TABLE OF CONTENTS

SJE RHOMBUS®

To assist us in delivering the exact product you want, please order by the seven digit part number or panel model number. If you require special features, such as additional cable length or special packaging, please call your customer service representative at 1-888-342-5753.

SJE Rhombus® also manufactures Engineered Custom control panels. Please email quote requests to techsupport@sjeinc.com. For additional information on our Blanket Agreement Program, Freight Paid Program, Return Policy or Payment Terms, please refer to the back side of your multiplier sheet, contact your factory representative or contact SJE Rhombus customer service at 1-888-342-5753.

ORDERING PANELS

Our Build-A-Panel™ control panels utilize a user-friendly worksheet on the back of each panel catalog page to assist in building your panel model. Simply select the appropriate feature and fill in the corresponding box at the top of the page. The total of these selections will result in your panel model. See example:

EXAMPLE

IFN	2	1	W	1		4		6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFN			
MODEL TYPE	✓	2	Single Phase Simplex (includes Options 6A, 8AC and 10E as standard)	$1,240.12	
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)	Base	
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)	Base	
STARTING DEVICE	✓	1	120/208/240V	Base	
PUMP FULL LOAD AMPS		0	0 - 7 FLA	Base	
		1	7 - 15 FLA	Base	
		2	15 - 20 FLA	$114.33	
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V	Base	
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)	See Options	
		E	EZconnex® Float Switch System	See Options	
		X	No Floats, Transmitter or Sensor	Base	
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats	See Options	
		T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.	See Options	

PRICING WORKSHEET

IFS Simplex Base Price **$1,240.12**

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

_____

SHIPPING YOUR ORDER

Standard catalog items, depending on volume and options, are shipped within five (5) business days from receipt of order. SJE Rhombus Build-A-Panel™ control panels ordered with multiple options and orders exceeding $10,000 may require up to ten (10) business days to ship. Large stocking panel orders or custom panel orders may require additional lead time of more than ten (10) business days.

Next Day Air, Second Day Air and Three Day UPS Ground services are available. To receive these services you must place your order before 1:00 p.m. Central Time. SJE Rhombus reserves the right to increase prices if transportation rates increase.

PRODUCT RETURN

Returned Materials Authorization (RMA) numbers must be assigned to products being returned for warranty claim. Control panel models IFS7, IFS8, SGS, 113, 123, 114, 124, 314, and 324; panels including option "10A"; panels including any "non-catalog" options; Build-A-Panel™ PLUS control panels; obsolete panels; and products more than one year from the date of manufacture cannot be returned to SJE Rhombus for restocking credit. Contact your customer service representative for instructions on returning a product for warranty.

PRICING SUBJECT TO CHANGE WITHOUT NOTICE.

WARRANTY

SJE Rhombus offers an industry-leading five-year limited warranty on most standard products available in our catalog. For complete terms and conditions, please visit www.sjerhombus.com.

PROP 65

For all products in this book: **California Prop 65 requires the following:** ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

BUILD-A-PANEL™ PLUS CONTROL PANEL PROGRAM
Expanded Build-A-Panel™ Control Panel Program

This program is designed to benefit customers who require additional options beyond what the standard control panel line offers, but do not require a custom engineered solution.

The Build-A-Panel™ Plus program utilizes inventoried components for:
- 24 hour response to quotes
- Faster build-to-ship times
- More affordable solutions
- And much more!

OPTIONS

- Larger enclosure sizes up to 30 x 24 x 12 inches, including fiberglass, Type 304 and 316 stainless steel, and Type 4 painted steel

- Inner dead front doors, including clear polycarbonate, aluminum, and white powder coated steel

- IEC starters (up to 65 amps per pump)

- 22mm switches and lights

- SJE dedicated pump controllers

- Smart relay/PLC with programs (limited I/O, 12 in and 8 out, discrete only); timed or demand dose programming; pump and alarm data logging upon request

- Landline auto dialers

- Battery backup circuits

- 12 VDC and 24 VDC circuits

- GFI receptacle with circuit breaker (single phase or 230V 4-wire service only)

- Surge protection

- Generator receptacles up to 100 amps

- UL/cUL Listed (508A or 698A)

- Two-year limited warranty

Examples

ADDITIONAL OPTIONS

Don't see the option you need listed? Let us know!
We may be able to offer it through this program or we can design a custom engineered solution for you!

Email quote requests to: techsupport@sjeinc.com

SJE RHOMBUS®

CUSTOMIZED CONTROL SOLUTIONS

When off-the-shelf control panels will not meet your needs, you can count on our engineering team to understand the project requirements and design a customized control panel solution for your application. We handle all steps of the process: Design, Programming, Assembly, Testing and Commissioning. We have the expertise to provide the perfect custom solution.
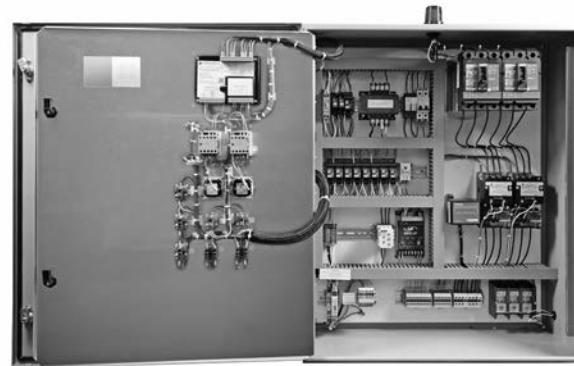
KEY APPLICATIONS

•   Lift Stations
•   Constant Pressure Systems
•   Aeration Controls
•   Blower Systems
•   Oil Spotter
•   Water & Wastewater Treatment

ACCEL® PANEL PROGRAM

We also offer top quality control solutions with quick turn-around time for simplex, duplex and triplex water/wastewater applications. We've pre-engineered popular base models with select options that are quoted and delivered with accelerated lead times:

•   Same day quotes or use our user friendly self-service quoting tool that provides instant pricing for your control solution
•   24-hour submittals (includes BOM, layout drawing and electrical schematic)
•   10-day build-to-ship (leads times may vary due to availability of components)
•   Standardized panel model schemes for easy identification and reorder

WHY CHOOSE SJE RHOMBUS?

Fast Quotes & Delivery
Your customers are asking for a quote yesterday. Our dedicated Sales Engineering team has experience quoting panels of all types and sizes so we can quickly and accurately design a panel to meet your needs with industry-leading delivery times, including:

•   Variable Frequency Drives
•   Reduced voltage starters
•   Programmable Logic Controllers (PLC)
•   Service entrance rating
•   Manual transfer switch gear
•   SCADA systems
•   Operator interface (HMI)
•   Remote monitoring
•   Telemetry/alarm dialers
•   Multiple pump control
•   User specified components
•   Voltage/current meters
•   Line and load reactors
•   Third party approvals: UL508A, UL698A, ULNNNY, cUL

Exceptional Support & Service
We pride ourselves on our legendary customer service. Our specialists are ready to be part of your team.

High Quality Products
We use the highest quality parts and components. All panels are fully powered up and thoroughly tested before delivery.

Experience You Can Trust
Our Sales Engineering team quotes thousands of control panels every year, so we've seen it all!

Get a quote today!
techsupport@sjeinc.com

EZ SERIES® SINGLE PHASE SIMPLEX

Single Phase, Simplex Demand Dose or Timed Dose Float Controlled System for Pump Control and System Monitoring

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off

c(UL)us LISTED • 5 YEAR LIMITED WARRANTY
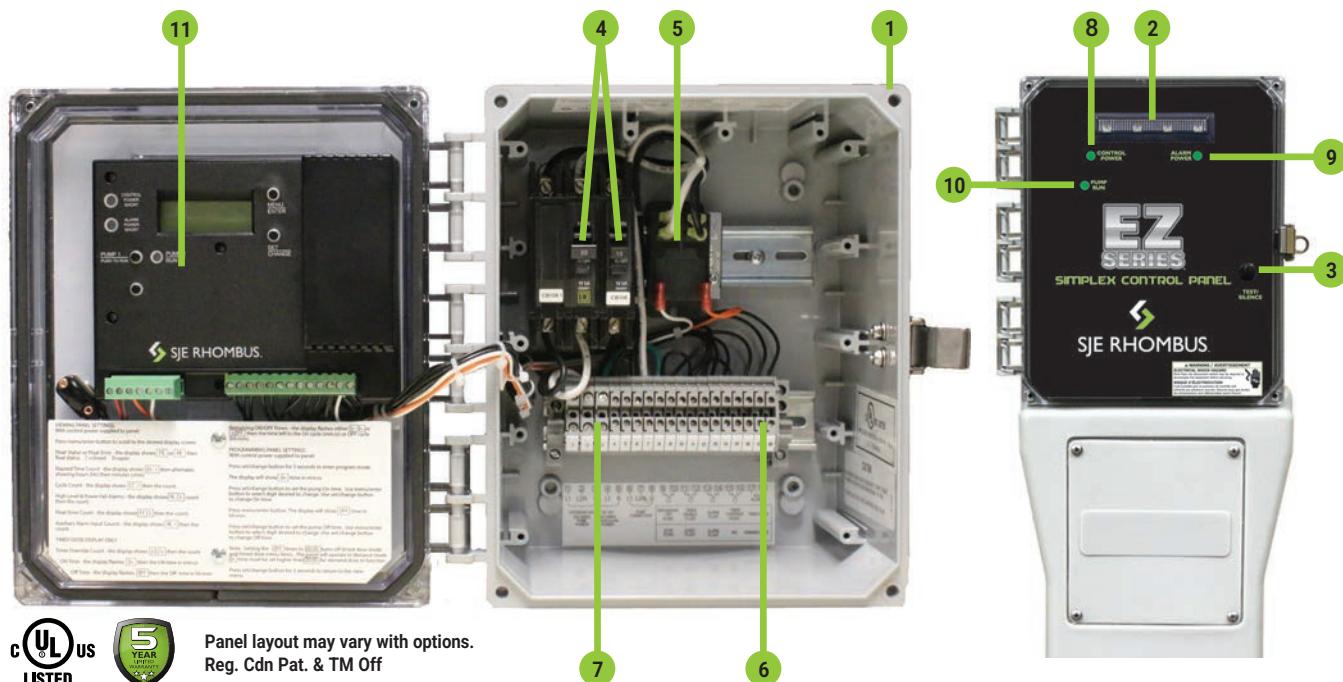
The EZ Series® simplex control panel is designed to control one 120, 208, 240 VAC single phase pump in water and sewage installations.

The EZ Series® simplex control panel features a backlit LCD display on the inside of the front cover for programming and system monitoring, including: float status, elapsed time pump run, cycle counter, alarm counts (high water/power fail), float error count, auxiliary alarm counter, timer override count (TD only).

The panel configuration can be easily converted in the field to either a timed dose or demand dose.

Optional mounting post has removable access door for easy wiring. The post can be mounted in the ground directly, over a 4x4, or conduit. This panel is available with optional duo alarm for local code compliance; and optional EZconnex® float connection system.

COMPONENTS

1. Enclosure base measures 10 x 8 x 6 inches (25.4 x 20.32 x 15.24 cm); NEMA 4X enclosure (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use) includes locking latch as standard
2. Red alarm beacon provides visual check of alarm condition
3. Exterior Alarm Test/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared
4. Two circuit breakers: one for pump power; another for control and alarm power
5. Power relay controls pump by switching electrical lines
6. Float connection terminal block with auxiliary alarm contact
7. Incoming control/alarm power & pump power terminal block
8. Control Power indicator light
9. Alarm Power indicator light
10. Pump Run indicator light
11. Simplex controller (touch safe housing) for pump control:
    a. Backlit LCD display shows system information including: pump elapsed time (hh:mm), pump events (cycles), and alarm condition (counts)
    b. Menu/Enter button used for viewing panel settings
    c. Set/Change button used for programming panel settings
    d. Pump Push To Run momentary switch - pump activates when pressed
    e. Control and Alarm Power - shorted condition indicators
12. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating - located inside panel on cover, not shown)

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

EZ Series® - Single phase, simplex demand dose or timed dose float controlled system for pump control and system monitoring.

Part #	Pre-configured Panels for Easy Ordering
1030771	EZS21W114X3A6A8AC10E15A
1052607	EZS11W114H3A6A8AC10E15A17G

EZS		1	W	1		4		3A6A8AC10E15A
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	EZS	
MODEL TYPE		1	Simplex Timed Dose (includes Options 3A6A8AC10E15A as standard)
		2	Simplex Demand Dose (includes Option 3A6A8AC10E15A as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker(s) 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = timer enable and alarm / Demand dose = stop, start, and alarm
		E	EZconnex® Float Switch System
		X	No Floats

PRICING WORKSHEET

EZS Simplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
✓	3A	**Alarm Flasher (Included as standard)**
	4A	Redundant Off (Timed Dose Float Panel Only) (must also select Option 4D if floats are required)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
✓	6A	**Auxiliary Alarm Contact, Form A (Included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10P	Mounting Post (Factory installed with 2.5" cord seal)
✓	15A	**Control/Alarm Circuit Breaker (Included as standard)**

	OPTIONS	DESCRIPTION
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
	18A	Timer Override Float (Timed Dose Float Panel Only)
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp (Timed Dose Only)

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

Note: Timed Dose models have the base price adjusted as it is a two float system.

EZ SERIES® SINGLE PHASE DUPLEX
Single Phase, Duplex Demand Dose Float Controlled System for Pump Control and System Monitoring

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off
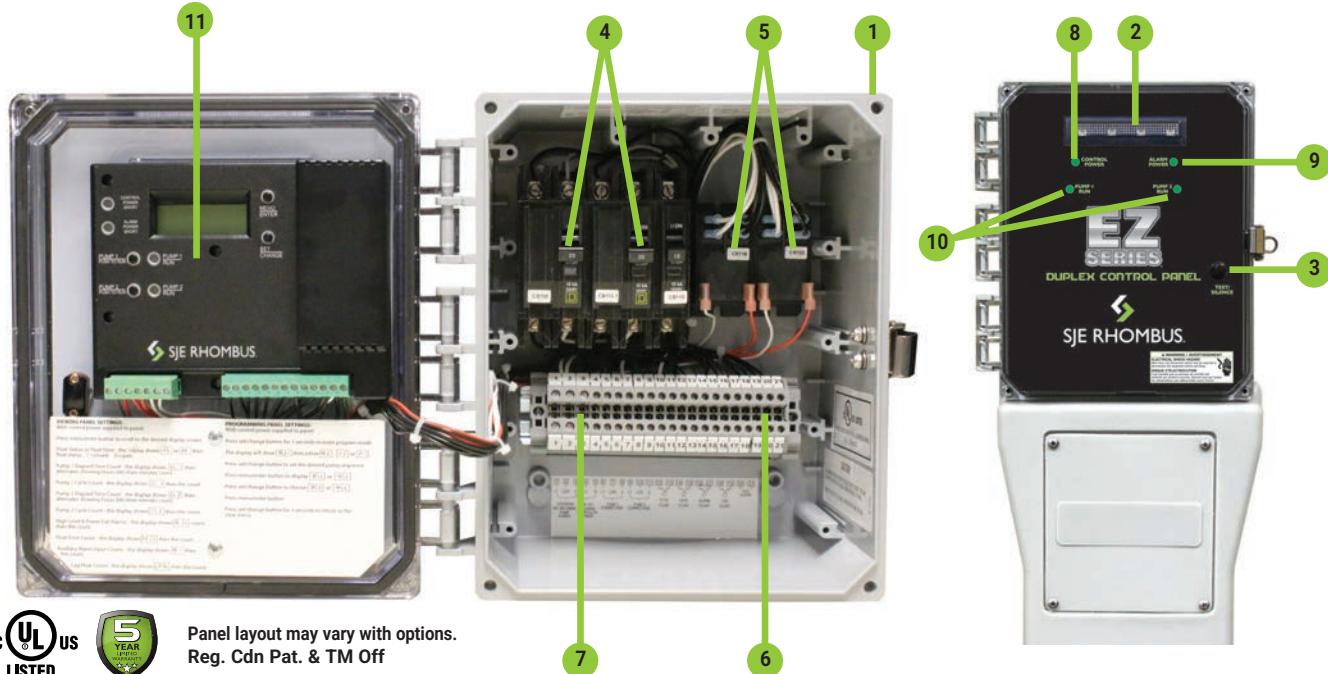
The EZ Series® duplex control panel is designed to control two (alternating) 120, 208, 240 VAC single phase pumps in water and sewage installations. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail.

The EZ Series® duplex control panel features a backlit LCD display on the inside of the front cover for programming and system monitoring, including: float status, elapsed time pump run, cycle counter, alarm counts (high water/power fail), float error count, auxiliary alarm counter, timer override count (TD only).

Optional mounting post has removable access door for easy wiring. The post can be mounted in the ground directly, over a 4x4, or conduit. This panel is available with optional duo alarm for local code compliance; and optional EZconnex® float connection system.

COMPONENTS

1. Enclosure base measures 10 x 8 x 6 inches (25.4 x 20.32 x 15.24 cm); NEMA 4X enclosure (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use) includes locking latch as standard
2. Red alarm beacon provides visual check of alarm condition
3. Exterior Alarm Test/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared
4. Two sets of circuit breakers: one for each pump power circuit; another for control and alarm power
5. Power relays control pumps by switching electrical lines
6. Float connection terminal block with auxiliary alarm contact
7. Incoming control/alarm power & pump power terminal block
8. Control Power indicator light
9. Alarm Power indicator light
10. Pump Run indicator lights
11. Duplex controller (touch safe housing) for pump control:
    a. Backlit LCD display shows system information including: pump elapsed time (hh:mm), pump events (cycles), and alarm condition (counts)
    b. Menu/Enter button used for viewing panel settings
    c. Set/Change button used for programming panel settings
    d. Pump 1 and Pump 2 Push To Run momentary switches - pump activates when pressed
    e. Control and Alarm Power - shorted condition indicators
12. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating - located inside panel on cover, not shown)

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

EZ Series® - Single phase, duplex demand dose float controlled system for pump control and system monitoring.

EZS	4	1	W	1		4		3A6A8AC10E15A
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	EZS	
MODEL TYPE	✓	4	Single Phase Duplex (includes Options 3A6A8AC10E15A as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker(s) 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

PRICING WORKSHEET

EZS Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

|	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
✓	3A	Alarm Flasher (Included as standard)
✓	6A	Auxiliary Alarm Contact, Form A (Included as standard)
✓	8AC	Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter (included as standard)
✓	10E	Lockable Latch - NEMA 4X (included as standard)
	10P	Mounting Post (Factory installed with 2.5" cord seal)
✓	15A	Control/Alarm Circuit Breaker (Included as standard)
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)

OPTIONS	DESCRIPTION
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
19F	Fourth Float to Separate Alarm Function from Lag
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

EZ Series®

SJE RHOMBUS.

EZ Series®

EZ In-Site

In-Site REPORT

Download on the **App Store**

GET IT ON **Google Play**

C ⓤ US LISTED

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949
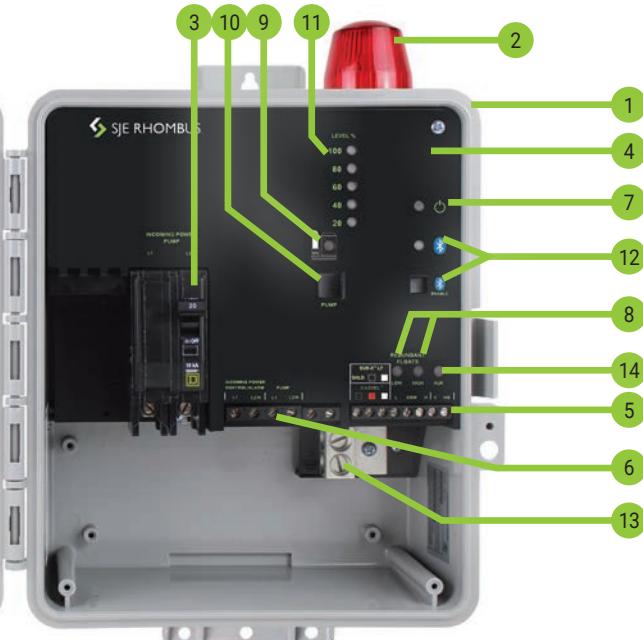
The EZ Series® In-Site® simplex control panel is designed to control one 120, 208, 240 VAC single phase pump in water and sewage installations. This innovative data logging control panel features a wireless Bluetooth® connection for your smart device, allowing safe and secure access in all weather conditions. Now there is no need to open the panel for configuration, viewing status or downloading data using the EZ InSite® Connect App.

EZ In-Site The **EZ In-Site® Connect App** allows you to configure the control panel, view real time data from your smart device including pump run times, cycle counts, alarm conditions, HOA settings, power outages, tank levels, service calls and more!

In-Site REPORT All system data (up to 4000 system events) can be downloaded and analyzed using our exclusive **In-site Reporting software**. This software formulates system data for you, creating reports quickly and easily so system conditions can be identified and corrected.

The panel utilizes the Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring by sensing the level in the tank and sending a signal to the panel.

The compact redesign (10" x 8" x 4") of this panel is ideal for residential applications. The innovative internal design of components and integral mounting tabs make installation quick and simple. Includes integral padlockable latch for added safety. The panel can be converted to demand or timed dose in the field.

• Five-year limited warranty on panel
• Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

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SJE RHOMBUS ®

COMPONENTS

1. Enclosure base measures 10 x 8 x 4 inches (25.4 x 20.32 x 10.16 cm); NEMA 4X enclosure (ultraviolet stabilized thermoplastic with integral mounting tabs for outdoor or indoor use) includes integral locking latch as standard
2. Red LED beacon provides visual check of alarm condition
3. Circuit breaker provides pump power disconnect and branch circuit protection
4. Safety cover with touch safe design
5. Connection terminal block for float, C-Level™ Sensor or Sub-X™ LT Transmitter
6. Incoming control/alarm power & pump power terminal block
7. Control Power indicator light
8. Float Status indicator lights
9. Pump Run indicator light
10. Pump manual run switch
11. Tank level indicator
12. Bluetooth® wireless module
13. Ground lug(s)
14. Auxiliary alarm Indicator

NOT SHOWN: Exterior Alarm Test/Silence Switch allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared.

Alarm Horn provides audio warning of alarm condition (83 to 85 decibel rating).

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

EZ SERIES® IN-SITE® Bluetooth® Single Phase Simplex - Demand or timed dose, C-Level™ or Sub-X™ LT sensor controlled system for pump control and system monitoring with Bluetooth® wireless module.

EZI	S	1	W	1		4		3A4A6A10E30A
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	EZI	
MODEL TYPE	✓	S	Simplex (includes Options 3A4A6A10E30A as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
LEVEL CONTROL APPLICATION		X	No Floats, Transmitter or Sensor
		C	C-Level™ Sensor (select Option 24 or 29) Select Option 3E and/or 4D for high water alarm and/or redundant off floats.
		T	Sub-X™ LT Transmitter (select Option 31) Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

EZI Simplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

NOTE: Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
✓	**3A**	**Alarm Flasher (Included as standard)**
	3E	High Water Alarm Float (must also select Option 17)
✓	**4A**	**Redundant Off (Included as standard)**
	4D	Redundant Off Float (must also select Option 17)
✓	**6A**	**Auxiliary Alarm Contact, Form A (Included as standard)**
✓	**10E**	**Lockable Latch - NEMA 4X (Included as standard)**
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)
	17G	20' SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical
	17H	20' SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical

	OPTIONS	DESCRIPTION
	24E	C-Level™ CL40 Sensor with 25' Vented Cable
	24F	C-Level™ CL40 Sensor with 50' Vented Cable
	24P	C-Level™ CL40 Sensor with 100' Vented Cable
	29A	C-Level™ CL100 Sensor with 25' Vented Cable
	29B	C-Level™ CL100 Sensor with 50' Vented Cable
	29C	C-Level™ CL100 Sensor with 100' Vented Cable
✓	**30A**	**Bluetooth® Wireless Module (included as standard)**
	31A	25' Sub-X™ LT Transmitter (4-20mA)
	31B	50' Sub-X™ LT Transmitter (4-20mA)
	31C	100' Sub-X™ LT Transmitter (4-20mA)

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

The EZ Series® In-Site® duplex control panel is designed to control two 120, 208, 240 VAC single phase pumps in water and sewage installations. The alternating action equalizes pump wear. In addition, this system provides override control should either pump fail. This innovative data logging control panel features a wireless Bluetooth® connection for your smart device, allowing safe and secure access in all weather conditions. Now there is no need to open the panel for configuration, viewing status or downloading data using the EZ In-Site® Connect App.

The **EZ In-Site® Connect App** allows you to configure the control panel, view real time data from your smart device including pump run times, cycle counts, alarm conditions, HOA settings, power outages, tank levels, service calls and more!

All system data (up to 4000 system events) can be downloaded and analyzed using our exclusive **In-site Reporting software**. This software formulates system data for you, creating reports quickly and easily so system conditions can be identified and corrected.

The panel utilizes the Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring by sensing the level in the tank and sending a signal to the panel.

The compact redesign (10" x 8" x 4") of this panel is ideal for residential applications. The innovative internal design of components and integral mounting tabs make installation quick and simple. Includes integral padlockable latch for added safety. The panel can be converted to demand or timed dose in the field.

• Five-year limited warranty on panel
• Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

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COMPONENTS

1. Enclosure base measures 10 x 8 x 4 inches (25.4 x 20.32 x 10.16 cm); NEMA 4X enclosure (ultraviolet stabilized thermoplastic with integral mounting tabs for outdoor or indoor use) includes integral locking latch as standard
2. Red LED beacon provides visual check of alarm condition
3. Circuit breakers provide pump power disconnect and branch circuit protection
4. Safety cover with touch safe design
5. Connection terminal block for float, C-Level™ Sensor or Sub-X™ LT Transmitter
6. Incoming control/alarm power & pump power terminal block
7. Control Power indicator light
8. Float Status indicator lights
9. Pump Run indicator light
10. Pump manual run switches
11. Tank level indicator
12. Bluetooth® wireless module
13. Ground lug(s)
14. Auxiliary alarm Indicator

NOT SHOWN: Exterior Alarm Test/Silence Switch allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition is cleared.

Alarm Horn provides audio warning of alarm condition (83 to 85 decibel rating).

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

EZ SERIES® IN-SITE® Bluetooth® Single Phase Duplex - Demand or timed dose, C-Level™ or Sub-X™ LT sensor controlled system for pump control and system monitoring with Bluetooth® wireless module.

EZI	D	1	W	1		4		3A4A6A10E30A
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	EZI	
MODEL TYPE	✓	D	Duplex (includes Options 3A4A6A10E30A as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
LEVEL CONTROL APPLICATION		X	No Floats, Transmitter or Sensor
		C	C-Level™ Sensor (select Option 24 or 29) Select Option 3E and/or 4D for high water alarm and/or redundant off floats.
		T	Sub-X™ LT Transmitter (select Option 31). Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

EZI Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

NOTE: Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
✓	3A	**Alarm Flasher (Included as standard)**
	3E	High Water Alarm Float (must also select Option 17)
✓	4A	**Redundant Off (Included as standard)**
	4D	Redundant Off Float (must also select Option 17)
✓	6A	**Auxiliary Alarm Contact, Form A (Included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)
	17G	20' SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical
	17H	20' SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical

	OPTIONS	DESCRIPTION
	24E	C-Level™ CL40 Sensor with 25' Vented Cable
	24F	C-Level™ CL40 Sensor with 50' Vented Cable
	24P	C-Level™ CL40 Sensor with 100' Vented Cable
	29A	C-Level™ CL100 Sensor with 25' Vented Cable
	29B	C-Level™ CL100 Sensor with 50' Vented Cable
	29C	C-Level™ CL100 Sensor with 100' Vented Cable
✓	30A	**Bluetooth® Wireless Module (included as standard)**
	31A	25' Sub-X™ LT Transmitter (4-20mA)
	31B	50' Sub-X™ LT Transmitter (4-20mA)
	31C	100' Sub-X™ LT Transmitter (4-20mA)

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

SJE RHOMBUS

EZ Series®

EZ SERIES® PLUGGER CONTROL PANEL
Convenient Wiring Connection for Pump

Panel layout may vary with options.
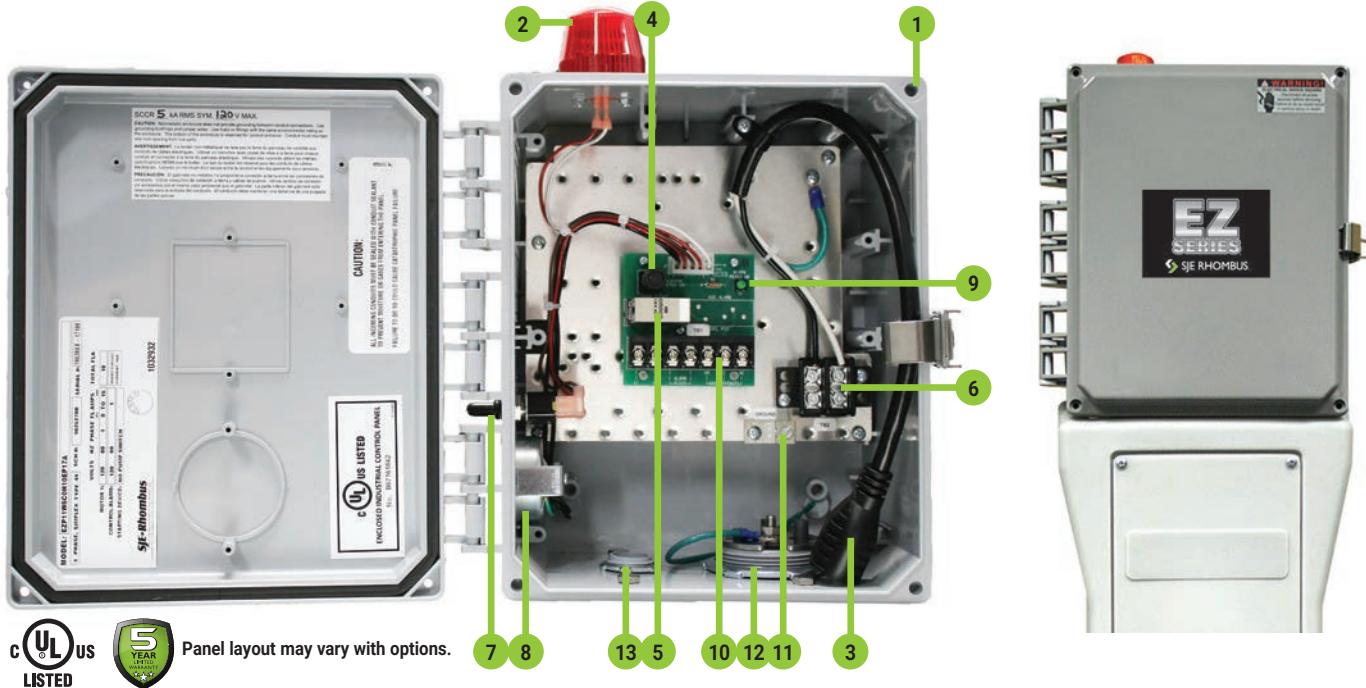
Easy to install control panel provides convenient wiring connection for use with one single phase pump in effluent and sewage installations.

The EZ Series® Plugger control panels feature a sleek easy to install panel and optional mounting post. The panel includes a built-in high water alarm with test/normal/silence switch and incorporates a receptacle to accept 120 VAC or 240 VAC pump and piggy-back pump switch.

Models with the optional post include a removable access door and cord seal which allow piggy-back and pump plugs to be easily routed and sealed into the panel. The post can be mounted in the ground directly, over a 4X4, or over conduit. The panel is also available with optional duo alarm and auxiliary contacts to meet the needs of various applications.

OPTIONAL FEATURES

• 34" mounting post with cord seal
• Duo Alarm
• Elapsed Time Meter (See Accessories catalog page for information.)
• Various cord lengths available
• Pump circuit breaker
• Auxiliary contacts

COMPONENTS

1. Enclosure measures 10 x 8 x 6 inch (25.40 x 20.30 x 15.2 cm) with removable mounting feet, NEMA 4X rated, ultraviolet stabilized thermoplastic for indoor and outdoor use; includes locking latch as standard
2. Red LED beacon provides 360° visual check of alarm condition
3. Receptacle for use with piggy-back pump switch
4. Alarm fuse (mounted on circuit board)
5. Horn silence relay (mounted on circuit board)
6. Pump circuit terminal block
7. Exterior Alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared
8. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
9. Alarm Power indicator (mounted on circuit board)
10. Alarm circuit terminal block (mounted on circuit board)
11. Ground lug
12. Custom engineered liquid tight 2" cord seal
13. Incoming pump power 3/4" hub

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

EZ SERIES® PLUGGER - Provides convenient wiring connection for use with one single phase 120V or 230V pump in effluent and sewage installations.

EZP		1	W		C			10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	EZP		
MODEL TYPE		1	120V (includes Option 10E as standard)	
		2	240V (includes Option 10E as standard)	
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, red light, & horn)	
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)	
STARTING DEVICE		2	SJE PumpMaster® Plus Pump Switch (0-15 FLA)	
		6	No Pump Switch	
		7	120V Double Float® Master Pump Switch (0-15 FLA)	
		8	240V Double Float® Master Pump Switch (0-15 FLA)	
		A	SJE MicroMaster® Plus WS Pump Switch (0-13 FLA)	
PUMP FULL LOAD AMPS	✓	C	0 - 15 FLA	
PUMP DISCONNECTS		0	No Pump Disconnect	
		4	Circuit Breaker	120V
				240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below)	
		X	No Floats, Transmitter or Sensor	

PRICING WORKSHEET

EZ Plugger Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	6A	Auxiliary Alarm Contact, Form C
	8G	ETM with Piggy-Back
✓	10E	Lockable Latch - NEMA 4X (included as standard)
	10P	Mounting Post (Factory installed, includes Cord Seal)

| OPTIONS	DESCRIPTION
16C	30' Cord in Lieu of 20' Cord (per Float)
16D	40' Cord in Lieu of 20' Cord (per Float)
17A	SJE SignalMaster® / Pipe Clamp (Alarm Float Only) - Mechanical
22C	2" Hub Installed with Cord Seal
22F	Riser Mounting Kit

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

EZ Series®

INSTALLER FRIENDLY SERIES® (IFS) SINGLE PHASE SIMPLEX

Demand Dose or Timed Dose, Float, Sensor or Transmitter Controlled System for Pump Control and System Monitoring

C UL US LISTED

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

The Next Generation IFS simplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control one 120/208/240 VAC single phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™ LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

LCD INTERFACE FEATURES

- Full color graphics and menu navigation encoder for easy setup
- Touch safe housing
- Pump Hand/Off/Auto Control selectable via menu navigation
- Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
- Demand or Timed Dose operation selectable via menu navigation
- Tank Level Indication and setpoint monitoring at-a-glance
- Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
- Displays remaining time in Timed Dose mode
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)
- Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Circuit breakers provides pump power disconnect and branch circuit protection included as standard on all panels
4. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
5. Controller Features:
   a. Incoming Control/Alarm Power terminal blocks
   b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
   c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
   d. Normally open auxiliary alarm contacts included as standard
   e. Control Power On/Off switch
   f. Green LED Pump Run indicators illuminate when pump is called to run*
   g. Control panel able to operate if LCD interface fails or is disconnected
   h. Touch safe housing
6. Alarm Horn provides audible warning of alarm condition (not shown)
7. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (not shown)
8. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc. (not shown)

*In fault condition, LED indicators will be red.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® SINGLE PHASE SIMPLEX - Demand or timed dose system for pump control and system monitoring.

Part #	Pre-configured Panels for Easy Ordering
1071427	IFN21W114X6A8AC10E
1071416	IFN21W114H6A8AC10E17G

IFN	2	1	W	1		4		6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

<div style="text-align: right">Installer Friendly Series®</div>

CONTROL PANEL	✓	IFN		PRICING WORKSHEET
MODEL TYPE	✓	2	Single Phase Simplex (includes Options 6A, 8AC and 10E as standard)	IFS Simplex Base Price _____
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)	
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)	Alarm Package _____
STARTING DEVICE	✓	1	120/208/240V	
PUMP FULL LOAD AMPS		0	0 - 7 FLA	Enclosure Rating _____
		1	7 - 15 FLA	Starting Device _____
		2	15 - 20 FLA	
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V	Pump Full Load Amps _____
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)	Pump Disconnects _____
		E	EZconnex® Float Switch System	Level Control Application _____
		X	No Floats, Transmitter or Sensor	Total Options _____
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats	TOTAL LIST PRICE _____
		T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.	

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only.
Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10F	Lightning Arrestor (must also select Option 15A)
	10K	Anti-condensation Heater (must also select Option 15A)
	10P	Panel Mounting Post - Factory Installed (max. enclosure size 14" x 12" x 6")
	15A	Control/Alarm Circuit Breaker
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)

OPTIONS	DESCRIPTION
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge when selecting any of the 17 options.

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout. Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

INSTALLER FRIENDLY SERIES® (IFS)
SINGLE PHASE DUPLEX
Demand Dose or Timed Dose, Float, Sensor or Transmitter Controlled System for Pump Control and System Monitoring

C UL US
LISTED

Panel layout may vary with options.
Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

The Next Generation IFS duplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control two 120/208/240 VAC single phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™ LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

• Five-year limited warranty on panel
• Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

LCD INTERFACE FEATURES

• Full color graphics and menu navigation encoder for easy setup
• Touch safe housing
• Pump Hand/Off/Auto Control selectable via menu navigation
• Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
• Demand or Timed Dose operation selectable via menu navigation
• Tank Level Indication and setpoint monitoring at-a-glance
• Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
• Displays remaining time in Timed Dose mode
• RJ45 communication connector
• Flashing function for alarm beacon and horn (configurable)
• Manual alarm reset (configurable)
• Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Circuit breakers provides pump power disconnect and branch circuit protection included as standard on all panels
4. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
5. Controller Features:
   a. Incoming Control/Alarm Power terminal blocks
   b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
   c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
   d. Normally open auxiliary alarm contacts included as standard
   e. Control Power On/Off switch
   f. Green LED Pump Run indicators illuminate when pump is called to run*
   g. Control panel able to operate if LCD interface fails or is disconnected
   h. Touch safe housing
6. Alarm Horn provides audible warning of alarm condition (not shown)
7. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (not shown)
8. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc. (not shown)

*In fault condition, LED indicators will be red.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® SINGLE PHASE DUPLEX - Demand or timed dose system for pump control and system monitoring.

Part #	Pre-configured Panels for Easy Ordering
1071431	IFN41W114X6A8AC10E
1071430	IFN41W114H6A8AC10E17G

IFN	4	1	W	1		4		6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFN	
MODEL TYPE	✓	4	Single Phase Duplex (includes Options 6A, 8AC and 10E as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)
		E	EZconnex® Float Switch System
		X	No Floats, Transmitter or Sensor
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats
		T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

IFS Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only.
Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10F	Lightning Arrestor (must also select Option 15A)
	10K	Anti-condensation Heater (must also select Option 15A)
	10P	Panel Mounting Post - Factory Installed (max. enclosure size 14" x 12" x 6")
	15A	Control/Alarm Circuit Breaker
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)

OPTIONS	DESCRIPTION
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge
when selecting any of the 17 options.

For additional level control and control panel options, please contact
Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change
enclosure size and enclosure features, and component layout.
Schematic/Wiring Diagram and Pump Specification Label are located
inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

INSTALLER FRIENDLY SERIES® (IFS)
THREE PHASE SIMPLEX
Demand Dose or Timed Dose, Float, Sensor or Transmitter Controlled System for Pump Control and System Monitoring

Panel layout may vary with options. Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

The Next Generation IFS simplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control one 208/240/480 and 600 VAC three phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™ LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

• Five-year limited warranty on panel
• Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

LCD INTERFACE FEATURES

• Full color graphics and menu navigation encoder for easy setup
• Touch safe housing
• Pump Hand/Off/Auto Control selectable via menu navigation
• Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
• Demand or Timed Dose operation selectable via menu navigation
• Tank Level Indication and setpoint monitoring at-a-glance
• Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
• Displays remaining time in Timed Dose mode
• RJ45 communication connector
• Flashing function for alarm beacon and horn (configurable)
• Manual alarm reset (configurable)
• Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure base measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Motor protective switches provide adjustable overload, branch circuit protection and pump disconnect
4. IEC motor contactors control pumps by switching electrical lines
5. Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control alarm voltage or 600 VAC primary transformer
6. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
7. Controller Features:
    a. Incoming Control/Alarm Power terminal blocks
    b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
    c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
    d. Normally open auxiliary alarm contacts included as standard
    e. Control Power On/Off switch
    f. Green LED Pump Run indicators illuminate when pump is called to run*
    g. Control panel able to operate if LCD interface fails or is disconnected
    h. Touch safe housing
8. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc.
9. Option 5AE - Thermal Cutout/Heat Sensor & Seal Failure Module
10. Large incoming power connection terminal block
11. Alarm Horn provides audible warning of alarm condition (Not shown)
12. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

*In fault condition, LED indicators will be red.

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® THREE PHASE SIMPLEX - Demand or timed dose system for pump control and system monitoring.

IFN	5	1	W			6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

<table>
<tr><td>CONTROL PANEL</td><td>✓</td><td colspan="2">IFN</td></tr>
<tr><td>MODEL TYPE</td><td>✓</td><td colspan="2">5</td></tr>
<tr><td>ALARM PACKAGE</td><td>✓</td><td colspan="2">1</td></tr>
<tr><td>ENCLOSURE RATING</td><td>✓</td><td colspan="2">W</td></tr>
</table>

CONTROL PANEL	✓	IFN	
MODEL TYPE	✓	5	Three Phase Simplex (includes Option 6A, 8AC and 10E as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)

PUMP FULL LOAD AMPS		208/240/480V			600V
	001	1.0 - 1.6 FLA		005	1.0 - 1.6 FLA
	101	1.6 - 2.5 FLA		105	1.6 - 2.5 FLA
	201	2.5 - 4.0 FLA		205	2.5 - 4.0 FLA
	301	4.0 - 6.3 FLA		305	4.0 - 6.3 FLA
	401	6.0 - 10.0 FLA		405	6.0 - 10.0 FLA
	511	9.0 - 14.0 FLA		515	9.0 - 14.0 FLA
	611	13.0 - 18.0 FLA		615	13.0 - 18.0 FLA
	621	17.0 - 23.0 FLA		625	17.0 - 23.0 FLA
	701	20.0 - 25.0 FLA		705	20.0 - 25.0 FLA

LEVEL CONTROL APPLICATION		
	H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)
	E	EZconnex® Float Switch System
	X	No Floats, Transmitter or Sensor
	C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats
	T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

IFS Three Phase
Simplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only.
Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**

OPTIONS	DESCRIPTION
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge
when selecting any of the 17 options.

For additional level control and control panel options, please contact
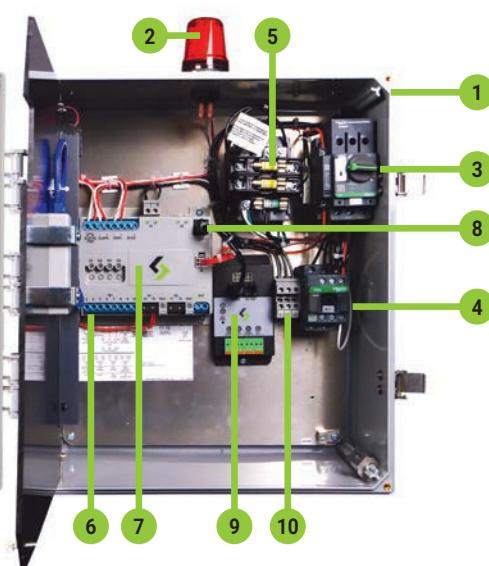Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change
enclosure size and enclosure features, and component layout.
Schematic/Wiring Diagram and Pump Specification Label are located
inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

(sidebar) Installer Friendly Series®

INSTALLER FRIENDLY SERIES® (IFS) THREE PHASE DUPLEX

Demand Dose or Timed Dose, Float, Sensor or Transmitter Controlled System for Pump Control and System Monitoring

C UL US LISTED

Panel layout may vary with options. Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

Installer Friendly Series®

The Next Generation IFS duplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control two 208/240/480 and 600 VAC three phase pumps in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™ LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

LCD INTERFACE FEATURES

- Full color graphics and menu navigation encoder for easy setup
- Touch safe housing
- Pump Hand/Off/Auto Control selectable via menu navigation
- Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
- Demand or Timed Dose operation selectable via menu navigation
- Tank Level Indication and setpoint monitoring at-a-glance
- Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
- Displays remaining time in Timed Dose mode
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)
- Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure base measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Motor protective switches provide adjustable overload, branch circuit protection and pump disconnect
4. IEC motor contactors control pumps by switching electrical lines
5. Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control alarm voltage or 600 VAC primary transformer
6. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
7. Controller Features:
    a. Incoming Control/Alarm Power terminal blocks
    b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
    c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
    d. Normally open auxiliary alarm contacts included as standard
    e. Control Power On/Off switch
    f. Green LED Pump Run indicators illuminate when pump is called to run*
    g. Control panel able to operate if LCD interface fails or is disconnected
    h. Touch safe housing
8. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc.
9. Option 5AE - Thermal Cutout/Heat Sensor & Seal Failure Module
10. Large incoming power connection terminal block
11. Alarm Horn provides audible warning of alarm condition (Not shown)
12. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

*In fault condition, LED indicators will be red.

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

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INSTALLER FRIENDLY SERIES® THREE PHASE DUPLEX - Demand or timed dose system for pump control and system monitoring.

IFN	6	1	W			6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

Installer Friendly Series® *(vertical side tab)*

CONTROL PANEL	✓	IFN	
MODEL TYPE	✓	6	Three Phase Duplex (includes Option 6A, 8AC and 10E as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)

PUMP FULL LOAD AMPS		208/240/480V			600V
	001	1.0 - 1.6 FLA	005	1.0 - 1.6 FLA
	101	1.6 - 2.5 FLA	105	1.6 - 2.5 FLA
	201	2.5 - 4.0 FLA	205	2.5 - 4.0 FLA
	301	4.0 - 6.3 FLA	305	4.0 - 6.3 FLA
	401	6.0 - 10.0 FLA	405	6.0 - 10.0 FLA
	511	9.0 - 14.0 FLA	515	9.0 - 14.0 FLA
	611	13.0 - 18.0 FLA	615	13.0 - 18.0 FLA
	621	17.0 - 23.0 FLA	625	17.0 - 23.0 FLA
	701	20.0 - 25.0 FLA	705	20.0 - 25.0 FLA

LEVEL CONTROL APPLICATION		
	H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)
	E	EZconnex® Float Switch System
	X	No Floats, Transmitter or Sensor
	C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats
	T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

IFS Three Phase Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

	OPTIONS	DESCRIPTION
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)
	16E	50' Cord in Lieu of 20' Cord (per Float)
	16G	100' Cord in Lieu of 20 Cord (per Float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**

OPTIONS	DESCRIPTION
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge when selecting any of the 17 options.

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout. Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

Installer Friendly Series®

Panel layout may vary with options. Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949

C UL US LISTED

The Next Generation IFS simplex capacitor (start/run) control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control one 120/208/240 VAC single phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

NOTE: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranty of any type with respect to motor start kits supplied by the customer.

LCD INTERFACE FEATURES

- Full color graphics and menu navigation encoder for easy setup
- Touch safe housing
- Pump Hand/Off/Auto Control selectable via menu navigation
- Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
- Demand or Timed Dose operation selectable via menu navigation
- Tank Level Indication and setpoint monitoring at-a-glance
- Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
- Displays remaining time in Timed Dose mode
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)
- Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure base measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic)
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Circuit breaker provides pump power disconnect and branch circuit protection included as standard on all panels
4. Option 9_A - Adjustable Overload Relay
5. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
6. Controller Features:
   a. Incoming Control/Alarm Power terminal blocks
   b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
   c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
   d. Normally open auxiliary alarm contacts included as standard
   e. Control Power On/Off switch
   f. Green LED Pump Run indicators illuminate when pump is called to run*
   g. Control panel able to operate if LCD interface fails or is disconnected
   h. Touch safe housing
7. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc.
8. Option 5AE - Thermal Cutout/Heat Sensor & Seal Failure Module
9. Large incoming power connection terminal block
10. Alarm Horn provides audible warning of alarm condition (Not shown)
11. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

*In fault condition, LED indicators will be red.

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® SINGLE PHASE SIMPLEX CAPACITOR (START/RUN) - Demand or timed dose system for pump control and system monitoring.

IFN	7	1	W	1				6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFN		
MODEL TYPE	✓	7	Single Phase Simplex Capacitor (includes Option 6A, 8AC, and 10E as standard)	
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)	
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)	
STARTING DEVICE	✓	1	120/208/240V IEC Motor Contactor	
PUMP FULL LOAD AMPS		0	0 - 7 FLA	
		1	7 - 15 FLA	
		2	15 - 20 FLA	
		3	20 - 30 FLA	
		4	30 - 40 FLA	
PUMP DISCONNECTS		4	Circuit Breaker	
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)	
		E	EZconnex® Float Switch System	
		X	No Floats, Transmitter or Sensor	
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats	
		T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.	

PRICING WORKSHEET

IFS Single Phase Simplex Capacitor Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

	OPTIONS	DESCRIPTION
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter (included as standard)**
	9_A	Pump Overload - Specify Amperage after Number 9 Followed by Letter "A" (must select Option 15A) Example: 912A = 12 amp pump — 0 - 30 FLA / 30 - 40 FLA
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10F	Lightning Arrestor (must select Option 15A)
	10K	Anti-condensation Heater (must select Option 15A)
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus
	12C	Motor Start Components Mounted and Supplied by SJE Rhombus
	15A	Control/Alarm Circuit Breaker
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)

OPTIONS	DESCRIPTION
16E	50' Cord in Lieu of 20' Cord (per Float)
16G	100' Cord in Lieu of 20 Cord (per Float)
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge when selecting any of the 17 options.

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

Note: Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout. Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

Installer Friendly Series®

SJE RHOMBUS.

C UL US LISTED

**Panel layout may vary with options. Reg. Cdn Pat. & TM Off
US Patent No. 8,336,385; 8,567,242; 8,650,949**

(Right margin, rotated) Installer Friendly Series®

The Next Generation IFS duplex capacitor (start/run) control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control one 120/208/240 VAC single phase pump in water and sewage applications. These newly redesigned IFS panels feature an easy-to use color LCD interface located on the inner door for programming and system monitoring. The panel configuration can be easily converted in the field to either a timed dose or demand dose through the LCD interface.

The panel can easily be changed in the field to utilize floats, Sub-X™ LT Transmitter or the C-Level™ Sensor for continuous level monitoring. The Sub-X™LT Transmitter and the C-Level™ Sensor sense the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface.

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor and Sub-X™ LT Transmitter

NOTE: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranty of any type with respect to motor start kits supplied by the customer.

LCD INTERFACE FEATURES

- Full color graphics and menu navigation encoder for easy setup
- Touch safe housing
- Pump Hand/Off/Auto Control selectable via menu navigation
- Sub-X™ LT Transmitter, C-Level™ Sensor or float operation selectable
- Demand or Timed Dose operation selectable via menu navigation
- Tank Level Indication and setpoint monitoring at-a-glance
- Lead pump is easily identified by a graphic ring around the current lead pump regardless of control mode (timed dose or demand)
- Displays remaining time in Timed Dose mode
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)
- Thermal cutout and seal failure module (optional)

COMPONENTS

1. Enclosure base measures 18 x 16 x 8 inches (45.72 x 40.64 x 20.32 cm); NEMA 4X fiberglass for outdoor or indoor use
2. Red Alarm Beacon provides 360° visual check of alarm condition
3. Circuit breakers provides pump power disconnect and branch circuit protection included as standard on all panels
4. Option 9_A - Adjustable Overload Relay
5. Sub-X™ LT Transmitter, C-Level™ Sensor and float connection terminal blocks
6. Controller Features:
   a. Incoming Control/Alarm Power terminal blocks
   b. Control/Alarm Power/System Status green LED indicators illuminate if control/alarm power is present and controller is operating*
   c. Controller status green LED indicators for: Power/Active, Float Input Status, Pump Run, C-Level Active*
   d. Normally open auxiliary alarm contacts included as standard
   e. Control Power On/Off switch
   f. Green LED Pump Run indicators illuminate when pump is called to run*
   g. Control panel able to operate if LCD interface fails or is disconnected
   h. Touch safe housing
7. Modbus Port (RJ45) for future expansion - eg. remote monitoring, valve control, In-Site®, logging, etc.
8. Option 5AE - Thermal Cutout/Heat Sensor & Seal Failure Module
9. Large incoming power connection terminal block
10. Alarm Horn provides audible warning of alarm condition (Not shown)
11. Exterior Alarm Test/Silence push button allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

*In fault condition, LED indicators will be red.

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® SINGLE PHASE DUPLEX CAPACITOR (START/RUN) - Demand or timed dose system for pump control and system monitoring.

IFN	8	1	W	1				6A8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFN	
MODEL TYPE	✓	8	Single Phase Duplex Capacitor (includes Option 6A, 8AC, and 10E as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V IEC Motor Contactor
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
		4	30 - 40 FLA
PUMP DISCONNECTS		4	Circuit Breaker
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = redundant off, timer enable, alarm / Demand dose = stop, start, alarm (all systems will ship with 3 floats by default)
		E	EZconnex® Float Switch System
		X	No Floats, Transmitter or Sensor
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats. Pump down applications only.
		T	Sub-X™ LT Transmitter (select Option 31).* Select Option 3E and/or 4D for high water alarm and/or redundant off floats.

PRICING WORKSHEET

IFS Single Phase Duplex Capacitor Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

*NOTE: When using the Sub-X™ LT Transmitter or C-Level™ Sensor: Operation is for Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off.

