PRODUCT NEWS



NO:	CT-027
DATE:	May 202

27 2021 PRODUCT: H7CZ TYPE: Discontinuation Notice

Discontinuation Notice of Solid-state Counter H7CZ series



Digital Counter



Model H7CZ series



[Final order entry date]

The end of March 2022.

[Date of The Last Shipping]

The end of June 2022.

[Caution on recommended replacement]

Terminal arrangement

Some of the recommended replacements have different terminal arrangements. For details, see "■Terminal Arrangement / Wiring Connections" (page 2).

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen- sions	Wire connection	Mounting Dimensions		•	Operation methods
Model H7CC series	×	0	0	Ø	0	0	0

** : Compatible

* : The change is a little/Almost compatible

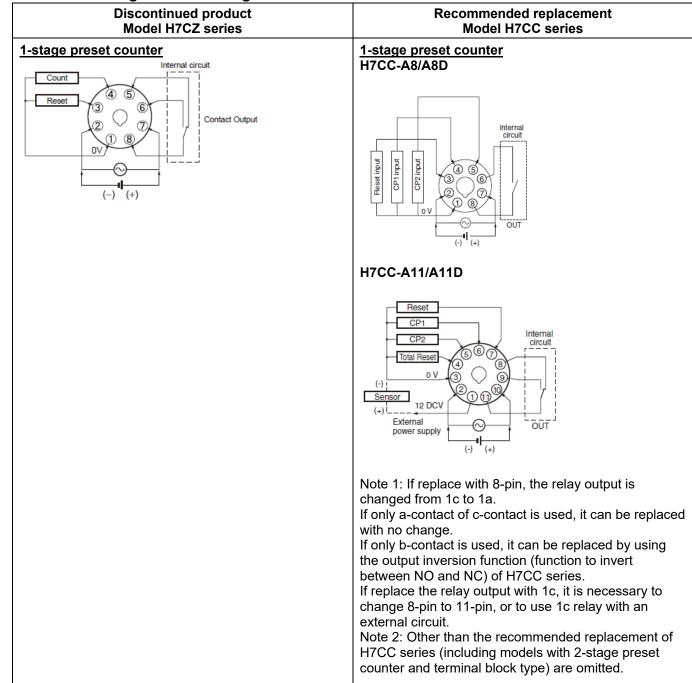
- -- : Not compatible
- : No corresponding specification

Discontinued product and Recommended replacement

Discontinued product		Recommended replacement	
Model H7CZ-L8 100 to 240 VAC		Model H7CC-A8	100 to 240 VAC
	100 10 240 VAC	Model H7CC-A11	100 to 240 VAC
Model H7CZ-L8D1	24VAC/12 to 24VDC	Model H7CC-A8D	24VAC/12 to 48VDC
		Model H7CC-A11D	24VAC/12 to 48VDC

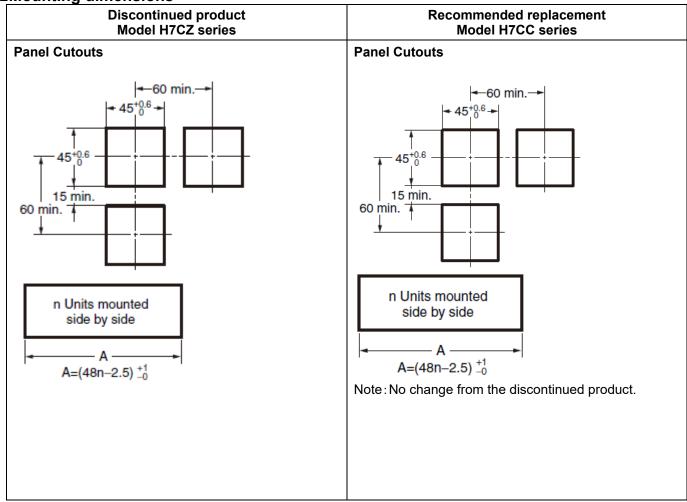
■Body color

	Discontinued product Model H7CZ series	Recommended replacement Model H7CC series
Case color Front panel	: Black (N1.5) : Light gray (5Y7/1)	Case color : Black (N1.5)
	COUNTER L23456 DE DE D	UMBOR HYCC COUNTER

