

NO: TI-049 **PRODUCT:** H3CR Timers
DATE: March 2014 **TYPE:** Modification Notice

H3CR Timers Modified with More Timing Modes and Timing Units; New Supply Voltage Ranges Simplify Stocking

Effective date: April 2013

Reasons for modification: Streamline product offering to make timers easier to stock with fewer part numbers. Expanded timing modes and units were added to meet users' needs and keep H3CR competitive in the marketplace.



Affected Parts

Part number	Part number
H3CR-A AC100-240/DC100-125 300H	H3CR-H8L AC200/220/240 12M
H3CR-A AC24-48/DC12-48 300H	H3CR-H8L DC100-125 12M
H3CR-A-301 AC100-240/DC100-125 600H	H3CR-H8L DC48 12M
H3CR-A-301 AC24-48/DC12-48 600H	H3CR-H8L AC/DC24 12S
H3CR-A8 AC100-240/DC100-125 300H	H3CR-H8L AC100/110/120 12S
H3CR-A8 AC24-48/DC12-48 300H	H3CR-H8L AC200/220/240 12S
H3CR-A8-301 AC100-240/DC100-125 600H	H3CR-H8L DC100-125 12S
H3CR-A8-301 AC24-48/DC12-48 600H	H3CR-H8L DC48 12S
H3CR-A8-31 DC100 300H	H3CR-H8RL AC/DC24 12M
H3CR-A8E AC100-240/DC100-125 300H	H3CR-H8RL AC100/110/120 12M
H3CR-A8E AC24-48/DC24-48 300H	H3CR-H8RL AC200/220/240 12M
H3CR-A8S AC24-48/DC12-48 300H	H3CR-H8RL DC100-125 12M
H3CR-AP AC100-240/DC100-125 300H	H3CR-H8RL AC/DC24 12S
H3CR-AP AC24-48/DC12-48 300H	H3CR-H8RL AC100/110/120 12S
H3CR-AS AC24-48/DC12-48 300H	H3CR-H8RL AC200/220/240 12S
H3CR-F AC/DC24	H3CR-H8RL DC100-125 12S
H3CR-F AC100-240	H3CR-H8RL DC48 12S
H3CR-F8 AC/DC24	H3CR-H8RL DC48 M
H3CR-F8 AC100-240	H3CR-H8RL AC/DC24 12M
H3CR-F8N AC/DC24	H3CR-H8RL AC100/110/120 12M
H3CR-F8N AC100-240	H3CR-H8RL AC200/220/240 12M
H3CR-FN AC/DC24	H3CR-H8RL DC100-125 12M
H3CR-FN AC100-240	H3CR-H8RL AC/DC24 12S
H3CR-G8EL AC100/110/120	H3CR-H8RL AC100/110/120 12S
H3CR-G8EL AC200/220/240	H3CR-H8RL AC200/220/240 12S
H3CR-G8L AC100/110/120	H3CR-H8RL DC100-125 12S
H3CR-G8L AC200/220/240	H3CR-H8RL DC48 12S
H3CR-H8L AC/DC24 12M	H3CR-H8RL DC48 M
H3CR-H8L AC100/110/120 12M	

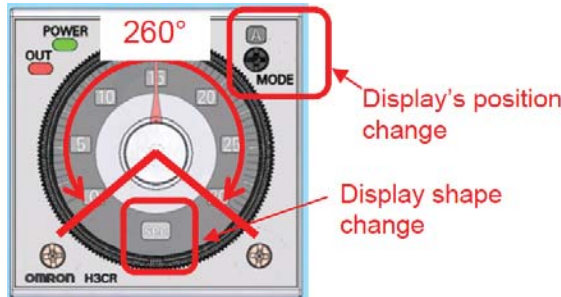
See the following pages for details about the changes.

