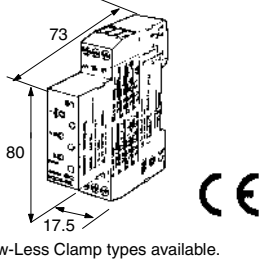
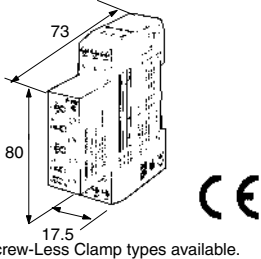
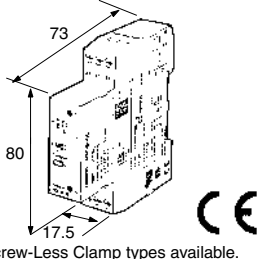
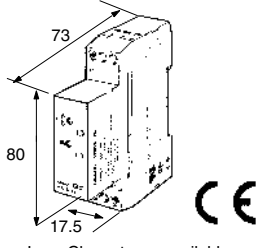
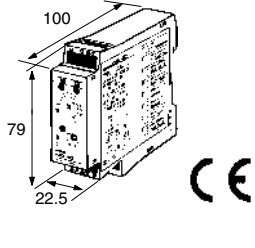
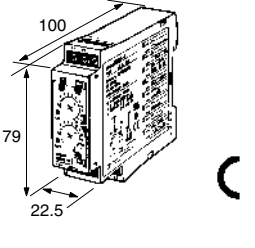
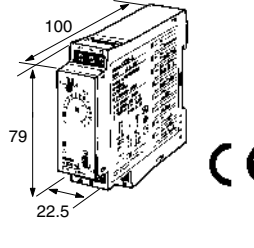
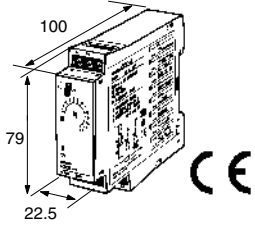
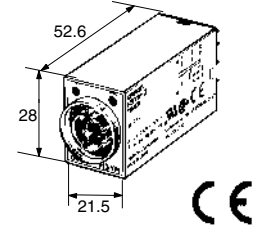
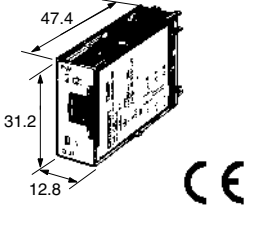


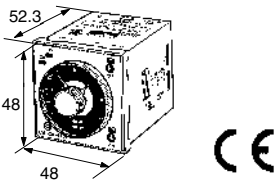
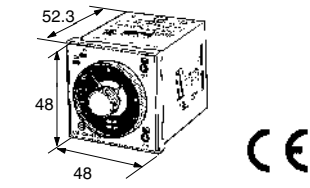
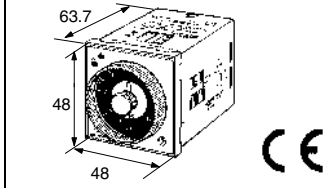
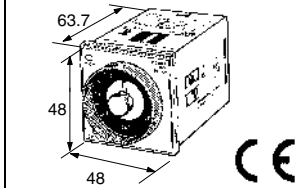
Timers