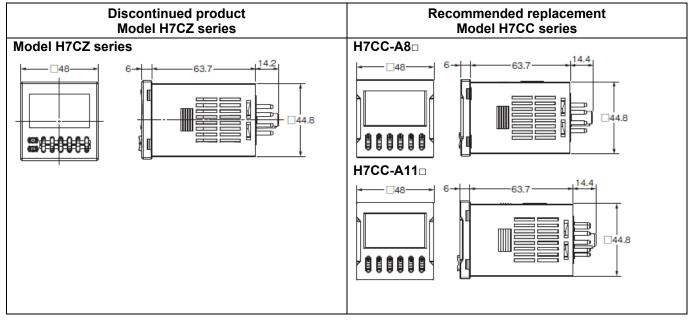


■Terminal Arrangement / Wiring Connections

Mounting dimensions



Dimensions



Ratings and Specifications

ltem	Discontinued product Model H7CZ series	Recommended replacement Model H7CC series	
Туре	1-stage preset counter	1-stage preset counter, total preset counter (switchable)	
Supply voltage	•100 to 240 VAC, 50/60Hz •24 VAC, 50/60Hz/12 to 24 VDC	•100 to 240 VAC 50/60Hz •24 VAC, 50/60Hz/12 to 48VDC	
Operating voltage range	85% to 110% of rated voltage (12 VDC: 90% to 110%)	85% to 110% of rated voltage (12 to 48 VDC: 90% to 110%)	
Power consumption	Approx. 9.4VA (100 to 240 VAC) Approx. 7.2VA/4.7W (24VAC/12 to 24 VDC)	Approx. 6.8VA (100 to 240 VAC) Approx. 5.5VA/3.3W (24VAC/12 to 48VDC)	
Degree of protection	IEC IP66, UL508 Type 4X (indoors) for panel surface only and only when Y92S- 29 Waterproof Packing is used.	IEC IP66, for panel surface only and only when Y92S-P6 Waterproof Packing is used.	
Input signals	Count, Reset	CP1, CP2, Reset, Total reset	
Max. counting speeds of count input	30Hz (minimum pulse width 16.7ms), 10kHz (minimum pulse width 0.05ms) (switchable) (ON/OFF ratio : 1 :1)	30Hz (minimum pulse width 16.7ms), 10kHz (minimum pulse width 0.05ms) (switchable) (ON/OFF ratio:1:1)	
Input mode	Increment, decrement (switchable)	Increment (UP), decrement (DOWN), increment/decrement (UP/DOWN A (command input) ,UP/DOWN B (individual input) ,UP/DOWN C (quadrature input) , UP/DOWN D (command input) ,UP/DOWN E (individual input) ,UP/DOWN F (quadrature input) (switchable)	
Output mode	N, F, C, R, K-1, P, Q, A (switchable)	N, F, C, R, K-1, P, Q, A, K-2, D, L (switchable)	
One-shot output time	0.01 to 99.99s	0.01 to 99.99s	
Reset system	External reset (minimum reset signal width: 1 ms or 20 ms, selectable), manual reset and automatic reset (internal according to C, R, P, and Q mode operation)	External reset (minimum reset signal width: 1 ms or 20 ms, selectable), manual reset and automatic reset (internal according to C, R, P, and Q mode operation)	
Prescaling function	Yes (0.001 to 99.999)	Yes (0.001 to 99.999)	
Decimal point adjustment	Yes (rightmost 3 digits)	Yes (rightmost 3 digits)	
Sensor waiting time	290 ms max.	290 ms max.	

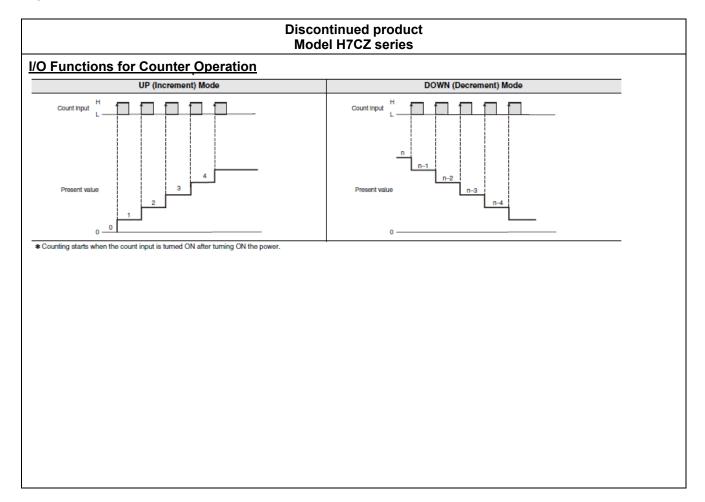
Input method	No-voltage inputs: ON impedance: 1 kΩ max. (Leakage current: 12 mA at 0 Ω) ON residual voltage: 3 V max. OFF impedance: 100 kΩ min.	No-voltage (NPN) input/voltage (PNP) input (switchable) No-voltage inputs: ON impedance: $1 k\Omega max$. (Leakage current: $12 mA at 0 \Omega$) ON residual voltage: $3 V max$. OFF impedance: $100 k\Omega min$. Voltage input: High (logic) level: $4.5 to 30 VDC$ Low (logic) level: $0 to 2 VDC$ (Input resistance: approx. $4.7 k\Omega$)
External power supply	No	No H7CC-A8□ Yes H7CC-A11□ 12 VDC (±10%) ,100mA
Control output	3 A at 250 VAC/30 VDC, resistive load (cosφ=1), Minimum applied load: 10 mA at 5 VDC (failure level: Ρ, reference value)	 Contact output: 3 A at 250 VAC/30 VDC, resistive load (cosφ=1), minimum applied load: 5VDC 10mA (P-level reference value) Transistor output: 30VDC max. 100mA max. Residual voltage: 1.5 VDC max. (approx. 1 V), leakage current: 0.1 mA max.