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

	OPTIONS	DESCRIPTION
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	4D	Redundant Off Float (must also select Option 17)** **Only Available with Level Control Application = C or T**
	5AE	Thermal Cutout/Heat Sensor & Seal Failure Circuit (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form A (included as standard)**
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter and Lead/Lag Selector (included as standard)**
	9_A	Pump Overload - Specify Amperage after Number 9 Followed by Letter "A" (must select Option 15A) Example: 912A = 12 amp pump — 0 - 30 FLA / 30 - 40 FLA
✓	10E	**Lockable Latch - NEMA 4X (included as standard)**
	10F	Lightning Arrestor (must select Option 15A)
	10K	Anti-condensation Heater (must select Option 15A)
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus
	12C	Motor Start Components, Mounted and Supplied by SJE Rhombus
	15A	Control/Alarm Circuit Breaker
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)

OPTIONS	DESCRIPTION
16E	50' Cord in Lieu of 20' Cord (per Float)
16G	100' Cord in Lieu of 20 Cord (per Float)
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury**
19F	4th Float for Timer Override **Only Available with Level Control Application = H**
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
31A	Sub-X™ LT Transmitter 25' (4-20mA)
31B	Sub-X™ LT Transmitter 50' (4-20mA)
31C	Sub-X™ LT Transmitter 100' (4-20mA)
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

**For 3E and 4D options, there is no charge when selecting any of the 17 options.

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

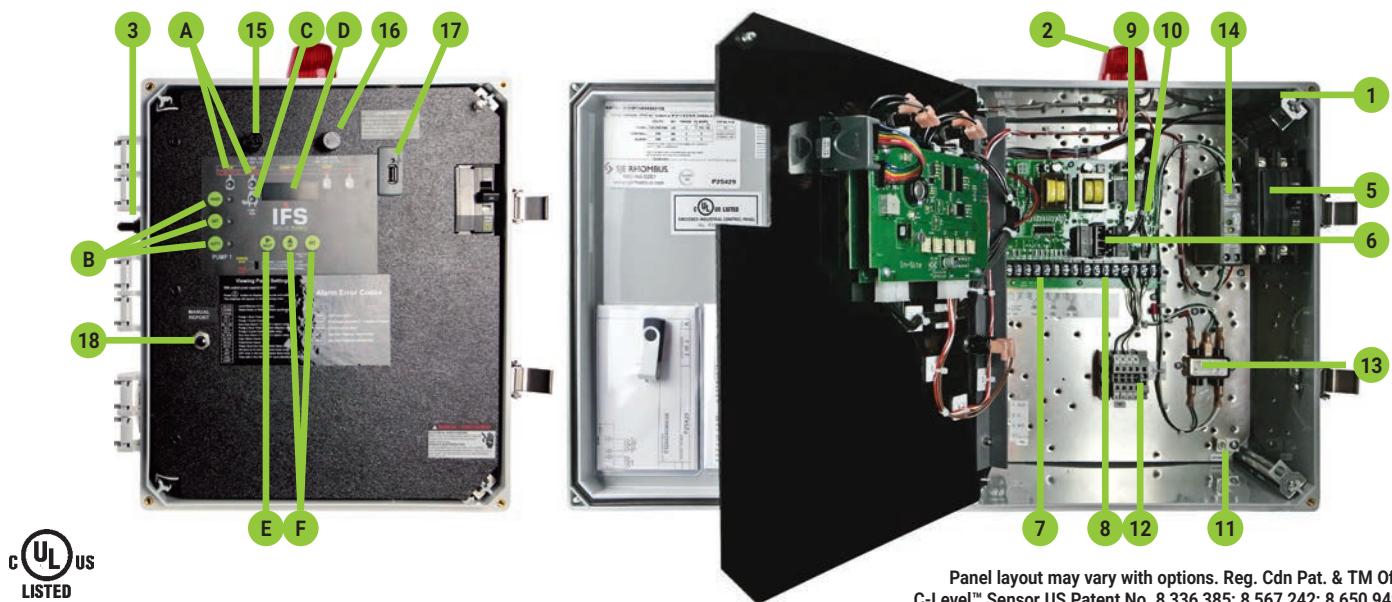**Note:** Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout. Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SENSOR/TRANSMITTER	OPERATING RANGE
C-Level™ CL40	0-39.9 inWC
C-Level™ CL100	0-99.9 inWC
Sub-X™ LT Transmitter (4-20mA)	0-100 inWC

Installer Friendly Series®

INSTALLER FRIENDLY SERIES® (IFS) IN-SITE®
SINGLE PHASE SIMPLEX
Demand Dose or Timed Dose, Float or C-Level™ Sensor Controlled System for Pump Control, System Monitoring, Event Logging and Reporting

Panel layout may vary with options. Reg. Cdn Pat. & TM Off
C-Level™ Sensor US Patent No. 8,336,385; 8,567,242; 8,650,949

Get In-Site® to your On-Site™ Systems!

The IFS In-Site® simplex control panel utilizes an innovative circuit board design to control one 120/208/240V single phase pump in water and sewage applications. IFS panels feature an easy-to-use touch pad on inner door for programming and system monitoring. Quick retrieval of all system events can be done by downloading panel information onto a USB flash drive. The panel configuration can be easily converted in the field to either a timed dose or demand dose. Available with the EZconnex® float system.

Monitor system events including pump run times, pump cycles, alarm conditions, power outages, service calls and more! Quick, convenient reports make diagnosing system conditions easy! Plug the flash drive into the USB port located on the inner door of the IFS In-Site® panel to download system events which occurred. No computer is needed at the site! Use the flash drive (included with panel) with any computer to download system information and reports. The pre-loaded software on the flash drive formulates system data for you, creating reports quickly in an easy-to-read format so system conditions can be easily identified and corrected. In addition to monitoring system events, the IFS In-Site® panel logs any service calls and changes made to system settings, which helps protect service providers.

The panel can utilize the C-Level™ sensor for continuous level monitoring. It senses the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the panel touch pad. C-Level™ CL40 sensor operating range is 3-39.9 inches (7.6-101.3 cm). C-Level™ CL100 operating range is 3-99.5 inches (7.6-252.7 cm).

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor

TOUCH PAD FEATURES

A. Level Status indicators illuminate when floats or set points are activated; alarm will activate if a float operates out of sequence
B. HOA (Hand-Off-Automatic) buttons with indication control pump mode; Hand mode defaults to Automatic when stop level or redundant off level is reached
C. Pump Run indicator illuminates when pump is called to run
D. LED display for system information including: level in inches or centimeters (C-Level™ sensor only), mode, pump elapsed time (hh:mm), events (cycles), alarm counter, float error count, timed dose override counter (timed dose only), pump ON/OFF times (timed dose only), and sequence ON/OFF times (timed dose only)
E. NEXT push button toggles display
F. UP and SET push buttons used to set pump ON/OFF times (timed dose only), date and hour, activation levels (C-Level™ only)

COMPONENTS

1. Enclosure base measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)
2. Red LED beacon provides 360° visual check of alarm condition
3. Exterior Alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared
4. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (Not shown)
5. Circuit breaker (optional) provides pump disconnect and branch circuit protection
6. Power relay controls pump by switching electrical lines; definite purpose contactor used when pump full load amps are above 15
7. Float connection terminal block
8. Incoming control/alarm terminal block
9. Control Power indicator/fuse indicator light illuminates if control power is present in panel; alarm will activate if control fuse is blown
10. Alarm Power indicator/fuse indicator light illuminates if alarm power is present in panel
11. Ground lug
12. Incoming pump power connections
13. RF filter
14. Power supply
15. Control fuse
16. Alarm fuse
17. USB port for flash drive to download time-stamped system events
18. Manual report switch date and time stamps service calls

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

INSTALLER FRIENDLY SERIES® IN-SITE® SINGLE PHASE SIMPLEX - Demand or timed dose float controlled system for pump control, system monitoring, event logging and reporting.

IFI		1	W	1				8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

<div style="margin-left: 0">Installer Friendly Series®</div>

CONTROL PANEL	✓	IFI	
MODEL TYPE		1	Simplex Timed Dose (includes Option 8AC as standard)
		2	Simplex Demand Dose (includes Option 8AC as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS		0	No Pump Disconnect
		4	Circuit Breaker 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = timer enable and alarm / Demand dose = stop, start, and alarm
		E	EZconnex® Float Switch System
		X	No Floats or Sensor
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4A & 4D for high water alarm and/or redundant off floats

PRICING WORKSHEET

IFI Simplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

NOTE: Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off when using the C-Level™ sensor.

|	OPTIONS	DESCRIPTION		OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs		17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury**
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C**		17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury**
				17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical**
	4A	Redundant Off (must also select Option 4D if floats are required)		17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical**
	4D	Redundant Off Float (must also select Option 4A and Option 17)		17J	Sensor Float® / Pipe Clamp (per Float) - Mercury
	6A	Auxiliary Alarm Contact, Form C		18A	Timer Override Float (Timed Dose Float Panel Only)
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)**		24E	C-Level™ CL40 Sensor with 25' Vented Cable
				24F	C-Level™ CL40 Sensor with 50' Vented Cable
✓	10E	**Lockable Latch - NEMA 4X**		24P	C-Level™ CL40 Sensor with 100' Vented Cable
	10F	Lightning Arrestor (select pump circuit breaker, control and alarm power combined)		24X	No C-Level™ CL40 Sensor
				29A	C-Level™ CL100 Sensor with 25' Vented Cable
	10K	Anti-condensation Heater **(must select if operating temperature is colder than 0 degrees F or -18 degrees C)**		29B	C-Level™ CL100 Sensor with 50' Vented Cable
				29C	C-Level™ CL100 Sensor with 100' Vented Cable
	15A	Control/Alarm Circuit Breaker		29X	No C-Level™ CL100 Sensor
	16C	30' Cord in Lieu of 20' Cord (per Float)		33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	16D	40' Cord in Lieu of 20' Cord (per Float)		35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

*For TImed Dose models, the base price is adjusted as it is a two float system.

**For 3E options, there is no charge when selecting any of the 17 options.

INSTALLER FRIENDLY SERIES® (IFS) IN-SITE® SINGLE PHASE DUPLEX

Demand Dose or Timed Dose, Float or C-Level™ Sensor Controlled System for Pump Control, System Monitoring, Event Logging and Reporting
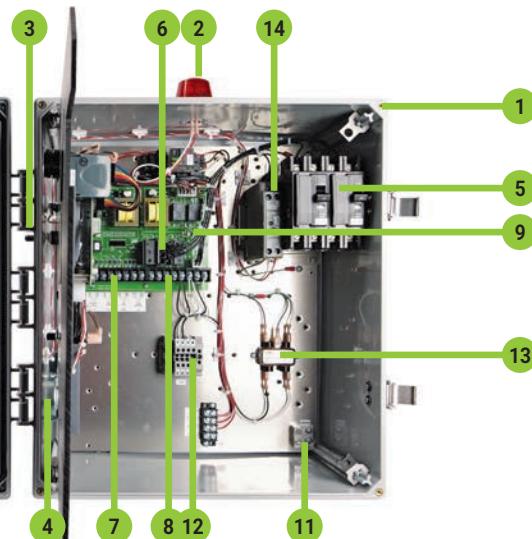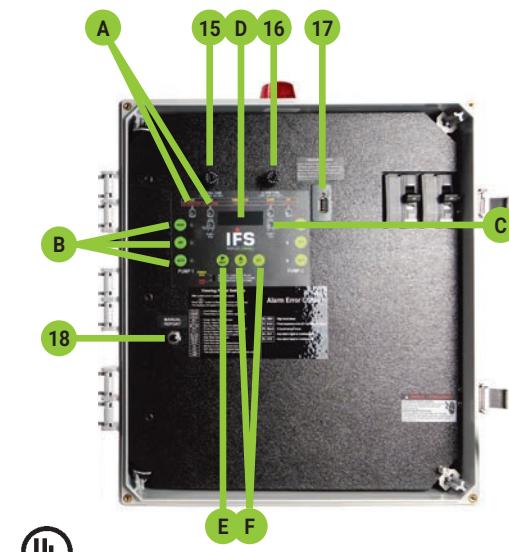
Panel layout may vary with options. Reg. Cdn Pat. & TM Off
C-Level™ Sensor US Patent No. 8,336,385; 8,567,242; 8,650,949

The IFS In-Site® duplex control panel utilizes an innovative circuit board design to control two alternating 120/208/240V single phase pumps in water and sewage applications. IFS panels feature an easy-to-use touch pad on inner door for programming and system monitoring. The alternating action equalizes pump wear. In addition, this system provides override control should either pump fail. Quick retrieval of all system events can be done by downloading panel information onto a USB flash drive. The panel configuration can be easily converted in the field to either a timed dose or demand dose. Available with the EZconnex® float system.

Monitor system events including pump run times, pump cycles, alarm conditions, power outages, service calls and more! Quick, convenient reports make diagnosing system conditions easy! Plug the flash drive into the USB port located on the inner door of the IFS In-Site® panel to download system events which occurred. No computer is needed at the site! Use the flash drive (included with panel) with any computer to download system information and reports. The pre-loaded software on the flash drive formulates system data for you, creating reports quickly in an easy-to-read format so system conditions can be easily identified and corrected. In addition to monitoring system events, the IFS In-Site® panel logs any service calls and changes made to system settings, which helps protect service providers.

The panel can utilize the C-Level™ sensor for continuous level monitoring. It senses the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the panel touch pad. C-Level™ CL40 sensor operating range is 3-39.9 inches (7.6-101.3 cm). C-Level™ CL100 operating range is 3-99.5 inches (7.6-252.7 cm).

- Five-year limited warranty on panel
- Two-year limited warranty on C-Level™ Sensor

TOUCH PAD FEATURES

A. Level Status indicators illuminate when floats or set points are activated; alarm will activate if a float operates out of sequence
B. HOA (Hand-Off-Automatic) buttons with indication control pump mode; Hand mode defaults to Automatic when stop level or redundant off level is reached
C. Pump Run indicators will illuminate when pumps are called to run
D. LED display for system information including: level in inches or centimeters (C-Level™ only), mode, pumps elapsed time (hh:mm), events (cycles), alarm counter, float error count, timed dose override counter (timed dose only), pump ON/OFF times (timed dose only), and sequence ON/OFF times (timed dose only)
E. NEXT push button toggles display
F. UP and SET Push Buttons used to set pump ON/OFF times (timed dose only), pump operation (alternate 1-2 and 2-1), date and hour, activation levels (C-Level™ only)

COMPONENTS

1. Enclosure base measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)
2. Red LED beacon provides 360° visual check of alarm condition
3. Exterior Alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared
4. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
5. Circuit breakers (optional) provide pump disconnect and branch circuit protection
6. Power relays control pump by switching electrical lines; definite purpose contactors used when pump full load amps are above 15
7. Float connection terminal block
8. Incoming Control/Alarm Terminal Block
9. Control Power indicator/fuse indicator light illuminates if control power is present in panel; alarm activates if control fuse is blown
10. Alarm Power indicator/fuse indicator light illuminates if alarm power is present in panel (Not shown)
11. Ground lugs
12. Incoming pump power connections
13. RF filter
14. Power supply
15. Control fuse
16. Alarm fuse
17. USB port for flash drive to download time-stamped system events
18. Manual report switch date and time stamps service calls

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

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SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® IN-SITE® SINGLE PHASE DUPLEX - Demand or timed dose float controlled system for pump control, system monitoring, event logging and reporting.

IFI		1	W	1				8AC10E
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFI	
MODEL TYPE		3	Duplex Timed Dose (includes Option 8AC as standard)
		4	Duplex Demand Dose (includes Option 8AC as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS		0	No Pump Disconnect
		4	Circuit Breaker(s) 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below) Timed dose = timer enable and alarm / Demand dose = stop, start, and alarm
		E	EZconnex® Float Switch System
		X	No Floats or Sensor
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4A & 4D for high water alarm and/or redundant off floats

PRICING WORKSHEET

IFI Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

NOTE: Pump down applications only. Industry practices suggest that a secondary device, such as a float switch, be used for redundant activation of the high level alarm and pump shut off when using the C-Level™ sensor.

	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
	3E	High Water Alarm Float (must also select Option 17)** **Only Available with Level Control Application = C**
	4A	Redundant Off (must also select Option 4D if floats are required)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
	6A	Auxiliary Alarm Contact, Form C
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, Override Counter (Timed Dose Only), and Lead/Lag Selector (Demand Dose Only) (included as standard)**
✓	10E	**Lockable Latch - NEMA 4X**
	10F	Lightning Arrestor (select pump circuit breakers, control and alarm power combined)
	10K	Anti-condensation Heater **(must select if operating temperature is colder than 0 degrees F or -18 degrees C)**
	15A	Control/Alarm Circuit Breaker
	16C	30' Cord in Lieu of 20' Cord (per Float)
	16D	40' Cord in Lieu of 20' Cord (per Float)

OPTIONS	DESCRIPTION
17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
18A	Timer Override Float (Timed Dose Float Panel Only)
19F	Fourth Float to Separate Alarm Function from Lag (Demand Dose Float Panel Only)
24E	C-Level™ CL40 Sensor with 25' Vented Cable
24F	C-Level™ CL40 Sensor with 50' Vented Cable
24P	C-Level™ CL40 Sensor with 100' Vented Cable
24X	No C-Level™ CL40 Sensor
29A	C-Level™ CL100 Sensor with 25' Vented Cable
29B	C-Level™ CL100 Sensor with 50' Vented Cable
29C	C-Level™ CL100 Sensor with 100' Vented Cable
29X	No C-Level™ CL100 Sensor
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional level control and control panel options, please contact Technical Support at techsupport@sjeinc.com.

*For TImed Dose models, the base price is adjusted as it is a two float system.

**For 3E options, there is no charge when selecting any of the 17 options.

SJE RHOMBUS.

Installer Friendly Series®

INSTALLER FRIENDLY SERIES® (IFS) DRIP

Single Phase, Simplex Subsurface Drip Irrigation Panel for Pump Control and System Monitoring
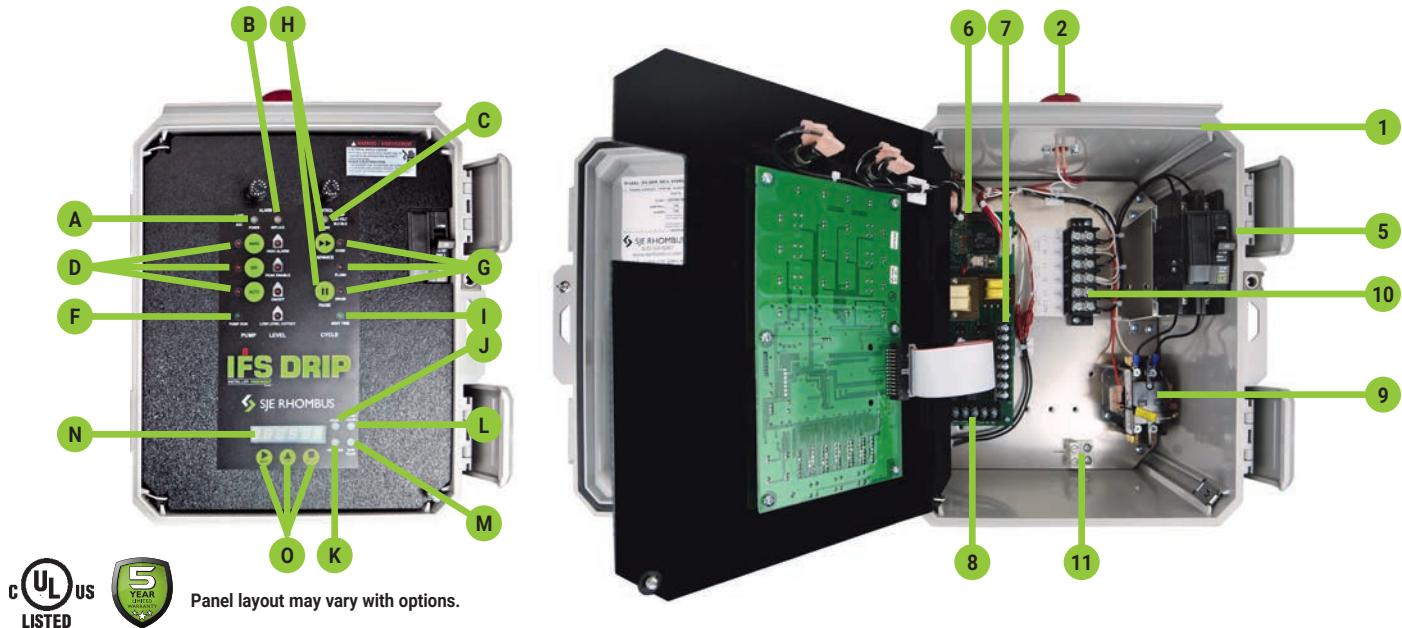
Panel layout may vary with options.

The Installer Friendly Series® Drip irrigation control panel is designed to control one 120V or 230V single phase pump for subsurface irrigation systems. The IFS Drip panel features a simple, easy-to-use touch pad on the inner door for programming and monitoring system operation: rest for standard time, rest for peak enable time, spin filter flush time, dose time, field flush time, field drain time, and low alarm activation.

TOUCH PAD FEATURES

A. Alarm Power indicator/fuse; LED indicator light illuminates if alarm power is present in panel

B. Alarm Power replace indicator illuminates if alarm fuse is blown

C. Control Power indicator/fuse; LED indicator light illuminates if control power is present in panel

NOTE: If control power is not present panel will go into alarm mode.

D. HOA (Hand/Off/Automatic) indicators/buttons control pump mode with LED indication

E. Float Status indicators illuminate when floats are activated; alarm will activate and indicator will flash if a float operates out of sequence

F. Pump Run indicator illuminates when pump is called to run

G. Cycle Status indicators allows user to see which cycle (dose, flush, or drain) is activated

H. Advance and Pause buttons allow user to cycle though system functions for testing

I. Rest Time indicator illuminates in between cycles

J. Count indicator illuminates when viewing panel data

K. Program indicator illuminates when programming panel

L. Flush Valve indicator illuminates when flush valve is called to energize

M. Spin Valve indicator illuminates when spin valve is called to energize

N. Seven-Segment LED Display for high water alarm count, float status sequence error count, low level cutout float open low alarm count, standard dose count, power-fail count, pump on/off cycle count, pump run times (hh:mm), and peak dose count

O. Next, Up, Select Buttons are used to navigate through the display.

NOTE: LED display will turn off after one minute of not being used.

COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)

2. Red LED beacon provides 360° visual check of alarm condition

3. Exterior Alarm Test/Normal/Silence Switch allows horn and beacon to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

4. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (Not shown)

5. Circuit breaker provides pump disconnect and branch circuit protection

6. Circuit board provides power to main circuit board and contains terminal blocks for float and valve connections

7. Float connections

8. Valve connections

9. Magnetic motor contactor controls pump by switching electrical lines

10. Large incoming power/pump connection terminal block

11. Ground lugs

Note: Options, voltage, and amp range selected may change enclosure size and component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

INSTALLER FRIENDLY SERIES® DRIP - Single phase, simplex subsurface touch pad drip irrigation for pump control and system monitoring.

Part #	Description	VAC	FLA
1018134	IFS Drip Panel	120/208/240V	7-15
1021573	IFS Drip Panel with Pressure Switch	120V	7-15
1021563	IFS Drip Panel with Pressure Switch	120/208/240V	7-15

IFS Drip Control Panel Operation:

Four (4) float switches (low level, timer on/off, peak enable, and high alarm floats) control the operation. Timers internal to the PCB control the pump dosing cycles. When the liquid level activates the timer on float, the following operations occur:

1. Rest time
2. The pump turns on and the spin filter valve opens for the user-programmed length of time.
3. The spin filter valve closes and the pump continues to run for the user-programmed dose time.
4. The pump continues to run and the flush valve opens for the user-programmed length of time.
5. The pump turns off and the flush valve remains open for the user-programmed drain time.
6. The flush valve closes for the user-programmed off time.

VENT VENT

FLUSH MANIFOLD SUPPLY MANIFOLD

DRIP LINE

DRIP LINE

DRIP LINE

SPIN FILTER

SPIN VALVE

FLUSH VALVE

SUPPLY

IFS DRIP

SJE RHOMBUS

HIGH ALARM

PEAK ENABLE

ON / OFF

REDUNDANT OFF

PUMP

PRE-TREATMENT TANK DOSE TANK
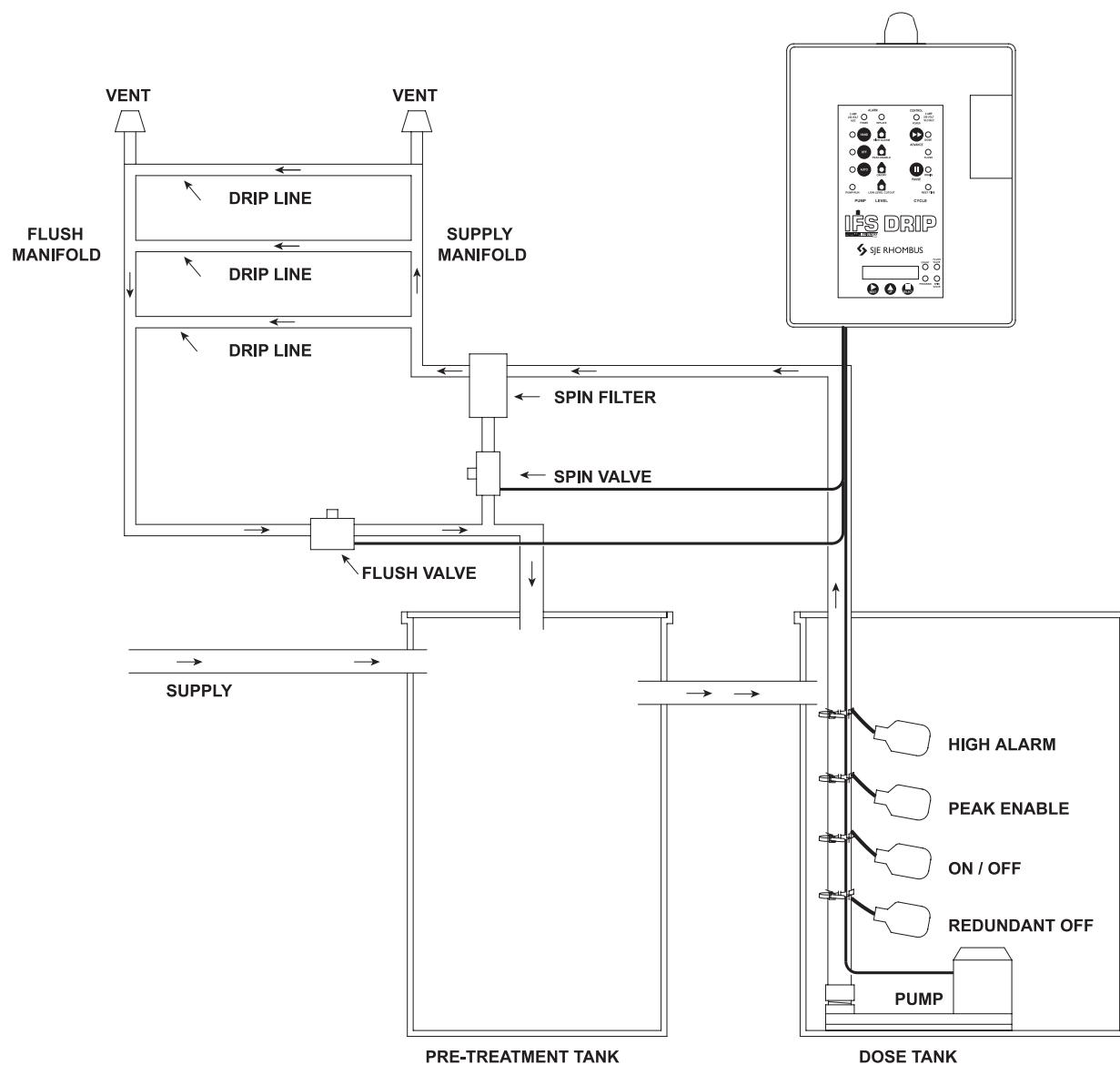
NEX SERIES® SINGLE PHASE SIMPLEX

Single Phase, Simplex Motor Control

U.S. Patent No. 10,251,284
Panel layout may vary with options.

The NEX Series® simplex panel is designed to control one single phase pump in water and wastewater applications. Two control switches activate a power relay to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audible/visual alarm system. The compact design (8" x 6" x 4") is ideal for residential applications. Universal pump voltage and control/alarm power allow the NEX Series® panel to handle three voltages (120/208/240V). The innovative internal design of components and integral mounting tabs make installation quick and simple.
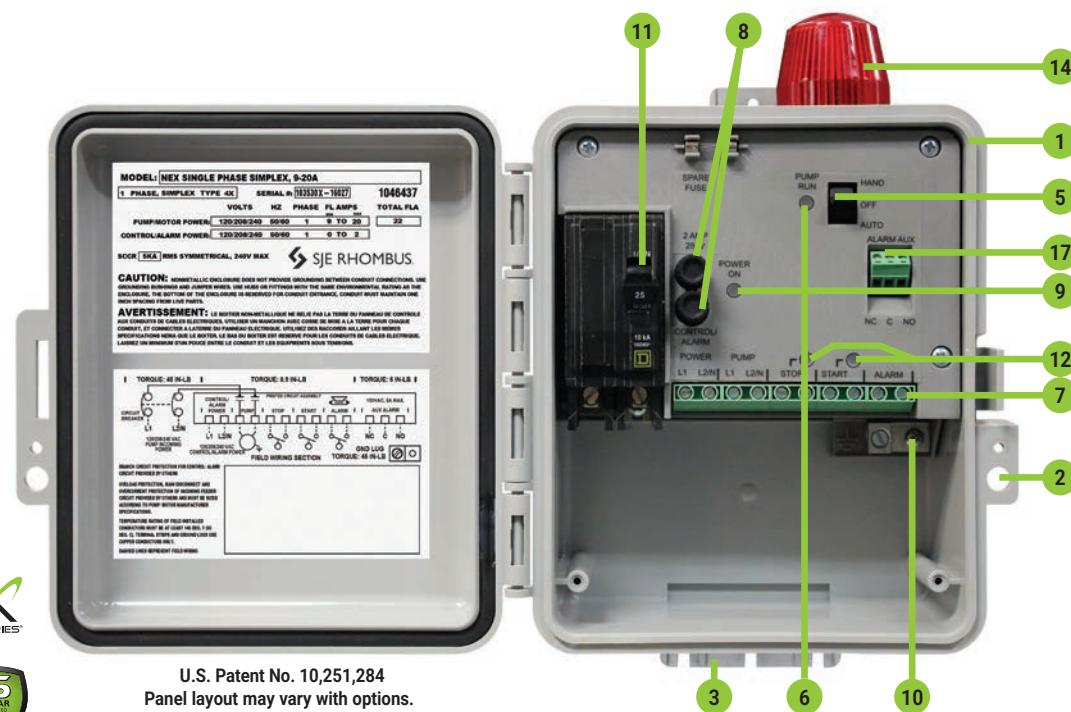
COMPONENTS

1. Enclosure measures 8 x 6 x 4 inches (20.32 x 15.24 x 10.16 cm) NEMA 4X (ultraviolet stabilized thermoplastic) for indoor or outdoor use
2. Integral padlockable latch for added safety
3. Integral mounting feet
4. Power relay controls pump by switching electrical lines (Not shown)
5. HOA switch for manual pump control
6. Green Pump Run indicator light
7. Field wiring terminal blocks
8. Control/Alarm fuses
9. Control/Alarm Power indicator (not available with Elapsed Time Meter option)
10. Ground lug
11. Circuit breaker provides pump disconnect and branch circuit protection
12. Float Status indicator lights (Stop and Start float status) (Float/Control Voltage: 12 VDC)
13. Elapsed Time Meter (optional - not shown) provides pump run-time in hours
14. Red LED beacon provides 360° visual check of alarm condition
15. Alarm horn provides audible warning of alarm condition (85 to 90 decibel rating) (Not shown)
16. Exterior alarm Test/Silence push button switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition has been cleared (Not shown)
17. Auxiliary Alarm Contacts are provided for signaling an external device (Form C, 5 amp, 120V max)

NEX SERIES® SINGLE PHASE SIMPLEX - Single phase, simplex motor control.

Part #	Description (without Elapsed Time Meter)	Amps	Shipping Weight
1046436	NEX Series® Simplex, 120/208/240V, (3) 20' SJE SignalMaster® Switches	0-12	9 lbs.
1047662	NEX Series® Simplex, 120/208/240V, No Floats	0-12	5 lbs.
1054597	NEX Series® Simplex, 120/208/240V, EZconnex® 3-Port, 50' with (3) 10' Floats ♣	0-12	13.6 lbs.
1046437	NEX Series® Simplex, 120/208/240V, (3) 20' SJE SignalMaster® Switches	9-20	9 lbs.
1047663	NEX Series® Simplex, 120/208/240V, No Floats	9-20	5 lbs.
1054598	NEX Series® Simplex, 120/208/240V, EZconnex® 3-Port, 50' with (3) 10' Floats ♣	9-20	13.6 lbs.
Part #	Description (with Elapsed Time Meter)	Amps	Shipping Weight
1053452	NEX Series® Simplex, 120/208/240V, with ETM, (3) 20' SJE SignalMaster® Switches	0-12	9 lbs.
1053454	NEX Series® Simplex, 120/208/240V, with ETM, No Floats	0-12	5 lbs.
1055708	NEX Series® Simplex, 120/208/240V, with ETM, EZconnex® 3-Port, 50' with (3) 10' Floats ♣	0-12	13.6 lbs.
1053453	NEX Series® Simplex, 120/208/240V, with ETM, (3) 20' SJE SignalMaster® Switches	9-20	9 lbs.
1053455	NEX Series® Simplex, 120/208/240V, with ETM, No Floats	9-20	5 lbs.
1055709	NEX Series® Simplex, 120/208/240V, with ETM, EZconnex® 3-Port, 50' with (3) 10' Floats ♣	9-20	13.6 lbs.

♣ All EZconnex® float switches are normally open with pipe clamp.

SPECIFICATIONS

VOLTAGE SUPPLY:
PUMP: 120/208/240 VAC, 50/60 Hz
CONTROL/ALARM: 120/208/240 VAC, 50/60 Hz

ENCLOSURE: 8 x 6 x 4 inch (20.32 x 15.24 x 10.16 cm)
Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with integral mounting feet for outdoor or indoor use)

FLOAT CONTROL VOLTAGE: 12 VDC

PUMP AMPS: 0-12 Amps; 9-20 Amps

AUXILIARY ALARM CONTACTS: Form C, 5 amp, 120 VAC Max

SJE RHOMBUS

NEX Series®

NEX SERIES® SINGLE PHASE DUPLEX

Single Phase, Duplex Motor Alternating Pump Control with Override

U.S. Patent No. 10,251,284
Panel layout may vary with options.

The NEX Series® duplex panel is designed to alternately control two 120, 208 or 240 VAC single phase pumps in water and sewage installations. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail. If an alarm condition occurs, an alarm switch activates the audible/visual alarm system. The compact design (10" x 8" x 4") is ideal for residential applications. Universal pump voltage and control/alarm power allow the NEX Series® panel to handle three voltages (120/208/240V). The innovative internal design of components and integral mounting tabs make installation quick and simple. Includes integral padlockable latch for added safety.
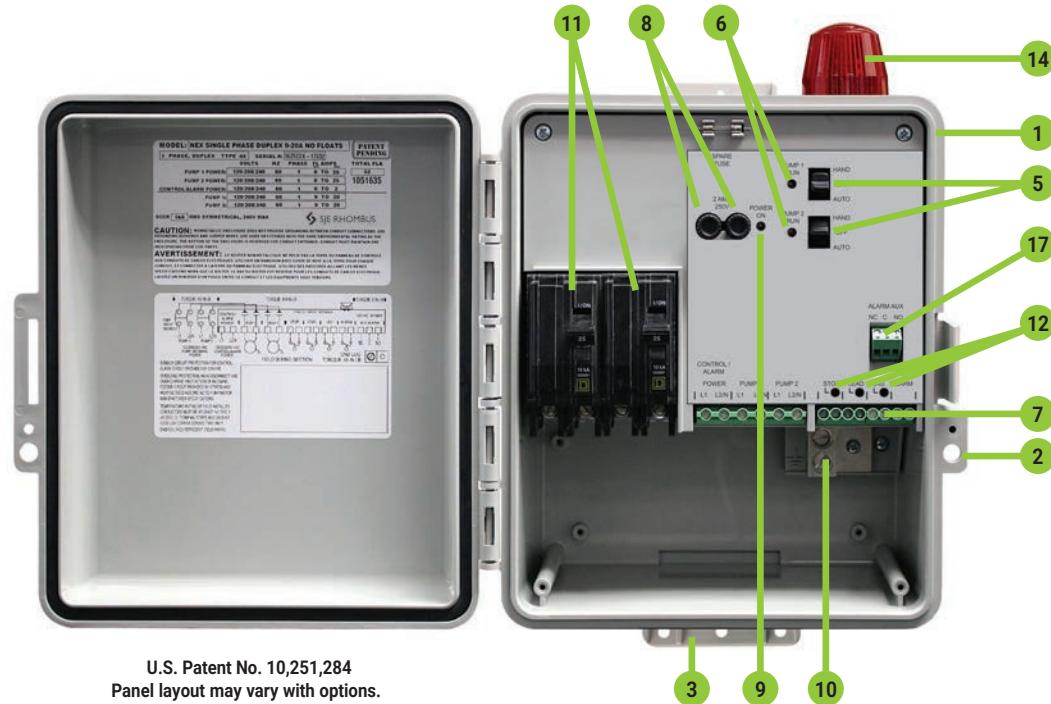
COMPONENTS

1. Enclosure measures 10 x 8 x 4 inches (25 x 20 x 10 cm) NEMA 4X (ultraviolet stabilized thermoplastic) for indoor or outdoor use
2. Integral padlockable latch for added safety
3. Integral mounting feet for indoor or outdoor use
4. Power relays control pumps by switching electrical lines (Not shown)
5. HOA switches for manual pump control
6. Green Pump Run indicator lights
7. Field wiring terminal blocks
8. Control/Alarm fuses
9. Control/Alarm Power indicator
10. Ground lug
11. Circuit breakers provide pump disconnect and branch circuit protection
12. Float Status indicator lights (Stop, Lead and Lag float status) (Float/Control Voltage: 12 VDC)
13. Elapsed Time Meter (optional - not shown) provides individual pump run-time in hours
14. Red LED beacon provides 360° visual check of alarm condition
15. Alarm horn provides audible warning of alarm condition (85 to 90 decibel rating) (Not shown)
16. Exterior alarm Test/Silence push button switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition has been cleared (Not shown)
17. Auxiliary Alarm Contacts are provided for signaling an external device (Form C, 5 amp, 120V max)

SJE RHOMBUS®

NEX SERIES® SINGLE PHASE DUPLEX - Single phase, duplex motor control.

Part #	Description (without Elapsed Time Meter)	Amps	Shipping Weight
1051630	NEX Series® Duplex, 120/208/240V, (4) 20' SJE SignalMaster Switches	0-12	14 lbs.
1051631	NEX Series® Duplex, 120/208/240V, (3) 20' SJE SignalMaster Switches	0-12	12 lbs.
1051632	NEX Series® Duplex, 120/208/240V, No Floats	0-12	9 lbs.
1051633	NEX Series® Duplex, 120/208/240V, (4) 20' SJE SignalMaster Switches	9-20	14 lbs.
1051634	NEX Series® Duplex, 120/208/240V, (3) 20' SJE SignalMaster Switches	9-20	12 lbs.
1051635	NEX Series® Duplex, 120/208/240V, No Floats	9-20	9 lbs.
Part #	Description (with Elapsed Time Meter)	Amps	Shipping Weight
1053263	NEX Series® Duplex, 120/208/240V, with ETM, (4) 20' SJE SignalMaster Switches	0-12	14 lbs.
1053264	NEX Series® Duplex, 120/208/240V, with ETM, (3) 20' SJE SignalMaster Switches	0-12	12 lbs.
1053265	NEX Series® Duplex, 120/208/240V, with ETM, No Floats	0-12	9 lbs.
1053266	NEX Series® Duplex, 120/208/240V, with ETM, (4) 20' SJE SignalMaster Switches	9-20	14 lbs.
1053267	NEX Series® Duplex, 120/208/240V, with ETM, (3) 20' SJE SignalMaster Switches	9-20	12 lbs.
1053268	NEX Series® Duplex, 120/208/240V, with ETM, No Floats	9-20	9 lbs.
Part #	Description (with EZconnex ® 4-Port System)	Amps	Shipping Weight
1055737	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 25' with (3) 10' Floats with Plug ❖	0-12	19 lbs.
1055738	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 50' with (3) 10' Floats with Plug ❖	0-12	22 lbs.
1055739	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 25' with (4) 10' Floats ❖	0-12	20 lbs.
1055741	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 25' with (3) 10' Floats with Plug ❖	9-20	19 lbs.
1055743	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 25' with (4) 10' Floats ❖	9-20	20 lbs.
1055744	NEX Series® Duplex, 120/208/240V, EZconnex® 4-Port, 50' with (4) 10' Floats ❖	9-20	23 lbs.

❖ All EZconnex® float switches are normally open with pipe clamp.

SPECIFICATIONS

VOLTAGE SUPPLY:
    PUMP: 120/208/240 VAC, 50/60 Hz
    CONTROL/ALARM: 120/208/240 VAC, 50/60 Hz

ENCLOSURE: 10 x 8 x 4 inch (25 x 20 x 10 cm)
    Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with
    integral mounting feet for outdoor or indoor use)

FLOAT CONTROL VOLTAGE: 12 VDC

PUMP AMPS: 0-12 Amps; 9-20 Amps

AUXILIARY ALARM CONTACTS: Form C, 5 amp, 120 VAC Max

NEX Series®

SJE RHOMBUS.

MODEL 115 CONTROL PANEL
Single Phase, Simplex Pump Switch Control

Panel layout may vary with options.
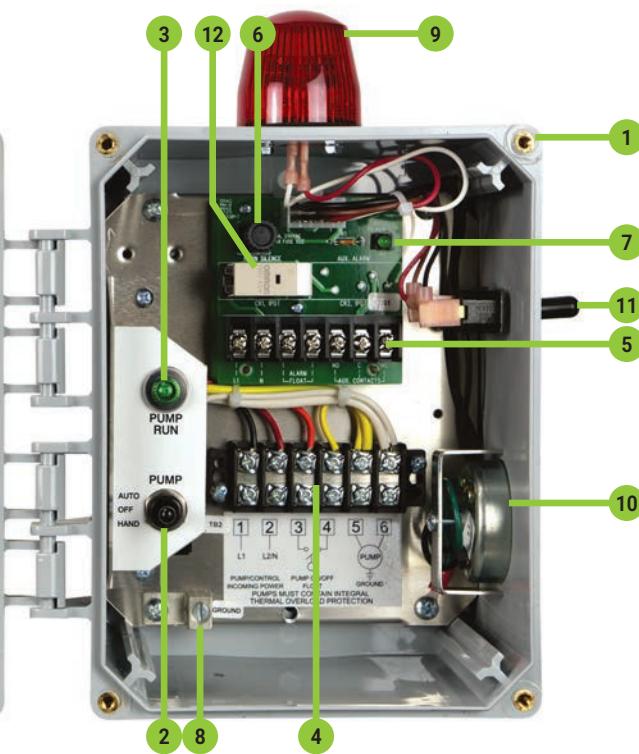
The Model 115 control panel provides customers with a reliable means of controlling one 120, 208, or 240 VAC single phase pump in water and wastewater installations. A pump float switch turns the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers, sump pump basins, irrigation systems, and lift stations.

OPTIONAL FEATURE

• 34" (86.36 cm) Panel Mounting Post (factory installed). Includes Simplex Installation Kit (Enclosure upsized to 10" x 8" x 6" (25.4 x 20.32 x 15.24 cm). Max. Enclosure size 14" x 12" x 6" (35.56 x 30.48 x 15.24 cm)

COMPONENTS

1. Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use) enclosure; enclosure measures 8 x 6 x 4 inches (20.32 x 15.24 x 10.16 cm)
2. HOA switch for manual pump control
3. Green pump run indicator light
4. Pump circuit terminal block
5. Alarm circuit terminal block (mounted on circuit board)
6. Alarm fuse (mounted on circuit board).
7. Alarm power indicator (mounted on circuit board)
8. Ground lug

Standard ALARM PACKAGE

9. Red LED beacon provides 360° visual check of alarm condition - Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon
10. Alarm Horn provides audio warning of alarm condition (83 to 85 decibel rating) - Note: NEMA 1 style utilizes an internally mounted buzzer in lieu of a horn
11. Exterior alarm test/normal/silence switch
12. Horn silence relay (mounted on circuit board)

Note: Other options available.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Single Phase

MODEL 115 - Single phase, simplex pump switch control.

115	1	W					
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	115	Single Phase Simplex
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, horn & float)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE		2	SJE PumpMaster® Plus Pump Switch (0-15 FLA) - Mechanical
		3	120V Double Float® Pump Switch (0-15 FLA) - Mercury
		4	240V Double Float® Pump Switch (0-12 FLA) - Mercury
		6	No Pump Switch
		7	120V Double Float® Master Pump Switch (0-15 FLA) - Mechanical
		8	240V Double Float® Master Pump Switch (0-15 FLA) - Mechanical
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
PUMP DISCONNECTS		0	No Pump Disconnect
		4	Circuit Breaker
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below)
		X	No Floats

PRICING WORKSHEET

Model 115 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

OPTIONS	DESCRIPTION
6A	Auxiliary Alarm Contact, Form C
8A	Elapsed Time Meter (120V)
8B	Elapsed Time Meter (240V)
10E	Lockable Latch - NEMA 4X / NEMA 1
10P	Panel Mounting Post - Factory Installed, Includes Simplex Installation Kit (Enclosure Upsized to 10x8x6, Max 14x12x6)

OPTIONS	DESCRIPTION
16C	30' Cord in Lieu of 20' Cord (per Float)
16D	40' Cord in Lieu of 20' Cord (per Float)
17A	SJE SignalMaster® / Pipe Clamp (Alarm Float Only) - Mechanical
17E	Sensor Float® Mini / Pipe Clamp (Alarm Float Only) - Mercury
17J	Sensor Float® / Pipe Clamp (Alarm Float Only) - Mercury
19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light through Door Mounted
19X	Door Mounted Pump Run Indicator

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Single Phase

www.sjerhombus.com • email: customer.service@sjeinc.com   **SEE PRICE BOOK FOR PRICING.**

SJE RHOMBUS.

MODEL 112 CONTROL PANEL

Single Phase, Simplex Motor Contactor Control
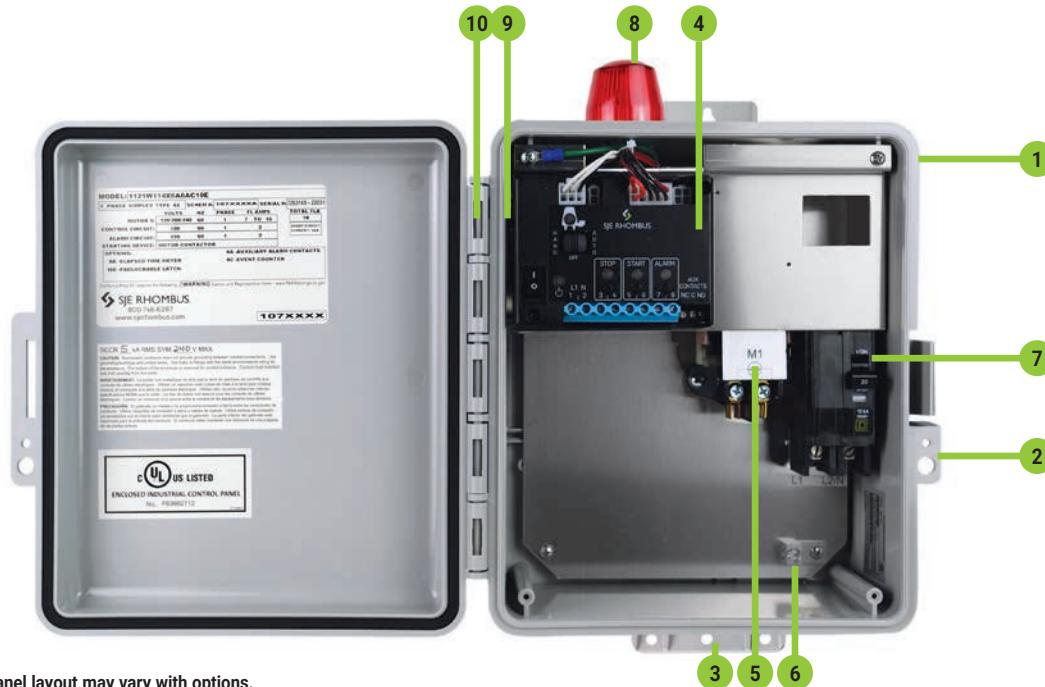
Panel layout may vary with options.

This latest generation Model 112 control panel controls one 120, 208, or 240 VAC single phase pump in water and sewage installations. This panel includes a new innovative simplex controller for pump control and alarm; including float status LEDs, control/alarm power on/off switch with LED indicator, pump run LED, HOA switch, auxiliary contacts and more!

The Model 112 control panel features built in pump failure and float out of sequence detection. In addition, there are three user selectable field programmable options: alarm steady state or flashing; alarm auto reset or manual reset; and optional seal failure alarm beacon plus horn activation.

Simplex controller features include:

- Touch safe circuit board housing and low voltage 24 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump contactor failure detection
- Controller protected by three auto resettable fuses (control, alarm, and pump 1)

Note: SJE Rhombus recommends separate pump and control/alarm power sources.

COMPONENTS

1. Enclosure measures 10 x 8 x 4 inches (25 x 20 x 10 cm) NEMA 4X (ultraviolet stabilized thermoplastic) for indoor or outdoor use
2. Integral padlockable latch for added safety
3. Integral mounting feet for indoor or outdoor use
4. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
   a. HOA switch for manual control of the pump
   b. Pump run green LED indicator
   c. Control power ON/OFF switch
   d. Power ON green LED indicator
   e. Float push-to-test buttons
   f. Float status red LED indicators
   g. Auxiliary alarm contacts Form C
   h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)
5. Magnetic motor contactor
6. Ground lug
7. Circuit breaker
8. Red LED beacon provides 360° visual check of alarm condition - Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon
9. Alarm horn provide audible warning of alarm condition (83 to 85 decibel rating) - Note: NEMA 1 style utilizes an internally mounted buzzer in lieu of horn **(Not shown)**
10. Exterior alarm test/normal/silence switch allows horn to be silenced in an alarm condition; alarm automatically resets once alarm condition has been cleared **(Not shown)**

Notes: Options, voltage, and amp range selected may change enclosure size and component layout.

Other options available.

Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Single Phase

SJE RHOMBUS®

Model 112 - Single phase, simplex motor contactor control.

Part #	Pre-configured Panels for Easy Ordering
1071824	1121W114X6A10E
1071853	1121W124X6A10E
1071823	1121W114H6A10E17G
1071822	1121W124H6A10E17G
1071841	1121W114H6A8AC10E17G
1075046	1121W124H6A8AC10E17G

112	1	W	1		4		6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	112	Single Phase Simplex
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, horn & float)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	Magnetic Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA (Enclosure Upsize Required)
PUMP DISCONNECT	✓	4	Circuit Breaker 120/208/240V
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17G below - 3 floats by default when selected)
		L	Floats - Pump Up (select Option 17G below - 3 floats by default when selected)
		E	EZconnex® Float Switch System
		X	No Floats

PRICING WORKSHEET

Model 112 Base Price _____
(includes Alarm Package,
Enclosure Rating,
Starting Device and
Pump Disconnect

Pump Full Load Amps _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION	
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)	
	5E	Seal Failure Circuit & Red Indicator (2 wire) (Normally Open)	
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**	
	8A	Elapsed Time Meter	
	8C	Event (Cycle) Counter	
	9_A	Pump Overload - Specify Amperage after Number 9 Followed by Letter "A"	0 - 25 FLA
		Example: 912A = 12 amp pump	25 - 30 FLA
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**	
	10F	Lightning Arrestor	
	10K	Anti-condensation Heater	
	10P	Panel Mounting Post - factory installed (max. enclosure 14x12x6)	
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON position (must select Circuit Breaker)	0 - 20 FLA
			20 - 30 FLA

OPTIONS	DESCRIPTION
15A	Control / Alarm Circuit Breaker
16C	30' Cord in Lieu of 20' Cord (per Float)
16D	40' Cord in Lieu of 20' Cord (per Float)
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
19T	TOA (Test/Off/Automatic) Switch and Pump Run Light through Door Mounted
19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light through Door Mounted
19X	Door Mounted Pump Run Indicator
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at
techsupport@sjeinc.com.

California Prop 65 requires the following: ⚠️**WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov**

B.36   www.sjerhombus.com • email: customer.service@sjeinc.com   **SEE PRICE BOOK FOR PRICING.**   SJE RHOMBUS.

MODEL 122 CONTROL PANEL
Single Phase, Duplex Alternating Pump Control with Override

Panel layout may vary with options.

The newly redesigned Model 122 control panel controls two 120/208/240V single phase pumps in water and sewage installations. This panel includes a new innovative duplex controller for pump control, alternation and alarm; including float status LEDs, control/alarm power on/off switch with LED indicator, pump run LEDs, HOA switches, pump lead lag selector switch, auxiliary contacts and more!

The Model 122 control panel features built in lag pump delay time, pump failure detection, and float out of sequence. In addition, there are four user selectable field programmable operations: alarm steady state or flashing; alarm auto reset or manual reset; pump failure notification; and optional seal failure alarm beacon notification or beacon plus horn activation. This panel is available with optional EZconnex® float connection system.

Other features include:

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses (control, alarm, pump 1, and pump 2), no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up

COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. Duplex controller provides pump control, alternation and alarm; elevated in the enclosure for easy access and field wiring
   a. HOA switches for manual control of the pump with green/red LED indicators
   b. Control power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1-lag
   g. Auxiliary alarm contacts Form C
   h. Separate terminal blocks for incoming power and float switches
   j. Option: adjustable seal failure circuits and red LED indicators (must select option 5E when ordering)
3. Magnetic motor contactors control pumps by switching electrical lines
4. Circuit breakers (optional) provide pump disconnect and branch circuit protection
5. Ground lugs
6. Red LED beacon provides 360° visual check of alarm condition
7. Alarm horn provides audible alarm warning (83 to 85 decibel rating) (Not shown)
8. Exterior Alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared unless the controller is programmed to manual alarm reset (Not shown)

Note: Options may increase enclosure size and/or change enclosure features/component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

Single Phase

MODEL 122 - Single phase, duplex alternating pump control with override.

