

Interposing/Isolation Relays

Product Overview/Product Selection



Bulletin 700-HC — Miniature Ice Cube Relay

- 7 or 10 A contact ratings
- 2PDT or 4PDT
- Standard ON/OFF flag indicator
- Blade-style terminals
- Choice of standard silver nickel contacts, or silver nickel with gold-plated contacts for low-energy applications
- Options: LED, push-to-test with manual override option
- Tungsten UL Approvals
 - 4-Pole: 5A @ 24V DC
 - 2-Pole: 10A @ 24V DC

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Product Selection

Bulletin 700-HC Miniature Square Base with Blade Terminals







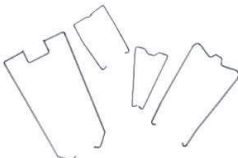
	Description	Contact Rating	Wiring Diagrams		Coil Voltage	Cat. No. * ✱
			U.S./Canada	International		
	2PDT 2-Pole 2 Form C Contacts: 10 A = AgNi Contacts	10 A C300 R300 Low energy rating; (10V, 10 mA) 100 mW			12V DC	700-HC22Z12
					24V DC	700-HC22Z24
					24V AC	700-HC22A24
					120V AC	700-HC22A1
	4PDT 4-Pole 4 Form C Contacts: 7A = AgNiAu Gold Plated Contacts	7 A Low energy rating; (5V, 10 mA or 25V, 2 mA) 50 mW			240V AC	700-HC22A2
					6V AC	700-HC14A06
					12V AC	700-HC14A12
					24V AC	700-HC14A24
					120V AC	700-HC14A1
					240V AC	700-HC14A2
4PDT 4-Pole 4 Form C Contacts: 7A = AgNi Silver Contacts	7 A C300 R300 Low energy rating; (10V, 10 mA) 100 mW			6V DC	700-HC14Z06	
				12V DC	700-HC14Z12	
				24V DC	700-HC14Z24	
				48V DC	700-HC14Z48	
				110V DC	700-HC14Z1	
				6V AC	700-HC24A06	
				12V AC	700-HC24A12	
				24V AC	700-HC24A24	
				120V AC	700-HC24A1	
				240V AC	700-HC24A2	
6V DC	700-HC24Z06					
12V DC	700-HC24Z12					
24V DC	700-HC24Z24					
48V DC	700-HC24Z48					
110V DC	700-HC24Z1					

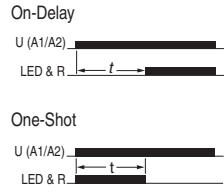
* LED Option: Add suffix (-4) to the selected Bulletin 700-HC Relay Cat. No. except for the 240V AC units, add (-4L).

✱ Push-to-Test and LED Option: Add suffix (-3-4) to the selected Bulletin 700-HC Relay Cat. No., except for the 240V AC units, add (-3-4L).



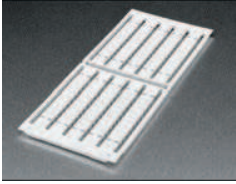
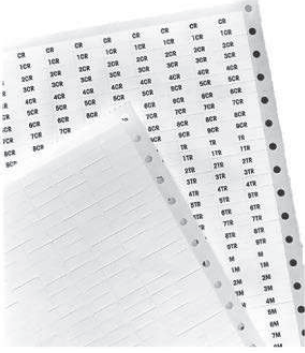
Accessories