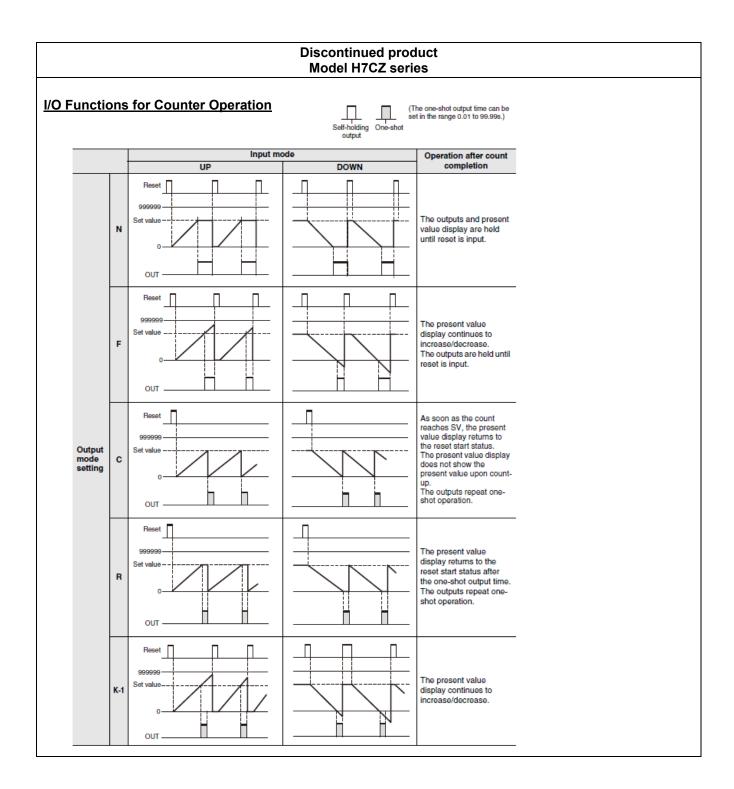
Ratings and Specifications (Continued)

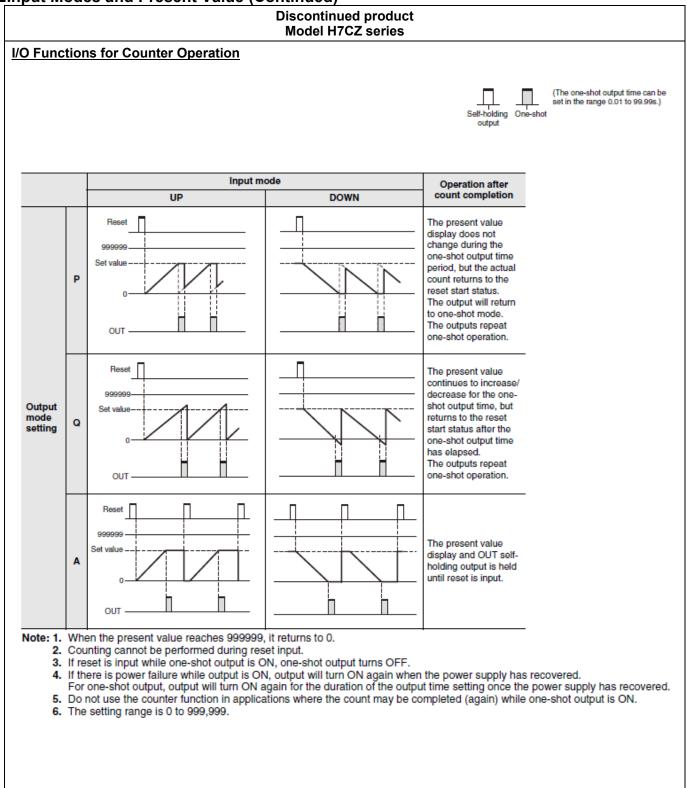
Item	Discontinued product Model H7CZ series	Recommended replacement Model H7CC series	
Display	7-segment, positive transmissive LCD Character height Count value: 10 mm Set value: 6 mm	7-segment, negative transmissive LCD Character height Count value: 10 mm (white) Set value: 6 mm (green)	
Number of digits	6 digits, −999999 to 999999 (−5 digits_to +6 digits)	6 digits, -99999 to 999999 (-5 digits to +6 digits)	
Operating temperature range	-10 to 55°C (side-by-side mounting: -10 to 50°C) (with no icing or condensation)	-10 to 55°C (side-by-side mounting: -10 to 50°C) (with no icing or condensation)	
Storage temperature range	 —25 to 70°C (with no icing or condensation) 	 —25 to 70°C (with no icing or condensation) 	
Operating humidity range	25 to 85%	25 to 85%	
Insulation resistance	100 MΩ min. (at 500 VDC) between current-carrying terminal and exposed noncurrent-carrying metal parts, and between non-continuous contacts	100 M Ω min. (at 500 VDC) between current-carrying terminal and exposed noncurrent-carrying metal parts, and between non-continuous contacts	

