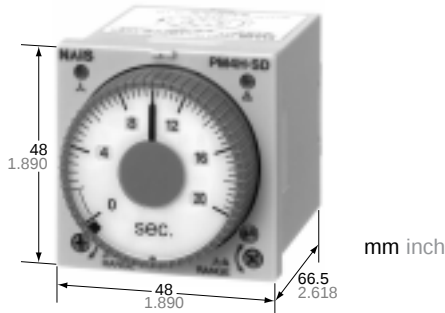




FEATURES

- Select four types of operation time ranges between 0.2 s and 100 s on a single unit.
- Select between five (∟-△ switching) time ranges between 0.04 s and 0.7 s.
- There is a ∟-△ switching indicator so you can check the operation at a glance.

CHARACTERISTICS

Item		Type	PM4H-SD/SDM
Rating	Rated operating voltage		100 to 240V AC, 24V AC
	Rated frequency		50/60Hz common (AC operating type)
	Rated power consumption		Max. 10VA (100 to 240V AC) Max. 2.5VA (24V AC)
	Output rating		5A 250V AC (resistive load)
	Operation mode		∟-△ star-delta switching (Power ON-delay)
	∟ operation control time range		2s to 100s, 4 time ranges switchable
	∟-△ switching time		0.04, 0.1, 0.3, 0.5, 0.7s (5 time ranges selectable)
Time accuracy (Note:)	Operation time fluctuation		±0.3% (power off time change at the range of 0.1s to 1h)
	Setting error		±5%
	Voltage error		±0.5% (at operating voltage changes between 85 to 110%)
	Temperature error		±2% (at 20°C ambient temp. at the range of -10 to +50°C +14 to +122°F)
Contact	Contact arrangement		Star (∟) side: Timed-out 1 Form A Delta (△) side: Timed-out 1 Form A Instantaneous: 1 Form A (Instantaneous for SDM type only)
	Contact resistance (Initial value)		Max. 100mΩ (at 1A 6V DC)
	Contact material		Au flash on Silver alloy
Life	Mechanical		2×10 ⁷
	Electrical		10 ⁵ (at rated control capacity)
Electrical function	Allowable operating voltage range		85 to 110% of rated operating voltage (at 20°C coil temp.)
	Insulation resistance (Initial value)		Between live and dead metal parts Between input and output Between contacts of different poles *3 (At 500V DC) Between contacts of same pole
	Breakdown voltage (Initial value)		2,000Vrms for 1 min Between live and dead metal parts 2,000Vrms for 1 min Between input and output 2,000Vrms for 1 min Between contacts of different poles *3 1,000Vrms for 1 min Between contacts of same pole
	Min. power off time		500ms
	Max. temperature rise		65°C 131°F
Mechanical function	Shock resistance	Functional	Min. 294m/s ² (4 times on 3 axes)
		Destructive	Min. 980m/s ² (5 times on 3 axes)
	Vibration resistance	Functional	10 to 55Hz: 1 cycle/min double amplitude of 0.5mm (10min on 3 axes)
		Destructive	10 to 55Hz: 1 cycle/min double amplitude of 0.75mm (1h on 3 axes)
Operating condition	Ambient temperature		-10 to +50°C +14 to +122°F
	Ambient humidity		Max. 85%RH
	Atmospheric pressure		860 to 1,060hPa
Others	Protective construction		IP65 on front panel (using rubber gasket ATC18002)
	Weight		100g 3.527 oz (Pin type) 110g 3.880 oz (Screw terminal type)

Notes: 1) Unless otherwise specified, the measurement conditions at the maximum scale time standard are specified at rated operating voltage, 20°C 68°F ambient temperature, and 1s power off time.

2) For the 2s range, the tolerance for each specification becomes ±10ms.

3) Between contacts of different poles for SDM type only.