Classification		Analogue Timer		
Model		H3DS-M/-S/-A	H3DS-F	H3DS-G
Features		DIN Track Mounting, Standard 17.5 mm Width, Solid-state Multifunctional Timer with Smart Dial/Selector-locking Mechanism	DIN Track Mounting, Standard 17.5 mm Width, Solid-state Twin Timer with Smart Dial/Selector-locking Mechanism	DIN Track Mounting, Standard 17.5 mm Width, Solid-state Star-delta Timer with Smart Dial/Selector-locking Mechanism
Appearance and dimensions				
Time range		0.1 s..120 h	0.1 s..12 h	1 s..120 s
Supply voltage		24..230 VAC (50/60 Hz)/ 24..48 VDC	24..230 VAC (50/60 Hz)/ 24..48 VDC	24..230 VAC (50/60 Hz)/ 24..48 VDC
Power consumption		AC: 32 VA max./3.0 W max. (typical: 30 VAC/ 2.7 W) at 230 VAC, 14 VA max./2.2 W max. (typical: 13 VAC/ 2.1 W) at 100..120 VAC DC: 0.7 W max. (typical: 0.6 W) at 24 VDC, 1.4 W max. (typical: 1.3 W) at 48 VDC	AC: 33 VA max./2.2 W max. (typical: 31 VAC/ 2.0 W) at 230 VAC, 11 VA max./1.9 W max. (typical: 9.7 VAC/ 1.7 W) at 100..120 VAC DC: 0.7 W max. (typical: 0.6 W) at 24 VDC, 1.4 W max. (typical: 1.2 W) at 48 VDC	AC: 21 VA max./1.7 W max. (typical: 20 VAC/1.6 W) at 230 VAC 11 VA max./2.0 W max. (typical: 8.6 VAC/1.5 W) at 100..120 VAC DC: 1.3 W max. (typical: 1.2 W) at 24 VDC 0.7 W max. (typical: 0.6 W) at 48 VDC
Accuracy of operating time		±1% max.	±1% max.	±1% max.
Setting error		±10%±0.05 s max.	±10%±0.05 s max.	±10%±0.05 s max.
Control output		5 A at 250 VAC/30 VDC	5 A at 250 VAC/30 VDC	5 A at 250 VAC/30 VDC
Contact configuration	Type			
	Time-limit	SPDT	SPDT	SPST-NO
	Instantaneous	---	---	---
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 J: One-shot	Flicker OFF start/Flicker ON start With independent time setting for OFF and ON time	Star-delta operation
Life expectancy	Mechanical	10 x 10 ⁶ operations	10 x 10 ⁶ operations	10 x 10 ⁶ operations
	Electrical (Resistive load) (see note 1)	100 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)
EMC		Conforms to EN61812-1 (EMI: EN55011 class B)	Conforms to EN61812-1 (EMI: EN55011 class B)	Conforms to EN61812-1 (EMI: EN55011 class B)
Approved safety standards (see note2)		UL, CSA, conforms to EN61812-1	UL, CSA, conforms to EN61812-1	UL, CSA, conforms to EN61812-1
Socket	Front Connecting	---	---	---
	Back Connecting	---	---	---
Page No.		B-11	B-23	B-31

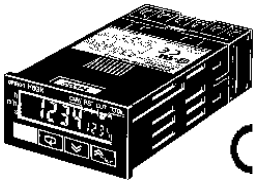
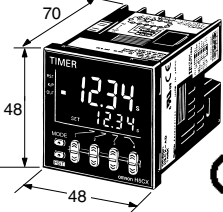

Analogue Timers			
H3DS-X	H3DE-M/-S	H3DE-F	H3DE-G
DIN Track Mounting, Standard 17.5 mm Width, Solid-state Two-wired Timer with Smart Dial/Selector-locking Mechanism	DIN Track Mounting, Standard 22.5 mm Width Timer	DIN Track Mounting, Standard 22.5 mm Width, Solid-state Twin timer	DIN Track Mounting Standard 22.5 mm Width, Solid-state Star-delta Timer
			