	Description	Pkg. Qty.	Cat. No.
	Diode with LED Surge Suppressor Voltage Range: 6...24V DC used with 700-HN104 socket	10	700-ADL1
	Diode with LED Surge Suppressor Voltage Range: 28...60V DC used with 700-HN104 socket	10	700-ADL2
	Diode with LED Surge Suppressor Voltage Range: 110...220V DC used with 700-HN104 socket	10	700-ADL3
	Varistor with LED Surge Suppressor Voltage Range: 6...24V AC used with 700-HN104 socket	10	700-AV1R
	Varistor with LED Surge Suppressor Voltage Range: 110...240V AC used with 700-HN104 socket	10	700-AV3R
	RC Surge Suppressor Voltage Range: 6...24V AC/DC used with 700-HN104 socket	10	700-AR1
	RC Surge Suppressor Voltage Range: 110...240V AC/DC used with 700-HN104 socket	10	700-AR2
	Timing Module On-Delay or One-Shot selectable voltage range: 12...24V AC/DC used with sockets that accept plug-in accessory modules.	1	700-AT3
	Timing Module On-Delay or One-Shot selectable voltage range: 110...125V AC used with sockets that accept plug-in accessory modules.		700-AT3A1
	Timing Module On-Delay or One-Shot selectable voltage range: 230...240V AC used with sockets that accept plug-in accessory modules.		700-AT3A2
 Cat. No. 700-HN103	Screw Terminal Socket — Panel or DIN Rail Mounting; Guarded Terminal Construction. $I_{th} = 10$ A per pole. 14-blade miniature socket for use with Bulletin 700-SC Relays.	10	700-HN103
 Cat. No. 700-HN104	Screw Terminal Socket — Panel or DIN Rail Mounting; Guarded Terminal Construction $I_{th} = 10$ A per pole. 14-blade miniature socket for use with Bulletin 700-SC relays. This socket has coil and contact separation as well as the ability to plug in optional plug in modules (700-A__ accessories: LED, Surge Suppression, Timing Modules)	10	700-HN104
 Cat. No. 700-HN128	Screw Terminal Base Socket — Panel or DIN Rail Mounting; Open-Style Construction $I_{th} = 10$ A per pole. 14-blade miniature socket for use with Bulletin 700-SC Relays.	10	700-HN128
 Cat. No. 199-DR1	DIN (#3) symmetrical hat rail 35 x 7.5 x 1 m	10	199-DR1
 Sample Retainer Clips	Retainer Clip for Cat. Nos. 700-HN103, -HN104 and -HN128 Sockets with 700-HC Relays. Secures relay in socket. *	10	700-HN114
	Plastic Retainer and Ejection Lever For use with the 700-HN104 Sockets for 700-HC relays. Built-in ability to accept 1492 Snap-in Markers	10	700-HN124



* See Bulletin 700-HC Miniature Square Base Relay, Socket, and Retainer Clip Reference Chart

Bulletin 700-HC
Interposing/Isolation Relays
 Accessories

	Description	Pkg. Qty.	Cat. No.
 <p>Snap-in markers</p>	<p>Relay Identification Snap-in Markers Snap-in markers fit on top of product covers. Squares slip into molded slot on top of product cover.</p>	5 5 5 5 5 100	1492-MS5X12 1492-MS6X9 1492-MS6X12 1492-MS8X9 1492-MS8X12 1492-MP-Blank
	<p>Pre-Printed Identification Tags — contains 10 sheets of pre-printed and blank tags. Each sheet contains 13 sets of the markings CR...9CR, TR...9TR, M...9M, F, R, 1S, and 117 blank tags. Tags are peel-off with sticky backing for easy placement on relays.</p> <p>Markers — Used for terminal identification</p>	10 50	700-N40 700-N41

Relay Type	Socket Cat. No.	Retainer Clip Cat. No.
700-HC	700-HN103	700-HN114
	700-HN128	700-HN114
	700-HN104	700-HN114 or 700-HN124

