

PUMP SEAL FAILURE RELAYS

Plug-in

Single & Dual Channel



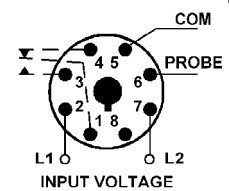
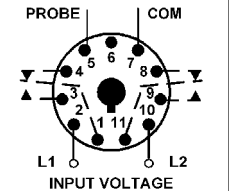
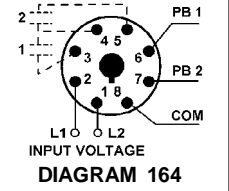
- u Monitors Submersible Pump Seals for Leakage
- u Single or Dual Channel for Monitoring 1 or 2 Pumps
- u Three Adjustable Sensitivity Ranges
- u Optional Fixed Sensitivity Setting Available
- u Optional Low-Profile Adjustment Knob
- u Uses industry-standard 8 & 11 pin octal sockets

u  (Pending)

 with appropriate socket (Pending)

SFP Series Pump Seal Failure Relays are designed to monitor the shaft seals of submersible pumps. A resistive-measuring probe is installed in the pump seal cavity. If the seal starts to leak, contaminating fluid enters the seal cavity, lowering the resistance between the internal probe & the common connection. When the resistance drops below the user-adjustable sensitivity set-point of the relay, the output relay energizes & the LED turns ON. The relay output can be used to give an alarm indication of a leaking seal. These products will automatically reset when the fault condition clears.

Three output configurations are offered: an 8 pin SPDT single channel relay & an 11 pin DPDT single channel relay to monitor a single pump, and an 8 pin dual channel relay (with 2 SPNO contacts) to monitor two pumps. In addition to the three adjustable sensitivity ranges offered, relays with fixed values are available--contact Macromatic for more information (minimum quantities apply). An optional low-profile adjustment knob to prevent accidental change of setting is also available (see footnote below).

| CONFIGURATION | INPUT VOLTAGE | SENSITIVITY RANGE | PRODUCT NUMBER n | WIRING/ SOCKET |
|--------------------------------|---------------|--|--|--|
| SINGLE CHANNEL 8 Pin SPDT | 120V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP120A025 SFP120A100 SFP120A250 | 8 Pin Octal 70169-D  INPUT VOLTAGE DIAGRAM 163 |
| | 240V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP240A025 SFP240A100 SFP240A250 | |
| SINGLE CHANNEL 11 Pin DPDT | 120V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP120B025 SFP120B100 SFP120B250 | 11 Pin Octal 70170-D  INPUT VOLTAGE DIAGRAM 162 |
| | 240V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP240B025 SFP240B100 SFP240B250 | |
| DUAL CHANNEL 8 Pin (2) SPNO | 120V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP120C025 SFP120C100 SFP120C250 | 8 Pin Octal 70169-D  INPUT VOLTAGE DIAGRAM 164 |
| | 240V AC | 10K to 25KΩ 4.7K to 100KΩ 10K to 250KΩ | SFP240C025 SFP240C100 SFP240C250 | |



