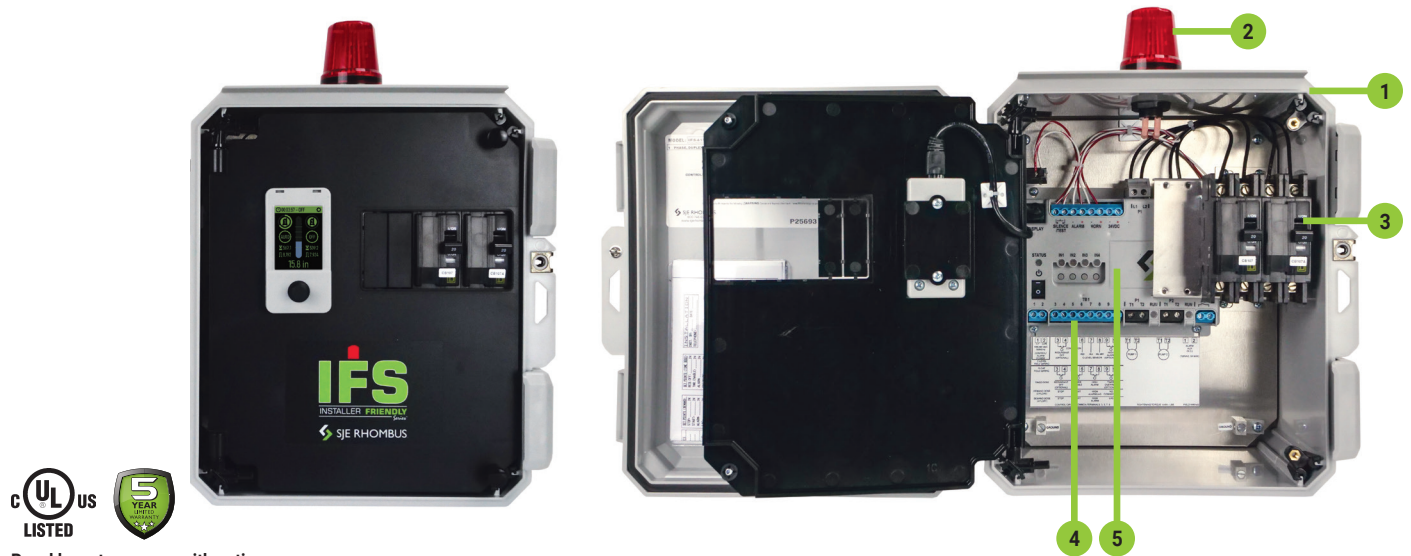


INSTALLER FRIENDLY SERIES® (IFS)

SINGLE PHASE DUPLEX

Demand Dose or Timed Dose, Float or C-Level™ Sensor Controlled System for Pump Control and System Monitoring



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 Next Generation IFS duplex control panel utilizes an innovative circuit board design enclosed in a touch-safe housing to control two 120/208/240V single 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. Available with the EZconnex® float system.

The panel can easily be changed in the field to utilize either floats or the patented C-Level™ sensor for continuous level monitoring. The C-Level™ sensor senses the level in the tank and sends a signal to the panel. Pump activation levels can be adjusted by using the LCD interface. 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). The C-Level™ Sensor features a five year limited warranty.

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
- C-Level™ Sensor or Float operation selectable via menu navigation
- 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 each active ON or OFF Timed Dose mode, as well as at-a-glance ON or OFF time elapsed graphic around lead pump
- RJ45 communication connector
- Flashing function for alarm beacon and horn (configurable)
- Manual alarm reset (configurable)

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. 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. seal fail modules, remote monitoring, valve control, In-Site®, logging, etc. (not shown)

*In fault condition, LED indicators will be red.

Note: Added options, voltage, and amp range selected may change enclosure size and enclosure features, and component layout.