Part #	Pre-configured Panels for Easy Ordering
1019842	1221W114H6A10E17G19B
1019462	1221W114X6A10E19B

122	1	W	1		4		6A19B
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS

CONTROL PANEL	✓	122	Single Phase Duplex (includes Options 6A and 19B as standard)	
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, red light, & horn)	
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)	
STARTING DEVICE	✓	1	Magnetic Motor Contactor 120/208/240V	
PUMP FULL LOAD AMPS		0	0 - 7 FLA	
		1	7 - 15 FLA	
		2	15 - 20 FLA	
		3	20 - 30 FLA	
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V	
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)	
		L	Pump Up (select Option 17 below)	
		E	EZconnex® Float Switch System	
		X	No Floats	

PRICING WORKSHEET

Model 122 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

Enclosure Upsize _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	4A	Redundant Off (must also select Option 4D if floats are required)
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4A)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	Auxiliary Alarm Contact, Form C (included as standard)
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
	9_A	Pump Overload - Specify Amperage After Number 9 Followed by Letter "A", Example: 912A = 12 Amp Pump / 0-25 FLA
		25-30 FLA
	10E	Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)
		Lockable Latch - NEMA 1
	10F	Lightning Arrestor (select pump circuit breaker)
	10K	Anti-condensation Heater
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) (must select circuit breaker) / 0-20 FLA (total of both pumps)
		20-60 FLA (total of both pumps)

	OPTIONS	DESCRIPTION
	16C	30' Cord in Lieu of 20' Cord (per float)
	16D	40' Cord in Lieu of 20' Cord (per float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
	17E	Sensor Float® Mini / Pipe Clamp (3 Floats) - Mercury
	17F	Sensor Float® Mini / Externally Weighted (3 Floats) - Mercury
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
✓	19B	Lead Lag Selector Switch (included as standard)
	19F	Fourth Float to Separate Alarm Function From Lag
	19T	TOA (Test/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19U	HOA (Hand/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19X	Door Mounted Pump Run Indicator
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Single Phase

MODEL 312 CONTROL PANEL
Three Phase, Simplex Motor Contactor Control

Panel layout may vary with options.

The Model 312 control panel provides industrial and commercial customers with a reliable means of controlling one 208/240/480V three phase pump in water and sewage installations. Two control switches activate an IEC motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers, irrigation systems, and lift stations. This panel is available with optional EZconnex® float connection system.

Simplex controller features include:

• Touch safe circuit board housing and low voltage 24 VDC float circuits

• Alarm (field programmable to flash)

• Alarm automatic reset (field programmable to manual alarm reset)

• Float out-of-sequence detection

• Pump contactor failure detection

• Controller protected by three auto resettable fuses (control, alarm, and pump 1)

COMPONENTS

1. NEMA 4X (ultraviolet stabilized thermoplastic enclosure measures 12 x 10 x 6 inches (30.48 x 24.4 x 15.24), padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use). Note: added options may change enclosure size and enclosure features.

2. IEC motor contactor controls pump by switching electrical lines

3. Multi-tap transformer (208/240/480 VAC primary) provides 120V control/alarm voltage or 600 VAC primary transformer

4. Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect

5. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
   a. HOA switch for manual control of the pump
   b. Pump run green LED indicator
   c. Control power ON/OFF switch
   d. Power ON green LED indicator
   e. Float push-to-test buttons
   f. Float status red LED indicators
   g. Auxiliary alarm contacts Form C
   h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)

6. Input power terminal block

7. Ground lugs

8. Red LED beacon provides 360° visual check of alarm condition

9. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)

10. Exterior Alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared **(Not shown)**

Note: Options may increase enclosure size and/or change enclosure features/component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Three Phase

MODEL 312 - Three phase, simplex, motor contactor control.

312	1	W			6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	312	Three Phase Simplex (includes Option 10E as standard)		
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)		
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)		
PUMP FULL LOAD AMPS			**208/240/480V**		**600V**
		001	1.0 - 1.6 FLA	005	1.0 - 1.6 FLA
		101	1.6 - 2.5 FLA	105	1.6 - 2.5 FLA
		201	2.5 - 4.0 FLA	205	2.5 - 4.0 FLA
		301	4.0 - 6.3 FLA	305	4.0 - 6.3 FLA
		401	6.0 - 10.0 FLA	405	6.0 - 10.0 FLA
		511	9.0 - 14.0 FLA	515	9.0 - 14.0 FLA
		611	13.0 - 18.0 FLA	615	13.0 - 18.0 FLA
		621	17.0 - 23.0 FLA	625	17.0 - 23.0 FLA
		701	20.0 - 25.0 FLA	705	20.0 - 25.0 FLA
LEVEL CONTROL APPLICATION		H	Floats - Pump Down (select Option 17 below)		
		L	Floats - Pump Up (select Option 17 below)		
		E	EZconnex® Float Switch System		
		X	No Floats		

PRICING WORKSHEET

Model 312 Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater
	14B	Main Disconnect - 14x12 Enclosure Upgrade (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position)

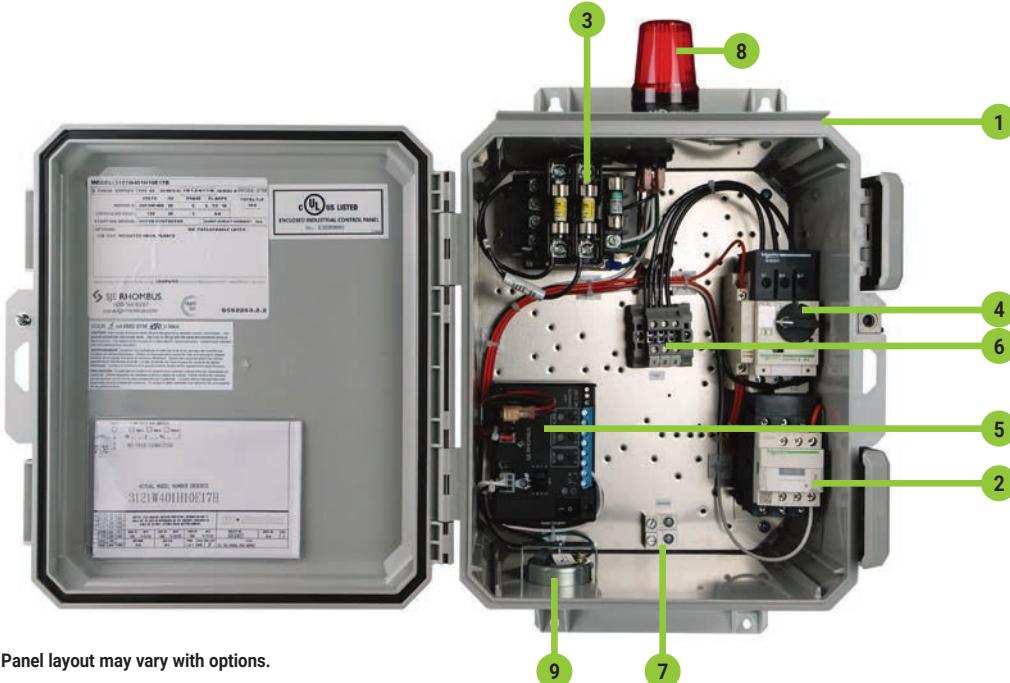| OPTIONS	DESCRIPTION
16C	30' Cord in Lieu of 20' Cord (per float)
16D	40' Cord in Lieu of 20' Cord (per float)
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
19T	TOA (Test/Off/Automatic) Switch and Pump Run Light Through Door Mounted
19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light Through Door Mounted
19X	Door Mounted Pump Run Indicator
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Three Phase

MODEL 322 CONTROL PANEL

Three Phase, Duplex Alternating Pump Control with Override

Panel layout may vary with options.
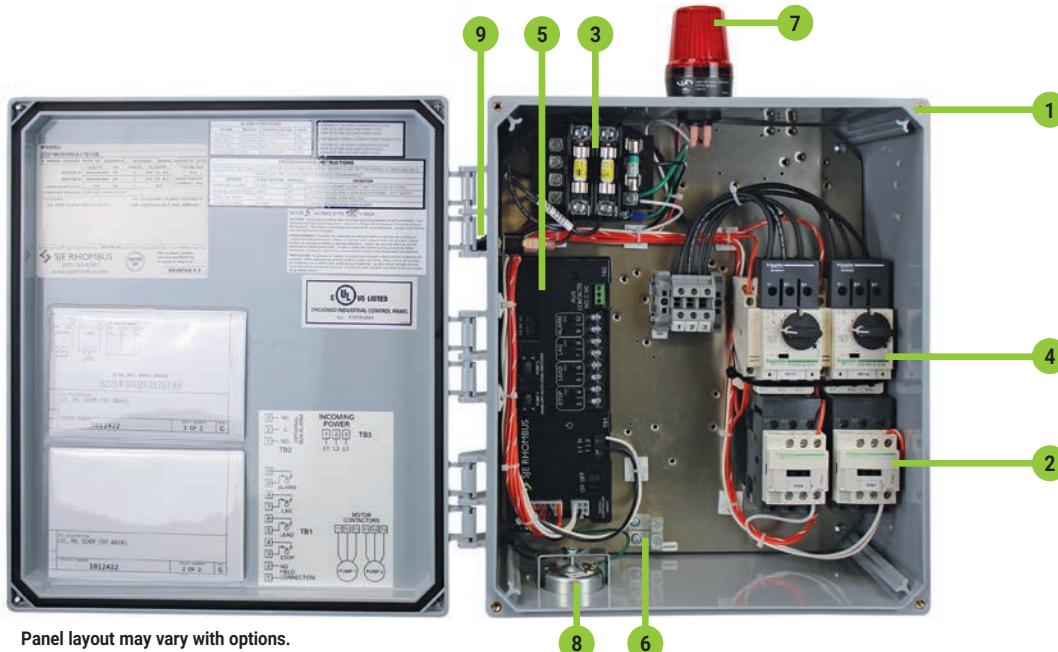
The newly redesigned Model 322 control panel controls two 208/240/480V three phase pumps in water and sewage installations. This panel includes a new innovative duplex controller for pump control, alternation and alarm; including float status LEDs, control/alarm power on/off switch with LED indicator, pump run LEDs, HOA switches, pump lead lag selector switch, auxiliary contacts and more!

The Model 322 control panel features built in lag pump delay time, pump failure detection, and float out of sequence. In addition, there are four user selectable field programmable operations: alarm steady state or flashing; alarm auto reset or manual reset; pump failure notification; and optional seal failure alarm beacon notification or beacon plus horn activation. This panel is available with optional EZconnex® float connection system.

Other features include:

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses (control, alarm, pump 1, and pump 2), no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up

COMPONENTS

1. NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use) enclosure; enclosure measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm)
2. IEC motor contactors control pumps by switching electrical lines
3. Multi-tap transformer (208/240/480 VAC primary or 600 VAC primary transformer) provides 120 VAC control/alarm voltage
4. Motor protective switches provide adjustable overload, branch circuit protection and pump disconnect
5. Duplex controller provides pump control, alternation and alarm
   a. HOA switches for manual control Hand/Off/Automatic
   b. Control power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1 lag
   g. Auxiliary alarm contacts Form C
   h. Terminal block: incoming power
   i. Terminal block: float switches
   j. Option: adjustable seal failure circuits and red LED indicators (must select option 5E when ordering)
6. Ground lugs
7. Red LED beacon provides 360° visual check of alarm condition
8. Alarm horn provides audible alarm warning (83 to 85 decibel rating)
9. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared

Note: Options may increase enclosure size and/or change enclosure features/component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Three Phase

SJE RHOMBUS®

MODEL 322 - Three phase, duplex alternating pump control with override.

322		W			6A10E19B
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	322	Three Phase Duplex (includes Options 6A and 19B as standard)
ALARM PACKAGE		0	Select Options or No Alarm Package
		1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)

PUMP FULL LOAD AMPS

208/240/480V		600V	
001	1.0 - 1.6 FLA	005	1.0 - 1.6 FLA
101	1.6 - 2.5 FLA	105	1.6 - 2.5 FLA
201	2.5 - 4.0 FLA	205	2.5 - 4.0 FLA
301	4.0 - 6.3 FLA	305	4.0 - 6.3 FLA
401	6.0 - 10.0 FLA	405	6.0 - 10.0 FLA
511	9.0 - 14.0 FLA	515	9.0 - 14.0 FLA
611	13.0 - 18.0 FLA	615	13.0 - 18.0 FLA
621	17.0 - 23.0 FLA	625	17.0 - 23.0 FLA
701	20.0 - 25.0 FLA	705	20.0 - 25.0 FLA

LEVEL CONTROL APPLICATION

H	Floats - Pump Down (select Option 17 below - ships with 3 floats by default)
L	Floats - Pump Up (select Option 17 below - ships with 3 floats by default)
E	EZconnex® Float Switch System
X	No Floats

PRICING WORKSHEET

Model 322 Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

Enclosure Upsize _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	4A	Redundant Off (must also select Option 4D if floats are required)
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4A)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	**6A**	**Auxiliary Alarm Contact, Form C (included as standard)**
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
	10A	Clear Inner Swing-Out Door with Dead Front (lights and switches mounted on inner door) **PANELS ORDERED WITH THIS OPTION CANNOT BE RETURNED**
✓	**10E**	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) — 0-20 FLA (total of both pumps) / 20-50 FLA (total of both pumps)

	OPTIONS	DESCRIPTION
	16C	30' Cord in Lieu of 20' Cord (per float)
	16D	40' Cord in Lieu of 20' Cord (per float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
	17E	Sensor Float® Mini / Pipe Clamp (3 Floats) - Mercury
	17F	Sensor Float® Mini / Externally Weighted (3 Floats) - Mercury
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
✓	**19B**	**Lead Lag Selector Switch (included as standard)**
	19F	Fourth Float to Separate Alarm Function from Lag
	19T	TOA (Test/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19U	HOA (Hand/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19X	Door Mounted Pump Run Indicator
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

B.42   www.sjerhombus.com • email: customer.service@sjeinc.com   SEE PRICE BOOK FOR PRICING.

SJE RHOMBUS.

Three Phase

MODEL 32S CONTROL PANEL
Three Phase, Duplex Alternating Pump Control with Override - Simply Add the Appropriate Overload Modules

**Panel layout may vary with options.**

The Model 32S control panel is designed to alternately control two three phase pumps in industrial and commercial water and sewage systems using standard 4 float operation (off, lead start, lag start, high level). The alternating action equalizes pump wear. In addition to alternating pump control, this system provides time delayed override control should either pump fail. This panel also provides seal fail indicators, thermal cutout and elapsed time meters for each pump. If a high water alarm condition occurs, the alarm switch activates the audible/visual alarm system along with auxiliary contacts for remote alarm. Common applications include lift stations, pump chambers, or installations classified as hazardous locations requiring intrinsically safe circuits.

INNER DOOR FEATURES

Inner Door provides a degree of safety for panel operation.

A. Hand/Off/Auto switches (22mm) for manual pump control (mounted on inner door)

B. Elapsed Time Meters provide time monitoring of pump operation (mounted on inner door)

C. Green Pump Run indicator lights (22mm) identify pump called to run condition (mounted on inner door)

D. Adjustable seal fail module provides dual pump seal inputs and two red seal fail indicators (mounted on inner door)

E. Inner door provides a degree of safety for panel operation
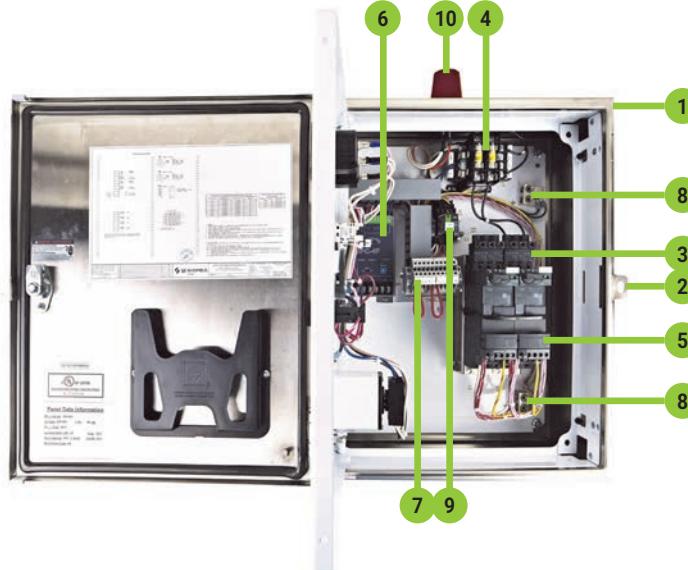
COMPONENTS

1. Enclosure measures 20" x 16" x 8" (50.8 x 40.6 x 20.3 cm) Type 4X stainless steel or Type 4X fiberglass 18" x 16" x 10" (45.7 x 40.6 x 25.4 cm) with mounting feet (for outdoor or indoor use)

2. Padlockable latch provides added safety

3. IEC HP rated motor starters perform contactor/circuit-breaker function, up to 32 FLA (requires separate overload modules); provides location for field wiring of incoming power and pumps

4. Multi-tap transformer (208/230/460 VAC primary) provides 120 VAC control/alarm voltage along with primary and secondary fusing

5. Class 10 ambient overload modules (purchased separately) provide overload-short circuit, phase failure-phase imbalance and ground fault protection (equipment protection only); accessible through inner door (two overload modules required, field installation required)

6. DPC-4F controller sequences pumps on and off in response to change in level input provided by the float switches, provides pump alternation selection (Alt, 1-2, 2-1), lag pump delay time (0-60 seconds), and provides the high water alarm and float out-of-sequence alarm conditions; for float out of sequences, the controller will reassign float designation for continued operation, until the float condition has cleared

7. Terminal blocks provide location for field wiring of floats, auxiliary alarm contact, seal fail and thermal cutout for each pump

8. Ground bar provides location for field wiring ground wires incoming power and pumps

9. Auxiliary alarm relay provides normally open contacts for activation of remote devices during high water condition

10. Red LED beacon provides 360 degree visual check of alarm condition

11. Alarm horn provides audio warning of alarm condition (95 decibel rating) (Not shown)

12. Exterior Test/Silence button (22 mm) allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

Intrinsically Safe Models

13. Intrinsically safe 4-channel module limits the amount of energy to float switches preventing ignition of flammable gases (Not shown)

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Three Phase

SJE RHOMBUS®

MODEL 32S - Three phase, duplex alternating pump control with override. Simply add the appropriate overload modules.

Part #	Description
1037516	32S1S000X3A5AE6A8A10AE19B Stainless Steel Enclosure
1059958	32S1W000X3A5AE6A8A10AE19B Fiberglass Enclosure
1059959	32S1W000X3A5AE6A8A10AE19B27A Fiberglass Enclosure, Intrinsically Safe Relay
1059960	32S1S000X3A5AE6A8A10AE19B27A Stainless Steel Enclosure, Intrinsically Safe Relay
Options Part #	**Description**
1033805	Overload Module 1.25-5.0 FLA
1023500	Overload Module 4.5-18.0 FLA
1033806	Overload Module 8.0-32.0 FLA
1036351	Surge Arrestor with Bracket

Note: Each panel requires two overload modules. Field installation required.

SPECIFICATIONS

VOLTAGE SUPPLY: 208/230/460 VAC 50/60 Hz 3Ø

ENCLOSURE: 32SIS: 20 x 16 x 8 inch (50.8 x 40.6 x 20.3 cm) NEMA 4X stainless steel, rated of indoor/outdoor use
32SIW: 18 x 16 x 10 inch (45.7 x 40.6 x 25.4 cm) NEMA 4X fiberglass, rated for indoor/outdoor use

INNER DOOR & BACK PLATE: white painted steel

LOCKING LATCH: (1) stainless steel 32SIS, or (2) thermoplastic 32SIW, padlockable

DPC-4F CONTROLLER: Provides pump control sequence, pump selector switch, pump lag delay timer (0-60sec), high water alarm, float out-of-sequence alarm and float reassignment, green pump call-to-run LEDs, and amber float status LEDs

FLOAT CONTROL VOLTAGE: 12 DC

MOTOR STARTER: IEC motor protection switch, IEC motor contactor with disconnect/overload reset mounted through the inner door

PUMP AMPS: 0-32 FLA each

ALARM HORN: 83-85 decibel rating

FLASHING RED LED ALARM LIGHT 360°

PUMP HAND-OFF-AUTO SWITCHES: 22mm mounted on inner door

PUMP RUN LIGHTS: green LED, 22mm mounted on inner door

ELAPSED TIME METER: mounted on inner door

DUAL SEAL FAIL MODULE: two pumps, adjustable 1k-250kΩ, red LED's mounted on inner door

AUXILIARY ALARM CONTACTS: Form A, N.O.

INTRINSICALLY SAFE MODELS: 4 channel IS relay cUL 913 Listed Control panel cUL 698A Listed

Three Phase

MODEL 32XR CONTROL PANEL

Three Phase, Duplex Alternating Pump Control with Override - Simply Add the Appropriate Overload Modules

Panel layout may vary with options.

The Model 32XR control panel is designed to alternately control two three phase pumps in industrial and commercial water and sewage systems using a 4-20 mA level transmitter. In addition to transmitter control, this system will accept a high water float to activate the alarm and run both pumps. This panel also provides a redundant low level cutout, seal fail and thermal cutout for both pumps. Common applications include lift stations, pump chambers and irrigation systems.

INNER DOOR FEATURES

Inner Door provides a degree of safety for panel operation.

A. TPC-X controller sequences pumps on and off in response to a change in level input provided by a 4-20 mA sensor and also provides pump over temp, seal fail, pump run, pump fail, high level and low level monitoring indications

B. Hand/Off/Auto switches for manual pump control

C. Green Pump Run indicator lights identify pump called to run condition

D. Inner door provides added safety for panel operation

COMPONENTS

1. Enclosure measures 18" x 16" x 10" (45.7 x 40.6 x 25.4 cm) TYPE 4X fiberglass with mounting feet (for indoor or outdoor use)

2. Padlockable latch provides added safety (Not shown)

3. IEC HP rated motor starters perform contactor/circuit breaker function, up to 32 FLA (requires separate overload modules); provides location for field wiring of incoming power and pumps

4. Multi-tap transformer (208/230/460 VAC primary) provides 120 VAC control/alarm voltage

5. Class 10 ambient overload modules (purchased separately) provide overload-short circuit, phase failure-phase imbalance and ground fault protection (equipment protection only); accessible through inner door (two overload modules required, field installation required)

6. Terminal block provides connections for field wiring of transmitter, floats, auxiliary alarm contact, seal fail and thermal cutout for each pump

7. Ground lugs provide location for field wiring ground wires for incoming power and pumps

8. Lightning arrestor provides surge suppression with immediate indication if replacement is required

9. Power supply provides 24 VDC to TPC-X controller and backup float(s)

10. Red LED beacon provides 360 degree visual check of alarm condition

11. Alarm horn provides audible warning of alarm condition (95 decibel rating) (Not shown)

12. Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

Three Phase

MODEL 32XR - Three phase, duplex alternating pump control with override. Simply add the appropriate overload modules.

Part #	Description
1051507	32XR1W000X4A5ADEM6A8AC10AEG
Options Part #	**Description**
1036510	Overload Module, 3-12 FLA
1033806	Overload Module 8-32 FLA
1051382	Kit, Transmitter (SJE)/ 50 ft. MAP Float, with float bracket
1051588	Kit, Transmitter (SJE)/(2) 50 ft. MAP Floats, with float bracket
1051585	Kit, Transmitter (RAT)/(2) 50 ft. MAP Floats, with float bracket

Note: Each panel requires two overload modules. Field installation required.
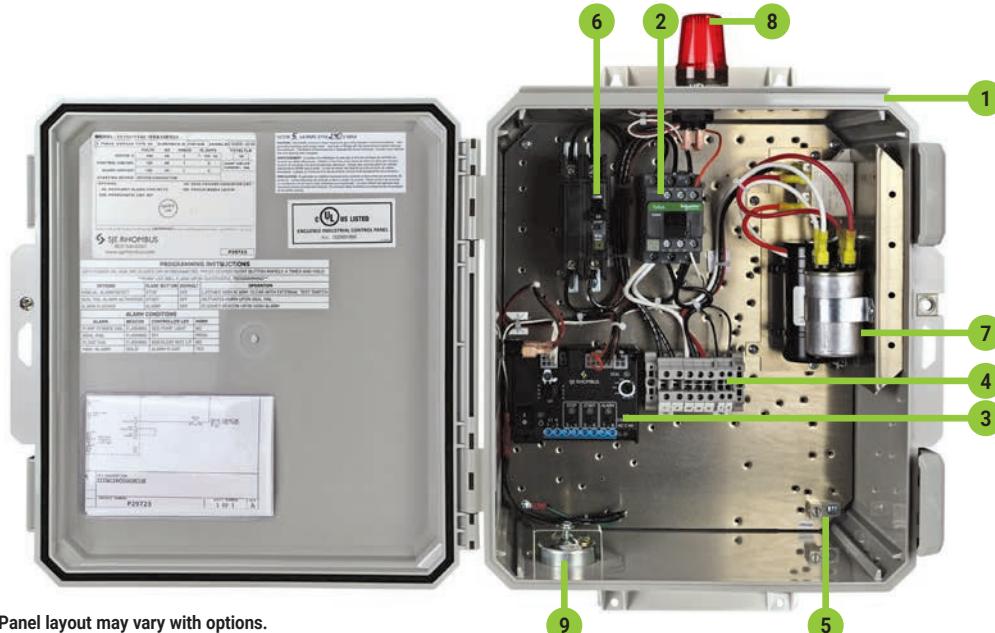
Three Phase

MODEL 113 CONTROL PANEL
Single Phase, Simplex Capacitor Start/Run Pump Control

Panel layout may vary with options.

Model 113 control panels provide a reliable means of controlling one 120, 208, or 240 VAC single phase pump requiring external starting components in water and sewage installations. Two control switches activate an IEC motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers and lift stations.

The Model 113 control panel features built in pump failure and float out of sequence detection. In addition, there are three user selectable field programmable options: alarm steady state or flashing; alarm auto reset or manual reset; and optional seal failure alarm beacon plus horn activation.

Simplex controller features include:

- Touch safe circuit board housing and low voltage 24 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump contactor failure detection
- Controller protected by three auto resettable fuses (control, alarm, and pump 1)

Note: SJE Rhombus recommends separate pump and control/alarm power sources.

Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.

COMPONENTS

1. Enclosure measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. IEC motor contactor controls pump by switching electrical lines
3. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
   a. HOA switch for manual control of the pump
   b. Pump run green LED indicator
   c. Control power ON/OFF switch
   d. Power ON green LED indicator
   e. Float push-to-test buttons
   f. Float status red LED indicators
   g. Auxiliary alarm contacts Form C
   h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)
4. Pump input power and pump connection terminal block
5. Ground lugs
6. Circuit breaker (optional) provides pump disconnect and branch circuit protection
7. Capacitor start module - start/run capacitor kits available
8. Red LED beacon provides 360° visual check of alarm condition
9. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
10. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared **(Not shown)**

Model 113 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

Capacitor Start/Run

MODEL 113 - Single phase, simplex capacitor start/run pump control.

113	1	W	1		4		6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	113	Single Phase Simplex Capacitor Start/Run
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	IEC Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
		4	30 - 40 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)
		L	Pump Up (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

PRICING WORKSHEET

Model 113 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
	9_A	Pump Overload - Specify Amperage After Number 9 Followed by Letter "A" Example: 912A = 12 Amp Pump — 0-30 FLA / 30-40 FLA
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10F	Lightning Arrestor (select pump circuit breaker)
	10K	Anti-condensation Heater
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus
	12C	Motor Start Component, Mounted and Supplied by SJE Rhombus

OPTIONS	DESCRIPTION
14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) (must select circuit breaker)
16C	30' Cord in Lieu of 20' Cord (per float)
16D	40' Cord in Lieu of 20' Cord (per float)
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
19T	TOA (Test/Off/Automatic) Switch and Pump Run Light Through Door Mounted
19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light Through Door Mounted
19X	Door Mounted Pump Run Indicator
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Capacitor Start/Run

SJE RHOMBUS.

Panel layout may vary with options.

The Model 123 control panel is designed to control two 120, 208, or 240 VAC single phase pumps requiring external starting components in water and sewage installations. The controller is provided with a pump selector switch that can be set to alternate the pumps to equalize wear or to call either pump to activate first with the other pump to activate in lag condition. If an alarm occurs, the alarm activates the audible-visual system. The alarm conditions include: high water, float out-of-sequence, pump fail-to-run, seal failure (optional). Common applications include pump chambers and lift stations. This panel is available with the optional EZconnex® float connection system.

Other features include:

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Constant alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection with automatic float reassignment
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses, no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up

Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.

COMPONENTS

1. Enclosure measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)
2. Circuit breakers (optional) provide pump disconnect and branch circuit protection
3. IEC motor contactors control pumps by switching electrical lines
4. Capacitor start modules - start/run capacitor kits available
5. Duplex controller provides pump control, alternation and alarm
   a. HOA switches for manual control Hand/Off/Automatic
   b. Control power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1 lag
   g. Auxiliary alarm contacts Form-C
   h. Terminal block: incoming power
   i. Terminal block: float switches
   j. Option: adjustable seal failure circuits and red LED indicators (must select option 5E when ordering)
6. Incoming pump power terminal block/pump terminal block
7. Ground lugs
8. Red LED beacon provides 360° visual check of alarm condition
9. Alarm horn provides audible alarm warning (83 to 85 decibel rating)
10. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared

Model 123 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Capacitor Start/Run

![SJE RHOMBUS logo]

MODEL 123 - Single phase, duplex capacitor start/run pump control.

123		W	1		4		6A10E19B
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	123	Single Phase Duplex Capacitor Start/Run (includes Options 6A and 19B as standard)
ALARM PACKAGE		0	Select Options or No Alarm Package
		1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	IEC Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
		4	30 - 40 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)
		L	Pump Up (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

PRICING WORKSHEET

Model 123 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

Enclosure Upsize _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	4A	Redundant Off (must also select Option 4D if floats are required)
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4A)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
	9_A	Pump Overload - Specify Amperage After Number 9 Followed by Letter "A" Example: 912A = 12 Amp Pump — 0-20 FLA
		30-40 FLA
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10F	Lightning Arrestor (must select Pump Circuit Breakers)
	10K	Anti-condensation Heater
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus
	12C	Motor Start Component, Mounted and Supplied by SJE Rhombus
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) — 0-20 FLA (total of both pumps)
		20-80 FLA (total of both pumps)

	OPTIONS	DESCRIPTION
	16C	30' Cord in Lieu of 20' Cord (per float)
	16D	40' Cord in Lieu of 20' Cord (per float)
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury
	17E	Sensor Float® Mini / Pipe Clamp (3 Floats) - Mercury
	17F	Sensor Float® Mini / Externally Weighted (3 Floats) - Mercury
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury
✓	19B	**Lead Lag Selector Switch (included as standard)**
	19F	Fourth Float to Separate Alarm Function from Lag
	19T	TOA (Test/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19U	HOA (Hand/Off/Automatic) Switches and Pump Run Lights Through Door Mounted
	19X	Door Mounted Pump Run Indicator
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Capacitor Start/Run

MODEL 114 CONTROL PANEL
Single Phase, Simplex Pump Control with Intrinsically Safe Circuits

C **UL** US
LISTED

5 YEAR LIMITED WARRANTY

Panel layout may vary with options.

The Model 114 control panel is designed for applications requiring intrinsically safe float circuits or other circuit extensions. This panel will control one 120, 208, or 240 VAC single phase pump. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers, lift stations, or other installations classified as hazardous locations requiring intrinsically safe circuits.

The Model 114 control panel features built in pump failure and float out of sequence detection. In addition, there are three user selectable field programmable options: alarm steady state or flashing; alarm auto reset or manual reset; and optional seal failure alarm beacon plus horn activation.

Simplex controller features include:

• Touch safe circuit board housing and low voltage 24 VDC float circuits

• Alarm (field programmable to flash)

• Alarm automatic reset (field programmable to manual alarm reset)

• Float out-of-sequence detection

• Pump contactor failure detection

• Controller protected by three auto resettable fuses (control, alarm, and pump 1)

Note: SJE Rhombus recommends separate pump and control/alarm power sources.

Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.

COMPONENTS

1. Enclosure measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm) NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, (2) heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)

2. Intrinsically safe module limits the amount of energy to switches preventing ignition of flammable gases

3. IEC motor contactor controls pump by switching electrical lines

4. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
   a. HOA switch for manual control of the pump
   b. Pump run green LED indicator
   c. Control power ON/OFF switch
   d. Power ON green LED indicator
   e. Float push-to-test buttons
   f. Float status red LED indicators
   g. Auxiliary alarm contacts Form C
   h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)

5. Input power terminal block

6. Ground lugs

7. Circuit breaker (optional) provides pump disconnect and branch circuit protection

8. Red LED beacon provides 360° visual check of alarm condition

9. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)

10. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared.

11. Overload relay (optional) provides thermal overload protection for pump **(Not shown)**

Model 114 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

MODEL 114 - Single phase, simplex pump control with intrinsically safe circuits.

114	1	W	1		4		6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	114	Single Phase Simplex Intrinsically Safe
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	Magnetic Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
		4	30 - 40 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)
		L	Pump Up (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

PRICING WORKSHEET

Model 114 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

	OPTIONS	DESCRIPTION	
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)	
	5E	Seal Failure Circuit & Red Indicator (2 wire)	
✓	**6A**	**Auxiliary Alarm Contact, Form C (included as standard)**	
	6G	Auxiliary Contact, Dry, Seal Fail, Normally Open (must select Option 5E)	
	8A	Elapsed Time Meter	
	8C	Event (Cycle) Counter	
	9_A	Pump Overload - Specify Amperage After Number 9 Followed by Letter "A" Example: 912A = 12 Amp Pump	0-25 FLA
			25-40 FLA
✓	**10E**	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**	
	10F	Lightning Arrestor (select pump circuit breaker)	
	10K	Anti-condensation Heater	
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus	
	12C	Motor Start Component, Mounted and Supplied by SJE Rhombus	

OPTIONS	DESCRIPTION	
14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) (must select circuit breaker)	0-20 FLA
		20-40 FLA
16C	30' Cord in Lieu of 20' Cord (per float)	
16D	40' Cord in Lieu of 20' Cord (per float)	
17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical	
17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical	
19T	TOA (Test/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
19X	Door Mounted Pump Run Indicator	
33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	
35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Intrinsically Safe

SJE RHOMBUS

MODEL 124 CONTROL PANEL
Single Phase, Duplex Alternating Pump Control with Intrinsically Safe Circuits

Panel layout may vary with options.

The Model 124 control panel is designed to control two 120/208/240 VAC single phase pumps for applications requiring intrinsically safe float circuits. The controller is provided with a pump selector switch that can be set to alternate the pumps to equalize wear or to call either pump to activate first with the other pump to activate in lag condition. If an alarm occurs, the alarm activates the audible-visual system. The alarm conditions include: high water, float out-of-sequence, pump fail-to-run, seal failure (optional). Common applications include pump chambers, lift stations, or other installations classified as hazardous locations requiring intrinsically safe circuits. This panel is available with the optional EZconnex® float connection system.

Other features include:

- Touch safe circuit board housing and low voltage 12 VDC float circuits
- Constant alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection with automatic float reassignment
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses, no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up

Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.

COMPONENTS

1. Enclosure measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)
2. Intrinsically safe module limits the amount of energy to switches preventing ignition of flammable gasses
3. Circuit breakers (optional) provide pump disconnect and branch circuit protection
4. IEC motor contactors control pumps by switching electrical lines
5. Adjustable overloads (optional) provide thermal overload protection for pump (Not shown)
6. Duplex controller provides pump control, alternation and alarm
   a. HOA switches for manual control Hand/Off/Automatic
   b. Control power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1 lag
   g. Auxiliary alarm contacts Form-C
   h. Terminal block: incoming power
   i. Terminal block: float switches
   j. Option: adjustable seal failure circuits and red LED indicators (must select option 5E when ordering)
7. Input power terminal block
8. Ground lugs
9. Red LED beacon provides 360° visual check of alarm condition
10. Alarm horn provides audible alarm warning (83 to 85 decibel rating)
11. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared

Model 124 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

Intrinsically Safe

MODEL 124 - Single phase, duplex alternating pump control with intrinsically safe circuits.

124	1	W	1		4		6A10E19B
CONTROL PANEL	**ALARM PACKAGE**	**ENCLOSURE RATING**	**STARTING DEVICE**	**PUMP FULL LOAD AMPS**	**PUMP DISCONNECTS**	**LEVEL CONTROL APPLICATION**	**OPTIONS (LISTED BELOW)**

CONTROL PANEL	✓	124	Single Phase Duplex Intrinsically Safe (includes Options 6A and 19B as standard)
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE	✓	1	Magnetic Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
		4	30 - 40 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)
		L	Pump Up (select Option 17 below)
		E	EZconnex® Float Switch System
		X	No Floats

Start/run capacitor kits must be ordered separately (see Option 12 below or call factory).

PRICING WORKSHEET

Model 124 Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Pump Disconnects _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION	
	4A	Redundant Off (must also select Option 4D if floats are required)	
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4A)	
	4D	Redundant Off Float (must also select Option 4A and Option 17)	
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)	
	5E	Seal Failure Circuit & Red Indicator (2 wire)	
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**	
	6G	Auxiliary Contact, Dry, Seal Fail, Normally Open (must select Option 5E)	
	8A	Elapsed Time Meter	
	8C	Event (Cycle) Counter	
	9_A	Pump Overload - Specify Amperage After Number 9 Followed by Letter "A" Example: 912A = 12 Amp Pump	0-25 FLA
			25-40 FLA
	10A	Clear Inner Swing-Out Door with Dead Front (lights and switches mounted on inner door) **PANELS ORDERED WITH THIS OPTION CANNOT BE RETURNED**	
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**	
	10F	Lightning Arrestor (must select Pump Circuit Breaker)	
	10K	Anti-condensation Heater	
	12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus	
	12C	Motor Start Component, Mounted and Supplied by SJE Rhombus	

	OPTIONS	DESCRIPTION	
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position) (must select circuit breaker)	0-20 FLA (total of both pumps)
			20-80 FLA (total of both pumps)
	16C	30' Cord in Lieu of 20' Cord (per float)	
	16D	40' Cord in Lieu of 20' Cord (per float)	
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury	
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury	
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical	
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical	
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury	
✓	19B	**Lead Lag Selector Switch (included as standard)**	
	19F	Fourth Float to Separate Alarm Function from Lag	
	19T	TOA (Test/Off/Automatic) Switches and Pump Run Lights Through Door Mounted	
	19U	HOA (Hand/Off/Automatic) Switches and Pump Run Lights Through Door Mounted	
	19X	Door Mounted Pump Run Indicator	
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Intrinsically Safe

MODEL 314 CONTROL PANEL
Three Phase, Simplex Pump Control with Intrinsically Safe Circuits

C UL US LISTED **5 YEAR LIMITED WARRANTY**

Panel layout may vary with options.

The Model 314 control panel is designed for applications requiring intrinsically safe float circuits or other circuit extensions. This panel will control one 208/240/480 VAC three phase pump. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common applications include pump chambers, lift stations, or other installations classified as hazardous locations requiring intrinsically safe circuits.

The Model 314 control panel features built in pump failure and float out of sequence detection. In addition, there are three user selectable field programmable options: alarm steady state or flashing; alarm auto reset or manual reset; and optional seal failure alarm beacon plus horn activation.

Simplex controller features include:

- Touch safe circuit board housing and low voltage 24 VDC float circuits
- Alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection
- Pump contactor failure detection
- Controller protected by three auto resettable fuses (control, alarm, and pump 1)

Note: SJE Rhombus recommends separate pump and control/alarm power sources.

COMPONENTS

1. Enclosure measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use)
2. Intrinsically safe module limits the amount of energy to switches preventing ignition of flammable gases
3. Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect
4. Simplex controller provides pump and alarm control; elevated in the enclosure for easy access and field wiring
   a. HOA switch for manual control of the pump
   b. Pump run green LED indicator
   c. Control power ON/OFF switch
   d. Power ON green LED indicator
   e. Float push-to-test buttons
   f. Float status red LED indicators
   g. Auxiliary alarm contacts Form C
   h. Option: adjustable seal failure circuit and red LED indicator (must select option 5E when ordering)
5. IEC motor contactor controls pump by switching electrical lines
6. Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control/alarm voltage or 600 VAC primary transformer
7. Input power terminal block
8. Ground lugs
9. Red LED beacon provides 360° visual check of alarm condition
10. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating)
11. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared

Model 314 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

SJE RHOMBUS®

MODEL 314 - Three phase, simplex pump control with intrinsically safe circuits.

314	1	W			6A10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	314	Three Phase Simplex Intrinsically Safe		
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)		
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)		
			208/240/480V		**600V**

PUMP FULL LOAD AMPS			
001	1.0 - 1.6 FLA	005	1.0 - 1.6 FLA
101	1.6 - 2.5 FLA	105	1.6 - 2.5 FLA
201	2.5 - 4.0 FLA	205	2.5 - 4.0 FLA
301	4.0 - 6.3 FLA	305	4.0 - 6.3 FLA
401	6.0 - 10.0 FLA	405	6.0 - 10.0 FLA
511	9.0 - 14.0 FLA	515	9.0 - 14.0 FLA
611	13.0 - 18.0 FLA	615	13.0 - 18.0 FLA
621	17.0 - 23.0 FLA	625	17.0 - 23.0 FLA
701	20.0 - 25.0 FLA	705	20.0 - 25.0 FLA

LEVEL CONTROL APPLICATION		
H	Floats - Pump Down (select Option 17 below)	
L	Floats - Pump Up (select Option 17 below)	
E	EZconnex® Float Switch System	
X	No Floats	

PRICING WORKSHEET

Model 314 Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**
	6G	Auxiliary Contact, Dry, Seal Fail, Normally Open (must select Option 5E)
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater

	OPTIONS	DESCRIPTION	
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position)	0-20 FLA
			20-25 FLA
	16C	30' Cord in Lieu of 20' Cord (per float)	
	16D	40' Cord in Lieu of 20' Cord (per float)	
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical	
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical	
	19T	TOA (Test/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
	19U	HOA (Hand/Off/Automatic) Switch and Pump Run Light Through Door Mounted	
	19X	Door Mounted Pump Run Indicator	
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

SJE RHOMBUS.

Intrinsically Safe

MODEL 324 CONTROL PANEL
Three Phase, Duplex Alternating Pump Control with Intrinsically Safe Circuits

Panel layout may vary with options.

The Model 324 control panel is designed to control two 208/240/480 VAC three phase pumps for applications requiring intrinsically safe float circuits. The controller is provided with a pump selector switch that can be set to alternate the pumps to equalize wear or to call either pump to activate first with the other pump to activate in lag condition. If an alarm occurs, the alarm activates the audible-visual system. The alarm conditions include: high water, float out-of-sequence, pump fail-to-run, seal failure (optional). Common applications include pump chambers, lift stations, or other installations classified as hazardous locations requiring intrinsically safe circuits. This panel is available with optional EZconnex® float connection system.

Other features include:

- Touch safe circuit board housing and low voltage float circuits
- Constant alarm (field programmable to flash)
- Alarm automatic reset (field programmable to manual alarm reset)
- Float out-of-sequence detection with automatic float reassignment
- Pump fail-to-run detection (field programmable to deactivate)
- Controller protected by four auto resettable fuses, no fuse replacement
- Three second lag pump delay time, prevents simultaneous pump start-up

COMPONENTS

1. Enclosure measures 16 x 14 x 6 inches (40.64 x 35.56 x 15.24 cm) NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)
2. Intrinsically safe module limits the amount of energy to switches preventing ignition of flammable gases
3. Motor protective switches provide adjustable overload, branch circuit protection and pump disconnect
4. IEC motor contactors control pumps by switching electrical lines
5. Multi-tap transformer (208/240/480 VAC primary or 600 VAC primary transformer) provides 120 VAC control/alarm voltage
6. Duplex controller provides pump control, alternation and alarm
   a. HOA switches for manual control Hand/Off/Automatic
   b. Control power ON/OFF switch
   c. Power ON green LED indicator
   d. Float status red LED indicators
   e. Float push-to-test buttons
   f. Pump selector switch: Alt, 1-lead 2-lag, 2-lead 1 lag
   g. Auxiliary alarm contacts Form-C
   h. Terminal block: incoming power
   i. Terminal block: float switches
   j. Option: adjustable seal failure circuits and red LED indicators (must select option 5E when ordering)
7. Ground lugs
8. Red LED beacon provides 360° visual check of alarm condition
9. Alarm horn provides audible alarm warning (83 to 85 decibel rating)
10. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared

Model 324 control panels cannot be returned. Please refer to the Product Return section.

Note: Other options available. Options selected may increase enclosure size and change component layout.

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

MODEL 324 - Three phase, duplex pump control with intrinsically safe circuits.

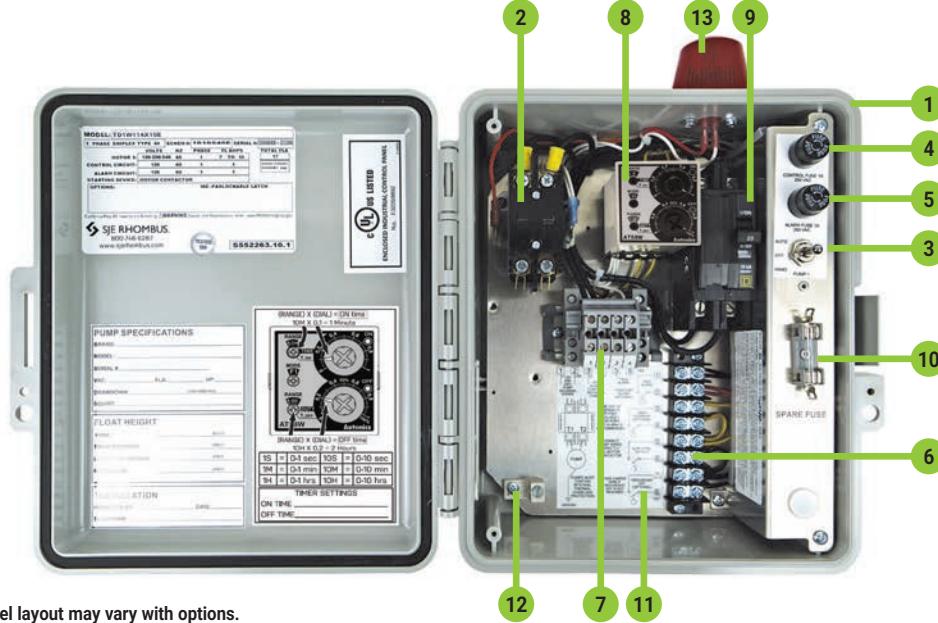| 324		W			6A10E19B
CONTROL PANEL	**ALARM PACKAGE**	**ENCLOSURE RATING**	**PUMP FULL LOAD AMPS**	**LEVEL CONTROL APPLICATION**	**OPTIONS (LISTED BELOW)**

CONTROL PANEL	✓	324	Three Phase Duplex Intrinsically Safe
ALARM PACKAGE		0	Select Options or No Alarm Package
		1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)

PUMP FULL LOAD AMPS		208/240/480V			600V	
	001	1.0 - 1.6 FLA		005	1.0 - 1.6 FLA	
	101	1.6 - 2.5 FLA		105	1.6 - 2.5 FLA	
	201	2.5 - 4.0 FLA		205	2.5 - 4.0 FLA	
	301	4.0 - 6.3 FLA		305	4.0 - 6.3 FLA	
	401	6.0 - 10.0 FLA		405	6.0 - 10.0 FLA	
	511	9.0 - 14.0 FLA		515	9.0 - 14.0 FLA	
	611	13.0 - 18.0 FLA		615	13.0 - 18.0 FLA	
	621	17.0 - 23.0 FLA		625	17.0 - 23.0 FLA	
	701	20.0 - 25.0 FLA		705	20.0 - 25.0 FLA	

LEVEL CONTROL APPLICATION	H	Floats - Pump Down (select Option 17 below)
	L	Floats - Pump Up (select Option 17 below)
	E	EZconnex® Float Switch System
	X	No Floats

PRICING WORKSHEET

Model 324 Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	4A	Redundant Off (must also select Option 4D if floats are required)
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4A)
	4D	Redundant Off Float (must also select Option 4A and Option 17)
	5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E	Seal Failure Circuit & Red Indicator (2 wire)
✓	6A	**Auxiliary Alarm Contact, Form C (included as standard)**
	6G	Auxiliary Contact, Dry, Seal Fail, Normally Open (must select Option 5E)
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
	10A	Clear Inner Swing-Out Door with Dead Front (lights and switches mounted on inner door) **PANELS ORDERED WITH THIS OPTION CANNOT BE RETURNED**
✓	10E	**Lockable Latch - NEMA 4X (included as standard, must select Enclosure Rating W above)**
	10G	Lightning Arrestor
	10K	Anti-condensation Heater

	OPTIONS	DESCRIPTION	
	14B	Main Disconnect (rotary style, mounted through door, non-fused, padlockable in the OFF position, door interlock in the ON-position)	0-20 FLA (total of both pumps)
			20-50 FLA (total of both pumps)
	16C	30' Cord in Lieu of 20' Cord (per float)	
	16D	40' Cord in Lieu of 20' Cord (per float)	
	17C	Sensor Float® / Internally Weighted (3 Floats) - Mercury	
	17D	Sensor Float® / Externally Weighted (3 Floats) - Mercury	
	17G	SJE MilliAmpMaster™ / Pipe Clamp (3 Floats) - Mechanical	
	17H	SJE MilliAmpMaster™ / Externally Weighted (3 Floats) - Mechanical	
	17J	Sensor Float® / Pipe Clamp (3 Floats) - Mercury	
✓	19B	**Lead Lag Selector Switch (included as standard)**	
	19F	Fourth Float to Separate Alarm Function from Lag	
	19T	TOA (Test/Off/Automatic) Switches and Pump Run Lights Through Door Mounted	
	19U	HOA (Hand/Off/Automatic) Switches and Pump Run Lights Through Door Mounted	
	19X	Door Mounted Pump Run Indicator	
	33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	
	35D	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Intrinsically Safe

MODEL TD CONTROL PANEL
Single Phase, Simplex Timed Dosing Pump Control

Panel layout may vary with options.

The Model TD control panel provides a reliable means of controlling one single phase pump in onsite septic installations. A programmable timer activates a magnetic motor contactor to turn the pump on and off. A low level cutout float overrides the timer to prevent the pump from running dry. An alarm float activates the audio/visual alarm system indicating a high liquid level. Common applications include sand filter systems, pressure distribution systems, mound systems, or any application requiring a timed dose. This panel is available with optional EZconnex® float connection system.

COMPONENTS

1. Enclosure measures 10 x 8 x 4 inches (25 x 20 x 10 cm) NEMA 4X (ultraviolet stabilized thermoplastic) for indoor or outdoor use
2. Magnetic motor contactor controls pump by switching electrical lines
3. HOA switch for manual pump control
4. Control fuse
5. Alarm fuse
6. Float switch terminal block
7. Incoming power terminal block
8. Programmable timer with separate variable controls allows for setting the on and off times from .1 seconds to 10 hours
9. Circuit breaker provides pump disconnect and branch circuit protection
10. Spare fuse
11. Backplate label includes diagram of float, pump, and power connections
12. Ground lug
13. Red LED beacon provides 360° visual check of alarm condition
14. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (Not shown)
15. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)
16. Horn silence relay (No shown - mounted under bracket)

Note: Other options available.

Note: Timer Installation Label and Pump/Float Switch Installation Specification Label are located inside the panel on enclosure cover.

SJE RHOMBUS®

MODEL TD - Single phase, simplex timed dosing pump control.

TD	1	W			4		10E
CONTROL PANEL	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	TD	Single Phase Simplex Timed Dosing
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, red light, & horn)
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE		1	Magnetic Motor Contactor 120/208/240V
		9	Magnetic Motor Contactor 120V only
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
PUMP DISCONNECTS	✓	4	Circuit Breaker
LEVEL CONTROL APPLICATION		H	Pump Down - 20' Low Level Cutout (select Option 17W below) (all systems will ship with 2 floats by default)
		X	No Floats

PRICING WORKSHEET

Model TD Base Price _____

Alarm Package _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	4B	Red Redundant Off Indicator & Alarm (must also select Option 4D if floats are required)
	4D	Redundant Off Float
	4E	Redundant Off Float, Alarm Activation (20' SJE SignalMaster® SPDT)
	6A	Auxiliary Alarm Contact, Form A
	8A	Elapsed Time Meter
	8C	Event (Cycle) Counter
✓	**10E**	**Lockable Latch - NEMA 4X (included as standard)**
	10K	Anti-condensation Heater

OPTIONS	DESCRIPTION
16C	30' Cord in Lieu of 20' Cord (per float)
16D	40' Cord in Lieu of 20' Cord (per float)
17W	SJE MilliAmpMaster™ Wide-Angle / Pipe Clamp
18A	Timer Override Float
19X	Door Mounted Pump Run Indicator

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

B.60   www.sjerhombus.com • email: customer.service@sjeinc.com   SEE PRICE BOOK FOR PRICING.   SJE RHOMBUS.

DIGITAL TIMED DOSE CONTROL PANEL
Single Phase, Simplex Timed Dosing Pump Control
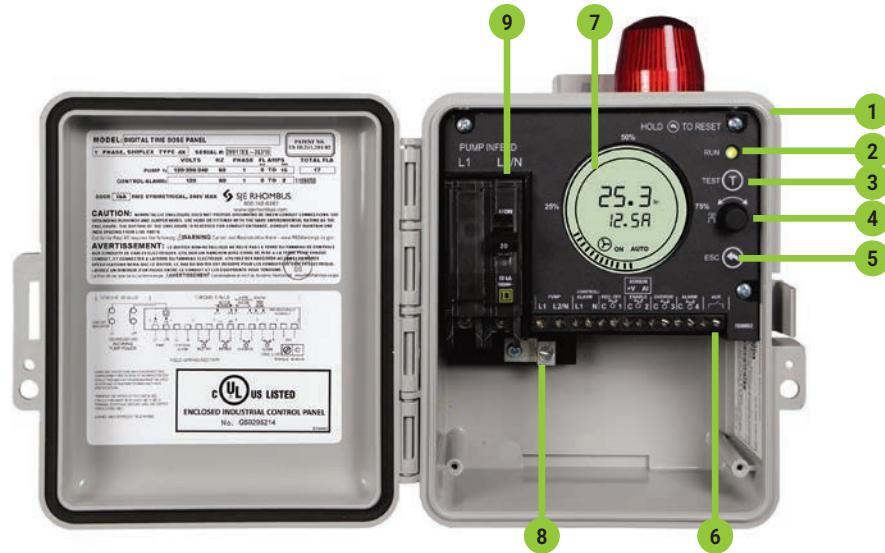
The Digital Timed Dose control panel provides a reliable means of controlling one single phase pump in onsite septic installations. This control panel can be operated using a level transmitter or float switches. A digital timer signals the pump to turn on and off through a power relay. A low level cutout float overrides the timer to prevent the pump from running dry. An alarm float activates the audible/visual alarm system indicating a high liquid level. Common applications include sand filter systems, pressure distribution systems, and mound systems.