0.1 s..120 h	0.10 s..120 h	0.1 s..12 h	1 s..120 s
24..230 VAC/VDC (50/60 Hz)	24..230 VAC/DC (50/60 Hz) 12 VDC (H3DE-M2 only)	24..230 VAC/VDC (50/60 Hz)	24..230 VAC/VDC (50/60 Hz)
5 mA max.	H3DE-S1 AC: approx. 2.7 VA (1.6 W) at 230 VAC DC: approx. 0.7 W at 24 VDC	AC: approx. 3.1 VA (1.8 W) at 230 VAC DC: approx. 0.8 W at 24 VDC	AC: approx. 3 VA (1.8 W) at 230 VAC DC: approx. 0.8 W at 24 VDC
±1% max.	±1% max.	±1% max.	±1% max.
±10%±0.05 s max.	±10%±0.05 s max.	±10%±0.05 s max.	±10%±0.05 s max.
SCR output: 5 mA..0.7 A	5 A at 250 VAC/30 VDC	5 A at 250 VAC	5 A at 250 VAC
---	-M1/-S1	-M2/-S2	---
SCR output	SPDT	SPDT	SPDT
---	---	SPDT (Programmable to Time-limit)	---
ON-delay	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 J: One-shot	Flicker-OFF/Flicker-ON start With independent time setting for OFF and ON time	Star-delta operation
---	10 x 10 ⁶ operations	10 x 10 ⁶ operations	10 x 10 ⁶ operations
---	100 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)
Conforms to EN61812-1 (EMI: EN55011 class B)	Conforms to EN61812-1 (EMI: EN55011 class B)	Conforms to EN61812-1 (EMI: EN55011 class B)	Conforms to EN61812-1 (EMI: EN55011 class B)
UL, CSA, conforms to EN61812-1	UL, CSA, conforms to EN61812-1	UL, CSA, conforms to EN61812-1	UL, CSA, conforms to EN61812-1
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B-39	B-55	B-65	B-71

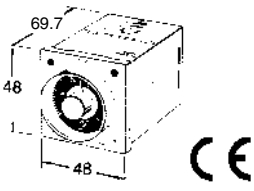
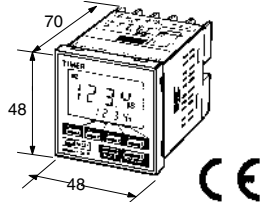
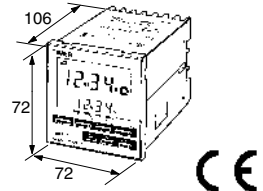
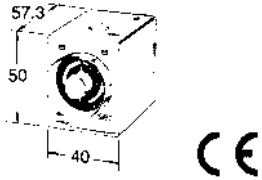
Timers

Classification		Analogue Timers			
Model		H3DE-H	H3YN	H3RN	
Features		DIN Track Mounting, Standard 22.5 mm Width, Solid-state Power OFF-delay Timer	Miniature Timer with Multiple Time Ranges and Multiple Operating Modes	Ultra-slim timer for G2R relay socket	
Appearance and dimensions					
Time range		0.1 s..120 s	0.1 s..10 h	0.1 s..10 h	
Supply voltage		100..120 VAC (50/60 Hz) 200..230 VAC (50/60 Hz) 24 VAC/VDC (50/60 Hz) 48 VAC/VDC (50/60 Hz)	24 VAC (50/60 Hz) 100..120 VAC (50/60 Hz) 200..230 VAC (50/60 Hz) 12, 24, 48, 100..110, 125 VDC	24 VAC (50/60 Hz), 12, 24 VDC	
Power consumption		AC: approx. 1.6 VA (1.0 W) at 230 VAC DC: approx. 0.2 W at 24 VDC	100..120 VAC: approx. 1.5 VA (1.3 W) 100..110 VDC: approx. 1.3 W	24 VAC: approx. 0.8 VA (0.5 W) 24 VDC: approx. 0.5 W	
Accuracy of operating time		±1% max.	±1% max.	±1% max.	
Setting error		±10%±0.05 s max.	±10%±0.05 s max.	±15%±0.05 s max.	
Control output		5 A at 250 VAC	5 A at 250 VAC/3 A at 250 VAC	3 A at 250 A	
Contact configuration	Type		-2/-21	-4/-41	-1/-11
	Time-limit	SPDT	DPDT	4PDT	SPDT
	Instantaneous	---	---	---	---
Operating mode		Power OFF-delay	ON-delay Interval Flicker-ON	ON-delay Interval Flicker-ON	
Life expectancy	Mechanical	10 x 10 ⁶ operations	10 x 10 ⁶ operations	10 x 10 ⁶ operations	
	Electrical (Resistive load) (see note 1)	100 x 10 ³ operations (5 A at 250 VAC)	4PDT: 200 x 10 ³ operations (3 A at 250 VAC) DPDT: 500 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (3 A at 250 VAC)	
EMC		Conforms to EN61812-1 (EMI: EN55011 class A)	Conforms to EN61812-1	Conforms to EN61812-1	
Approved safety standards (see note2)		UL, CSA, conforms to EN61812-1	UL, CSA, LR, conforms to EN61812-1	UL, CSA, conforms to EN61812-1	
Socket	Front Connecting	---	PYF	R2RF	
	Back Connecting	---	PY screw type PYF screwless type	P2R screw type P2RF screwless type	
Page No.		B-77	B-87	B-99	

