

# Product Details and Certifications

**Cross Reference RA Part Number: 700-HNC44AA12 C**

 **Product: 700-HNC44AA12**

Description: 700-HN Miniature General Purpose Timing Relay, Miniature Multi-Function, Multi-Mode (4 Functions), 0.1 seconds to 10 minutes, 4PDT Timed, 100-120V AC 50/60Hz



Representative Photo Only (actual product may vary based on configuration sections)

## **CONTROL RELAY DATA**

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Bulletin Number	700-HN Miniature Timing Relay
Type of Timer	Miniature Multi-Function
Timing Mode	Multi-Mode (4 Functions)
Contact Configuration	4PDT Timed Contact Arrangement
Timing Range	0.1 seconds to 10 minutes
Coil Voltage	100-120V AC 50/60Hz

## **CERTIFICATIONS AND APPROVALS**

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UL  
cURus  
CSA  
CE  
ACA  
C-Tick  
For UL Certifications Directory: <http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

## Relays, Timers &amp; Temperature Controllers


## Product Overview



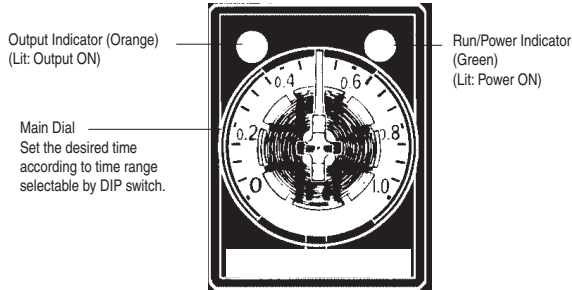
Bulletin No.	700-HRY	700-HRQ	700-HNC	700-HNK
<b>Type</b>	Star-Delta Timer	True Off-Delay Timer	Miniature Timer	Ultra-Slim Timer
<b>Features</b>	<ul style="list-style-type: none"> <li>A wide star-time range (up to 120 s)</li> <li>Star-delta transfer time range (up to 0.5 s)</li> <li>UL Recognized</li> </ul>	<ul style="list-style-type: none"> <li>Dial timing relays</li> <li>Long power Off-delay times</li> <li>11-pin and 8-pin models are available</li> <li>UL Recognized</li> </ul>	<ul style="list-style-type: none"> <li>Four different operating modes</li> <li>DIN Rail mount with socket</li> <li>Pin configuration same as Bulletin 700-HC relay</li> </ul>	<ul style="list-style-type: none"> <li>Ultra-slim timing relay</li> <li>Four different operating modes</li> <li>Three operating voltages</li> <li>DIN Rail mount with socket</li> <li>Pin configuration same as Bulletin 700-HK relay</li> </ul>
<b>Control Outputs: Time Limit Instantaneous</b>	SPST (Star, Delta) Timed SPST - NO Instantaneous	DPDT Timed	4PDT	SPDT, DPST-NO
<b>Operation Modes:</b>	Star-Delta	True OFF-delay Timer True OFF-delay Timer w/reset	On-Delay One Shot Repeat Cycle Off Start Repeat Cycle On Start	On-Delay One Shot Repeat Cycle Off Start Repeat Cycle On Start
<b>Time Range</b>	0.5 s...120 s	0.05 s...12 min.	0.1 s...10 h	0.1 s...10 h
<b>Supply Voltage</b>	100...120V AC 200...240V AC	48V DC 24V AC/DC 100...240V AC 100...125V DC	12V DC 24V AC/DC 48...125V DC 100...240V AC	12V DC 24V DC 24V AC
<b>Contact Rating at 120V AC</b>	5 A	5 A	5 A	5 A
<b>Certifications</b>	cURus, CE, C-Tick	cURus, CE, C-Tick	cURus, CSA, CE, C-Tick	cURus, CE, ACA
<b>Socket Cat. No(s).</b>	700-HN100 700-HN125	700-HN100 OR 700-HN101 700-HN125 OR 700-HN126	700-HN103 700-HN128	700-HN121 700-HN122
<b>Page Number</b>	page 9-84	page 9-84	page 9-73	page 9-78

	<p><b>Bulletin 700-HNC — Miniature Timing Relay</b></p> <ul style="list-style-type: none"> <li>Miniature timer, perfect for converting Bul. 700-HC "Ice Cube" relays into timing relays</li> <li>4 operating modes</li> <li>4PDT contact output</li> <li>Timing range from 0.1 s...10 hr</li> <li>Socket mounted</li> </ul>	<p><b>Table of Contents</b></p> <p>Product Selection ..... this page</p> <p>Accessories ..... this page</p> <p>Specifications..... 9-74</p> <p>Approximate Dimensions..... 9-77</p> <p><b>Standards Compliance and Certifications</b></p> <p>See Specification table in this section, page 9-75</p>
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**Product Selection**  
**Bulletin 700-HNC Miniature Timer with Multiple Time Ranges**

