

# Solid-state Timer H3JA

## Economical, Compact, Plug-in Timer

- Time limit, ON-delay, operation with automatic resetting.
- DIN size (36 x 36 mm), fits standard 8-pin sockets.
- Wide choice of supply voltages: 24, 100 to 120, 200 to 240 VAC, 12, 24 VDC.
- Dual LED indication for power and output status.
- Large transparent setting knob.
- Setting error rating almost matches that of a 48 x 48 timer.
- Conforms to UL and CSA, and meets CE marking requirements.



## Ordering Information

**Stock Note:** Shaded models are normally stocked.

Operation/resetting system	Time-limit contact	Mounting method	Rated time	Model
Time-limit operation/ self-resetting	SPDT	Surface mounting, flush mounting, and DIN track mounting	1 s, 3 s, 5 s, 10 s, 30 s, 60 s, 3 min, 5 min, 10 min, 30 min, 60 min, 3 hrs	<b>H3JA-8A</b>
	DPDT		1 s, 3 s, 5 s, 10 s, 30 s, 60 s, 3 min, 5 min, 10 min, 30 min, 60 min, 3 hrs	<b>H3JA-8C</b>

**Note:** Specify the model number, supply voltage, and rated time when ordering.

Ex. H3JA-8A 100 to 120 VAC 1 s

Rated time  
 Supply voltage

## ■ Accessories (Order Separately)

**Stock Note:** Shaded models are normally stocked.

Name/specifications		Model
Flush mounting adapter		Y92F-31
Mounting track	50 cm (l) x 7.3 mm (t)	PFP-50N
	1 m (l) x 7.3 mm (t)	PFP-100N
	1 m (l) x 16 mm (t)	PFP-100N2
End plate		PFP-M
Spacer		PFP-S
Track mounting/ Front connecting socket	8-pin	PF085A
Back connecting socket	8-pin	P3G-08
	8-pin, finger safe type	P3G-08 with Y92A-48G (see note 1)
Hold-down clip (see note 2)	For PF085A Socket	Y92H-6

**Note:** 1. Y92A-48G is a finger safe terminal cover which is attached to the P3G-08 Socket.

2. Hold-down Clips are sold in sets of two.

## Specifications

### ■ Time Ranges

Rated time	Time range	Rated time	Time range
1 s	0.1 to 1 s	3 min	0.3 to 3 min
3 s	0.3 to 3 s	5 min	0.5 to 5 min
5 s	0.5 to 5 s	10 min	1 to 10 min
10 s	1 to 10 s	30 min	3 to 30 min
30 s	3 to 30 s	60 min	6 to 60 min
60 s	6 to 60 s	3 hrs	0.3 to 3 hrs

### ■ Ratings

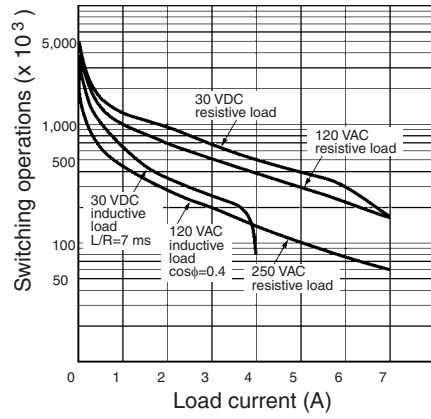
<b>Rated supply voltage</b>	24, 100 to 120 or 200 to 240 VAC (50/60 Hz); 24 VDC; 12 VDC (only available on H3JA-8A model)
<b>Operating voltage range</b>	85% to 110% of rated supply voltage
<b>Power consumption</b>	<p><u>H3JA-8A</u>            100 to 120 VAC: Approx. 3 VA (1.3 W) at 120 VAC            200 to 240 VAC: Approx. 5 VA (1.5 W) at 240 VAC            24 VAC: Approx. 1.2 VA (0.9 W) at 24 VAC            24 VDC: Approx. 0.8 W at 24 VDC</p> <p><u>H3JA-8C</u>            100 to 120 VAC: Approx. 3 VA (1.1 W) at 120 VAC            200 to 240 VAC: Approx. 5 VA (1.3 W) at 240 VAC            24 VAC: Approx. 1.3 VA (1 W) at 24 VAC            24 VDC: Approx. 0.9 W at 24 VDC</p>
<b>Control outputs</b>	H3JA-8A: 7 A at 250 VAC, resistive load H3JA-8C: 5 A at 250 VAC, resistive load

