HX39, HX49 & HX59 SERIES

Status and Control in One Package



Hawkeye Relay Combination Series high voltage output current switches are the ideal solution for the automation installer. These units combine a current switch and relay into a single package, reducing the space required for total control of fans and pumps. The integrated current switch and relay operate independently of one another. All relay connections are externally available for maximum flexibility.

These products perform the functions of start/stop and status monitoring with one device instead of two.

SPECIFICATIONS

Sensor Power	Induced from monitored conductor
Insulation Class	600 Vac RMS
Frequency Range	50/60 Hz
Temperature Range	-15 to 60 °C (5 to 140 °F)
Humidity Range	10 to 90% RH non-condensing
Hysteresis	10% Typical
Terminal Block Wire Size	24 to 14 AWG (0.2 to 2.1 mm²)
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)
WARRANTY	
Agency Approvals	UL 508 open device listing, CAT III, Pollution Degree 2, basic insulation
AGENCY APPROVALS	
Limited Warranty	5 years



Do not use the LED status indicators as evidence of applied voltage.

Combined relay & status

Combines command relay and fan/ pump status sensor in a single, easy-to-install unit

No tubing

Easier to install than differential pressure switches...no tubing needed

Polarity insensitive

Polarity insensitive status outputs...fast and easy installation

Detect belt loss

Detect belt loss & motor failure... ideal for fan and pump status

Easy setup

Relay and status LEDs

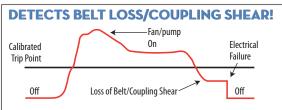
Added flexibility

Bracket on H939, H949, and H959 can be installed in three different configurations

APPLICATIONS

Starting/stopping and monitoring positive status of motors

Detecting belt loss and coupling shear

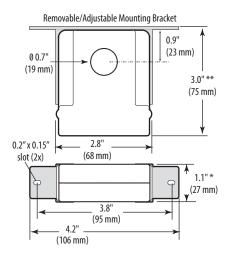


Now you can easily detect when drive belts slip, break, or pump couplings shear. In fact, a typical HVAC motor that loses its load has a reduction of current draw of up to 50%. That's why our sensors are the industry standard for status.

Rela	y Contact Ratir	ngs				
Hx39, Hx59 (SPST, N	I.O.)					
Resistive	10 A @ 250 Vac, 30 Vdc					
Inductive	5 A @ 250 Vac, 30 Vdc					
Hx38, Hx58 (SPDT)						
Resistive	8 A @ 250 Vac, 30 Vdc					
Inductive	3.5 A @ 250 Vac, 30 Vdc					
Typical Coil Performance						
Voltage	AC	DC				
24V	10 mA	10 mA				
12V (Hx58)		20 mA				
Pull-in Voltage						
Hx39		20.1 Vdc				
Hx49		20.1 Vdc				
Hx59		8.4 Vdc				
Drop-out Voltage						
Hx39		5.2 Vdc				
Hx49		5.2 Vdc				
Hx59		3.0 Vdc				

H739/H749

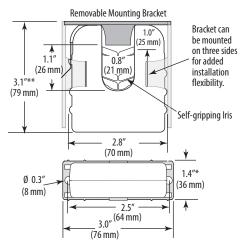
Dimensional Drawing



- * Terminal block may extend up to 1/8" over the height dimensions shown.
- ** Slide switch may extend up to 1/4" over the height dimensions shown.

H939/H949/H959

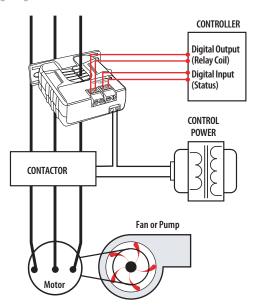
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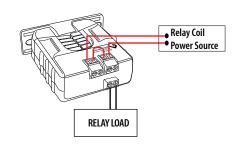
START/STOP MONITORING OF FAN /PUMP MOTORS

Wiring Diagram



RELAY CONTROLLED DIRECTLY BY STATUS CONTACTS

Wiring Diagram



ORDERING INFORMATION

MODEL	AMPERAGE RANGE	STATUS OUTPUT (MAX.)	MIN. TRIP POINT	RELAY TYPE	RELAY COIL	HOUSING	STATUS LED	RELAY POWER LED	UL
H739	1 to 135 A	N.O. 0.2 A @ 120 Vac/dc	1 A or less	SPST, N.O.	24 Vac/dc	Solid-core	•	•	•
H749	1 to 135 A		1 A or less	SPDT	24 Vac/dc	Solid-core	•	•	•
H939	2.5 to 135 A		2.5 A or less	SPST, N.O.	24 Vac/dc	Split-core	•	•	•
H949	2.5 to 135 A		2.5 A or less	SPDT	24 Vac/dc	Split-core	•	•	•
H959	2.5 to 135 A		2.5 A or less	SPST, N.O.	12 Vdc nom.	Split-core	•	•	•