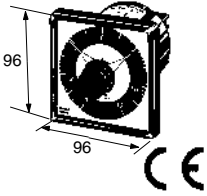
Analogue Timers								
H3CR-A			H3CR-F		H3CR-G		H3CR-H	
DIN 48 x 48 mm, Multifunctional Timer with many time ranges, operating modes and wide power supply ranges Optional panel cover in black and gray available)			DIN 48 x 48 mm Solid-state Twin Timers		DIN 48 x 48 mm Solid-state Star-delta Timers		DIN 48 x 48 mm Solid-state Power OFF-delay Timers	
								
0.05 s..600 h			0.05 s..300 h		0.5..120 s		0.05 s..12 min	
100..240 VAC (50/60 Hz)/ 100..125 VDC, 24..48 VAC (50/60 Hz)/12..48 VDC			100..240 VAC (50/60 Hz), 12 VDC, 24 VDC/VAC (50/60 Hz), 48..125 VDC		100..120 VAC (50/60 Hz), 200..240 VAC (50/60 Hz)		100..120 VAC (50/60 Hz), 200..240 VAC (50/60 Hz), 24 VAC/VDC (50/60 Hz), 48 VDC, 100..125 VDC	
H3CR-A/-A8 (When relay ON) AC: approx. 2.1 VA (1.6 W) at 240 VAC DC: approx. 0.8 W at 24 VDC (When relay OFF) AC: approx. 1.3 VA (1.1 W) at 240 VAC DC: approx. 0.2 W at 24 VDC			100..240 VAC: approx. 10 VA (2.1 W) at 240 VAC 24 VAC/VDC: approx. 2 VA (1.7 W) at 24 VAC, approx. 1 W at 24 VDC 48..125 VDC: approx. 1.5 W at 125 VDC 12 VDC: approx. 1 W at 12 VDC		100..120 VAC: approx. 6 VA (2.4 W) at 120 VAC 200..240 VAC: approx. 12 VA (3.0 W) at 240 VAC		100..120 VAC: approx. 0.23 VA (0.22 W) at 120 VAC 200..240 VAC: approx. 0.35 VA (0.3 W) at 240 VAC 24 VAC/DC: approx. 0.17 VA (0.15 W) at 24 VAC, approx. 0.1 W at 24 VDC 48 VDC: approx. 0.18 W at 48 VDC 100..125 VDC: approx. 0.5 W at 125 VDC	
±0.2% max.			±0.2% max.		±0.2% max.		±0.2% max.	
±5%±0.05 s max.			±5%±0.05 s max.		±5%±0.05 s max.		±5%±0.05 s max.	
5 A at 250 VAC			5 A at 250 VAC/30 VDC		5 A at 250 VAC/30 VDC		5 A at 250 VAC/30 VDC	
-A/-A8	-A8E	-AS/-ABS			-G8EL	-G8L	-H8L/-HRL	-H8RL
DPDT	SPDT	Solid-state	DPDT		SPST-NO	SPST-NO	DPDT	SPDT
---	SPDT	---	---		SPST-NO	---	---	---
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 J: One-shot			Flicker OFF start Flicker ON start With independent time setting for OFF and ON time		Star-delta timer		Power OFF-delay	
20 x 10 ⁶ operations			20 x 10 ⁶ operations		20 x 10 ⁶ operations		10 x 10 ⁶ operations	
100 x 10 ³ operations (5 A at 250 VAC)			100 x 10 ³ operations (5 A at 250 VAC)		100 x 10 ³ operations (5 A at 250 VAC)		100 x 10 ³ operations (5 A at 250 VAC)	
Conforms to EN61812-1			Conforms to EN61812-1		Conforms to EN61812-1		Conforms to EN61812-1	
UL, CSA, LR conforms to EN61812-1			UL, CSA, LR, conforms to EN61812-1		UL, CSA, LR, conforms to EN61812-1		UL, CSA, LR, conforms to EN61812-1	
P2CF			P2CF		P2CF		P2CF	
PL, P3G			P3G		P3G		P3G	
B-109			B-131		B-137		B-145	

