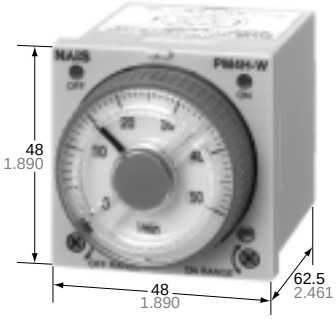
NAiS

DIN48 SIZE ANALOG MULTI-RANGE CYCLIC TWIN TIMERS

PM4H-W



mm inch

FEATURES

- **A single twin timer unit that repeats (variable) ON/OFF.**
- **Multiple ranges from 0.1 s to 500 h.**
- **The output ON/OFF operation is indicated by red and green LED's. It's easy to check the operation at a glance.**
- **A new screw terminal type allows wiring to be done easily with a screwdriver.**

CHARACTERISTICS

Item \ Type			PM4H-W
Rating	Rated operating voltage		100 to 240V AC, 12V DC, 24V AC/DC
	Rated frequency		50/60Hz common (AC operating type)
	Rated power consumption		Max. 10VA (100 to 240V AC) Max. 2.5VA (24V AC) Max. 2W (12V DC, 24V DC)
	Output rating		5A 250V AC (resistive load)
	Operation mode		Cyclic (OFF-start/Twin operation)
	Time range		1s to 500h 16 time ranges switchable (T_1, T_2 time setting individually)
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 the 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		Timed-out 2 Form C
	Contact resistance (Initial value)		Max. 100mΩ (at 1A 6V DC)
	Contact material		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)		Min. 100MΩ (At 500V DC) Between live and dead metal parts Between input and output Between contacts of different poles Between contacts of same pole
	Breakdown voltage (Initial value)		2,000Vrms for 1 min Between live and metal parts 2,000Vrms for 1 min Between input and output 2,000Vrms for 1 min Between contacts of different poles 1,000Vrms for 1 min Between contacts of same pole
	Min. power off time		300ms
	Max. temperature rise		55°C 131°F
Mechanical function	Shock resistance	Functional	Min. 98m/s² (4 times on 3 axes)
		Destructive	Min. 980m/s² (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
	Ripple factor (DC type)		20%
Others	Protective construction		IP65 on front panel (using rubber gasket ATC18002)
	Weight		120g 4.233 oz (Pin type)
			130g 4.586 oz (Screw terminal type)

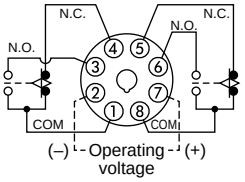
Notes: 1) Unless otherwise specified, the measurement conditions at the maximum scale time standard are specified at rated operating voltage (within 5% ripple factor for DC), 20°C 68°F ambient temperature, and 1s power off time.
2) For the 1s range, the tolerance for each specification becomes ±10ms.

PRODUCT TYPE

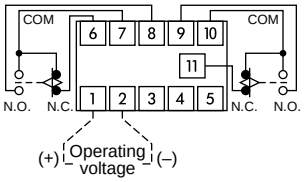
Type	Operating mode	Contact arrangement	Time range	Protective construction	Rated Operating voltage	Terminal type	Part Number
PM4H-W Twin timer	Cyclic (OFF-start, Twin)	Relay Timed-out 2 Form C	16 selectable time ranges (1s to 500h)	IP65	100 to 240V AC	8 pin	PM4HW-H-AC240VW
						Screw terminal	PM4HW-H-AC240VSW
					24V AC/DC	8 pin	PM4HW-H-24VW
						Screw terminal	PM4HW-H-24VSW
					12V DC	8 pin	PM4HW-H-DC12VW
						Screw terminal	PM4HW-H-DC12VSW
				IP50	100 to 240V AC	8 pin	PM4HW-H-AC240V
						Screw terminal	PM4HW-H-AC240VS
					24V AC/DC	8 pin	PM4HW-H-24V
						Screw terminal	PM4HW-H-24VS
					12V DC	8 pin	PM4HW-H-DC12V
						Screw terminal	PM4HW-H-DC12V

WIRING DIAGRAMS

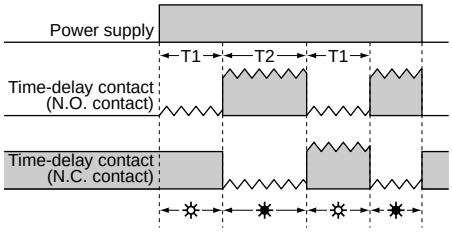
Pin Type
Cyclic timed-out relay contact: 2C



