

INSTALLER FRIENDLY SERIES® - IFS Three Phase Duplex

Three 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) 208, 240 or 480 VAC three phase pumps in water and sewage installations. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail.

The panel features an easy-to-use touch pad with display 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.

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

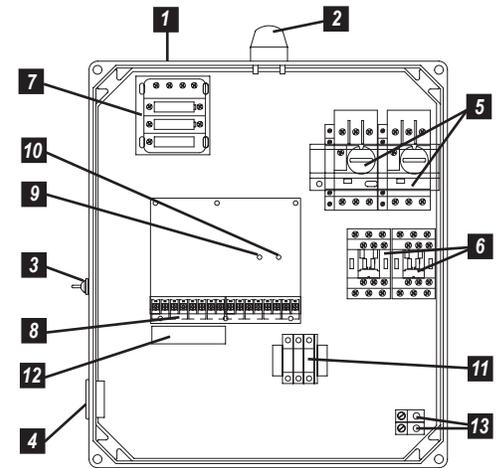
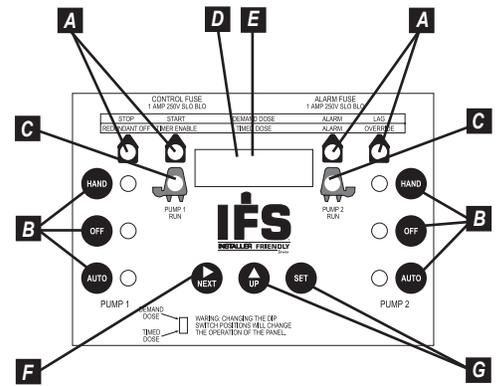
- A. **Level Status Indicators** illuminate when floats or set points are activated. Alarm will activate if a float operates out of sequence.
- B. **HOA (Hand-Off-Automatic) Buttons** control pump mode with indication. Hand mode defaults to Automatic when stop level or redundant off level is reached.
- 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 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). **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. **Motor Protective Switches** provide adjustable overload, branch circuit protection and pump disconnect.
6. **IEC Motor Contactors** control pumps by switching electrical lines.
7. **Multi-Tap Transformer** (208/240/480 VAC primary) provides 120V control alarm voltage or 600VAC primary transformer.
8. **Float Connection 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. **Large Incoming Power Connection Terminal Block**
12. **Terminal Block Float Wiring Label**
13. **Ground Lugs**

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

**SEE BACKSIDE FOR COMPLETE LISTING OF AVAILABLE OPTIONS.
SEE PRICE BOOK FOR LIST PRICE.**



Model Shown IFS61W001X8AC

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 three 20' control switches
- Available with EZconnex® float system
- Complete with step-by-step installation instructions
- Five-year limited warranty



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MODEL IFS6

ALARM PACKAGE
 1 = alarm package (includes test/normal/silence switch, fuse, red light, horn, & float)

ENCLOSURE RATING
 W = Weatherproof, NEMA 4X (engineered thermoplastic)

PUMP FULL LOAD AMPS

208/240/480V	600V
<input type="checkbox"/> 001 = 1.0-1.6 FLA	<input type="checkbox"/> 005 = 1.0-1.6 FLA
<input type="checkbox"/> 101 = 1.6-2.5 FLA	<input type="checkbox"/> 105 = 1.6-2.5 FLA
<input type="checkbox"/> 201 = 2.5-4.0 FLA	<input type="checkbox"/> 205 = 2.5-4.0 FLA
<input type="checkbox"/> 301 = 4.0-6.3 FLA	<input type="checkbox"/> 305 = 4.0-6.3 FLA
<input type="checkbox"/> 401 = 6.0-10.0 FLA	<input type="checkbox"/> 405 = 6.0-10.0 FLA
<input type="checkbox"/> 511 = 9.0-14.0 FLA	<input type="checkbox"/> 515 = 9.0-14.0 FLA
<input type="checkbox"/> 611 = 13.0-18.0 FLA	<input type="checkbox"/> 615 = 13.0-18.0 FLA
<input type="checkbox"/> 621 = 17.0-23.0 FLA	<input type="checkbox"/> 625 = 17.0-23.0 FLA
<input type="checkbox"/> 701 = 20.0-25.0 FLA	<input type="checkbox"/> 705 = 20.0-25.0 FLA

FLOAT SWITCH APPLICATION

H = pump down (select 17 option)
 E = EZconnex® float switch system (select 34 or 35 option)
 X = no floats
 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)

