## INSTALLER FRIENDLY SERIES® (IFS) THREE PHASE SIMPLEX

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



The IFS simplex control panel utilizes an innovative circuit board design to control one 208/240/480 VAC three 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).

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

## **TOUCH PAD FEATURES**

- Level Status indicators illuminate when floats or set points are activated; alarm will activate if a float operates out of sequence
- 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

 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)

C-Level™ Sensor US Patent No. 8,336,385; 8,567,242; 8,650,949

- Red LED beacon provides 360° visual check of alarm condition
- 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
- Motor protective switch provides adjustable overload, branch circuit protection and pump disconnect
- 5. IEC motor contactor controls pump by switching electrical lines
- Multi-tap transformer (208/240/480 VAC primary) provides 120 VAC control alarm voltage or 600 VAC primary transformer
- 7. Float connection terminal block
- Control Power indicator/fuse indicator light illuminates if control power is present in panel; alarm will activate if control fuse is blown
- Alarm Power indicator/fuse indicator light illuminates if alarm power is present in panel
- 10. Large incoming power connection terminal block
- 11. Terminal block float wiring label
- 12. Ground lugs
- Alarm horn provides audio warning of alarm condition (83 to 85 decibel rating) (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.

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

IFS	5	1	W			8AC
CONTROL	MODEL	ALARM	ENCLOSURE	PUMP FULL	FLOAT SWITCH	OPTIONS (LISTED BELOW)
PANEL	TYPE	PACKAGE	RATING	LOAD AMPS	APPLICATION	

CONTROL PANEL	/	IFS					
MODEL TYPE	1	5	Three Phase Simplex (includes Option 8AC as standard)				
ALARM PACKAGE	<b>✓</b>	1	Alarm Package (includes test/normal/silence switch, fuse, red light, & horn)				
ENCLOSURE RATING	1	W	Weatherproof, NEMA 4X (engineered thermoplastic)				
	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	
PUMP FULL		301	4.0 - 6.3 FLA		305	4.0 - 6.3 FLA	
LOAD AMPS		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	
		Н	Floats - Pump Down (select Option 17 below)				
FLOAT OWITOU		Е	EZconnex® Float Switch System (select Option 33 or 34 below)				
FLOAT SWITCH APPLICATION		Χ	No Floats				
TIT EIGHTION		С	C-Level™ Sensor (select Option 24 or 29)* Select Option 3E and/or 4A & 4D for high water alarm and/or redundant off floats				

	IFS Three Phase Simplex Base Price	
Ē	Alarm Package	
RKS	Enclosure Rating	
MO!	Pump Full Load Amps	
PRICING WORKSHEE	Float Switch Application	
PRI	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
	3A	Alarm Flasher		17C	Sensor Float® / Internally Weighted (per Float) - Mercury
	3B	Manual Alarm Reset		17D	Sensor Float® / Externally Weighted (per Float) - Mercury
	3E	High Water Alarm Float (must also select Option 17) Only Available with Float Switch Application = C		17G	SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical
		Only Available with Float Switch Application = C		17H	SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical
	4A	Redundant Off (must also select Option 4D if floats are required)		17J	Sensor Float® / Pipe Clamp (per Float) - Mercury
	4D	Redundant Off Float (must also select Option 4A and Option 17)		24E	C-Level™ CL40 Sensor with 25' Vented Cable
	5A	Thermal Cutout/Heat Sensor Auto Reset		24F	C-Level™ CL40 Sensor with 50' Vented Cable
		(for pumps with thermal switch leads)		24P	C-Level™ CL40 Sensor with 100' Vented Cable
	5E	Seal Failure Circuit and Red Indicator (2 Wire)		24X	No C-Level™ CL40 Sensor
	6A	Auxiliary Alarm Contact, Form C		29A	C-Level™ CL100 Sensor with 25' Vented Cable
,	✓ 8AC	Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter (included as standard)		29B	C-Level™ CL100 Sensor with 50' Vented Cable
•	OAC	Alarm Counter (included as standard)		29C	C-Level™ CL100 Sensor with 100' Vented Cable
	10E	Lockable Latch - NEMA 4X		29X	No C-Level™ CL100 Sensor
	10G	Lightning Arrestor		33D	EZconnex® 3-Port, 25', with 10' Floats (3) / Pipe Clamp
	10K	Anti-condensation Heater		33E	EZconnex® 3-Port, 50', with 10' Floats (3) / Pipe Clamp
	11C	Additional NEMA 1 Remote Alarm Panel (must also select Option 6A)		33G	EZconnex® 3-Port, 25', with 20' Floats (3) / Pipe Clamp
	11D	Additional NEMA 4X Remote Alarm Panel (must also select Option 6A)		33H	EZconnex® 3-Port, 50', with 20' Floats (3) / Pipe Clamp
	16A	10' Cord in Lieu of 20' Cord (per Float)		34D	EZconnex® 4-Port, 25', with 10' Floats (3) / Pipe Clamp, Sealing Plug
	16B	15' Cord in Lieu of 20' Cord (per Float)		34E	EZconnex® 4-Port, 50', with 10' Floats (3) / Pipe Clamp, Sealing Plug
	16C	30' Cord in Lieu of 20' Cord (per Float)		34G	EZconnex® 4-Port, 25', with 20' Floats (3) / Pipe Clamp, Sealing Plug
	16D	40' Cord in Lieu of 20' Cord (per Float)		34H	EZconnex® 4-Port, 50', with 20' Floats (3) / Pipe Clamp, Sealing Plug

<sup>\*</sup>C-Level™ Sensor lengths up to 300 ft. available. Call for details.

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