## ■ Characteristics

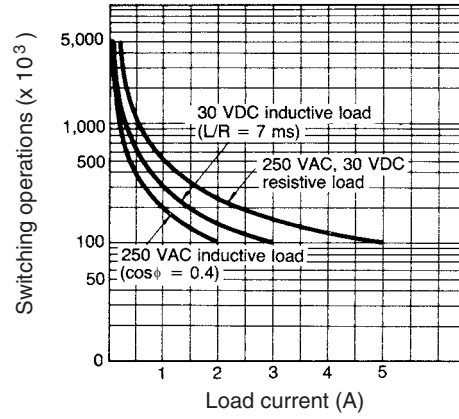
Accuracy of operating time	±2% max.
Setting error	±7% max.
Influence of voltage	±2% max.
Influence of temperature	±5% max.
Insulation resistance	100 MΩ min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60 Hz for 1 min (between current-carrying and non-current-carrying parts, and between contact-carrying and control circuit, and between contacts of different poles) 1,000 VAC, 50/60 Hz for 1 min (between non-continuous contacts)
Impulse withstand voltage	3 kV (between power terminals) 4.5 kV (between current-carrying terminal and exposed non-current-carrying metal parts)
Noise immunity	±1.5 kV (between power terminals) and ±1.5 kV (between output terminals), square-wave noise by noise simulator (pulse width: 100 ns/1 μs, 1-ns rise)
Static immunity	Destruction: 8 kV Malfunction: 6 kV
Vibration resistance	Destruction: 10 to 55 Hz with 0.75-mm double amplitude in 3 directions for 1 hour each. Malfunction: 10 to 55 Hz with 0.5-mm double amplitude in 3 directions for 10 minutes each.
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> Malfunction: 100 m/s <sup>2</sup>
Ambient temperature	Operating: -10°C to 55°C Storage: -25°C to 65°C
Ambient humidity	Operating: 35% to 85%
Life expectancy	<u>H3JA-8A</u> Mechanical: 10,000,000 operations min. Electrical: 60,000 operations min. (7 A resistive load at 250 VAC, 360 operations/h) <u>H3JA-8C</u> Mechanical: 10,000,000 operations min. Electrical: 100,000 operations min. (5 A resistive load at 250 VAC, 360 operations/h)
EMC	(EMI) Emission Enclosure: EN55011 Group 1 class A Emission AC Mains: EN55011 Group 1 class A (EMS) Immunity ESD: EN61000-4-2: 6 kV contact discharge (level 3) 8 kV air discharge (level 3) Immunity RF-interference from AM Radio Waves: EN61000-4-3: 10 V/m (80 MHz to 1 GHz) (level 3) Immunity Burst: EN61000-4-4: 2 kV power port and output port (level 3) 1 kV control port with capacitive clamp (level 3) Immunity Surge: EN61000-4-5: 2 kV common mode (level 3) 1 kV differential mode (level 3)
Approved standard	UL508, CSA C22.2 No. 14, conforms to EN61812-1
Case color	Light gray (Munsell 5Y7/1)
Degree of protection	IP40 (panel surface)
Weight	H3JA-8A: Approx. 50 g H3JA-8C: Approx. 60 g

