Digital Counter/Tachometer
H7CC

New and improved design for easier use, programming, maintenance and user feedback The improved user interface is intuitive and offers better overall visibility. Replacement time notification function notifies the user of potential preventive maintenance

NEW

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

⚠ Refer to *Safety Precautions* page 61.

Basic Features

- The white-color display offers better visual clarity and visibility, and the color universal design is used.
- Up/Down Keys are provided for all six digits, which reduces the number of button operations during setup and other processes.
- An easy operation is realized by the operation guide on which each key lights up.
- The progress can be easily understood at one glance from the status indicators of the present value and the measurement value.
- The body depth of all models with screw terminals has been reduced to 59 mm.

Safety and Reliability

- The replacement time is notified in advance by predicting the service life.
- The power supply circuit and input circuits are isolated in all models, and therefore, there is no need of any wiring restrictions.

Other Features

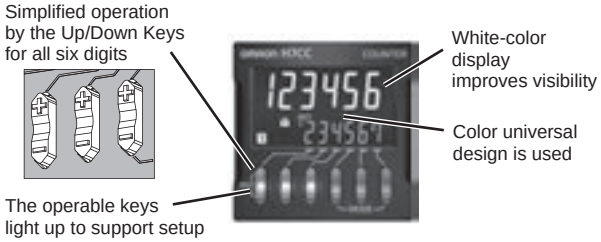
- Follows the ratings, characteristics, and functionality of the H7CX-N.
- Equipped with the Output Allocation and Output ON/OFF Inversion Function.
- Equipped with a Memory Backup and H7AN Compatibility Function to facilitate problem-free conversion from H7CN/H7AN.

Features

Basic Features

Better visual feedback and operation

The white-color display offers better visual clarity and visibility, and the color universal design is used. The keys of all six digits can be operated up/down for easier use. The LED indicator of the operable keys lights up to support setup.



Status Notification by Status Indicator

The status can be indicated by the ratio of the present value or measurement value to the set value, which makes it easy to understand the status.

Three indicators light up when the status reaches 50%

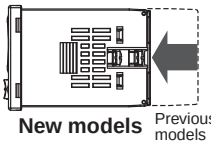
All indicators light up when the status reaches 100%

Shortened Body

The body depth of all models with screw terminals has been reduced to 59 mm, which contributes to thinner control panels!

Models with Screw Terminals: 59 mm

Models with Sockets: 63.7 mm (case dimension)

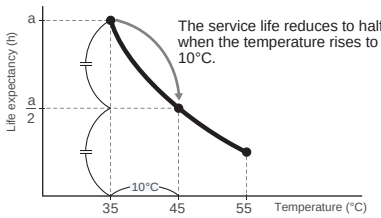


Safety and Reliability

Notification of Replacement Time

The service life prerequisites of the counter include the relay output count and the deterioration of the electrolytic capacitors. In the H7CC, in addition to the relay output count, an alarm is displayed when the deterioration of electrolytic capacitors due to the cumulative run time reaches the standard value, and planned maintenance is supported.

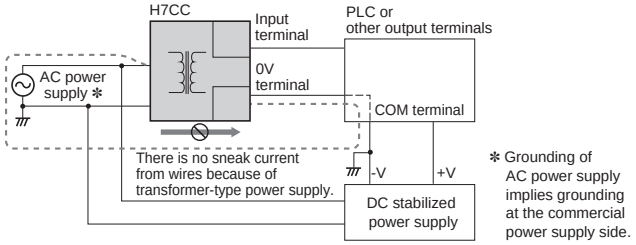
Note: For details, refer to *Replacement Time Notification Function* on pages 41 and 57.



Relationship between the life expectancy of electrolytic capacitors and temperature (Example)

Isolated Power Supply and Input Circuits

In all models, the power supply circuit and input circuits are isolated. Previous non-isolated counters had wiring restrictions and could be damaged if wired incorrectly. The H7CC removes these worries.



Other Features

Equipped with a Key Protect Function

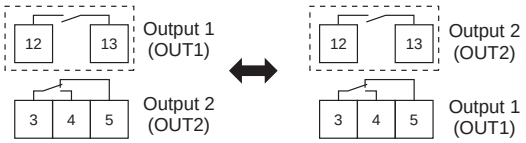
Any abnormality in the device due to malfunctioning or setting errors can be prevented.

Follows the Ratings, Characteristics, and Functionality of the H7CX-N

The H7CC follows the ratings, characteristics, and functionality of the H7CX-N. Other than the H7CC-A8□, all models are equipped with power supply to external devices, which reduces the load on wiring.

Output Allocation Function

The allocation of outputs 1 and 2 (OUT1 and OUT2) can be changed. In the conventional 2-stage output models, output 1 (OUT1) was fixed as SPST, and output 2 (OUT2) was fixed as SPDT, however, in the H7CC, the allocation of outputs 1 and 2 (OUT1 and OUT2) can be changed to SPST or SPDT, which reduces the man-hours involved when it is necessary to change the wiring.



