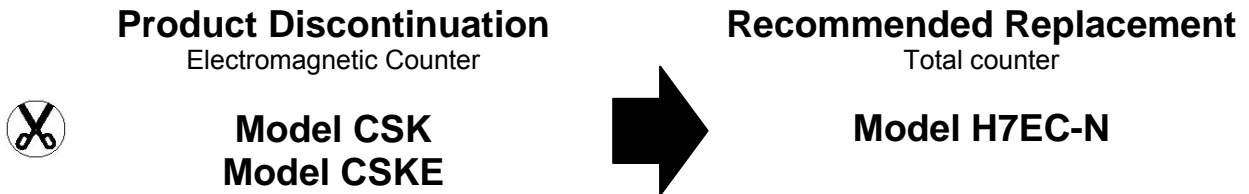


Discontinuation Notice of CSK-series Electromagnetic Counter and CSKE-series Compact Electromagnetic Counter



Discontinuation date : The end of March, 2013

Caution on recommended replacement

- Model H7EC has a higher counting speed than models CSK and CSKE. Therefore, when used in surroundings with much noise, it may have a counting error. Be sure to confirm normal counting operation before using it in such environment, or consider alternative if necessary.
- Model H7EC has the reset key as the standard function. The specification without the reset key is provided by model H7EC-NV. Consult your trading company for details.
- Model H7EC-NFV is the free voltage input type (24 to 240 VAC/VDC). Model H7EC-NV is the voltage input type (4.5 to 30 VDC).
- Model H7EC-series have the following features. See the catalog for details.
 - In addition to conventional light gray, black cases are available.
 - The front face is compatible with NEMA4.
 - The Totalizer is reusable by battery replacement.
 - Finger protection type terminal block is used, which conforms to VDE0106 Part100.
 - It conforms to UL, CSA, and CE marking.
 - It conforms to EN61010-1 (pollution degree 2 / overvoltage category III).
 - As it conforms to EMC standards (EN61326), it also can be used in commercial and light-industry areas.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
H7EC-NV	*	--	--	--	*	*	*
H7EC-NFV	*	--	--	--	*	*	*

** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
CSK4 AC100	H7EC-NFV
CSK4 AC200	H7EC-NFV
CSK4 DC100	H7EC-NFV
CSK4 DC12	H7EC-NV
CSK4 DC24	H7EC-NV
CSK4-K AC100	H7EC-NFV
CSK4-K AC200	H7EC-NFV
CSK4-K DC100	H7EC-NFV
CSK4-K DC12	H7EC-NV
CSK4-K DC24	H7EC-NV
CSK4-KW AC100	H7EC-NFV
CSK4-KW AC200	H7EC-NFV
CSK4-KW DC100	H7EC-NFV
CSK4-KW DC12	H7EC-NV
CSK4-KW DC24	H7EC-NV
CSK4-LW AC100	H7EC-NFV
CSK4-LW AC200	H7EC-NFV
CSK4-LW DC100.	H7EC-NFV
CSK4-W AC100	H7EC-NFV
CSK4-W AC200	H7EC-NFV
CSK4-W DC100	H7EC-NFV
CSK4-W DC12	H7EC-NV
CSK4-W DC24	H7EC-NV
CSK4-Y AC100	H7EC-NFV
CSK4-Y AC110	H7EC-NFV
CSK4-Y AC200	H7EC-NFV
CSK4-Y AC220	H7EC-NFV
CSK4-Y DC12	H7EC-NV
CSK4-Y DC24	H7EC-NV
CSK4-YK AC100	H7EC-NFV
CSK4-YK AC200	H7EC-NFV
CSK4-YK AC220	H7EC-NFV
CSK4-YK DC12	H7EC-NV
CSK4-YK DC24	H7EC-NV
CSK4-YKW AC100	H7EC-NFV
CSK4-YKW AC110	H7EC-NFV
CSK4-YKW AC200	H7EC-NFV
CSK4-YKW AC220	H7EC-NFV
CSK4-YKW DC100	H7EC-NFV
CSK4-YKW DC12	H7EC-NV
CSK4-YKW DC24	H7EC-NV
CSK4-YL AC100	H7EC-NFV
CSK4-YL DC100	H7EC-NFV
CSK4-YL DC12	H7EC-NV
CSK4-YL DC24	H7EC-NV
CSK4-YLW AC100	H7EC-NFV
CSK4-YLW AC200	H7EC-NFV
CSK4-YLW DC100	H7EC-NFV
CSK4-YLW DC12	H7EC-NV
CSK4-YLW DC24	H7EC-NV
CSK4-YW AC100	H7EC-NFV
CSK4-YW AC110	H7EC-NFV
CSK4-YW AC200	H7EC-NFV



Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
CSK4-YW AC220	H7EC-NFV
CSK4-YW DC100	H7EC-NFV
CSK4-YW DC12	H7EC-NV
CSK4-YW DC24	H7EC-NV
CSK6 AC100	H7EC-NFV
CSK6 AC200	H7EC-NFV
CSK6 DC100	H7EC-NFV
CSK6 DC12	H7EC-NV
CSK6 DC24	H7EC-NV
CSK6-K AC100	H7EC-NFV
CSK6-K AC200	H7EC-NFV
CSK6-K DC24	H7EC-NV
CSK6-KW AC100	H7EC-NFV
CSK6-KW AC200	H7EC-NFV
CSK6-KW DC12	H7EC-NV
CSK6-KW DC24	H7EC-NV
CSK6-LW AC200	H7EC-NFV
CSK6-LW DC12	H7EC-NV
CSK6-LW DC24	H7EC-NV
CSK6-W AC100	H7EC-NFV
CSK6-W AC200	H7EC-NFV
CSK6-W DC100	H7EC-NFV
CSK6-W DC24	H7EC-NV
CSK6-Y AC100	H7EC-NFV
CSK6-Y AC110	H7EC-NFV
CSK6-Y AC200	H7EC-NFV
CSK6-Y AC220	H7EC-NFV
CSK6-Y DC100	H7EC-NFV
CSK6-Y DC12	H7EC-NV
CSK6-Y DC24	H7EC-NV
CSK6-YK AC100	H7EC-NFV
CSK6-YK AC110	H7EC-NFV
CSK6-YK AC200	H7EC-NFV
CSK6-YK AC220	H7EC-NFV
CSK6-YK DC12	H7EC-NV
CSK6-YK DC24	H7EC-NV
CSK6-YKW AC100	H7EC-NFV
CSK6-YKW AC110	H7EC-NFV
CSK6-YKW AC200	H7EC-NFV
CSK6-YKW AC220	H7EC-NFV
CSK6-YKW DC100	H7EC-NFV
CSK6-YKW DC110	H7EC-NFV
CSK6-YKW DC12	H7EC-NV
CSK6-YKW DC24	H7EC-NV
CSK6-YL AC100	H7EC-NFV
CSK6-YL AC200	H7EC-NFV
CSK6-YLW AC100	H7EC-NFV
CSK6-YLW AC200	H7EC-NFV
CSK6-YLW DC100	H7EC-NFV
CSK6-YLW DC12	H7EC-NV
CSK6-YLW DC24	H7EC-NV
CSK6-YLW-45 DC24	H7EC-NV
CSK6-YW AC100	H7EC-NFV

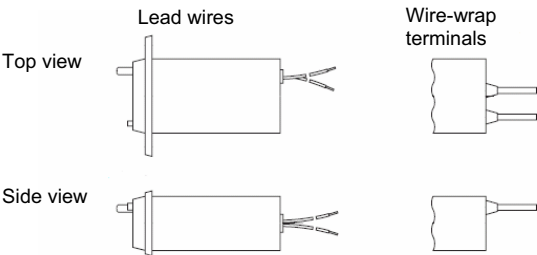
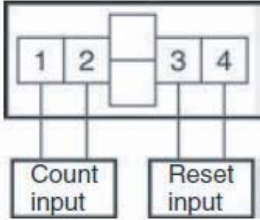
Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
CSK6-YW AC110	H7EC-NFV
CSK6-YW AC200	H7EC-NFV
CSK6-YW AC220	H7EC-NFV
CSK6-YW DC100	H7EC-NFV
CSK6-YW DC12	H7EC-NV
CSK6-YW DC24	H7EC-NV
CSKE-6R DC24	H7EC-NV
CSKE-6RL DC24	H7EC-NV
CSKE-6Y DC24	H7EC-NV
CSKE-7R DC24	H7EC-NV
CSKE-7RL DC24	H7EC-NV
CSKE-7Y DC24	H7EC-NV
CSK4-K AC220	H7EC-NFV
CSK4-W AC110	H7EC-NFV
CSK6-YL DC110	H7EC-NFV