Screw terminal type
Cyclic timed-out relay contact: 2C



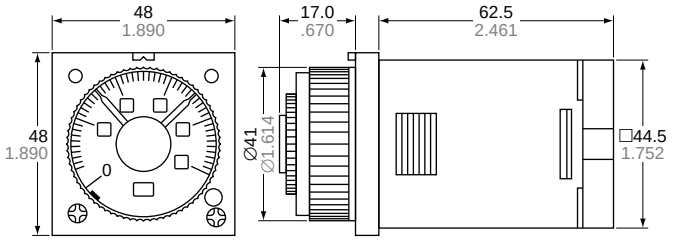
OPERATION

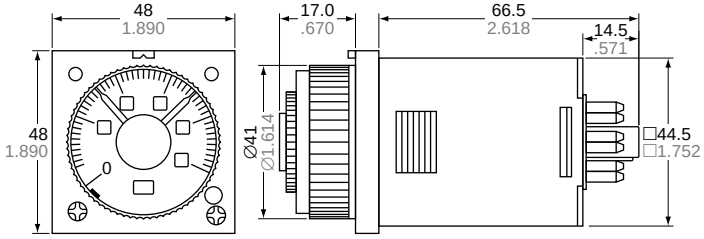


☼: Output OFF indicator (red)
✷: Output ON indicator (green)
T1: OFF set time
T2: ON set time

DIMENSIONS

mm inch





TIME RANGE

Scale \ Time unit		seconds	minutes	hours	hours
1	Control time range	0.1s to 1s	0.1 min to 1 min	0.1h to 1h	1.0h to 10h
5		0.5s to 5s	0.5 min to 5 min	0.5h to 5h	5h to 50h
10		1.0s to 10s	1.0 min to 10 min	1.0h to 10h	10h to 100h
50		5s to 50s	5 min to 50 min	5h to 50h	50h to 500h

<PM4H-W>
All types of PM4H-W timer have multi-time range.
16 time ranges are selectable.
1s to 500h (Max. range) is controlled.

MODES & TIME SETTING

1) Operation mode setting [PM4H-A]
8 operation modes are selectable with operation mode selector.
Turn the operation mode selector with screw driver.
Operation mode is shown through the window above the mode selector. The marks are Ⓞ, Ⓕ, Ⓕ, Ⓕ, Ⓢ, Ⓞ, Ⓕ, Ⓒ.
Turn the mode selector (clicking sound) to the desired position.
Confirm the mode selector position.
If the position is not correct, the timer might not operate properly.

2) Time range setting [common]
16 time ranges are selectable between 1s to 500h.
Turn the time range selector with the screw driver.
Clockwise turning increases the time range, and Counter-clockwise turning decreases the time range.
Confirm the range selector position.

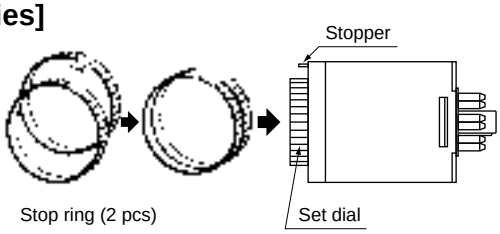
3) Time setting [common]
To set the time, turn the set dial to a desired time within the range.
Instantaneous output will be on when the dial is set to “0”.
When the instantaneous output is used, the dial should be set under “0” range. (Instantaneous output area)
When power supply is on, the time range and operation mode cannot be changed.
Turn off the power supply or a reset signal is applied to set the new operation mode.





How to use “Stop ring” [PM4H series]

1) Fixed time setting
Set the desired time and put 2 stop rings together.
Insert the rings into stopper to fix the time.

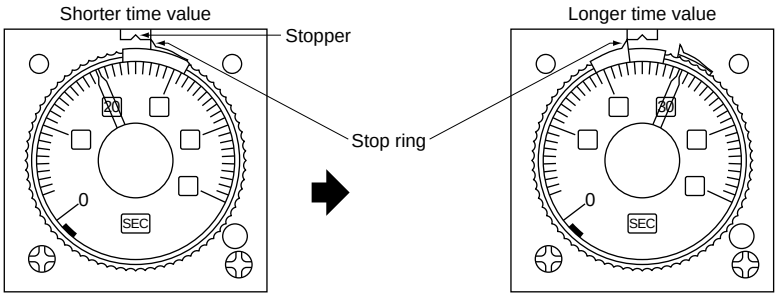


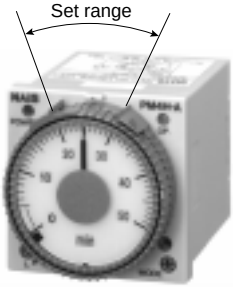


2) Fixed time range setting
Example: Time range 20s to 30s.

① Shorter time value setting
Set the dial to 20s.
Place the stop ring at the right side of stopper.

② Longer time value setting
Set the dial to 30s.
Place the stop ring at the left side of stopper.