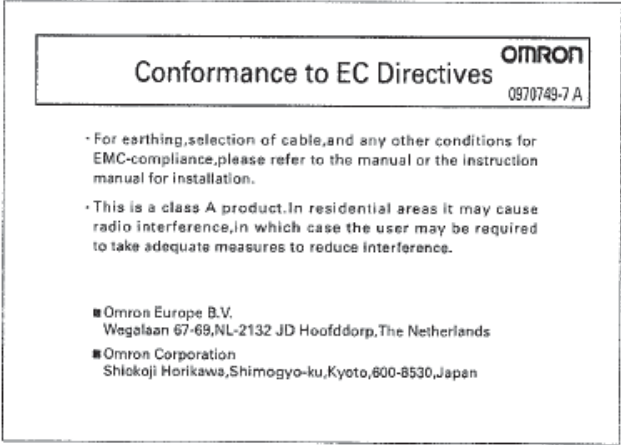
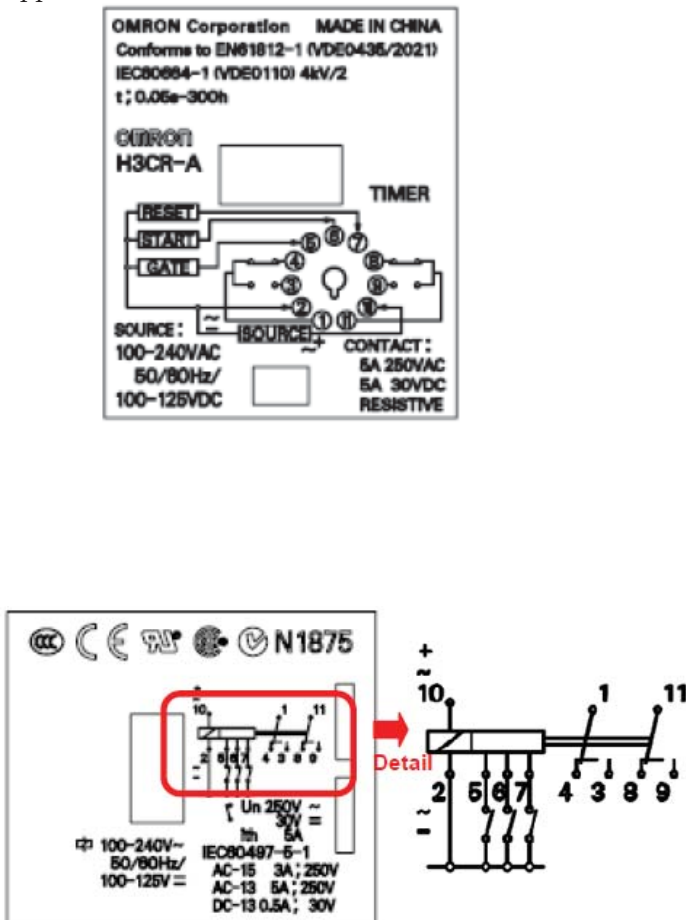
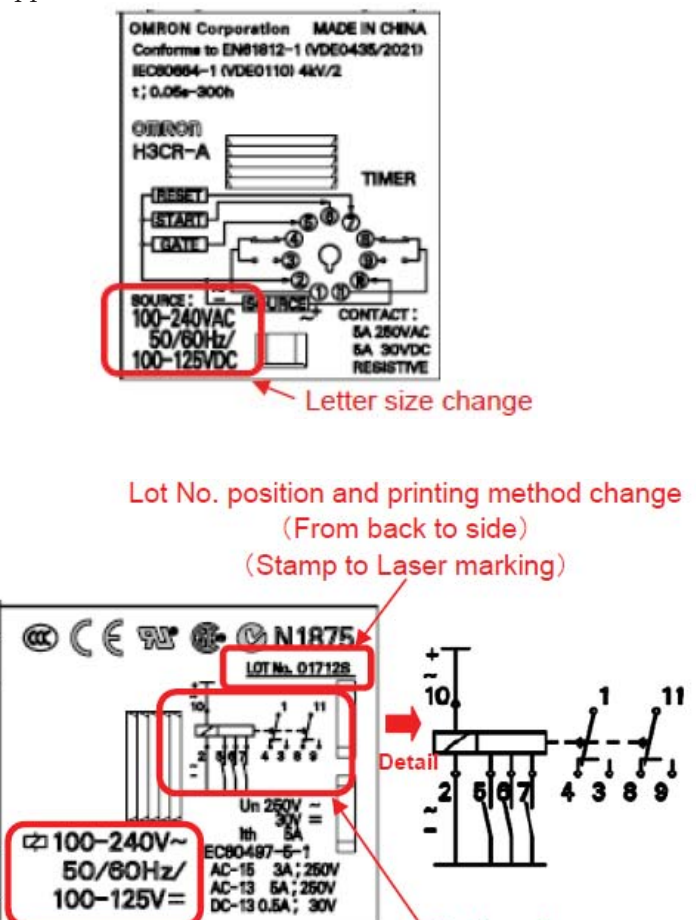
Changes

