

# **DRYER** CURRENT SENSOR

These are the same controls used in more than a quarter million condos/apartments. Con-Cur senses as soon as your clothes dryer draws more than 1 amp of current. It automatically turns on your dryer booster fan, eliminating additional sensors, switches, or speed controls. When current drops below the pre-set 2-amp threshold, the Con-Cur Dryer Current Sensor automatically shuts off the booster fan. Mount it:



- 1. inside your dryer compartment, or
- 2. at the dryer junction box

The dryer supply neutral (white) wire passes through the current transformer cutout with no physical connection to the control.

**IMPORTANT:** A licensed electrician is the best person to install this equipment. Be sure to adhere to local provisions and national electrical codes. Verify industry standards prior to installation.

**DISCLAIMER:** Note that some low voltage dryers operate at a lower voltage, and as such, Con-Cur current sensors must be field tested for the specific model in operation. infraAIR is not responsible for any compatibility issues or installation costs incurred. This includes any legal claims or lawsuits arising from such issues. Our standard return policies, as posted on our website, apply. The field test must be conducted by a licensed electrician to confirm that the new dryer operates correctly with the relay according to the dryer cycle.

### **FEATURES**

- Self-powered cuts installation and operating costs.
- · Safe and reliable.
- · Easy for installation.
- Solid-state switch for control circuits up to 2.5A @120 VAC/DC.
- Designed to meet CSA approval.
- The shell is made of ABS (UL 94V-0).
- Adjustable set trip point from 0.5 to 50A.
- Power MOS act as a switch device in the designed of the switch.
- The number of startup is not limited.
- The response time of the switch less than 200ms.
- Solid-core or split-core design, the isolation voltage up to 2000V.

## **WORKING PRINCIPLES**

The switch is based on the principle of electromagnet induction. According to this principle, Induced current will be produced when the AC current in the circuit changes. By sensing AC, this device can control AC load used in relay, lamp or fan and applicably, the monitored AC circuit. By sensing amplitude with its inductance coils, this sensing switch determines if the pre-set conduct point has been exceeded and changes the status on the solid state switch. Delay module was incorporated into the circuit for 5, 10, 15 minutes and zero time delays on action.

## TECHNICAL APPLICATIONS

- · Monitor AC current.
- · Motor overload protection.
- Act as an electronic switch in automatic control system.
- Apply in lighting circuits act as an electronic switch.
- · Electrical heaters protection.

Vendor -infraAIR Sales

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## **SPECIFICATIONS**

INPUT RANGE	1.25 – 40 Amp- turns
HYSTERESIS	<1% FS Max
OPTIMUM TEMPERATURE	0 – 40 °C (32- 104°F)
OPTIMUM HUMIDITY	0-95% RH Non- condensing
TRIP SET-POINT	Factory pre-set at approximately 1.25 Amps
MATERIAL	Self- Extinguishing ABS (Cycolac 94V-0)
HXWXD	70x89x28 mm (2.75×3.5×1.1 in) MAX
MOUNTING HOLES	2x5mm holes spaced 76mm (2×0.19 in. holes spaced 3 in.)
AC COND. HOLE	19mm (0.75in) Ø
OUTPUT TYPE	Triac
SWITCH RATING	120 VAC @ 2.5 Amps Max
LEAKAGE CURRENT	<1mA
CORE CURRENT	1.25 – 40 Amps Continuous



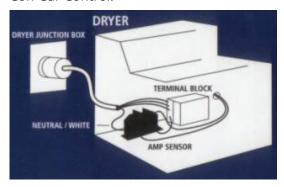
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## INSTALLATION PROCEDURE

#### **INSTALLATION MODEL 1**

#### **INSIDE DRYER**

- 1. Mount the Con-Cur current sensor in convenient location inside dryer connection compartment.
- 2. Disconnect and loop neutral (white) dryer power supply wire through current sensor cutout, then re-connect.
- 3. Connect fan 120v-AC power supply to top (relay) terminals of Con-Cur Control.



#### **INSTALLATION MODEL 2**

#### AT DRYER JUNCTION BOX

- 1. Attach electrical junction box to dryer junction box.
- 2. Disconnect and loop neutral (white) dryer power supply wire through current sensor cutout, then back to dryer junction box and re-connect.
- 3. Mount Con-Cur current sensor in electrical box (may require drilling 2 mounting holes).
- 4. Connect fan 120v-AC power supply to top (relay) terminals of Con-Cur Control.