Timers

Classification		Digital Timers		
Model		H8GN	H5CX	K3NP
Features		Preset Counter/Timer	48 x 48 mm Multifunctional Digital Timer	1/8 DIN Period Meter 5-digit
Appearance and dimensions				
Time range		0.001 s..9999 h	0.001 s..9999 h	Hours, minutes and seconds
Supply voltage		24 VDC	100..240 VAC (50/60 Hz), 24 VAC (50/60 Hz) 12 to 24 VDC	100..240 VAC (50/60 Hz), 12 to 24 VDC
Power consumption		1.5 W max.	AC: approx. 6.2 VA at 264 VAC approx. 5.1 VA at 26.4 VAC DC: approx. 2.4 W at 12 VDC	Depending on the output board selection
Accuracy of operating time		Signal start: $\pm 0.03\% \pm 30$ ms max. Power-ON start: $\pm 0.03\% \pm 50$ ms max.	Power ON start: $\pm 0.01\% \pm 0.05$ s max. Signal start: $\pm 0.005\% \pm 0.03$ s max.	$\pm 0.08\%$ rdg ± 1 digit
Setting error		No error	No error	No error
Control output		3 A at 250 VAC/30 VDC, resistive load (cos ϕ =1)	Contact output: 5 A at 250 VAC Solid state: 100 mA at 30 VDC	See available output board
Contact configuration	Type	---	-A/-A11/-L8	-AS/-A11S/-L8S
	Time-limit	SPDT	SPDT	Solid-state
	Instantaneous	---	---	---
Operating mode		A: ON-delay B: Flicker D: Signal OFF-delay E: Interval F: Accumulative Z: ON/OFF-duty adjustable flicker	A: Signal ON-delay A-1: Signal ON-delay 2 A-2: Power ON-delay 1 A-3: Power ON-delay 2 b: Repeat cycle 1 b-1: Repeat cycle 2 d: Signal OFF-delay E: Interval F: Cumulative Z: ON/OFF-duty adjustable flicker toff: Twin timer OFF start ton: Twin timer ON start	Passing speed Cycle Time difference Elapsed time Length measurement Interval
Life expectancy	Mechanical	10 x 10 ⁶ operations	10 x 10 ⁶ operations	---
	Electrical (Resistive load) (see note 1)	100 x 10 ³ operations min. (3 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)	---
EMC		Conforms to EN61326	Conforms to EN61326	
Approved safety standards (see note2)		UL, CSA, LR, conforms to EN61010-1, conforms to VDE0106/P100, CE marking	cULus, cURus, conforms to EN61010-1	UL, CSA, conforms to EN61010-1
Socket	Front Connecting	---	P2CF	
	Back Connecting	---	P3G	
Page No.		C-61	B-161	B-195

Motor Timer		Digital Timers		Motor Timer	
H2C		H5CR	H5BR	H2A	
DIN-sized (48 x 48 mm, 45 x 75 mm) Motor Timer with variable time range		1/16 DIN Timer with easy-to-use function	72 x 72 mm Timer with easy-to-use functions	Miniature, high-performance Motor Timer	
					