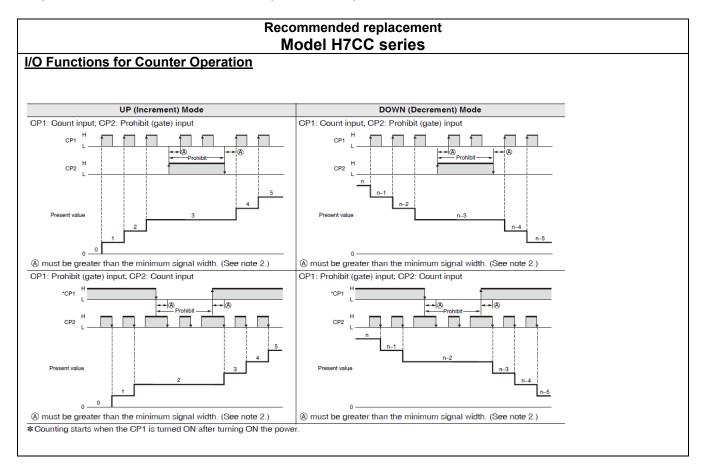
Dielectric strength		Between current-carrying metal parts and non-current carrying metal parts : 2,000 VAC, 50/60 Hz for 1 min Between power supply and input circuit : 2,000 VAC, 50/60Hz 1min (1,000 VAC for 24 VAC/12 to 24 VDC) Between control output, power supply, and input circuit : AC2,000V 50/60Hz 1min Between non-continuous contacts : 1,000 VAC, 50/60 Hz for 1 min	Between current-carrying metal parts and non-current carrying metal parts : 2,000 VAC, 50/60 Hz for 1 min Between power supply and input circuit : 2,000 VAC, 50/60Hz 1min (except H7CC- □D□) (1,500 VAC for 24 VAC/12 to 48 VDC) Between control output, power supply, and input circuit : AC1,500V 50/60Hz 1min (H7CC-□SD□) 2,000 VAC 50/60 Hz for 1 min (except H7CC-□SD□) Between non-continuous contacts : 1,000 VAC, 50/60 Hz for 1 min	
Impulse withstand voltage		Between power terminals: 3.0kV (24 VAC/12 to 24 VDC:1.0kV) Between current-carrying terminal and exposed non-current-carrying metal parts: 4.5kV (24 VAC/12 to 24 VDC:1.5kV)	Between power terminals: 6.0kV (24 VAC/12 to 48 VDC:1.0kV) Between current-carrying terminal and exposed non-current-carrying metal parts: 6.0kV (24 VAC/12 to 48 VDC:1.5kV)	
Static im	nmunity	8kV (malfunction),15kV (destruction)	8kV (malfunction),15kV (destruction)	
Vibra- tion	Destruction	10 to 55Hz 0.75-mm single amplitude, each in three directions for 2 hours	10 to 55Hz 0.75-mm single amplitude, each in three directions for 2 hours	
resis- tance	Malfunction	10 to 55Hz 0.35-mm single amplitude, each in three directions for 10 min	10 to 55Hz 0.35-mm single amplitude, each in three directions for 10 min	
Shock	Destruction	300m/s ² each in three directions, three cycles	300m/s ² each in three directions, three cycles	
resis- tance Malfunction		100m/s ² each in three directions, three cycles	100m/s ² each in three directions, three cycles	
Life expectancy		Mechanical: 10 million operations min. Electrical: 100,000 operations min. (3A at 250 VAC, resistive load)	Mechanical: 10 million operations min. Electrical: 100,000 operations min. (3A at 250 VAC, resistive load) (3 A at 250 VAC, resistive load, ambient temperature condition: 23°C)*	
Weight		Approx. 100g	Approx. 120g	
Approved safety standards		cULus (or cURus) :UL508/CSA C22.2 No.14,EN61010-1 (IEC61010-1) : Pollution degree 2/overvoltage category II,EN61326-1,B300 PILOT DUTY 1/4 HP 120 VAC, 1/3 HP 240 VAC, 3-A resistive load, VDE0106/part100	cULus (or cURus) :UL508/CSA C22.2 No.14,EN61010-1 (IEC61010-1) :Pollution degree 2/overvoltage category II,EN61326- 1,EAC,RCM,B300 PILOT DUTY 1/4 HP 1/3 HP, 240 VAC, 3-A, 250 VAC/30 VDC resistive load, VDE0106/part100	