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



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

IFN CONTROL PANEL	4 MODEL TYPE	1 ALARM PACKAGE	W ENCLOSURE RATING	1 STARTING DEVICE	PUMP FULL LOAD AMPS	4 PUMP DISCONNECTS	FLOAT SWITCH APPLICATION	6A8AC10E OPTIONS (LISTED BELOW)
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CONTROL PANEL	✓	IFN		
MODEL TYPE	✓	4	Single Phase Duplex (includes Options 6A, 8AC and 10E as standard)	\$1,599.00
ALARM PACKAGE	✓	1	Alarm Package (includes test/normal/silence switch, fuse, 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	\$129.00
PUMP DISCONNECTS	✓	4	Circuit Breaker 120/208/240V	Base
FLOAT SWITCH 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)	Base
		E	EZconnex® Float Switch System (select Option 33 or 35 below)	-\$102.00
		X	No Floats	-\$102.00
		C	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4D for high water alarm and/or redundant off floats	-\$102.00

PRICING WORKSHEET

IFS Duplex Base Price	\$1,599.00
Alarm Package	_____
Enclosure Rating	_____
Starting Device	_____
Pump Full Load Amps	_____
Pump Disconnects	_____
Float Switch 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	LIST PRICE
1J	Duo Alarm Inputs	\$34.00
3E	High Water Alarm Float (must also select Option 17) Only Available with Float Switch Application = C	\$34.00
4D	Redundant Off Float (must also select Option 17) Only Available with Float Switch Application = C	\$34.00
✓ 6A	Auxiliary Alarm Contact, Form C included as standard	\$0.00
✓ 8AC	Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter, and Override Counter (Timed Dose Only) (included as standard)	\$0.00
✓ 10E	Lockable Latch - NEMA 4X (included as standard)	\$0.00
10F	Lightning Arrestor (must also select Option 15A)	\$285.00
10K	Anti-condensation Heater (must also select Option 15A)	\$124.00
11C	Additional NEMA 1 Remote Alarm Panel	\$114.00
11D	Additional NEMA 4X Remote Alarm Panel	\$368.00
15A	Control/Alarm Circuit Breaker	\$112.00
16A	10' Cord in Lieu of 20' Cord (per Float)	-\$3.00
16B	15' Cord in Lieu of 20' Cord (per Float)	-\$2.00
16C	30' Cord in Lieu of 20' Cord (per Float)	\$6.00
16D	40' Cord in Lieu of 20' Cord (per Float)	\$18.00

OPTIONS	DESCRIPTION	LIST PRICE
17C	Sensor Float® / Internally Weighted (per Float) - Mercury	\$13.00
17D	Sensor Float® / Externally Weighted (per Float) - Mercury	\$15.00
17G	SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical	\$0.00
17H	SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical	\$8.00
17J	Sensor Float® / Pipe Clamp (per Float) - Mercury	\$6.00
19F	4th Float for Timer Override or Lag Only Available with Float Switch Application = H	\$34.00
24E	C-Level™ CL40 Sensor with 25' Vented Cable	\$380.00
24F	C-Level™ CL40 Sensor with 50' Vented Cable	\$425.00
24P	C-Level™ CL40 Sensor with 100' Vented Cable	\$515.00
24X	No C-Level™ CL40 Sensor	\$0.00
29A	C-Level™ CL100 Sensor with 25' Vented Cable	\$380.00
29B	C-Level™ CL100 Sensor with 50' Vented Cable	\$425.00
29C	C-Level™ CL100 Sensor with 100' Vented Cable	\$515.00
29X	No C-Level™ CL100 Sensor	\$0.00
33D ■	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp	\$313.00
33E ■	EZconnex® 3-Port, 50', with 10' Floats (3) / Pipe Clamp	\$355.00
33G ■	EZconnex® 3-Port, 25', with 20' Floats (3) / Pipe Clamp	\$337.00
33H ■	EZconnex® 3-Port, 50', with 20' Floats (3) / Pipe Clamp	\$379.00
35D ■	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp	\$442.00
35E ■	EZconnex® 4-Port, 50', with 10' Floats (4) / Pipe Clamp	\$496.00
35G ■	EZconnex® 4-Port, 25', with 20' Floats (4) / Pipe Clamp	\$473.00
35H ■	EZconnex® 4-Port, 50', with 20' Floats (4) / Pipe Clamp	\$526.00

*C-Level™ Sensor lengths up to 300 ft. available. Call for details.

■ EZconnex® mechanically-activated, narrow angle float switches with quick release connections