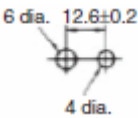
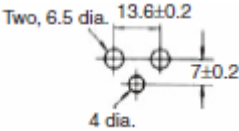
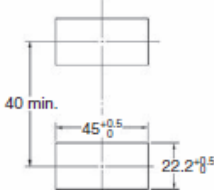
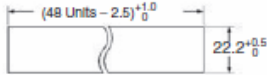
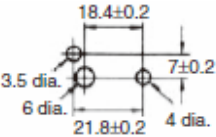
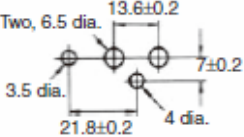
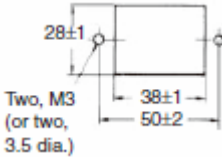
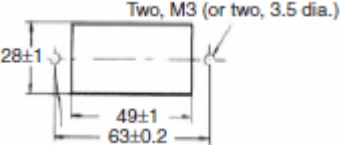
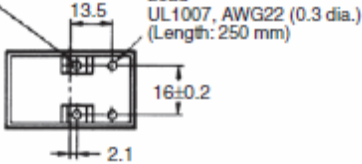
Body color

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>Light gray</p> 	<p>Light gray * Black type is also available.</p> 

Wire connection

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>There are two count input wires on the back (one type has lead wires while the other has wire-wrap terminals).</p> 	<p>Terminal Arrangement Bottom view: View of the Total Counter rotated horizontally 180°</p>  <p>Screw tightening torque: recommendable 0.5N·m maximum 0.98N·m</p>

Mounting dimensions

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>CSK4 Surface mounting Mounting Holes CSK4-W/KW/LW</p>  <p style="text-align: center;">6 dia. 12.6±0.2 4 dia. 7±0.2</p> <p style="text-align: center;">Mounting Holes CSK4/K</p>  <p style="text-align: center;">Two, 6.5 dia. 13.6±0.2 4 dia. 7±0.2</p>	<p>H7EC-NSK4 Flush mounting (No surface mounting type provided.)</p> <p style="text-align: center;">Panel Cutout Separate mounting</p>  <p style="text-align: center;">40 min. 45^{+0.5}/₀ 22.2^{+0.5}/_{0.5}</p> <p style="text-align: center;">Dense mounting</p>  <p style="text-align: center;">(48 Units - 2.5)^{+1.0}/₀ 22.2^{+0.5}/₀</p> <p style="text-align: center;">Waterproofing is not possible for dense mounting</p> <ul style="list-style-type: none"> When mounting, insert the Counter into the cutout, insert the adapter from the back and push in the Counter while making the gap between the front panel and the cutout panel as small as possible. Use screws to secure the Counter. If waterproofing is desired, insert the waterproof packing. When several Counters are installed, ensure that the ambient temperature will not exceed specifications. The appropriate thickness of the panel is 1 to 5 mm.
<p>CSK6 Surface mounting Mounting Holes CSK6-W/KW/LW</p>  <p style="text-align: center;">18.4±0.2 7±0.2 3.5 dia. 6 dia. 4 dia. 21.8±0.2</p> <p style="text-align: center;">Mounting Holes CSK6/K</p>  <p style="text-align: center;">Two, 6.5 dia. 13.6±0.2 3.5 dia. 7±0.2 21.8±0.2 4 dia.</p>	
<p>CSK4 Flush mounting Mounting Holes CSK4-YW/YKW/YLW/Y/YK/YL</p>  <p style="text-align: center;">28±1 38±1 50±2 Two, M3 (or two, 3.5 dia.)</p>	
<p>CSK6 Flush mounting Mounting Holes CSK6-YW/YKW/YLW/Y/YK/YL</p>  <p style="text-align: center;">28±1 49±1 63±0.2 Two, M3 (or two, 3.5 dia.)</p>	
<p>CSKE Surface mounting I (-R models) Mounting screw holes Two, M3 (P = 0.5, Depth: 2.8 mm)</p>  <p style="text-align: center;">13.5 16±0.2 2.1 Lead UL1007, AWG22 (0.3 dia.) (Length: 250 mm)</p>	

