

INSTALLER FRIENDLY SERIES® (IFS) SINGLE PHASE SIMPLEX CAPACITOR (START/RUN)

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 IFS simplex capacitor (start/run) 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. The panel configuration can be easily converted in the field to either a timed dose or demand dose. Available with the EZconnex® float system.

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).

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.

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 control pump mode with indication; Hand mode defaults to Automatic when stop level or redundant off level is reached
- C. Pump Run indicator 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), and ON/OFF times (timed dose only)
- E. NEXT push button toggles display
- F. UP and SET push buttons set pump ON/OFF times (timed dose only) and 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. Overload relay (optional) provides pump overload protection (Not shown)
6. IEC motor contactor controls pump by switching electrical lines
7. Circuit breaker (optional) provides pump disconnect and branch circuit protection
8. Float and control/alarm incoming 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. Large pump connection power terminal block
12. Terminal block float and control/alarm incoming power wiring label
13. 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.

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

IFS	7	1	W	1				8AC
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	STARTING DEVICE	PUMP FULL LOAD AMPS	PUMP DISCONNECTS	FLOAT SWITCH APPLICATION	OPTIONS (LISTED BELOW)
CONTROL PANEL	✓	IFS						
MODEL TYPE	✓	7	Single Phase Simplex Capacitor (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 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		0	No Pump Disconnect					
		4	Circuit Breaker					
FLOAT SWITCH APPLICATION		H	Floats - Pump Down (select Option 17 below)					
		L	Floats - Pump Up (select Option 17 below)					
		E	EZconnex® Float Switch System (select Option 33 or 34 below)					
		X	No Floats WITH Alarm Package					
		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	IFS Single Phase Simplex Capacitor Base Price	_____
	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.

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

OPTIONS	DESCRIPTION	OPTIONS	DESCRIPTION
3A	Alarm Flasher	16A	10' Cord in Lieu of 20' Cord (per Float)
3B	Manual Alarm Reset	16B	15' Cord in Lieu of 20' Cord (per Float)
3E	High Water Alarm Float (must also select Option 17) Only Available with Float Switch Application = C	16C	30' Cord in Lieu of 20' Cord (per Float)
4A	Redundant Off (must also select Option 4D if floats are required)	16D	40' Cord in Lieu of 20' Cord (per Float)
4D	Redundant Off Float (must also select Option 4A and Option 17)	17C	Sensor Float® / Internally Weighted (per Float) - Mercury
5A	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)	17D	Sensor Float® / Externally Weighted (per Float) - Mercury
5E	Seal Failure Circuit and Red Indicator (2 Wire)	17G	SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical
6A	Auxiliary Alarm Contact, Form C	17H	SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical
✓ 8AC	Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter (included as standard)	17J	Sensor Float® / Pipe Clamp (per Float) - Mercury
9_A	Pump Overload - Specify Amperage after Number 9 Followed by Letter "A" Example: 912A = 12 amp pump	24E	C-Level™ CL40 Sensor with 4' Vent Tube and 20' Cord
	0 - 30 FLA	24F	C-Level™ CL40 Sensor with 4' Vent Tube and 40' Cord
	30 - 40 FLA	24G	C-Level™ CL40 Sensor with 8' Vent Tube and 20' Cord
10E	Lockable Latch - NEMA 4X	24H	C-Level™ CL40 Sensor with 8' Vent Tube and 40' Cord
10F	Lightning Arrestor (must select pump circuit breakers, control and alarm power combined)	24X	No C-Level™ CL40 Sensor
10K	Anti-condensation Heater	29A	C-Level™ CL100 Sensor with 10' Vent Tube and 20' Cord
11C	Additional NEMA 1 Remote Alarm Panel (must also select Option 6A)	29B	C-Level™ CL100 Sensor with 10' Vent Tube and 40' Cord
11D	Additional NEMA 4X Remote Alarm Panel (must also select Option 6A)	29X	No C-Level™ CL100 Sensor
12B	Customer Supplied Motor Start Components, Mounted in Enclosure by SJE Rhombus	33D ■	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
12C	Motor Start Components Mounted and Supplied by SJE Rhombus	33E ■	EZconnex® 3-Port, 50', with 10' Floats (3) / Pipe Clamp
		33G ■	EZconnex® 3-Port, 25', with 20' Floats (3) / Pipe Clamp
		33H ■	EZconnex® 3-Port, 50', with 20' Floats (3) / Pipe Clamp
		34D ■	EZconnex® 4-Port, 25', with 10' Floats (3) / Pipe Clamp, Sealing Plug
		34E ■	EZconnex® 4-Port, 50', with 10' Floats (3) / Pipe Clamp, Sealing Plug
		34G ■	EZconnex® 4-Port, 25', with 20' Floats (3) / Pipe Clamp, Sealing Plug
		34H ■	EZconnex® 4-Port, 50', with 20' Floats (3) / Pipe Clamp, Sealing Plug

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