Specifications

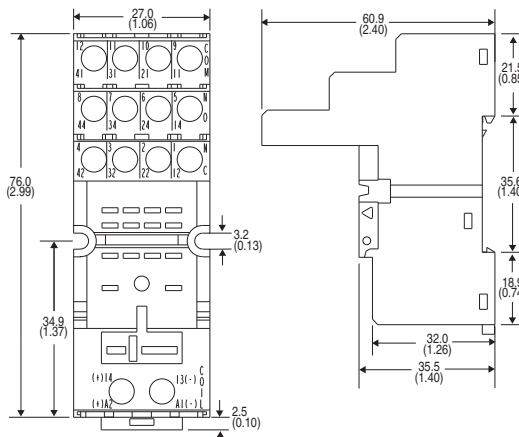
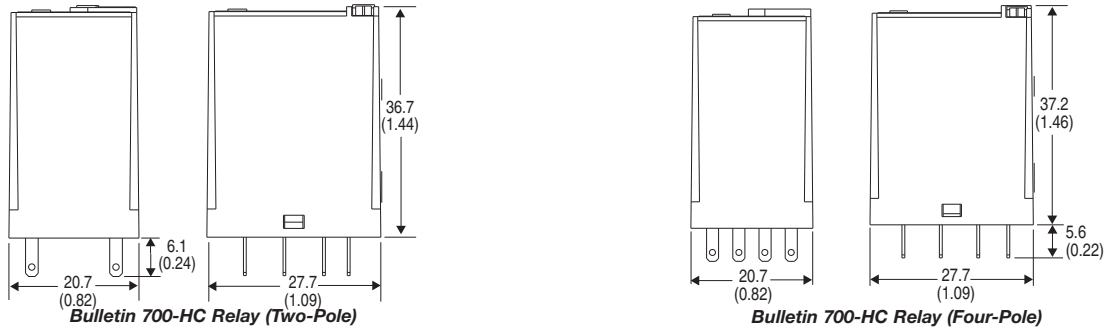
Cat. No. 700-HC...			
Electrical Ratings			
Pilot Duty Rating *		NEMA C300, R300	
Rated Thermal Current (I_{th})		7 A and 10 A	
Rated Insulation Voltage (U)		250V IEC – 300V UL/CSA	
Contacts	Inductive	700-HC_4	Hp
		▶][◀	◀][▶
	120V AC	15 A	1.5 A
	240V AC	7.5 A	0.75 A
	General Purpose	7 A, 277V AC	
	Resistive	7 A, 30V DC	
		700-HC22	Hp
		▶][◀	◀][▶
		15 A	1.5 A
		7.5 A	0.75 A
		10 A, 277V AC	
		10 A, 24V DC	
Min. Low Energy Permissible Load		100 mW (10V, 10 mA) - Silver Contacts 50 mW (5V, 10 mA or 25V, 2 mA) - Gold Contacts	
Permissible Coil Voltage Variation		Pickup: 80...110% of Nominal Voltage at 50 Hz 80...110% of Nominal Voltage at 60 Hz 80...110% of Nominal Voltage at DC	Must Dropout Voltage: 20% of Nominal Voltage at AC 10% of Nominal Voltage at DC
		50 Hz	60 Hz
Coil Consumption ±10%	AC Coils	Inrush	2.2 VA
		Sealed	1.3 VA
	DC Coils	1.0 W	
Max. Allowable Leakage		20% of VA (AC) 10% of W (DC)	
Design Specification/Test Requirements			
Electrical			
Dielectric Withstand Voltage	Pole-to-Pole	1000V	
	Contact to Coil	3600V	
	Contact to Frame	3600V	
Electrical Life (Cycles)	100 000 minimum		
Mechanical			
Degree of Protection (Open Type) IEC 529		IP 20 (Guarded Terminal Sockets)	
Mechanical Life Cycles		20 x 10 ⁶ (AC) 50 x 10 ⁶ (DC)	
Switching Frequency Operations		1800/HR	
Coil Voltages		See Product Selection	
Operating Time (ms)	Max. Pickup	10	
	Max. Dropout	3	
Maximum Operating Rate		8 cycles/s	
Environmental			
Temperature	Operating	-30...+55 °C	
		(-22...+131 °F)	
	Storage	-55...+85 °C	
		(-67...+185 °F)	
Altitude		2000 m (6560 ft)	
Insulating Material		Molded High Dielectric Material	
Enclosure		Transparent Dust Cover	
Contact Material		AgNi (700-HC2) AgNi + 5 μm AlI (700-HC1)	
Terminal Markings on Socket		In accordance with EN50 0005	
Sockets		700-HN103, -HN128, -HN104	
Certifications		cURus Recognized (File No. E14843, Guide NRNT2/NRNT8), cULus Listed when used with Bulletin 700-HN103, -HN104, and -HN128 sockets (File No. E14843, Guide NRNT/NRNT7), CE Marked, LR Certified	
Standards		UL 508, CSA 22.2 No. 14, EN/IEC 60947-4-1, EN/IEC 60947-5-1	

* Performance Data – See this catalog, Important 3.
* NEMA Rating Chart is in publication 700-SG003_-EN-P.