Output ON/OFF Inversion Function

Conventionally, the output turns ON when the set value is reached, however, when this function is used, the output can be turned OFF when the set value is reached. As a result, the man-hours involved in checking the wiring can be reduced.

Memory Backup Function

Conversion from the H7CN/H7AN is supported by enabling the setting of the present value and the output state memory backup.

H7AN Compatibility Function

Conversion from the H7AN is supported by enabling the setting to start counting from 999999 when the present value being decremented exceeds 0.

Reset Operation

To prevent operational errors, reset by pressing and holding RST keys (+ and - on the left). Then, when the reset is enabled, you will be visually guided by blinking LEDs. Note: For details, refer to *Nomenclature* on pages 10 and 46.

Model Number Structure

Model Configuration

H7CC Series

Model		H7CC-A Series Digital Counter		H7CC-R Series Digital Tachometer	
					
Classification		Preset counter	Preset counter/Tachometer	Tachometer	
Model		H7CC-A□	H7CC-AW□/AU□	H7CC-R11□	H7CC-R11W□
Function	**1-stage preset counter**	Yes	Yes	No	
	2-stage preset counter	No	Yes	No	
	Total and preset counter	Yes	Yes	No	
	Batch counter	No	Yes	No	
	Dual counter	No	Yes	No	
	Twin counter	No	Yes	No	
	Tachometer	No	Yes ✻	Yes	
Tachometer Input		---	1 input or 2 inputs (independent measurements, differential, absolute ratio value and error ratio value)	Yes 1 input	Yes 2 inputs (independent measurement only)
Settings		1-stage	2-stage	1-stage	
External connections		8-pin socket, 11-pin socket, Screw terminals	Screw terminals	11-pin socket	
Display digits		6 digits			

✻ Set the tachometer input mode from the function setting mode to switch to the tachometer function.

Model Number Legend (Not all possible combinations of functions are available.)

H7CC-□□□□□
1 2 3 4 5

1. Type

Symbol	Meaning
A	Standard type
R	Tachometer

2. External connections

Symbol	Meaning
None	Screw terminals
8	8-pin socket
11	11-pin socket

3. Settings

Symbol	Meaning
None	1-stage setting
W	2-stage setting ✻
U	1-stage contact+1-stage Solid state

✻ The H7CC-R11W□ is a 1-stage (2 inputs and outputs) rather than a 2-stage counter.

4. Output type

Symbol	Meaning
None	Contact output
S	Transistor output

5. Supply voltage

Symbol	Meaning
None	100 to 240 VAC at 50/60 Hz
D	24 VAC 50/60 Hz/12-48 VDC

Ordering Information

List of Models

Type	Classification	Configuration	External connections	Settings	Display digits	Outputs	Power supply voltage	Model
H7CC-A Series	Preset counter	• 1-stage preset counter • Total and preset counter	8-pin socket	1-stage	6 digits	Contact output (SPST)	100 to 240 VAC	**H7CC-A8**
							24 VAC/ 12 to 48 VDC	**H7CC-A8D**
			11-pin socket			Contact output (SPDT)	100 to 240 VAC	**H7CC-A11**
						Transistor output (SPST)		**H7CC-A11S**
						Contact output (SPDT)	24 VAC/ 12 to 48 VDC	**H7CC-A11D**
						Transistor output (SPST)		**H7CC-A11SD**
			Screw terminals			Contact output (SPDT)	100 to 240 VAC	**H7CC-A**
						Transistor output (SPST)		**H7CC-AS**
						Contact output (SPDT)	24 VAC/ 12 to 48 VDC	**H7CC-AD**
						Transistor output (SPST)		**H7CC-ASD**
	Preset counter/ Tachometer	• 1-stage preset counter • 2-stage preset counter • Total and preset counter • Batch counter • Dual counter • Twin counter • Tachometer		2-stage		Contact output (SPST+SPDT)	100 to 240 VAC	**H7CC-AW**
						Transistor output (DSPT)		**H7CC-AWS**
						Contact output (SPST+SPDT)	24 VAC/ 12 to 48 VDC	**H7CC-AWD**
						Transistor output (DSPT)		**H7CC-AWSD**
						Contact output (SPDT) + Transistor output (SPST)	100 to 240 VAC	**H7CC-AU**
							24 VAC/ 12 to 48 VDC	**H7CC-AUD**
H7CC-R Series	Tachometer	• Tachometer	11-pin socket	1-stage (1 input and output)		Contact output (SPDT)	100 to 240 VAC	**H7CC-R11**
							24 VAC/ 12 to 48 VDC	**H7CC-R11D**
				1 stage (2 inputs and outputs)		Contact output (SPDT+SPST)	100 to 240 VAC	**H7CC-R11W**
							24 VAC/ 12 to 48 VDC	**H7CC-R11WD**