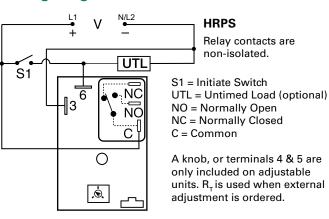
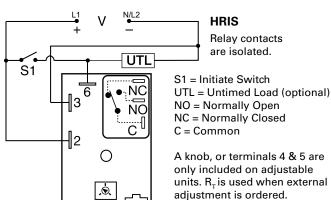
HRPS / HRIS SERIES





Wiring Diagram





Description

The HRPS/HRIS Series combines an electromechanical relay output with microcontroller timing circuitry. It is a factory programmed module available in any 1 of 13 standard functions. It offers 12 to 240V operation in two universal ranges and factory fixed, onboard, or external adjustable time delays with a repeat accuracy of ±0.5%. The output contact rating allows for direct operation of heavy loads, such as compressors, pumps, blower motors, heaters, etc. This series is ideal for OEM applications where cost is a factor. The HRPS has non-isolated SPDT relay contacts, and the HRIS has isolated SPDT relay contacts. Both offer the most popular timer functions in the industry.

Operation (Interval)

Upon application of input voltage, the time delay begins. The output (relay or solid state) energizes during the time delay. At the end of time delay the output de-energizes and remains de-energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and output.

Features & Benefits

FEATURES	BENEFITS	
Microcontroller based	Repeat Accuracy + / - 0.5% , factory calibration +/- 2%	
Compact design	Allows flexiblility for OEM applications	
30A, SPDT, Normally Open output contacts	Allows for direct operation of heavy loads	
Encapsulated	Protects against shock, vibration, and humidity	

Ordering Information

MODEL	INPUT VOLTAGE	ADJUST.	TIME DELAY	FUNCTION
HRISW21FT	24 - 240VAC/24 - 110VDC	Onboard	0.1 - 10s	Alternating
HRISW27I	24 - 240VAC/24 - 110VDC	Onboard	0.1 - 10h	Interval
HRPSD12HI	12 - 48VDC	Fixed	2h	Interval
HRISW25B	24 - 240VAC/24 - 110VDC	Onboard	1 - 100m	Delay on break

If you don't find the part you need, call us for a custom product 800-843-8848

HRPS / HRIS SERIES

Accessories



P1004-95, P1004-95-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P1023-6 Mounting bracket

The 90° orientation of mounting slots makes installation/removal of modules quick and easy.



P0700-7 Versa-Knob

Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



P1015-64 (AWG 14/16), P1015-13 (AWG 10/12) **Female Quick Connect**

These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide



P1015-18 Quick Connect to Screw Adapter

Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.



C103PM (AL) DIN Rail

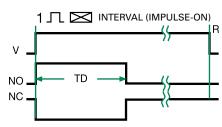
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

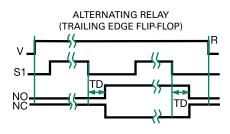


P1023-20 DIN Rail Adapter

Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

Function Diagrams





V = Voltage

S1 = Initiate Switch

NO = Normally

Open Contact NC = Normally

Closed Contact TD = Time Delay

R = Reset

- = Undefined Time

Specifications

Time Delay

Type Range 0.1s - 1000h in 9 adjustable ranges or fixed Repeat Accuracy ±0.5% or 20ms, whichever is greater Tolerance

(Factory Calibration) **Reset Time Initiate Time** Time Delay vs Temp.

& Voltage

Input

Voltage **Tolerance** 12 to 48VDC 24 to 110VDC/240VAC

AC Line Frequency Power Consumption

Output

Type **Form Ratings General Purpose** 125/240VAC Resistive 125/240VAC 28VDC **Motor Load 125VAC 240VAC** Life

Protection

Surge Circuitry **Isolation Voltage Insulation Resistance Polarity** Mechanical Mounting **Dimensions**

Termination Environmental Operating/Storage

Temperature Humidity Weight

Microcontroller circuitry

≤ 150ms ≤ 20ms

±2%

12 to 48VDC; 24 to 240VAC/24 to 110VDC

-15% - 20% -20% - 10% 50/60Hz $AC \le 4VA$; $DC \le 2W$

Electromechanical relay

SPDT SPDT-NO	SPDT-NC
30A	15A
30A 20A	15A 10A
1 hp* 2 hp** Mechanical - 1 x 1	1/4 hp** 1 hp**
Electrical - 1 x 105	, *3 x 10 ⁴ , **6,000

IEEE C62.41-1991 Level A

Encapsulated

≥ 1500V RMS input to output; isolated units

DC units are reverse polarity protected

Surface mt. with one #10 (M5 x 0.8) screw **H** 76.2 mm (3.0"); **W** 50.8 mm (2.0");

D 38.1 mm (1.5")

0.25 in. (6.35 mm) male quick connects

 -40° to 60° C / -40° to 85° C 95% relative, non-condensing $\approx 3.9 \text{ oz } (111 \text{ g})$