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*

ENCLOSURE UPSIZE - If you selected one or more of the options

- | CODE | DESCRIPTION |
|---|--|
| <input type="checkbox"/> 3A | Alarm flasher |
| <input type="checkbox"/> 3B | Manual alarm reset |
| <input type="checkbox"/> 3E | High water alarm float <i>(must select 17 option)</i>
(Available only when Switch Applications = C) |
| <input type="checkbox"/> 4A | Redundant off
<i>(select option 4D if floats are required)</i> |
| <input type="checkbox"/> 4D | Redundant off float
<i>(must select 4A option) (must select 17 option)</i> |
| <input type="checkbox"/> ★ 5A | Thermal cutout/heat sensor auto reset
<i>(for pumps w/thermal switch leads)</i> |
| <input type="checkbox"/> ★ 5E | Seal failure circuit & red indicator (2 wire) |
| <input type="checkbox"/> 6A | Auxiliary alarm contacts, form C |
| <input checked="" type="checkbox"/> 8AC | Display board includes: ETM counter, events (cycles) counter, alarm counter and lead/lag selector switch. <i>(Included as standard).</i> |
| <input type="checkbox"/> 10E | Lockable latch - NEMA 4X |
| <input type="checkbox"/> 10G | Lightning arrestor |
| <input type="checkbox"/> 10K | Anti-condensation heater |
| <input type="checkbox"/> 11C | NEMA 1 remote alarm panel
<i>(must select option 6A)</i> |
| <input type="checkbox"/> 11D | NEMA 4X remote alarm panel
<i>(must select option 6A)</i> |
| <input type="checkbox"/> 16A | 10' cord in lieu of 20' <i>(per float)</i> |
| <input type="checkbox"/> 16B | 15' cord in lieu of 20' <i>(per float)</i> |
| <input type="checkbox"/> 16C | 30' cord in lieu of 20' <i>(per float)</i> |
| <input type="checkbox"/> 16D | 40' cord in lieu of 20' <i>(per float)</i> |

- | CODE | DESCRIPTION |
|------------------------------|---|
| <input type="checkbox"/> 17C | Sensor Float® / internally weighted ▲ <i>(per float)</i> |
| <input type="checkbox"/> 17D | Sensor Float® / externally weighted ▲ <i>(per float)</i> |
| <input type="checkbox"/> 17G | SJE MilliAmpMaster™ / pipe clamp ● <i>(per float)</i> |
| <input type="checkbox"/> 17H | SJE MilliAmpMaster™ / externally weighted ● <i>(per float)</i> |
| <input type="checkbox"/> 17J | Sensor Float® / pipe clamp ▲ <i>(per float)</i> |
| <input type="checkbox"/> 19F | Fourth float to separate alarm function from lag |
| <input type="checkbox"/> 24E | C-Level™ CL40 sensor with 4' vent tube & 20' cord |
| <input type="checkbox"/> 24F | C-Level™ CL40 sensor with 4' vent tube & 40' cord |
| <input type="checkbox"/> 24G | C-Level™ CL40 sensor with 8' vent tube & 20' cord |
| <input type="checkbox"/> 24H | C-Level™ CL40 sensor with 8' vent tube & 40' cord |
| <input type="checkbox"/> 24X | No C-Level™ CL40 sensor |
| <input type="checkbox"/> 29A | C-Level™ CL100 sensor w/10' vent tube & 20' cord |
| <input type="checkbox"/> 29B | C-Level™ CL100 sensor w/10' vent tube & 40' cord |
| <input type="checkbox"/> 29X | No C-Level™ CL100 sensor |
| <input type="checkbox"/> 34D | EZconnex® 4-Port, 25', w/10' floats (3) /pipe clamp, sealing plug * |
| <input type="checkbox"/> 34E | EZconnex® 4-Port, 50', w/10' floats (3) /pipe clamp, sealing plug * |
| <input type="checkbox"/> 34G | EZconnex® 4-Port, 25', w/20' floats (3) /pipe clamp, sealing plug * |
| <input type="checkbox"/> 34H | EZconnex® 4-Port, 50', w/20' floats (3) /pipe clamp, sealing plug * |
| <input type="checkbox"/> 35D | EZconnex® 4-Port, 25', w/10' floats (4) /pipe clamp * |
| <input type="checkbox"/> 35E | EZconnex® 4-Port, 50', w/10' floats (4) /pipe clamp * |
| <input type="checkbox"/> 35G | EZconnex® 4-Port, 25', w/20' floats (4) /pipe clamp |
| <input type="checkbox"/> 35H | EZconnex® 4-Port, 50', w/20' floats (4) /pipe clamp * |

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