PRODUCT TYPE

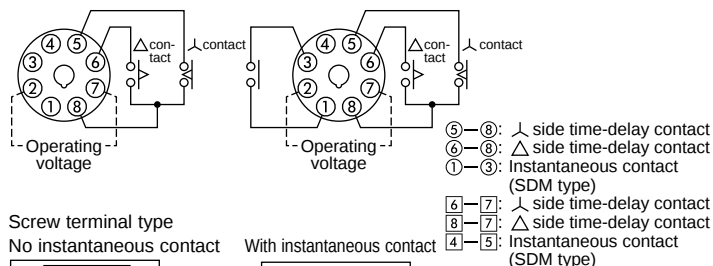
Type	Operation mode	Contact arrangement	Time range	Protective construction	Rated operating voltage	Terminal type	Part number
PM4H-SD Star (⋈)-Delta (Δ) switching	Star (⋈)-Delta (Δ) switching	Relay Timed-out ⋈ side: 1 Form A Δ side: 1 Form A	4 selectable operation ranges over 2s to 100s (⋈-Δ switching time: 0.04, 0.1, 0.3, 0.5, 0.7s)	IP65	100 to 240V AC	8 pin	PM4HSD-S-AC240VW
		screw				PM4HSD-S-AC240VSW	
24V AC		8 pin			PM4HSD-S-AC24VW		
		screw			PM4HSD-S-AC24VSW		
100 to 240V AC		8 pin			PM4HSDM-S-AC240VW		
		screw			PM4HSDM-S-AC240VSW		
24V AC		8 pin		PM4HSDM-S-AC24VW			
		screw		PM4HSDM-S-AC24VSW			
PM4H-SDM Star (⋈)-Delta (Δ) switching (Instantaneous contact)		Relay Timed-out ⋈ side: 1 Form A Δ side: 1 Form A Instantaneous: 1 Form A		IP50	100 to 240V AC	8 pin	PM4HSD-S-AC240V
		screw				PM4HSD-S-AC240VS	
24V AC		8 pin			PM4HSD-S-AC24V		
		screw			PM4HSD-S-AC24VS		
100 to 240V AC	8 pin	PM4HSDM-S-AC240V					
	screw	PM4HSDM-S-AC240VS					
24V AC	8 pin	PM4HSDM-S-AC24V					
	screw	PM4HSDM-S-AC24VS					
PM4H-SD Star (⋈)-Delta (Δ) switching	Relay Timed-out ⋈ side: 1 Form A Δ side: 1 Form A	IP50	100 to 240V AC	8 pin	PM4HSD-S-AC240V		
	screw			PM4HSD-S-AC240VS			
24V AC	8 pin		PM4HSD-S-AC24V				
	screw		PM4HSD-S-AC24VS				
100 to 240V AC	8 pin		PM4HSDM-S-AC240V				
	screw		PM4HSDM-S-AC240VS				
24V AC	8 pin	PM4HSDM-S-AC24V					
	screw	PM4HSDM-S-AC24VS					
PM4H-SDM Star (⋈)-Delta (Δ) switching (Instantaneous contact)	Relay Timed-out ⋈ side: 1 Form A Δ side: 1 Form A Instantaneous: 1 Form A	IP50	100 to 240V AC	8 pin	PM4HSDM-S-AC240V		
	screw			PM4HSDM-S-AC240VS			
24V AC	8 pin		PM4HSDM-S-AC24V				
	screw		PM4HSDM-S-AC24VS				
100 to 240V AC	8 pin		PM4HSDM-S-AC240V				
	screw		PM4HSDM-S-AC240VS				
24V AC	8 pin	PM4HSDM-S-AC24V					
	screw	PM4HSDM-S-AC24VS					

WIRING DIAGRAMS

Pin type

No instantaneous contact

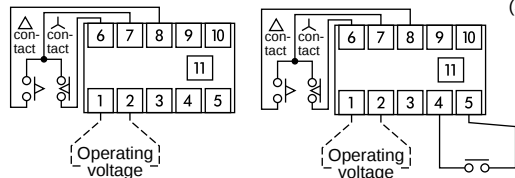
With instantaneous contact



Screw terminal type

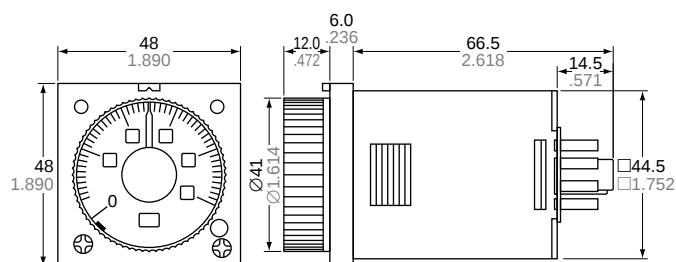
No instantaneous contact

With instantaneous contact

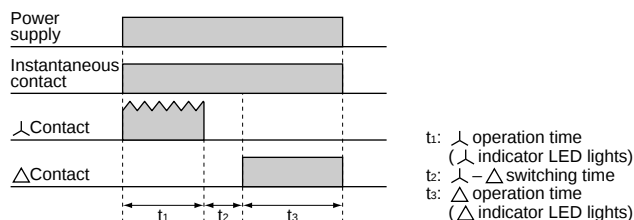


DIMENSIONS

mm inch



OPERATION MODE



TIME RANGE

Time range	Time range unit	Operating time (s)	λ - Δ switching time (s)
2		0.2s to 2s	0.04
10		1s to 10s	0.1
20		2s to 20s	0.3
			0.5
100		10s to 100s	0.7