




 LISTED
 IND. CONT. EQ.
 496Y
 (Model AEE)

Submersible Pump Monitor Dual Function Alarm Relay

SPECIFICATIONS

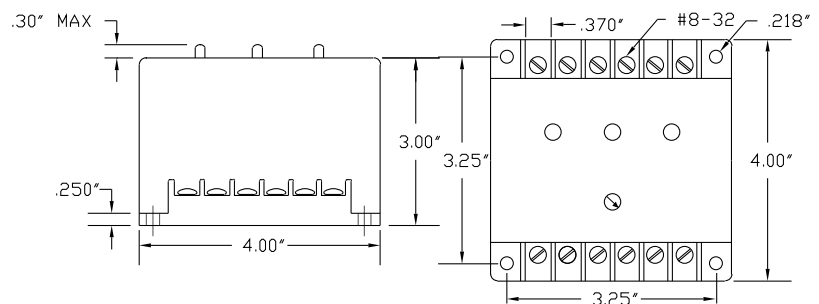
CONTROL VOLTAGE	120 VAC, 50/60 Hz (Model AEE) 120-240V AC 50/60 Hz (Model AEA) 24V AC/DC (Model AEA)
SENSOR VOLTAGE	12 VDC (Model AEE) 9V DC (Model AEA)
POWER REQUIRED	4 VA
DUTY CYCLE	Continuous
SENSITIVITY	Leakage 1K Ω to 35K Ω adjustable (Model AEE) 1K Ω to 25K Ω adjustable (Model AEA) 4.7K Ω to 100K Ω adjustable (Model AEA) Over Temperature Open Circuit
CONTACT RATING	(2) SPDT, 10 A @ 120 VAC Resistive
LIFE EXPECTANCY	Mechanical 10 Million Operations Electrical 100,000 Operations @ Rated Load
INDICATORS	Green LED illuminates under normal conditions Red LED illuminates when leak is detected Red LED illuminates on over-temperature
TEMPERATURE RATING	Operate -4° to 131°F (-20° to +55°C) Storage -40° to 185°F (-40° to +85°C)
RESPONSE TIMES	Leakage Trip 1 SEC Leakage Reset 1 SEC Temperature Trip 0.1 SEC
TERMINATIONS	(12) #8-32 Screw Terminals (Model AEE)
ENCLOSURE	Style "E" Lexan® Surface Mounted (Model AEE) Style "A" 11 Pin Plug-In (Model AEA)
WEIGHT	17 oz. (Model AEE)
RESET	Seal Leakage: When the leakage condition clears the relay resets automatically Over Temperature: 1. Remote Manual Reset 2. For "S" type models when reset switch is set in auto position the unit will be reset by interrupting supply voltage for 1.5 sec.

The ATC Diversified **Submersible Pump Monitor** is a specialized control for monitoring the **shaft seal** and stator **temperature** of a **submersible pump motor**. Seal leakage is detected by either a resistive float switch or a pair of conductive probes installed in the seal cavity. Over-temperature is detected by a normally-closed-low temperature switch mounted on the stator. The over-temperature function incorporates a bistable relay that retains its position during power failures. For (S) models over-temperature reset can be configured by changing the reset switch.

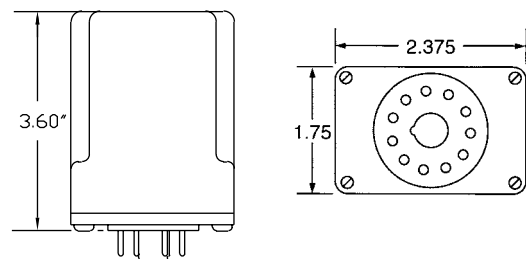
ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
SPM120AEE	Dual Function Alarm Relay 120 vac Base Mount.
SPM120AEA25K	Dual Function Alarm Relay 120 vac, 1k to 25 k sensitivity, Plug-in.
SPM24AEA25K	Dual Function Alarm Relay 24v ac/dc, 1k to 25 k sensitivity, Plug-in.
SPM120AEA100K	Dual Function Alarm Relay 120 vac, 4.7k to 100 k sensitivity, Plug-in.
SPM24AEA100K	Dual Function Alarm Relay 24v ac/dc 4.7k to 100 k sensitivity, Plug-in.
SPM120AEA(S)25K	Dual Function Alarm Relay 120 vac, 1k to 25 k sensitivity, Plug-in, reset mode selector switch.
SPM24AEA(S)25K	Dual Function Alarm Relay 24v ac/dc, 1k to 25 k sensitivity, Plug-in, reset mode selector switch.
SPM120AEA(S)100K	Dual Function Alarm Relay 120 vac, 4.7k to 100k sensitivity, Plug-in, reset mode selector switch.
SPM24AEA(S)100K	Dual Function Alarm Relay 24v ac/dc, 4.7k to 100k sensitivity, Plug-in, reset mode selector switch.

