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 mm ²)	
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	
CUL US		

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

Polarity insensitive

Polarity insensitive status outputs...fast and easy installation

Easy setup

Relay and status LEDs

APPLICATIONS

 Starting/stopping and monitoring positive status of motors

No tubing

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

Detect belt loss

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

Added flexibility

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

 Detecting belt loss and coupling 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.

Relay Contact Ratings			
Hx39, Hx59 (SPST, N	N.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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ORDERING INFORMATION

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

START/STOP MONITORING OF FAN /PUMP MOTORS

Wiring Diagram



RELAY CONTROLLED DIRECTLY BY STATUS CONTACTS

Wiring Diagram