FEATURES

- Level transmitter or float switch control
- LCD display with bar graph
  - Tank level monitoring
  - Float switch status
  - Pump amps monitoring
  - Run indication
  - Pump run time
  - Pump run cycles
- Pump protection
  - Overload
  - Redundant level control
- Adjustable level set points
- Pump run on high float alarm
- Float out of sequence monitoring
- Auxiliary alarm contact
- Fault history

COMPONENTS

1. NEMA 4X enclosure 8 x 6 x 4 inches (20.32 x 15.24 x 10.16 cm) for indoor or outdoor use with integral padlockable latch for added safety.
2. Pump run green LED indicator
3. Pump test switch for manual control of the pump
4. Menu rotary encoder/selector switch
5. Menu ESC button
6. Auxiliary alarm contacts
7. LCD display
8. Ground lug
9. Circuit breaker

SJE RHOMBUS

Digital Timed Dose Control Panel - Single phase, simplex timed dosing pump control.

Part #	Description	Pump FLA	Pump VAC	Shipping Weight
1109650	Digital TD Single Phase, Simplex	20A	120/208/240	3.8 lbs.

SPECIFICATIONS

INPUT VOLTAGE: Single phase, 120/208/240 VAC, 60 Hz

PUMP RATINGS: Single phase, Up to 20 Amps at 120/208/240 VAC

OPERATING TEMPERATURE: 14°F to 122°F (-10°C to 50°C)

ENCLOSURE: 8 x 6 x 4 inch (add cm)
Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with integral mounting feet for outdoor or indoor use)

ELECTRONIC OVERLOAD RANGE: 5-20A

PUMP CIRCUIT BREAKER: 25A

CONTROL/ALARM FUSE RATING: 2A, 120 VAC

AUXILIARY ALARM CONTACTS: N.O. 1 amp, 120 VAC Max

**INPUTS:** 2-4 float switches (normally open), 4-20mA level transmitter

SJE Rhombus® recommends using the Sub-X™ LT Transmitter for level control. SJE Rhombus® recommends using the SJE MilliAmpMaster™ Control Switch or the EZconnex® Float Switch Connection System for backup float switches. For ordering information, please see our catalog pages at www.sjerhombus.com.

SJE RHOMBUS.

MODEL PS11/12 CONTROL PANEL
Single Phase, Two Independent Motor Contactor Control/Programmable Timed Dosing Control Panel

Panel layout may vary with options.
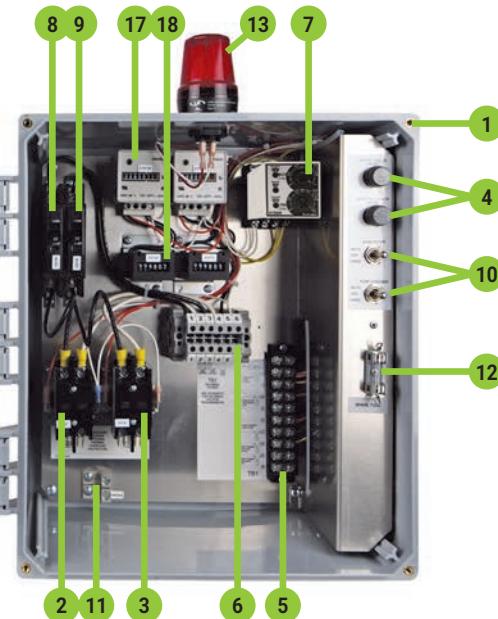
The PS11 (120V) / PS12 (240V) control panel provides a reliable means of controlling both pump chamber and sand filter pumps in an onsite septic installation.

COMPONENTS

1. Enclosure measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic) with removable mounting feet for indoor or outdoor use
2. Pump chamber magnetic motor contactor controls pump chamber pump by switching electrical lines
3. Sand filter magnetic motor contactor controls sand filter pump by switching electrical lines
4. Alarm/control fuse
5. Float switch terminal block
6. Control/pump power terminal block
7. Programmable timer features separate variable controls to allow for pump chamber pump on/off time settings from .1 seconds to 10 hours
8. Pump chamber circuit breaker provides pump chamber disconnect and provides branch circuit protection
9. Sand filter circuit breaker provides sand filter pump disconnect and provides branch circuit protection
10. HOA switches provide manual pump control
11. Ground lugs
12. Spare fuse
13. Red LED beacon provides 360° visual check of alarm condition
14. Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (Not shown)
15. Exterior alarm Test/Normal/Silence switch allows horn and light to be tested and horn to be silenced in an alarm condition; alarm automatically resets once alarm condition is cleared (Not shown)
16. Horn silence relay (Not shown - mounted under bracket)
17. Elapsed time meter
18. Event counter

Note: Timer Installation Label and Pump/Float Switch Installation Specification Label are located inside the panel on enclosure cover.

MODEL PS11/PS12 - Single phase, duplex motor contactor control/programmable timed dosing control.

Part #	Description	Shipping Weight
1006586	PS11 - 120V	26 lbs.
1007395	PS12 - 240V	26 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC (PS11) or 240 VAC (PS12)

ENCLOSURE: 14 x 10 x 6 inch (35.56 x 30.48 x 15.24 cm) NEMA 4X weatherproof thermoplastic with hinged door.

BRANCH CIRCUIT PROTECTION: Circuit breakers for pump chamber and sand filter pumps.

JB PLUGGER™ SYSTEM

Provides Convenient Wiring Connection for Pump Station Applications

This junction box provides a convenient location to connect all wiring required for a typical pumping station installation. The junction box employs a receptacle to accept a 120 VAC or 230 VAC piggy-back plug and a pump plug.

The JB Plugger also features an easy-to-use terminal strip which can be used for connecting an alarm system in the junction box.

The JB Plugger package ensures a liquid-tight seal and strain relief for the cable entering the junction box from the pumping station.

FEATURES

- NEMA 4X enclosure with hinged door
- Separate alarm and pump control circuit
- Receptacle for pump and pump switch (120V or 230V)
- Tank Alert® AB alarm system provides high or low level alarm (optional)
- Pump float provides pump control (optional)
- Control float provides alarm activation (optional)
- Riser extension coupling and washers
- Custom engineered liquid-tight cable seal
- Strain relief for pump and float cords provided by cord seal
- Electrical conduit hub
- Terminal strip for use with alarm system

SJE RHOMBUS®

JB PLUGGER - Easy-to-install junction box provides convenient connection for use with one single phase pump in effluent and sewage chambers.

Part #	Description (120V)	Shipping Weight
1007936	JBP No Alarm or Floats	3.5 lbs.
1011917	JBP Tank Alert® AB & 15' SJE SignalMaster®	6.36 lbs.
1019753	JBP Tank Alert® AB & 15' SJE PumpMaster® & 15' SJE SignalMaster®	7.81 lbs.
Part #	Description (230V)	Shipping Weight
1007937	JBP No Alarm or Floats	3.5 lbs.
1023120	JBP Tank Alert® AB & 15' SJE SignalMaster®	6.36 lbs.
1019754	JBP Tank Alert® AB & 15' SJE PumpMaster® & 15' SJE SignalMaster®	7.81 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC or 230 VAC

ENCLOSURE: 6 x 6 x 4 inch (15.24 x 15.24 x 10.16 cm) NEMA 4X weatherproof thermoplastic with hinged door.

SEPARATE ALARM AND PUMP CONTROL SWITCH

RECEPTACLE: 120 VAC type 5-15; 230 VAC type 6-15

RISER EXTENSION COUPLING AND WASHERS

CORD SEAL: Custom engineered to provide liquid tight seal and provide strain relief for pump and float cords.

ELECTRICAL CONDUIT HUB

QUICK POST PLUS™ SYSTEM WITH INDOOR ALARM
Provides Convenient Wiring Connection and System Monitoring for Pump Station Applications

The Quick Post Plus™ system features an 8 x 8 x 4 inch enclosure to connect alarm wiring and incoming power. The provided pump switch receptacle plug pigtail is available in 120 VAC or 230 VAC to accept a piggy-back plug, pump plug, and optional elapsed time meter (ETM). The provided factory-installed 22" weatherproof post features access door for easy wiring. The system also includes the riser extension conduit with stainless steel compression nuts to connect the mounting post to the riser, two cord seals, tank alarm, and SJE SignalMaster® control switch.

The post can be mounted directly into the ground, over 4" x 4" (10.16 x 10.16 cm) post or over conduit.

FEATURES

- NEMA 4X enclosure with hinged door
- Factory installed mounting post with access cover for easy wiring
- Receptacle pigtail (120 VAC or 230 VAC) and wiring terminal blocks for easy field connections
- Separate alarm and pump control circuit
- Riser extension 2.5 inch (6.35 cm) diameter coupling conduit to accommodate float piggyback plug
- Riser extension stainless steel compression nuts provide easy adjustability and strong connection
- Strain relief for pump and float cords, provided by cord seals
- Indoor Tank Alert® AB alarm provides high level alarm notification
- SJE SignalMaster® control switch provides alarm activation

OPTIONS

- Elapsed Timer Meter provides pump operation timer
- The Tank Alert® AB DUO alarm system can serve as high or low level alarm or filter alarm depending on the float switch model used
- Xpert Alert® WiFi alarm provides remote alarm notification

Quick Post Plus™ system shown with optional elapsed time meter

Panel layout may vary with options.

QUICK POST PLUS™ SYSTEM WITH INDOOR ALARM - Easy to install Quick Post Plus™ system with indoor alarm provides convenient wiring connection and system monitoring for pump station applications.

Part #	Description (120V)	Shipping Weight
1053759	120V QPP1, Tank Alert® AB, SJE SignalMaster®	5.9 lbs.
1053760	120V QPP1E, Elapsed Timer Meter, Tank Alert® AB, SJE SignalMaster®	6.0 lbs.
1053761	120V QPP1DE, Elapsed Timer Meter, Tank Alert® AB DUO, SJE SignalMaster®	6.0 lbs.
1059013	120V QPP1WiFi, Xpert Alert® WiFi, SJE SignalMaster®	5.91 lbs.
Part #	**Description (230V)**	**Shipping Weight**
1053762	230V QPP2, Tank Alert® AB, SJE SignalMaster®	5.9 lbs.
1053763	230V QPP2E, Elapsed Timer Meter, Tank Alert® AB, SJE SignalMaster®	6.0 lbs.
1053764	230V QPP2DE, Elapsed Timer Meter, Tank Alert® AB DUO, SJE SignalMaster®	6.0 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC or 230 VAC; 50/60hz

ENCLOSURE: 8" x 8" x 4" (20.32 x 20.32 x 10.16 cm) NEMA 4X ultraviolet stabilized thermoplastic

RECEPTACLE PIGTAIL: 120 VAC NEMA 5-15R or 230 VAC NEMA 6-15R; 12.0" (30.48 cm) SJTOW cable

MOUNTING POST: 22" x 7" x 6" (55.88 x 17.78 x 15.24 cm) polyethylene weatherproof gray engineered thermal plastic with 3" x 3" (7.62 x 7.62 cm) access cover

RISER EXTENSION KIT: 2.5" (6.35 cm) diameter schedule 40 conduit, 6" (15.24 cm) in length; (2) stainless steel compression nuts

LIQUID TIGHT CORD SEAL: Seal - neoprene; washers, nuts and bolts - stainless steel

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

ALARM: Indoor Tank Alert® AB alarm system, Tank Alert® AB DUO alarm system, or Xpert Alert® WiFi indoor alarm system

QUICK POST PLUS™ OUTDOOR SYSTEM
Provides Convenient Wiring Connection and System Monitoring for Pump Station Applications

The Quick Post Plus™ outdoor system features an 8 x 8 x 4 inch enclosure with integral alarm and terminals to connect alarm and incoming power. The provided receptacle plug pigtail is available in 120 VAC or 230 VAC to accept a pump switch piggy-back plug, pump plug, and optional elapsed time meter (ETM). The provided factory-installed 22" weatherproof post features access door for easy wiring. The system also includes the riser extension conduit with stainless steel compression nuts to connect the mounting post to the riser, two cord seals, and SJE SignalMaster® control switch.

The post can be mounted directly into the ground, over 4 x 4 inch (10.16 x 10.16 cm) post or over conduit.

FEATURES

- NEMA 4X enclosure with hinged door
- Factory installed mounting post with access cover for easy wiring
- Receptacle pigtail (120 VAC or 230 VAC) and wiring terminal blocks for easy field connections
- Separate alarm and pump control circuit
- Riser extension 2.5 inch (6.35 cm) diameter coupling conduit to accommodate float piggy-back plug
- Riser extension stainless steel compression nuts provide easy adjustability and strong connection
- Strain relief for pump and float cords, provided by cord seals
- Integrated alarm, beacon, horn, and test/silence switch to provide high level alarm notification
- SJE SignalMaster® control switch provides alarm activation

OPTIONS

- Elapsed Timer Meter provides pump operation timer
- DUO alarm input to provide high and low level alarm or filter alarm depending on the float switch model used

Quick Post Plus™ outdoor system shown with optional elapsed time meter

Panel layout may vary with options.

SJE RHOMBUS®

QUICK POST PLUS™ OUTDOOR SYSTEM - Easy to install Quick Post Plus™ outdoor system provides convenient wiring connection and system monitoring for pump station applications.

Part #	Description (120V)	Shipping Weight
1053765	120V QPP1W, Integral Alarm, SJE SignalMaster®	5.4 lbs.
1053766	120V QPP1WE, Elapsed Timer Meter, Integral Alarm, SJE SignalMaster®	5.5 lbs.
1053767	120V QPP1WDE, Elapsed Timer Meter, DUO Alarm, SJE SignalMaster®	5.5 lbs.
Part #	**Description (230V)**	**Shipping Weight**
1053768	230V QPP2W, Integral Alarm, SJE SignalMaster®	5.4 lbs.
1053769	230V QPP2WE, Elapsed Timer Meter, Integral Alarm, SJE SignalMaster®	5.5 lbs.
1053770	230V QPP2WDE, Elapsed Timer Meter, DUO Alarm, SJE SignalMaster®	5.5 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC or 230 VAC; 50/60hz

ENCLOSURE: 8" x 8" x 4" (20.32 x 20.32 x 10.16 cm)
NEMA 4X ultraviolet stabilized thermoplastic

RECEPTACLE PIGTAIL: 120 VAC NEMA 5-15R or 230 VAC NEMA 6-15R;
12.0" (30.48 cm) SJTOW cable

MOUNTING POST: 22" x 7" x 6" (55.88 x 17.78 x 15.24 cm) polyethylene
weatherproof gray engineered thermal plastic with
3" x 3" (7.62 x 7.62 cm) access cover

RISER EXTENSION KIT: 2.5" (6.35 cm) diameter schedule 40 conduit,
6" (15.24 cm) in length; (2) stainless steel
compression nuts

LIQUID TIGHT CORD SEAL: Seal - neoprene; washers, nuts and bolts -
stainless steel

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

ALARM: 360 degree LED beacon, 95 decibels at 2 feet (60.96 cm) piezo horn

ULTRA NATOR™ SYSTEM
Controls Two Single Phase Pumps in Indoor Duplex Pump Applications

The Ultra Nator™ control and alarm system provides a convenient location for all wiring required for an indoor duplex pump application. The Ultra Nator™ employs two receptacles to accept two 120 VAC pump plugs. No wiring needed!

In normal operation, pumps will alternate based on the pump switch level. If an alarm condition occurs (top float activates), the alarm light and horn turn on. The pump in use will turn off and the other pump will turn on. Pumping will continue until the pump switch deactivates (bottom float).

FEATURES

- 120AC Voltage - Primary: 120 VAC, 60Hz; Secondary: 9 VDC
- If primary power fails, the alarm system continues to work due to battery backup feature. Battery Backup Power - 9VDC (Battery not included) (Battery backup will not run pumps)
- Pump failure indicator, alerts of potential pump problems
- NEMA 1 rated for indoor use
- Alternating pump action equalizes pump wear
- Factory-installed 10ft power cord
- Factory-installed pump activation and alarm activation switches for easy installations (various switch configurations available)
- Red LED high water indicator
- Amber LED horn disabled indicator
- Green LED pump run indicators (pump 1 & pump 2)
- Green LED power on indicator
- Audible and visual high water alarm
- Alarm test press button switch
- Pump run press button switch
- Horn silence press button switch
- Test-reset press button switch
- Auxiliary contacts (normally open and normally closed)

Shown with SJE MicroMaster® pump switches

Plugger Products

ULTRA NATOR™ - Controls two 120V single phase pumps using two receptacles for pump connections in indoor duplex pump applications. No wiring needed.

Part #	Description (120V)	Shipping Weight
1029624	Ultra Nator™ & two 10' SJE MicroMaster®	13 lbs.
1030108	Ultra Nator™ & two 10' SJE VerticalMaster® II	13 lbs.
1030109	Ultra Nator™ & one 10' SJE VerticalMaster® II & one 10' VRS	13 lbs.
1031346	Ultra Nator™ & two 20' SJE MicroMaster®	15 lbs.
1032893	Ultra Nator™ & two 20' SJE VerticalMaster® II	15 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC

OUTPUT CONTACT RATING: 4 Amp

ENCLOSURE: 6 x 6 x 4 inch (15.24 x 15.24 x 10.16 cm),
NEMA 1 thermoplastic

RECEPTACLES: 120 VAC NEMA type 5-15

ALARM HORN: 95 decibels at 2 feet (0.61 meters)

MAXIMUM CURRENT: 15 Amps

PS PATROL® SYSTEM
Provides Convenient Wiring Connection and System Monitoring for Pump Station Applications

The PS Patrol® system features a built-in high water alarm and provides a convenient location to connect all wiring required for a pumping station installation. The PS Patrol® system employs a receptacle to accept a 120 VAC pump and piggy-back style pump switch.

The sleek, angled design of the clear enclosure includes a removable cover for easy access for field wiring. All internal components are sealed within the cover for protection from the elements. The red LED illuminates the cover in an alarm condition for easy 360° visual identification. Available with or without 32″ mounting post.

FEATURES

- Controller meets Type 3R watertight standards and is designed for outdoor use
- Built-in high water alarm
- Removable cover provides greater access for field wiring and service
- Controller can be purchased with standard 5″ square plastic post or can be mounted on 4″ schedule 40/80 PVC pipe or conduit (customer supplied)
- Automatic alarm reset, horn silence and alarm test
- 360° visual alarm; audible alarm
- Red LED illuminates cover in alarm condition
- Green Power On light
- Auxiliary alarm contacts included for easy attachment of remote alarm
- Receptacle for easy connection of pump and piggy-back pump switch
- Cord seal included for sealing switches and pump cable
- Electrical potting cavity provides easy reliable method to seal power cables (user to provide duct seal)

OPTIONS

- Mercury or mechanical pump switches
- Various cord lengths
- Riser assembly adapter
- Dual alarm (2nd alarm input - yellow LED illuminates cover in alarm condition)
- Elapsed Time Meter (ETM)
- Pump circuit breaker
- Available with or without 32″ post

Shown with mounting post
U.S. Patent Nos. D 780,703
and 9,472,932

LR54245

SJE RHOMBUS®

PS PATROL® - Provides convenient wiring connection and system monitoring for pump station applications.

Part #	Pre-configured Panels for Easy Ordering	FLA	Shipping Weight
1022728	PSP2 120V, 120V Alarm, No Pump Switch; 20' SJE SignalMaster®, with Mounting Post	0-15	13 lbs.
1019021	PSP2 120V, 120V Alarm, No Pump Switch, 20A Circuit Breaker, with Mounting Post	7-15	13 lbs.
1022575	PSP2 120V, 120V Alarm, ETM, 20' SJE SignalMaster®, with Mounting Post	0-15	14 lbs.
1022577	PSP2 120V, 120V DUO Alarm, ETM, 20' SJE SignalMaster® & VRS, with Mounting Post	0-15	15 lbs.
1018434	PSP2 120V, No Alarm, No Pump Switch; Remote TAAB, 15' SJE SignalMaster®, with Mounting Post	0-15	16 lbs.
1011551	Assembly Kit - Riser Extension Coupling and Washers	N/A	10 lbs.

PSP2	**120V**			
CONTROL PANEL	MODEL TYPE	STARTING DEVICE	LEVEL CONTROL APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	PSP2	
MODEL TYPE	✓	120V	120V
STARTING DEVICE		1	SJE PumpMaster® Pump Switch (0-13 FLA) - Mechanical
		2	SJE PumpMaster® Plus Pump Switch (0-15 FLA) - Mechanical
		3	120V Double Float® Pump Switch (0-15 FLA) - Mercury
		6	No Pump Switch
		7	120V Double Float® Master Pump Switch (0-15 FLA) - Mechanical
LEVEL CONTROL APPLICATION		H	Pump Down (select Option 17 below)
		X	No Floats

PRICING WORKSHEET

PS Patrol® Base Price _____

Starting Device _____

Level Control Application _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	1J	Duo Alarm Inputs
	1V	Vertical Reed Switch (must select Option 1J)
	8A	Elapsed Time Meter
	10X	No Mounting Post
	15_P	Pump Breaker - Specify 0 or 1 after Number 15 Followed by Letter "P" 0 = 15 Amp Breaker (0-7 FLA), 1 = 20 Amp Breaker (7-15 FLA) Example: 151P = 20 Amp Breaker, 7-15 FLA

	OPTIONS	DESCRIPTION
	16C	30' Cord in Lieu of 20' Cord (per float)
	16D	40' Cord in Lieu of 20' Cord (per float)
	17A	SJE SignalMaster® / Pipe Clamp (Alarm Float) - Mechanical
	17J	Sensor Float® / Pipe Clamp (Alarm Float) - Mercury
	22F	PSP Assembly Kit

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

SPECIFICATIONS

ALARM VOLTAGE: 120 VAC

PUMP VOLTAGE: 120 VAC

ENCLOSURE SIZE: Controller with post 5 x 5 x 39 inches (12.7 x 12.7 x 99.06 cm) Controller without post 5 x 5 x 8 inches (12.7 x 12.7 x 20.32 cm)

RECEPTACLE: 120 VAC - NEMA type 5-15

AUXILIARY CONTACTS: 120 VAC, 0.5 amps max., 50/60 Hz, (circuit not supervised)

ALARM HORN: 82 decibels at 10 feet

ALARM FLOAT: SJE SignalMaster® control switch with mounting clamp

SJE RHOMBUS

SJE OIL SPOTTER™ SYSTEM

The SJE Oil Spotter™ system is designed to provide pump control and alarm notification of potentially threatening water and oil levels in simplex pumping applications.

The system features an innovative, factory-installed Oil Water Switch that senses the difference between oil and water to remove water from the tank, while preventing oil from entering the environment.

The Oil Water Switch features four probes (start level, stop level, high water level, reference for ground) and a mechanical high oil alarm float.

Common applications include elevator sump basins, transformer vaults, leachate well applications, garages or any application requiring ASME A17.1 compliance.

In normal operation, as water and oil enter the tank, the oil rises to create a floating layer on top of the water. The water level rises to reach the Start Probe, activating the pump to remove water from the tank. It continues pumping water out of the tank until the water level falls below the Stop Probe (5 inch pumping range).

If the water level continues to rise and reaches the High Water Probe, the red high water LED indicator illuminates and auxiliary contacts close (activating an optional Tank Alert® alarm or other remote device).

If the oil level rises to activate the mechanical High Oil Float, the red high oil LED indicator illuminates and auxiliary contacts close (activating an optional Tank Alert® alarm or other remote device).

Receptacle on bottom of panel
120V model shown

FEATURES

- NEMA 1 rated for indoor use
- Factory-installed 10ft power cord
- Plug and play - no wiring for easy installation
- Receptacle to accept one 120 VAC or 230 VAC pump plug (15 amp FLA max)
- SJE Oil Spotter™ Panel with LED indicators for:
  - High Water Indicator (red)
  - High Oil Indicator (red)
  - Pump Run Indicator (green)
  - Power Indicator (green)
- Factory-installed Oil Water switch includes:
  - High oil float
  - High water probe
  - Start probe
  - Stop probe
  - Reference probe
- Pump activation probes (start and stop levels) 5 inch pumping range
- Helps satisfy requirements of ASME A17.1 compliant system

SJE RHOMBUS®

SJE OIL SPOTTER™ - Provides pump control and alarm notification of potentially threatening water and oil levels in simplex pumping applications.

Part #	Description (120V)	Shipping Weight
1033606	SJE Oil Spotter™ System (10ft)	13 lbs.
1033578	SJE Oil Spotter™ System (10ft) w/ Tank Alert® AB	15 lbs.
1036286	SJE Oil Spotter™ System (50ft) w/ Tank Alert® AB	18 lbs.
Part #	Description (230V)	Shipping Weight
1037562	SJE Oil Spotter™ 230V System (10ft)	13 lbs.
1037723	SJE Oil Spotter™ 230V System (10ft) w/ Tank Alert® AB	15 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC; 230 VAC

ENCLOSURE: 8 x 8 x 4 inch (20.32 x 20.32 x 10.16 cm), NEMA 1 indoor

RECEPTACLE: 120 VAC NEMA type 5-15; 230 VAC NEMA type 6-15

MAXIMUM CURRENT: 15 Amps

Oil Detection

The SJE Oil Spotter™ Auto control and alarm system is designed to monitor and control oil/water environments and provides a convenient location for all wiring required for an indoor simplex pump application.

The SJE Oil Spotter™ Auto employs a terminal block for one 120 VAC pump, a 120 VAC oil containment valve and a 120 VAC water drain valve. Another terminal block is for wiring the SJE Oil Spotter™ Auto probe, high water alarm float, and auxiliary alarm connection. The panel also includes a Auto/Hand pump switch and Water/Oil Drain selection switch (functions in HAND mode only).

In normal operation, the pump will turn on and off as the water level activates the probes (5 inch pumping range). If the water level rises enough to activate the high water probe, a red indicator will illuminate and activate auxiliary contacts. If the oil level reaches the high oil float, a red indicator will illuminate and activate the auxiliary contacts, the pump energizes along with the valves to automatically remove contaminated water/oil into the appropriate holding vessel.

In Hand operation (spring loaded) the operator can manually pump out the water/oil from the pit. The valve selection switch allows the operator to choose if the valves are activated or not.

Common applications include elevator sump basins, transformer vaults, leachate well applications or garages.

Oil Detection

FEATURES

- NEMA 1 rated padlockable enclosure for indoor use with (2) heavy duty latches, stainless steel 1/4 turn set screw, drip shield, and integral mounting flanges
- Water/Oil Drain switch (functions in Hand mode only)
- SJE Oil Spotter™ Auto Panel with LED indicators for:
  - High Water Indicator (red)
  - High Oil Indicator (red)
  - Pump Run Indicator (green)
  - Power Indicator (green)
- 10' Oil Water switch includes:
  - High oil float
  - High water probe
  - Start probe
  - Stop probe
  - Reference probe
- Auto/Hand switch (spring loaded to Auto)
- Pump disconnect breaker
- Control fuse
- Helps satisfy requirements of ASME A17.1 compliant system

SJE Oil Spotter™ Auto
Optional 120V Alarm
Water Valve
To Water Holding Tank
Oil Valve
To Oil Holding Tank
Oil Water Switch
High Water Probe
Start Probe
Stop Probe
Reference Probe
High Oil Float
Oil
Water
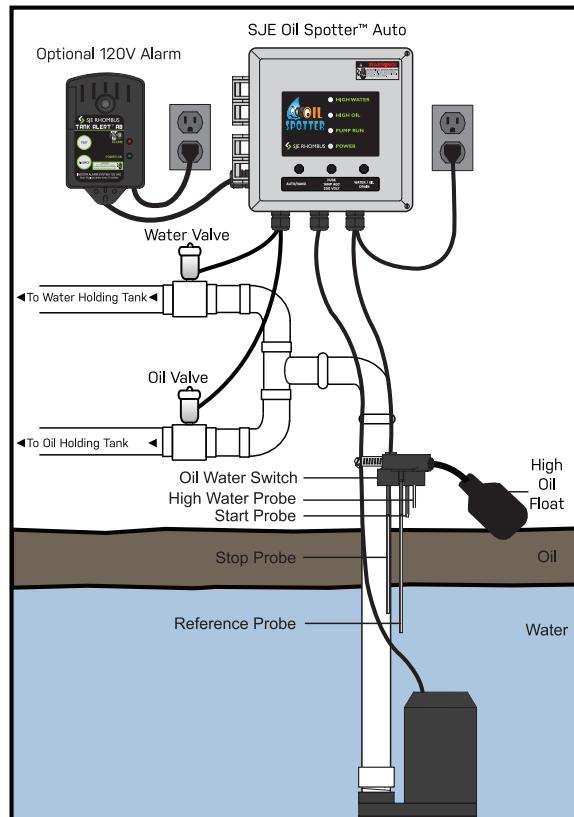
SJE OIL SPOTTER™ AUTO - Provides pump control, valve control, and alarm notification of potentially threatening water and oil levels in simplex pumping applications.

Part #	Description (120V)	Shipping Weight
1038943	SJE Oil Spotter™ Auto System	9 lbs.
1038946	SJE Oil Spotter™ Auto System w/ Tank Alert® AB	10 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC

ENCLOSURE: 12 x 10 x 6 inch (30.48 x 25.4 x 15.24 cm), NEMA 1 indoor, ultraviolet, stabilized thermoplastic, padlockable, dripshield, integral mounting flanges, (2) heavy duty cover latches, 1/4 turn stainless steel set screw

MAXIMUM CURRENT: 15 Amps

SJE RHOMBUS.

Oil Detection

VARIOSPEED® GRINDER SIMPLEX CONTROL PANEL

Variable Frequency Drive for Grinder Pumps

The Simplex VARIOspeed® Grinder Control Panels are available for single phase or for three phase incoming power. Both versions are designed to control a three phase sewage grinder pump in level control applications. Float switches activate a Variable Frequency Drive (VFD) to turn the pump on and off. If a high level alarm condition occurs, it activates the audible/visual alarm system. The VARIOspeed® Grinder control panel is able to reverse on start to clear any debris in the impeller. In addition, it can detect high-amp conditions during pump run, indicative of clogging and automatically reverse the impeller. This is done momentarily and repeatedly until the binding material has been shredded to a size that can easily pass through the pump. This control method reduces clogging and potential failure resulting from a locked rotor.

FEATURES

- Quick start wizard for easy setup
    1. Enter motor amps (FLA)
    2. Enter motor horsepower (HP)
    3. Enter motor voltage (V)
    4. Perform motor auto-tuning
- Graphic color display (LCD):
    - High Brightness / Direct sunlight readable
    - Removable/handheld for easy programming
    - Pump run indication (FWD or REV)
    - Pump speed (Hz)
    - Pump current (A)
    - Float switch status
    - Elapse time meter/cycle counter
    - Message bar (Status & Alarm)
    - Alarm history
    - Password protection
    - Rotary button for easy menu navigation
- Quick connect terminals for ease of troubleshooting and service
- Pump dry run alarm
- Thermal cutout protection
- 2 or 3 float switch operation
- Pump motor overload protection
- Pump run high level alarm
- Max pump cycle time limiter
- 3 auto-reverse modes available (multiple modes can be selected)
    - Auto-reverse on start (clears the pump before starting the pump cycle)
    - Auto-reverse on stop (clears the pump after the pump cycle)
    - Auto-reverse on High Amps Detection (during a run cycle)
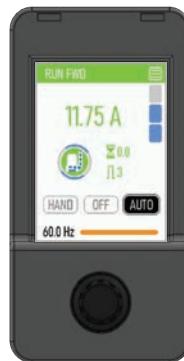
COMPONENTS

1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

    Note: See specifications on back side for sizing.

2. Variable Frequency Drive
3. LCD VFD display
4. Circuit breaker
5. LED beacon
6. Vents for VFD cooling (not shown)
7. Horn with Test/Silence button (not shown)
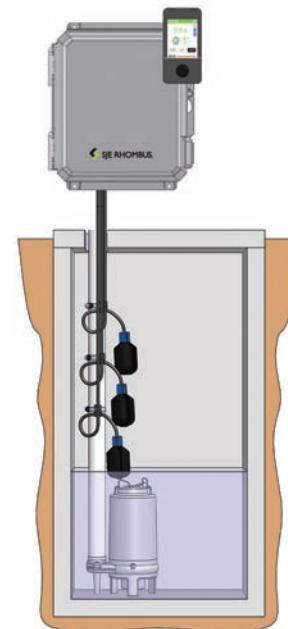
SJE RHOMBUS.

VARIOSPEED® SIMPLEX GRINDER CONTROL PANEL - Variable Frequency Drive for grinder pumps.

Part #	Model	Input Voltage	Pump Rating	HP	Max Out. Amps	Enclosure Size	Shipping Weight
1107914	VSGS-240-1-11	208-240V, 1 Phase	**208/230V, 3 Phase**	**2**	**11A**	14 x 12 x 6	18 lbs.
1107915	VSGS-240-1-17.8[1]	208-240V, 1 Phase	**208/230V, 3 Phase**	**3-5**	**17.8A**	18 x 16 x 10	33 lbs.
1113571	VSGS-240-1-28[1]	208-240V, 1 Phase	**208/230V, 3 Phase**	**7.5-10**	**28.0A**	28 x 20 x 12	42 lbs.
1107916	VSGS-240-3-11	208-240V, 3 Phase	**208/230V, 3 Phase**	**2**	**11A**	14 x 12 x 6	18 lbs.
1107917	VSGS-240-3-16.5	208-240V, 3 Phase	**208/230V, 3 Phase**	**5**	**16.5A**	14 x 12 x 6	26 lbs.
1107918	VSGS-240-3-31.8	208-240V, 3 Phase	**208/230V, 3 Phase**	**7.5-10**	**31.8A**	18 x 16 x 10	33 lbs.

[1]Model not UL Listed

SELECTING THE CORRECT VFD

1. Determine the number of phase and voltage available on site. If three phase is available, use models rated for three phase incoming power.
2. Select a pump with the same voltage rating as the incoming power (motor must be three phase).
3. Check pump motor nameplate Full Load Amps (FLA) for proper VFD sizing.
4. Select a VFD with an output amp rating equal or higher than motor FLA.

SPECIFICATIONS

CONTROL: VFD motor control (Sensorless Vector Control)
3 x Float Switch Inputs (Stop/Start/High Level)
1 x Thermal Cutout Input
1 x Aux Alarm Relay Output
Pump run/direction indication (FWD or REV)
Pump speed (Hz) and Amps (A) indication
Pump motor overload protection
Pump dry run alarm

ENCLOSURE: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

ENVIRONMENTAL: Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)
Panel internal temperature: 14°F to 122°F (-10°C to 50°C)
Storage temperature: -4°F to 131°F (-20°C to 55°C)
Altitude: Maximum of 3,280 ft (1,000 m) above sea level

All conduits must be properly sealed to prevent sewer gas from entering the enclosure. Not rated for installation in hazardous locations.

ELECTRICAL: Input voltage: 240V nominal
208-240V 50Hz/60Hz, single phase for VSGS-240-1 models
208-240V 50Hz/60Hz, three phase for VSGS-240-3 models

Note: The output voltage cannot exceed the input voltage.

SJE Rhombus® recommends using the SJE MilliAmpMAster™ Control Switch, SJE MegaMaster® Control Switch or the EZconnex® Float Switch Connection System for level control and high level alarm. For ordering information, please see our catalog pages at www.sjerhombus.com.

Grinder Products
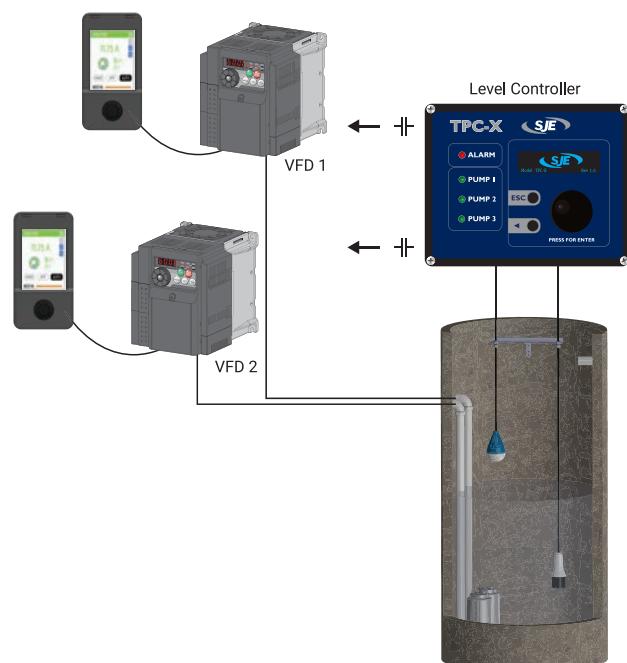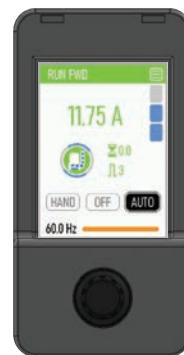
VARIOSPEED® GRINDER DUPLEX CONTROL PANEL
Variable Frequency Drives for Grinder Pumps

The Duplex VARIOspeed® Grinder Control Panels are available for single-phase or for three-phase incoming power. Both versions are designed to control two three-phase sewage grinder pumps in level control applications. The TPC-X level controller is used with a transmitter to monitor the tank level and activate the Variable Frequency Drives (VFDs). The TPC-X controller provides automatic pump alternation, lead/lag operation, high and low level alarms, seal fail and thermal cutoff protection. If a high level alarm condition occurs, it activates the audible/visual alarm system. Each pump is controlled by a VARIOspeed® Grinder VFD and is able to reverse on a pump start and/or pump stop to clear any debris in the impeller. In addition, the panel can detect high-amp conditions during pump run, indicative of clogging, and automatically reverse the impeller. The process is momentary and repeated until the binding material has been shredded to a size that can easily pass through the pump. This control method reduces clogging and potential failure resulting from a locked rotor.

COMPONENTS

1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

    Note: See specifications on back side for sizing.
2. Variable Frequency Drives
3. LCD VFD displays
4. Circuit breakers
5. LED beacon
6. TPC-X level controller
7. Vents for VFD cooling (not shown)
8. Horn with Test/Silence button (not shown)

FEATURES

- TPC-X level controller
    - Level transmitter operation with backup high level float switch
    - Thermal cutout protection
    - Seal Fail protection
    - Automatic pump alternation
    - Lead / Lag operation
- VFD Graphic color display (LCD):
    - High Brightness / Direct sunlight readable
    - Removable/handheld for easy programming
    - Pump run indication (FWD or REV)
    - Pump speed (Hz)
    - Pump current (A)
    - Float switch status
    - Elapse time meter/cycle counter
    - Message bar (Status & Alarm)
    - Alarm history
    - Password protection
    - Rotary button for easy menu navigation
- Quick start wizard for easy setup:
    1. Enter motor amps (FLA)
    2. Enter motor horsepower (HP)
    3. Enter motor voltage (V)
    4. Perform motor auto-tuning
- Quick connect terminals for ease of troubleshooting and service
- Pump dry run alarm (low amps)
- Pump motor overload protection
- Pump run high level alarm
- Max pump cycle time limiter
- 3 auto-reverse modes available (multiple modes can be selected)
    - Auto-reverse on start (clears the pump before starting the pump cycle)
    - Auto-reverse on stop (clears the pump after the pump cycle)
    - Auto-reverse on High Amps Detection (during a run cycle)
- Web-based cellular remote monitoring using SJE Panel Link (optional)

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Level Controller

VFD 1

VFD 2

VARIOSPEED® GRINDER DUPLEX CONTROL PANEL - Variable Frequency Drives for grinder pumps.

Part #	Model	Input Voltage	Pump Rating	HP	Max Out Amps	Enclosure Size	Shipping Weight
1107909	VSGD-240-1-11	208-240V, 1 Phase	**208/230V, 3 Phase**	**2**	**11A**	24 x 24 x 10	45 lbs.
1107910	VSGD-240-1-17.8[1]	208-240V, 1 Phase	**208/230V, 3 Phase**	**3-5**	**17.8A**	24 x 24 x 10	62 lbs.
1114917	VSGD-240-1-28	208-240V, 1 Phase	**208/230V, 3 Phase**	**7.5-10**	**28A**	36 x 30 x 12	190 lbs.
1107911	VSGD-240-3-11	208-240V, 3 Phase	**208/230V, 3 Phase**	**2**	**11A**	24 x 24 x 10	45 lbs.
1107912	VSGD-240-3-16.5	208-240V, 3 Phase	**208/230V, 3 Phase**	**5**	**16.5A**	24 x 24 x 10	51 lbs.
1107913	VSGD-240-3-31.8	208-240V, 3 Phase	**208/230V, 3 Phase**	**7.5-10**	**31.8A**	24 x 24 x 10	62 lbs.

[1]Model not UL Listed

SELECTING THE CORRECT VFD

1. Determine the number of phase and voltage available on site. If three phase is available, use models rated for three phase incoming power.
2. Select a pump with the same voltage rating as the incoming power (motor must be three phase).
3. Check pump motor nameplate Full Load Amps (FLA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor FLA.

SPECIFICATIONS

CONTROL: VFD motor control (Sensorless Vector Control)
TPC-X Controller
    1 x Transmitter Input
    1 x Float Switch Input (High Level)
    2 x Thermal Cutout Inputs
    2 x Seal Fail Inputs
    1 x Aux Alarm Relay Output
VFD LCD Display
    Pump run/direction indication (FWD or REV)
    Pump speed (Hz) and Amps (A) indication
    Pump motor overload protection
    Pump dry run alarm

ENCLOSURE: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

ENVIRONMENTAL: Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)
Panel internal temperature: 14°F to 122°F (-10°C to 50°C)
Storage temperature: -4°F to 131°F (-20°C to 55°C)
Altitude: Maximum of 3,280 ft (1,000 m) above sea level

All conduits must be properly sealed to prevent sewer gas from entering the enclosure. Not rated for installation in hazardous locations.

ELECTRICAL: Input voltage: 240V nominal
208-240V 50Hz/60Hz, single phase for VSGD-240-1 models
208-240V 50Hz/60Hz, three phase for VSGD-240-3 models

Note: The output voltage cannot exceed the input voltage.

SJE Rhombus® recommends using the Sub-X™ Transmitter for level control. SJE Rhombus recommends using the SJE MilliAmpMAster™ Control Switch, SJE MegaMaster® Control Switch or the EZconnex® Float Switch Connection System for a high level backup float switch. For ordering information, please see our catalog pages at www.sjerhombus.com

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Grinder Products

NEX SERIES® GRINDER SIMPLEX CONTROL PANEL
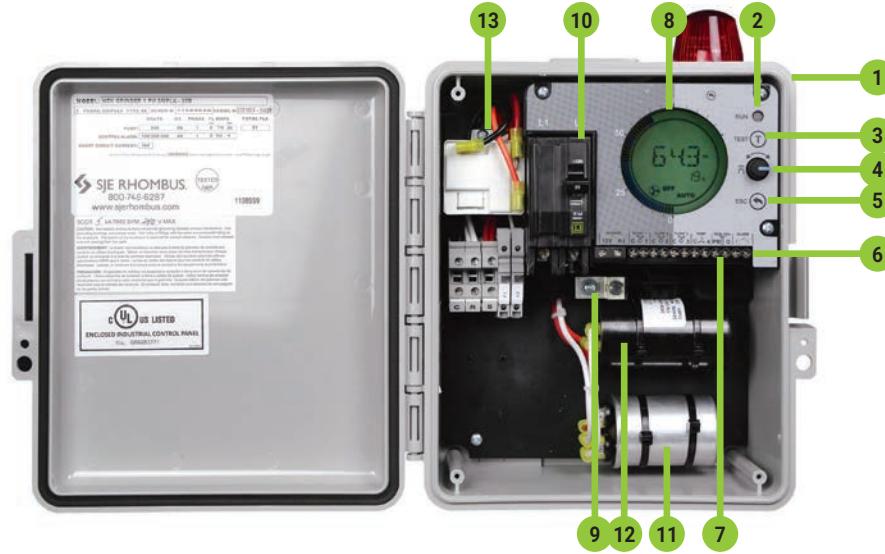
Single Phase Grinder Pump Control

The NEX Series® Grinder simplex control panel is designed to control a single phase 3-wire grinder pump in level control applications. This control panel can be operated using a level transmitter or float switches. The pump will operate based on the level sensor measurement and controller settings. If a high-level alarm condition occurs, it activates the audible/visual alarm. In addition, it can detect high and low amp conditions during pump run and shut the pump off to protect it from damage. This panel has built-in Start and Run capacitors with models available for a variety of pumps or can be ordered without capacitors for 2-wire pump applications.

FEATURES

- Level transmitter or float switch control
- LCD display with bar graph
  - Tank level monitoring
  - Float switch status
  - Pump amps monitoring
  - Run indication
  - Pump run time
  - Pump run cycles
  - Pump GPM flow rate
- Pump protection
  - Seal fail monitoring
  - Thermal cutout
  - Overload
  - Dry run
  - Max run
  - Rapid cycle
- Adjustable level set points
- Gallons per day pumped
- Pump run on high float alarm
- Float out of sequence monitoring

COMPONENTS

1. NEMA 4X enclosure 10 x 8 x 4 inches (25.4 x 20.32 x 10.16 cm) for indoor or outdoor use with integral padlockable latch for added safety.
2. Pump run green LED indicator
3. Pump test switch for manual control of the pump
4. Menu rotary encoder/selector switch
5. Menu ESC button
6. Auxiliary alarm contacts
7. Seal fail and thermal cutout input
8. LCD display
9. Ground lug
10. Circuit breaker
11. Run capacitor
12. Start capacitor
13. Start relay

Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year.

Grinder Products

SJE RHOMBUS®

NEX Series® Grinder Simplex Control Panel - Single phase grinder pump control panel.

Part #	Description	Pump Manufacturer	Pump Model	Pump HP	Pump FLA	Pump VAC	Shipping Weight
1108954	NEX Grinder 1 ph, Simplex - 71B	Ashland Pump	AGP-HC200M2E-35	2	18A	230/240V	7.3 lbs.
1108955	NEX Grinder 1 ph, Simplex - 87A	Champion Pump	CPG2023DSL	2	15A	230/240V	7.3 lbs.
1108956	NEX Grinder 1 ph, Simplex - 53U	Crane Pumps & Systems	ZSGV2072L	2	15A	230/240V	7.3 lbs.
1108957	NEX Grinder 1 ph, Simplex - 58E	Franklin Electric	IGP-M231	2	13.9A	230/240V	7.3 lbs.
1108958	NEX Grinder 1 ph, Simplex - 67C	Liberty Pumps	LSG202M-C	2	15A	230/240V	7.3 lbs.
1108959	NEX Grinder 1 ph, Simplex - 52B	Pentair/Hydromatic	HPG200M2-2	2	15.6A	230/240V	7.3 lbs.
1110466	NEX Grinder 1 ph, Simplex - 54R/72P	Fe Myers/Hydromatic	VS20-21/HVS200M	2	13.5A	230/240V	7.3 lbs.
1108960	NEX Grinder 1 ph, Simplex - 54A	Pentair/Fe Myers	WG20-21	2	12.5A	230/240V	7.3 lbs.
1108961	NEX Grinder 1 ph, Simplex - 57A	Zoeller	E841	2	17.2A	230/240V	7.3 lbs.
1108962	NEX Grinder 1 ph, Simplex - 70A	Wayne/Blue Angel	BARDSGP1-2021	2	14.5A	230/240V	7.3 lbs.
1108963	NEX Grinder 1 ph, Simplex - NC	Any	2-Wire PUMP[1]	1-2	5-20A	230/240V	6 lbs.

[1]NC model has no capacitors and no start relay. It is only suitable for 2-wire pumps with built-in capacitors.
Data subject to change. Refer to the user manual for capacitor kit information. Consult pump manufacturer for updated motor data and capacitor kit requirements.

SPECIFICATIONS

INPUT VOLTAGE: Single phase, 240 VAC, 60 Hz

PUMP RATINGS: Single phase, 1-2 HP, 3-wire (NC model suitable for 2-wire)

OPERATING TEMPERATURE: 14°F to 122°F (-10°C to 50°C)

ENCLOSURE: 10 x 8 x 4 inch (25.4 x 20.32 x 10.16 cm)
Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with integral mounting feet for outdoor or indoor use)

ELECTRONIC OVERLOAD RANGE: 5-20A

PUMP CIRCUIT BREAKER: 25A

CONTROL/ALARM FUSE RATING: 1A, 250V

AUXILIARY ALARM CONTACTS: N.O. 1 amp, 120 VAC Max

INPUTS: 3 float switches, 4-20mA level transmitter, seal fail, thermal cutout

SJE Rhombus® recommends using the Sub-X™ LT Transmitter for level control. SJE Rhombus® recommends using the SJE MilliAmpMaster™ Control Switch or the EZconnex® Float Switch Connection System for backup float switches. For ordering information, please see our catalog pages at www.sjerhombus.com.

Grinder Products

H2O DRIVE® CONSTANT PRESSURE CONTROL

Single Phase, 240 V - Variable Frequency Drive Well Pump Control Panel

The H2O Drive® control panel is designed to control a three phase submersible well pump in constant pressure control applications.

As flow conditions change in the pumping system, the VFD is able to automatically control the pump speed and maintain a constant pressure. The desired set pressure is entered on the color LCD display. The pressure transducer measures the pump system pressure.

FEATURES

- 2 step quick start wizard for easy setup
  1. Enter set pressure
  2. Enter well pump amps (SFA)

- Graphic color display (LCD):
  - High Brightness / Direct sunlight readable
  - Removable/handheld for easy programming
  - Discharge Pressure (PSI)
  - Pump run indication
  - Pump speed (Hz)
  - Pump Amps (A)
  - Message bar (Status & Alarm)
  - Alarm history
  - Password protection
  - Rotary button for easy menu navigation

- Pump dry run alarm

- Well recharge timer function

- High and Low Pressure Alarm

- Pump motor overload protection

- Monitors transducer faults

- Includes 0-150 PSI pressure transducer with cable

- 2 digital inputs for optional level or floor sensor

- 60Hz max. motor speed (default)

- Up to 80Hz max. possible in select systems

COMPONENTS

1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

   Note: See specifications on back side for sizing.

2. Vents for VFD cooling (not shown)

3. Variable Frequency Drive

4. LCD controller display

SJE RHOMBUS®

H2O DRIVE® CONSTANT PRESSURE CONTROLS - Single phase, 240V - Variable Frequency Drive well pump control panel.

Part #	Model	HP	Max Amps	Sine Filter	Input	Pump Rating	Enclosure Size	Shipping Weight
1076917	RD150[1]	0.5 - 1.5	7.5A	No	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	17 lbs.
1076918	RD300[1]	2.0 - 3.0	11.6A	No	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	18 lbs.
1076919	RD500	5.0	17.8A	No	240V, 1 Phase	208/230V, 3 Phase	18 x 16 x 10	33 lbs.
1107747	RD750	7.5	28.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	41 lbs.
1107690	RD1000	10	35.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	44 lbs.
1107691	RD1500	15	55.0A	No	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	46 lbs.
1123857	RD2000	20	125A	No	240V, 1 Phase	208/230V, 3 Phase	30 x 24 x 12	150 lbs.
1123708	RD3000	30	154A	No	240V, 1 Phase	208/230V, 3 Phase	36 x 30 x 12	212 lbs.
1107750	RD150SF	0.5 - 1.5	7.5A	Yes	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	19 lbs.
1107751	RD300SF	2.0 - 3.0	11.6A	Yes	240V, 1 Phase	208/230V, 3 Phase	14 x 12 x 6	20 lbs.
1107752	RD500SF	5.0	17.8A	Yes	240V, 1 Phase	208/230V, 3 Phase	18 x 16 x 10	35 lbs.
1107748	RD750SF	7.5	28.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	44 lbs.
1107692	RD1000SF	10	35.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	47 lbs.
1107693	RD1500SF	15	55.0A	Yes	240V, 1 Phase	208/230V, 3 Phase	28 x 20 x 12	50 lbs.

[1]UL Listed   c(UL)us LISTED

SELECTING THE CORRECT VFD

1. Determine the voltage available on site.
2. Select a well pump with the same voltage (motor must be three phase).
3. Check well pump motor nameplate Service Factor Amps (SFA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor SFA.
5. Use Full Load Amps (FLA) for booster pump application.

SPECIFICATIONS

CONTROL: Pump run indication
Pump speed (Hz) and Amps (A) indication
Pump motor overload protection
High and low pressure alarms
Pump dry run alarm

ENCLOSURE: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

PRESSURE TRANSDUCER: 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated, 4-20mA, with 15 ft cable. Two-year limited warranty on pressure transducer.

ENVIRONMENTAL: Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)
Panel internal temperature: 14°F to 122°F (-10°C to 50°C)
Storage temperature: -4°F to 131°F (-20°C to 55°C)
Altitude: Maximum of 3,280 ft (1,000 m) above sea level

ELECTRICAL: Input voltage: 240V nominal
200-240V 50Hz/60Hz, single phase

Note: The output voltage cannot exceed the input voltage.

Pressure Tank

Pressure Transducer

Pressure Relief Valve

Well Pump

230V, 3 Phase Motor   Incoming Power

Float Switch (Optional)

Floor Sensor (Optional)

Note: For use in clean water pressure control applications. Not for use with sewage pumps.

H2O DRIVE® CONSTANT PRESSURE CONTROL

Three Phase, 240 V - Variable Frequency Drive Well Pump Control Panel

The H2O Drive® control panel is designed to control a three phase submersible well pump in constant pressure control applications.