DIMENSIONS (INCHES) MODEL (AEE) BASE MOUNT



DIMENSIONS (INCHES) MODEL (AEA) 11 PIN PLUG-IN



OPERATION

Figure 1 shows the connections for use with a Flygt model FLS float switch. The leakage sensitivity must be adjusted to 1 k for float switch applications. If a pair of conductive probes is used to sense seal leakage, a 100 k resistor is required as shown in Figure 2, and the sensitivity should be set to the desired value.

The states of the unit's relay outputs are determined by the series combination resistance of the leakage and temperature sensors. Under normal conditions the resistance remains between the leakage and over-temperature sensitivities, and both output relays are de-energized. If the temperature switch opens, the over-temperature relay latches on until the remote reset button is pressed. Two conditions must be met for reset to occur: power must be applied and the temperature switch must be closed. If the leakage sensor resistance drops below the leakage sensitivity setting, the leakage relay energizes. When the leakage condition clears, the relay resets automatically.

CAUS
E55826
(Model AEA)



WIRING MODEL (AEE) (BASE MOUNT)

Figure 1

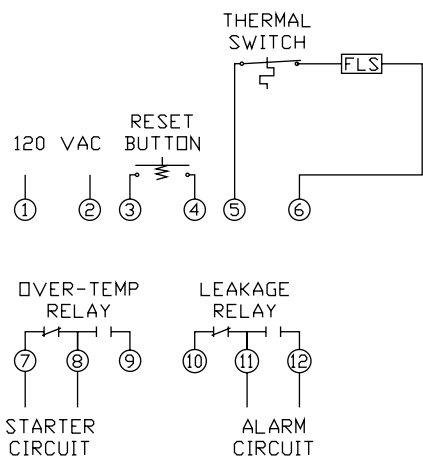
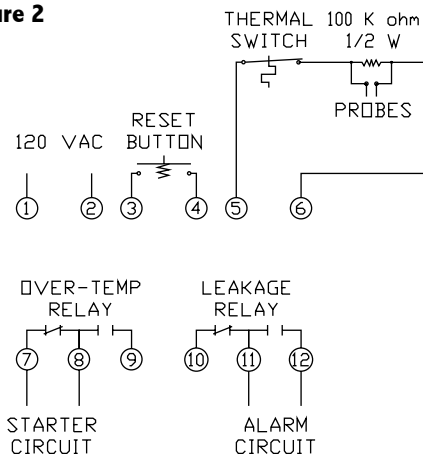


Figure 2



WIRING MODEL (AEA) (PLUG-IN)

Figure 1

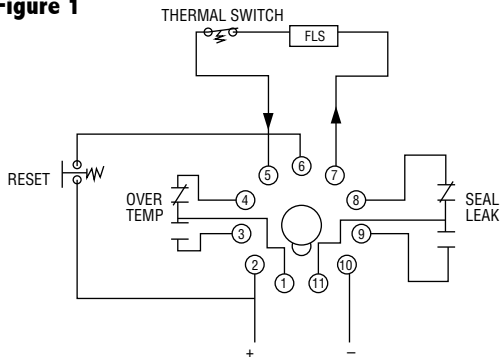
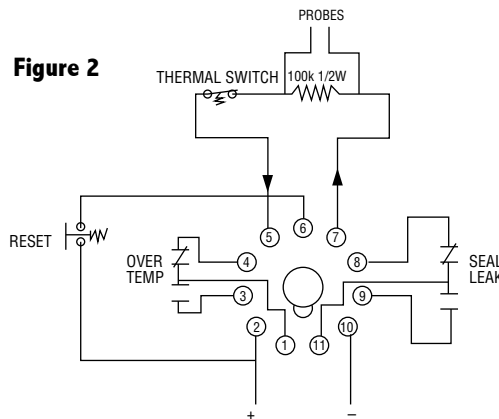


Figure 2



ACCESSORIES: SOCKETS

- OT11-PC 11 pin din-rail mount socket.
- RB-11 11 pin surface mount socket.