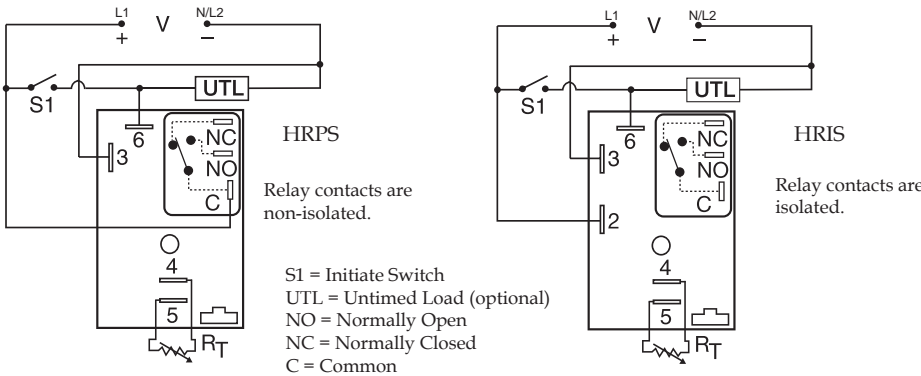




The HRPS/HRIS Series combines an electromechanical relay output with microcontroller timing circuitry. It is a factory programmed module available in any 1 of 13 standard functions. It offers 12 to 240V operation in two universal ranges and factory fixed, onboard, or external adjustable time delays with a repeat accuracy of $\pm 0.5\%$. 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.




See Appendix B, page 165, Figure 2 for dimensional drawing.

Connection:



A knob, or terminals 4 & 5 are only included on adjustable units. R_T is used when external adjustment is ordered.

Features:

- 30A, SPDT, NO output contacts
 - Factory programmed
 - 12 to 240V operation in 2 ranges
 - Special time ranges & functions available
 - Delays from 0.1s - 1000h in 9 ranges
 - $\pm 0.5\%$ repeat accuracy
 - $\pm 2\%$ factory calibration
 - Fixed, external, or onboard adjustment
- Approvals:   

Auxiliary Products:

- **External adjust potentiometer:**
P/N: P1004-95
P/N: P1004-95-X
- **Mounting bracket:** P/N: P1023-6
- **Female quick connect:**
P/N: P1015-13 (AWG 10/12)
P/N: P1015-64 (AWG 14/16)
- **Quick connect to screw adaptor:**
P/N: P1015-18
- **Versa-knob:** P/N: P0700-7
- **DIN rail:** P/N: C103PM (Al)
- **DIN rail adaptor:** P/N: P1023-20

Available Models:

HRISW21FT
HRISW27I
HRPSD12HI

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

<u>HRPS /</u> <u>HRIS</u>	<u>X</u> Input	<u>X</u> Adjustment	<u>X</u> Time Delay*	<u>X</u> Function
	<u>W</u> - 24 to 240VAC 24 to 110VDC	<u>1</u> - Fixed	<u>1</u> - 0.1 - 10s	<u>Specify function</u>
	<u>D</u> - 12 to 48VDC	<u>2</u> - Onboard adjust	<u>2</u> - 1 - 100s	
		<u>3</u> - External adjust	<u>3</u> - 10 - 1000s	Functions:
			<u>4</u> - 0.1 - 10m	M, B, RE, RD, S, SD,
			<u>5</u> - 1 - 100m	I, TS, US, UB, AM,
			<u>6</u> - 10 - 1000m	PSD, FT
			<u>7</u> - 0.1 - 10h	
			<u>8</u> - 1 - 100h	
			<u>9</u> - 10 - 1000h	

*If fixed delay is selected, insert delay (0.1-1000) followed by (S) secs., (M) mins., or (H) hrs.

For a complete list of functions with descriptions and diagrams, see Appendix A - Timer Functions, pages 156-164.

Specifications

Time Delay			
Type	Microcontroller circuitry		
Range	0.1s - 1000h in 9 adjustable ranges or fixed		
Repeat Accuracy	$\pm 0.5\%$ or 20ms, whichever is greater		
Tolerance (Factory Calibration)	$\pm 2\%$		
Reset Time	≤ 150 ms		
Initiate Time	≤ 20 ms		
Time Delay vs Temp. & Voltage	$\pm 2\%$		
Input			
Voltage	12 to 48VDC; 24 to 240VAC/24 to 110VDC		
Tolerance	12 to 48VDC	-15% - 20%	
	24 to 110VDC/240VAC	-20% - 10%	
AC Line Frequency	50/60Hz		
Power Consumption	AC ≤ 4 VA; DC ≤ 2 W		
Output			
Type	Electromechanical relay		
Form	SPDT		
Ratings:	SPDT-NO	SPDT-NC	
General Purpose	125/240VAC	30A	15A
Resistive	125/240VAC	30A	15A
	28VDC	20A	10A
Motor Load	125VAC	1 hp*	1/4 hp**
	240VAC	2 hp**	1 hp**
Life		Mechanical - 1 x 10 ⁶	Electrical - 1 x 10 ⁵ ; *3 x 10 ⁴ , **6,000
Protection			
Surge	IEEE C62.41-1991 Level A		
Circuitry	Encapsulated		
Isolation Voltage	≥ 1500 V RMS input to output; isolated units		
Insulation Resistance	≥ 100 M Ω		
Polarity	DC units are reverse polarity protected		
Mechanical			
Mounting	Surface mt. with one #10 (M5 x 0.8) screw		
Dimensions	3 x 2 x 1.5 in (76.7 x 51.3 x 38.1 mm)		
Termination	0.25 in. (6.35 mm) male quick connects		
Environmental			
Operating / Storage Temperature	-40° to 60°C / -40° to 85°C		
Humidity	95% relative, non-condensing		
Weight	≈ 3.9 oz (111 g)		