# Engineering Data

## ■ H3JA-8A



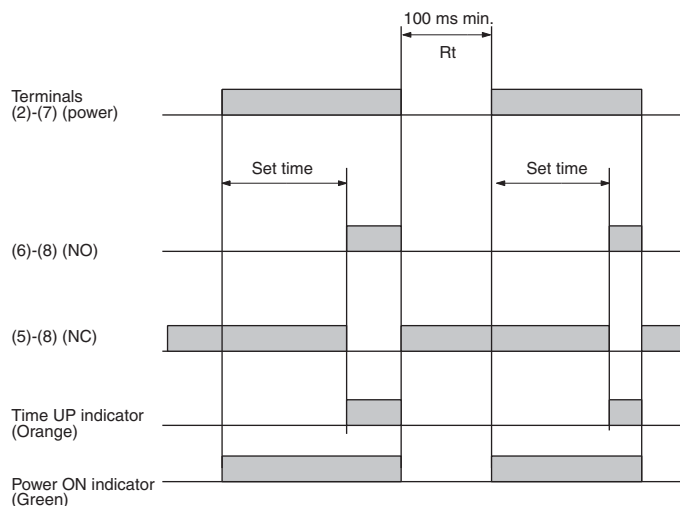
## ■ H3JA-8C



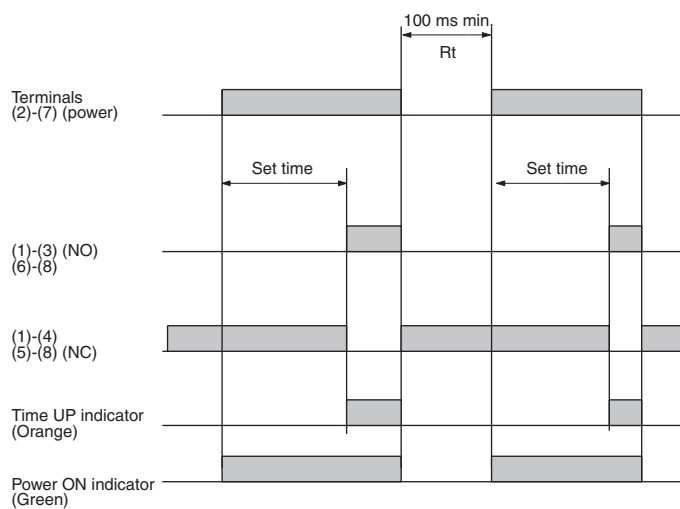
# Operation

## ■ Timing Chart

### H3JA-8A

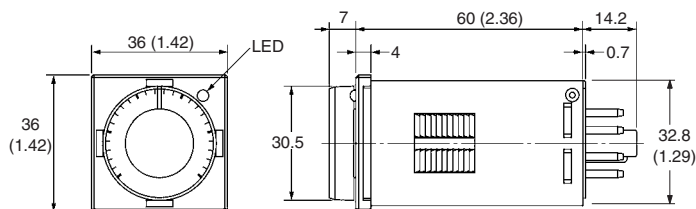
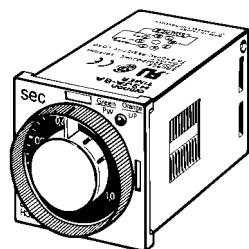


### H3JA-8C



## Dimensions

Unit: mm (inch)

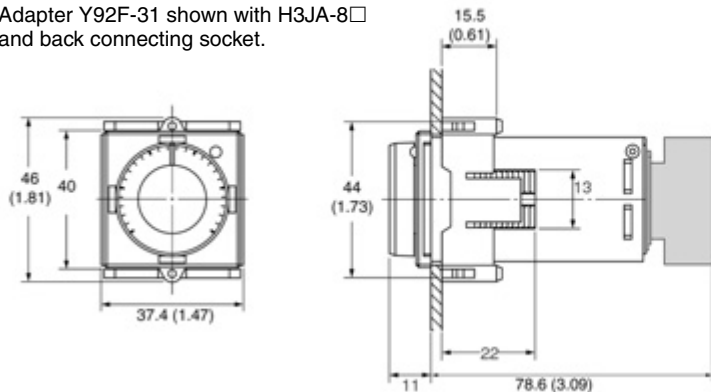


## ■ Accessories (Order Separately)

### Flush Mounting Adapter

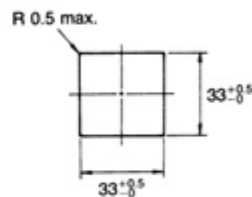
#### Y92F-31

Adapter Y92F-31 shown with H3JA-8□ and back connecting socket.



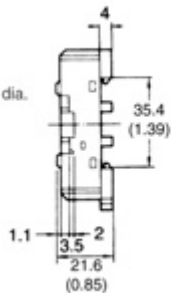
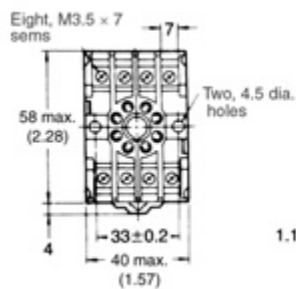
#### Panel Cutout

Recommended panel thickness: 1 to 5 mm

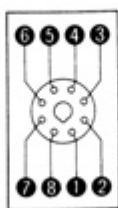


### Track Mounting/Front Connecting Socket

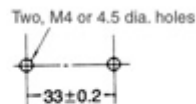
#### PF085A



#### Terminal Arrangement (Top View)

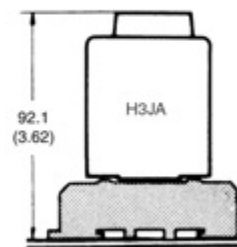


#### Mounting Holes



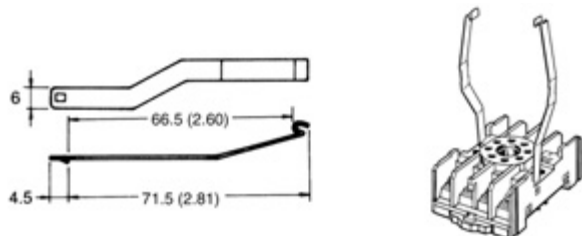
Note: PF085A can be used as a front connecting socket.