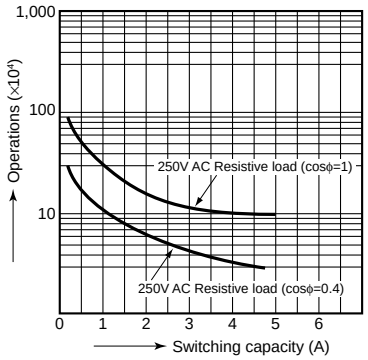




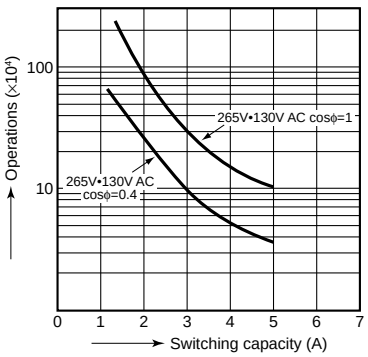
DATA

■ Load control life

• Load life curve (PM4H-A, PM4H-S)

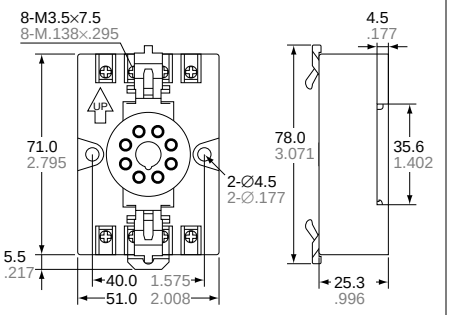
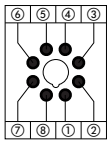
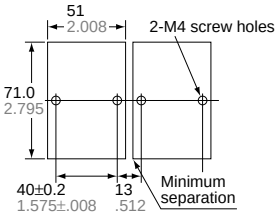
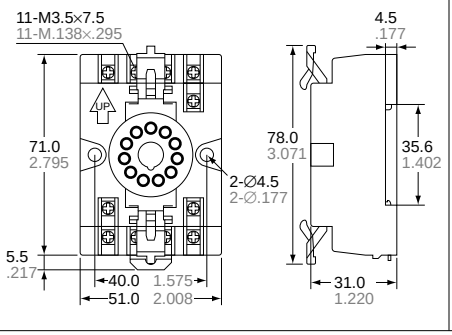
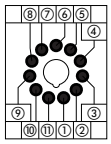
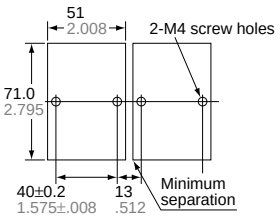


• Load life curve (PM4H-M)



ACCESSORIES

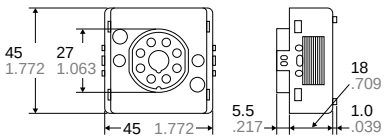
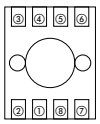
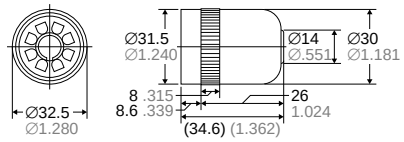
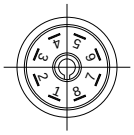
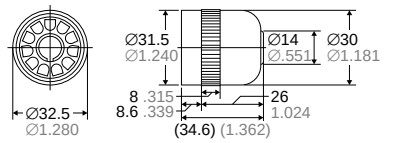
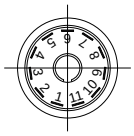
mm inch

Type	Appearance	Dimensions	Terminal wiring (TOP VIEW)	Mounting hole dimensions
PM4H-S PM4H-M PM4H-W PM4H-SD PM4H-F8 PM4H-F8R (8 pin)	• DIN rail socket (8 pin)  ATC18003		 Note: Terminal No. on the main body are identifical to those on the terminal socket.	
PM4H-A PM4H-F11R (11 pin)	• DIN rail socket (11 pin)  ATC18004		 Note: Terminal No. on the main body are identifical to those on the terminal socket.	

Note: Terminal No. on the main body are identifical to those on the terminal socket.

Tolerance: ±1 ±.039

SOCKETS & CAPS

Type	Screw terminal	Dimensions	Terminal wiring (TOP VIEW)	Mounting hole dimensions
PM4H-S PM4H-M PM4H-W PM4H-SD PM4H-F8 PM4H-F8R (8 pin)	• Screw terminal  AT8-RR			———
	• 8 pin cap  AD8-RC			———
PM4H-A PM4H-F11R (11 pin)	• 11 pin cap  AT8-DP11			———

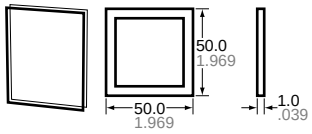
Note: Terminal No. on the main body are identifical to those on the terminal socket.

Tolerance: ±1 ±.039

MOUNTING PARTS

mm inch

• Rubber gasket



ATC18002

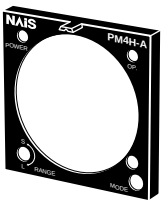
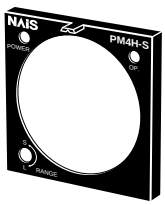
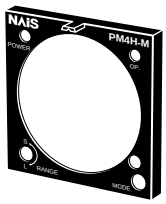
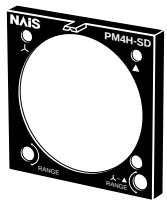
• Stop ring



ATC18001

When you control the fixed time range, the setting rings make it easy to do the time setting (a set of 2 pcs) and keep the time range all the time.

• Panel cover (Black)

• PM4H-A	• PM4H-S	• PM4H-M	• PM4H-W	• PM4H-SD	• PM4H-F
					
ATC18011	ATC18012	ATC18013	ATC18014	ATC18015	ATC18016