

Auto-Calibrating Current Switch: the Hawkeye 10F

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

To reduce calibration errors, Veris Industries offers the Hawkeye TruStat H10F, a microprocessor-based, self-learning, self-calibrating current switch. It provides calibration-free motor status, for both under-current (belt-loss, mechanical failure) and over-current (locked rotor, blockage) conditions. At initial power-up, the H10F automatically learns the average current on the line with no action required by the installer. Once a current is learned, the switch monitors for changes in current greater than $\pm 20\%$ of the learned load.

How It Works

Learn Mode

- Unit automatically enters Learn Mode upon initial power-up
- Auto-calibration is achieved by averaging the load current for 30 seconds
- During this stage, green and red LEDs blink on/off
- Status output contacts are closed
- Learn Mode can be re-initiated manually using the push-button feature

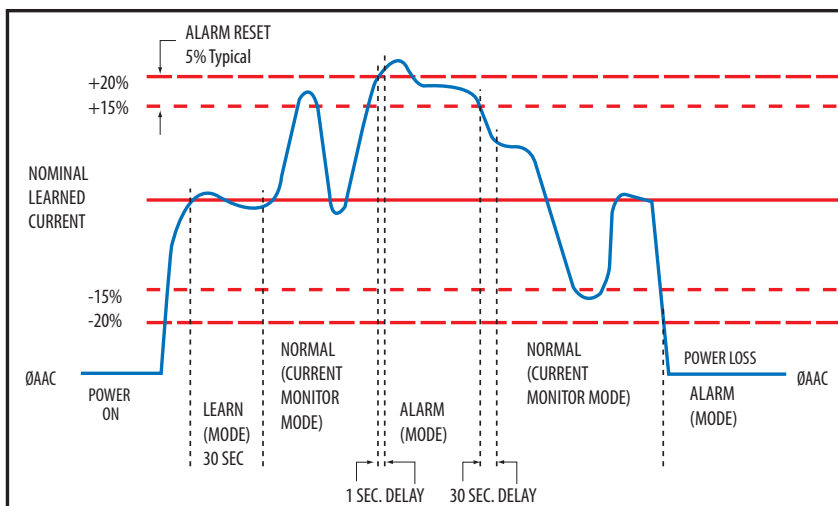
Normal Mode

- Initiated after the 30-second learning period, or immediately upon power-up if sensor has already learned a load
- The red LED is off, and the green LED is blinking
- Status output contacts are closed

Alarm Mode

- The Alarm state signals low current, high current, or power loss conditions
- Initiated within 1 second when any load current excursion exceeds a nominal $\pm 20\%$
- Alarm will persist until the load current returns to within a nominal $\pm 15\%$ of the learned current value, or when power is restored to normal
- The 5% Alarm-to-Normal mode reentry margin prevents alarm signal oscillations. This feature is enhanced by a 30-second delay, to insure true nominal load current conditions when returning to Normal mode from an Alarm state
- The green LED shuts off, and the red LED blinks
- Status output contacts are open

Product Functions



OPERATING MODES	STATUS LEDs		STATUS OUTPUT
	GREEN	RED	
Learn (30 secs)	Alternating Blink On/Off		Contacts Closed
Normal	Blink	Off	Contacts Closed
Alarm	Off	Blink	Contacts Open