Before the change	After the change								
Operating mode Applicable model: H3CR-A, AP, AS 6 mode <table border="1"> <thead> <tr> <th>Type</th><th>Operating mode</th></tr> </thead> <tbody> <tr> <td>6 mode</td><td>A: ON-delay B: Flicker OFF start B2: Flicker ON start C: Signal ON/OFF-delay D: Signal OFF-delay E: Interval</td></tr> </tbody> </table>	Type	Operating mode	6 mode	A: ON-delay B: Flicker OFF start B2: Flicker ON start C: Signal ON/OFF-delay D: Signal OFF-delay E: Interval	Operating mode Applicable model: H3CR-A, AP, AS 8 mode <table border="1"> <thead> <tr> <th>Type</th><th>Operating mode</th></tr> </thead> <tbody> <tr> <td>8 mode</td><td>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</td></tr> </tbody> </table>	Type	Operating mode	8 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
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Operating mode selection sequence Applicable model: H3CR-A, AP, AS 6 mode A→B→B2→C→D→E→(A→B ...) (clockwise : 6 selectors)	Operating mode selection sequence Applicable model: H3CR-A, AP, AS 8 mode A→B→B2→C→D→E→G→J→(A→B ...) (clockwise : 8 selectors)								

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Before the change						After the change							
Time Unit						Time Unit							
Applicable model: H3CR-A, AP, AS, A8, A8S, A8E						Applicable model: H3CR-A, AP, AS, A8, A8S, A8E							
Time unit		sec	min	hrs	×10h	Time unit		sec	×10s	min	×10m	hrs	×10h
Full scale setting						Full scale setting							
1.2	Set time	0.05~1.2	0.12~1.2		1.2~12	1.2	Set time	0.05~1.2	1.2~12	0.12~1.2	1.2~12	0.12~1.2	1.2~12
3		0.3~3			3~30	3		0.3~3	3~30	0.3~3	3~30	0.3~3	3~30
12		1.2~12			12~120	12		1.2~12	12~120	1.2~12	12~120	1.2~12	12~120
30		3~30			30~300	30		3~30	30~300	3~30	30~300	3~30	30~300

