SubMonitor, 3-phase Pump Protection, 3-200 Hp

The SubMonitor is the latest innovation in 3-phase pump protection from Franklin Electric. Using state-of-the-art technology, the SubMonitor provides the ultimate protection for a pump and motor. There is simply no better way to protect a large 3-phase submersible pump investment than with a SubMonitor. It's the protection device that can sense overheating straight from the motor windings!* And it is made by the world leader in submersible motors – Franklin Electric.

APPLICATION DATA

The SubMonitor is designed to protect 3-phase pumps with horsepower ratings between 3 and 200 Hp. Current, voltage and motor temperature are monitored using three integrated current transformers. A digital display provides current and voltage readings for all three legs and allows the user to set up the SubMonitor quickly and easily.

FEATURES & BENEFITS

- Quick setup to monitor a motor, simply enter the Line Frequency (Hz), Line Voltage (volts), and Motor Service Factor Amp rating.
- Digital display indicates voltage and current on all three legs at the same time, and fault messages are in easily understandable text.
- Monitors
  - Under/Overload
  - Current Unbalance
  - False Start (Chattering)
  - Under/Overvoltage
  - Overheated Motor (Subtrol-Equipped)
  - Phase Reversal
- For motors with service factor amp ratings between 3 and 359 amps.
- One unit covers the entire range from 190 to 600 Volts.
- No need to make additional turns around the CT or add external CTs.
- Password Protection Option.
- DIN Rail Mounting Option.
- Stores fault, setting changes, and pump run-time, that can be accessed through the display.
- Detachable NEMA 3R display unit can be mounted on panel door.
- UL 508 Listed.

WARNINGS: Serious or fatal electrical shock or fire hazard may result from failure to follow the instructions for proper installation and use which accompany this equipment. Do not use motor in swimming areas.

SPECIFICATIONS

Model Number
Premium Package** 586 000 5100

Input Voltage ..... 190 – 600 VAC

Frequency ..... 60/50 Hz

Motor Service Factor Amps ..... 3 to 359 Amps

Maximum Conductor Size Through Sensors
Max Diameter ..... 0.920 in. (23 mm)

Trip Response
Motor Under/Overload, Under/Overvoltage, Overheat, Unbalance ..... 3 seconds

Control Circuit Rating ..... 1.5 Amp AC, up to 600 volts

Signal Circuit Rating ..... 1 Amp AC, up to 250 volts (Incandescent lamp: 100 watts max)

Wiring Terminals
Wire Gauge ..... #12 to #18 AWG
Tighten to ..... 4.5 in-lbs

Weight (SubMonitor) ..... 3.3 lbs/1.5 kg

Carton Size (Std. Unit) ... 7.75 in x 11.5 in x 6.75 in (19.7 cm x 29.2 cm x 17.1 cm)

Shipping Weight (Std. Unit) ..... 3.5 Lbs./1.5 Kg.

* For motors equipped with Subtrol sensor

** Premium package includes lightning arrestor and 3-year warranty on SubMonitor and motor

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Display

- Real time display of voltage and current for each leg.
- Easy menu-driven setup and adjustment of monitoring parameters.

Detachable Display Unit

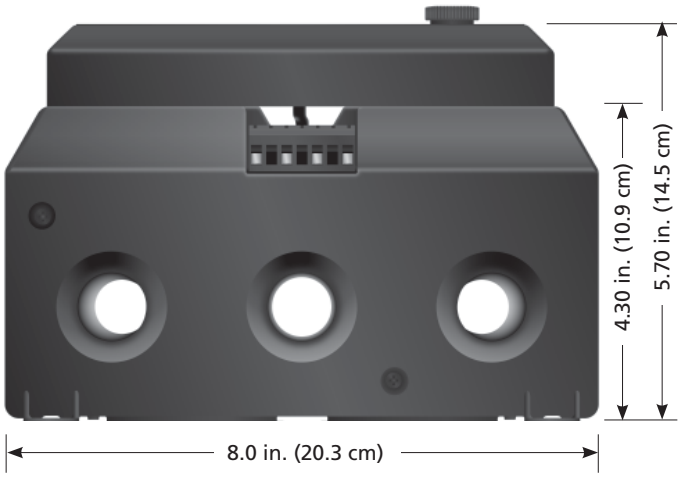
The detachable display unit displays and stores data it receives from the base unit.

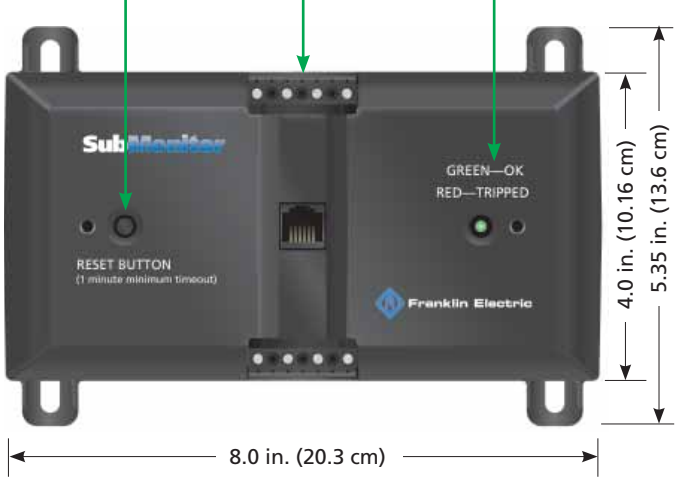
- Can be mounted on panel door for easy access and display of motor amps and voltage as well as fault messages. Communication cable connects the display to the base unit.
- Fault light can be seen from a distance - indicates that a trip has occurred and that a fault message is being displayed.
- Turn-and-push adjustment knob to access the setup menu, enable or disable monitoring parameters, and read fault data history.

Base Unit

The base unit contains the current sensors and electronics that monitor motor leads that pass through the sensors. It can operate independently of the detachable head.

- Can be mounted with 4 screws or with DIN rail.
- Dual colored fault light indicates status of the unit
  - Green ..... OK
  - Red ..... FAULT
- Power, control, and alarm terminal connectors are removable for easy access.
- Reset button allows the user to restart a motor after a trip has occurred.





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