As flow conditions change in the pumping system, the VFD is able to automatically control the pump speed and maintain a constant pressure. The desired set pressure is entered on the color LCD display. The pressure transducer measures the pump system pressure.
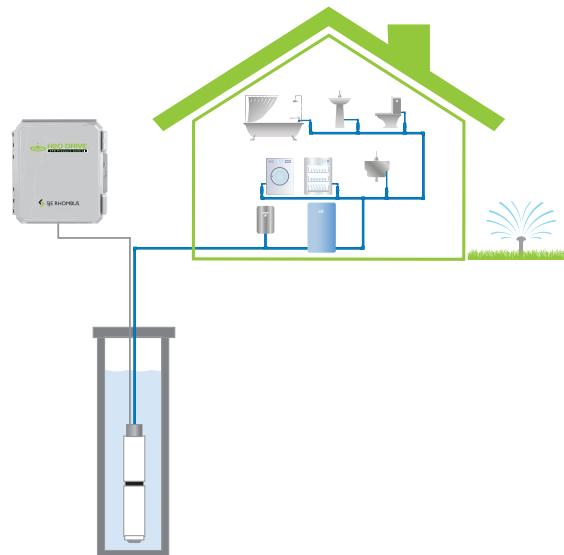
FEATURES

- 2 step quick start wizard for easy setup
  1. Enter set pressure
  2. Enter well pump amps (SFA)

- Graphic color display (LCD):
  - High Brightness / Direct sunlight readable
  - Removable/handheld for easy programming
  - Discharge Pressure (PSI)
  - Pump run indication
  - Pump speed (Hz)
  - Pump Amps (A)
  - Message bar (Status & Alarm)
  - Alarm history
  - Password protection
  - Rotary button for easy menu navigation

- Pump dry run alarm
- Well recharge timer function
- High and Low Pressure Alarm
- Pump motor overload protection
- Monitors transducer faults
- Includes 0-150 PSI pressure transducer with cable
- 2 digital inputs for optional level or floor sensor
- 60Hz max. motor speed (default)
- Up to 80Hz max. possible in select systems

COMPONENTS

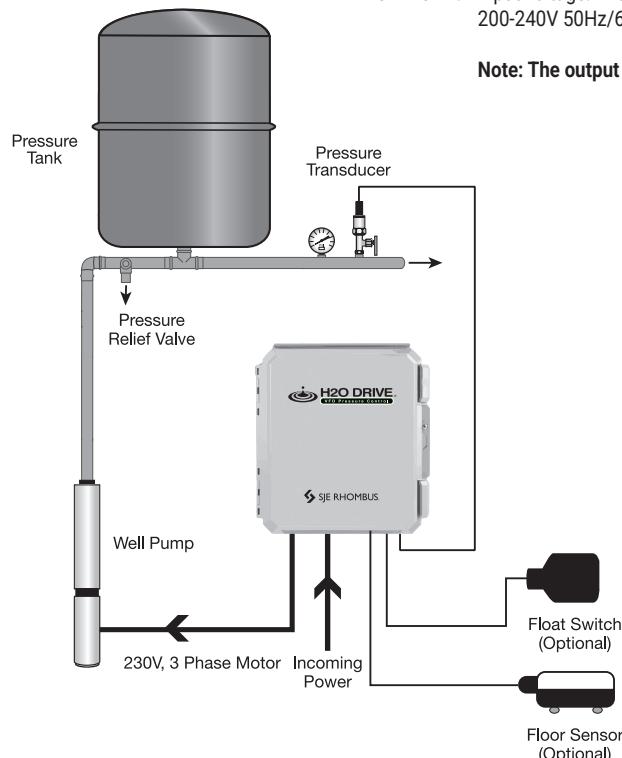1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

   Note: See specifications on back side for sizing.

2. Variable Frequency Drive
3. LCD controller display
4. Vents for VFD cooling (not shown)

SJE RHOMBUS®

H2O DRIVE® CONSTANT PRESSURE CONTROLS - Three phase, 240V - Variable Frequency Drive well pump control panel.

Part #	Model	HP	Max Amps	Load Reactor	Input	Pump Rating	Enclosure Size	Shipping Weight
1104992	RD502	5	19.6A	No	240V, 3 Phase	208/230V, 3 Phase	14 x 12 x 6	16.8 lbs.
1104991	RD752	7.5	30A	No	240V, 3 Phase	208/230V, 3 Phase	18 x 16 x 10	28.7 lbs.
1104989	RD1002	10	40A	No	240V, 3 Phase	208/230V, 3 Phase	18 x 16 x 10	36.8 lbs.
1104988	RD1502	15	56A	No	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	67.9 lbs.
1104986	RD2002	20	69A	No	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	68.4 lbs.
1104984	RD2502	25	88A	No	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	80.3 lbs.
1104982	RD3002	30	115A	No	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	80.3 lbs.
1106583	RD502LR	5	19.6A	Yes	240V, 3 Phase	208/230V, 3 Phase	18 x 16 x 10	42.5 lbs.
1106582	RD752LR	7.5	30A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	77.3 lbs.
1106580	RD1002LR	10	40A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	87.3 lbs.
1106579	RD1502LR	15	56A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	91.9 lbs.
1106577	RD2002LR	20	69A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	93.4 lbs.
1106575	RD2502LR	25	88A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	105.3 lbs.
1106573	RD3002LR	30	115A	Yes	240V, 3 Phase	208/230V, 3 Phase	28 x 20 x 12	109.3 lbs.

SELECTING THE CORRECT VFD

1. Determine the voltage available on site.
2. Select a well pump with the same voltage (motor must be three phase).
3. Check well pump motor nameplate Service Factor Amps (SFA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor SFA.
5. Use Full Load Amps (FLA) for booster pump application.

SPECIFICATIONS

CONTROL: Pump run indication
Pump speed (Hz) and Amps (A) indication
Pump motor overload protection
High and low pressure alarms
Pump dry run alarm

ENCLOSURE: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

PRESSURE TRANSDUCER: 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated, 4-20mA, with 15 ft cable. Two-year limited warranty on pressure transducer.

ENVIRONMENTAL: Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)
Panel internal temperature: 14°F to 122°F (-10°C to 50°C)
Storage temperature: -4°F to 131°F (-20°C to 55°C)
Altitude: Maximum of 3,280 ft (1,000 m) above sea level

ELECTRICAL: Input voltage: 240V nominal
200-240V 50Hz/60Hz, three phase

Note: The output voltage cannot exceed the input voltage.

Pressure Tank

Pressure Transducer

Pressure Relief Valve

Well Pump

Float Switch (Optional)

230V, 3 Phase Motor   Incoming Power
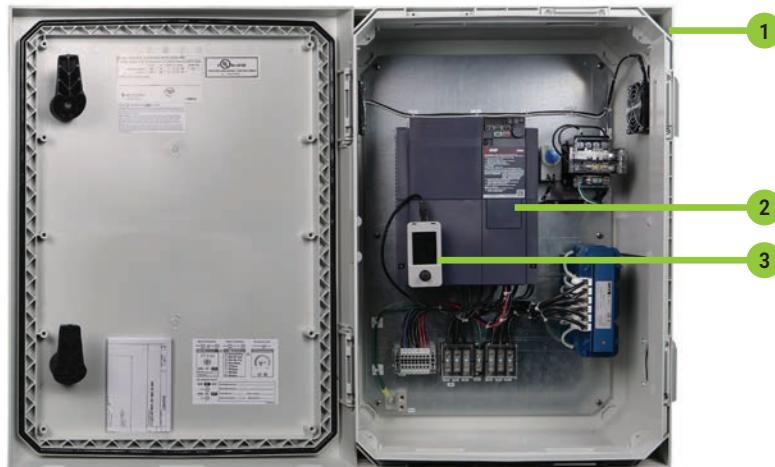
Floor Sensor (Optional)

Note: For use in clean water pressure control applications. Not for use with sewage pumps.

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

H2O DRIVE® CONSTANT PRESSURE CONTROL

Three Phase, 480 V - Variable Frequency Drive Well Pump Control Panel

The H2O Drive® control panel is designed to control a three phase submersible well pump in constant pressure control applications.

As flow conditions change in the pumping system, the VFD is able to automatically control the pump speed and maintain a constant pressure. The desired set pressure is entered on the color LCD display. The pressure transducer measures the pump system pressure.
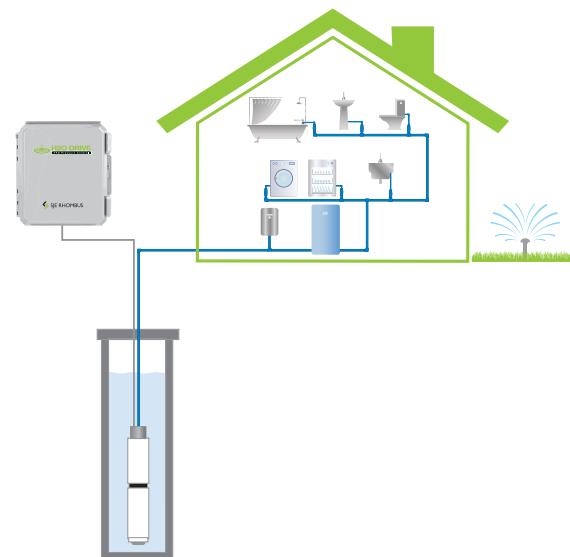
FEATURES

- 2 step quick start wizard for easy setup
    1. Enter set pressure
    2. Enter well pump amps (SFA)

- Graphic color display (LCD):
    - High Brightness / Direct sunlight readable
    - Removable/handheld for easy programming
    - Discharge Pressure (PSI)
    - Pump run indication
    - Pump speed (Hz)
    - Pump Amps (A)
    - Message bar (Status & Alarm)
    - Alarm history
    - Password protection
    - Rotary button for easy menu navigation

- Pump dry run alarm

- Well recharge timer function

- High and Low Pressure Alarm

- Pump motor overload protection

- Monitors transducer faults

- Includes 0-150 PSI pressure transducer with cable

- 2 digital inputs for optional level or floor sensor

- 60Hz max. motor speed (default)
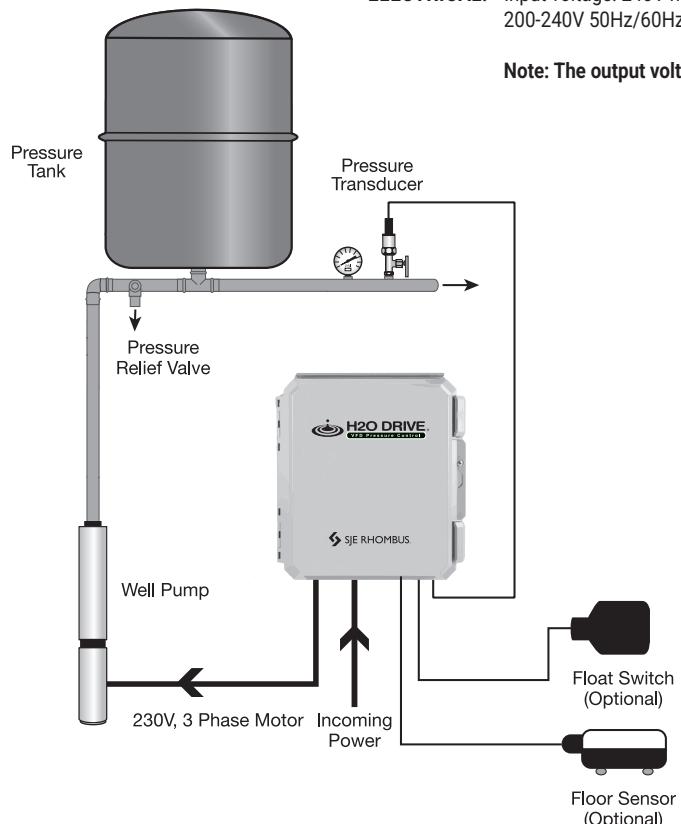
- Up to 80Hz max. possible in select systems

COMPONENTS

1. Enclosure: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable door

   Note: See specifications and sizing table on the back.

2. Variable Frequency Drive
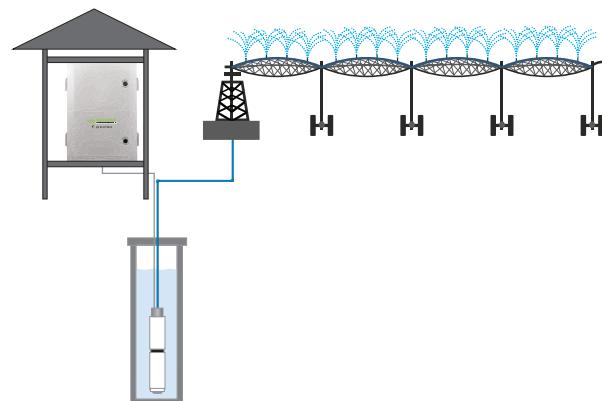
3. LCD controller display

4. Vents for VFD cooling (not shown)

![SJE RHOMBUS logo]

H2O DRIVE® CONSTANT PRESSURE CONTROLS - Three phase, 480V - Variable Frequency Drive well pump control panel.

Part #	Model	HP	Max Amps	Load Reactor	Input	Pump Rating	Enclosure Size	Shipping Weight
1104994	RD304	3	6.9A	No	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	33.5 lbs.
1104993	RD504	5	11.1A	No	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	33.5 lbs.
1104990	RD1004	7.5-10	17.5A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	61.3 lbs.
1104987	RD2004	15-20	35.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	66.5 lbs.
1104985	RD2504	25	45.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	80.3 lbs.
1104983	RD3004	30	60.0A	No	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	80.3 lbs.
1106585	RD304LR	3	6.9A	Yes	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	50.5 lbs.
1106584	RD504LR	5	11.1A	Yes	480V, 3 Phase	460V, 3 Phase	18 x 16 x 10	50.5 lbs.
1106581	RD1004LR	7.5-10	17.5A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	78.3 lbs.
1106578	RD2004LR	15-20	35.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	83.6 lbs.
1106576	RD2504LR	25	45.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	93.8 lbs.
1106574	RD3004LR	30	60.0A	Yes	480V, 3 Phase	460V, 3 Phase	28 x 20 x 12	114.3 lbs.
1110360	RD5004LR	40-50	77.0A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 30 x 12	170.0 lbs.
1110361	RD6004LR	60	93.0A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 30 x 12	215.0 lbs.
1122156	RD7504LR	75	116A	Yes	480V, 3 Phase	460V, 3 Phase	36 x 36 x 12	280.0 lbs.

SELECTING THE CORRECT VFD

1. Determine the voltage available on site.
2. Select a well pump with the same voltage (motor must be three phase).
3. Check well pump motor nameplate Service Factor Amps (SFA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor SFA.
5. Use Full Load Amps (FLA) for booster pump application.
6. The H2O Drive® can be used with non-submersible pump applications such as booster pumps. Use the Full Load Amps (FLA) for VFD sizing for booster pump applications.
7. A load reactor is recommended for well pumps and for long motor cable applications.

SPECIFICATIONS

CONTROL: Pump run indication
Pump speed (Hz) and Amps (A) indication
Pump motor overload protection
High and low pressure alarms
Pump dry run alarm

ENCLOSURE: NEMA 3R ultraviolet stabilized thermoplastic rated for outdoor use with mounting flanges, padlockable cover

PRESSURE TRANSDUCER: 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated, 4-20mA, with 15 ft cable. Two-year limited warranty on pressure transducer.

ENVIRONMENTAL: Surrounding air temperature: 14°F to 104°F (-10°C to 40°C)
Panel internal temperature: 14°F to 122°F (-10°C to 50°C)
Storage temperature: -4°F to 131°F (-20°C to 55°C)
Altitude: Maximum of 3,280 ft (1,000 m) above sea level

ELECTRICAL: Input voltage: 480V nominal
400-480V 50Hz/60Hz, three phase
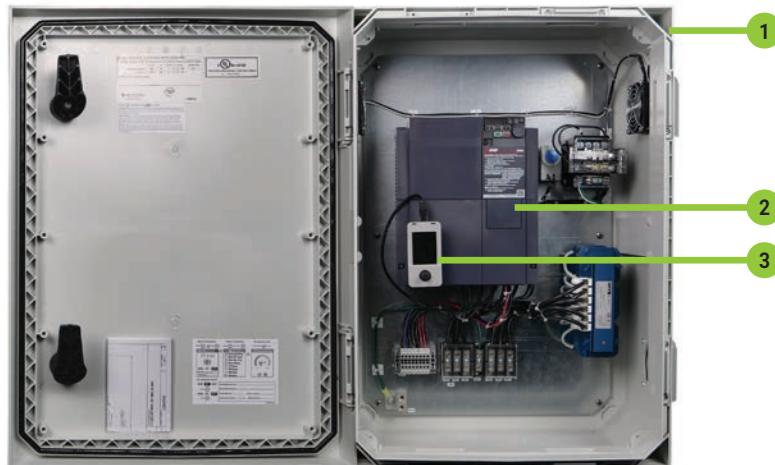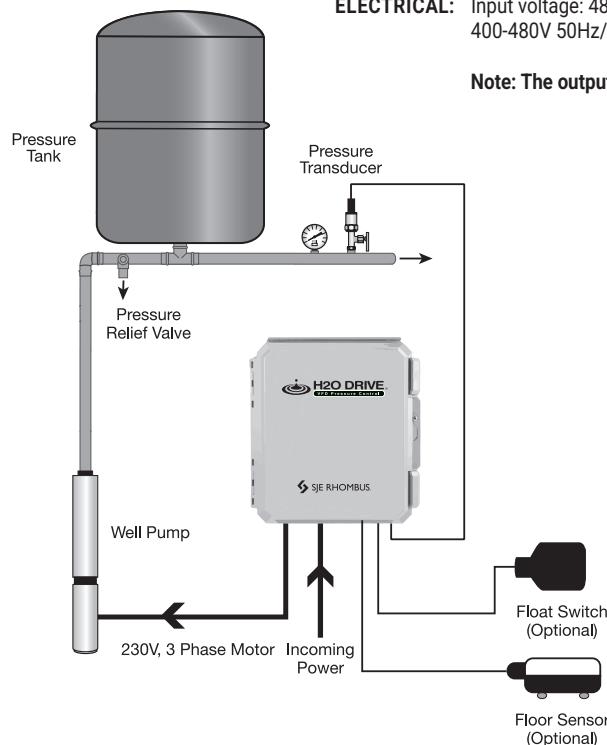
Note: The output voltage cannot exceed the input voltage.

Pressure Tank
Pressure Transducer
Pressure Relief Valve
H2O DRIVE VFD Pressure Control
SJE RHOMBUS
Well Pump
Float Switch (Optional)
230V, 3 Phase Motor   Incoming Power
Floor Sensor (Optional)

Note: For use in clean water pressure control applications. Not for use with sewage pumps.

ENDURA™ PRESSURE BOOSTER CONTROL PANEL
Pre-engineered Variable Frequency Drive Control Panels for Indoor Use

The Endura™ Duplex or Triplex booster control panels feature the VFDC-3000 controller for commercial pressure booster pump, well pump, or irrigation applications using (2) or (3) Variable Frequency Drives (VFDs). As flow and head conditions change, the controller calls for the required number of pumps to activate and automatically adjusts the speed of each VFD to maintain a constant discharge pressure to match the set point value.

Control panel features include:

- Simple display with pressure and pump status
- Fast and intuitive menu navigation and setup
- Elapsed Time and Cycle Counter for each pump
- Low pressure Alarm (pipe burst or run dry protection)
- High pressure alarm and protection
- System Fault Log
- Standard package includes (1) 0-200 PSI pressure transmitter 1/4" NPT Male, NEMA 4X rated with 20 ft (6m) of cable
- Two-year limited warranty on control panel
- One-year limited warranty on the pressure transmitter
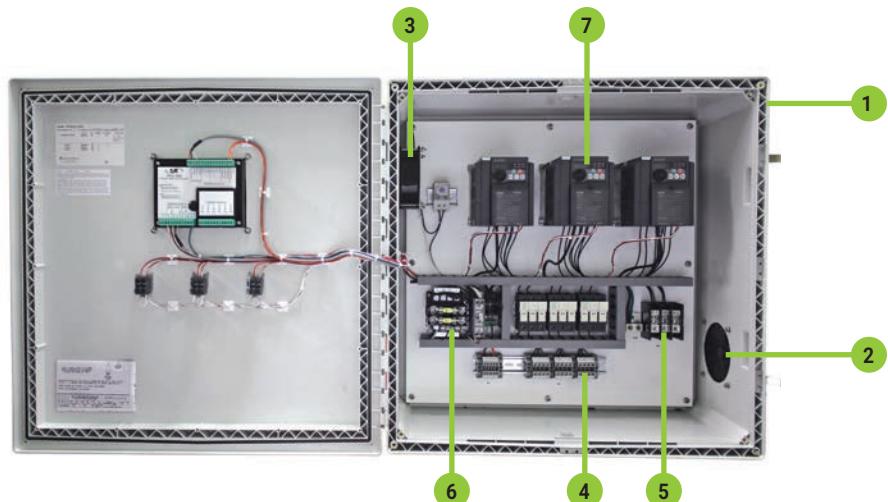
COMPONENTS

1. Polycarbonate or painted steel (see table on back page), wall mounted single door enclosure; NEMA 1 indoor rated
2. Intake filter for VFD cooling
3. Exhaust fan and thermostat for VFD cooling
4. Terminal blocks for easy field wiring
5. Circuit Breaker or fuses for branch circuit protection
6. Multitap transformer 480/240/208:120 VAC
7. Variable frequency drives
8. Hand/Off/Auto selector switches
9. VFDC-3000 Controller
   a. High visibility blue OLED display 2.7 inches (6.86 cm) diagonal 64x256 pixel
   b. Rotary/Push button for easy menu navigation and editing
   c. Escape push buttons exits to main menu without saving changes
   d. Back arrow steps back one menu level and changing value adjustment scale
   e. Pump Run indicator green LEDs (3)
   f. Alarm indicator red LED

Note: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel.

ENDURA™ PRESSURE BOOSTER CONTROL PANEL - Pre-engineered variable frequency drive control panels for indoor use
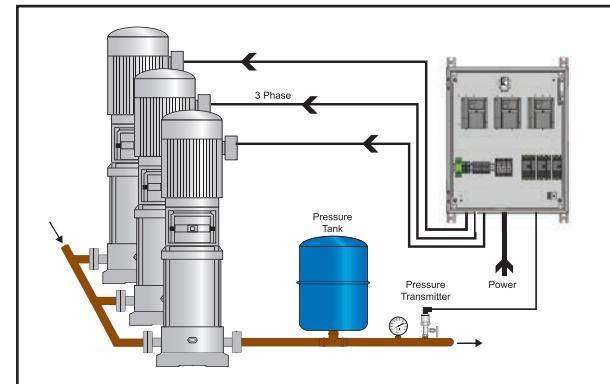
Part #	Description	Model	Motor Amps	Motor HP	Branch Circuit Protection	Enclosure Size (inches)	Ship Weight
1066673	Endura™ Duplex 208/240V, 3-5 HP	EN32-240-16.5	16.5	3-5	Circuit Breakers	24x24x10 Polycarbonate	50.7 lbs.
1066674	Endura™ Duplex 208/240V, 7.5-10 HP	EN32-240-31.8	31.8	7.5-10	Circuit Breakers	24x24x10 Polycarbonate	61.7 lbs.
1066675	Endura™ Duplex 208/240V, 15-20 HP	EN32-240-58.0	58.0	15-20	Circuit Breakers	36x30x12 Painted Steel	114.6 lbs.
1066676	Endura™ Duplex 480V, 3-5 HP	EN32-480-8.0	8.0	3-5	Fuses	24x24x10 Polycarbonate	50.7 lbs.
1066677	Endura™ Duplex 480V, 7.5-10 HP	EN32-480-16.0	16.0	7.5-10	Fuses	24x24x10 Polycarbonate	61.7 lbs.
1066678	Endura™ Duplex 480V, 15-20 HP	EN32-480-29.5	29.5	15-20	Circuit Breakers	36x30x12 Painted Steel	114.6 lbs.
1064132	Endura™ Triplex 208/240V, 3-5 HP	EN33-240-16.5	16.5	3.5-5	Circuit Breakers	24x24x10 Polycarbonate	55.1 lbs.
1066679	Endura™ Triplex 208/240V, 7.5-10 HP	EN33-240-31.8	31.8	7.5-10	Circuit Breakers	36x30x12 Painted Steel	114.6 lbs.
1066680	Endura™ Triplex 208/240V, 15-20 HP	EN33-240-58.0	58.0	15-20	Circuit Breakers	36x36x12 Painted Steel	130.1 lbs.
1064133	Endura™ Triplex 480V, 3-5 HP	EN33-480-8.0	8.0	3-5	Fuses	24x24x10 Polycarbonate	55.1 lbs.
1066681	Endura™ Triplex, 480V, 7.5-10 HP	EN33-480-16.0	16.0	7.5-10	Fuses	36x30x12 Painted Steel	114.6 lbs.
1066682	Endura™ Triplex 480V, 15-20 HP	EN33-480-29.5	29.5	15-20	Circuit Breakers	36x36x12 Painted Steel	130.1 lbs.

OPTIONS	Description
MD	Main Disconnect with Door Operator (not available on Motor HP Range 15-20)
PM	Phase Monitor with Digital Display (not available on Motor HP Range 15-20)
1036351	Surge Arrestor with Bracket

NOTE: HP rating is based on standard NEMA B 4-pole motor (used for indication only, use nameplate FLA for sizing). The output voltage of the VFD cannot exceed the incoming voltage. Example: 208V in, 208V out (max).

SELECTING THE CORRECT VFD CONTROL PANEL

Verify your system requirements before ordering. Endura™ Control Panels cannot be returned.

1. Determine the voltage available on site.
2. Select pumps with the same voltage (motor must be 3 phase).
3. Check pump motor nameplate Full Load Amps (FLA) for proper VFD sizing.
4. Select a VFD with an output amp rating higher than motor FLA.
5. Use motor Service Factor Amps (SFA) for submersible well pump applications for VFD sizing.

MAXIMUM MOTOR CABLE LENGTHS

For 208V-240V pumps: 400 ft (122m). For cable lengths greater than 400 ft (122m), use a load reactor for each pump. Do not exceed 800 ft (244m)
For 380V-480V pumps: 50 ft (15m). For cable lengths greater than 50 ft (15m), use a load reactor for each pump. Do not exceed 300 ft (91m).

SPECIFICATIONS

POWER: Available HP Range 208V~240V or 380~480V
Three Phase, 3.0HP - 20.0HP
CONTROL: P.I.D. control
Adjustable electronic overload
Auto Start on pressure drop (adjustable)
Auto Stop on low Hz (No-Flow - sleep mode)
Lead/Lag/Lag-Lag operation
Auto alternation on Run Time

ENVIRONMENTAL:
Operating temperature: 32ºF to 113ºF (0ºC to 45ºC)
Storage temperature: -4ºF to 140ºF (-20ºC to 60ºC)
Altitude: maximum of 3,280 ft (1,000m) above sea level

WELLZONE® PRESSURE CONTROLLER

2-Wire Single Phase Well Pump Control Panel

The WellZone® digital controller provides pressure control for single phase 2-wire submersible well pump applications. It uses a 0-150 PSI pressure transducer to monitor the discharge pressure and turns the pump ON and OFF according to the Start and Stop setpoints. The LCD display is visible through the clear cover of the enclosure to allow for quick view of the system pressure, run status, hours run and pump cycles. The rotary button provides the user with a simple navigation method through the menu and program settings. It features built in pump protection including rapid cycling and dry run. It is preprogrammed to run the pump as the pressure drops below 40 PSI and stop as the pressure rises above 60 PSI. High & Low pressure settings are available with an auxiliary alarm relay.

COMPONENTS

1. NEMA 4X enclosure 8 x 6 x 4 inches (20.32 x 15.24 x 10.16 cm) for indoor or outdoor use with integral padlockable latch for added safety.
2. Pump run green LED indicator
3. Pump test switch for manual control of the pump
4. Menu rotary encoder/selector switch
5. Menu ESC button
6. Auxiliary alarm contacts
7. Digital input for optional floor sensor or float switch
8. LCD display
9. Ground lug
10. Circuit breaker (20A, 2 pole)

FEATURES

- Includes a 0-150 PSI pressure transducer (No pressure switch needed)
- LCD display with bar graph
  - Pressure monitoring
  - Pump amps monitoring
  - Pump on monitoring
  - Pump Run Time
  - Pump Run Cycles
- Adjustable pressure set points
  - Start /Stop pressure set points
  - High /Low pressure alarms
- Advanced functions
  - Dry Run protection
  - Well recharge timer
  - Rapid cycle protection
  - Water filter replacement notification
  - Alarm history
- Five-year limited warranty on panel
- Two-year limited warranty on pressure transducer

Constant Speed

SJE RHOMBUS®

WELLZONE® Pressure Controller - 2-wire single phase well pump control panel.

Part #	Description	Shipping Weight
1076886	WellZone® 2W-150	3.8 lbs.

SPECIFICATIONS

INPUT VOLTAGE: Single phase, 115/230 VAC, 60 Hz

PUMP RATINGS: Single phase, 2-wire (4-14 FLA)
- 0.5 HP at 115 VAC, 60 Hz
- 0.5 HP - 1.5 HP at 230 VAC, 60 Hz

OPERATING TEMPERATURE: 14°F to 122°F (-10°C to 50°C)

ENCLOSURE: 8 x 6 x 4 inch (20.32 x 15.24 x 10.16 cm)
Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with integral mounting feet for outdoor or indoor use)

Includes liquid tight cable strain relief fittings:
- 2 – 1/2" UF cable
- 1 – 1/2" round cable

PRESSURE TRANSDUCER: 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated,4-20mA, with 5m cable. Two-year limited warranty on pressure transducer.

AUXILIARY ALARM CONTACTS: N.O. 1 amp, 120 VAC Max

NOTE: This digital controller does not provide Variable Speed Pump Control and constant pressure operation

ACCESSORIES (OPTIONAL)

WS360 Water Sensor

The WS360 water sensor, when connected to a WellZone® Pressure Controller, is designed to warn of potential water damage to end users. Place this sensor in any location where there is a risk of water damage: utility room, laundry, kitchen, bathroom, basement, etc. When water reaches any side, top or bottom of the 360° sensor, the WellZone® Pressure Controller will stop the pump and display the alarm fault "WATER SW". One-year limited warranty.

U.S. Patent No. 10,393,687

Part #	Description	Shipping Weight
1078433	360 degree water sensor with 20 ft. cable	0.26 lbs.

Transducer Kit

This 0-150 PSI transducer provides continuous level monitoring. It measures the discharge pressure of the water at the sensor and outputs a standard 4-20mA signal proportional to the water pressure.

Part #	Description	Shipping Weight
1077481	Transducer with cable, 4-20mA, 0-150 PSI, bagged	0.5 lbs

SJE MilliAmpMaster™ WPS Control Switch

The SJE MilliAmpMaster™ WPS mechanically-activated, narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in potable water applications. It is CSA Certified to meet NSF/ANSI 61 standard for use in potable water; approved for use in tanks of 250 US gallons (950L) in volume or greater per float.

For specifications, please see our Control Switch catalog pages.

Part #	Description (Normally Open or Normally Closed)	Shipping Weight
1062686	15MANWPSPC	1.7 lbs.
1062687	30MANWPSPC	2.5 lbs.
1067227	50MANWPSPC	3.93 lbs.

PC = **P**ipe **C**lamp

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

SJE MilliAmpMaster™ Control Switch

The SJE MilliAmpMaster™ mechanically-activated, wide-angle or narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in water applications.

For specifications, see our Control Switch catalog pages.

WIDE ANGLE VERSIONS				
NORMALLY OPEN		NORMALLY CLOSED		
Part #	Description	Part #	Description	Shipping Weight
1016215	30MAPCNO	1016216	30MAPCNC	2.34 lbs.
1016217	30MAWENO	1016218	30MAWENC	3.43 lbs.

PC = **P**ipe **C**lamp   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

SJE RHOMBUS

Constant Speed

Constant Speed

The WellZone® digital controller provides pressure control for single phase 3-wire submersible well pump applications. It uses a 0-150 PSI pressure transducer to monitor the discharge pressure and turns the pump ON and OFF according to the adjustable Start and Stop setpoints. The LCD display allows for quick view of the system pressure, run status, hours run and pump cycles. The rotary button provides the user with a simple navigation method through the menu and program settings. It features built in pump protection including rapid cycling and dry run. It is preprogrammed to run the pump as the pressure drops below 40 PSI and stop as the pressure rises above 60 PSI. High & Low pressure settings are available with an auxiliary alarm relay.

FEATURES

- Includes a 0-150 PSI pressure transducer (No pressure switch needed)
- LCD display with bar graph
  - Pressure monitoring
  - Pump amps monitoring
  - Pump on monitoring
  - Pump Run Time
  - Pump Run Cycles
- Adjustable pressure set points
  - Start /Stop pressure set points
  - High /Low pressure alarms
- Advanced functions
  - Dry Run protection
  - Well recharge timer
  - Rapid cycle protection
  - Water filter replacement notification
  - Alarm history
- Five-year limited warranty on panel*
- Two-year limited warranty on pressure transducer

COMPONENTS

1. NEMA 4X enclosure 10 x 8 x 4 inches (25.4 x 20.32 x 10.16 cm) for indoor or outdoor use with integral padlockable latch for added safety.
2. Pump run green LED indicator
3. Pump test switch for manual control of the pump
4. Menu rotary encoder/selector switch
5. Menu ESC button
6. Auxiliary alarm contacts
7. Digital input for optional floor sensor or float switch
8. LCD display
9. Ground lug
10. Circuit breaker
11. Run capacitor
12. Start capacitor
13. Start relay

*Note: SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year.

Pressure Tank

Pressure Transducer

Pressure Relief Valve

Well Pump

Incoming Power 230V Single Phase

230V Single Phase 3-Wire Pump

SJE RHOMBUS®

WELLZONE® Pressure Controller - 3-wire single phase well pump control panel.

Part #	Description	HP	Volts	SFA	Shipping Weight
1094602	WellZone® 3W-050	.5	230	4.3	7.3
1094603	WellZone® 3W-075	.75	230	5.7	7.3
1094604	WellZone® 3W-100	1	230	7.1	7.3
1094605	WellZone® 3W-150	1.5	230	11.5	7.3
1094606	WellZone® 3W-200	2	230	13.2	7.3
1094638	WellZone® 3W-300	3	230	17.0	7.3

SPECIFICATIONS

INPUT VOLTAGE: Single phase, 230 VAC, 60 Hz

PUMP RATINGS: Single phase, 3-wire (4-17 A) max.

OPERATING TEMPERATURE: 14°F to 122°F (-10°C to 50°C)

ENCLOSURE: 10 x 8 x 4 inch (25.4 x 20.32 x 10.16 cm)
Padlockable NEMA 4X (ultraviolet stabilized thermoplastic with integral mounting feet for outdoor or indoor use)

Includes liquid tight cable strain relief fittings:
- 1 x 1/2" + 1 x 3/4" UF cable strain relief
- 1 x 1/2" round cable strain relief

PRESSURE TRANSDUCER: 0-150 PSI (included) 1/4" NPT Male, NSF 61 rated,4-20mA, with 5m cable. Two-year limited warranty on pressure transducer.

AUXILIARY ALARM CONTACTS: N.O. 1 amp, 120 VAC Max

NOTE: This digital controller does not provide variable speed pump control and constant pressure operation.

ACCESSORIES (OPTIONAL)

WS360 Water Sensor

The WS360 water sensor, when connected to a WellZone® Pressure Controller, is designed to warn of potential water damage to end users. Place this sensor in any location where there is a risk of water damage: utility room, laundry, kitchen, bathroom, basement, etc. When water reaches any side, top or bottom of the 360° sensor, the WellZone® Pressure Controller will stop the pump and display the alarm fault "WATER SW". One-year limited warranty.

U.S. Patent No. 10,393,687

Part #	Description	Shipping Weight
1078433	360 degree water sensor with 20 ft. cable	0.26 lbs.

Transducer Kit

This 0-150 PSI transducer provides continuous level monitoring. It measures the discharge pressure of the water at the sensor and outputs a standard 4-20mA signal proportional to the water pressure.

Part #	Description	Shipping Weight
1077481	Transducer with cable, 4-20mA, 0-150 PSI, bagged	0.5 lbs

SJE MilliAmpMaster™ WPS Control Switch

The SJE MilliAmpMaster™ WPS mechanically-activated, narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in potable water applications. It is CSA Certified to meet NSF/ANSI 61 standard for use in potable water; approved for use in tanks of 250 US gallons (950L) in volume or greater per float.

For specifications, please see our Control Switch catalog pages.

Part #	Description (Normally Open or Normally Closed)	Shipping Weight
1062686	15MANWPSPC	1.7 lbs.
1062687	30MANWPSPC	2.5 lbs.
1067227	50MANWPSPC	3.93 lbs.

PC = **P**ipe **C**lamp

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

SJE MilliAmpMaster™ Control Switch

The SJE MilliAmpMaster™ mechanically-activated, wide-angle or narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in water applications.

For specifications, see our Control Switch catalog pages.

WIDE ANGLE VERSIONS				
NORMALLY OPEN		NORMALLY CLOSED		
Part #	Description	Part #	Description	Shipping Weight
1016215	30MAPCNO	1016216	30MAPCNC	2.34 lbs.
1016217	30MAWENO	1016218	30MAWENC	3.43 lbs.

PC = **P**ipe **C**lamp   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

Constant Speed

SJE RHOMBUS

MODEL 126 CONTROL PANEL
Single Phase, Duplex Alternating Pump Control with Override

Panel layout may vary with options.

The Model 126 control panel is designed to alternately control two 120, 208, or 240 VAC single phase pumps in water well installations. The alternating action provides alternation between two wells. In addition to the alternating pump control, this system provides override control to maintain system pressure upon high demand or should either pump fail.

COMPONENTS

1. Enclosure measures 12 x 10 x 6 inches (30.48 x 25.4 x 15.24 cm) NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for indoor/outdoor use)
2. Magnetic motor contactors control pumps by switching electrical lines
3. HOA switches for manual pump control
4. Alternating circuit board provides pump control and alternation (U.S. Patent # 5,909,532)
5. Green Pump Run indicator lights
6. Field wiring label
7. Incoming pump power/control power terminal block
8. Pressure switch terminal block
9. Control power/pressure switch terminal block (Not shown)
10. Control fuse
11. Control relay provides lag function
12. Ground lugs

MODEL 126 - Single phase, duplex alternating pump control with override for water well applications.

0	W			0	X	10E
ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	LEVEL CONTROL APPLICATION	OPTIONS

CONTROL PANEL	✓	126	Single Phase Duplex with Override
ALARM PACKAGE	✓	0	No Alarm Package
ENCLOSURE RATING	✓	W	Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE		0	No Starting Device - Control Only (must select "0" for **Pump Full Load Amps**)
		1	Magnetic Motor Contactor 120/208/240V
PUMP FULL LOAD AMPS		0	0 - 7 FLA
		1	7 - 15 FLA
		2	15 - 20 FLA
		3	20 - 30 FLA
PUMP DISCONNECTS	✓	0	No Pump Disconnect
LEVEL CONTROL APPLICATION	✓	X	No Pressure Switches

PRICING WORKSHEET

Model 126 Base Price _____

Enclosure Rating _____

Starting Device _____

Pump Full Load Amps _____

Total Options _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	6T	Normally Open Non-Powered Chemical Free Pump Contacts
✓	10E	**Lockable Latch - NEMA 4X** **(included as standard, must select Enclosure Rating W above)**

For additional control panel options, please contact Technical Support at techsupport@sjeinc.com.

Constant Speed
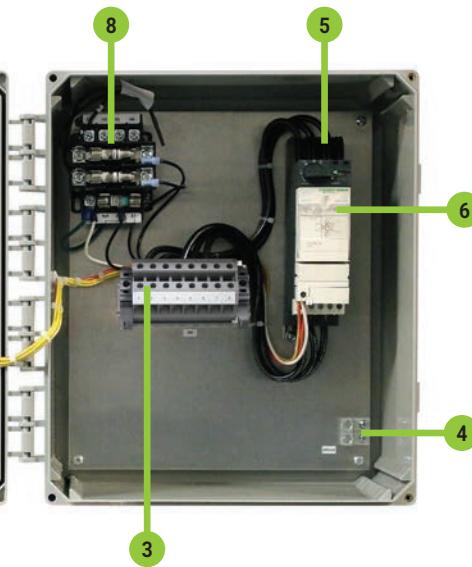
Model shown without disconnect

Panel layout may vary with options.

Select Start™ three phase starter boxes provide a reliable means of controlling one 208 VAC three phase motor, one 240 VAC three phase motor, one 480 VAC three phase motor, or one 575 VAC three phase motor in water, wastewater, and sewage installations. Select Start™ starter boxes utilize a wide angle float switch to activate a combination motor controller to turn the motor on and off in Auto Mode and have an adjustable overload that allows for easy adjustment of motor overload current. Common applications include pump chambers, sump pump basins, irrigation systems, lift stations, and air compressor systems.

COMPONENTS

1. Enclosure for models without through door disconnect measures 14 x 12 x 6 inches (35.56 x 30.48 x 15.24 cm); NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use)

   Enclosure for models with through door disconnect measures 12 x 12 x 10 inches (30.48 x 30.48 x 25.40 cm); Type 3R (painted steel for outdoor or indoor use)

2. Hand/Off/Auto switch for manual pump control
3. Terminal block for incoming power, motor and float connections
4. Ground lugs
5. Combination motor controller controls pump by switching electrical lines
6. Adjustable motor overload
7. Pump Run indicator
8. Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control voltage (No multi-Tap transformer on 575 VAC)

Constant Speed

SELECT START™ STARTER BOXES - Three phase starter boxes for motor control.

Part #	Description	Amps	Thru Door Pump Disconnect	Overload Module	Shipping Weight
1041336	Starter Box, Three Phase, 208/240/480 VAC	3-12	No	Yes	12 lbs.
1040968	Starter Box, Three Phase, 208/240/480 VAC	8-32	No	Yes	12 lbs.
1041467	Starter Box, Three Phase, 208/240/480 VAC	3-12	Yes	Yes	24 lbs.
1041468	Starter Box, Three Phase, 208/240/480 VAC	8-32	Yes	Yes	24 lbs.
1041470	Starter Box, Three Phase, 208/240/480 VAC	3-32	Yes	No*	24 lbs.
1044585	Starter Box, Three Phase, 575 VAC	3-12	No	Yes	24 lbs.
1044587	Starter Box, Three Phase, 575 VAC	3-12	Yes	Yes	24 lbs.
1044588	Starter Box, Three Phase, 575 VAC	8-32	Yes	Yes	24 lbs.
1044590	Starter Box, Three Phase, 575 VAC	3-32	Yes	No*	24 lbs.
1036510	Overload Module, 120 VAC, 3-12 FLA	3-12	–	–	0.30 lbs.
1033806	Overload Module, 120 VAC, 8-32 FLA	8-32	–	–	0.30 lbs.

*NOTE: Starter Boxes ordered Without Overload Module will require Overload Module to be added in order to operate.

Constant Speed

Panel layout may vary with options.

Select Start™ LT three phase starter boxes provide a simple and reliable means of controlling a 230 VAC three phase well pump or booster pump. Select Start™ LT starter boxes utilize an external device, like a pressure switch, float switch, or a run signal from an irrigation controller to activate the motor starter and run the pump in Auto Mode. It has an adjustable overload that allows for easy adjustment of motor overload current. Common applications include pump control for irrigation systems, water storage tanks, or pressure boosting.

Other features include:

- 24 VAC Interface Relay - allows an irrigation controller to run the pump in AUTO mode
- Tank Fill Relay (Optional) - allows the pump to be controlled by two float switches to fill a holding tank*

*Control float switches sold separately.

COMPONENTS

1. Enclosure: NEMA 4X (ultraviolet stabilized thermoplastic, padlockable with integral mounting flanges, drip shield, heavy duty cover latches, and stainless steel ¼ turn set screw; for outdoor or indoor use)
2. Hand/Off/Auto selector switch
3. Terminal block for external device (pressure switch or float switch)
4. Ground lug
5. Motor contactor
6. Adjustable motor overload relay
7. 24 VAC Interface Relay
8. Pump Run indicator

Constant Speed

SELECT START™ LT STARTER BOXES - Three phase starter boxes for motor control.

Part #	Description	Amps	Enclosure Size	Shipping Weight
1107516	Starter Box LT, Three Phase, 230 VAC	2.5-4	12x10x6	10 lbs.
1107517	Starter Box LT, Three Phase, 230 VAC	4-6	12x10x6	10 lbs.
1107518	Starter Box LT, Three Phase, 230 VAC	5.5-8	12x10x6	10 lbs.
1107520	Starter Box LT, Three Phase, 230 VAC	7-10	12x10x6	10 lbs.
1107521	Starter Box LT, Three Phase, 230 VAC	9-13	12x10x6	10 lbs.
1107522	Starter Box LT, Three Phase, 230 VAC	12-18	12x10x6	10 lbs.
1107523	Starter Box LT, Three Phase, 230 VAC	16-24	12x10x6	10 lbs.
1107579	Starter Box LT, Three Phase, 230 VAC	23-32	12x10x6	10 lbs.
1107580	Starter Box LT, Three Phase, 230 VAC	30-40	14x12x6	15 lbs.
1107581	Starter Box LT, Three Phase, 230 VAC	37-50	14x12x6	15 lbs.
1107582	Starter Box LT, Three Phase, 230 VAC	48-65	14x12x6	15 lbs.
1107959	Starter Box LT Tank Fill Option*			0.5 lbs.

*Control float switches sold separately.

Constant Speed

SJE RHOMBUS.

XPERT ALERT® RF ALARM SYSTEM

Wireless Technology Connecting an Outdoor Control Panel to an Indoor Alarm

The Xpert Alert® RF alarm system helps protect your home from potentially costly damage due to flooding, pump failure and sewage backup. The RF system includes **(A)** Xpert Alert® alarm, **(B)** RF receiver module which attaches to the indoor alarm, and **(C)** RF panel module which is installed into the outdoor control panel.

The RF receiver and RF panel modules wirelessly connect the outdoor control panel with an indoor alarm. When the control panel has an alarm condition, it activates the RF panel module through its auxiliary alarm contacts and sends a radio signal to the RF receiver module to activate the indoor alarm, alerting you of the alarm condition.

The wireless design makes this an attractive, easy to install system ideal for residential applications, including lift pump chambers, holding tanks, sewage, agricultural and other water applications.

The compact design of the RF panel module fits conveniently into most control panel enclosures and includes a wiring harness for quick and easy installation. For control panel enclosures with limited space, it is also available in a NEMA 4X watertight configuration.

The Xpert Alert® alarm includes 2 sensor inputs; one is utilized for the RF receiver module; one is available for monitoring a liquid level condition (see the Xpert Alert® alarm catalog page for complete alarm specifications).

STANDARD FEATURES

- LoRa radio technology (long range, low power wireless platform)
- Up to 200 ft. communication range (above grade installations can exceed 200 ft.)
- LED indicators for signal strength (green) and alarm (amber)
- Lost communication alarm
- NEMA 4X configurations available for standard and WiFi models

WIFI FEATURES

- The WiFi model includes the Xpert Alert® WiFi alarm (see XA WiFi alarm catalog page for complete specifications), RF receiver module, and RF panel model.
- Provides 24/7 notification (2 emails, 2 SMS text) to smart device of potential conditions:
  - Alarms, power lost, power restored, low temperature, low battery, alarm offline

U.S. Patent No. D874,960

(RF modules) (Alarm) LR54245

ALARM/RECEIVER MODULE

A
B
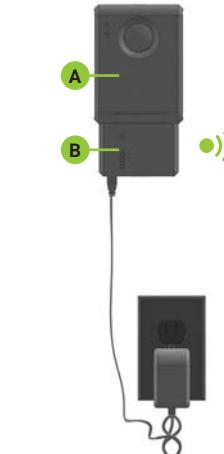
PANEL MODULE
(wire harness included)

C

min. 3 ft.

XPERT ALERT® RF - Wireless technology connecting an outdoor control panel to an indoor alarm.
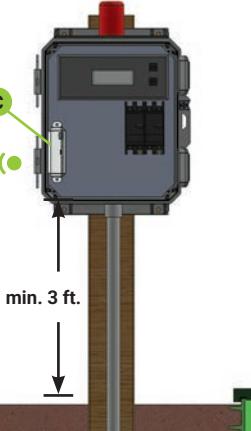
Part #	Description	Shipping Weight
1069102	Xpert Alert® RF (includes Xpert Alert®, receiver module, and panel module)	1.65 lbs.
1069097	Xpert Alert® RF, 4X (includes Xpert Alert®, receiver module, and panel module in NEMA 4X enclosure)	4.15 lbs.
1069103	Xpert Alert® RF WiFi (includes Xpert Alert® WiFi, receiver module, and panel module)	1.65 lbs.
1069099	Xpert Alert® RF WiFi, 4X (includes Xpert Alert® WiFi, receiver module, and panel module in NEMA 4X enclosure)	4.15 lbs.

SPECIFICATIONS

VOLTAGE:

RF RECEIVER MODULE

PRIMARY: 120 VAC, 60 Hz, 5 watts max. (alarm condition)

SECONDARY: 5 VDC

RF PANEL MODULE

PRIMARY: 120 VAC, 60Hz or 12-24VDC or 5VDC (Micro USB powered)

WIRE HARNESS: 24 inches (60.96 cm), 18 gauge

ALARM ENCLOSURE:

INDOOR ALARM WITH RF RECEIVER MODULE:
8.1 x 4 x 1.75 inch (20.57 x 10.16 x 4.45 cm), NEMA 1 plastic

PANEL MODULE: 4.8 x 2.7 x 1.4 inch (12.2 x 6.86 x 3.56 cm), NEMA 1 plastic

4X ENCLOSURE: 8 x 6 x 4 inch (20.32 x 15.24 x 10.16 cm), NEMA 4X plastic

MOUNTING LOCATIONS:

PANEL MODULE: Min. of 3 ft. above ground

NOTE: See Xpert Alert® or Xpert Alert® WiFi alarm catalog page for product specific specifications.

Alarm includes 6 foot (1.8 meter) MicroUSB power cord.

Float switch sold separately.

Connect to dry auxiliary alarm contacts only.

If power is lost to the indoor alarm, panel alarm conditions will not be communicated to indoor alarm.

Indoor Alarms

XPERT ALERT® ALARM SYSTEM
Easy to Install Liquid Level Alarm with Low Temperature Alarm and Battery Backup Features for Indoor Use

The Xpert Alert® indoor alarm system helps protect your home from potentially costly damage due to flooding, pump failure or freezing pipes. The sleek design of the enclosure, with its unique shape, smooth rounded edges, and large push button with LED light ring, makes this attractive alarm ideal for residential applications, including sump pump basins, lift pump chambers, holding tanks, sewage, agricultural and other water applications.

When the level in the tank rises, the high water float switch activates the alarm (audible and visual) to alert of potentially threatening liquid level conditions. The sleek design of the Xpert Alert® alarm incorporates a unique, easy-to-see LED alarm light ring that illuminates red for alarm 1 and amber for alarm 2. The alarm horn can be silenced by pressing the large button, but the LED remains on as long as the alarm condition exists. Once the condition is cleared, the alarm will automatically reset.

A red "Low Temperature" LED activates when the temperature falls below 40°F (4°C) to help protect against freezing pipes; this feature can be disabled for installations in cold areas. A "Power On" LED indicator is green while on plug-in power; amber while on battery backup; and red when the backup battery is low. Low battery chirp feature provides notification when battery should be replaced (3AA batteries not included).

FEATURES

- Sleek enclosure design features unique shape with smooth rounded edges and large push button with LED light ring makes this attractive alarm ideal for residential applications
- Compact NEMA 1 enclosure, designed for ease of installation, rated for indoor use
- Automatic alarm reset
- (2) sensor inputs to monitor (2) separate liquid level conditions
- LED alarm light ring alerts you of alarm status; red for alarm 1, amber for alarm 2
- Audible alarm activates with alarm 1, alarm 2, low temperature and low battery chirp
- LED low temperature indicator activates at 40°F (4°C) to alert of potential freezing conditions (green for temperature normal, red for low temperature)
- Low temperature alarm may be deactivated when temperature monitoring is not required
- LED power on indicator (green for primary power, amber for battery backup, red for low battery)
- Alarm horn sounds at 80 decibels at 10 feet (3 meters)
- Large, easy-to-use test/silence button located conveniently on front of alarm; simply press to test or silence alarm
- If primary power fails, the alarm system continues to work due to battery backup feature (Batteries not included)
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock
- Low battery chirp
- Includes auxiliary alarm contacts for easy attachment of remote devices (continues to operate during loss of primary power)
- Covered terminal block for easy, secure float switch installation

U.S. Patent No. D874,960

LR54245

SJE RHOMBUS®

Indoor Alarms

XPERT ALERT® - Easy-to-install liquid level alarm system with low temperature alarm and battery backup features for indoor use.
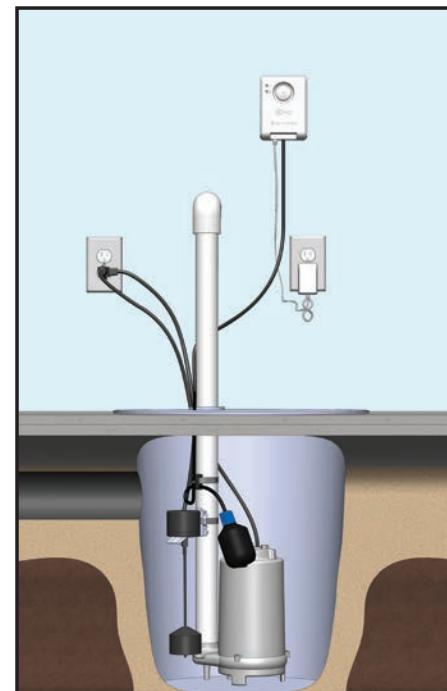
Part #	Description	Shipping Weight
1056754	Xpert Alert®, 120V, High w/ 10' SJE MilliAmpMaster™ Float	1.85 lbs.
1057333	Xpert Alert®, 120V, no float	0.85 lbs.

MASTER CARTON holds 16 boxed units.

CONTROL SWITCH OPTIONS

The Xpert Alert® alarm system comes standard with a 10 ft SJE MilliAmpMaster™ control switch with mounting clamp. Other float switches may be ordered separately. See control switch section of the catalog.

SPECIFICATIONS

VOLTAGE:

Primary: 120 VAC, 60 Hz, 5 watts max. (alarm condition)

SECONDARY: 5 VDC

BATTERY BACKUP POWER: 4.5 VDC (3 AA batteries not included); operates for 24 hours in alarm condition, one month when no alarm is present

ALARM ENCLOSURE: 5.5 x 4 x 1.75 inch (14 x 10 x 4.5 cm), NEMA 1 plastic

ALARM HORN: 80 decibels at 10 feet (3 meters)

POWER CORD: 6 foot (1.8 meter) MicroUSB

FLOAT SWITCH CONNECTION TERMINALS: For float switch connection only - do not apply power (Voltage across terminals is 3 VDC)

FLOAT SWITCH: SJE MilliAmpMaster™ control switch with mounting clamp

CABLE: 10 feet (3 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and water up to 140°F (60°C)

AUXILIARY ALARM CONTACTS: Normally open, normally closed (CSA certified)

VOLTAGE: ≤ 30 VAC/VDC (Class 2)

CURRENT: 1 amp maximum

SJE RHOMBUS.

Indoor Alarms

XPERT ALERT® WIFI ALARM SYSTEM

Easy to Install Indoor Alarm System with WiFi Connectivity, Remote Notification, 2 Alarm Inputs, Temperature Alarm, Auto Reset and Battery Backup

The Xpert Alert® WiFi indoor alarm system helps protect your home 24/7 from potentially costly damage due to flooding, pump failure or freezing pipes. The system monitors and reports any residential alarm condition by notifying you locally (audible and visual alarms) and remotely via SMS text messages and/or emails over a WiFi or Ethernet network to your smartphone, tablet or computer. The sleek design of the enclosure, with its unique shape, smooth rounded edges, and large push button with LED light ring, makes this attractive alarm ideal for residential applications, including sump pump basins, lift pump chambers, holding tanks, sewage, agricultural and other water applications.