Model	Timing Mode	Contact Output	Input Voltages	Timing Range	Socket Type	Cat. No.
  <i>Cat. No. 700-HNC</i>	<p>On-Delay One Shot Repeat cycle, OFF-start Repeat cycle, ON-start</p>	<p>4PDT</p>	12V DC	0.1 s...10 min .1 min...10 hr	<p>700-HN103 700-HN128</p>	<b>700-HNC44AZ12</b>
			700-HNC44BZ12			
			24V DC	0.1 s...10 min 0.1 min....10 hr		<b>700-HNC44AZ24</b>
			700-HNC44BZ24			
			48V DC	0.1 s...10 min 0.1 min....10 hr		<b>700-HNC44AZ48</b>
			700-HNC44BZ48			
			100...110V DC	0.1 s...10 min 0.1 min....10 hr		<b>700-HNC44AZ11</b>
			700-HNC44BZ11			
			125V DC	0.1 s...10 min 0.1 min....10 hr		<b>700-HNC44AZ25</b>
			700-HNC44BZ25			
			24V AC	0.1 s...10 min 0.1 min....10 hr		<b>700-HNC44AA24</b>
			700-HNC44BA24			
100...120V AC	0.1 s...10 min 0.1 min....10 hr	<b>700-HNC44AA12</b>				
700-HNC44BA12						
200...230V AC	0.1 s...10 min 0.1 min....10 hr	<b>700-HNC44AA23</b>				
700-HNC44BA23						



**General Timer Functions**



**Accessories**

	Description	Pkg. Quantity	Cat. No.
 <i>Cat. No. 700-HN103</i>	<p><b>Screw Terminal Socket — Panel or DIN Rail Mounting.</b>  <b>Guarded Terminal Construction</b>                      14-Blade miniature socket for use with Bulletin 700-HNC timers.</p>	10	<b>700-HN103</b>
 <i>Cat. No. 700-HN128</i>	<p><b>Screw Terminal Base Sockets — Panel or DIN Rail Mounting.</b>  <b>Open Style Construction</b>                      14-blade miniature socket for use with Bulletin 700-HNC timers.</p>	10	<b>700-HN128</b>

Bulletin 700-HNC  
**Plug-in Timing Relays**  
 Accessories/ Specifications

	Description	Pkg. Quantity	Cat. No.
 <b>Cat. No. 700-HN104</b>	<b>Screw Terminal Socket – Panel or DIN Rail Mounting. Guarded Terminal Construction</b> 14-blade miniature socket for use with Bulletin 700-HNC timers. This socket has coil and contact separation.	10	<b>700-HN104</b>
 <b>Cat. No. 700-HN263</b>	Retainer Clip for Cat. Nos. 700-HN103, -HN104 and -HN128 Sockets with Bulletin 700-HNC Timers. Secures Timer in Socket.	10	<b>700-HN263</b>

**Specifications**

Item		Ratings	
		<b>700-HNC</b>	
Pilot Duty Rating	NEMA B300		
Pin type	Plug-in		
Operating voltage range	85%...110% of rated supply voltage (12V DC: 90%...110% of rated supply voltage)*		
Reset voltage	10% min. of rated supply voltage‡		
Power consumption	24V AC:	Relay ON: Relay OFF:	1.5 VA (1.1 W) (at 24V AC, 60 Hz) 0.2 VA (0.1 W) (at 24V AC, 60 Hz)
	100...120V AC:	Relay ON: Relay OFF:	1.5 VA (1.3 W) (at 120V AC, 60 Hz) 0.8 VA (0.5 W) (at 120V AC, 60 Hz)
	200...230V AC:	Relay ON: Relay OFF:	1.8 VA (1.5 W) (at 230V AC, 60 Hz) 1.2 VA (0.9 W) (at 230V AC, 60 Hz)
	12V DC:	Relay ON: Relay OFF:	0.9 W (at 12V DC) 0.07 W (at 12V DC)
	24V DC:	Relay ON: Relay OFF:	0.9 W (at 24V DC) 0.07 W (at 24V DC)
	48V DC:	Relay ON: Relay OFF:	1.0 W (at 48V DC) 0.2 W (at 48V DC)
	100...110V DC:	Relay ON: Relay OFF:	1.3 W (at 110V DC) 0.3 W (at 110V DC)
	125V DC:	Relay ON: Relay OFF:	1.3 W (at 125V DC) 0.3 W (at 125V DC)
Control outputs	4PDT: 5 A at 250V AC, resistive load (cosφ = 1)		
Characteristics			
Make	▶ ◀	120V AC	30 A
		240V AC	15 A
Break	◀ ▶	120V AC	3 A
		240V AC	1.5 A
Hp at 120V AC	1/6 Hp		
Hp at 240V AC	1/6 Hp		
Accuracy of operating time	±1% FS max. (1 s range: ±1%±10 ms max.)		
Setting error	±10%±50 ms FS max.		
Reset time	Min. power-opening time: 0.1 s max. (including halfway reset)		
Influence of voltage	±2% FS max.		
Influence of temperature	±2% FS max.		
Insulation resistance	100 mΩ min. (at 500V DC)		
Dielectric strength	2000V AC, 50/60 Hz for 1 min (between current-carrying terminals and exposed non-current-carrying metal parts)*		
	2000V AC, 50/60 Hz for 1 min (between operating power circuit and control output)		
	2000V AC, 50/60 Hz for 1 min (between different pole contacts; 2-pole model)		
	1500V AC, 50/60 Hz for 1 min (between different pole contacts; 4-pole model)		
Vibration resistance	Malfunction:10...55 Hz, 0.5 mm single amplitude		
Shock resistance	Malfunction:100 m/s² (approx. 10G)		
Ambient temperature	Operating:-10 °C...50 °C (with no icing) Storage:-25 °C...65 °C (with no icing)		
Ambient humidity	Operating:35%...85%		
Life expectancy	Mechanical:10 000 000 operations min. (under no load at 1800 operations/hr)		
	Electrical:4PDT: 200 000 operations min. (3 A at 250V AC, resistive load at 1800 operations/hr)		

\* Single-phase, full-wave-rectified power supplies can be used.

‡ When using the 700-HNC continuously in any place where the ambient temperature is in a range of 45 °C...50 °C, supply 90%...110% of the rated supply voltages supply 95%...110% with 12V DC type).