

INSTALLER FRIENDLY SERIES® - IFS Single Phase Simplex Capacitor (Start/Run)

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

The IFS single phase simplex capacitor (start/run) control panel is designed to control one 120, 208, or 240 VAC single phase pump in water and sewage installations. The IFS single phase simplex capacitor (start/run) control panel features a simple, easy-to-use touch pad on the inner door for programming and monitoring pump and float operation.

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).

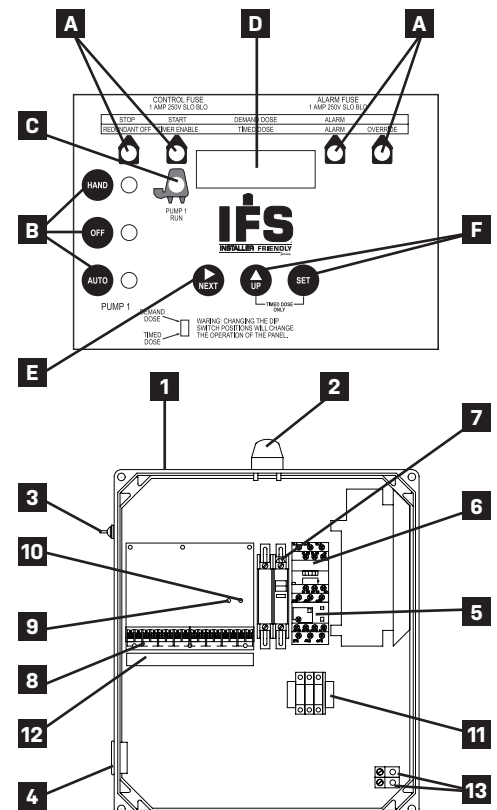
TOUCH PAD FEATURES

- 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 Indicator** illuminates when pump is called to run.
- D. LED Display** shows system information including: level in inches or centimeters (C-Level™ only), mode, pump elapsed time (hh:mm), events (cycles), alarm counter, float error count, timed does 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) or 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. Overload Relay** (optional) provides pump overload protection.
- 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: Schematic/Wiring Diagram and Pump Specification Label are located inside the panel on enclosure cover.



Model Shown IFS71W114X912A8C

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. This express warranty does not apply to the motor start kit components. SJE Rhombus will warranty motor start kit components supplied by SJE Rhombus for one year. SJE Rhombus makes no warranties of any type with respect to motor start kits supplied by a customer.



SJE RHOMBUS

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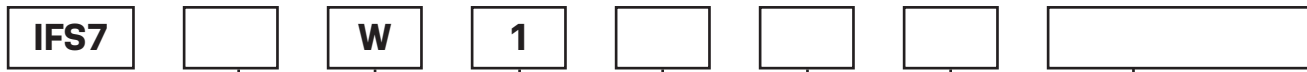
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**SEE REVERSE SIDE FOR ORDERING INFORMATION.
SEE PRICE BOOK FOR LIST PRICE.**



MODEL IFS7

ALARM PACKAGE

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

ENCLOSURE RATING

W = Weatherproof, NEMA 4X (engineered thermoplastic)

STARTING DEVICE

1 = IEC motor contactor 120/208/240V

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 or L = pump down or pump up (select 17 option)
- E = Ezconnex® float switch system (select 33 or 34 option)
 - WITH alarm package
- X = no floats
 - WITH alarm package
- 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*

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

- | CODE | DESCRIPTION |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> 3A | Alarm flasher |
| <input type="checkbox"/> 3B | Manual alarm reset |
| <input type="checkbox"/> 3E | High water alarm float (must select 17 option) |
| (Available only when Switch Applications = C) | |
| <input type="checkbox"/> 4A | Redundant off
(select option 4D if floats are required) |
| <input type="checkbox"/> 4D | Redundant off float
(must select 4A option) (must select 17 option) |
| <input type="checkbox"/> 5A | Thermal cutout/heat sensor auto reset
(for pumps w/thermal switch leads) |
| <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. (Included as standard) |
| <input type="checkbox"/> 9_A | Pump overload
specify amperage after number 9 followed by letter "A".
Example: 912A = 12 amp pump. |
| <input type="checkbox"/> | 0-30 FLA |
| <input type="checkbox"/> | 30-100 FLA |
| <input type="checkbox"/> 10E | Lockable latch - NEMA 4X |
| <input type="checkbox"/> 10F | Lightning arrestor (must select pump circuit breakers, control and alarm power combined) |
| <input type="checkbox"/> 10K | Anti-condensation heater |
| <input type="checkbox"/> 11C | NEMA 1 remote alarm panel
(must select option 6A) |
| <input type="checkbox"/> 11D | NEMA 4X remote alarm panel
(must select option 6A) |
| <input type="checkbox"/> 12B | Customer supplied motor start components, mounted in enclosure by SJE Rhombus |
| <input type="checkbox"/> 12C | Motor start component, mounted and supplied by SJE Rhombus |

- | CODE | DESCRIPTION |
|------------------------------|---------------------------------------------------------------------|
| <input type="checkbox"/> 16A | 10' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 16B | 15' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 16C | 30' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 16D | 40' cord in lieu of 20' (per float) |
| <input type="checkbox"/> 17C | Sensor Float® / internally weighted ▲ (per float) |
| <input type="checkbox"/> 17D | Sensor Float® / externally weighted ▲ (per float) |
| <input type="checkbox"/> 17G | SJE MilliAmpMaster™/ pipe clamp ● (per float) |
| <input type="checkbox"/> 17H | SJE MilliAmpMaster™/ externally weighted ● (per float) |
| <input type="checkbox"/> 17J | Sensor Float® / pipe clamp ▲ (per float) |
| <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"/> 33D | EZconnex® 3-Port, 25', w/10' floats (3) /pipe clamp * |
| <input type="checkbox"/> 33E | EZconnex® 3-Port, 50', w/10' floats (3) /pipe clamp * |
| <input type="checkbox"/> 33G | EZconnex® 3-Port, 25', w/20' floats (3) /pipe clamp * |
| <input type="checkbox"/> 33H | EZconnex® 3-Port, 50', w/20' floats (3) /pipe clamp * |
| <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 * |

● Mechanically-activated ▲ Mercury-activated

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