When the tank level rises, the high water float activates the alarm to audibly and visually warn of potentially threatening liquid level conditions. The alarm features an easy-to-see LED alarm light ring that illuminates red for alarm 1 and amber for alarm 2. The alarm horn can be silenced by pressing the large button, but the LED remains on as long as the alarm condition exists. Once the condition is cleared, the alarm automatically resets. A red "Low Temperature" LED activates when the temperature falls below 40°F (4°C) to help protect against freezing pipes; this can be disabled for installations in cold areas. When alarm conditions occur, you are notified by text/email message.

The alarm works with your existing WiFi or Ethernet network. Since it does not rely on a cellular connection, it is an excellent solution for areas with poor cellular service. No monthly fees or contracts! Easy installation and setup make this a great option for businesses, rental properties and seasonal homes to help prevent costly damage.

FEATURES

- Compact NEMA 1 rated indoor enclosure is designed for easy installation
- Automatic alarm reset
- (2) sensor inputs to monitor (2) separate liquid level conditions.
- LED alarm light ring warns of alarm status; red for alarm 1, amber for alarm 2
- Audible alarm activates alarm 1, alarm 2, low temperature and low battery chirp
- Notifies up to 4 contacts (2 email contacts and 2 text, text in country code 1 only, maximum of 10 text messages sent per day)
- Notifies the user via SMS text and/or email notifications of conditions: alarm 1, alarm 2, power lost, power restored, low temperature, low battery and alarm offline
- WiFi connectivity for remote alarm report
    - Simple Access Point Mode push-button connection
    - Manual WiFi setup through Ethernet cable connection to router/modem (cable not included)
    - NOTE: Installation of an Uninterruptible Power Supply (UPS) on internet modem and wireless router is recommended. The internet connection must be maintained to receive notifications
- LED low temperature indicator activates at 40°F (4°C) to alert of potential freezing conditions (green for temperature normal, red for low temperature); may be deactivated when temperature monitoring is not required
- LED power indicators (green = primary power, amber = battery backup, red = low battery)
- LED network status indicators (blue flashing = network connection setup, blue constant = network connection established)
- Alarm horn sounds at 80 decibels at 10 feet (3 meters)
- Large, easy-to-use test/silence push-button located conveniently on front of alarm
- If primary power fails, the alarm system continues to work due to integral rechargeable battery backup feature
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock
- Low battery chirp
- Includes auxiliary alarm contacts for easy attachment of remote devices (continues to operate during loss of power)
- Covered terminal block for easy, secure float switch installation

U.S. Patent No. D874,960

LR54245

A Xpert Alert® WiFi Alarm System

B WiFi Router
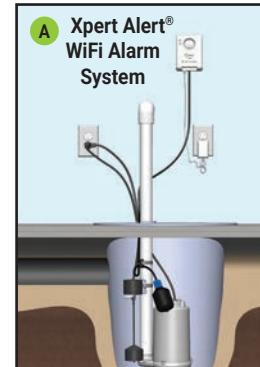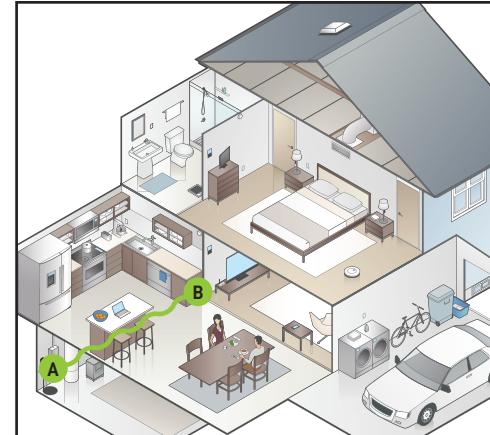
WiFi: Requires a WiFi connection with WPA2 security.

Ethernet: Requires an Ethernet connection.

XPERT ALERT® WIFI - Easy-to-install indoor alarm system with WiFi connectivity, remote notification, 2 alarm inputs, temperature alarm, auto reset and battery backup.

Part #	Description	Shipping Weight
1060316	Xpert Alert® WiFi, 120V, High w/ 10' SJE MilliAmpMaster™ Float	1.85 lbs.
1061894	Xpert Alert® WiFi, 120V, no float	0.85 lbs.

MASTER CARTON holds 16 boxed units.

CONTROL SWITCH OPTIONS

The Xpert Alert® WiFi alarm system comes standard with a 10 ft SJE MilliAmpMaster™ control switch with mounting clamp. Other float switches may be ordered separately. See control switch section of the catalog.

SPECIFICATIONS

VOLTAGE:

    PRIMARY: 120 VAC, 60 Hz, 5 watts max. (alarm condition)

    SECONDARY: 5 VDC

BATTERY BACKUP POWER: 3.7 VDC rechargeable lithium

ALARM ENCLOSURE: 5.5 x 4 x 1.75 inch (14 x 10 x 4.5 cm), NEMA 1 plastic

ALARM HORN: 80 decibels at 10 feet (3 meters)

POWER CORD: 6 foot (1.8 meter) MicroUSB

FLOAT SWITCH CONNECTION TERMINALS: For float switch connection only - do not apply power (Voltage across terminals is 3 VDC)

FLOAT SWITCH: SJE MilliAmpMaster™ control switch with mounting clamp

    CABLE: 10 feet (3 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

    FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and water up to 140°F (60°C)

WIFI: Connect using Access Point Mode or manually by using Ethernet connection (ethernet cable not provided); WPA2 security required on wireless router

ETHERNET: Requires an ethernet connection (ethernet cable not provided)

NOTE: Cellular WiFi hotspots are not recommended for use with this WiFi alarm, as intermittent or unreliable notification service can result

AUXILIARY ALARM CONTACTS: Normally open, normally closed (CSA certified)

    VOLTAGE: ≤ 30 VAC/VDC (Class 2)

    CURRENT: 1 amp maximum

WS360 WATER SENSOR (OPTIONAL)

The WS360 water sensor, when connected to an Xpert Alert® WiFi alarm, is designed to warn of potential water damage to end users. Place this sensor in any location where there is a risk of water damage: utility room, laundry, kitchen, bathroom, basement, AC drip pans, etc. When water reaches any side, top or bottom of the 360° sensor, an audible/visual alarm is activated; as well as remote notification sent via email/text to the contact(s) for the smart device set up with WiFi alarm unit. Up to five sensors may be connected in series to monitor multiple locations with one single alarm. One-year limited warranty.

U.S. Patent No. 10,393,687

Part #	Description	Shipping Weight
1070659	WS360 Water Sensor & Adapter, with 20 ft. cable (for use with WiFi alarm)	0.33 lbs.
1070875	WS360 Water sensor only, with 20 ft. cable (to connect multiple WS360 units)	0.26 lbs.
1070876	20 ft. extension cable	0.18 lbs.

Indoor Alarms

SJE RHOMBUS

TANK ALERT® AB ALARM SYSTEM
Indoor Alarm System with Auto Reset and Battery Backup

This alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® AB alarm system can serve as a high or low level alarm depending on the float switch model used.

The alarm horn sounds when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm light remains on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset.

A green "Power On" light indicates 120 VAC primary power to the alarm. Low battery chirp feature indicates when battery should be replaced.

FEATURES

- NEMA 1 enclosure, designed for ease of installation, rated for indoor use
- Automatic alarm reset
- Red "alarm" light and green "power on" light, alarm "test" switch, and horn "silence" switch
- Alarm horn sounds at 87 decibels at 10 feet (3 meters)
- Can be used with any UL Listed/Recognized switching mechanism rated to include 1 amp, 9 VDC load
- If primary power fails, the alarm system continues to work due to battery backup feature (battery not included)
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock
- Low battery chirp
- Easy access battery compartment
- External terminal block for easy float switch installation

OPTIONS

When ordered with the alarm, this system is available with:
- Alternate float switch models for high or low level warning
- Auxiliary dry normally open and normally closed contacts (Tank Alert® AB with auxiliary contacts included is CSA Certified only)
- Splice kit

TANK ALERT® AB - Easy-to-install liquid level alarm system with auto reset and battery backup features for indoor use.

Part #	Description	Shipping Weight
1011421	TA AB-01H (120 VAC w/15' SJE SignalMaster® High Level)	2.73 lbs.
1011424	TA AB-01L (120 VAC w/15' SJE SignalMaster® Low Level)	2.73 lbs.
1011422	TA AB-01H (120 VAC w/15' Sensor Float® High Level)	2.81 lbs.
1011423	TA AB-01X (120 VAC no float)	1.44 lbs.
1012668	TA AB-01HAUX (120 VAC w/15' SJE SignalMaster® High Level & Auxiliary Contacts)	2.75 lbs.
1021932	TA AB-01XAUX (120 VAC no float w/Auxiliary Contacts)	1.46 lbs.
OPTION AUX	Alarm Auxiliary Contacts (factory installed option only)	NA

H = **H**igh **L**evel   **L** = **L**ow **L**evel   **X** = **N**o **F**loat   **AUX** = **Aux**iliary Contacts   **MASTER CARTON holds 16 boxed units.**

CONTROL SWITCH OPTIONS

The Tank Alert® AB alarm system comes standard with a 15ft SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE FOR 120 VAC MODEL:

    PRIMARY: 120 VAC, 50/60 Hz, 2.4 watts max. (alarm condition)

    SECONDARY: 9 VDC

BATTERY BACKUP POWER: 9 VDC

ALARM ENCLOSURE: 6 x 4 x 2.25 inches (15.24 x 10.16 x 5.71 cm), NEMA 1 plastic

ALARM HORN: 87 decibels at 10 feet (3 meters)

POWER CORD: 6 foot (1.8 meter)

FLOAT SWITCH CONNECTION TERMINAL: for float switch connection only (voltage across terminals is 8-9 VDC)

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

    CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water resistant (CPE)

    FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and water up to 140°F (60°C)

AUXILIARY ALARM CONTACTS (OPTIONAL):

    NOTE: Units with auxiliary alarm contacts are CSA Certified only

    VOLTAGE: 120 VAC

    CURRENT: 5 amps maximum N/O, 3 amps maximum N/C

SJE RHOMBUS

Indoor Alarms

TANK ALERT® AB DUO ALARM SYSTEM
Indoor Dual Alarm System with Auto Reset and Battery Backup

This alarm system monitors two separate liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, filters, and other water applications.

The alarm horn and red "alarm 1" LED indicator activates when an alarm 1 condition occurs. The alarm horn and yellow "alarm 2" LED indicator activates when an alarm 2 condition occurs.

A green "Power On" light indicates 120 VAC primary power to the alarm. Low battery chirp feature indicates when battery should be replaced.

The Tank Alert® AB DUO alarm system can serve as high or low level alarm or filter alarm depending on the float switch model used.

FEATURES

- NEMA 1 enclosure, designed for ease of installation, rated for indoor use
- Automatic alarm reset
- Red "alarm 1" light, yellow "alarm 2" light, and green "power on" light, alarm "test" switch, and horn "silence" switch
- Alarm horn sounds at 87 decibels at 10 feet (3 meters)
- Can be used with any switching mechanism rated to include 1 amp, 9 VDC load
- If primary power fails, the alarm system continues to work due to battery backup feature (battery not included)
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock
- Low battery chirp
- Easy access battery compartment
- External terminal block for easy float switch installation

OPTIONS

When ordered with the alarm, the system is available with:
- Auxiliary dry normally open and normally closed contacts

Indoor Alarms

TANK ALERT® AB DUO - Easy-to-install indoor alarm featuring two alarm inputs to monitor two level conditions. Includes auto reset and battery backup features.

Part #	Description	Shipping Weight
1036378	TA AB DUO-01H (120 VAC w/15' SJE SignalMaster® High Level)	2.73 lbs.
1038473	TA AB DUO-01HAUX (120 VAC w/15' SJE SignalMaster® High Level w/Auxiliary Contacts)	2.75 lbs.
1052956	TA AB DUO-01X (120 VAC - no float switch)	1.50 lbs.

H = **H**igh **L**evel   **X** = **N**o **F**loat   **AUX** = **Aux**iliary Contacts   **MASTER CARTON holds 16 boxed units.**

SPECIFICATIONS

VOLTAGE FOR 120 VAC MODEL:

PRIMARY: 120 VAC, 50/60 Hz, 2.4 watts max. (alarm condition)

SECONDARY: 9 VDC

BATTERY BACKUP POWER: 9 VDC

ALARM ENCLOSURE: 6 x 4 x 2.25 inches (15.24 x 10.16 x 5.71 cm), NEMA 1 plastic

ALARM HORN: 87 decibels at 10 feet (3 meters)

POWER CORD: 6 foot (1.8 meter)

FLOAT SWITCH CONNECTION TERMINAL: for float switch connection only (voltage across terminals is 8-9 VDC)

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and water up to 140°F (60°C)

AUXILIARY ALARM CONTACTS (OPTIONAL):

VOLTAGE: 120 VAC;

CURRENT: 0.5 amps maximum

Indoor Alarms

TANK ALERT® I ALARM SYSTEM
Easy to Install Liquid Level Alarm System for Indoor Use

This alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® I alarm system can serve as a high or low level alarm depending on the float switch model used.

The alarm horn sounds when a potentially threatening liquid level condition occurs. The horn can be silenced, but the warning light remains on until the condition is remedied. A green "power on" light indicates power to the alarm panel.

FEATURES

- NEMA 1 enclosure, designed for ease of installation, rated for indoor use
- Red "alarm" light, green "power on" light, alarm "test" switch, and horn "silence" switch
- Alarm horn sounds at 86 decibels at 10 feet (3 meters)
- Can be used with any UL Listed / Recognized switching mechanism rated to include 1 amp, 12 VAC load
- Alarm system (when installed on separate circuit) operates even if the pump circuit fails
- Switching mechanism operates on low voltage and is isolated from the power line to reduce the possibility of shock

OPTIONS

When ordered with the alarm, this system is available with:

- Alternate float switch models for high or low level warning
- 120 VAC primary voltage or 230 VAC primary voltage (230 VAC model is not UL Listed or CSA Certified)

Indoor Alarms

TANK ALERT® I - Easy-to-install liquid level alarm system for indoor use.

Part #	Description (120V)	Shipping Weight
1007457	101-01H (120 VAC w/15' SJE SignalMaster® High Level)	3.58 lbs
1009207	101-01HSPKT (120 VAC w/15' SJE SignalMaster® High Level) with splice kit	3.58 lbs.
1003104	101-01H (120 VAC w/15' Sensor Float® High Level)	3.58 lbs.
1003365	101-01L (120 VAC w/15' Sensor Float® Low Level)	3.58 lbs.
1002235	101-01X (120 VAC no float)	2.14 lbs.
Part #	Description (230V)	Shipping Weight
1008009	101-02H (230 VAC w/15' SJE SignalMaster® High Level)	3.58 lbs.
1003364	101-02H (230 VAC w/15' Sensor Float® High Level)	3.58 lbs.
1005420	101-02L (230 VAC w/15' Sensor Float® Low Level)	3.58 lbs.
1005419	101-02X (230 VAC no float)	2.14 lbs.

H = **H**igh **L**evel   **L** = **L**ow **L**evel   **X** = **N**o **F**loat   **SPKT** = **Sp**lice **K**it   **MASTER CARTON holds 16 boxed units.**

CONTROL SWITCH OPTIONS

The Tank Alert® I alarm system comes standard with a 15 foot SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE FOR 120 VAC MODEL:

PRIMARY: 120 VAC, 50/60 Hz, 5 watts max. (alarm condition)

SECONDARY: 12 VAC

VOLTAGE FOR 230 VAC MODEL (not UL Listed or CSA Certified):

PRIMARY: 230 VAC, 50/60 Hz, 5 watts max. (alarm condition)

SECONDARY: 12 VAC

ALARM ENCLOSURE: 6 x 4 x 2.5 inch (15.24 x 10.16 x 6.35 cm), NEMA 1 metal

ALARM HORN: 86 decibels at 10 feet (3 meters)

POWER CORD: 6 foot (1.8 meter)

FLOAT SWITCH CONNECTION TERMINAL: For float switch connection only. Do not apply power. (Voltage across terminals is 12 VAC.)

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL: 5 amps, 125 VAC/250 VAC, 50/60 Hz

Indoor Alarms

SJE RHOMBUS

TANK ALERT® EZ ALARM SYSTEM
Innovative, Indoor or Outdoor Liquid Level Alarm System

This alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® EZ indoor/outdoor alarm can serve as a high or low level alarm depending on the float switch model used. This easy to install alarm features an innovative, sleek 2-color molded enclosure which integrates the red LED translucent beacon.

The alarm sounds and the upper housing half illuminates when a potentially threatening liquid level condition occurs. The audible alarm can be silenced by pressing the Test/Silence button, but the alarm light will remain on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset. A green "Power On" light indicates power to the alarm panel.

FEATURES

- 2-color molded enclosure offers a distinct look; upper translucent half illuminates in alarm condition
- Removable lower cover provides greater access for easier field wiring while the internal circuitry remains protected
- Interlocking enclosure features unique sound chamber to amplify the horn, while helping prevent moisture from entering
- External mounting tabs for easy installation
- Enclosure meets Type 3R water-tight standards
- Enclosure has indicator marks on bottom for easy placement of cord entry locations
- Automatic alarm reset, horn silence switch, and alarm test switch
- Alarm horn sounds at 82 decibels at 10 feet (3 meters)
- Alarm system (when installed on separate circuit) operates even if pump circuit fails
- Green power on indicator
- Includes auxiliary alarm contacts for easy attachment of remote devices

OPTIONS

When ordered with the alarm, the system is available with:

- Alternate float switch models for high or low liquid level warning
- Premounted terminal block so enclosure can also be used as a junction box for splicing pump, pump switch, and pump power; meets NEC standard for junction boxes
- 6 foot (1.8 meter) power cord with 120 VAC plug and liquid tight connector (120V model only)

U.S. Patent Nos. 8,737,672 and D695,640

SJE RHOMBUS®

TANK ALERT® EZ - Easy-to-install indoor/outdoor alarm system features a removable cover to provide greater access for easier field wiring. Two-color molded enclosure integrates red LED beacon.

Part #	Description (120V)	Shipping Weight
1036589	TAEZ-01H (120 VAC w/15' SJE SignalMaster® High Level)	2.75 lbs.
1036590	TAEZ-01H (120 VAC w/15' SJE Sensor Float® High Level)	2.75 lbs.
1036591	TAEZ-01X (120 VAC no float)	1.50 lbs.
1038019	TAEZ-01L (120 VAC w/15' SJE SignalMaster® Low Level)	2.75 lbs.
1038020	TAEZ-01L (120 VAC w/15' SJE Sensor Float® Low Level)	2.75 lbs.
Part #	**Description (120V with Terminal Block)**	**Shipping Weight**
1036592	TAEZ-01HTB (120 VAC w/15' SJE SignalMaster® High Level Terminal Block)	2.75 lbs.
1036593	TAEZ-01HTB (120 VAC w/15' Sensor Float® High Level Terminal Block)	2.75 lbs.
1036594	TAEZ-01XTB (120 VAC no float w/Terminal Block)	1.50 lbs.
1038035	TAEZ-01LTB (120 VAC w/15' SJE SignalMaster® Low Level Terminal Block)	2.75 lbs.
1038036	TAEZ-01LTB (120 VAC w/15' Sensor Float® Low Level Terminal Block)	2.75 lbs.
Part #	**Description (240V)**	**Shipping Weight**
1036595	TAEZ-02H (240 VAC w/15' SJE SignalMaster® High Level)	2.75 lbs.
1036596	TAEZ-02X (240 VAC no float)	1.50 lbs.
Part #	**Description (240V with Terminal Block)**	**Shipping Weight**
1036597	TAEZ-02HTB (240 VAC w/15' SJE SignalMaster® High Level w/Terminal Block)	2.75 lbs.
1036598	TAEZ-02XTB (240 VAC no float w/Terminal Block)	1.50 lbs.

OPTION PC	6' power cord with two RCC8 1/2" liquid-tight connectors (120V Model Only)	NA

H = **H**igh **L**evel   **L** = **L**ow **L**evel   **X** = **N**o **F**loat   **TB** = Includes **T**erminal **B**lock   **MASTER CARTON holds 12 boxed units.**

CONTROL SWITCH OPTIONS

The Tank Alert® EZ alarm system comes standard with a 15 foot SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE FOR 120 VAC MODEL:

    PRIMARY: 120 VAC, 50/60 Hz, 3.8 watts max. (alarm condition)

    SECONDARY: 9 VDC

VOLTAGE FOR 240 VAC MODEL

    PRIMARY: 240 VAC, 50/60 Hz, 3.8 watts max. (alarm condition)

    SECONDARY: 9 VDC

ALARM ENCLOSURE: 6.7 x 5.3 x 2.5 inch (17.02 x 13.46 x 6.35 cm), indoor-outdoor, weatherproof, thermoplastic meets Type 3R water-tight standard

ALARM HORN: 82 decibels at 10 feet (3 meters)

AUXILIARY ALARM CONTACTS: 240 VAC / 30 VDC, 1.5 amps max., 50/60 Hz (circuit not supervised)

PRE-MOUNTED TERMINAL BLOCK (OPTIONAL): 20 amps, 120/240 VAC

POWER CORD (OPTIONAL - 120V MODEL ONLY): 6 foot (1.8 meter) cord with 120 VAC plug and two RCC8 1/2 inch liquid-tight connectors

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

    CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

    FLOAT: 2.74 inch diameter x 4.83 inch long (7 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 PSI

ELECTRICAL: 5 amps, 125 VAC/250 VAC, 50/60 Hz

Indoor/Outdoor Alarms

TANK ALERT® EZ DUO ALARM SYSTEM

Innovative, Indoor or Outdoor Liquid Level Dual Alarm System

The Tank Alert® EZ DUO alarm system monitors two separate liquid levels or other contact closure in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® EZ DUO indoor/outdoor alarm can serve as a high or low level alarm depending on the float switch model used. This easy to install alarm features an innovative, sleek 2-color molded enclosure which integrates the red LED translucent beacon.

The alarm sounds and the upper housing half illuminates when a potentially threatening liquid level condition occurs. The audible alarm can be silenced by pressing the Test/Silence button, but the alarm light will remain on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset. A green "Power On" light indicates power to the alarm panel.

FEATURES

- 2-color molded enclosure offers a distinct look; upper translucent half illuminates in alarm condition
- Red LED for alarm 1 and amber LED for alarm 2
- Removable lower cover provides greater access for easier field wiring while the internal circuitry remains protected
- Interlocking enclosure features unique sound chamber to amplify the horn, while helping prevent moisture from entering
- External mounting tabs for easy installation
- Enclosure meets Type 3R water-tight standards
- Enclosure has indicator marks on bottom for easy placement of cord entry locations
- Automatic alarm reset, horn silence switch, and alarm test switch
- Alarm horn sounds at 82 decibels at 10 feet (3 meters)
- Alarm system (when installed on separate circuit) operates even if pump circuit fails
- Green power on indicator
- Includes auxiliary alarm contacts for easy attachment of remote devices

U.S. Patent Nos. 8,737,672 and D695,640

Indoor/Outdoor Alarms

TANK ALERT® EZ DUO - Versatile, indoor or outdoor alarm system featuring two alarm inputs to monitor two level conditions.

Part #	Description (120V DUO ALARM)	Shipping Weight
1052096	TAEZ-01HDUO (120 VAC w/ (2) 15' SJE SignalMasters®)	3.50 lbs.
1052094	TAEZ-01HDUO (120 VAC w/ 15' SJE SignalMasters®)	2.75 lbs.
1052097	TAEZ-01XDUO (120 VAC - no float switch)	1.50 lbs.

H = **H**igh **L**evel   **X** = **N**o **F**loat   **DUO** = **D**ual Alarm Inputs   **MASTER CARTON holds 12 boxed units.**

CONTROL SWITCH OPTIONS

The Tank Alert® EZ DUO alarm system comes standard with a 15 foot SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE FOR 120 VAC MODEL:

    PRIMARY: 120 VAC, 50/60 Hz, 3.8 watts max. (alarm condition)

    SECONDARY: 9 VDC

ALARM ENCLOSURE: 6.7 x 5.3 x 2.5 inch (17.02 x 13.46 x 6.35 cm), indoor-outdoor, weatherproof, thermoplastic meets Type 3R water-tight standard

ALARM HORN: 82 decibels at 10 feet (3 meters)

AUXILIARY ALARM CONTACTS: 240 VAC / 30 VDC, 1.5 amps max., 50/60 Hz (circuit not supervised)

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

    CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

    FLOAT: 2.74 inch diameter x 4.83 inch long (7 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 PSI

ELECTRICAL: 5 amps, 125 VAC/250 VAC, 50/60 Hz

TANK ALERT® XT ALARM SYSTEM
Versatile, Indoor or Outdoor Liquid Level Alarm System

This alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® XT indoor/outdoor alarm can serve as a high or low level alarm depending on the float switch model used.

The alarm horn sounds and the red LED beacon illuminates when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm light remains on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset.

A "power on" light on the switch indicates power to the alarm panel.

FEATURES

• Enclosure meets Type 3R water-tight standard
• Automatic alarm reset, horn silence switch, and alarm test switch
• Alarm horn sounds at 85 decibels at 10 feet (3 meters)
• Alarm system (when installed on separate circuit) operates even if pump circuit fails

OPTIONS

When ordered with the alarm, the system is available with:

• Alternate float switch models for high or low liquid level warning
• Auxiliary dry normally open contacts for easy attachment of remote devices
• Premounted terminal block so enclosure can also be used as a junction box for splicing pump, pump switch, and pump power; meets NEC standard for junction boxes
• 6 foot (1.8 meter) power cord and liquid-tight connectors

SIGNALING
TYPE E
UL LISTED 288X
CSA® LR54245
5 YEAR LIMITED WARRANTY

SJE RHOMBUS®

TANK ALERT® XT - Versatile, indoor or outdoor liquid level alarm system.

Part #	Description (120V)	Shipping Weight
1009923	TAXT-01H (120 VAC w/15' SJE SignalMaster® High Level)	3.00 lbs.
1010251	TAXT-01L (120 VAC w/15' SJE SignalMaster® Low Level)	3.00 lbs.
1004442	TAXT-01H (120 VAC w/15' Sensor Float® High Level)	3.00 lbs.
1005140	TAXT-01L (120 VAC w/15' Sensor Float® Low Level)	3.00 lbs.
1005141	TAXT-01X (120 VAC no float)	1.50 lbs.
Part #	**Description (120V with Terminal Block)**	**Shipping Weight**
1012416	TAXT-01HAUXTB (120 VAC w/15' SJE SignalMaster® High Level Aux Con TB)	3.50 lbs.
1022241	TAXT-01HTB (120 VAC w/15' SJE SignalMaster® High Level TB)	3.50 lbs.
1005481	TAXT-01HTB (120 VAC w/15' Sensor Float® High Level TB)	3.50 lbs.
1005835	TAXT-01LTB (120 VAC w/15' Sensor Float® Low Level TB)	3.50 lbs.
1005836	TAXT-01XTB (120 VAC no float TB)	2.00 lbs.
1009214	TAXT-01HAUXTB (120 VAC w/15' SJE Sensor Float® High Level Aux Con TB)	3.50 lbs.
Part #	**Description (120V with Options)**	**Shipping Weight**
1006850	TAXT-01HAUX (120 VAC w/15' Sensor Float® High Level Auxiliary Contacts)	3.50 lbs.
1006690	TAXT-01HPC (120 VAC w/15' Sensor Float® High Level Power Cord)	3.50 lbs.
1032257	TAXT-01HAUX (120VAC w/ 15' SJE SignalMaster® High Level Auxiliary Contacts)	3.1 lbs.
1057473	TAXT-01HPC (120 VAC w/15' SJE SignalMaster® High Level Power Cord)	3.3 lbs.
OPTION AUX	Auxiliary contacts (factory installed option only)	N/A
OPTION PC	6' power cord with two RCC8 1/2" liquid-tight connectors	N/A

H = **H**igh **L**evel   **L** = **L**ow **L**evel   **X** = **N**o **F**loat   **TB** = Includes **T**erminal **B**lock   **PC** = **P**ower **C**ord   **AUX** = **Aux**iliary Contacts

MASTER CARTON holds 12 boxed units.

CONTROL SWITCH OPTIONS

The Tank Alert® XT alarm system comes standard with a 15 foot SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE: 120 VAC, 50/60 Hz

ALARM ENCLOSURE: 6.5 x 4.5 x 3 inches (16.51 x 11.43 x 7.62 cm), indoor/outdoor, weatherproof, thermoplastic, meets Type 3R water-tight standard

ALARM HORN: 85 decibels at 10 feet (3 meters), meets Type 3R water-tight standard as installed by factory

ALARM BEACON: UL LIsted, Type 4X beacon assembly

TEST/SILENCE SWITCH: certified to IP66 and IP68 standards

AUXILIARY ALARM CONTACTS (OPTIONAL): 120 VAC, 5 amps max., 50/60 HZ

PRE-MOUNTED TERMINAL BLOCK (OPTIONAL): 20 amps, 120/230 VAC

POWER CORD: (optional) 6 foot (1.8 meters) cord with 120 VAC plug and two RCC8 1/2 inch liquid-tight connectors

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL: 5 amps, 125 VAC/250 VAC, 50/60 Hz

Indoor/Outdoor Alarms

SJE RHOMBUS

TANK ALERT® 4X ALARM SYSTEM

Easy to Install Liquid Level Alarm System with NEMA 4X Enclosure for Indoor or Outdoor Use

This alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® 4X alarm system can serve as a high or low level alarm depending on the float switch model used.

The alarm horn sounds and red LED beacon illuminates when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm beacon remains on until the condition is remedied. Once the condition is cleared the alarm will automatically reset.

FEATURES

- NEMA 4X enclosure rated for indoor or outdoor use
- Automatic alarm reset and alarm test/normal/silence switch
- Alarm horn sounds at 88 decibels at 10 feet (3 meters)
- Alarm system (when installed on separate circuit) operates even if the pump circuit fails
- Auxiliary dry contacts (normally open and normally closed) for easy attachment of remote devices

OPTIONS

When ordered with the alarm, this system is available with:

- Alternate float switch models for high or low level warning

SJE RHOMBUS

Indoor/Outdoor Alarms

TANK ALERT® 4X - Easy-to-install liquid level alarm system which has a NEMA 4X enclosure for indoor or outdoor use.

Part #	Description	Shipping Weight
1112201	4X-01HSGM (120 VAC w/15' SJE SignalMaster® High Level)	3.90 lbs.
1112202	4X-01LSGM (120 VAC w/15' SJE SignalMaster® Low Level)	3.90 lbs.
1112199	4X-01X (120 VAC no float)	2.60 lbs.

H = **H**igh **L**evel **L** = **L**ow **L**evel **X** = **N**o **F**loat   **MASTER CARTON holds 3 boxed units.**

CONTROL SWITCH OPTIONS

The Tank Alert® 4X alarm system comes standard with a 15 foot SJE SignalMaster® control switch with mounting clamp. Other float switches are available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE: 120 VAC, 50/60 Hz

ALARM ENCLOSURE: 8 x 6 x 4 inches (20.32 x 15.24 x 10.16 cm),
NEMA 4X, indoor-outdoor, weatherproof,
UV stabilized thermoplastic

ALARM HORN: 88 decibels at 10 feet (3 meters)

ALARM BEACON: UL Listed, Type 4X beacon assembly

AUXILIARY ALARM CONTACTS: 120 VAC, 5 amps max., 50/60 HZ

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

CABLE: 15 feet (4.57 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 cm x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL: 5 amps, 125 VAC/250 VAC, 50/60 Hz

Indoor/Outdoor Alarms

TANK ALERT® SOLAR ALARM SYSTEM
Versatile, Indoor or Outdoor Solar Powered Liquid Level Alarm System

This innovative alarm system monitors liquid levels in lift pump chambers, sump pump basins, holding tanks, sewage, agricultural, and other water applications.

The Tank Alert® Solar indoor/outdoor alarm can serve as a high or low level alarm depending on the float switch model used.

The Tank Alert® Solar alarm utilizes a solar panel with battery backup for easy installation and operation. It's a simple, idea solution for seasonal homes, cabins in remote locations, or for retrofitting existing systems. Install the solar panel in direct sunlight for the alarm to operate properly.

The alarm horn sounds and the red LED beacon illuminates when a potentially threatening liquid level condition occurs. The horn can be silenced, but the alarm light remains on until the condition is remedied. Once the condition is cleared, the alarm will automatically reset.

FEATURES

- NEMA 4X enclosure rated for indoor/outdoor use
- Alarm is powered by rechargeable battery via 12VDC, 10 watt solar panel (includes mounting bracket and 10 feet (3 meters) of 18/2 cable)
- (2) Lithium Ion batteries provide backup power
- (2) liquid-tight round cable connectors (RCC-8)
- Main power on/off switch
- Green power on LED indicator
- Amber battery charging LED indicator
- Red reverse battery polarity LED indicator
- Alarm will operate for up to 72 hours with no sun if not in alarm or up to 24 hours with no sun if in alarm
- Automatic alarm reset, test/silence push button switch
- Alarm horn sounds at 85 decibels at 10 feet (3 meters)
- Integral mounting tabs for easy installation
- Integral padlockable latch for added safety
- Two-year limited warranty on alarm package (including float and solar panel)
- One-year limited warranty on the Lithium-Ion batteries

OPTIONS

- Alternate float switch models for high or low liquid level warning
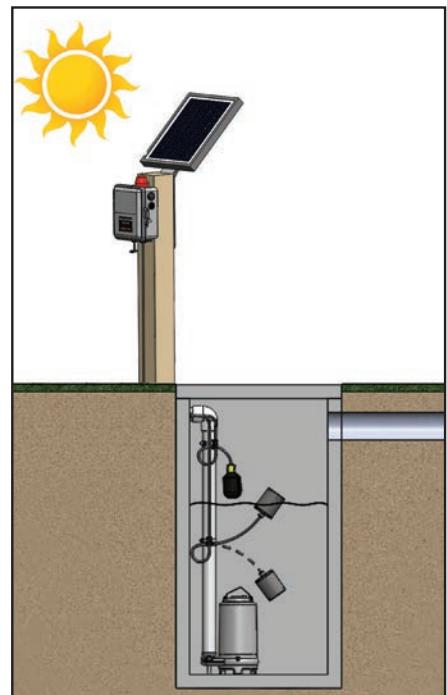
Must be installed in location with adequate sunlight for solar charging. Unit in full alarm without any solar charging will run for approximately 24 hours.

Idle unit without any solar charging will run for approximately 5 days.

SJE RHOMBUS®

Indoor/Outdoor Alarms

TANK ALERT® SOLAR - Versatile, indoor or outdoor solar powered alarm system.

Part #	Description	Shipping Weight
1052473	TA Solar Alarm, w/ 20ft SJE SignalMaster® High level, 10W Solar Panel	9.00 lbs.
1052474	TA Solar Alarm, w/ 20ft SJE SignalMaster® Low level, 10W Solar Panel	9.00 lbs.
1052475	TA Solar Alarm, No Float, 10W Solar Panel	7.50 lbs.

CONTROL SWITCH OPTIONS

The Tank Alert® Solar alarm system comes standard with a 20 foot SJE SignalMaster® control switch with mounting clamp. Other lengths and floats switches available. See control switch section of the catalog. To determine the price of alarm with an alternate float, add the price of the part number with "no float" to the price of the float switch.

SPECIFICATIONS

VOLTAGE: 12 VDC (solar panel)

ALARM ENCLOSURE: 8 x 6 x 4 inch (20.32 x 15.24 x 10.16 cm), indoor-outdoor, weatherproof, thermoplastic meets NEMA 4X water-tight standard

ALARM HORN: 85 decibels at 10 feet (3 meters), meets NEMA 4X water-tight standard as installed by factory

ALARM BEACON: meets NEMA 4X water-tight standard as installed by factory

TEST/SILENCE SWITCH: certified to IP66 and IP68 standards

FLOAT SWITCH: SJE SignalMaster® control switch with mounting clamp

CABLE: 20 feet (6.096 meters), flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 x 12.3 cm), high impact, corrosion resistant polypropylene housing for use in sewage and non-potable water up to 140°F (60°C)

SOLAR PANEL: 10W, 12VDC

SOLAR PANEL DIMENSIONS: 14.06 x 11.89 x 1.18 in (35.71 x 30.20 x 3 cm)

BATTERIES: 3.7 VDC, Lithium-Ion rechargeable

SIZE: 18650, 3000mAh

Indoor/Outdoor Alarms

C-CON™ CONVERTER BOX
Allows Most Control Panels to Utilize the C-Level™ CL40 Floatless Sensor

The C-Con™ converts the signal from a C-Level™ CL40 sensor to simulate float levels (up to four floats). Activation levels can be conveniently set and adjusted at the C-Con™ box by using the output dials, eliminating the need to go into the tank to move float tether points. Works well in wastewater pump tanks, confined space applications, and systems with high grease content.

Note: The C-Con™ converter box can be used with most panels using control switches for pump down applications. The C-Con™ converter box is not recommended for use with plugger type panels or intrinsically safe type panels.

FEATURES

- NEMA 1 rated for indoor use; can be mounted in a control panel
- Green power on indicator
- Four independently adjustable output set points at the converter box with red LED status indicators
- Adjustable pump start/stop and alarm levels from converter box
- Simulate button for testing proper wiring of outputs
- Factory-installed output and power wires
- Works with most simplex or duplex control panels
- Alternative to mercury float switches
- Utilizes the innovative floatless C-Level™ Sensor
- Five-year limited warranty on C-Con™ Converter Box
- Two-year limited warranty on C-Level™ Sensor

OPTIONS

This system is available with:

- C-Level™ CL40 Sensor with 25' Vented Cable
- C-Level™ CL40 Sensor with 50' Vented Cable
- C-Level™ CL40 Sensor with 100' Vented Cable
- Without C-Level™ CL40 sensor

C-Level™ Sensor US Patent No.
8,567,242; 8,336,385 and 8,650,949.

Level Monitoring Controls

C-CON™ CONVERTER BOX (120V) - Converts any float-operated control panel to utilize the C-Level™ CL40 floatless sensor.

Part #	Description	Shipping Weight
1093696	C-Con™ Converter Box w/C-Level™ CL40 Sensor with 25' Vented Cable	2.44 lbs.
1093699	C-Con™ Converter Box w/C-Level™ CL40 Sensor with 50' Vented Cable	3.13 lbs.
1093702	C-Con™ Converter Box w/C-Level™ CL40 Sensor with 100' Vented Cable	4.51 lbs.
1031067	C-Con™ Converter Box without C-Level™ CL40 sensor	1.08 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC, 60Hz, 44mA

OUTPUT CONTACT RATING: 3 amp, 240 VAC

ENCLOSURE: 3 x 4.25 x 1.25 inches (7.62 x 10.79 x 3.81 cm), NEMA 1 thermoplastic

Level Monitoring Controls

California Prop 65 requires the following: ⚠WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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SJE LEVEL MONITOR™ CL SYSTEM
Monitors Tank Levels by Utilizing the C-Level™ Floatless Sensor

The SJE Level Monitor™ CL system is a convenient way to monitor tank levels by utilizing a scalable LED bargraph to represent the level as a percentage of a full tank. The adjustable alarm is easy to set using the Alarm Level and Set buttons on the touch pad. As the liquid level reaches the installer-specified alarm set point, the audible alarm is activated. The audible alarm can be silenced using the Test/Silence button, but the alarm light will remain on until the condition is remedied.

FEATURES

- NEMA 1 rated for indoor use
- Power on and alarm indicators
- Adjustable alarm set point
- Can be calibrated for tanks ranging:
    - 12" to 40" (30.48cm to 101.60cm) for 40" C-Level™ CL40
    - 25" to 100" (63.5cm to 254cm) for 100" C-Level™ CL100
- Utilizes the innovative, floatless C-Level™ sensor
- Various cable lengths available to allow monitoring tanks up to 300 ft (91.4 meters) away
- 10 segment LED bargraph displays the tank level
- Test/Silence button
- Alarm Level button
- Set button
- Auxiliary contacts (normally open and normally closed) for Class II circuits
- Can be configured as high level, low level or no alarm
- Utilizes the innovative floatless C-Level™ Sensor
- Five-year limited warranty on SJE Level Monitor™ CL
- Two-year limited warranty on C-Level™ Sensor

OPTIONS

This system is available with:
- C-Level™ CL40 Sensor with 25' Vented Cable
- C-Level™ CL40 Sensor with 50' Vented Cable
- C-Level™ CL40 Sensor with 100' Vented Cable
- C-Level™ CL40 Sensor with 200' Vented Cable
- C-Level™ CL40 Sensor with 300' Vented Cable
- C-Level™ CL100 Sensor with 25' Vented Cable
- C-Level™ CL100 Sensor with 50' Vented Cable
- C-Level™ CL100 Sensor with 100' Vented Cable

C-Level™ Sensor US Patent No. 8,567,242; 8,336,385 and 8,650,949.

Level Monitoring Controls

SJE LEVEL MONITOR™ CL (120V) - Monitors tank levels by utilizing the C-Level™ floatless sensor.

Part #	Description	Shipping Weight
1087297	SJE Level Monitor™ CL w/C-Level™ CL40 Sensor with 25' Vented Cable	2.19 lbs.
1087298	SJE Level Monitor™ CL w/C-Level™ CL40 sensor with 50' Vented Cable	2.88 lbs.
1087299	SJE Level Monitor™ CL w/C-Level™ CL40 sensor with 100' Vented Cable	4.26 lbs.
1087300	SJE Level Monitor™ CL w/C-Level™ CL40 sensor with 200' Vented Cable	7.02 lbs.
1087301	SJE Level Monitor™ CL w/C-Level™ CL40 sensor with 300' Vented Cable	9.78 lbs
1087302	SJE Level Monitor™ CL w/C-Level™ CL100 sensor with 25' Vented Cable	2.19 lbs.
1087303	SJE Level Monitor™ CL w/C-Level™ CL100 sensor with 50' Vented Cable	2.88 lbs.
1087304	SJE Level Monitor™ CL w/C-Level™ CL100 sensor with 100' Vented Cable	4.26 lbs.
1031877	SJE Level Monitor™ CL (no C-Level™ sensor)	0.83 lbs.

SPECIFICATIONS

VOLTAGE: 120 VAC, 50-60Hz, 0.15A Class II transformer

OUTPUT CONTACT RATING: 3 amp, Class II circuits

ENCLOSURE: 3 x 4.25 x 1.25 inches (7.62 x 10.79 x 3.81 cm), NEMA 1 thermoplastic

Level Monitoring
Controls

SUB-X™ TRANSMITTER
For Continuous Level Monitoring Applications

The Sub-X™ submersible level transmitter is designed for continuous level monitoring. It measures the hydrostatic pressure of the water above the sensor and outputs a standard 4-20 mA signal proportional to the water level. The robust design of the Sub-X™ transmitter provides a reliable and low maintenance solution for level control applications, including sewage/effluent lift stations, storm water pump stations, non-potable water systems, tanks, wet wells, and reservoirs.

The transmitter wetted components are designed with nonconductive materials to provide an electrical isolation barrier. The pressure sensor is isolated from process material by a protective VITON® diaphragm. Stainless steel mounting bracket and cord strain relief are included.

FEATURES

- Reliable long-life operation with low to no maintenance
- Rugged non-conductive transmitter housing
- Industry standard 4-20mA, 2-wire loop powered
- 18/2 shielded cable with vent tube
- Built-in internal stabilizing weight
- Reverse polarity protected
- Colored cord seals for easy range identification
- Multiple ranges and cable lengths available

OPTIONS

- Optional 6 hook bracket available.

US Patent 8,336,385

Level Monitoring Controls

SUB-X™ TRANSMITTER - Submersible level transmitter with 4-20mA output.
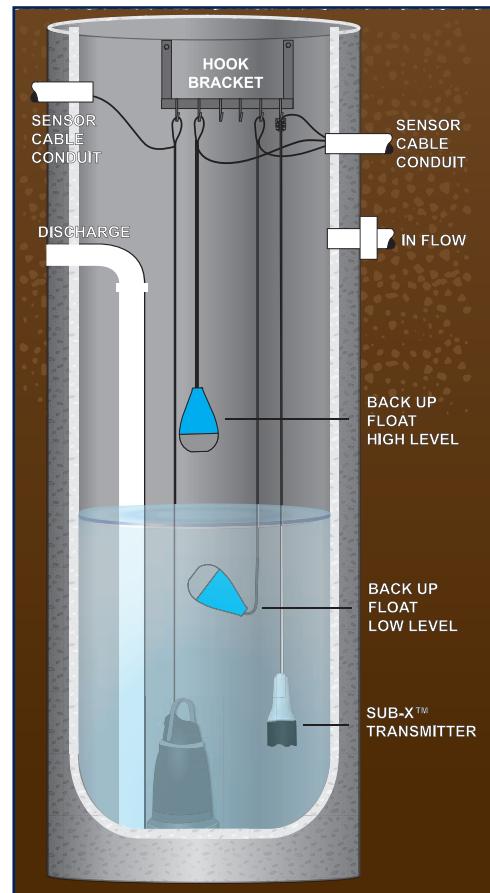
Part #	Description	Shipping Weight
1107758	Sub-X™ 8.3 ftWC with 25 ft. Cable	5.3 lbs.
1107759	Sub-X™ 8.3 ftWC with 50 ft. Cable	6.2 lbs.
1107760	Sub-X™ 8.3 ftWC with 75 ft. Cable	7.0 lbs.
1107761	Sub-X™ 8.3 ftWC with 100 ft. Cable	8.3 lbs.
1107763	Sub-X™ 16.7 ftWC with 25 ft. Cable	5.3 lbs.
1107764	Sub-X™ 16.7 ftWC with 50 ft. Cable	6.2 lbs.
1107765	Sub-X™ 16.7 ftWC with 75 ft. Cable	7.0 lbs.
1107766	Sub-X™ 16.7 ftWC with 100 ft. Cable	8.3 lbs.
1107768	Sub-X™ 33.4 ftWC with 25 ft. Cable	5.3 lbs.
1107769	Sub-X™ 33.4 ftWC with 50 ft. Cable	6.2 lbs.
1107770	Sub-X™ 33.4 ftWC with 75 ft. Cable	7.0 lbs.
1107771	Sub-X™ 33.4 ftWC with 100 ft. Cable	8.3 lbs.
Options		
1052814	6 Hook Bracket	2 lbs.

For additional lengths, please contact Technical Support at techsupport@sjeinc.com.

SPECIFICATIONS

MEASURING RANGES: 3.62 PSI (8.3 ftWC) - blue cord seal
7.25 PSI (16.7 ftWC) - grey cord seal
14.50 PSI (33.4 ftWC) - black cord seal

ACCURACY: 1% full scale

OPERATING TEMPERATURE: 32°F to 122°F (0°C to 50°C)

OUTPUT: 4-20 mA, loop powered

EXCITATION VOLTAGE: 8-30 VDC reverse polarity protected

OVERPRESSURE PROTECTION:
7.62 PSI (16.7 ftWC) for 3.62 PSI (8.3 ftWC) model
58 PSI (133.6 ftWC) for 7.25 PSI (16.7 ftWC) model
58 PSI (133.6 ftWC) for 14.50 PSI (33.4 ftWC) model

IP RATING: IP 68 for permanent submersion

WETTED MATERIALS:

Sensor Housing: PVC, 3.09" diameter x 7.67" length
(79mm x 195mm)

Cable Seal: EPDM

Diaphragm: VITON®, 1.25" diameter (32mm)

Cable: TPE, 18 AWG - 2 wire shielded with vent tube,
0.3" diameter (8mm)

Level Monitoring Controls

SJE RHOMBUS

SUB-X™ LT TRANSMITTER
For Continuous Level Monitoring Applications

The Sub-X™ LT submersible level transmitter is designed for continuous level monitoring. It measures the hydrostatic pressure of the water above the sensor and outputs a standard 4-20 mA signal proportional to the water level. The robust design of the Sub-X™ LT transmitter provides a reliable and low maintenance solution for level control applications, including sewage/effluent lift stations, storm water pump stations, non-potable water systems, tanks, wet wells, and reservoirs.

The transmitter wetted components are designed with nonconductive materials to provide an electrical isolation barrier. The pressure sensor is isolated from process material by a protective VITON® diaphragm. A stainless steel hose clamp is included for mounting the transmitter to a pipe towards the bottom of the tank. The Sub-X™ LT transmitter must be clamped. For free hanging installations, use the Sub-X™ transmitter.

FEATURES

- Provides continuous level monitoring
- Industry standard 4-20mA, 2-wire loop powered
- 22/2 shielded cable with vent tube
- Provided with a hose clamp for pipe mounting
- Reverse polarity protected
- Multiple cable lengths available
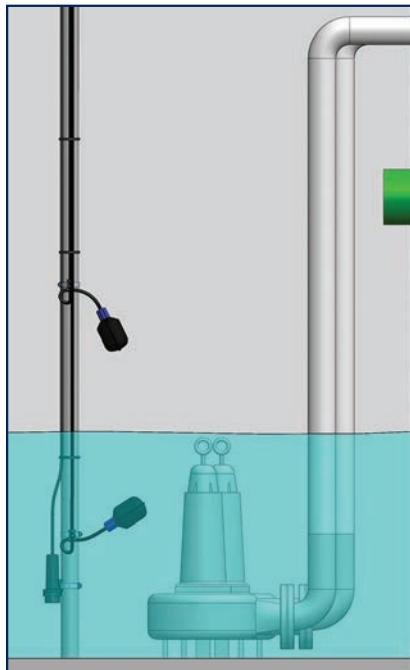
US Patent 8,336,385

Typical installation shown with 2 backup float switches. Always include a backup high level alarm float switch in your system at a minimum. The transmitter must be clamped to a pipe or chain and cannot be free hanging.

SJE RHOMBUS®

Level Monitoring Controls

SUB-X™ LT TRANSMITTER - Submersible level transmitter with 4-20mA output.

Part #	Description	Shipping Weight
1107978	Sub-X™ LT 100 inWC with 25 ft. Cable	1.34 lbs.
1107979	Sub-X™ LT 100 inWC with 50 ft. Cable	2.08 lbs.
1107980	Sub-X™ LT 100 inWC with 100 ft. Cable	3.64 lbs.
1107981	Sub-X™ LT 100 inWC with 150 ft. Cable	5.2 lbs.
1107982	Sub-X™ LT 100 inWC with 200 ft. Cable	6.75 lbs.

SPECIFICATIONS

MEASURING RANGE: 3.62 PSI (0-100 inWC)

ACCURACY: 2% full scale

OPERATING TEMPERATURE: 32°F to 122°F (0°C to 50°C)

OUTPUT: 4-20 mA, loop powered

EXCITATION VOLTAGE: 8-30 VDC reverse polarity protected

OVERPRESSURE PROTECTION: 7.26 PSI (200 inWC)

IP RATING: IP 68 for permanent submersion

WETTED MATERIALS:

Sensor Housing: PVC, 2.00" diameter x 5.35" length (51mm x 136mm)

Diaphragm: VITON®, 1.25" diameter (32mm)

Cable: TPE, 22 AWG - 2 wire shielded with vent tube, 0.24" diameter (6mm)

Hose Clamp: 18-8 stainless steel (included)

Level Monitoring Controls

The Sub-X™ IS submersible level transmitter is specially designed for continuous level monitoring in the harshest environments including sanitary and stormwater lift stations having suspended solids. The instrument measures the hydrostatic pressure of the liquid above the sensor and outputs a 4-20mA signal proportional to the level.

The robust design of the Sub-X™ IS transmitter provides a reliable and low maintenance solution for critical level control applications where other level sensors easily foul. Some examples include: sewage, stormwater and effluent pump stations, lagoons, equalization tanks and holding ponds, raw water wet wells/intakes, storage tanks and reservoirs.

Unit is suitable for operation in Class 1, Div 1, Groups C, D, T4 Hazardous Locations with optional Intrinsic Safety Barrier.

FEATURES

- Reliable long-life operation with low to no maintenance
- Rugged Non-Conductive Transmitter housing provides superior electrical surge isolation from measured liquid.
- Pressure sensor isolated from process material by a protective VITON® diaphragm
- Industry standard 4-20 mA, 2-wire loop powered
- Reverse polarity protected
- Color coded 18/2 shielded cable with vent tube
- Built in internal stabilizing weight
- Fixed or suspension mounting
- Multiple ranges and cable lengths
- Two-year limited warranty

US Patent 8,336,385

Level Monitoring Controls

SJE RHOMBUS®

SUB-X™ IS TRANSMITTER - Submersible level transmitter with 4-20mA output.

Part #	Description	Shipping Weight
1122747	Sub-X™ IS 11.5 ftWC with 50 ft. Cable	6.2 lbs.
1122746	Sub-X™ IS 11.5 ftWC with 75 ft. Cable	7.0 lbs.
1122745	Sub-X™ IS 11.5 ftWC with 100 ft. Cable	8.3 lbs.
1122744	Sub-X™ IS 34.6 ftWC with 50 ft. Cable	6.2 lbs.
1122743	Sub-X™ IS 34.6 ftWC with 75 ft. Cable	7.0 lbs.
1122742	Sub-X™ IS 34.6 ftWC with 100 ft. Cable	8.3 lbs.

SPECIFICATIONS

MEASURING RANGES: 5 PSI (11.55 ftWC) and 15 PSI (34.65 ftWC)

ACCURACY: ≤1% full scale

OPERATING TEMPERATURE: 32°F to 122°F (0°C to 50°C)

OUTPUT: 4-20 mA, loop powered

EXCITATION VOLTAGE: 10-28 VDC reverse polarity protected

OVERPRESSURE PROTECTION: 2X range

BURST PRESSURE: 5X range

IP RATING: IP 68 for permanent submersion

WETTED MATERIALS:

Sensor Housing: PVC, 3.09" diameter x 7.67" length (79mm x 195mm)

Diaphragm: VITON®, 1.25" diameter (32mm)

Cable: TPE, 18 AWG - 2 wire shielded with vent tube, 0.3" diameter (8mm)

Cable Seal: EPDM

Level Monitoring Controls

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PUMP SWITCH OVERVIEW

Wide-angle pump switches directly control pumps up to 3 HP at 250 VAC.
Each switch features an adjustable pumping range.

