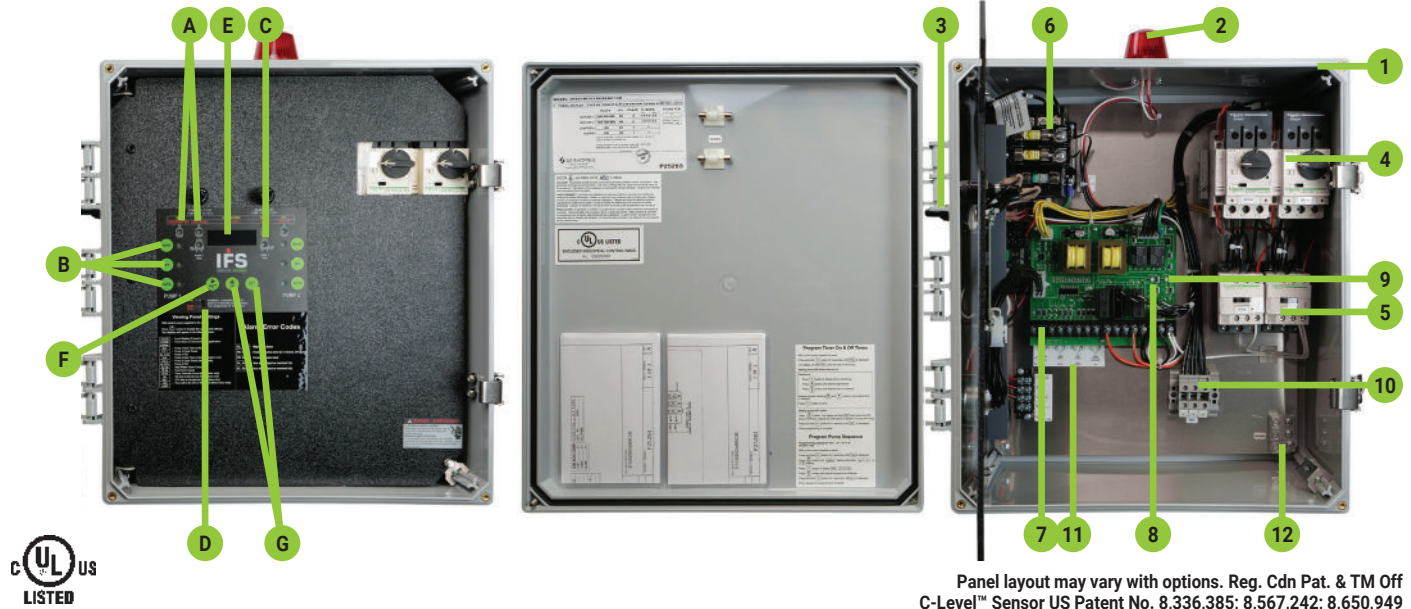# INSTALLER FRIENDLY SERIES® (IFS) THREE PHASE DUPLEX

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 IFS duplex control panel utilizes an innovative circuit board design to control two alternating 208/240/480 VAC three 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. 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

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 indicators will illuminate when pumps are called to run

D. Lead/Lag selector toggles pump operation (alternate 1-2 and 2-1)

E. LED display shows 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)

F. NEXT push button toggles display

G. UP and SET push buttons set pump ON/OFF times (timed dose only) and activation levels (C-Level™ only)

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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. Motor protective switches provide adjustable overload, branch circuit protection and pump disconnect

5. IEC motor contactors control pumps 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. Float connection terminal block

8. Control Power indicator/fuse indicator light illuminates if control power is present in panel; alarm will activate if control fuse is blown

9. 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

13. 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 DUPLEX - Demand or timed dose float controlled system for pump control and system monitoring.

IFS	6	1	W			8AC
CONTROL PANEL	MODEL TYPE	ALARM PACKAGE	ENCLOSURE RATING	PUMP FULL LOAD AMPS	FLOAT SWITCH APPLICATION	OPTIONS (LISTED BELOW)

CONTROL PANEL	✓	IFS	
MODEL TYPE	✓	6	Three Phase Duplex (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)

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

FLOAT SWITCH APPLICATION		
	H	Floats - Pump Down (select Option 17 below)
	E	EZconnex® Float Switch System (select Option 34 or 35 below)
	X	No Floats
	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

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.

ENCLOSURE UPSIZE:
If you selected one or more of the ◆ options, **add a one-time charge** for enclosure upsize.

PRICING WORKSHEET

IFS Three Phase
Duplex Base Price _____

Alarm Package _____

Enclosure Rating _____

Pump Full Load Amps _____

Float Switch Application _____

Total Options _____

Enclosure Upsize _____

TOTAL LIST PRICE _____

	OPTIONS	DESCRIPTION
	3A	Alarm Flasher
	3B	Manual Alarm Reset
	3E	High Water Alarm Float (must also select Option 17) **Only Available with Float Switch 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)
	5A ◆	Thermal Cutout/Heat Sensor Auto Reset (for pumps with thermal switch leads)
	5E ◆	Seal Failure Circuit and Red Indicator (2 Wire)
	6A	Auxiliary Alarm Contact, Form C
✓	8AC	**Display Board - Includes: ETM Counter, Events (Cycles) Counter, Alarm Counter and Lead/Lag Selector (included as standard)**
	10E	Lockable Latch - NEMA 4X
	10G	Lightning Arrestor
	10K	Anti-condensation Heater
	11C	Additional NEMA 1 Remote Alarm Panel (must also select Option 6A)
	11D	Additional NEMA 4X Remote Alarm Panel (must also select Option 6A)
	16A	10' Cord in Lieu of 20' Cord (per Float)
	16B	15' Cord in Lieu of 20' Cord (per Float)
	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 (per Float) - Mercury
17D	Sensor Float® / Externally Weighted (per Float) - Mercury
17G	SJE MilliAmpMaster™ / Pipe Clamp (per Float) - Mechanical
17H	SJE MilliAmpMaster™ / Externally Weighted (per Float) - Mechanical
17J	Sensor Float® / Pipe Clamp (per Float) - Mercury
19F	Fourth Float to Separate Alarm Function from Lag
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
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
35D ■	EZconnex® 4-Port, 25', with 10' Floats (4) / Pipe Clamp
35E ■	EZconnex® 4-Port, 50', with 10' Floats (4) / Pipe Clamp
35G ■	EZconnex® 4-Port, 25', with 20' Floats (4) / Pipe Clamp
35H ■	EZconnex® 4-Port, 50', with 20' Floats (4) / Pipe Clamp

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

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

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Installer Friendly Series®