Veris Application Note



Current Sensor/Relay Combination Devices: Start/Stop and Status with a Single Device

\Lambda DANGER 🖄

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Follow safe electrical work practices. See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
- DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION
- Only install this product on insulated conductors.

Failure to follow these instructions will result in death or serious injury.

The information provided herein is intended to supplement the knowledge required of an electrician trained in high voltage installations. There is no intent to foresee all possible variables in individual situations, nor to provide all training needed to perform these tasks. The installer is ultimately responsible to assure that a particular installation will be and remain safe and operable under the specific conditions encountered.

Introduction

In most HVAC applications, sensor/control methods include the use of current sensors to detect system load conditions with a separate control relay to actuate the motor. The combination sensor covers both of these functions in one device.

- A single, compact device better fit in the electrical enclosure
- Cut installation costs eliminate conduit runs to remote locations
- Safer eliminates high voltage runs to panel mounted relays
- Environmentally conscious fewer devices and wiring consumed

Both solid- and split-core models are available in a variety of coil voltages to suit any control system.

Combined Sensor and Relay Installation

The combined sensor/relay device simplifies the installation, with the power source and the controller wired directly into the sensor. Relay trip point settings are programmed into this device at the time of installation.



Separate Sensor and Relay Installation

Use of a separate relay for motor control requires more devices, resulting in a more complicated installation process. The relay must be wired to a power source, the controller, and the current sensor, and programmed with the appropriate trip point settings.