Bulletin 700-HC
Interposing/Isolation Relays
 Approximate Dimensions

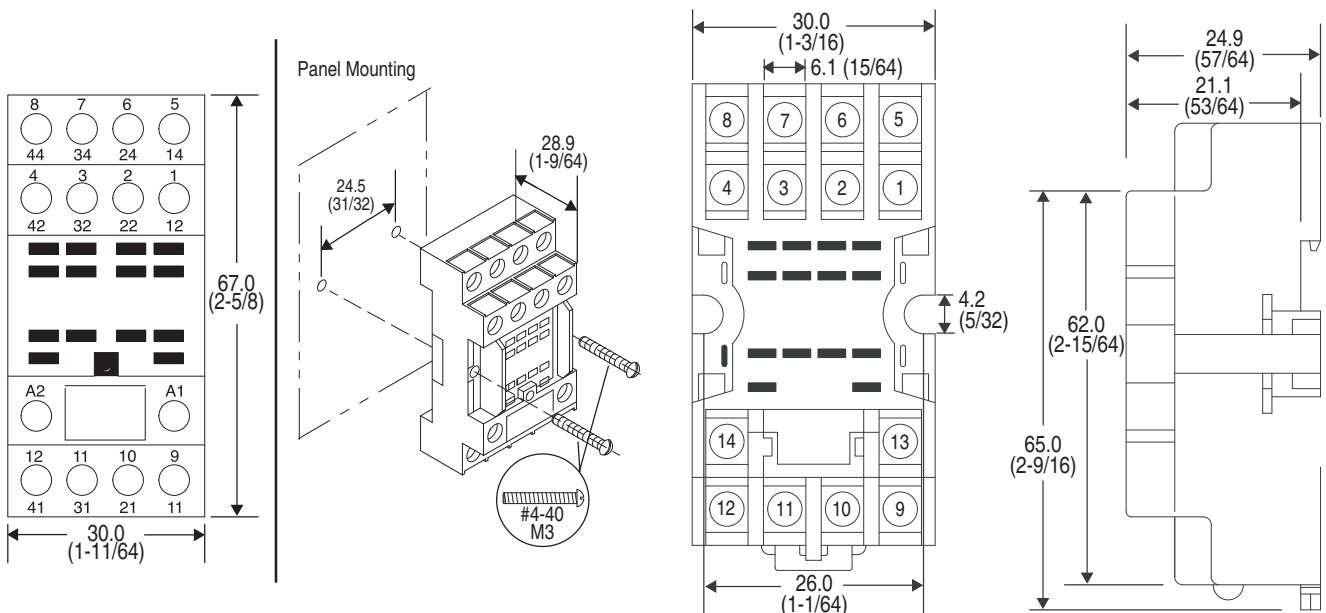
Approximate Dimensions

Approximate Dimensions are shown in millimeters (inches). Approximate Dimensions are not intended to be used for manufacturing purposes.



Cat. No. 700-HN104

Single Wire: 0.2 mm²...2.5 mm² (#24 AWG...14 AWG)
Double Wire: 2 x 0.2 mm²...2 x 2.5 mm² (2 x 24 AWG...2 x 14 AWG)
Wire Type: solid or stranded, copper only
Strip Length: 7 mm (9/32 in.), Torque: 0.5 N•m (4.4 lb•in)



Cat. No. 700-HN103

Single Wire: 0.2 mm²...2.5 mm² (#24 AWG...14 AWG)
Double Wire: 2 x 0.2 mm²...2 x 1.5 mm² (2 x 24 AWG...2 x 16 AWG)
Wire Type: Solid or Stranded, Copper only
Strip Length: 8 mm (5/16 in.), Torque: 0.5 N•m (4.4 lb•in)

Cat. No. 700-HN128

Wire Size: 2 x 1.5mm² (#2-16 AWG...#1-20 AWG)
(Either Solid or Stranded)
Strip Length: 9 mm (3/8 in.) – Torque: 0.8 N•m (7 lb•in)