Pump Switch	Type of Activation	Pump Control	Max Pump Run Current	Max Pump Start Current	Pumping Range
SJE PumpMaster® WPS	Mechanically Activated	1/2 HP, 120V 1 HP, 230V	13A, 120V 13A, 230V	85A, 120V 85A, 230V	7 - 36 in (18 - 91 cm)
SJE PumpMaster®	Mechanically Activated	1/2 HP, 120V 1 HP, 230V	13A, 120V 13A, 230V	85A, 120V 85A, 230V	7 - 36 in (18 - 91 cm)
SJE PumpMaster® Plus	Mechanically Activated	3/4 HP, 120V 2 HP, 230V	15A, 120V 15A, 230V	85A, 120V 85A, 230V	7 - 36 in (18 - 91 cm)
Double Float® Master	Mechanically Activated	15 FLA, 90LRA 120 or 240V	15A, 120V 15A, 240V	90A, 120V 90A, 240V	3 - 48 in (7.6 - 122 cm)
SJE AmpMaster®	Mechanically Activated	1 1/2 HP, 125V 3 HP, 250V	20A, 125V 20A, 250V	120A, 125V 120A, 250V	9 - 24 in (23 - 61 cm)
SJE VerticalMaster® 3 Plus (For Limited Space Applications)	Mechanically Activated	1/2 HP, 120V 1 HP, 230V	13A, 120V 13A, 230V	60A, 120V 78A, 230V	.75 - 6.5 in (2 - 17 cm)
SJE MicroMaster® AC/DC	Mechanically Activated	Use pump run and start current	10A, 12 VDC 10A, 125 VAC 8A, 250 VAC	100A, 12 VDC 60A, 125V 60A, 250V	8 - 36 in (20 - 91 cm)
SJE MicroMaster® Plus WS	Mechanically Activated	Use pump run and start current	13A, 125V 12A, 250V	78A, 125V 72A, 250V	8 - 36 in (20 - 91 cm)
SJE MicroMaster® RA	Mechanically Activated	Use pump run and start current	15A, 120V	90A, 120V	2.5 in (6.35 cm)
SJE HiTempMaster™	Mechanically Activated	Use pump run and start current	13A, 125V 12A, 250V	78A, 125V 72A, 250V	8 - 36 in (20 - 91 cm)
Junior Super Single®	Mercury Activated	1/2 HP, 120V 1 HP, 230V	13A, 120V 8A, 230V	40A, 120V 20A, 230V	6.5 - 19 in (16.5 - 48 cm)
Double Float®	Mercury Activated	1 HP, 120V 2 HP, 230V	15A, 120V 12A, 230V	55A, 120V 35A, 230V	1.75 - 48 in (4.45 - 122cm)

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SJE RHOMBUS®

5 YEAR LIMITED WARRANTY

SJE PUMPMASTER® WPS FLOAT SWITCH

Mechanically-Activated, Wide-Angle Switch for Use in Potable Water Applications

The SJE PumpMaster® WPS mechanically-activated, wide-angle pump switch is designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC or control applications as low as 120 VAC, 100mA for:

- potable water applications
- water applications

It can be wired to work in either pump down (normally open) or pump up (normally closed) applications.

The SJE PumpMaster® WPS float switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

FEATURES

- Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (Single Pole, Double Throw)

- Heavy-duty contacts

- Controls pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC or control applications as low as 120 VAC, 100 mA

- For direct wiring applications

- Adjustable pumping range of 7 to 36 inches (18 to 91 cm)

- Includes external cable weight and boxed packaging

- CSA Certified to meet NSF/ANSI 61 standard for use in potable water; approved for use in tanks of 250 US gallons (950L) in volume or greater per float

CSA® C US — Drinking Water NSF/ANSI 61   CSA® LR54245   5 YEAR

SJE RHOMBUS®

Mechanical

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SJE PUMPMASTER® WPS PUMP SWITCH - Mechanically activated, wide angle float switch designed for use in potable water applications.

Part #	Description	Shipping Weight
1047427	15PMWPSWE	3.3 lbs.
1053697	30PMWPSWE	5.1 lbs.

WE = Weighted **E**xternally

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

EXTERNAL WEIGHT is standard.

PACKAGING: Boxed - standard

SPECIFICATIONS

CABLE: Flexible 16 gauge, 3 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 3.05 inch diameter x 3.56 inch long (7.75 x 9.04 cm) high impact, corrosion resistant, PVC housing for use in potable water and water up to 140°F (60°C)

ELECTRICAL: 120/230 VAC 50/60 Hz, 13 FLA, 85 LRA

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

Minimum Electrical Load: 120 VAC, 100 mA

NOTE: This switch is not intended to control non-arcing loads.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying applications.

PUMP UP is normally closed contacts for filling applications.

Mechanical

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SJE PUMPMASTER®, SJE PUMPMASTER® PLUS, SJE PUMPMASTER® SPDT PUMP SWITCHES

Mechanically-Activated, Wide-Angle Switches

These mechanically-activated, wide-angle pump switches are designed for direct control of pumps for:

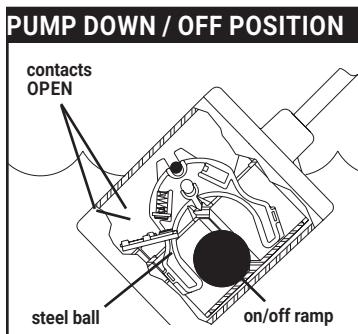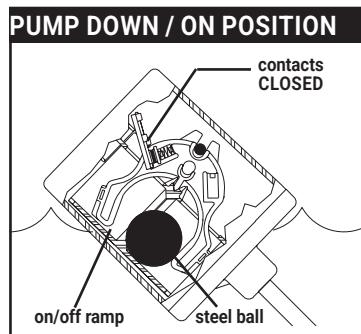- water applications
- sewage applications

These switches are not sensitive to rotation or turbulence allowing them to be used in both calm and turbulent applications.

SJE PumpMaster®/ SJE PumpMaster® Plus models available for pump down or pump up applications as specified by part numbers.

SJE PumpMaster® SPDT models can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

FEATURES

- Heavy-duty contacts
- Adjustable pumping range of 7 to 36 inches (18 to 91 cm)
- Includes standard mounting clamp and boxed packaging
- **SJE PumpMaster®/SJE PumpMaster® SPDT models** control pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC
- **SJE PumpMaster® Plus models** control pumps up to 3/4 HP at 120 VAC and 2 HP at 230 VAC

PUMP DOWN / ON POSITION

contacts CLOSED

on/off ramp   steel ball

PUMP DOWN / OFF POSITION

contacts OPEN

steel ball   on/off ramp

UL Recognized for Water & Sewage

LR54245

OPTIONS

- In standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available).
- **SJE PumpMaster®/SJE PumpMaster® Plus models** are available with a 120 VAC or 230V piggy-back plug OR without a plug for direct wiring in 120 VAC or 230 VAC applications.
- **SJE PumpMaster® SPDT models** available without plug only for direct wiring in 120 VAC or 230 VAC applications.

Mechanical

SJE PUMPMASTER®, SJE PUMPMASTER® PLUS, SJE PUMPMASTER® SPDT PUMP SWITCHES - Mechanically activated, wide angle switches designed for direct control of pumps.

SJE PumpMaster® Pump Switch				
Part #	**Description - Pump Down** ⬇	**Part #**	**Description - Pump Up** ⬆	**Shipping Weight**
1002630	10PMD1WP	**1002707**	10PMU1WP	1.64 lbs.
1002714	10PMD2WP	**1002709**	10PMU2WP	1.68 lbs.
1002712	10PMDWOP	**1002706**	10PMUWOP	1.56 lbs.
1002715	15PMD1WP	**1002721**	15PMU1WP	1.89 lbs.
1002717	15PMD2WP	**1002723**	15PMU2WP	1.93 lbs.
1002719	15PMDWOP	**1002725**	15PMUWOP	1.82 lbs.
1036754	15PMD1WP-QF			1.95 lbs.
1002727	20PMD1WP	**1002733**	20PMU1WP	2.28 lbs.
1002729	20PMD2WP	**1002735**	20PMU2WP	2.32 lbs.
1002731	20PMDWOP	**1002737**	20PMUWOP	2.20 lbs.
1002739	30PMD1WP	**1002745**	30PMU1WP	2.94 lbs.
1002741	30PMD2WP	**1002747**	30PMU2WP	2.99 lbs.
1002743	30PMDWOP	**1002749**	30PMUWOP	2.86 lbs.

SJE PumpMaster® Plus Pump Switch				
Part #	**Description - Pump Down** ⬇	**Part #**	**Description - Pump Up** ⬆	**Shipping Weight**
1003232	10PMPD1WP	**1003237**	10PMPU1WP	1.88 lbs.
1003233	10PMPD2WP	**1003239**	10PMPU2WP	1.92 lbs.
1003235	10PMPDWOP	**1003241**	10PMPUWOP	1.73 lbs.
1003243	15PMPD1WP	**1003249**	15PMPU1WP	2.23 lbs.
1003245	15PMPD2WP	**1003251**	15PMPU2WP	2.23 lbs.
1003247	15PMPDWOP	**1003253**	15PMPUWOP	2.13 lbs.
1036797	15PMPD1WP-QF			2.50 lbs.
1003255	20PMPD1WP	**1003261**	20PMPU1WP	2.57 lbs.
1003257	20PMPD2WP	**1003263**	20PMPU2WP	2.61 lbs.
1003259	20PMPDWOP	**1003265**	20PMPUWOP	2.49 lbs.
1003267	30PMPD1WP	**1003273**	30PMPU1WP	3.38 lbs.
1003269	30PMPD2WP	**1003275**	30PMPU2WP	3.41 lbs.
1003271	30PMPDWOP	**1003277**	30PMPUWOP	3.30 lbs.

SJE PumpMaster® SPDT Pump Switch		
Part #	**Description - Pump Down or Pump Up** ⬇ ⬆ **Without Plug Only**	**Shipping Weight**
1004834	10PMSPDTPC	1.81 lbs.
1004835	10PMSPDTWE	3.05 lbs.
1004836	15PMSPDTPC	2.21 lbs.
1004837	15PMSPDTWE	3.45 lbs.
1004838	20PMSPDTPC	2.61 lbs.
1004839	20PMSPDTWE	3.85 lbs.
1004840	30PMSPDTPC	3.41 lbs.
1004841	30PMSPDTWE	4.65 lbs.

D = Pump **D**own **U** = Pump **U**p **1** = **1**20VAC **2** = **2**30VAC **WP** = **W**ith **P**lug **WOP** = **W**ith **O**ut **P**lug **QF** = **Q**uick **F**it

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

MOUNTING CLAMP is standard. CABLE WEIGHT MOUNTING is also available. **PACKAGING: Boxed** - Standard.

ADDITIONAL CABLE: Longer cable lengths available. **QUICK FIT** piggy-back plug and float are separate to allow for quick fit installation.

SPECIFICATIONS

PUMPING RANGE: 7 to 36 inches (18 cm to 91 cm)

FLOAT: 3.05 inch diameter x 3.56 inch long (7.75 cm x 9.04 cm), high impact, corrosion resistant, PVC housing for use in sewage and water up to 140°F (60°C)

ELECTRICAL:

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

	Voltage 50 Hz/60 Hz Single Phase	Maximum Pump Running Current	Maximum Pump Starting Current	Cable
SJE PumpMaster®	125/250 VAC	13 amps	85 amps	16 gauge, 2 conductor - (UL, CSA) SJOW, water-resistant (CPE)
SJE PumpMaster® Plus	125/250 VAC	15 amps	85 amps	14 gauge, 2 conductor - (UL, CSA) SJOW, water-resistant (CPE)
SJE PumpMaster® SPDT	125/250 VAC	13 amps	85 amps	16 gauge, 3 conductor - (UL, CSA) SJOW, water-resistant (CPE) Can be wired to operate in either pump down (normally open) or pump up (normally closed) applications. (Single Pole, Double Throw)

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying in water and sewage applications.

PUMP UP is normally closed contacts for filling in water and sewage applications.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in either 120 VAC or 230 VAC applications within specified amp ratings.

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Mechanical

DOUBLE FLOAT® MASTER PUMP SWITCH
Mechanically Activated Switch

The Double Float® Master mechanically-activated pump switch is designed to control pumps up to 15 FLA, 90 LRA, 120 VAC or 240 VAC for:

- non-potable water applications
- sewage applications

It is well-suited for confined applications requiring an accurate pumping range. It is not sensitive to rotation or turbulence. This switch is voltage sensitive - use with correct voltage.

The **Double Float® Master** pump switch consists of two mechanical floats and a splice tube. The splice tube contains a holding relay which enables the floats to function in series.

The holding relay eliminates pump chatter in turbulent conditions allowing the **Double Float® Master** pump switch to operate relay control panels for larger pump applications.
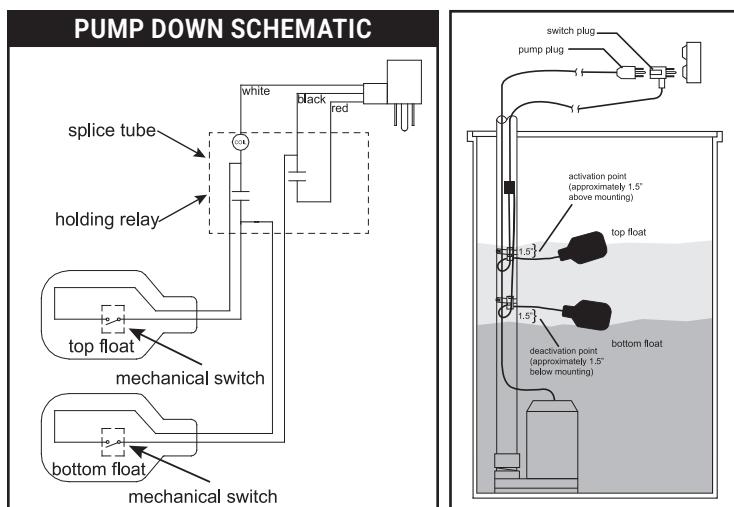
FEATURES

- Controls pumps up to 15 FLA, 90 LRA, 120 VAC or 240 VAC
- Adjustable pumping range of 3 to 48 inches (7.6 to 122 cm) with increased pumping range up to 6 feet (1.8 meters) available
- Includes standard mounting clamps and boxed packaging

OPTIONS

This switch is available:

- for pump down or pump up applications as specified by part number
- with a 120 VAC or 240 VAC piggy-back plug
- without a plug for direct wiring (120 VAC units can only be used with 120 VAC applications within specified amp ratings; 240 VAC units can only be used with 240 VAC applications within specified amp ratings)
- in standard cable lengths of 15, 20, or 30 feet and 5, 6 or 10 meters (longer lengths available)

LR54245

PUMP DOWN SCHEMATIC

- splice tube
- holding relay
- white
- black
- red
- top float
- mechanical switch
- bottom float
- mechanical switch

- switch plug
- pump plug
- activation point (approximately 1.5" above mounting)
- top float
- bottom float
- deactivation point (approximately 1.5" below mounting)

SJE RHOMBUS®

Mechanical

DOUBLE FLOAT MASTER® PUMP SWITCH - Mechanically-activated, wide-angle switch designed to control pumps up to 15 FLA, 90 LRA, 120 VAC or 240 VAC.

PUMP DOWN ⬇		PUMP UP ⬆		
Part #	Description	Part #	Description	Shipping Weight
1016864	15DFMMD1WP	1017668	15DFMMU1WP	3.63 lbs.
1017657	15DFMMD2WP	1017669	15DFMMU2WP	3.64 lbs.
1017658	15DFMMD1WOP	1017670	15DFMMU1WOP	3.55 lbs.
1017659	15DFMMD2WOP	1017671	15DFMMU2WOP	3.51 lbs.
1017660	20DFMMD1WP	1017672	20DFMMU1WP	4.04 lbs.
1017661	20DFMMD2WP	1017673	20DFMMU2WP	4.08 lbs.
1017662	20DFMMD1WOP	1017674	20DFMMU1WOP	3.97 lbs.
1017663	20DFMMD2WOP	1017675	20DFMMU2WOP	4.01 lbs.
1017664	30DFMMD1WP	1017676	30DFMMU1WP	4.95 lbs.
1017665	30DFMMD2WP	1017677	30DFMMU2WP	4.99 lbs.
1017666	30DFMMD1WOP	1017678	30DFMMU1WOP	4.86 lbs.
1017667	30DFMMD2WOP	1017679	30DFMMU2WOP	4.87 lbs.

D = Pump **D**own   **U** = Pump **U**p   **1** = **120**VAC   **2** = **230**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug

NOTE: Descriptions are grouped by cable length measured in feet (15, 20, 30).

PACKAGING: Boxed - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

PUMPING RANGE: 3 to 48 inches (7.6 cm to 122 cm), increased pumping range available. Call factory for quote.

CABLE ATTACHED TO FLOAT HOUSING: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

CABLE ABOVE SPLICE: flexible 14 gauge, 3 conductor (UL, CSA) SJTW, water-resistant thermoplastic

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, PP housing for use in sewage and non-potable water up to 140°F (60°C)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current
120 VAC 240 VAC	15 amps 15 amps	90 amps 90 amps

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying.

PUMP UP is normally closed contacts for filling.

DIRECT WIRING:
120 VAC units used for direct wiring (without plug) can **only** be used with **120 VAC** applications within specified amp ratings.

240 VAC units used for direct wiring (without plug) can **only** be used with **240 VAC** applications within specified amp ratings.

Mechanical

SJE RHOMBUS.

SJE AMPMASTER® PUMP SWITCH
Mechanically-Activated, Wide-Angle, 20 Amp Rated Switch

The SJE AmpMaster® mechanically-activated, wide-angle 20 amp rated pump switch is designed for direct control of pumps up to 1 1/2 HP at 125 VAC and 3 HP at 250 VAC for
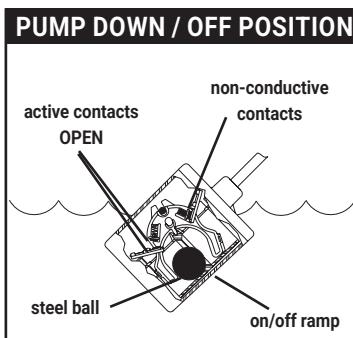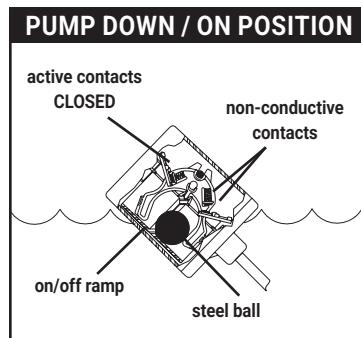
- grinder applications
- high head sewage pump applications
- lift station applications
- septic tank effluent pump (STEP) systems

The **SJE AmpMaster**® pump switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

It is available for pump down applications only.

FEATURES

- Maximum pump running current of 20 amps
- Heavy-duty contacts mounted on high-conductivity copper substrates
- Controls pumps up to 1 1/2 HP at 125 VAC and 3 HP at 250 VAC
- Second set of non-conductive contacts enhance switch activation
- For direct wiring in 125 VAC or 250 VAC applications (piggy-back plug model not available)
- Adjustable pumping range of 9 to 24 inches (23 to 61 cm)
- Includes standard mounting clamp and boxed packaging

PUMP DOWN / ON POSITION

active contacts CLOSED
non-conductive contacts
on/off ramp
steel ball

PUMP DOWN / OFF POSITION

non-conductive contacts
active contacts OPEN
steel ball
on/off ramp

UL Recognized for Water & Sewage

LR54245

OPTIONS

This switch is available:

- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)

Mechanical

SJE RHOMBUS®

SJE AMPMASTER® PUMP SWITCH - Mechanically-activated, wide-angle 20 amp rated switch designed to control pumps up to 1 1/2 HP at 125 VAC and 3 HP at 250 VAC.

Part #	Description (Pump Down - Without Plug Only) ⊕	Shipping Weight
1006310	10AMDWOP	1.79 lbs.
1006311	15AMDWOP	2.27 lbs.
1006312	20AMDWOP	2.72 lbs.
1006313	30AMDWOP	3.12 lbs.

D = Pump **D**own   **WOP** = **W**ith **O**ut **P**lug

MOUNTING CLAMP is standard.

PACKAGING: Boxed - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

PUMPING RANGE: 9 to 24 inches (23 cm to 61 cm)

CABLE: flexible 12 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 3.05 inch diameter x 3.56 inch long (7.75 cm x 9.04 cm), high impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 120°F (50°C)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current	Recommended Pump HP
125 VAC	**20 amps**	**120 amps**	1 1/2 HP or less
250 VAC	**20 amps**	**120 amps**	3 HP or less

NOTE: This switch must be used with pumps that provide integral thermal overload protection. Certain pump applications may require the use of an external capacitor start kit.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying. Available in pump down version only.

DIRECT WIRING: Units may be used with either 125 VAC or 250 VAC applications within specified amp ratings.

Mechanical

SJE VERTICALMASTER® 3 PLUS PUMP SWITCH

Mechanically-Activated Switch for Limited Space Applications

The SJE VerticalMaster® 3 Plus mechanically-activated pump switch is designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC for

- non-potable water applications
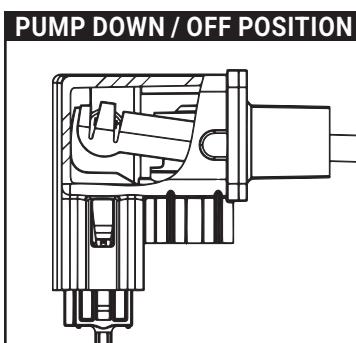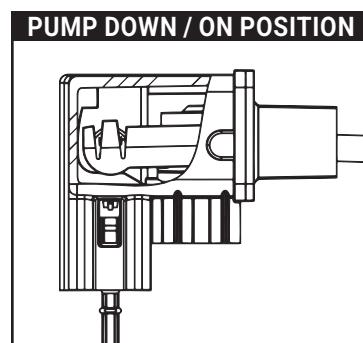- effluent applications
- limited space applications

It works well in small sump chambers, effluent applications, and laundry trays, as well as in large tanks.

The **SJE VerticalMaster®3 Plus** pump switch is not sensitive to turbulence.

It is available for pump down applications only.

FEATURES

- Heavy-duty contacts
- Controls pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC
- Adjustable pumping range of 2 to 6.5 inches (5 to 17 cm)

PUMP DOWN / ON POSITION	PUMP DOWN / OFF POSITION

OPTIONS

This switch is available:

- with a 120 VAC or 230 VAC piggy-back plug
- without a plug for direct wiring in 120 VAC or 230 VAC applications
- in standard cable lengths of 10, 15, 20, or 30 feet

U.S. Patents
D837745-S, 10141141-BS,
D818441-S, D817455-S,
20170250041-A1

Canadian Patent
CA3011555

Canadian Design
174,615; 179,579; 174,614

Foreign Patents Pending

LR54245

Mechanical

SJE RHOMBUS®

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SJE VERTICALMASTER® 3 PLUS PUMP SWITCH - Mechanically-activated pump switch designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC in limited space applications.

Part #	Description (Pump Down Only) ⊕	Shipping Weight
1076764	10VM3P1WP	1.73 lbs.
1076768	10VM3P2WP	1.77 lbs.
1076772	10VM3PWOP	1.65 lbs.
1076765	15VM3P1WP	2.08 lbs.
1076769	15VM3P2WP	2.12 lbs.
1076773	15VM3PWOP	2.00 lbs.
1076766	20VM3P1WP	2.43 lbs.
1076770	20VM3P2WP	2.47 lbs.
1076774	20VM3PWOP	2.35 lbs.
1076767	30VM3P1WP	3.13 lbs.
1076771	30VM3P2WP	3.17 lbs.
1076776	30VM3PWOP	3.05 lbs.

1 = **120**VAC   **2** = **230**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

MOUNTING BRACKET and HOSE CLAMP are standard.

PACKAGING: Boxed - Standard

SPECIFICATIONS

PUMPING RANGE: 2 to 6.5 inches (5 cm to 17 cm)

CABLE: flexible 16 gauge, 2 conductor (UL, CSA) SJOW or SJTOW, water-resistant (CPE).

MOUNTING BRACKET: polypropylene

LIFT ROD: acetal

FLOAT STOP: acetal

SWITCH AND FLOAT HOUSING: high impact, corrosion resistant, PVC housing for use in effluent and non-potable water up to 140°F (60°C)

- **Switch Housing:** Height 2.6" x Length 3.3" x Width 1.5" (6.6 cm x 8.5 cm x 3.9 cm)

- **Float Housing:** Height 2.87" x Diameter 2.87" (7.3 cm x 7.3 cm)

- **Float Rod Length:** 8.55"

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current	Recommended Pump HP
120 VAC	13 amps	78 amps	1/2 HP or less
230 VAC	13 amps	78 amps	1 HP or less

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in either 120 VAC or 230 VAC applications within specified amp ratings.

Mechanical

SJE RHOMBUS

The SJE MicroMaster® AC/DC mechanically-activated, wide-angle pump switch provides direct control of pumps for:

- water applications
- sewage applications

This **SJE MicroMaster® AC/DC** pump switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

FEATURES

- Mechanically-activated, snap action contacts
- High impact, corrosion resistant, polypropylene float housing
- Adjustable pump range of 8 to 36 inches (20 to 91 cm)

OPTIONS

This switch is available:

- for pump down or pump up applications as specified by part number
- without a plug for direct wiring
- in standard cable length of 15 feet (5 meters)

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Mechanical

SJE MICROMASTER® AC/DC PUMP SWITCH - Mechanically-activated, wide-angle switch designed for performance and dependability.

PUMP DOWN ⊕		PUMP UP ⊕		Shipping Weight
Part #	**Description**	**Part #**	**Description**	
1009813	15MMDCDWOP	**1012543**	15MMDCUWOP	3.63 lbs.

D = Pump **D**own   **U** = Pump **U**p   **WOP** = **W**ith **O**ut **P**lug

MOUNTING CLAMP is standard.

PACKAGING: Bagged - Standard

SPECIFICATIONS

PUMPING RANGE: 8 to 36 inches (20 cm to 91 cm).

CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, polypropylene housing for use in water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 33 feet (10 meters) or 13 psi (90 kPa)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current
12 VDC	**10 amps**	**100 amps**
125 VAC	**10 amps**	**60 amps**
250 VAC	**8 amps**	**60 amps**

NOTE: This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying in water or sewage applications.

PUMP UP is normally closed contacts for filling in water or sewage applications.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in 12 VDC, 125 VAC or 250 VAC applications within specified amp ratings.

Mechanical

The SJE MicroMaster® mechanically-activated, wide-angle pump switch designed specifically as a mechanical alternative to the mercury-activated Junior Super Single(R) pump switch for:

- water applications
- sewage applications

This **SJE MicroMaster® Plus WS** pump switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

FEATURES

- Mechanically-activated, snap action contacts
- High impact, corrosion resistant, polypropylene float housing
- Adjustable pump range of 8 to 36 inches (20 to 91 cm)

OPTIONS

This switch is available:

- for pump down or pump up applications as specified by part number
- with a 125 VAC or 250 VAC piggy back plug
- without a plug for direct wiring in 125 VAC or 250 VAC applications
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)

UL Recognized for Water & Sewage

LR54245

Mechanical

SJE RHOMBUS®

SJE MICROMASTER® PLUS WS PUMP SWITCH - Mechanically-activated, wide-angle switch designed for performance and dependability.

PUMP DOWN ⊕		PUMP UP ⊕		
Part #	Description	Part #	Description	Shipping Weight
1022021	10MMPD1WPWS	1022024	10MMPU1WPWS	1.48 lbs.
1022022	10MMPD2WPWS	1022025	10MMPU2WPWS	1.51 lbs.
1022020	10MMPDWOPWS	1022023	10MMPUWOPWS	1.04 lbs.
1022027	15MMPD1WPWS	1022030	15MMPU1WPWS	1.81 lbs.
1022028	15MMPD2WPWS	1022031	15MMPU2WPWS	1.85 lbs.
1022026	15MMPDWOPWS	1022029	15MMPUWOPWS	1.37 lbs.
1022033	20MMPD1WPWS	1022036	20MMPU1WPWS	2.14 lbs.
1022034	20MMPD2WPWS	1022037	20MMPU2WPWS	2.19 lbs.
1022032	20MMPDWOPWS	1022035	20MMPUWOPWS	1.69 lbs.
1022039	30MMPD1WPWS	1022042	30MMPU1WPWS	2.86 lbs.
1022040	30MMPD2WPWS	1022043	30MMPU2WPWS	2.90 lbs.
1022038	30MMPDWOPWS	1022041	30MMPUWOPWS	2.34 lbs.

D = Pump **D**own   **U** = Pump **U**p   **1** = **125**VAC   **2** = **250**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

MOUNTING CLAMP is standard.

CABLE WEIGHT MOUNTING is also available.

PACKAGING: Boxed - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

PUMPING RANGE: 8 to 36 inches (20 cm to 91 cm).

CABLE: flexible 16 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, polypropylene housing for use in water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 33 feet (10 meters) or 13 psi (90 kPa)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current
125 VAC	**13 amps**	**78 amps**
250 VAC	**12 amps**	**72 amps**

NOTE: This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying in water or sewage applications.

PUMP UP is normally closed contacts for filling in water or sewage applications.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in 125 VAC or 250 VAC applications within specified amp ratings.

Mechanical

SJE MICROMASTER® RA PUMP SWITCH
Mechanically-Activated, Reduced-Angle Switch

The SJE MicroMaster® RA mechanically-activated, reduced-angle pump switch provides direct control of pumps for:

- water applications
- sewage applications

This **SJE MicroMaster® RA** pump switch is not sensitive to rotation.

FEATURES

- Pump range of 2.5 inches
- Mechanically-activated, snap action contacts
- High impact, corrosion resistant, polypropylene float housing
- Controls pumps up to 15 FLA
- 120V with plug for pump down applications
- 15 ft. & 30 ft. cable length options

LR54245

5 YEAR LIMITED WARRANTY

Mechanical

SJE MICROMASTER® RA (REDUCED ANGLE) PUMP SWITCH - Mechanically-activated, reduced-angle switch designed for performance and dependability.

Part #	Description (Pump Down) ⊕	Shipping Weight
1109512	15MMRADWP	3.00 lbs.
1110720	30MMRADWP	4.32 lbs.

D = Pump **D**own   **WP** = **W**ith **P**lug

MOUNTING CLAMP is standard.

PACKAGING: Boxed - Standard

SPECIFICATIONS

PUMPING RANGE: 2.5 inches at 3.5 inch cord tether length

CABLE ATTACHED TO FLOAT HOUSING: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

CABLE ABOVE SPLICE: flexible 14 gauge, 3 conductor (UL, CSA) SJTW, water-resistant thermoplastic

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, polypropylene housing for use in water up to 140°F (60°C)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current
120 VAC	**15 amps**	**90 amps**

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying in water or sewage applications.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in 120 VAC applications within specified amp ratings. See installation instructions for wiring instructions.

Mechanical

SJE RHOMBUS.

SJE HI TEMP MASTER™ PUMP SWITCH
Mechanically-Activated, Wide-Angle Switch for High Temperature Applications

The SJE HighTempMaster™ mechanically-activated, wide-angle pump switch is designed to directly control pumps in high temperature sump applications up to 200°F (93°C) for:

- Water
- Sewage applications

It provides automatic control of pumps up to 13FLA, 78 LRA, 125V or 250V.

This **SJE HiTempMaster™** pump switch is not sensitive to rotation or turbulence allowing it to be used in both calm and turbulent applications.

FEATURES

- Mechanically-activated, snap action contacts
- High impact, corrosion resistant, polypropylene float housing
- Adjustable pump range of 8 to 36 inches (20 to 91 cm)
- Twin wall design of float housing protects internal components from heat and moisture

OPTIONS

This switch is available:

- for pump down applications
- with a 125 VAC or 250 VAC piggy-back plug
- without a plug for direct wiring in 125 VAC or 250 VAC applications
- in standard cable lengths of 15, 20, or 30 feet and 5, 6 or 10 meters (longer lengths available)

CSA® LR54245

5 YEAR LIMITED WARRANTY

Mechanical

SJE HITEMPMASTER™ PUMP SWITCH - Mechanically-activated, wide-angle switch specifically designed for performance and dependability in high temperature sump applications up to 200°F (93°C).

Part #	Description (Pump Down Only) ⊙	Shipping Weight
1043545	10HTMD1WP	1.72 lbs.
1043548	10HTMD2WP	1.76 lbs.
1043551	10HTMDWOP	1.64 lbs.
1043546	20HTMD1WP	2.36 lbs.
1043549	20HTMD2WP	2.40 lbs.
1043554	20HTMDWOP	2.28 lbs.
1043547	30HTMD1WP	3.02 lbs.
1043550	30HTMD2WP	3.07 lbs.
1043555	30HTMDWOP	2.94 lbs.

D = Pump **D**own   **1** = **125**VAC   **2** = **250**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug

NOTE: Descriptions are grouped by cable length measured in feet (10, 20, 30).

MOUNTING CLAMP is standard.

PACKAGING: Boxed - Standard

SPECIFICATIONS

PUMPING RANGE: 8 to 36 inches (20 cm to 91 cm).

CABLE: flexible 16 gauge, 2 conductor (UL, CSA) SJOOW, water-resistant (CPE)

FLOAT: 3.18 inch diameter x 5.58 inch long (8.1 cm x 14.2 cm), high impact, corrosion resistant, polypropylene housing for use in water up to 200°F (93°C)

MAXIMUM WATER DEPTH: 33 feet (10 meters) or 13 psi (90 kPa)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current
125 VAC 250 VAC	13 amps 12 amps	78 amps 72 amps

NOTE: This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying in water or sewage applications up to 200°F (93°C).

DIRECT WIRING: Units used for direct wiring (without plug) may be used in 125 VAC or 250 VAC applications within specified amp ratings.

Mechanical

SJE RHOMBUS.

JUNIOR SUPER SINGLE® PUMP SWITCH
Mercury-Activated, Wide-Angle Switch

The Junior Super Single® mercury-activated, wide-angle pump switch is designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC for
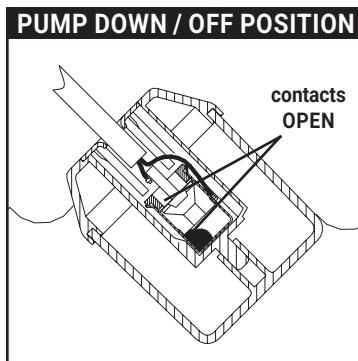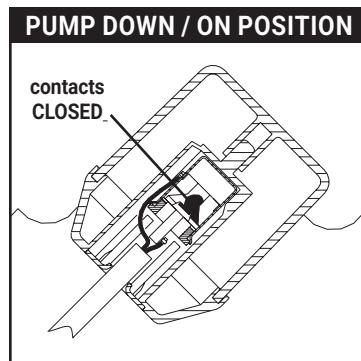
- non-potable water applications
- sewage applications

Although this switch is not sensitive to rotation, it is affected by turbulence and should be mounted in a non-turbulent location.

The **Junior Super Single®** pump switch is not recommended for use with motor contactors or relays because the motor contactor or relay may experience chattering. A Super Single® or Double Float® pump switch would operate more efficiently in these installations.

FEATURES

- Controls pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC
- Adjustable pumping range of 6.5 to 19 inches (16.5 to 48 cm)
- Includes standard mounting clamp and boxed packaging

PUMP DOWN / ON POSITION
contacts CLOSED

PUMP DOWN / OFF POSITION
contacts OPEN

OPTIONS

This switch is available:

- for pump down or pump up applications as specified by part number
- with a 120 VAC or 230 VAC piggy-back plug
- without a plug for direct wiring in 120 VAC or 230 VAC applications
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)

U.S. Patent Nos. 4,529,854 & 4,572,934

UL Recognized for Water & Sewage

LR54245

Mercury

SJE RHOMBUS®

JUNIOR SUPER SINGLE® PUMP SWITCH - Mercury-activated, wide-angle switch designed for direct control of pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC.

PUMP DOWN ⊙		PUMP UP ⊙		
Part #	Description	Part #	Description	Shipping Weight
1001896	10JSD1WP	1001918	10JSU1WP	1.45 lbs.
1001914	10JSD2WP	1001921	10JSU2WP	1.48 lbs.
1001916	10JSDWOP	1001923	10JSUWOP	1.37 lbs.
1001817	15JSD1WP	1001930	15JSU1WP	1.77 lbs.
1001926	15JSD2WP	1001932	15JSU2WP	1.81 lbs.
1001928	15JSDWOP	1001934	15JSUWOP	1.68 lbs.
1001898	20JSD1WP	1001941	20JSU1WP	2.11 lbs.
1001937	20JSD2WP	1001943	20JSU2WP	2.14 lbs.
1001939	20JSDWOP	1001945	20JSUWOP	2.03 lbs.
1001900	30JSD1WP	1001952	30JSU1WP	2.82 lbs.
1001948	30JSD2WP	1001954	30JSU2WP	2.86 lbs.
1001950	30JSDWOP	1001956	30JSUWOP	2.74 lbs

D = Pump **D**own   **U** = Pump **U**p   **1** = **120**VAC   **2** = **230**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug
NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

MOUNTING CLAMP is standard.

PACKAGING: Boxed - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

PUMPING RANGE: 6.5 to 19 inches (16.5 cm to 48 cm)

CABLE: flexible 16 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

FLOAT: 2.81 inch diameter x 3.42 inch long (7.14 cm x 8.68 cm), high impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 140°F (60°C)

MERCURY SWITCH: mercury-to-metal contacts, hermetically sealed in a steel capsule

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current	Recommended Pump HP
120 VAC 230 VAC	13 amps 8 amps	40 amps 20 amps	1/2 HP or less 1 HP or less

NOTE: This switch must be used with pumps that provide integral thermal overload protection. This switch is not designed to be directly wired to relays or motor contactors.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying.

PUMP UP is normally closed contacts for filling.

DIRECT WIRING: Units used for direct wiring (without plug) may be used in either 120 VAC or 230 VAC applications within specified amp ratings.

Mercury

DOUBLE FLOAT® PUMP SWITCH
Mercury-Activated, Wide-Angle Switch

The Double Float® mercury-activated, wide-angle pump switch is designed to control pumps up to 1 HP at 120 VAC and 2 HP at 230 VAC for

- non-potable water applications
- sewage applications

It is well-suited for confined applications requiring an accurate pumping range. It is not sensitive to rotation or turbulence. This switch is voltage sensitive - use with correct voltage.

The **Double Float®** pump switch consists of two floats and a splice tube. Each float contains a heavy-duty mercury switch. The splice tube contains a holding relay which enables the floats to function in series.

The holding relay eliminates pump chatter in turbulent conditions allowing the **Double Float®** pump switch to operate relay control panels for larger pump applications.

FEATURES

- Controls pumps up to 1 HP at 120 VAC and 2 HP at 230 VAC
- Adjustable pumping range of 1.75 to 48 inches (4.45 to 122 cm) with increased pumping rang up to 6 feet (1.8 meters) available
- Includes standard mounting clamps and boxed packaging

OPTIONS

This switch is available:

- for pump down or pump up applications as specified by part number
- with a 120 VAC or 230 VAC piggy-back plug
- without a plug for direct wiring (120 VAC units can only be used with 120 VAC applications within specified amp ratings. 230 VAC units can only be used with 230 VAC applications within specified amp ratings)
- in standard cable lengths of 15, 20, or 30 feet and 5, 6 or 10 meters (longer lengths available)

UL Recognized for Water & Sewage

LR54245

PUMP DOWN SCHEMATIC

splice tube
holding relay
red white black
top float
mercury switch
bottom float
mercury switch

switch plug
pump plug
top float
pumping range
bottom float

SJE RHOMBUS®

Mercury

DOUBLE FLOAT® PUMP SWITCH - Mercury-activated, wide-angle switch designed to control pumps up to 1 HP at 120 VAC and 2 HP at 230 VAC.

PUMP DOWN ⊕		PUMP UP ⊕		
Part #	Description	Part #	Description	Shipping Weight
1002022	15DFD1WP	1002030	15DFU1WP	3.63 lbs.
1002024	15DFD2WP	1002032	15DFU2WP	3.64 lbs.
1002026	15DFD1WOP	1002034	15DFU1WOP	3.55 lbs.
1002028	15DFD2WOP	1002036	15DFU2WOP	3.51 lbs.
1002038	20DFD1WP	1002046	20DFU1WP	4.04 lbs.
1002040	20DFD2WP	1002048	20DFU2WP	4.08 lbs.
1002042	20DFD1WOP	1002050	20DFU1WOP	3.97 lbs.
1002044	20DFD2WOP	1002052	20DFU2WOP	4.01 lbs.
1002054	30DFD1WP	1002062	30DFU1WP	4.95 lbs.
1002056	30DFD2WP			4.99 lbs.
1002058	30DFD1WOP	1002066	30DFU1WOP	4.86 lbs.
1002060	30DFD2WOP	1002068	30DFU2WOP	4.87 lbs.

D = Pump **D**own   **U** = Pump **U**p   **1** = **120**VAC   **2** = **230**VAC   **WP** = **W**ith **P**lug   **WOP** = **W**ith **O**ut **P**lug

NOTE: Descriptions are grouped by cable length measured in feet (15, 20, 30).

PACKAGING: Boxed - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

PUMPING RANGE: 1.75 to 48 inches (4.45 cm to 122 cm), increased pumping range available. Call factory for quote.

CABLE ATTACHED TO FLOAT HOUSING: flexible 14 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)

CABLE ABOVE SPLICE: flexible 14 gauge, 3 conductor (UL, CSA) SJTW, water-resistant thermoplastic

FLOAT: 3.38 inch diameter x 4.55 inch long (8.58 cm x 11.5 cm), high impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 140°F (60°C)

ELECTRICAL:

Voltage 50Hz/60Hz Single Phase	Max. Pump Run Current	Max. Pump Start Current	Recommended Pump HP
120 VAC 230 VAC	15 amps 12 amps	55 amps 35 amps	1 HP or less 2 HP or less

NOTE: This switch must be used with pumps that provide integral thermal overload protection.

A Pump Switch is designed for Horsepower (HP) rated loads and is not suitable for control (pilot duty) applications. It will fail prematurely when switching loads less than 1 Amp at 120 VAC. Select a float switch from our Control Switch offering for control applications.

OTHER INFORMATION

PUMP DOWN is normally open contacts for emptying.

PUMP UP is normally closed contacts for filling.

DIRECT WIRING:

120 VAC units used for direct wiring (without plug) can **only** be used with **120 VAC** applications within specified amp ratings.

230 VAC units used for direct wiring (without plug) can **only** be used with **230 VAC** applications within specified amp ratings.

Mercury

SJE RHOMBUS

CONTROL SWITCH OVERVIEW

Narrow-angle control switches accurately monitor high (normally open) or low (normally closed) liquid level conditions in water and sewage applications to activate control panels and alarms. Select models have colored caps for easy identification.

Control Switch	Type of Activation	Control Differential	Electrical Rating	Mounting Options
EZconnex® Float Switch ■ Blue Cap = Normally Open (Narrow or Wide Angle) ■ Red Cap = Normally Closed (Narrow or Wide Angle)	Mechanically Activated	Narrow 1.5 inch (4 cm) Wide 4 in (10 cm) above or below horizontal	125 VAC/30 VDC 0.160mA - 1A, 5 VDC 1mA min.	Mounting clamp or cable weight
SJE MegaMaster®	Mechanically Activated	Approx 10° above or below horizontal	1mA - 1A 4 VDC - 125 VAC	Internal weight
SJE SignalMaster® ■ Yellow Cap = Normally Open	Mechanically Activated	Approx 1.5 in (4 cm) above or below horizontal	5 amp 125V or 250V	Mounting clamp or cable weight
SJE SignalMaster® □ White Cap = Normally Closed	Mechanically Activated	Approx 1.5 in (4 cm) above or below horizontal	5 amp 125V or 250V	Mounting clamp or cable weight
SJE SignalMaster® SPDT ■ Green Cap = Single Pole, Double Throw	Mechanically Activated	Approx 1.5 in (4 cm) above or below horizontal	5 amp 125V or 250V	Mounting clamp or cable weight
SJE MilliAmpMaster® WPS ■ Orange Cap = WPS Control Switch	Mechanically Activated	Approx 1.5 in (4 cm) above or below horizontal	125 VAC/30 VDC 0.160mA - 1A, 5 VDC 1mA min.	Mounting clamp
SJE MilliAmpMaster® ■ Blue Cap = Narrow or Wide Angle	Mechanically Activated	Narrow 1.5 inch (4 cm) Wide 4 in (10 cm) above or below horizontal	125 VAC/30 VDC 0.160mA - 1A, 5 VDC 1mA min.	Mounting clamp or cable weight
Sensor Float®	Mercury Activated	Approx .5 in (1 cm) above or below horizontal	5 amp 120V or 230V	Mounting clamp, cable weight, internal weight
Sensor Float® Mini	Mercury Activated	Approx .5 in (1 cm) above or below horizontal	5 amp 120V or 230V	Mounting clamp or cable weight

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SJE RHOMBUS®

5 YEAR LIMITED WARRANTY

www.sjerhombus.com • Toll Free 888-342-5753

The EZconnex® float switch connection system is a revolutionary new way to install float switches in a wet well for level control applications. It includes an electrical wiring manifold with three quick release float switch connection ports, mounting bracket and hardware. Installation is as easy as 1, 2, 3…Simply install the manifold, plug in the quick connect floats, and wire the manifold cable to the control panel.

A single 6 conductor direct burial cable has Red-Blue-Yellow wire pairs that match the R-B-Y imprint on the manifold housing for easy identification and field wiring. The color-coded cable makes for a quick, easy installation. The quick release float switch connections and mounting bracket allow for easy maintenance and replacement of floats.

The EZconnex® system can be used with 1, 2, or 3 float switches. Each float switch includes a protective rubber boot that provides a dual seal design for an extra layer of protection to keep connections clean and dry. A range of wide-angle and narrow-angle float switch options are available with quick release connection to suit application needs (sold separately). Sealing plugs are available for unused manifold ports (sold separately).

NOTE: Do not install manifold with open port(s).

FEATURES

- (3) Quick release float connection ports for easy maintenance in the wet well
- A single 6-conductor direct burial cable with colored wire pairs for easy and clean field wiring of the control panel
- Manifold housing includes R-B-Y imprints that match Red-Blue-Yellow wire pairs in manifold cable for easy identification and field wiring
- Can be used with 1-3 float switches; sealing plug(s) available for unused manifold port(s)
- Rated for short-term water submersion in water
- Includes mounting bracket and hardware; float switches and sealing plugs must be ordered separately

OPTIONS

Manifold Options:

- Standard cable lengths of 25, 50, or 100 ft (7.62, 15.24, or 30.48 m)
- Sealing plug (includes rubber boot) required for unused port(s)
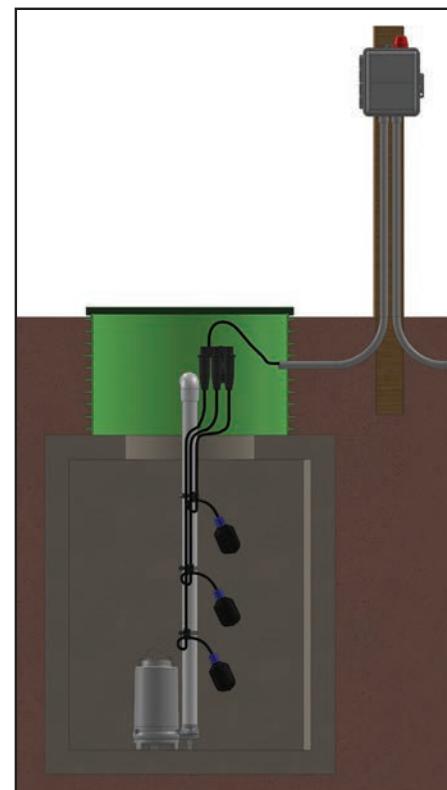
Float Switch Options:

- **EZconnex® SJE MilliAmpMaster™ Float switches:** these are SJE MilliAmpMaster™ control switches that feature the quick release connection. Please see the SJE MilliAmpMaster™ control switch section in this catalog for complete specifications.
    - Available in standard cable lengths of 5, 10, or 20 ft (1.52, 3.05, or 6.10 m)
    - Colored caps for easy identification (blue cap = normally open; red cap = normally closed)
    - Two float mounting configurations available; mounting clamp or cable weight
- **EZconnex® SJE MegaMaster® Float switches:** these are SJE MegaMaster® control switches that feature the quick release connection. Please see the SJE MegaMaster® control switch section in this catalog for complete specifications.
    - Available in standard cable lengths of 10, 25, or 50 ft (3.05, 7.62 or 15.24 m)
    - Optional 6-hook mounting bracket available (sold separately)

US Patent No. 9,559,455 and 9,583,867
CA Patent No. 2,891,806
China Patent No. 105322354

LR54245

SJE RHOMBUS®

Mechanical

EZCONNEX® 3-PORT FLOAT SWITCH CONNECTION SYSTEM - Manifold/float connection system designed for easy installation of 1-3 float switches in a wet well for level control applications.

Part #	Description (3-Port Manifold)	Shipping Weight
1047612	EZconnex®, 3-Port, 25 ft., with Mounting Bracket	3.33 lbs.
1047613	EZconnex®, 3-Port, 50 ft., with Mounting Bracket	5.22 lbs.
1050843	EZconnex®, 3-Port, 100 ft., with Mounting Bracket	9.28 lbs.

EZ CONNEX® FLOAT SWITCH NARROW-ANGLED VERSIONS				
NORMALLY OPEN		NORMALLY CLOSED		
Part #	Description	Part #	Description	Shipping Weight
1046922	5MAPNPCNOEZ	1046923	5MAPNPCNCEZ	0.86 lbs.
1046924	10MAPNPCNOEZ	1046925	10MAPNPCNCEZ	1.14 lbs.
1050721	20MAPNPCNOEZ	1050840	20MAPNPCNCEZ	1.79 lbs.
1054141	5MAPNCWNOEZ	1054142	5MAPNCWNCEZ	2.16 lbs.
1054145	10MAPNCWNOEZ	1054146	10MAPNCWNCEZ	2.44 lbs.
1054150	20MAPNCWNOEZ	1054151	20MAPNCWNCEZ	3.09 lbs.

EZ CONNEX® FLOAT SWITCH WIDE-ANGLED VERSIONS				
NORMALLY OPEN		NORMALLY CLOSED		
Part #	Description	Part #	Description	Shipping Weight
1046918	5MAPWPCNOEZ	1046919	5MAPWPCNCEZ	0.86 lbs.
1046920	10MAPWPCNOEZ	1046921	10MAPWPCNCEZ	1.14 lbs.
1050841	20MAPWPCNOEZ	1050842	20MAPWPCNCEZ	1.79 lbs.
1054143	5MAPWCWNOEZ	1054144	5MAPWCWNCEZ	2.16 lbs.
1054147	10MAPWCWNOEZ	1054148	10MAPWCWNCEZ	2.44 lbs.
1054152	20MAPWCWNOEZ	1054153	20MAPWCWNCEZ	3.09 lbs.

EZ CONNEX® MEGAMASTER® FLOAT SWITCH				
NORMALLY OPEN		NORMALLY CLOSED		
Part #	Description	Part #	Description	Shipping Weight
1059056	10MEGANOEZ	1059057	10MEGANCEZ	2.6 lbs.
1059058	25MEGANOEZ	1059059	25MEGANCEZ	3.6 lbs.
1059060	50MEGANOEZ	1059061	50MEGANCEZ	5.1 lbs.

Options Part #	Description	Shipping Weight
1047611	Sealing Plug (includes Rubber Boot)	0.16 lbs.
1052814	6 Hook Bracket	2.0 lbs.

N = **N**arrow Angle   **W** = **W**ide Angle   **PC** = **P**ipe **C**lamp   **CW** = **C**able **W**eight   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed   **EZ** = **EZ**connex®

NOTE: One sealing plug must be ordered for each unused port. Do not install manifold with open port(s).

PACKAGING:

    Manifold: **Boxed** - Standard

    Float Switches: Bagged - Standard

SPECIFICATIONS

MANIFOLD SPECIFICATIONS

CABLE: direct burial shielded PVC Type TC-ER TFFN (UL) 600V 18 gauge, 6 conductor

HOUSING: ABS plastic

ELECTRICAL: 125 VAC

    Maximum Electrical Load: 1 amp per connection port

FLOAT SPECIFICATIONS

- **EZconnex® SJE MilliAmpMaster™ Float switches:** these are SJE MilliAmpMaster™ control switches that feature the quick release connection. Please see the SJE MilliAmpMaster™ control switch section in this catalog for complete specifications.

- **EZconnex® SJE MegaMaster® Float switches:** these are SJE MegaMaster® control switches that feature the quick release connection. Please see the SJE MegaMaster™ control switch section in this catalog for complete specifications.

MOUNTING BRACKET SPECIFICATIONS

    BRACKET: PVC Plastic

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
Blue colored cap, the control switch turns on (closes) when the switch tips above horizontal signaling a high level, and turns off (opens) when the switch drops below horizontal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
Red colored cap, the control switch turns on (closes) when the switch drops below horizontal signaling a low level, and turns off (opens) when the switch tips above horizontal.

SJE RHOMBUS

Mechanical

EZCONNEX® 4-PORT FLOAT CONNECTION SYSTEM

Designed for Easy Installation of Float Switches in Wet Well Applications

The EZconnex® float switch connection system is a revolutionary new way to install float switches in a wet well for level control applications. It includes an electrical wiring manifold with four quick release float switch connection ports, mounting bracket and hardware. Installation is as easy as 1, 2, 3…Simply install the manifold, plug in the quick connect floats, and wire the manifold cable to the control panel.

A single 8 conductor direct burial cable has Red-Blue-Yellow-White wire pairs that match the R-B-Y-W colored caps on the manifold housing for easy identification and field wiring. The color-coded cable makes for a quick, easy installation. The quick release float switch connections and mounting bracket allow for easy maintenance and replacement of floats.

The EZconnex® system can be used with 1, 2, 3 or 4 float switches. Each float switch includes a protective rubber boot that provides a dual seal design for an extra layer of protection to keep connections clean and dry. A range of wide-angle and narrow-angle float switch options are available with quick release connection to suit application needs (sold separately). Sealing plugs are available for unused manifold ports (sold separately).

NOTE: Do not install manifold with open port(s).