0.2 s..30 h (50/60 Hz)		0.001 s..9999 h	0.001 s..9999 h	0.2 s..28 h (50/60 Hz)	
110, 115, 120, 220, 240 VAC (50/60 Hz), 100 VAC (50 Hz), 100/110 VAC (60 Hz), 200 VAC (50 Hz), 200/220 VAC (60 Hz)		100..240 VAC (50/60 Hz), 24 VAC (50/60 Hz), 12..24 VDC	100..240 VAC (50/60 Hz), 24 VAC (50/60 Hz), 12..24 VDC	100 VAC (50 Hz) 100/110 VAC (60 Hz) 200 VAC (50 Hz) 200/220 VAC (60 Hz)	
Approx. 3.5 VA (3.3 W)		AC: approx. 3 VA..5 VA at 240 VAC DC: approx. 1 W..2 W at 24 VDC	AC: approx. 8 VA at 240 VAC DC: approx. 5 W at 24 VDC	Approx. 3 VA (2.7 W)	
±0.5% ±2% max. setting error		Power OFF start: ±0.01%±0.05 s max. Reset start: ±0.005%±0.03 s max.	Power start: ±0.01%±0.05 s max. Signal start: ±0.005%±0.03 s max.	±2% ±5% max. setting error	
6 A at 250 VAC		Contact output: 5 A at 250 VAC	Contact: 5 A at 250 VAC Solid state: 100 mA at 30 VDC	2 A at 250 VAC	
H2C/-8/-F/-R/-FR	-8R	-L/-B/-S	-LS/-BS/-SS	---	---
SPDT	SPDT	SPDT	Solid-state	SPDT, solid-state	---
SPDT	---	---	---	---	---
ON-delay	---	A: Signal ON-delay 1 A-1: Signal ON-delay 2 A-2: Power ON-delay 1 A-3: Power ON-delay 2 b: Repeat cycle 1 b-1: Repeat cycle 2 d: Signal OFF-delay E: Interval F: Cumulative	A: Signal ON-delay 1 A-1: Signal ON-delay 2 A-2: Power ON-delay 1 A-3: Power ON-delay 2 b: Repeat cycle 1 b-1: Repeat cycle 2 d: Signal OFF-delay E: Interval F: Cumulative	ON-delay	---
30 x 10 ⁶ operations	---	10 x 10 ⁶ operations	10 x 10 ⁶ operations	1 x 10 ⁶ operations	---
500 x 10 ³ operations (3 A at 250 VAC)	---	100 x 10 ³ operations (5 A at 250 VAC)	100 x 10 ³ operations (5 A at 250 VAC)	500 x 10 ³ operations (2 A at 250 VAC)	---
Conforms to EN61812-1	---	Conforms to EN61326	Conforms to EN61326	Conforms to EN61812-1	---
UL, CSA, conforms to EN61812-1	---	UL, CSA, conforms to EN61010-1	UL, CSA, conforms to EN61010-1	UL, CSA, conforms to EN61812-1	---
PF, P2CF	---	P2CF	---	PF	---
PL, P3G	---	P3G	---	PL, P3G	---
B-221	---	This product is not shown in the catalogue. For more information please contact your local Omron sales office or download the data from www.eu.omron.com			

Timers

Classification		Motor Timer	
Model		H3AM	
Features		Large setting dial and moving pointers are ideal for easy operation and monitoring	
Appearance and dimensions			
Time range		0.2..60 h (50/60 Hz)	
Supply voltage		100..240 VAC (50/60 Hz)	
Power consumption		Approx. 9 VA (5 W)	
Accuracy of operating time		±0.7% max.	
Setting error		±2% max.	
Control output		5 A at 250 VAC	
Contact configuration	Type	-NS	-NSR
	Time-limit	SPDT	SPDT
	Instantaneous	SPDT (Programmable to Time-limit)	SPDT
Operating mode		ON-delay	
Life expectancy	Mechanical	50 x 10 ⁵ operations	
	Electrical (Resistive load) (see note 1)	100 x 10 ³ operations (5 A at 250 VAC)	
EMC		Conforms to EN61812-1	
Approved safety standards (see note2)		UL, CSA, conforms to EN61812-1	
Socket	Front Connecting	---	
	Back Connecting	---	
Page No.		This product is not shown in the catalogue. For more information please contact your local Omron sales office or download the data from www.eu.omron.com	