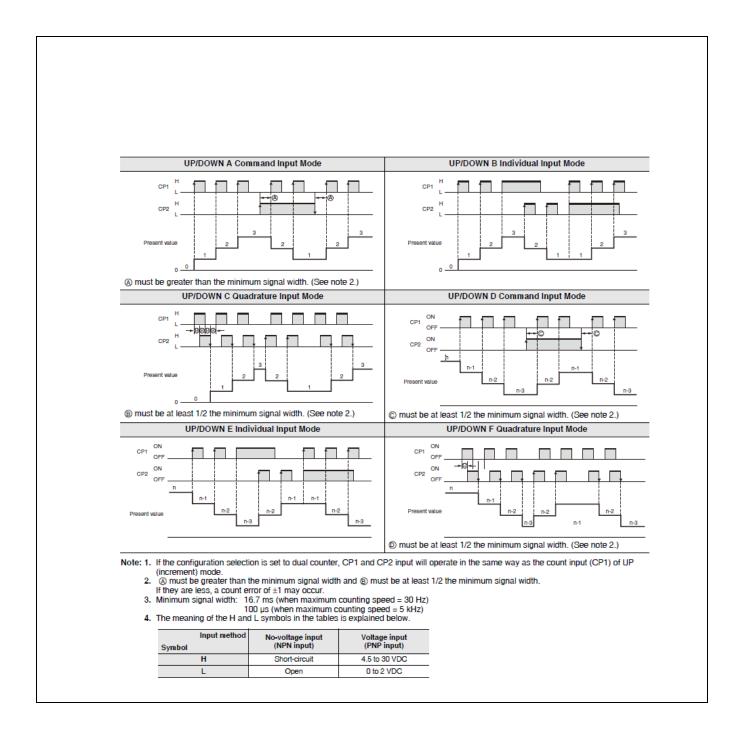
■Input Modes and Present Value

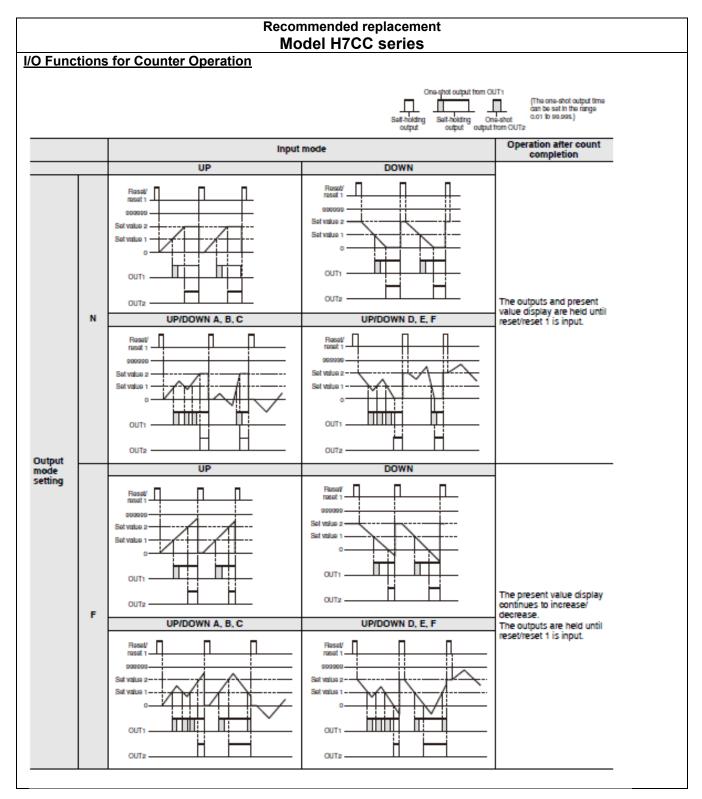


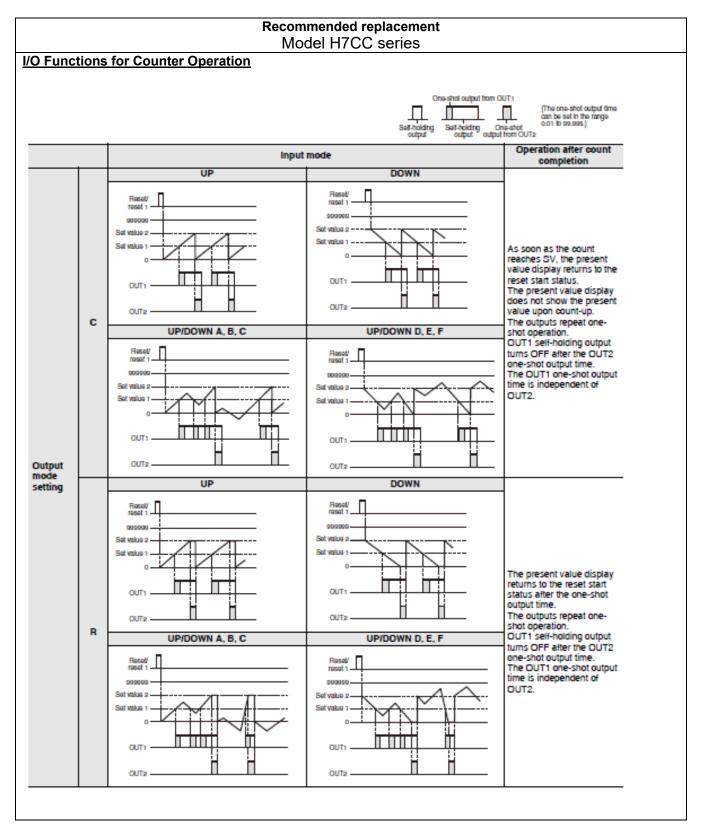


