# **Solid-state Timer**

H3JA

### **Economical, Compact, Plug-in Timer**

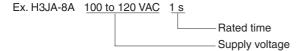
- Time limit operation with automatic resetting.
- $\blacksquare$  DIN size (36  $\times$  36 mm), fits standard 8-pin sockets.
- Wide choice of supply voltages: 24, 100 to 120, 200 to 240 VAC, 12, 24 VDC.
- Dual LED indication for power and output statuses.
- Large transparent setting knob.
- $\blacksquare$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



## **Ordering Information**

Operation/resetting system	Time-limit contact	Mounting method	Rated time	Model
Time-limit operation/	SPDT			H3JA-8A
self-resetting	DPDT		60 s, 3 min, 5 min, 10 min, 30 min, 60 min, 3 hrs	H3JA-8C

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



### ■ Accessories (Order Separately)

Name/specifications Flush Mounting Adapter		Models Y92F-31	
	1 m ( <i>l</i> ) × 7.3 mm (t)	PFP-100N	
	1 m ( <i>l</i> ) × 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	US08	
	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

Rated supply voltage	24, 100 to 120 or 200 to 240 VAC (50/60 Hz);		
	12, 24 VDC		
Operating voltage range	85% to 110% of rated supply voltage		
Power consumption	<u>H3JA-8A</u>		
	100 to 120 VAC: Approx. 2.6 VA (1.1 W) at 120 VAC		
	200 to 240 VAC: Approx. 5.0 VA (1.5 W) at 240 VAC		
	24 VAC: Approx. 1.0 VA (0.9 W) at 24 VAC		
	24 VDC: Approx. 0.8 W at 24 VDC		
	12 VDC: Approx. 0.5 W at 12 VDC		
	<u>H3JA-8C</u>		
	100 to 120 VAC: Approx. 2.4 VA (0.9 W) at 120 VAC		
	200 to 240 VAC: Approx. 4.1 VA (1.1 W) at 240 VAC		
	24 VAC: Approx. 1.2 VA (1.0 W) at 24 VAC		
	24 VDC: Approx. 0.8 W at 24 VDC		
Control outputs	H3JA-8A: 7 A at 250 VAC, resistive load		
	H3JA-8C: 5 A at 250 VAC, resistive load		

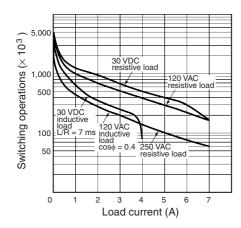
### ■ Characteristics

Accuracy of operating time	±2% max. (full scale)		
Setting error	±7% max. (full scale) ±50 ms at 20°C		
Influence of voltage	±2% max. (full scale)		
Influence of temperature	±5% max. (full scale)		
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) 750 VAC, 50/60 Hz for 1 min (between non-continuous contacts: H3JA-8A) 1,000 VAC, 50/60 Hz for 1 min (between non-continuous contacts: H3JA-8C)		
Impulse withstand voltage	3 kV (between power terminals) 4.5 kV (between current-carrying terminal and exposed non-current-carrying metal parts)		
Noise immunity	$\pm 1.5$ kV (between power terminals) and $\pm 1.5$ kV (between output terminals), square-wave noise by noise simulator (pulse width: 100 ns/1 $\mu$ s, 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	H3JA-8A Mechanical: 10,000,000 operations min. Electrical: 60,000 operations min. (7 A resistive load at 250 VAC, 360 operations/h) H3JA-8C Mechanical: 10,000,000 operations min. Electrical: 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 B Emission AC Mains: EN55011 Group 1 class B Harmonic Current: EN61000-3-2 Voltage Fluctuation and Flickering: EN61000-3-3  (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 (See note.), CSA C22.2 No. 14, conforms to EN61812-1 (Pollution degree 2)		
Case color	Light gray (Munsell 5Y7/1)		
Degree of protection	IP40 (panel surface)		
Weight	H3JA-8A: Approx. 50 g H3JA-8C: Approx. 60 g		

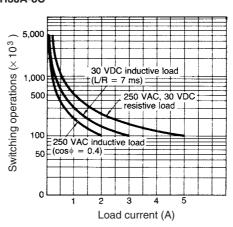
Note: The surrounding air temperature (operating) is -10 to  $40^{\circ}C$ .