800-238-7474

www.macromatic.com
sales@macromatic.com

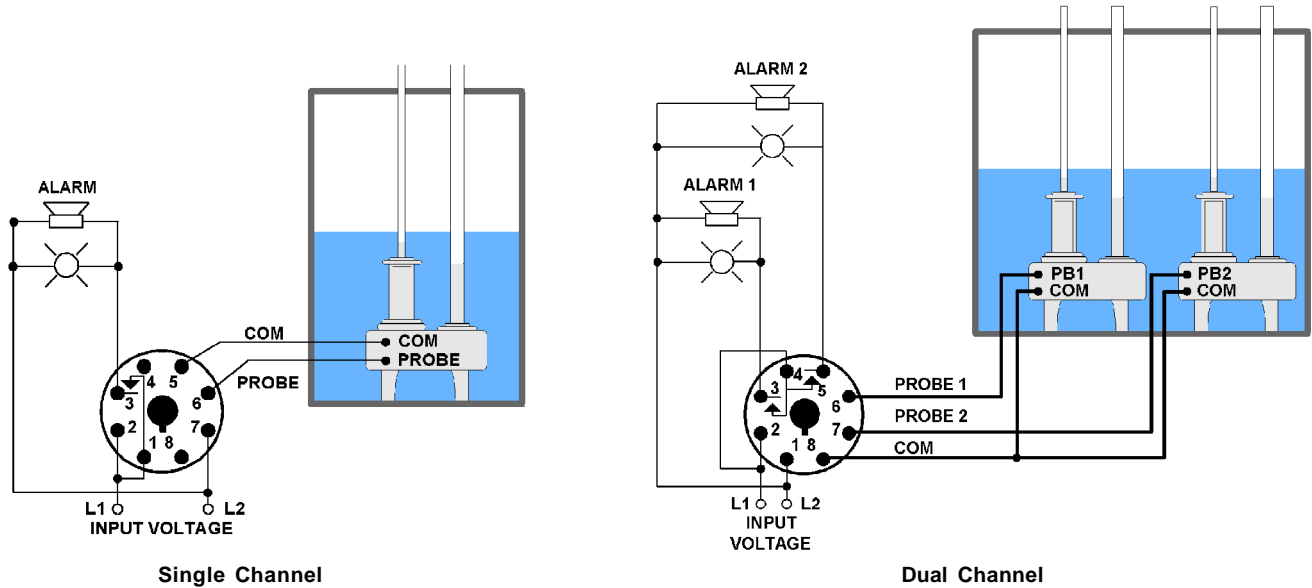
n To order a product with a low-profile adjustment knob, add the suffix "L" to the Product Number, i.e., SFP120A100L.

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Plug-in

Single & Dual Channel
Application Data & Dimensions

Typical Installations



Application Data

Voltage Tolerance:

AC Operation: +10/-15% of nominal at 50/60 Hz.

Load (Burden):

2VA

Probe Voltage:

9V DC

Response Time:

Pick-up: 10ms

Drop-out: 10ms

LED Indicator:

Red ON when seal leak detected & relay energized.

Temperature:

-28° to 65°C (-18° to 150°F)

Output Contacts:

Single Channel Relays: 10A @ 240V AC / 7A @ 30V DC,

1/4HP @ 120/240V AC

Dual Channel Relays: (2) 5A @ 240V AC / 5A @ 30V DC,

1/4HP @ 120/240V AC

Life:

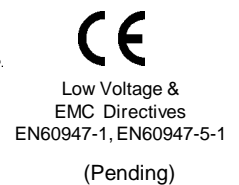
Mechanical: 2,000,000 operations

Full Load: 100,000 operations

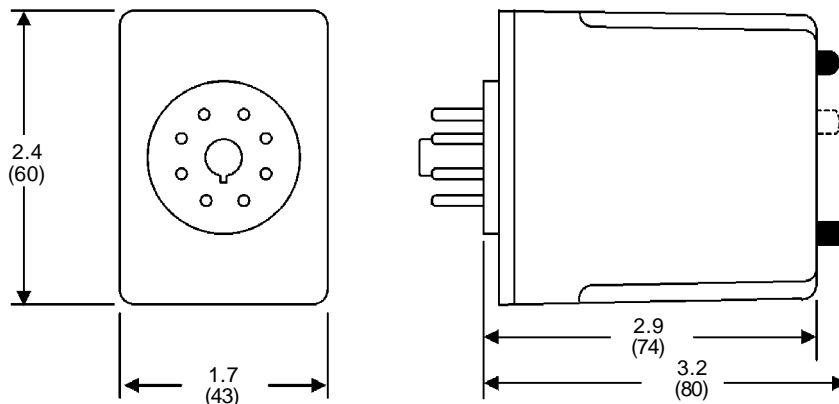
Insulation Voltage:

2,000 volts

Approvals:



Dimensions



All Dimensions in
Inches (Millimeters)