

Product Details and Certifications

Cross Reference RA Part Number: 700-HNC44BA12 C

 Product: **700-HNC44BA12**

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



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

CONTROL RELAY DATA

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 hours
Coil Voltage	100-120V AC 50/60Hz

CERTIFICATIONS AND APPROVALS


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 & Temperature Controllers


Product Overview



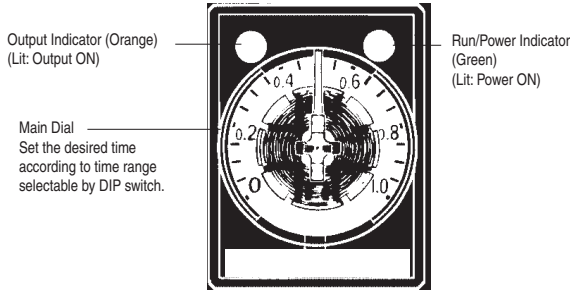
Bulletin No.	700-HRY	700-HRQ	700-HNC	700-HNK
Type	Star-Delta Timer	True Off-Delay Timer	Miniature Timer	Ultra-Slim Timer
Features	<ul style="list-style-type: none"> A wide star-time range (up to 120 s) Star-delta transfer time range (up to 0.5 s) UL Recognized 	<ul style="list-style-type: none"> Dial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

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



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>	700-HNC44AZ12
						700-HNC44BZ12
			24V DC	0.1 s...10 min 0.1 min....10 hr		700-HNC44AZ24
						700-HNC44BZ24
			48V DC	0.1 s...10 min 0.1 min....10 hr		700-HNC44AZ48
						700-HNC44BZ48
			100...110V DC	0.1 s...10 min 0.1 min....10 hr		700-HNC44AZ11
						700-HNC44BZ11
			125V DC	0.1 s...10 min 0.1 min....10 hr		700-HNC44AZ25
						700-HNC44BZ25
			24V AC	0.1 s...10 min 0.1 min....10 hr		700-HNC44AA24
						700-HNC44BA24
100...120V AC	0.1 s...10 min 0.1 min....10 hr	700-HNC44AA12				
		700-HNC44BA12				
200...230V AC	0.1 s...10 min 0.1 min....10 hr	700-HNC44AA23				
		700-HNC44BA23				



General Timer Functions



Accessories

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

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

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

Specifications

Item		Ratings	
		700-HNC	
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	1000V AC, 50/60 Hz for 1 min (between non-continuous contacts)		
	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).