

# INSTALLER FRIENDLY SERIES® - IFS Single Phase Duplex

Single phase, duplex demand dose or timed dose, float or C-Level™ sensor controlled system for pump control and system monitoring.

The IFS duplex control panel is designed to control two (alternating) 120, 208, 240 VAC single phase pumps in water and sewage installations. The panel features an easy-to-use touch pad with display on the inner door for programming and system monitoring. The alternating action equalizes pump wear. In addition to the alternating pump control, 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.

The optional C-Level™ sensor is a pressure transducer that senses the liquid level in the tank and sends a signal to the IFS 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).

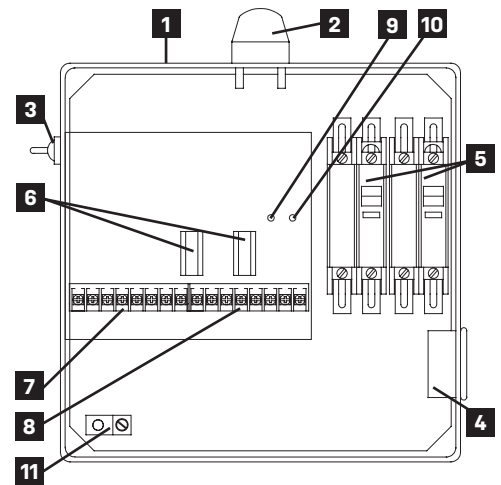
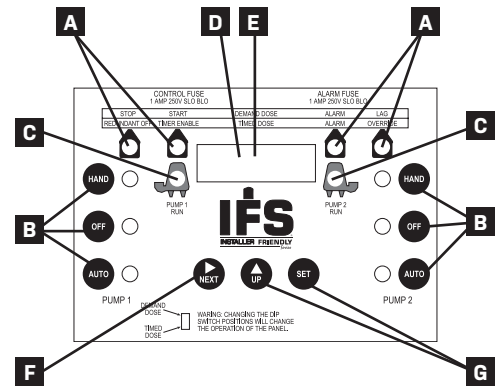
## TOUCH PAD FEATURES

- 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).

## PANEL COMPONENTS

- 1. Enclosure base** measures 10 X 10 X 6 inches (25.4 X 25.4 X 15.24 cm). NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use). **Note:** Options, voltage, and amp range selected may change enclosure size and component layout.
- 2. Red Alarm 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 Power & Pump 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.
- 11. Ground Lug**

**NOTE:** Schematic/Wiring Diagram and Pump Specification Label are located inside the panel on enclosure cover



Model Shown IFS31W114X8AC

Reg. Cdn Pat. & TM Off  
C-Level™ Sensor US Patent No. 8,336,385; 8,567,242; 8,650,949

## FEATURES

- Entire control system is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes:  
**Demand Dose** - three 20' control switches  
**Timed Dose** - two 20' control switches
- Available with EZconnex® float system
- Complete with step-by-step installation instructions
- Five-year limited warranty



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SEE REVERSE SIDE FOR ORDERING INFORMATION.

**MODEL IFS**

<input type="checkbox"/>	<b>MODEL TYPE</b>		
<input type="checkbox"/>	3 = DPLX TIMED DOSE (includes option 8AC standard).....		\$1,092.00
<input type="checkbox"/>	4 = DPLX DEMAND DOSE (includes option 8AC standard).....		\$1,117.00
<input checked="" type="checkbox"/>	<b>ALARM PACKAGE</b>		
	1 = alarm package (includes test/normal/silence switch, fuse, red light & horn) .....		Base
<input checked="" type="checkbox"/>	<b>ENCLOSURE RATING</b>		
	W = NEMA 4X.....		Base
<input type="checkbox"/>	<b>STARTING DEVICE</b>		
<input type="checkbox"/>	1 = 120/208/240 VAC.....		Base
<input type="checkbox"/>	9 = 120 VAC.....		Base
<input type="checkbox"/>	<b>PUMP FULL LOAD AMPS</b>		
<input type="checkbox"/>	0 = 0-7 FLA.....		Base
<input type="checkbox"/>	1 = 7-15 FLA.....		Base
<input type="checkbox"/>	2 = 15-20 FLA.....		\$105.00
<input type="checkbox"/>	<b>PUMP DISCONNECTS</b>		
<input type="checkbox"/>	0 = no pump disconnect.....		Base
<input type="checkbox"/>	4 = circuit breaker(s)		
	120 VAC (must select starting device option 9).....		\$70.00
	120/208/240 VAC (must select starting device option 1).....		\$140.00
<input type="checkbox"/>	<b>SWITCH APPLICATIONS</b>		
<input type="checkbox"/>	H = floats (Timed dose = timer enable and alarm / Demand dose = stop, start, and lag/alarm).....		Base
<input type="checkbox"/>	E = EZconnex® float switch system (select 34 or 35 option)		
	timed dose.....		-\$50.00
	demand dose.....		-\$75.00
<input type="checkbox"/>	X = no floats		
	timed dose.....		-\$50.00
	demand dose.....		-\$75.00
<input type="checkbox"/>	C = C-Level™ sensor (must select 24 or 29 option)		
	(select option 3E and/or 4A & 4D for high water alarm and/or redundant off floats)		
	timed dose.....		-\$50.00
	demand dose.....		-\$75.00