Dimensions

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>CSK4 Flush mounting</p> <p>CSK4-YW/YKW/YLW CSK4-Y/YK/YL</p> <p>3.5 dia. 3.5 dia.</p> <p>31 31</p> <p>60 60</p> <p>62.3 62.3</p> <p>15 max. 15 max.</p> <p>2 2</p> <p>* Lead wire length: approx. 250</p>	
<p>CSK6 Flush mounting</p> <p>CSK6-YW/YKW/YLW CSK6-Y/YK/YL</p> <p>3.5 dia. 3.5 dia.</p> <p>31 31</p> <p>72 72</p> <p>62.3 62.3</p> <p>15 max. 15 max.</p> <p>2 2</p> <p>* Lead wire length: approx. 250</p>	
<p>CSKE Surface mounting I (-R models)</p> <p>CSKE-6R/CSKE-7R</p> <p>Mounting screw holes Two, M3 (P = 0.5, Depth: 2.8 mm)</p> <p>Lead UL1007, AWG22 (0.3 dia.) (Length: 250 mm)</p>	
<p>CSKE Surface mounting II (-RL models)</p> <p>CSKE-6RL/CSKE-7RL</p> <p>Lead UL1007, AWG22 (0.3 dia.) (Length: 250 mm)</p>	
<p>CSKE Flush mounting II (-Y models)</p> <p>CSKE-6Y/CSKE-7Y</p> <p>Two M3 (P = 0.5, Depth: 2.8 mm)</p> <p>Lead, AWG22 (0.3 dia.) UL1007 (Length: 250 mm)</p>	

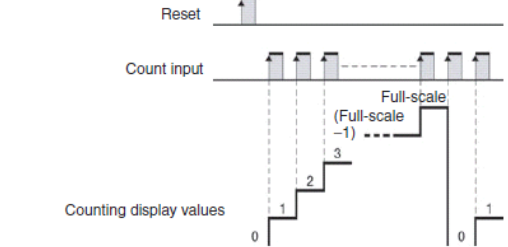
Characteristics

Item	Product discontinuation		Recommendable replacement Model H7EC-N
	Model CSK	Model CSKE	
Supply voltage	100 VAC, 200 VAC, 50/60Hz 12 VDC, 24 VDC, 100 VDC	24 VDC	Not required (powered by built-in battery (3V lithium battery))
Operating voltage range	85% to 110%	85% to 110%	90% to 110%
Power consumption	AC: approx. 3 VA (200V at 50Hz) DC: approx. 3.5 W	approx. 2 VA, approx. 2 W	60 μ W max
Counting speed	- AC input: 15 Hz (contact), minimum signal width: 33 ms (ON/OFF ratio: 1:1) - DC input: 20 Hz (contact), minimum signal width: 25 ms (ON/OFF ratio: 1:1)	10 Hz (contact), minimum signal width: 50 ms (ON/OFF ratio: 1:1)	20 Hz, minimum signal ratio: 25 ms (ON/OFF ratio: 1:1)
Reset system	Manual reset	No reset function	External reset and manual reset
Character height	4 mm	4 mm	8.6 mm
Ambient operating temperature	-10°C to +45°C	-10°C to +40°C	-10°C to +55°C
Ambient humidity	45% to 85%	45% to 85%	25% to 85%
Insulation resistance	100 M Ω min. (at 500 VDC)	100 M Ω min. (at 500 VDC)	100 M Ω min. (at 500 VDC)
Dielectric strength	1,500 VAC, 50/60Hz for 1 min	1,500 VAC, 50/60Hz for 1min	1,000 VAC, 50/60Hz for 1min
Vibration resistance (destruction)	16.7 Hz, 2 mm single amplitude, 1 h each in 3 directions	10 to 25 Hz, 2 mm single amplitude, 1 h each in 3 directions	10 to 55 Hz, 0.375 mm single amplitude, 2 h each in 3 directions
Vibration resistance (malfunction)	10 to 55 Hz, 0.25 mm single amplitude, 3 directions	10 to 55Hz, 0.25 mm single amplitude, 3 directions	10 to 55 Hz, 0.15 mm single amplitude, 10 min each in 3 directions
Shock resistance (destruction)	300 m/s ² , once in 6 directions	300 m/s ² , once in 6 directions	300 m/s ² , 3 times each in 6 directions
Shock resistance (malfunction)	50 m/s ² , 3 times each in 6 directions	50 m/s ² , 3 times each in 6 directions	200 m/s ² , 3 times each in 6 directions
Weight	approx. 100g (4-digit model) approx. 110g (6-digit model)	approx. 100g	approx. 60g

Operation ratings

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>CSK Operation mode: up counting Number of digits: 4 or 6 Display: Half-digit drive system</p> <p>CSKE Operation mode: up counting Number of digits: 6 or 7</p>	<p>H7EC-N Operation mode: up counting Number of digits: 8 Display: LCD (Numerical indication by liquid crystal display) (Displayed with zero suppression) Zero suppression: To ensure visibility, top zeroes are suppressed or not displayed. (e.g. "00000082" --> "82")</p>

Operation methods

Product discontinuation Model CSK and CSKE	Recommendable replacement Model H7EC-N
<p>Incrementing Operation (Up)</p> 	<p>Incrementing Operation (Up)</p> 