

ECM-Optimized Current Switch

H6ECM



H6ECM05



SPECIFICATIONS

Sensor Power	Induced from the monitored conductor
Amperage Range	0.5 to 175A continuous
Status Output Ratings	N.O. 1.0A @ 30 VAC/DC, not polarity sensitive
Insulation Class	600 VAC RMS (UL)
Setpoint	0.5A
Frequency Range	60Hz
Accuracy	±10%
Temperature Range	-15° to 60°C (5° to 140°F)
Humidity Range	10-90% RH non-condensing
Hysteresis	10% typical
Off State Resistance	Open switch represents > 1MΩ
On State Resistance	Closed switch represents < 200mΩ
Terminal Block Max. Wire Size	24 to 14 AWG (0.2 to 2.1mm ²)
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5N-m)
Agency Approvals	UL508 open device listing
Installation Category	Cat. III, pollution degree 2

For applications requiring double or reinforced insulation, please contact the factory. The product design provides basic insulation only. Do not use the LED indicators as evidence of applied voltage.

Split-core Current Switch, Proof of Rotation (Flow) for ECM Systems

FEATURES

- High performance device, split-core housing
- Precise current trip point setting
- Small size...fits easily inside small enclosures
- Self-gripping iris for easy installation
- Status LEDs for easy setup and local indication
- 1Amp status output...increased application flexibility
- Solid state for high reliability
- Polarity insensitive for trouble-free installation
- 5-year warranty

DESCRIPTION

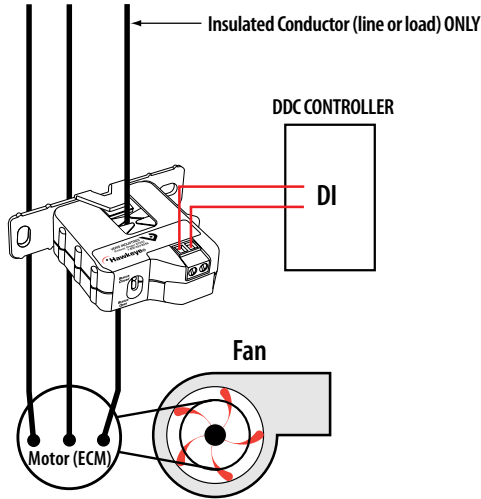
The **H6ECM** is a current-sensitive switching device that monitors current (amperage) in the conductor passing through it. A change in amperage in the monitored conductor that crosses the switch (setpoint) causes the resistance of the FET status output to change state, similar to the action of a mechanical switch. The status output is suitable for connection to building controllers or other appropriate data acquisition equipment operating at up to 30 volts. The product requires no external power supply to generate its output.

Electrically Commutated Motors (ECMs) are increasingly common as more energy conservation measures are implemented. The ECM is a brushless DC motor that is supplied AC power, converts that power to DC current and uses electronic switching to control the motor rotation. The ECM motor shaft speed can be reduced to save energy, resulting in lower cost and less component wear. The H6ECM is optimized to provide meaningful proof of rotation which verifies that the ECM motor is operating as expected.

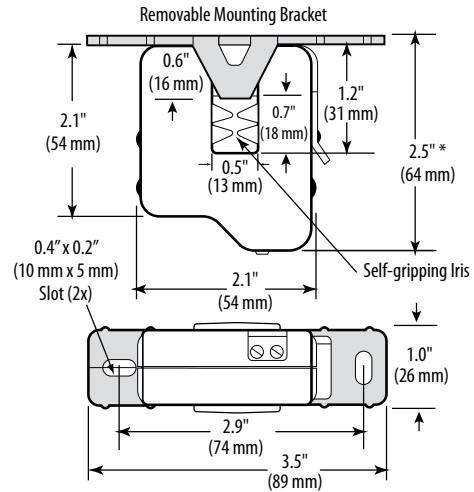
APPLICATIONS

- Systems with Electrically Commutated Motors such as cooling fans or compressor motors

WIRING DIAGRAM



DIMENSIONAL DRAWINGS



* Terminal block may extend up to 1/8" over the height dimensions shown.

USAGE EXAMPLE

The H6ECM is optimized for HVAC fan and blower systems using ECM motors.

ORDERING INFORMATION



MODEL	AMPERAGE RANGE	STATUS OUTPUT	TRIP POINT	STATUS LED	UL	RoHS
H6ECM05	0.5-175A	N.O. 1.0A@30VAC/DC	0.5A	●	●	●

ACCESSORIES

DIN Rail Clip Set (AH01)
DIN Rail (AV01) and DIN Stop Clip (AV02)



AH01



AV01



AV02