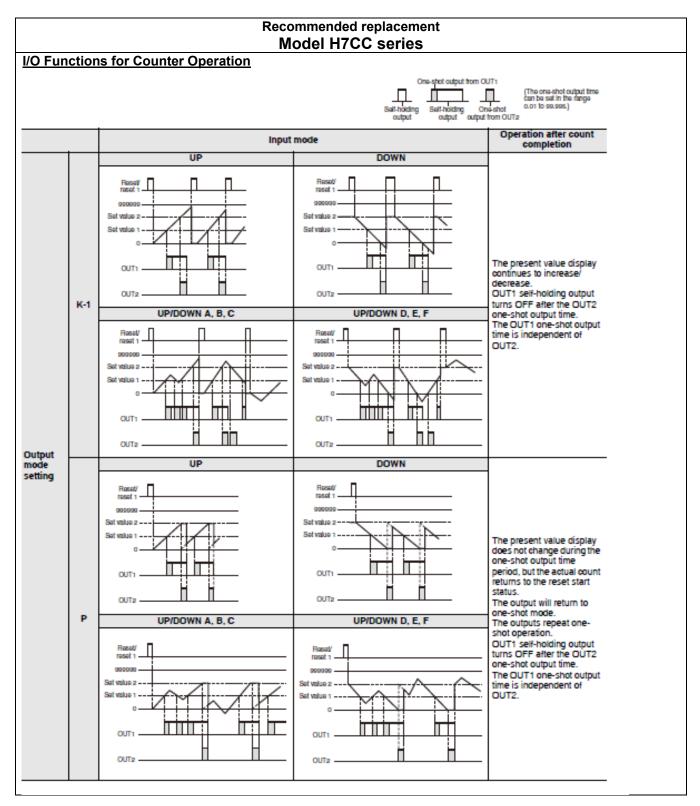


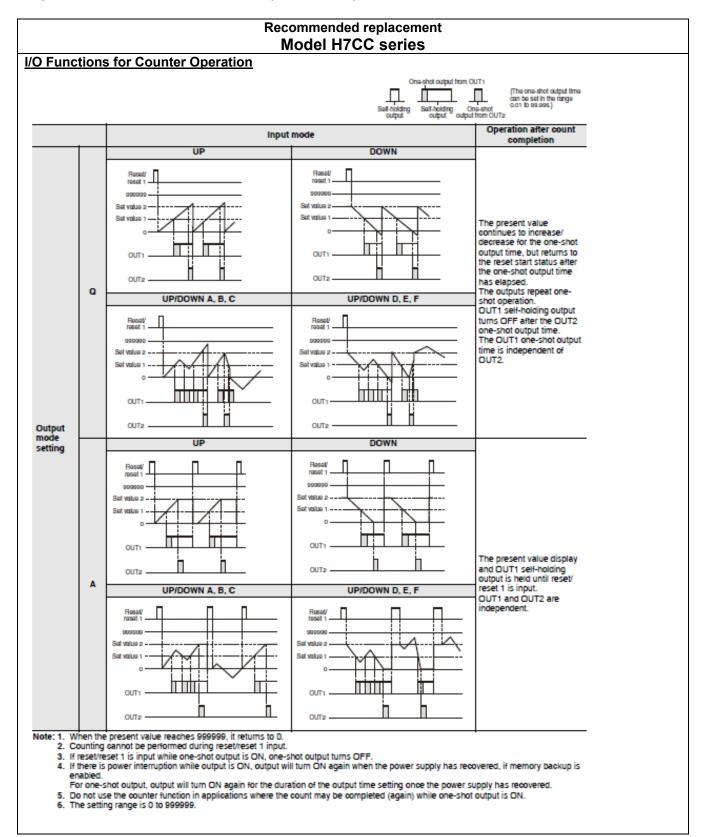


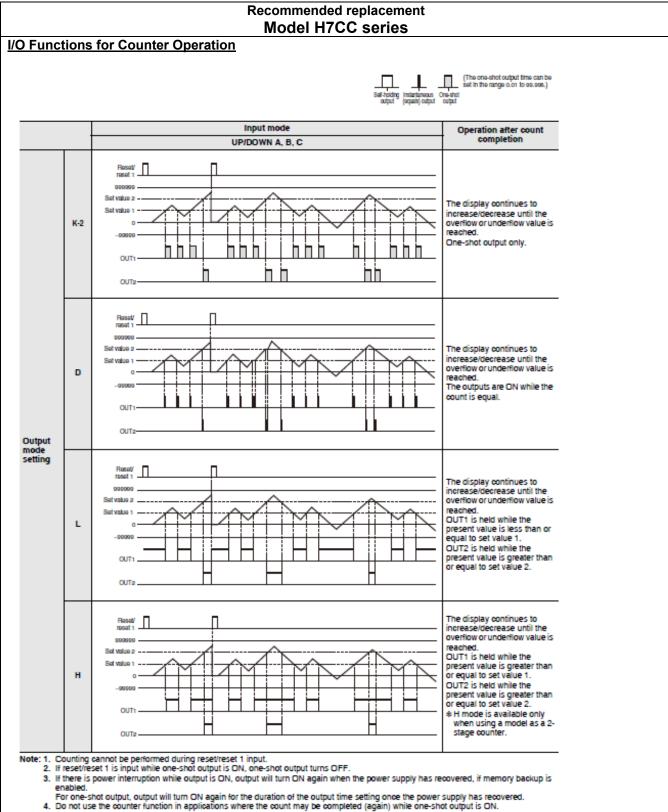






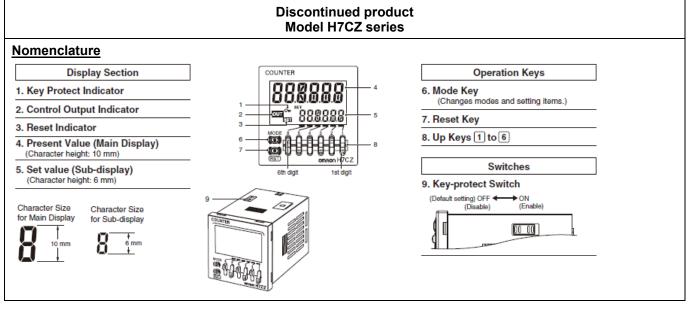


