OMRON

Solid-state Timer
H3CR

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments. Refer to *Warranty and Application Considerations* (page 52), and *Safety Precautions* (page 22, 44, 51).

DIN 48 x 48-mm Multifunctional Timer Series

- Conforms to EN61812-1 and IEC60664-1 4 kV/2 for Low Voltage, and EMC Directives.
- Approved by UL and CSA.
- Lloyds/NK approvals.
- Six-language instruction manual provided.

■ Broad Line-up of H3CR Series

H3CR

H3CR-A

Multifunctional Timer

- H3CR-A, H3CR-AS, H3CR-AP — 11-pin model
- H3CR-A8, H3CR-A8S — 8-pin model
- H3CR-A8E — 8-pin with instantaneous contact output model

H3CR-F

Twin Timer

- H3CR-F, H3CR-FN, H3CR-F-300, H3CR-FN-300 — 11-pin model
- H3CR-F8, H3CR-F8N, H3CR-F8-300, H3CR-F8N-300 — 8-pin model

H3CR-G

Star-delta Timer

- H3CR-G8L, H3CR-G8EL — 8-pin model

H3CR-H

Power OFF-delay Timer

- H3CR-HRL — 11-pin model
- H3CR-H8L, H3CR-H8RL — 8-pin model

Note: H3CR-AS, H3CR-A8S: Transistor output models

Contents

OMRON

Solid-state Multi-functional Timer
H3CR-A

DIN 48 x 48-mm State-of-the-art Multifunctional Timer

- A wider power supply range reduces the number of timer models kept in stock.
- A wide range of applications through six or four operating modes.
- Reduced power consumption. (Except for H3CR-A8E)
- Enables easy sequence checks through instantaneous outputs for a zero set value at any time range.
- Length, when panel-mounted with a Socket, of 80 mm or less.
- Time Setting Rings enable consistent settings and limit the setting range.
- Panel Covers enable various panel designs.
- PNP input models available.
- Rich variety of inputs: Start, reset, and gate functions (11-pin models and -AP models)

CE UL CSA C

Model Number Structure

■ Model Number Legend

Note: This model number legend includes combinations that are not available. Before ordering, please check the *List of Models* on page 3 for availability.

H3CR-A□ □ □ - □ □
1 2 3 4 5

1. **Number of Pins**
   None: 11-pin models
   8: 8-pin models
2. **Input Type for 11-pin Models**
   None: No-voltage input (NPN type)
   P: Voltage input (PNP type)
3. **Output**
   None: Relay output (DPDT)
   S: Transistor output (NPN/PNP universal use)
   E: Relay output (SPDT) with instantaneous relay output (SPDT)
4. **Suffix**
   300: Dual mode models (signal ON/OFF-delay and one-shot)
   301: Double time scale (range) models (0.1 s to 600 h)
5. **Supply Voltage**
   100-240AC/100-125DC: 100 to 240 VAC/100 to 125 VDC
   24-48AC/12-48DC: 24 to 48 VAC/12 to 48 VDC
   24-48AC/DC: 24 to 48 VAC/VDC (Only for H3CR-A8E)

Ordering Information

■ List of Models

Note: 1. Specify both the model number and supply voltage when ordering.
Example: H3CR-A 100-240AC/100-125DC
└ Supply voltage

2. The operating modes are as follows
A: ON-delay D: Signal OFF-delay
B: Flicker OFF start E: Interval
B2: Flicker ON start G: Signal ON/OFF-delay
C: Signal ON/OFF-delay J: One-shot

11-pin Models

Output	Supply voltage	Input type	Time range	Operating mode (See note 2)	Model (See note 1.)
Contact	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC	No-voltage input	0.05 s to 300 h	Six multi-modes: A, B, B2, C, D, E	H3CR-A
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC			Dual-modes: G, J	H3CR-A-300
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC	Voltage input		Six multi-modes: A, B, B2, C, D, E	H3CR-AP
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC	No-voltage input	0.1 s to 600 h		H3CR-A-301
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
Transistor (Photocoupler)	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC		0.05 s to 300 h		H3CR-AS

8-pin Models

Output	Supply voltage	Input type	Time range	Operating mode (See note 2)	Model (See note 1.)
Contact	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC	No-input available	0.05 s to 300 h	Four multi-modes: A, B2, E, J (Power supply start)	H3CR-A8
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC		0.1 s to 600 h		H3CR-A8-301
	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC				
Transistor (Photocoupler)	24 to 48 VAC (50/60 Hz)/ 12 to 48 VDC		0.05 s to 300 h		H3CR-A8S
Time-limit contact and instantaneous contact	100 to 240 VAC (50/60 Hz)/ 100 to 125 VDC				H3CR-A8E
	24 to 48 VAC/VDC (50/60 Hz)				

■ Accessories (Order Separately)

Name/specifications		Models
Flush Mounting Adapter		Y92F-30
		Y92F-73
		Y92F-74
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
Protective Cover		Y92A-48B
Track Mounting/ Front Connecting Socket	8-pin	P2CF-08
	8-pin, finger safe type	P2CF-08-E
	11-pin	P2CF-11
	11-pin, finger safe type	P2CF-11-E
Back Connecting Socket	8-pin	P3G-08
	8-pin, finger safe type	P3G-08 with Y92A-48G (See note 1)
	11-pin	P3GA-11
	11-pin, finger safe type	P3GA-11 with Y92A-48G (See note 1)
Time Setting Ring	Setting a specific time	Y92S-27
	Limiting the setting range	Y92S-28
Panel Cover (See note 2)	Light gray (5Y7/1)	Y92P-48GL
	Black (N1.5)	Y92P-48GB
	Medium gray (5Y5/1)	Y92P-48GM
Hold-down Clip (See note 3)	For PL08 and PL11 Sockets	Y92H-7
	For PF085A Socket	Y92H-8

Note: 1. Y92A-48G is a finger safe terminal cover which is attached to the P3G-08 or P3GA-11 Socket.
2. The Time Setting Ring and Panel Cover are sold together.
3. Hold-down Clips are sold in sets of two.

Specifications

■ General

Item	H3CR-A/-AS	H3CR-AP	H3CR-A8/-A8S	H3CR-A8E
Operating mode	A: ON-delay B: Flicker OFF start B2: Flicker ON start C: Signal ON/OFF-delay D: Signal OFF-delay E: Interval G: Signal ON/OFF-delay (Only for H3CR-A-300) J: One-shot (Only for H3CR-A-300)		A: ON-delay (power supply start) B2: Flicker ON start (power supply start) E: Interval (power supply start) J: One-shot (power supply start)	
Pin type	11-pin		8-pin	
Input type	No-voltage input	Voltage input	---	
Time-limit output type	H3CR-A/-A8/-AP: Relay output (DPDT) H3CR-AS/-A8S: Transistor output (NPN/PNP universal)*			Relay output (SPDT)
Instantaneous output type	---			Relay output (SPDT)
Mounting method	DIN track mounting, surface mounting, and flush mounting			
Approved standards	UL508, CSA C22.2 No.14, NK, Lloyds Conforms to EN61812-1 and IEC60664-1 (VDE0110) 4kV/2. Output category according to EN60947-5-1 for Timers with Contact Outputs. Output category according to EN60947-5-2 for Timers with Transistor Outputs.			

*The internal circuits are optically isolated from the output. This enables universal application as NPN or PNP transistor.