#### Mounting Height of Timer with Socket



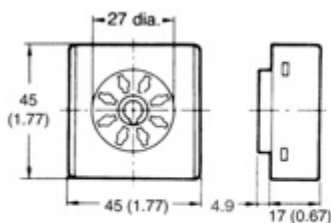
### Hold-down Clips (Set of Two Clips)

#### Y92H-6 for PF085A

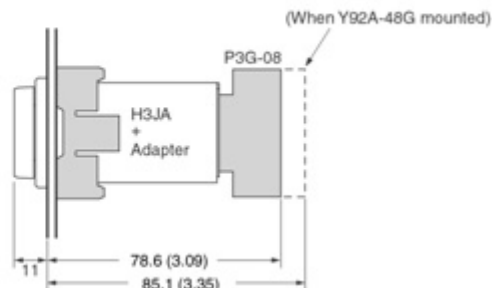
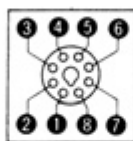


## Back Connecting Socket

P3G-08



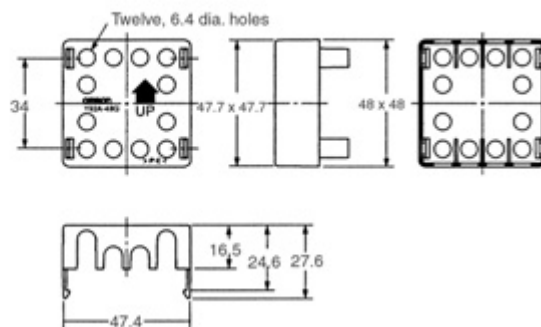
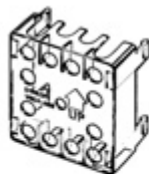
Terminal Arrangement (Bottom View)



## Finger Safe Terminal Cover Conforming to VDe0106/P100

Y92A-48G

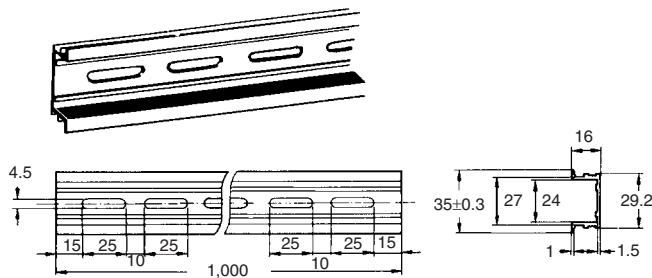
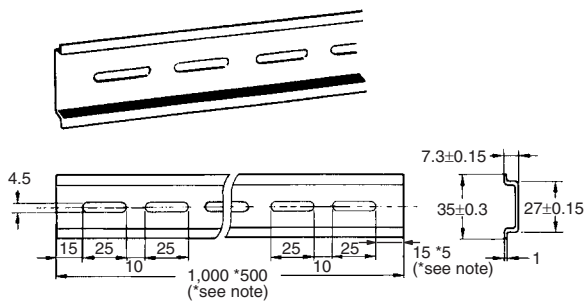
(Attachments for P3G-08 Socket)



## Mounting Track

PFP-100N, PFP-50N

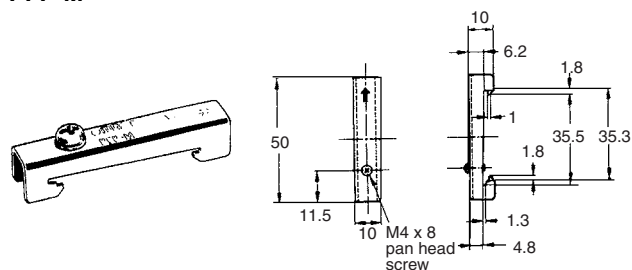
PFP-100N, PFP-50N



Note: The values shown with an asterisk are for the PFP-50N.

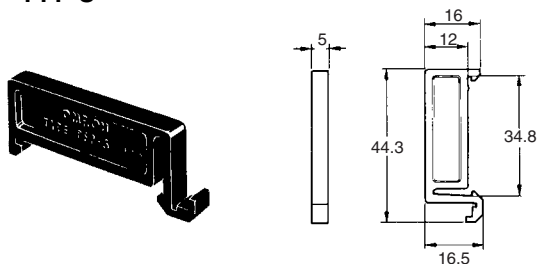
## End Plate

PFP-M



## Spacer

PFP-S

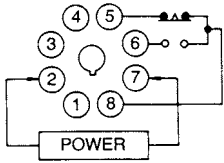


# Installation

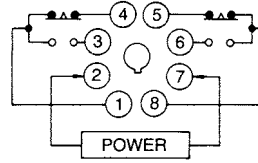
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## ■ Terminal Arrangement

### H3JA-8A



### H3JA-8C





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To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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