

# H735, HX38, HX48, HX58 SERIES

Status and Control in One Package



The Hawkeye Relay Combination Series is 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 current switch and relay operate independently of one another. These devices allow start/stop control 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 <sup>2</sup> )
Terminal Block Torque	3.5 to 4.4 in-lbs (0.4 to 0.5 N-m)

### WARRANTY

Limited Warranty	5 years
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### AGENCY APPROVALS

Agency Approvals	UL 508 open device listing, CAT III, Pollution Degree 2, basic insulation
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Note: 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

## Fan & pump status

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

## Polarity insensitive

Polarity insensitive status outputs...fast and easy installation

## APPLICATIONS

- Starting/stopping and monitoring positive status of motors
- Detecting belt loss and coupling shear

## Two outputs

H748 and H948 feature a SPDT command relay...control two outputs with a single relay

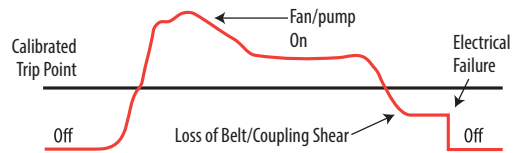
## Added flexibility

Bracket on H938, H948, and H958 can be installed in three different configurations

## Easy setup

Relay and status LEDs

### DETECTS BELT LOSS/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.

### RELAY CONTACT RATINGS

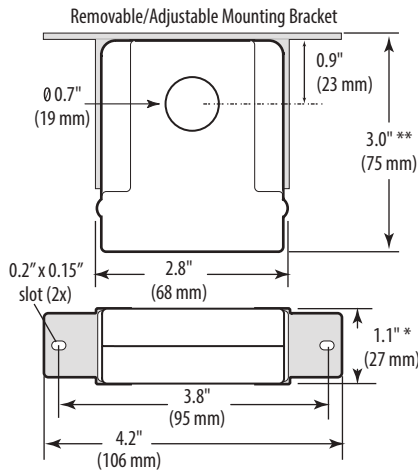
H735 (SPST, N.O.)		
Resistive	5 A @ 250 Vac, 30 Vdc	
Inductive	3 A @ 250 Vac, 30 Vdc	
Hx38, Hx58 (SPDT N.O.)		
Resistive	10 A @ 250 Vac, 30 Vdc	
Inductive	5 A @ 250 Vac, 30 Vdc	
Hx48 (SPDT)		
Resistive	8 A @ 250 Vac, 30 Vdc	
Inductive	3.5 A @ 250 Vac, 30 Vdc	

### TYPICAL COIL PERFORMANCE

Voltage	AC	DC
	24V	10 mA
12V (Hx58)		20 mA
Pull-in Voltage		
Hx3x		20.1 Vdc
Hx48		20.1 Vdc
Hx58		8.4 Vdc
Drop-out Voltage		
Hx3x		5.2 Vdc
Hx48		5.2 Vdc
Hx58		3.0 Vdc

**H735/738/748/758**

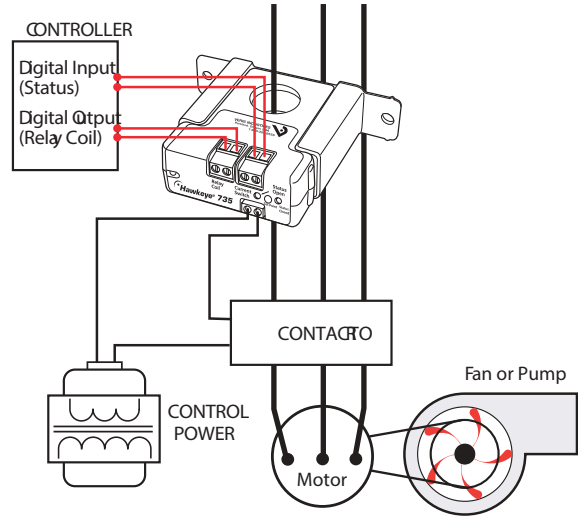
Dimensional Drawing



\* 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.

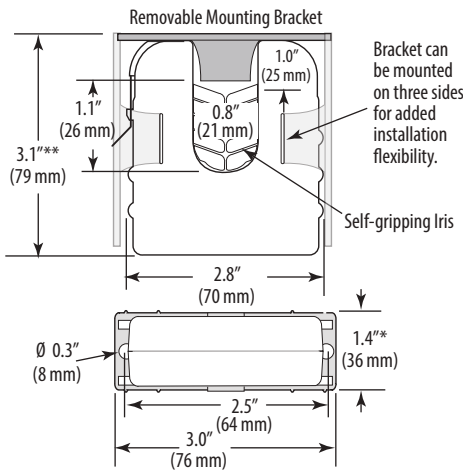
**START/STOP MONITORING OF FAN /PUMP MOTORS**

Wiring Diagram



**H938/948/958**

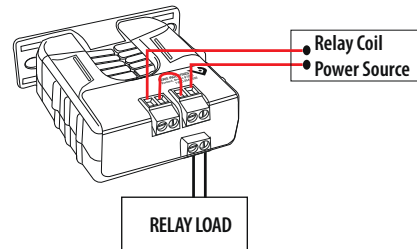
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**RELAY CONTROLLED DIRECTLY BY STATUS CONTACTS**

Wiring Diagram



**ORDERING INFORMATION**

MODEL	AMPERAGE RANGE	STATUS OUTPUT (MAX.)	MIN. TRIP POINT	RELAY	COIL VOLTAGE	HOUSING	STATUS LED	RELAY POWER LED	UL
H735	1 to 135 A	0.1 A @ 30 Vac/dc	1 A or less	SPST, N.O.	24 Vac/dc	Solid-core	•	•	•
H738	1 to 135 A		1 A or less	SPST, N.O.	24 Vac/dc	Solid-core	•	•	•
H748	1 to 135 A		1 A or less	SPDT	24 Vac/dc	Solid-core	•	•	•
H758	1 to 135 A		1 A or less	SPST, N.O.	12 Vdc nom.	Solid-core	•	•	•
H938	2.5 to 135 A	1.0 A @ 30 Vac/dc	2.5 A or less	SPST, N.O.	24 Vac/dc	Split-core	•	•	•
H948	2.5 to 135 A		2.5 A or less	SPDT	24 Vac/dc	Split-core	•	•	•
H958	2.5 to 135 A		2.5 A or less	SPST, N.O.	12 Vdc nom.	Split-core	•	•	•