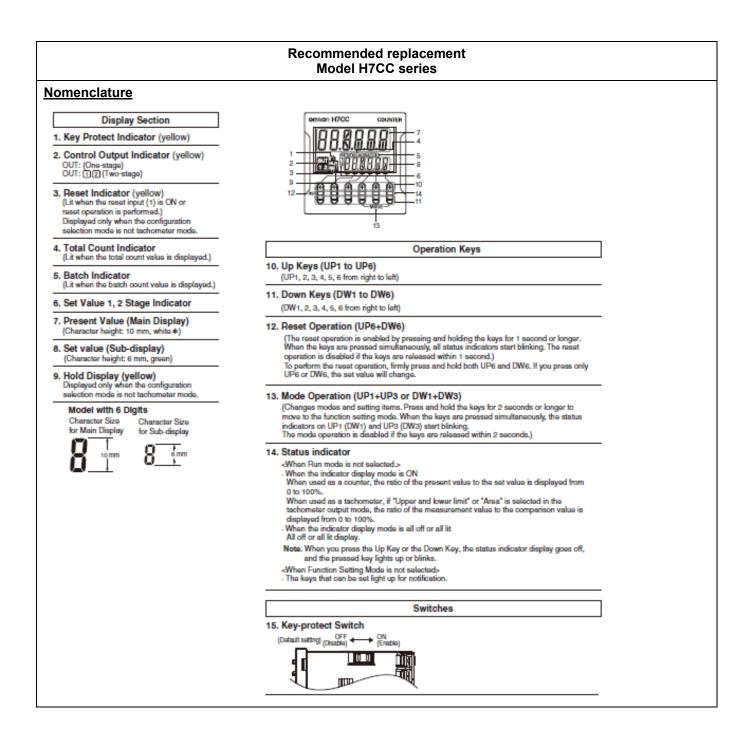


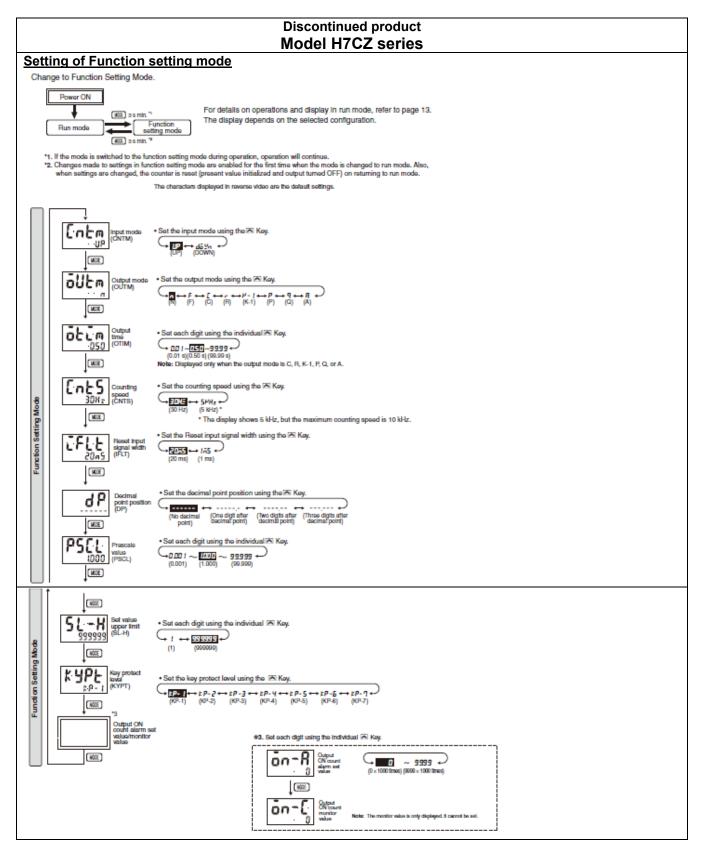


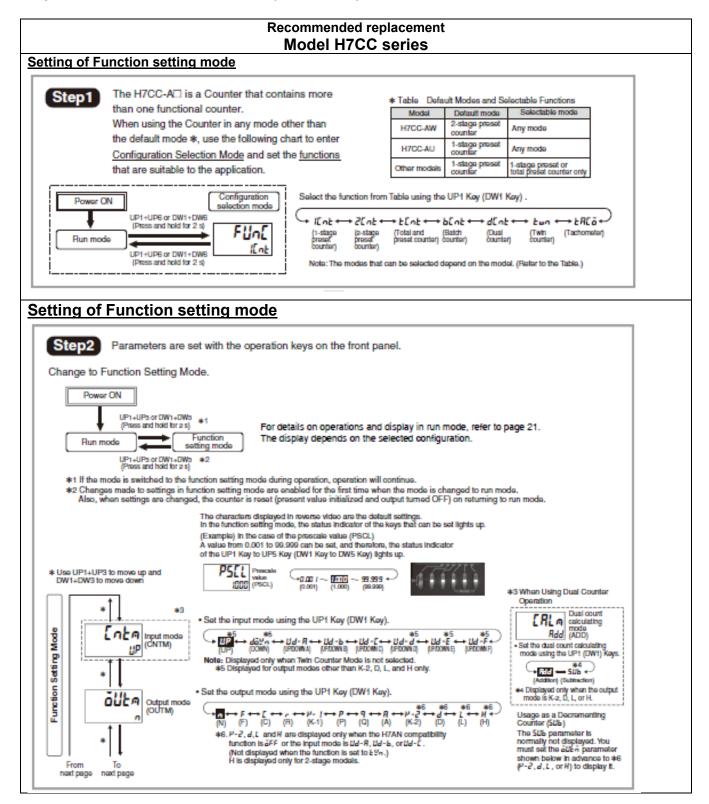
5. The set value is from -99999 to 999999.

