

AC Current Switch

ACS

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 :

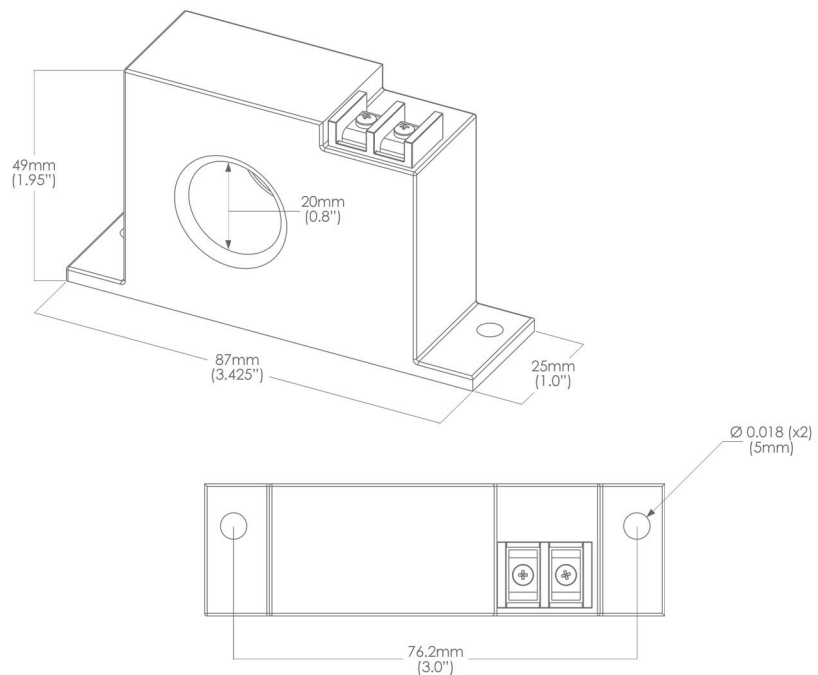
0 - 95% RH non-condensing

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

MODEL	Output Type	Switch V Max.	Switch I Max.	Leakage Current	Input I Min.	Input I Max.	Time Delay (off)	Approval
ACS-0	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	none	cULus
ACS-5	Triac	120 VAC	2.5 Amp	<1 mA	~1 Amp	50 Amps	5 minutes	cULus