**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** Listed below

Total Options \_\_\_\_\_  
**TOTAL LIST PRICE** \_\_\_\_\_

CODE	DESCRIPTION	LIST PRICE	CODE	DESCRIPTION	LIST PRICE
<input type="checkbox"/>	1J Duo alarm inputs .....	\$25.00	<input type="checkbox"/>	18A Timer override float (timed dose float panel only).....	\$25.00
<input type="checkbox"/>	3A Alarm flasher.....	\$50.00	<input type="checkbox"/>	19F Fourth float to separate alarm function from lag (demand dose float panel only) .....	\$25.00
<input type="checkbox"/>	3B Manual alarm reset .....	\$90.00	<input type="checkbox"/>	24E C-Level™ CL40 sensor with 4' vent tube & 20' cord...\$280.00	
<input type="checkbox"/>	3E High water alarm float (must select 17 option) .....	\$25.00	<input type="checkbox"/>	24F C-Level™ CL40 sensor with 4' vent tube & 40' cord....\$310.00	
	<b>(Available only when Switch Applications = C)</b>		<input type="checkbox"/>	24G C-Level™ CL40 sensor with 8' vent tube & 20' cord..\$285.00	
<input type="checkbox"/>	4A Redundant off (select option 4D if floats are required)		<input type="checkbox"/>	24H C-Level™ CL40 sensor with 8' vent tube & 40' cord...\$315.00	
	Demand Dose .....	\$55.00	<input type="checkbox"/>	24X No C-Level™ CL40 sensor .....	\$0.00
	Timed Dose .....	\$0.00	<input type="checkbox"/>	29A C-Level™ CL100 sensor w/10' vent tube & 20' cord.\$290.00	
<input type="checkbox"/>	4D Redundant off float (must select 4A option) (must select 17 option) .....	\$25.00	<input type="checkbox"/>	29B C-Level™ CL100 sensor w/10' vent tube & 40' cord.\$320.00	
<input type="checkbox"/>	6A Auxiliary alarm contacts, form C.....	\$40.00	<input type="checkbox"/>	29X No C-Level™ CL100 sensor .....	\$0.00
<input checked="" type="checkbox"/>	8AC Display board includes: ETM counter, events (cycles) counter, alarm counter, and override counter (timed dose only). (Included as standard.) .....	\$0.00	<input type="checkbox"/>	34D EZconnex® 4-Port, 25' w/10' floats (3) /pipe clamp, sealing plug *.....	\$343.00
<input type="checkbox"/>	10E Lockable latch - NEMA 4X.....	\$40.00	<input type="checkbox"/>	34E EZconnex® 4-Port, 50' w/10' floats (3) /pipe clamp, sealing plug *.....	\$388.00
<input type="checkbox"/>	10F Lightning arrestor (must select pump circuit breakers, control and alarm power combined) .....	\$230.00	<input type="checkbox"/>	34G EZconnex® 4-Port, 25' w/20' floats (3) /pipe clamp, sealing plug *.....	\$362.00
<input type="checkbox"/>	10K Anti-condensation heater.....	\$100.00	<input type="checkbox"/>	34H EZconnex® 4-Port, 50' w/20' floats (3) /pipe clamp, sealing plug *.....	\$407.00
<input type="checkbox"/>	11C NEMA 1 alarm panel (must select option 6A) .....	\$80.00	<input type="checkbox"/>	35D EZconnex® 4-Port, 25' w/10' floats (4) /pipe clamp *..\$379.00	
<input type="checkbox"/>	11D NEMA 4X alarm panel (must select option 6A) .....	\$250.00	<input type="checkbox"/>	35E EZconnex® 4-Port, 50' w/10' floats (4) /pipe clamp *..\$424.00	
<input type="checkbox"/>	15A Control / Alarm circuit breaker.....	\$85.00	<input type="checkbox"/>	35G EZconnex® 4-Port, 25' w/20' floats (4) /pipe clamp *\$405.00	
<input type="checkbox"/>	16A 10' cord in lieu of 20' (per float) .....	-\$2.00	<input type="checkbox"/>	35H EZconnex® 4-Port, 50' w/20' floats (4) /pipe clamp *\$450.00	
<input type="checkbox"/>	16B 15' cord in lieu of 20' (per float) .....	-\$1.00			
<input type="checkbox"/>	16C 30' cord in lieu of 20' (per float) .....	\$5.00			
<input type="checkbox"/>	16D 40' cord in lieu of 20' (per float) .....	\$15.00			
<input type="checkbox"/>	17C Sensor Float® / internally weighted ▲ (per float) .....	\$9.00			
<input type="checkbox"/>	17D Sensor Float® / externally weighted ▲ (per float) .....	\$11.00			
<input type="checkbox"/>	17G MilliAmpMaster™/ pipe clamp ● (per float) .....	\$0.00			
<input type="checkbox"/>	17H MilliAmpMaster™/ externally weighted ● (per float) .....	\$7.00			
<input type="checkbox"/>	17J Sensor Float® / pipe clamp ▲ (per float).....	\$4.00			

● Mechanically-activated ▲ Mercury-activated  
 \* EZconnex® mechanically-activated, narrow angle float switches with quick release connections.