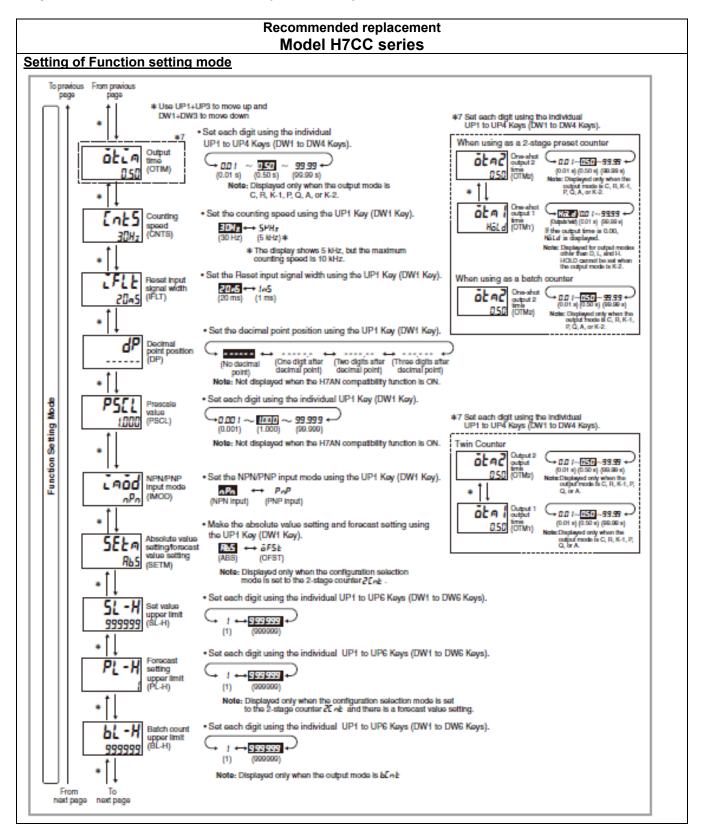
Operating procedures

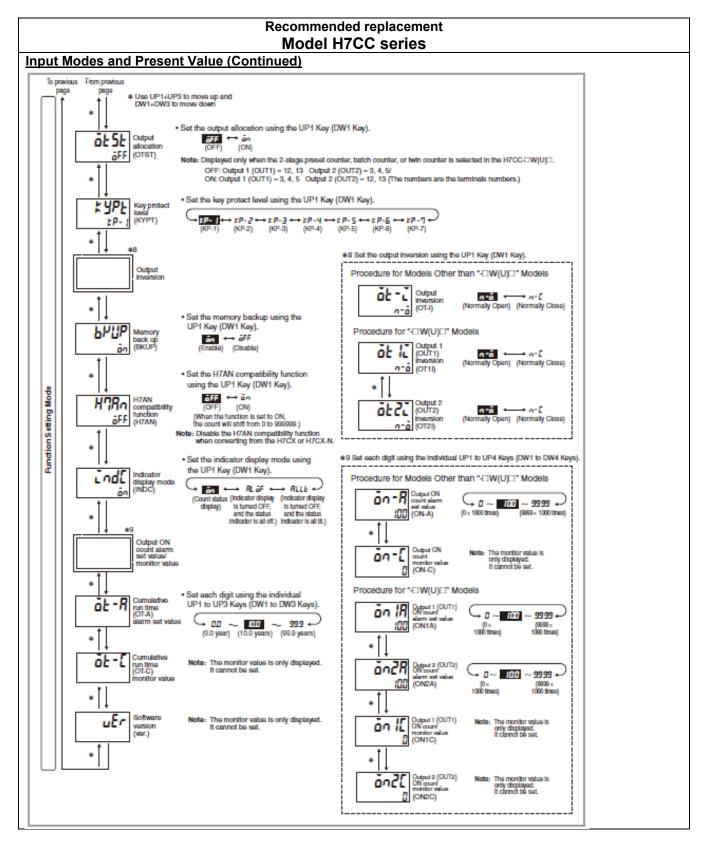












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