Pump Seal Failure Relay

**PSFR Series**

This relay is designed to monitor the shaft seals of submersible pumps. A resistive-measuring probe is installed in the pump seal cavity provided by pump manufacturer. If the seal starts to leak, contaminating fluid enters the seal cavity provided by pump manufacturer, lowering the resistance between the internal probe and the common connection.

**Features**

- Monitors submersible pump seals for leakage
- 8-pin, SPDT, single channel for monitoring one pump
- Adjustable sensitivity ranges (4.7K, 20K, 47K, 100K)
- Uses industry-standard 8-pin octal sockets

**Agency Approvals**

- cURus, File number E191059
- CE, EN60947-1, EN60947-5-1
- RoHS

**Technical Specifications**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Pcs/Pkg</th>
<th>Wt (lb)</th>
<th>Price</th>
<th>Use With</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSFR-1C-120A</td>
<td>Pump seal failure relay, monitors shaft seals of submersible pumps. Single channel, adjustable sensitivity range from 4.7K, 20K, 47K, 100K, LED failure indication, one 10A single-pole double-throw output contacts, 8-pin octal base, 9 VDC probe voltage.</td>
<td>1</td>
<td>0.4</td>
<td>$52.00</td>
<td>70169-D or 750-2C-SKT</td>
</tr>
<tr>
<td>70169-D</td>
<td>Relay socket, 10A at 600 V rated, 8-pin octal configuration. Can be mounted on 35mm DIN rail or directly mounted to the panel.</td>
<td>1</td>
<td>0.1</td>
<td>$3.50</td>
<td>-----</td>
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<tr>
<td>750-2C-SKT</td>
<td>Relay socket, 5A at 600 V rated, 8-pin octal configuration. Can be mounted on 35mm DIN rail or directly mounted to the panel.</td>
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When the resistance drops below the user-adjustable sensitivity setpoint of the relay, the output relay energizes and the LED turns ON. The relay output can be used to give an alarm indication of a leaking seal. The relay will automatically reset when the fault condition clears.

**Agency Approvals**

- cURus, File number E191059
- CE, EN60947-1, EN60947-5-1
- RoHS

(with appropriate socket 70169-D)
Pump Seal Failure Relay

Wiring

**PSFR-1C-120A**

**Dimensions**

**PSFR-1C-120A**

All Dimensions in Inches (Millimeters)

**Typical Installations**

**PSFR-1C-120A**

Single Channel

Prices as of April 16, 2014. Check Web site for most current prices.
8-pin Octal Socket

**Features**
- 600V (Plug-in 3-phase monitor relays require a 600V-rated socket when used with system voltages greater than 300V)
- Mounts on 35mm DIN rail
- Screw pressure wire clamp termination

**Agency Approvals**
- cURus, File number E191059, E225080
- CE
- RoHS

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<tr>
<th>Part Number</th>
<th>Voltage</th>
<th>Current</th>
<th>Screw Size</th>
<th>Screw wire size (capacity)</th>
<th>Screw wire torque</th>
<th>Screw chassis mounting torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>70169-D</td>
<td>600V</td>
<td>10A</td>
<td>6-32</td>
<td>1 or 2 #12-#22 AWG</td>
<td>6-7 Lb-in (12 Lb-in max)</td>
<td>7 Lb-in</td>
</tr>
<tr>
<td>750-2C-SKT</td>
<td>600V</td>
<td>5A</td>
<td>M3.5</td>
<td>(1) #12/ (2) #14 AWG</td>
<td>9 Lb-in</td>
<td>7 Lb-in</td>
</tr>
</tbody>
</table>

**Dimensions**

**70169-D**

```plaintext
Dimensions in Inches (Millimeters)
```

**750-2C-SKT**

**Socket Pinouts**

**70169-D**

```
Socket Pinouts
```

```
750-2C-SKT
```

**All Dimensions in Inches (Millimeters)**