# **Engineering Data**

### H3JA-8A



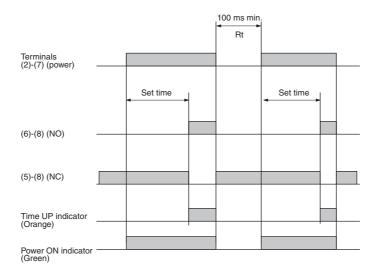
### H3JA-8C



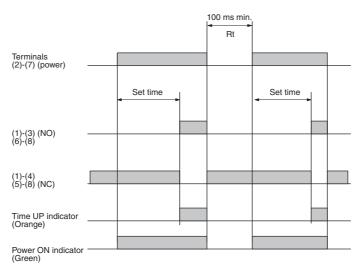
## Operation

### ■ Timing Chart

### H3JA-8A

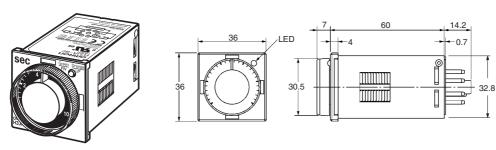


H3JA-8C



## **Dimensions**

Note: All units are in millimeters unless otherwise indicated.

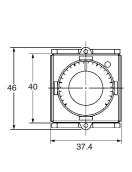


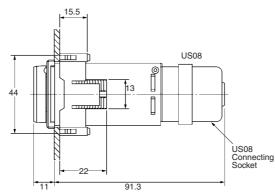
### ■ Accessories (Order Separately)

### Flush Mounting Adapter

Y92F-31

Adapter Y92F-31 shown with H3JA-8  $\!\Box$  and back connecting socket.

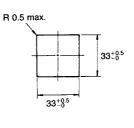




### **Panel Cutout**

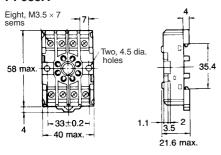
Recommended panel thickness: 1 to 5 mm

H3JA

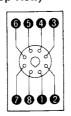


### **Track Mounting/Front Connecting Socket**

### PF085A



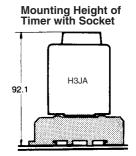




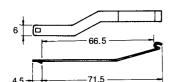
**Mounting Holes** 

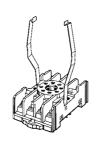


Note: PF085A can be used as a front connecting socket.



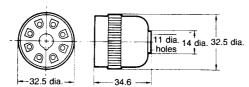
### Hold-down Clips (Set of Two Clips) Y92H-6 for PF085A Socket



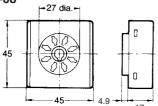


### **Back Connecting Socket**



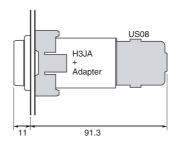


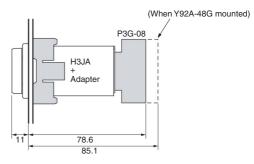




## Terminal Arrangement (Bottom View)



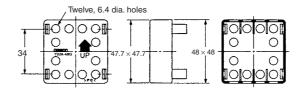


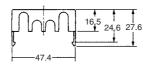


### Finger Safe Terminal Cover Conforming to VDE0106/P100

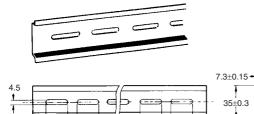
Y92A-48G (Attachment for P3G-08 Socket)







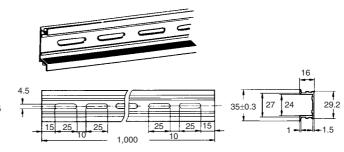
Mounting Track PFP-100N, PFP-50N

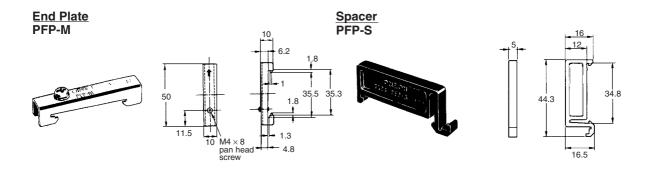


1,000 (500) (see note)

**Note:** The values shown in parentheses are for the PFP-50N.

### PFP-100N2





## Installation

## ■ Terminal Arrangement



**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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