## AC CURRENT SWITCH

## CS-425-HC Series

## APPLICATIONS:

- Direct control of AC loads, such as dryer booster fans, in response to the current of a monitored AC circuit
- Replaces Differential Pressure Switches


## DESCRIPTION:

The CS-425-HC products are solid-state current switches with N.O. triac outputs to control high-current line-voltage AC loads. All 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 cULu certified.

SPECIFICATIONS:

| Maximum Core <br> Current | 50 Amps | Turn on <br> time <br> Turn off <br> time | $<200 \mathrm{mS}$ |
| :--- | :--- | :--- | :--- |
| Operating <br> Temperature | 0 to $40^{\circ} \mathrm{C}\left(32 \mathrm{to} 104^{\circ} \mathrm{F}\right)$ | Operating <br> Humidity | $0-95 \%$ RH non-condensing |
| Trip Set-Point | Approximately 1 Amps | Material | UL 94V-0 flammability rated ABS <br> Insulation Class 600V |
| Enclosure Size <br> (H xW x D) | $49 \times 87 \times 25 \mathrm{~mm}\left(1.95^{\prime \prime} \times 3.45^{\prime \prime} \times 1^{\prime \prime}\right)$ | Mounting <br> Holes | $2 \times 5 \mathrm{~mm}$ holes spaced 76 mm on base <br> $\left(2 \times 0.19^{\prime \prime}\right.$ holes spaced 3" on base) |
| AC Conductor <br> Hole | $20 \mathrm{~mm}\left(0.8^{\prime \prime}\right)$ Diameter | Switch Type | Solid-state triac |
| Switch Rating | 120 Vac @ 2.5 Amps Max. | Off-state <br> Leakage | $<1 \mathrm{~mA}$ |

## DRYER BOOSTER FAN OPERATION:

The CS-425-HC series 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 remain closed for a pre-set delay time to allow heat to be removed from the vent before the switch is opened again. The device output can switch 120 Vac loads up to 2.5 Amps .

## CURRENT SWITCH: PRODUCT ORDERING INFORMATION

| Model | Output <br> Type | Switch V <br> Max. | Switch I <br> Max. | Leakage <br> Current | Input I <br> Min. | Input It <br> Max. | Time Delay <br> (off) | Approval |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS-425-HC-0 | Triac | 120 VAC | 2.5 Amp | $<1 \mathrm{~mA}$ | $\sim 1 \mathrm{Amp}$ | 50 Amps | none | cULus |
| CS-425-HC-5 | Triac | 120 VAC | 2.5 Amp | $<1 \mathrm{~mA}$ | $\sim 1 \mathrm{Amp}$ | 50 Amps | 5 minutes | cULus |
| CS-425-HC-10 | Triac | 120 VAC | 2.5 Amp | $<1 \mathrm{~mA}$ | $\sim 1 \mathrm{Amp}$ | 50 Amps | 10 minutes | cULus |
| CS-425-HC-15 | Triac | 120 VAC | 2.5 Amp | $<1 \mathrm{~mA}$ | $\sim 1 \mathrm{Amp}$ | 50 Amps | 15 minutes | cULus |