Before the change	After the change																																																										
Time Unit Applicable model: H3CR-A-301, H3CR-A8-301 <table><tr><th colspan="2">Time unit</th><th>sec</th><th>min</th><th>hrs</th><th>×10h</th></tr><tr><td rowspan="4">Full scale setting</td><td>2.4</td><td rowspan="4">Set time 0.1~2.4</td><td colspan="2">0.24~2.4</td><td>2.4~24</td></tr><tr><td>6</td><td colspan="2">0.6~6</td><td>6~60</td></tr><tr><td>24</td><td colspan="2">2.4~24</td><td>24~240</td></tr><tr><td>60</td><td colspan="2">6~60</td><td>60~600</td></tr></table>	Time unit		sec	min	hrs	×10h	Full scale setting	2.4	Set time 0.1~2.4	0.24~2.4		2.4~24	6	0.6~6		6~60	24	2.4~24		24~240	60	6~60		60~600	Time Unit Applicable model: H3CR-A-301 H3CR-A8-301 <table><tr><th colspan="2">Time unit</th><th>sec</th><th>×10s</th><th>min</th><th>×10m</th><th>hrs</th><th>×10h</th></tr><tr><td rowspan="4">Full scale setting</td><td>2.4</td><td rowspan="4">Set time 0.1~2.4</td><td>2.4~24</td><td>0.24~2.4</td><td>2.4~24</td><td>0.24~2.4</td><td>2.4~24</td></tr><tr><td>6</td><td>6~60</td><td>0.6~6</td><td>6~60</td><td>0.6~6</td><td>6~60</td></tr><tr><td>24</td><td>24~240</td><td>2.4~24</td><td>24~240</td><td>2.4~24</td><td>24~240</td></tr><tr><td>60</td><td>60~600</td><td>6~60</td><td>60~600</td><td>6~60</td><td>60~600</td></tr></table>	Time unit		sec	×10s	min	×10m	hrs	×10h	Full scale setting	2.4	Set time 0.1~2.4	2.4~24	0.24~2.4	2.4~24	0.24~2.4	2.4~24	6	6~60	0.6~6	6~60	0.6~6	6~60	24	24~240	2.4~24	24~240	2.4~24	24~240	60	60~600	6~60	60~600	6~60	60~600
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Supply voltage Applicable model: H3CR-F(8), F(8)N 4 types AC100-240V AC/DC24V DC12V DC48-125V	Supply voltage Applicable model: H3CR-F(8), F(8)N 2 types AC100-240V/DC100-125V AC24-48V/DC12-48V																																																										
Star-delta transfer time Applicable model: H3CR-G8EL, G8L 4 mode 0.05s, 0.1s, 0.25s, 0.5s (seconds)	Star-delta transfer time Applicable model: H3CR-G8EL, G8L 6 mode 0.05s, 0.1s, 0.25s, 0.5s, 0.75s, 1.0s (seconds)																																																										
Full scale setting angle and display window Full scale setting angle : All model Operating mode display window : H3CR-A Time unit selector display window : H3CR-A, H3CR-F Star – delta transfer time display window : H3CR-G 	Full scale setting angle and display window Full scale setting angle : All model Operating mode display window : H3CR-A Time unit selector display window : H3CR-A, H3CR-F Star – delta transfer time display window : H3CR-G 																																																										

Before the change	After the change
Inrush current Applicable model: H3CR-F(8), F(8)N(DC12V, AC/DC24V) 0.85A (AC/DC24V type: When AC26.4V) 0.6A (AC/DC24V type: When DC26.4V) 0.052A (DC12V type: When DC13.2V)	Inrush current Applicable model: H3CR-F(8), F(8)N(DC12V, AC/DC24V) 0.83A (When AC26.4V) 0.57A (When DC26.4V) 0.285A (When DC13.2V)
“Conformance to EC directive” sheet Applicable model: All model Including in packing case 	“Conformance to EC directive” sheet Applicable model: All model Not Including in packing case It will be including in instruction manual.
Case Label Applicable model: All models 	Case Label Applicable model: All models  Letter size change Lot No. position and printing method change (From back to side) (Stamp to Laser marking) Design change Letter size change

Before the change	After the change
Case Label Lot number : Production year Last 1 digits in the year □□□□□ ①②③④⑤⑥ ①② . . . Production day 01~31 ③ Production month 1~9, X, Y, Z X=10, Y=11, Z=12 ④ Production year Last 1 digits in the year ⑤ Production factory abbreviation ⑥ Production line code	Case Label Lot number : Production year Last 2 digits in the year □□□□□ ①②③④⑤⑥ ①② . . . Production day 01~31 ③ Production month 1~9, X, Y, Z X=10, Y=11, Z=12 ④⑤ . . . Production year Last 2 digits in the year ⑥ Production factory abbreviation
Packing case label Applicable model: All models  Lot number : Production year Last 1 digits in the year □□□□□ ①②③④⑤ ①② . . . Production day 01~31 ③ Production month 1~9, X, Y, Z X=10, Y=11, Z=12 ④ Production year Last 1 digits in the year ⑤ Production factory abbreviation	Packing case label Applicable model: All models Revision code "N" add.  Lot number : Production year Last 2 digits in the year □□□□□ ①②③④⑤⑥ ①② . . . Production day 01~31 ③ Production month 1~9, X, Y, Z X=10, Y=11, Z=12 ④⑤ . . . Production year Last 2 digits in the year ⑥ Production factory abbreviation

Specifications in this product news are as of the issue date and are subject to change without notice.
 Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.