OMRON Solid-state Timer

H3JA

((91))

Economical, Compact, Plug-in Timer

- Time limit 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, 24 VDC.
- Dual LED indication for power and output statuses.
- 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

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	H3JA-8A
	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	H3JA-8C

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)

Name/specifications Flush Mounting Adapter		Models		
		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	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); 24 VDC			
Operating voltage range	85% to 110% of rated supply voltage			
Power consumption	H3JA-8A 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 H3JA-8C 100 to 120 VAC: 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 VAC: Approx. 0.9 W at 24 VAC 24 VDC: Approx. 0.9 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.			
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 be- tween 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 μ 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 ² Malfunction: 100 m/s ²			
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. Electrical: 100,000 operations min.			
EMC	(EMI) Emission Enclosure: EN55011 Group 1 class A Emission AC Mains: EN55011 Group 1 class A (EMS) EN61000-4-2: 6 kV contact discharge (level 3) Immunity ESD: EN61000-4-2: 6 kV contact 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) Immunity Surge: EN61000-4-5: 2 kV comtrol port with capacitive clamp (level 3) Immunity Surge: EN61000-4-5: 2 kV common 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







Operation

Timing Chart

H3JA-8A



H3JA-8C

				100 ms min			
				Rt			
Terminals (2)-(7) (power)							
(-) (.) (P=)							
		Set time			Set time		
		• •			ح		
(1)-(3) (NO) (6)-(8)							
(6)-(8)							
(1)-(4) (5)-(8) (NC)							
(5)-(8) (NC)							
Time UP indicator							
(Orange)			1				
Power ON indicator							
(Green)							

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 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 Socket





Back Connecting Socket

-27 dia.

45

US08

P3G-08

45



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17

Terminal Arrangement (Bottom View)





(When Y92A-48G mounted)

16

29.2

-1.5

27 24

1

35±0.3

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25 15

25

10



Finger Safe Terminal Cover Conforming to VDE0106/P100

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







Mounting Track PFP-100N, PFP-50N

PFP-100N2



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



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.

Cat. No. L100-E1-1A In the interest of product improvement, specifications are subject to change without notice.

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