FEATURES

- (4) Quick release float connection ports for easy maintenance in the wet well
- A single 8-conductor direct burial cable with colored wire pairs for easy and clean field wiring of the control panel
- Manifold housing includes Red-Blue-Yellow-White colored caps that match Red-Blue-Yellow-White wire pairs in manifold cable for easy identification and field wiring
- Can be used with 1-4 float switches; sealing plug(s) available for unused manifold port(s)
- Rated for short-term water submersion in water
- Includes mounting bracket; float switches and sealing plugs must be ordered separately

OPTIONS

Manifold Options:

- Standard cable lengths of 25, 50, or 100 ft (7.62, 15.24, or 30.48 m)
- Sealing plug (includes rubber boot) required for unused port(s)
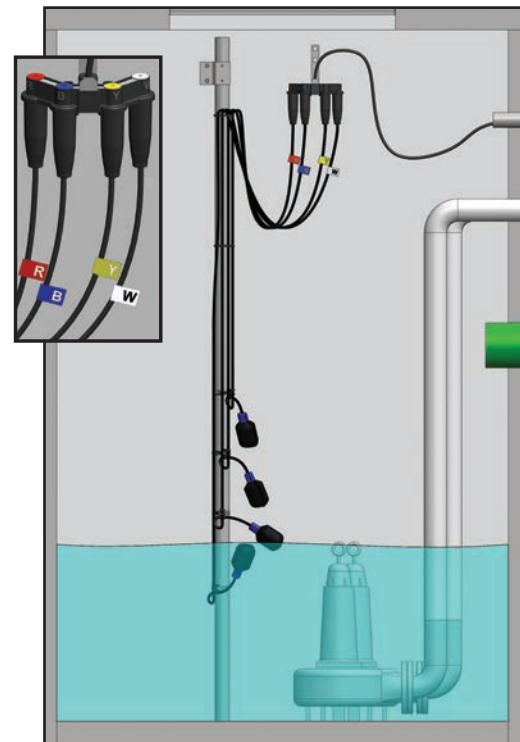
Float Switch Options:

- **EZconnex® SJE MilliAmpMaster™ Float switches:** these are SJE MilliAmpMaster™ control switches that feature the quick release connection. Please see the SJE MilliAmpMaster™ control switch section in this catalog for complete specifications.
    - Available in standard cable lengths of 5, 10, or 20 ft (1.52, 3.05, or 6.10 m)
    - Colored caps for easy identification (blue cap = normally open; red cap = normally closed)
    - Two float mounting configurations available; mounting clamp or cable weight
- **EZconnex® SJE MegaMaster® Float switches:** these are SJE MegaMaster® control switches that feature the quick release connection. Please see the SJE MegaMaster® control switch section in this catalog for complete specifications.
    - Available in standard cable lengths of 10, 25, or 50 ft (3.05, 7.62 or 15.24 m)
    - Optional 6-hook mounting bracket available (sold separately)

US Patent No. 9,559,455 and 9,583,867
CA Patent No. 2,891,806
China Patent No. 105322354

LR54245

SJE RHOMBUS®

Mechanical

EZCONNEX® 4-PORT FLOAT SWITCH CONNECTION SYSTEM - Manifold/float connection system designed for easy installation of 1-4 float switches in a wet well for level control applications.

Part #	Description (4-Port Manifold)			Shipping Weight
1053987	EZconnex®, 4-Port, 25 ft., with Mounting Bracket			4.57 lbs.
1053988	EZconnex®, 4-Port, 50 ft., with Mounting Bracket			7.04 lbs.
1053989	EZconnex®, 4-Port, 100 ft., with Mounting Bracket			11.98 lbs.
EZ CONNEX® FLOAT SWITCH NARROW-ANGLED VERSIONS				
NORMALLY OPEN		**NORMALLY CLOSED**		
Part #	Description	Part #	Description	Shipping Weight
1046922	5MAPNPCNOEZ	1046923	5MAPNPCNCEZ	0.86 lbs.
1046924	10MAPNPCNOEZ	1046925	10MAPNPCNCEZ	1.14 lbs.
1050721	20MAPNPCNOEZ	1050840	20MAPNPCNCEZ	1.79 lbs.
1054141	5MAPNCWNOEZ	1054142	5MAPNCWNCEZ	2.16 lbs.
1054145	10MAPNCWNOEZ	1054146	10MAPNCWNCEZ	2.44 lbs.
1054150	20MAPNCWNOEZ	1054151	20MAPNCWNCEZ	3.09 lbs.
EZ CONNEX® FLOAT SWITCH WIDE-ANGLED VERSIONS				
NORMALLY OPEN		**NORMALLY CLOSED**		
Part #	Description	Part #	Description	Shipping Weight
1046918	5MAPWPCNOEZ	1046919	5MAPWPCNCEZ	0.86 lbs.
1046920	10MAPWPCNOEZ	1046921	10MAPWPCNCEZ	1.14 lbs.
1050841	20MAPWPCNOEZ	1050842	20MAPWPCNCEZ	1.79 lbs.
1054143	5MAPWCWNOEZ	1054144	5MAPWCWNCEZ	2.16 lbs.
1054147	10MAPWCWNOEZ	1054148	10MAPWCWNCEZ	2.44 lbs.
1054152	20MAPWCWNOEZ	1054153	20MAPWCWNCEZ	3.09 lbs.
EZ CONNEX® MEGAMASTER® FLOAT SWITCH				
NORMALLY OPEN		**NORMALLY CLOSED**		
Part #	Description	Part #	Description	Shipping Weight
1059056	10MEGANOEZ	1059057	10MEGANCEZ	2.6 lbs.
1059058	25MEGANOEZ	1059059	25MEGANCEZ	3.6 lbs.
1059060	50MEGANOEZ	1059061	50MEGANCEZ	5.1 lbs.
Options Part #	**Description**			**Shipping Weight**
1047611	Sealing Plug (includes Rubber Boot)			0.16 lbs.
1052814	6 Hook Bracket			2.0 lbs.

N = **N**arrow Angle   **W** = **W**ide Angle   **PC** = **P**ipe **C**lamp   **CW** = **C**able **W**eight   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed   **EZ** = **EZ**connex®

NOTE: One sealing plug must be ordered for each unused port. Do not install manifold with open port(s).

SPECIFICATIONS

MANIFOLD SPECIFICATIONS

CABLE: direct burial shielded PVC Type TC-ER TFFN (UL) 600V 18 gauge, 8 conductor

HOUSING: ABS plastic

ELECTRICAL: 125 VAC

Maximum Electrical Load: 1 amp per connection port

FLOAT SPECIFICATIONS

- **EZconnex® SJE MilliAmpMaster™ Float switches:** these are SJE MilliAmpMaster™ control switches that feature the quick release connection. Please see the SJE MilliAmpMaster™ control switch section in this catalog for complete specifications.

- **EZconnex® SJE MegaMaster® Float switches:** these are SJE MegaMaster® control switches that feature the quick release connection. Please see the SJE MegaMaster™ control switch section in this catalog for complete specifications.

MOUNTING BRACKET SPECIFICATIONS

BRACKET: 304 stainless steel

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
Blue colored cap, the control switch turns on (closes) when the switch tips above horizontal signaling a high level, and turns off (opens) when the switch drops below horizontal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
Red colored cap, the control switch turns on (closes) when the switch drops below horizontal signaling a low level, and turns off (opens) when the switch tips above horizontal.

Mechanical

G.4   www.sjerhombus.com • email: customer.service@sjeinc.com   **SEE PRICE BOOK FOR PRICING.**

SJE RHOMBUS

SJE MEGAMASTER®

Mechanically-Activated, Narrow-Angle Float Switch Designed for Municipal Applications

The SJE MegaMaster® mechanically-activated, narrow-angle, internally weighted control switch. It is designed for level control in municipal water and sewage applications, including lift stations, non-potable water, PLC (programmable logic controllers), IS (instrinsically safe) and applications having a high grease content.

The internal switching mechanism has unique gold cross-point contacts for reliable control of current up to 1 Amp. The unique two-color float housing offers easy identification of float position.

The SJE MegaMaster® control switch can be wired to work in either normally open or normally closed applications. It is not sensitive to rotation.

When wired as Normally Open (high level)
The control switch turns on (closes) when the switch tips slightly **above** horizontal signaling a high level, and turns off (opens) when the switch drops slightly below horizontal.

When wired as Normally Closed (low level)
The control switch turns on (closes) when the switch drops slightly **below** horizontal signaling a low level, and turns off (opens) when the switch tips slightly above horizontal.

FEATURES

- Internally weighted
- 3 wire cable - SPDT (Single Pole, Double Throw) can be wired as normally open or normally closed; wire color: Common (white), N.O. (black), N.C. (red)
- Large twin wall tear drop shape design offers increased buoyancy
- Two-color housing allows for easy identification of float position
- Unique gold cross-point contacts provide precision and reliable control signals up to 1 amp

OPTIONS

This switch is available:

- with a float bracket (sold separately)
- in standard cable lengths of 25, 50, 75, or 100 feet (approximately 7, 15, 22, or 30 meters)

SJE RHOMBUS®
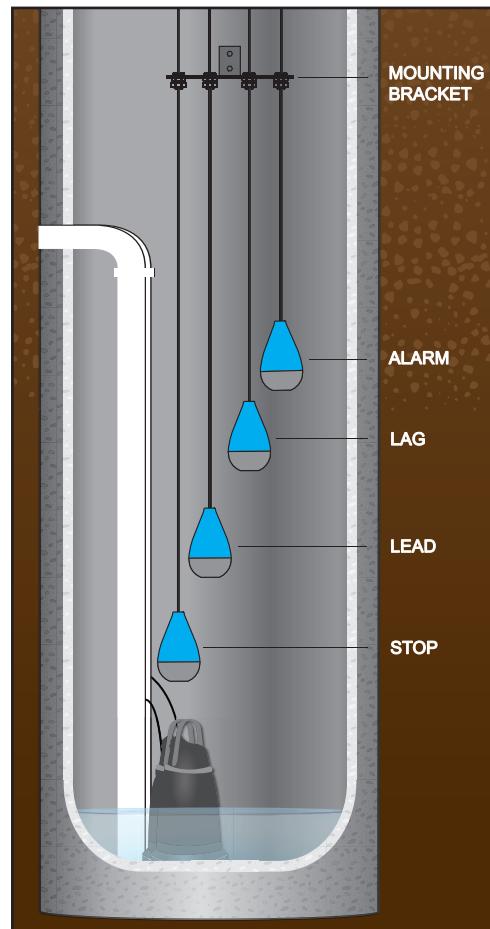
Mechanical

SJE MEGAMASTER® CONTROL SWITCH - Mechanically-activated, narrow-angle float switch designed for level control of municipal wastewater pumping stations.

Part #	Description (Normally Open or Normally Closed)	Shipping Weight
1046500	25MGMSPDT	3.53 lbs.
1046501	50MGMSPDT	5.06 lbs.
1046502	75MGMSPDT	6.65 lbs.
1046503	100MGMSPDT	8.21 lbs.
Options Part #	Description	Shipping Weight
1009432	4 Float Bracket with Mounting Device	2.22 lbs.

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications.

PACKAGING: Bagged - Standard

SPECIFICATIONS

CABLE: flexible 18 gauge, 3 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 4.03 inch diameter x 6.62 inch long (10.2 x 16.8 cm) high impact, corrosion resistant, polypropylene housing for use in sewage and water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 PSI (90 kPa)

ELECTRICAL:

Maximum Electrical Load: 1 amp, 125 VAC

Minimum Electrical Load: 1 mA, 4 VDC

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** horizontal in water or sewage applications.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal in water or sewage applications.

Mechanical

www.sjerhombus.com • email: customer.service@sjeinc.com **SEE PRICE BOOK FOR PRICING.** SJE RHOMBUS

These mechanically-activated, narrow-angle control switches are designed to accurately monitor liquid levels and activate pump control panels and alarms in:

- water applications
- sewage applications

The **SJE SignalMaster®** control switch is not sensitive to rotation.

Normally Open Model (high level) - Yellow Cap
The control switch turns on (closes) when the switch tips slightly above horizontal signaling a high level, and turns off (opens) when the switch drops slightly below horizontal.

Normally Closed Model (low level) - White Cap
The control switch turns on (closes) when the switch drops slightly below horizontal signaling a low level, and turns off (opens) when the switch tips slightly above horizontal.

SPDT (Single Pole Double Throw) - Green Cap
The control switch can be wired for either normally open or normally closed applications.

Normally Open   Normally Closed   Normally Open or Normally Closed

FEATURES

- Mechanically-activated, snap action contacts

- High impact, corrosion resistant, polypropylene float housing

- Not sensitive to rotation

- Control differential of 1.5 inches (4 cm) above or below horizontal

- Colored caps for easy identification: yellow = normally open; white = normally closed; green = SPDT (Single Pole, Double Throw) can be wired for either normally open or normally closed applications

OPTIONS

- In standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)

- with two mounting options that allow for flexibility in installation:

  Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device

  Externally Weighted: for applications where the switch can be suspended from above

UL Listed for Water & Sewage

UL LISTED 83N2   CSA® LR54245   5 YEAR LIMITED WARRANTY

SJE RHOMBUS®

Mechanical

SJE SIGNALMASTER®/SJE SIGNALMASTER® SPDT CONTROL SWITCHES - Mechanically-activated, narrow-angle float switches designed to activate pump control panels and alarms.

NORMALLY OPEN		NORMALLY CLOSED		
Part #	**Description**	**Part #**	**Description**	**Shipping Weight**
1006042	10SGMPCNO	**1006046**	10SGMPCNC	1.04 lbs.
1006050	10SGMWENO	**1006054**	10SGMWENC	2.13 lbs.
1006043	15SGMPCNO	**1006047**	15SGMPCNC	1.37 lbs.
1006051	15SGMWENO	**1006055**	15SGMWENC	2.45 lbs.
1006044	20SGMPCNO	**1006048**	20SGMPCNC	1.69 lbs.
1006052	20SGMWENO	**1006056**	20SGMWENC	2.70 lbs.
1006045	30SGMPCNO	**1006049**	30SGMPCNC	2.34 lbs.
1006053	30SGMWENO	**1006057**	30SGMWENC	3.43 lbs.

SPDT (NORMALLY OPEN OR NORMALLY CLOSED)		
Part #	**Description**	**Shipping Weight**
1006094	10SGMSPDTPC	1.20 lbs.
1006098	10SGMSPDTWE	2.29 lbs.
1006095	15SGMSPDTPC	1.61 lbs.
1006099	15SGMSPDTWE	2.69 lbs.
1006096	20SGMSPDTPC	2.01 lbs.
1006100	20SGMSPDTWE	3.10 lbs.
1006097	30SGMSPDTPC	2.82 lbs.
1006101	30SGMSPDTWE	3.91 lbs.

PC = **P**ipe **C**lamp   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

SPDT: Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

PACKAGING: Bagged - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

CABLE: SJE SignalMaster® - flexible 18 gauge, 2 conductor (UL) SJOW, water-resistant (CPE)

SJE SignalMaster® SPDT - flexible 18 gauge, 3 conductor (UL) SJOW, water-resistant (CPE)

FLOAT: 2.74 inch diameter x 4.83 inch long (7 x 12.3 cm), high impact, corrosion resistant polypropylene for use in sewage and water up to 140° F (60° C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL: 5 amp, 125/250 VAC, 50/60 Hz

This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** horizontal in water or sewage applications.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal in water or sewage applications.

Mechanical

The SJE MilliAmpMaster™ WPS mechanically-activated, narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in:

- potable water applications
- PLC panels (programmable logic controllers)
- low current solar applications
- other low current applications

The internal switching mechanism has sealed gold cross-point contacts for reliable low current operation. Common applications include PLC (programmable logic controller) panels, low current solar applications, and other low current control panels and alarms in potable water applications.

This narrow angle control float switch activates/deactivates at approximately 1.5" (3.81 cm) above and below horizontal with a 3.5" (9 cm) tether. It is not sensitive to rotation.

When Wired as a Normally Open Model (high level)
The control float switch turns on (closes) when the switch tips **above** horizontal signaling a high level, and turns off (opens) when the switch drops below horizontal.

When Wired as a Normally Closed Model (low level)
The control float switch turns on (closes) when the switch drops **below** horizontal signaling a low level, and turns off (opens) when the switch tips above horizontal.

FEATURES

- Low current applications down to 1 mA at 125 VAC
- Mechanically-activated, snap action contacts
- High impact, corrosion resistant polypropylene float housing
- Not sensitive to rotation
- Orange colored cap for easy identification of SJE MilliAmpMaster™ WPS control switch
- CSA Certified to meet NSF/ANSI 61 standard for use in potable water; approved for use in tanks of 250 US gallons (950L) in volume or greater per float

Drinking Water
NSF/ANSI 61

LR54245

5 YEAR LIMITED WARRANTY

Mechanical

SJE RHOMBUS

SJE MILLIAMPMASTER™ WPS CONTROL SWITCH - Mechanically-activated, narrow-angle control switch designed to activate low current control panels and alarms in potable water applications.

Part #	Description (Normally Open or Normally Closed)	Shipping Weight
1062686	15MANWPSPC	1.7 lbs.
1062687	30MANWPSPC	2.5 lbs.
1067227	50MANWPSPC	3.93 lbs.

PC = **P**ipe **C**lamp

Can be wired to work in either pump down (normally open) or pump up (normally closed) applications (**S**ingle **P**ole, **D**ouble **T**hrow).

NOTE: Descriptions are by cable length measured in feet.

SPECIFICATIONS

CABLE: flexible 16 gauge, 3 conductor (UL, CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, polypropylene housing for use in sewage and water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL:

125 VAC
> **Maximum Electrical Load:** 1 amp
> **Minimum Electrical Load:** 1 milliamp

30 VDC
> **Maximum Electrical Load:** 0.1 amps
> **Minimum Electrical Load:** 1 milliamp

4 VDC
> **Minimum Electrical Load:** 1 milliamp

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** horizontal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal.

Mechanical

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SJE RHOMBUS.

SJE MILLIAMPMASTER™ CONTROL SWITCH
Mechanically-Activated Control Switch Designed to Activate Low Current Control Panels and Alarms

The SJE MilliAmpMaster™ mechanically-activated, wide-angle or narrow-angle control switch offers reliable low current control for AC and DC applications to activate pump control panels and alarms in:

- water applications
- wastewater applications
- PLC panels (programmable logic controllers)
- IS panels (with intrinsically safe barriers)
- low current solar applications
- other low current applications

The wide-angle version activates/deactivates approximately 4" (10.16 cm) above and below horizontal with a 3.5" (9 cm) tether. The narrow angle version activates/deactivates at approximately 1.5" (3.81 cm) above and below horizontal with a 3.5" (9 cm) tether. It is not sensitive to rotation.

Normally Open Model (high level)
The control switch turns on (closes) when the switch tips **above** horizontal signaling a high level, and turns off (opens) when the switch drops below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the switch drops **below** horizontal signaling a low level, and turns off (opens) when the switch tips above horizontal.

FEATURES

- Low current, non-arching applications down to 1 mA at 125 VAC
- Mechanically-activated, snap action contacts
- High impact, corrosion resistant polypropylene float housing
- Not sensitive to rotation
- Blue colored cap for easy identification of SJE MilliAmpMaster™ control switch

OPTIONS

This switch is available:

- for normally open (high level) applications or normally closed (low level) applications
- with narrow-angle or wide-angle pumping ranges
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)
- with two mounting options that allow for flexibility in installation:

  Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device

  Externally Weighted: for applications where the switch can be suspended from above

UL Listed for Water & Sewage

UL LISTED 83N2   CSA® LR54245   5 YEAR LIMITED WARRANTY

Mechanical

SJE RHOMBUS®

SJE MILLIAMPMASTER™ CONTROL SWITCH - Mechanically-activated control switch designed to activate low current control panels and alarms.

NARROW ANGLE VERSIONS					
NORMALLY OPEN		NORMALLY CLOSED			
Part #	Description	Part #	Description		Shipping Weight
1018838	10MANPCNO	1018839	10MANPCNC		1.04 lbs.
1018840	10MANWENO	1018841	10MANWENC		2.16 lbs.
1018842	15MANPCNO	1018843	15MANPCNC		1.37 lbs.
1018844	15MANWENO	1018845	15MANWENC		2.45 lbs.
1018846	20MANPCNO	1018847	20MANPCNC		1.69 lbs.
1018848	20MANWENO	1018849	20MANWENC		2.70 lbs.
1018850	30MANPCNO	1018851	30MANPCNC		2.34 lbs.
1018852	30MANWENO	1018853	30MANWENC		3.43 lbs.
WIDE ANGLE VERSIONS					
NORMALLY OPEN		NORMALLY CLOSED			
Part #	Description	Part #	Description		Shipping Weight
1015725	10MAPCNO	1016180	10MAPCNC		1.04 lbs.
1016181	10MAWENO	1016182	10MAWENC		2.16 lbs.
1016184	15MAPCNO	1016185	15MAPCNC		1.37 lbs.
1016186	15MAWENO	1016187	15MAWENC		2.45 lbs.
1016211	20MAPCNO	1016212	20MAPCNC		1.69 lbs.
1016213	20MAWENO	1016214	20MAWENC		2.70 lbs.
1016215	30MAPCNO	1016216	30MAPCNC		2.34 lbs.
1016217	30MAWENO	1016218	30MAWENC		3.43 lbs.

PC = **P**ipe **C**lamp   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 2.74 inch diameter x 4.83 inch long (7.0 cm x 12.3 cm), high impact, corrosion resistant, polypropylene housing for use in sewage and water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

ELECTRICAL:

125 VAC
Maximum Electrical Load: 1 amp
Minimum Electrical Load: 1 milliamp

30 VDC
Maximum Electrical Load: 0.1 amps
Minimum Electrical Load: 1 milliamp

4 VDC
Minimum Electrical Load: 1 milliamp

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips **above** horizontal signaling a high level, and opens (turns off) when the float drops **below** normal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops **below** horizontal signaling a low level, and opens (turns off) when the float tips **above** horizontal.

SJE RHOMBUS.

Mechanical

SENSOR FLOAT® CONTROL SWITCH
Mercury-Activated, Narrow-Angle Float Switch Designed to Activate Pump Control Panels and Alarms

The Sensor Float® mercury-activated, narrow-angle control switch is designed to accurately monitor liquid levels and activate control pump control panels and alarms in:

- non-potable water applications
- sewage applications

The Sensor Float® control switch is not sensitive to rotation and is suitable for use with intrinsically safe circuits. Contact SJE Rhombus regarding specific intrinsically safe applications.

Normally Open Model (high level)
The control switch turns on (closes) when the switch tips slightly **above** horizontal signaling a high level, and turns off (opens) when the switch drops slightly below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the switch drops slightly **below** horizontal signaling a low level, and turns off (opens) when the switch tips slightly above horizontal.

FEATURES

- Suitable for use with intrinsically safe circuits
- Not sensitive to rotation
- Control differential of .5 inches (1 cm) above or below horizontal

OPTIONS

This switch is available:

- for normally open (high level) applications or normally closed (low level) applications
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)
- with three mounting options that allow for flexibility in installation:

  Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device

  Internally Weighted: for applications where the switch can be suspended from above

  Externally Weighted: for applications where the switch can be suspended from above

UL Listed for Water & Sewage

UL LISTED 83N2   CSA® LR54245   5 YEAR LIMITED WARRANTY

SJE RHOMBUS®

SENSOR FLOAT® CONTROL SWITCH - Mercury-activated, narrow-angle float switch designed to activate pump control panels and alarms.

NORMALLY OPEN		NORMALLY CLOSED		Shipping Weight
Part #	Description	Part #	Description	
1002108	10PCNO	1002111	10PCNC	1.29 lbs.
1002072	10SWINO	1002075	10SWINC	1.85 lbs.
1002143	10SWENO	1002146	10SWENC	2.66 lbs.
1002117	15PCNO	1002120	15PCNC	1.64 lbs.
1002080	15SWINO	1002083	15SWINC	2.22 lbs.
1002152	15SWENO	1002155	15SWENC	2.90 lbs.
1002125	20PCNO	1002128	20PCNC	1.99 lbs.
1002089	20SWINO	1002092	20SWINC	2.59 lbs.
1002161	20SWENO	1002164	20SWENC	3.27 lbs.
1002134	30PCNO	1002137	30PCNC	2.13 lbs.
1002098	30SWINO	1002101	30SWINC	3.28 lbs.
1002170	30SWENO	1002173	30SWENC	3.88 lbs.

PC = **P**ipe **C**lamp   **WI** = **W**eighted **I**nternally   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

PACKAGING: Bagged - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 3.38 inch diameter x 4.55 inch long (8.58 cm x 11.56 cm), high impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

MERCURY SWITCH: single pole, single throw, mercury-to-mercury contacts, hermetically sealed in a steel capsule and epoxy sealed in the float housing

ELECTRICAL: 5 amp 120/230 VAC, 50/60 Hz

NOTE: Suitable for use with intrinsically safe circuits.

Contact SJE Rhombus regarding specific intrinsically safe applications.

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** normal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal.

Mercury

SENSOR FLOAT® MINI CONTROL SWITCH

Mercury-Activated, Narrow-Angle Float Switch Designed to Activate Pump Control Panels and Alarms

The Sensor Float® Mini mercury-activated, narrow-angle control switch is designed to accurately monitor liquid levels to activate pump control panels and alarms in:

- non-potable water applications
- sewage applications

This control switch is not sensitive to rotation.

Normally Open Model (high level)
The control switch turns on (closes) when the switch tips slightly **above** horizontal signaling a high level, and turns off (opens) when the switch drops slightly below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the switch drops slightly **below** horizontal signaling a low level, and turns off (opens) when the switch tips slightly above horizontal.

Contact SJE Rhombus regarding intrinsically safe applications.

FEATURES

- Designed for use in confined spaces
- Not sensitive to rotation
- Control differential of .5 inches (1 cm) above or below horizontal

OPTIONS

This switch is available:

- for normally open (high level) applications or normally closed (low level) applications
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)
- with two mounting options that allow for flexibility in installation:

    Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device

    Externally Weighted: for applications where the switch can be suspended from above

UL Listed for Water & Sewage

UL LISTED 83N2   CSA® LR54245   5 YEAR

SJE RHOMBUS®

SENSOR FLOAT® MINI CONTROL SWITCH - Mercury-activated, narrow-angle float switch designed to activate pump control panels and alarms.

NORMALLY OPEN		NORMALLY CLOSED		Shipping Weight
Part #	**Description**	**Part #**	**Description**	
1002181	10MPCNO	**1002184**	10MPCNC	1.20 lbs.
1002206	10MWENO	**1002209**	10MWENC	2.58 lbs.
1002187	15MPCNO	**1002190**	15MPCNC	1.57 lbs.
1002212	15MWENO	**1002215**	15MWENC	2.81 lbs.
1002193	20MPCNO	**1002196**	20MPCNC	1.90 lbs.
1002218	20MWENO	**1002221**	20MWENC	3.14 lbs.
1002199	30MPCNO	**1002202**	30MPCNC	2.68 lbs.
1002224	30MWENO	**1002227**	30MWENC	3.96 lbs.

PC = **P**ipe **C**lamp   **WE** = **W**eighted **E**xternally   **NO** = **N**ormally **O**pen   **NC** = **N**ormally **C**losed

NOTE: Descriptions are grouped by cable length measured in feet (10, 15, 20, 30).

PACKAGING: Bagged - Standard

ADDITIONAL CABLE: Longer cable lengths available.

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 2.81 inch diameter x 3.42 inch long (7.14 cm x 8.68 cm), high impact, corrosion resistant PVC housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

MERCURY TILT SWITCH: single pole, single throw, mercury-to-metal contacts, hermetically sealed in a steel capsule and epoxy sealed in the float housing

ELECTRICAL: 5 amp 120/230 VAC, 50/60 Hz

This switch in not recommended for controlling:

- electric loads less than 30 milliamps, 12 VAC
- non-arcing electric loads

NOTE: Contact SJE Rhombus regarding intrinsically safe applications.

OTHER INFORMATION

NORMALLY OPEN (HIGH LEVEL) OPERATION
The control switch closes (turns on) when the float tips slightly **above** horizontal signaling a high level, and opens (turns off) when the float drops slightly **below** horizontal.

NORMALLY CLOSED (LOW LEVEL) OPERATION
The control switch closes (turns on) when the float drops slightly **below** horizontal signaling a low level, and opens (turns off) when the float tips slightly **above** horizontal.

Mercury

JUNCTION BOXES
Seals Electrical Connections from Moisture and Other Elements

Junction boxes provide a convenient location to connect all wiring required for a typical pumping station, on-site system or other electrical installation.

FEATURES

- NEMA 4X, UL Listed, CSA Certified enclosure

- External mounting feet included

- Flexible PVC or neoprene Gasket

- UL Listed and CSA Certified Hub for incoming power/control wires through conduit

  - 1" hub available

  - 1.5" standard with simplex version

  - 2" standard with duplex version

- UL Listed, CSA Certified cable connectors provide strain relief and a liquid tight seal (RCC8, RCC12, RCC16, UFCC8, UFCC12)

OPTIONS

Junction Boxes are available with:

- 1/2" (1.27 cm), 3/4" (1.90 cm) or 1" (2.54 cm) UL Listed, CSA Certified round cable liquid-tight strain relief connectors (installed)

- 1/2" (1.27 cm) or 3/4" (1.90 cm) UL Listed, CSA Certified flat UF cable liquid-tight strain relief connectors (installed)

- 1" (2.54 cm), 1 1/2" (3.81 cm), or 2" (5.08 cm) terminal adapter hub (installed)

- Custom connector configurations available
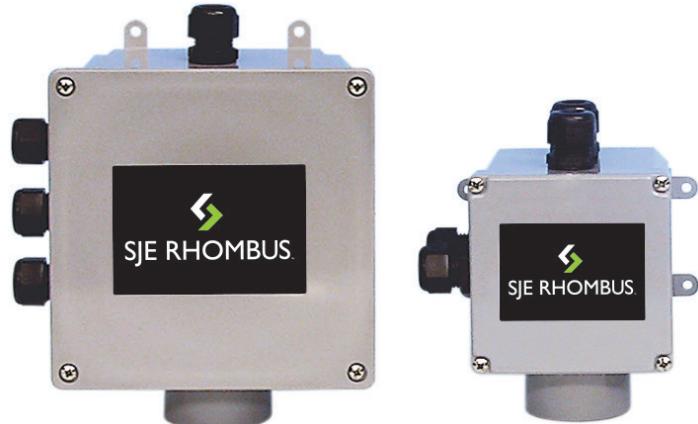
SIDE VIEW — 1 1/2"
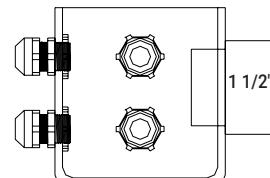
4 x 4 x 4 Simplex
P/N 1008547
MODEL:
JB444-1.5H-4R8

TOP VIEW — 1 1/2"
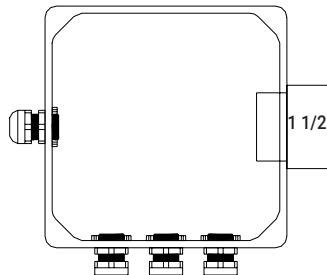
6 x 6 x 4 Simplex
P/N 1008549
MODEL:
JB664-1.5H-4R8

TOP VIEW — 2"
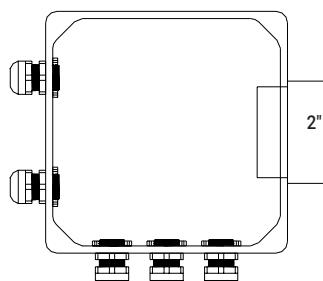
6 x 6 x 4 Duplex
P/N 1008550
MODEL:
JB664-2H-5R8

SJE RHOMBUS®

JUNCTION BOXES - Seals electrical connections from moisture and other elements.

Part #	Description	Shipping Weight
1008546	JB444 (no connectors or hub installed)	2 lbs.
1008872	JB444-1.5H-3R8 Simplex	3 lbs.
1008547	JB444-1.5H-4R8 Simplex	3 lbs.
1008548	JB664 (no connectors or hub installed)	3 lbs.
1008549	JB664-1.5H-4R8 Simplex (small HP pump)	4 lbs.
1008550	JB664-2H-5R8 Duplex (small HP pump)	4 lbs.
1008551	JB664-1.5H-3R8-1R12 Simplex (large HP pump)	4 lbs.
1008552	JB664-2H-3R8-2R12 Duplex (large HP pump)	5 lbs.
1008553	JB884 (no connectors or hub installed)	5 lbs.

NOTE: Descriptions grouped by enclosure size. 444 = 4 x 4 x 4, 664 = 6 x 6 x 4, 884 = 8 x 8 x 4. All enclosure dimensions are in inches. Number before R8 or R12 equals the number of connectors of that size installed.

1.5H = 1 1/2" HUB, 2H = 2" HUB. R8 = RCC8, R12 = RCC12.

Small HP pump = Pump cable 18/2 to 14/3 gauge. Large HP pump = Pump cable 14/4 to 10/3 gauge.

SPECIFICATIONS

LID AND BOX: UL Listed and CSA Certified made from high impact, corrosion resistant, weatherproof thermoplastic

GASKET: flexible PVC or neoprene

SCREWS: brass or stainless steel

INTERNAL VOLUME:
- 4 x 4 x 4 inches is 50.65 cubic inches (830 cubic cm)
- 6 x 6 x 4 inches is 125 cubic inches (2048 cubic cm)
- 8 x 8 x 4 inches is 261.14 cubic inches (4,280 cubic cm)

EXTERNAL ENCLOSURE SIZE:
- 4 x 4 x 4 inches (10.16 x 10.16 x 10.16 cm)
- 6 x 6 x 4 inches (15.24 x 15.24 x 10.16 cm)
- 8 x 8 x 4 inches (20.32 x 20.32 x 10.16 cm)

OTHER INFORMATION

CUSTOM CONNECTOR PLACEMENT
Contact your customer service representative for custom connector placement and pricing.

JUNCTION BOXES
Connector Form

Please use this form when ordering junction boxes with special connector placements. This is a special order made specifically for SJE Rhombus® customers. Special order products cannot be returned.

COMPANY NAME: _____ CONTACT:_____ PO #: _____

PHONE: _____ FAX: _____ EMAIL: _____ DATE: _____

JUNCTION BOX INFORMATION - PLEASE CHECK BOX SIZE

☐ **4" x 4" x 4"**

C2
C1

(C) Back

D2 D1   E1   B1 B2
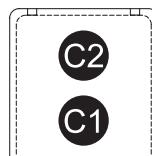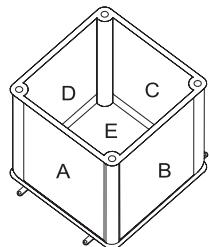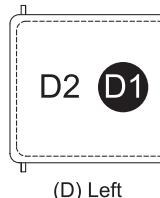
(D) Left   (E) Bottom   (B) Right

A1
A2
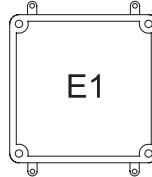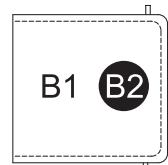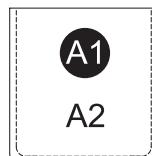
(A) Front

NOTE: Available with a 1" or 1.5" hub. Hub is always placed in the center of selected side. No other connectors can be installed on the same side as the hub.

☐ **6" x 6" x 4"**
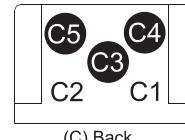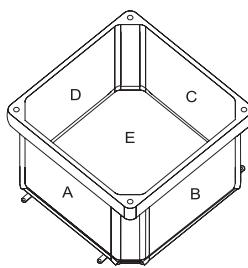
C5   C4
C3
C2   C1
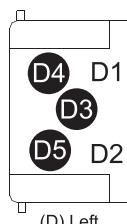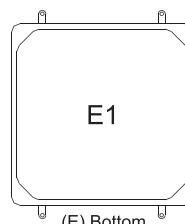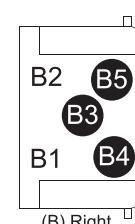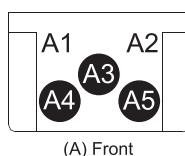
(C) Back

D4 D1
D3
D5 D2

(D) Left

E1

(E) Bottom

B2 B5
B3
B1 B4

(B) Right

A1   A2
A3
A4   A5

(A) Front

NOTE: Available with a 1", 1.5", 2", or 2.5" hub. Hub is always placed in the center of selected side. No other connectors can be installed on the same side as the hub.
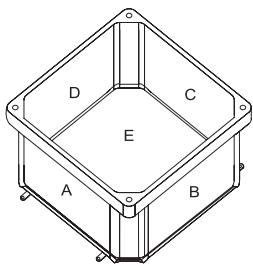
SEE BACKSIDE FOR 8" x 8" x 4"

CONNECTORS AVAILABLE

- **RCC - 8** (1/2")
- **RCC - 12** (3/4")
- **RCC - 16** (1") authorized placements only shown by ●

- **UFCC - 8** (1/2")
- **UFCC - 12** (3/4")

- **1" HUB**
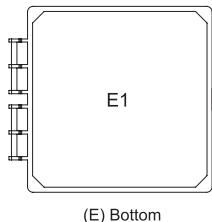- **1.5" HUB**
- **2" HUB**
- **2.5" HUB**

NOTE: For 6" x 6" x 4" junction box, connectors at locations C4, C5, A4 and A5 may make mounting feet difficult to access.
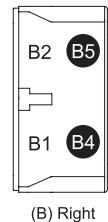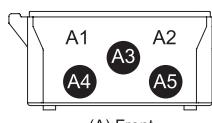
	LOCATION	CONNECTOR	HUB
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
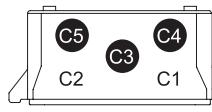
SJE RHOMBUS®

Control Panel Accessories

❏ **8" x 8" x 4"**

D | C
E
A | B

(C) Back

C5 | C3 | C4
C2 | | C1

(D) Left

D4
D3
D5

(E) Bottom

E1

(B) Right

B2 | B5
B1 | B4

(A) Front

A1 | A2
A4 | A3 | A5

NOTE: Available with a 1", 1.5", 2", or 2.5" hub. Hub is always placed in the center of selected side. No other connectors can be installed on the same side as the hub. A 2" or 2.5" hub can't be mounted on the D side (hinge side) or B side (latch side) of the 8" x 8" x 4" junction box.

NOTES: _____

_____

_____

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CONNECTORS AVAILABLE

- **RCC - 8** (1/2")
- **RCC - 12** (3/4")
- **RCC - 16** (1") authorized placements only shown by ⬤

- **UFCC - 8** (1/2")
- **UFCC - 12** (3/4")

- **1" HUB**
- **1.5" HUB**
- **2" HUB**
- **2.5" HUB**

	LOCATION	CONNECTOR	HUB
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

FOR SJE RHOMBUS INTERNAL USE ONLY

ORDER# _____

CONFIGURATION# _____

**NOTE:** If you need assistance in completing this form, please call SJE Rhombus Customer Service.

Control Panel Accessories

California Prop 65 requires the following: ⚠ WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

H.4   www.sjerhombus.com • email: customer.service@sjeinc.com   **SEE PRICE BOOK FOR PRICING.**   SJE RHOMBUS.

CONTROL PANEL ACCESSORIES
To Finish Any Onsite Installation

CORD SEALS

Provides strain relief and a liquid-tight seal.

- Seals 1-4 cables in 2" terminal adapters
- Seals 1-6 cables in 2½" terminal adapters
- PVC plugs included (for unused cable positions)
- Ground wire
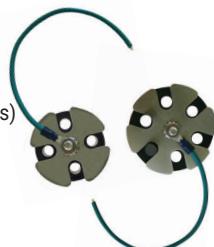
SEAL: neoprene
WASHERS: stainless steel
NUT AND BOLT: stainless steel
WIRE/CABLE ACCOMMODATED: SJOW, SJTW, 18/2, 18/3, 16/2,16/3,14/2 and 14/3

CABLE CONNECTORS

Provides strain relief and a liquid-tight seal.

- Round and Flat UF cable specifications on back side

VDE Approved

HUB ASSEMBLY

Provides liquid-tight conduit attachment location.

- Available in 3/4, 1, 1.5, 2 and 2.5 inch sizes.
- UL Listed and CSA Certified terminal adapter

TERMINAL ADAPTER (HUB): PVC
GASKET: neoprene
LOCK NUT: metal

PANEL MOUNTING POST

Provides easy installation of control panels.

- Removable front access door for easy wiring
- Can be mounted directly into ground, over a 4x4 post, or conduit for a quick, clean, easy installation
- Includes 2 stainless steel mounting bolts
- Includes drilling template
- Accommodates enclosures up to 14 x 12 x 6 inches (35.6 x 30.5 x 15.2 cm)

POST: Polyethylene (34 x 7 x 6 inches)
BOLTS: 4X rated stainless steel with gaskets

RISER MOUNTING KIT

Secures panel mounting post to tank riser.

Includes:
- (2) hub assemblies
- PVC pipe and connecting hardware
- Conduit for routing pump and float from tank riser to post

unassembled

assembled

SIMPLEX INSTALLATION KIT

Provides easy weather-proof wire installation for simplex control panels.

Includes:
- 2" hub assembly
- 2" cord seal (seals 1-4 cables)
- 3/4" hub assembly

DUPLEX INSTALLATION KIT

Provides easy weather-proof wire installation for duplex control panels.

Includes:
- 2.5" hub assembly
- 2.5" cord seal (seals 1-6 cables)
- 3/4" hub assembly

C-LEVEL™ SIMULATOR

Easy-to-use, hand-held test instrument designed to generate an adjustable C-Level™ simulation signal.

4-20mA SIMULATOR

Easy-to-use, hand-held test instrument designed to generate an adjustable 4-20mA signal from loop power.

SJE RHOMBUS®

CONTROL PANEL ACCESSORIES - Cord Seals, Hub Assembly, Simplex Installation Kit, Duplex Installation Kit, Cable Connectors, Panel Mounting Post, Riser Mounting Kit, C-Level™ Sensor Simulator, and 4-20mA Simulator.

Part #	Description
1008517	4 Cable Cord Seal
1037126	6 Cable Cord Seal
1002574	1/2 inch Round Cable Connector (RCC-8)
1002575	3/4 inch Round Cable Connector (RCC-12)
1009868	1 inch Round Cable Connector (RCC-16)
1002576	1/2 inch Flat UF Cable Connector (UFCC-8)
1002577	3/4 inch Flat UF Cable Connector (UFCC-12)
1030564	3/4 inch Hub Assembly
1009305	1 inch Hub Assembly
1008848	1.5 inch Hub Assembly
1008849	2 inch Hub Assembly
1037128	2.5 inch Hub Assembly
1106083	Panel Mounting Post
1038262	Riser Mounting Kit (2 inch)
1053756	Riser Mounting Kit (2.5 inch)
1038029	Simplex Installation Kit
1038030	Duplex Installation Kit
1038326	C-Level™ Sensor Simulator
1039199	4-20mA Simulator

ROUND CABLE SPECIFICATIONS

MATERIAL: polymid flame-resisting, self-extinguishing plastic

O RING: neoprene plastic

HOLE REQUIREMENT: NPT threaded OR clearance holes (jam nut included)

sealing nut
O ring
jam nut
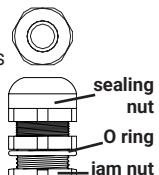
RCC-8
  NPT Hub: .5 inch (1.27cm)
  Maximum Diameter: .480 inch (1.22 cm)
  Minimum Diameter: .270 inch (.68 cm)
  Wire/Cable (AWG) Accommodated: 18/2, 18/3, 18/4, 16/2, 16/3, 16/4, 14/2, and 14/3

RCC-12
  NPT Hub: .75 inch (1.90 cm)
  Maximum Diameter: .709 inch (1.80 cm)
  Minimum Diameter: .545 inch (1.38 cm)
  Wire/Cable (AWG) Accommodated: 14/2, 14/3, 14/4, 12/2, 12/3, 12/4, 10/2, and 10/3

RCC-16
  NPT Hub: 1.0 inch (2.54 cm)
  Maximum Diameter: .98 inch (2.49 cm)
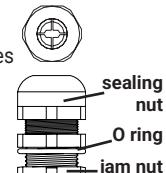 **Minimum Diameter:** .71 inch (1.80 cm)
  Wire/Cable (AWG) Accommodated: Round cable with outside diameter within range identified above.

FLAT UF CABLE SPECIFICATIONS

MATERIAL: weather-stabilized thermo plastic

O RING: neoprene plastic

HOLE REQUIREMENT: NPT threaded OR clearance holes (jam nut included)

sealing nut
O ring
jam nut

UFCC-8
  NPT Hub: .50 inch (1.27 cm)
  Maximum: .26 x .56 inch (.66 - 1.42 cm) slot
  Wire/Cable (AWG) Accommodated: 14/2, 12/2, 10/2

UFCC-12
  NPT Hub: .75 inch (1.90 cm)
  Maximum: .26 x .60 inch (.66 - 1.52 cm) slot
  Wire/Cable (AWG) Accommodated: 14/3, 12/3

SJE RHOMBUS.

Control Panel Accessories

The DPM-240 dual channel module pump monitor is designed to protect two submersible pumps against damage resulting from seal failure and over temperature. In Modes 1 & 2, the resistance of the seal sensor and temp sensor in each pump is continuously monitored and alarms when the seal sensor resistance drops below the adjustable trip level and alarms on a temp failure when the sensor is open. In Modes 3 & 4, the resistance of combined seal/temp sensor in each pump is continuously monitored and faults on a temp failure when the sensor is open and faults on a seal fail when the resistance drops below 400 Ohms. The measured resistance in the pump seal chamber drops as the seal leaks and contaminants enter. Each input has a corresponding output relay and indicating LED which are activated during a fault condition. The module is equipped with a Seal Trip Adjustment dial, a manual reset button, and a 4-position mode selector switch.

OPTIONAL DISPLAY: DPM-LCD

The optional display can be mounted on the inner door and connected to the RJ45 port on the DPM-240 module using an ethernet cable. The display is used to visualize the status of the Seal and Over Temp switch. It can be configured to show 1 or 2 pumps. Alarms are data logged with date and time stamps. The alarm log can be retrieved onto a smart phone via QR code technology.
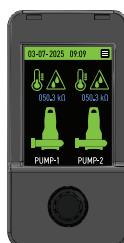
MODES OF OPERATION

MODE 1 - Over Temp & Seal Fail: 2-wire each / Auto Reset
MODE 2 - Over Temp & Seal Fail: 2-wire each / Manual Reset
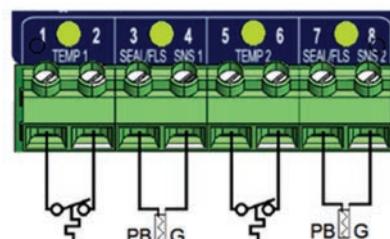**MODE 3** - Over Temp & Seal Fail: 2-wire combined – FLS Type / Auto Reset
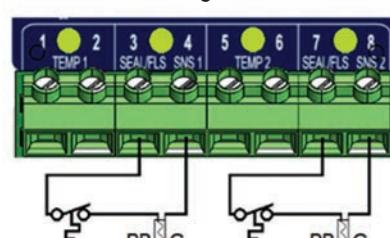**MODE 4** - Over Temp & Seal Fail: 2-wire combined – FLS Type / Manual Reset

Patent Pending

Sensor Wiring Modes 1 & 2

Sensor Wiring Modes 3 & 4

SJE RHOMBUS ®

Control Panel Accessories

DPM-240 - Dual Channel Seal Failure & Over Temperature Alarm Relay.

Part #	Description	Shipping Weight
1118777	DPM-240 Module (panel option 5F*)	0.8 lbs.
1113287	DPM-240 Module w/LCD Display, includes 3 ft. RJ45 display cable (panel option 5H*)	1.1 lbs.

*Use option code 5F or 5H to add to a panel configuration.
For additional display cable lengths, please contact Technical Support at techsupport@sjeinc.com.

SPECIFICATIONS

INPUT VOLTAGE: 120~240 VAC (50/60 Hz)

TRANSIENT PROTECTION: 30kV air/contact

INPUT/OUTPUT ISOLATION VOLTAGE: 4,300VAC

SENSOR VOLTAGE: 24VDC, 5mA (TEMP), 24VDC, 0.5mA (SEAL)

MAX SENSOR CABLE LENGTH: 328 feet (100m)

POWER CONSUMPTION: 2 VA

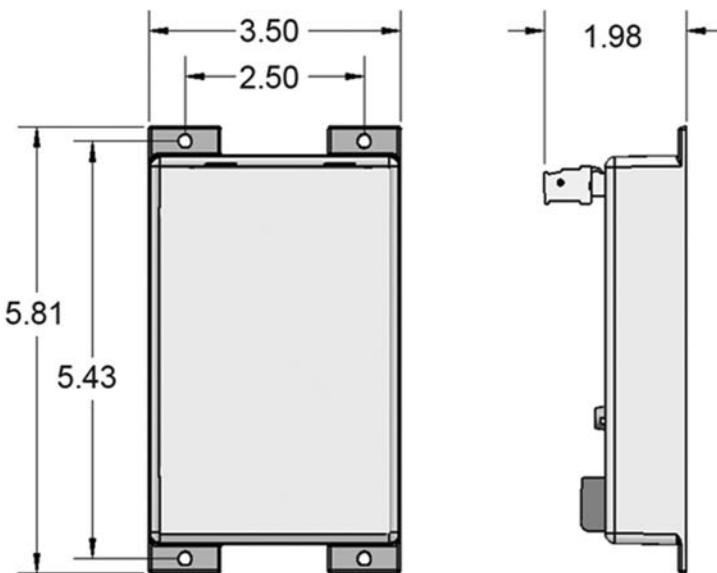**SEAL FAIL SENSITIVITY:** 5K Ω to 250K Ω (Adjustable – Modes 1&2)

RELAY RATING: 5A, 240VAC max. 10M operation (Mechanical)

INDICATORS: Green / Flashing red LED for each input

OPERATING TEMPERATURE: -18°F ~ 140°F (-28°C ~ 60°C)

STORAGE TEMPERATURE: -40°F ~185°F (-40°C ~ 85°C)

WEIGHT: 7.5 oz (213 g)

SJE RHOMBUS.

Control Panel
Accessories

FLOAT ACCESSORIES
To Finish Any Onsite Installation

CABLE CLAMP ASSEMBLY

Provides cable anchor point and strain relief. Secures cable in vertical direction.

• For use with 18/16 gauge, 14 gauge, & 12 gauge cable

MOUNTING CLAMP: ABS Nylon blend

HOSE CLAMP: highly corrosion resistant stainless steel

FLOAT BRACKET

Provides convenient installation of float switches.

• Six Float Bracket supports 1-6 floats
• Four Float Bracket supports 1-4 floats
• Can be directly mounted to wall or used with wall mounting device
• Provides convenient location to stow excess float cord
• Supplied with cord strain relief connectors
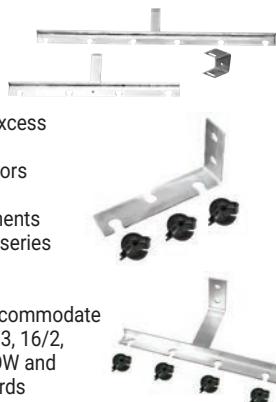
METAL COMPONENTS: all metal components are made of 300 series stainless steel

STRAIN RELIEF CONNECTORS: which accommodate 18/2, 18/3, 16/2, 16/3 SJOW and SJTW cords

PIPE MOUNTING BRACKET

• Secures discharge pipe to basin wall.
• Clamps directly to 2" PVC discharge pipe.

CABLE WEIGHT

Provides an accurate pivot point for suspended float switches.

• Gripper teeth on clip and weight channel securely lock float cable into place
• Cable weight can be adjusted without the use of tools

HOUSING: 1 pound, 5 ounce (0.6 kgs.), 2.8 inch diameter x 3.3 inch long (7.1 cm diameter x 8.4 cm), impact resistant, non-corrosive, PVC housing for use in liquids up to 140°F (60°C)

U.S. Patent 5,306,885

CLIP: injection molded acetal plastic

WIRE/CABLE ACCOMMODATED: SJOW, SJTW, 18/2, 18/3, 16/2, 16/3, 14/2 and 14/3

SHIP WEIGHT: 1.6 lbs. (.726 kgs)

CABLE WEIGHT MINI

Provides an accurate pivot point for suspended float switches.

• One piece cable weight
• Turn and Lock for easy installation

HOUSING: 9.6 ounces (0.27 kgs.), 2.5 inch diameter x 2.5 inch long (6.35 cm diameter x 6.35 cm), impact resistant, non-corrosive, PVC housing for use in liquids up to 140°F (60°C)

WIRE/CABLE ACCOMMODATED: SJOW, SJTW, 18/2, 18/3
NOTE: The Cable Weight Mini can be used on the following control switches with 18/2 or 18/3 cable:

• SJE SignalMaster®
• SJE SignalMaster® SPDT
• SJE MilliAmpMaster™
• Sensor Float® Mini

ELAPSED TIME METER WITH PIGGY-BACK PLUG

Plugs into switched outlet or piggy-back switch of plugger control panel. Unit must be placed inside an enclosure.

• Screws and mounting adhesive included

VERTICAL REED SWITCH

• Control differential: .375 inch (1 cm)
• Maximum angle from vertical: 5°
• Electrical: 250 mAmps, 12-125 VAC, 50/60 Hz
            500 mAmps, 6-12 VDC, 50/60 Hz
• Housing and Float: 1.60 inch diameter x 6.7 inch long (4.06 cm X 17.01 cm), high impact, corrosion resistant PVC for use in sewage and non-potable water up to 120°F (50°C)

ANCHOR

• 10 lb. weight
• Yellow, vinyl coated, mushroom style

CHAIN

• 1/8" thickness
• 316 grade stainless steel
• Available in one foot increments

6 HOOK BRACKET

• Universal hanger for up to 6 float switches, submersible transmitters, and small horsepower pump cords
• Hook diameter: 0.188" x 3.0" (1.8 mm x 76.2 mm)
• 304 stainless steel

SJE RHOMBUS®

FLOAT ACCESSORIES - Cable Clamp Assembly, Float Brackets, Pipe Mounting Bracket, Cable Weights, ETM w/ Piggy-Back Plug, Vertical Reed Switch, Anchor and Chain.

Part #	Description
1008569	18 & 16 Gauge Cable Clamp Assembly
1008574	14 Gauge Cable Clamp Assembly
1008575	12 Gauge Cable Clamp Assembly
1027830	304 Stainless Steel Float Bracket with 3 Black Cord Snubbers
1027647	304 Stainless Steel Float Bracket with 4 Black Cord Snubbers
1009432	4 Float Bracket with Mounting Device
1009433	4 Float Bracket without Mounting Device
1009434	6 Float Bracket with Mounting Device
1009435	6 Float Bracket without Mounting Device
1009436	Float Bracket Mounting Device
1109826	Pipe Mounting Bracket
1002230	Cable Weight
1030356	Cable Weight Mini
1022846	Elapsed Time Meter w/120V Piggy-Back Plug
1032834	Elapsed Time Meter w/230V Piggy-Back Plug
1011027	10 foot Vertical Reed Switch 120V Box
1016561	15 foot Vertical Reed Switch 120V Box
1018687	10 lb. Mushroom Anchor
1018823	1/8 inch Chain
1052814	6 Hook Bracket