AC Current Switch

Current-Operated Solid-State Relays for Switching AC Circuits

Description
The ACS-0 and ACS-5 products are solid-state current switches with N.O. triac outputs to control high-current line-voltage AC loads. The ACS-0 and ACS-5 models have a factory set trip level of approximately 1 Amp and require no field adjustment for easy installation. Internal circuits are powered by induction from the line being monitored and all models are cULus certified.

Features
- Self-powered and no insertion loss
- True digital switching and no leakage
- Small compact size
- Input / Output isolation via current transformer
- Solid-state reliability
- Solid, reliable mounting method

Applications
Direct control of AC loads, such as dryer booster fans, in response to the current of a monitored AC circuit.

Specifications
Maximum Core Current : 50 Amps
Operating Temperature :
0 to 40°C (32° to 104°F)
Trip Set-Point : Approximately 1 Amps
Enclosure Size (H x W x D) :
49 x 87 x 25mm (1.95” x 3.45” x 1”)
AC Conductor Hole : 20mm (0.8”) Diameter
Switch Rating : 120 Vac @ 2.5 Amps Max.
Turn on time : <200 ms
ACS-0 turn off time : 0 minute (factory set)
ACS-5 turn off time : 5 minutes (factory set)
Operating Humidity :
0 - 95% RH non-condensing
Material : UL 94V-0 flammability rated ABS Insulation Class 600V
Mounting Holes : 2 x 5mm holes spaced 76mm on base (2 x 0.19” holes spaced 3” on base)
Switch Type : Solid-state triac
Off-state Leakage : <1 mA

Dryer Booster Fan Operation
The ACS-0 and ACS-5 can operate a dryer booster fan directly. These devices sense when a clothes dryer is drawing 1 Amp of current and then closes the output switch to activate the dryer vent booster fan. When the dryer cycle is complete and the current drops below the threshold, the output switch will open again (with a 5 minute delay for the ACS-5). The device output can switch 120 Vac loads up to 2.5 Amps.

Current Switch : Product ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Output Type</th>
<th>Switch V Max.</th>
<th>Switch I Max.</th>
<th>Leakage Current</th>
<th>Input I Min.</th>
<th>Input I Max.</th>
<th>Time Delay (off)</th>
<th>Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS-0</td>
<td>Triac</td>
<td>120 VAC</td>
<td>2.5 Amp</td>
<td>&lt;1 mA</td>
<td>~1 Amp</td>
<td>50 Amps</td>
<td>none</td>
<td>cULus</td>
</tr>
<tr>
<td>ACS-5</td>
<td>Triac</td>
<td>120 VAC</td>
<td>2.5 Amp</td>
<td>&lt;1 mA</td>
<td>~1 Amp</td>
<td>50 Amps</td>
<td>5 minutes</td>
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