

# Interposing/Isolation Relays

## Product Overview/Product Selection



### Bulletin 700-HP — (PCB) "Pin Style" Relay

- 8 A contact ratings
- DPDT/ (2 c/o) contacts
- Plug-in PIN style (PCB) terminals (5 mm pinning)
- Choice of standard silver nickel contacts, or silver nickel with gold-plated contacts

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**Standards Compliance and Certifications**

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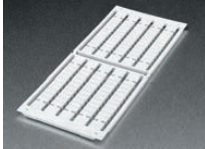
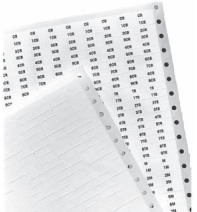
### Product Selection

#### Slim Line Relay with "PIN Style" Terminations

	Description	Contact Rating	Wiring Diagrams		Coil Voltage	Package Quantity	Cat. No.
			U.S./Canada	International			
	DPDT 2-Pole 2 Form C AgNi + Au Gold Plated Contacts	8 A			6V AC	10	700-HPX2A06
					12V AC	10	700-HPX2A12
					24V AC	10	700-HPX2A24
					120V AC	10	<b>700-HPX2A1</b>
					240V AC	10	700-HPX2A2
					6V DC	10	700-HPX2Z06
	Sockets	8 A			12V DC	10	700-HPX2Z12
					24V DC	10	<b>700-HPX2Z24</b>
					48V DC	10	700-HPX2Z48
					110V DC	10	700-HPX2Z1
					6V AC	10	700-HP32A06
					12V AC	10	700-HP32A12
<b>Bulletin 700-HP DPDT</b> Sockets	8 A			24V AC	10	<b>700-HP32A24</b>	
				120V AC	10	<b>700-HP32A1</b>	
				240V AC	10	<b>700-HP32A2</b>	
				6V DC	10	700-HP32Z06	
				12V DC	10	<b>700-HP32Z12</b>	
				24V DC	10	<b>700-HP32Z24</b>	
				48V DC	10	700-HP32Z48	
				110V DC	10	700-HP32Z1	



Accessories

	Description	Pkg. Quantity	Cat. No.
	<b>Diode Surge Suppressor</b> Voltage Range: 6...220V DC used with 700-HN123 socket	10	<b>700-ADR</b>
	<b>Diode with LED Surge Suppressor</b> Voltage Range: 6...24V DC used with 700-HN123 socket	10	<b>700-ADL1R</b>
	<b>Diode with LED Surge Suppressor</b> Voltage Range: 28...60V DC used with 700-HN123 socket	10	700-ADL2R
	<b>Diode with LED Surge Suppressor</b> Voltage Range: 110...220V DC used with 700-HN123 socket	10	700-ADL3R
	<b>Diode with LED Surge Suppressor</b> Voltage Range: 6...24V AC used with 700-HN123 socket	10	<b>700-AV1R</b>
	<b>Varistor with LED Surge Suppressor</b> Voltage Range: 110...240V AC used with 700-HN123 socket	10	<b>700-AV3R</b>
	<b>RC Surge Suppressor</b> Voltage Range: 6...24V AC/DC used with 700-HN123 socket	10	<b>700-AR1</b>
	<b>RC Surge Suppressor</b> Voltage Range: 110...240V AC/DC used with 700-HN123 socket	10	<b>700-AR2</b>
	<b>Timing Module</b> On-Delay or One-Shot selectable voltage range: 12...24V AC/DC used with sockets that accept plug-in accessory modules.	1	<b>700-AT3</b>
	<b>Timing Module</b> On-Delay or One-Shot selectable voltage range: 110...125V AC used with sockets that accept plug-in accessory modules.		700-AT3A1
	<b>Timing Module</b> On-Delay or One-Shot selectable voltage range: 230...240V AC used with sockets that accept plug-in accessory modules.		700-AT3A2
 <p>Cat. No. 700-HN123</p>	<b>Screw Terminal Socket — Panel or DIN Rail Mounting</b> 8-pin miniature socket for use with 2-pole, Bulletin 700-HP relays. Incorporates coil and contact separation.	10	<b>700-HN123</b>
	 <p>Cat. No. 700-HN180</p>	8-Way Jumper can be cut to required length. Rated 10 A – 250V	1
Red <b>700-HN180R</b>			
Gray <b>700-HN180G</b>			
Blue <b>700-HN180B</b>			
Cat. No. 700-HN119	<b>Plastic Retainer and Ejection Lever</b> For use with the 700-HN123 sockets Built-in ability to accept 1492 snap-in markers	10	<b>700-HN119</b>
Cat. No. 700-HN230	<b>Spring Clamp Terminal Socket — Panel or DIN Rail Mounting</b> 8-pin miniature socket for use with 2-pole, Bulletin 700-HP relays. Incorporates coil and contact separation.	10	700-HN230
Cat. No. 700-HN232	<b>Plastic Retainer and Ejection Lever</b> For use with the 700-HN230 sockets Built-in ability to accept 1492 snap-in markers	10	700-HN232
 <p>Cat. No. 199-DR1</p>	<b>DIN (#3) symmetrical hat rail</b> 35 x 7.5 x 1 m	10	<b>199-DR1</b>
 <p>Snap-in markers</p>	<b>Relay Identification Snap-in Markers</b> Note - These markers can only be used when the Plastic Retainer and Ejection Lever accessory (part # 700-HN119) is used because the markers snap into the Ejection Lever (and not into the relay itself).	5	<b>1492-MS5X12</b>
		5	<b>1492-MS6X9</b>
		5	<b>1492-MS6X12</b>
		5	<b>1492-MS8X9</b>
		5	<b>1492-MS8X12</b>
		100	<b>1492-MP-Blank</b>
	<b>Pre-Printed Identification Tags</b> — 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.	10	700-N40
			700-N41

Bulletin 700-HP  
**Interposing/Isolation Relays**  
 Specifications

**Bulletin 700-HP Pin Style (PCB) Slim Line Relay, Socket, and Retainer Clip Reference Chart**

Relay Type	Socket Cat. No.	Retainer Clip Cat. No.
700-HPX2	700-HN123	700-HN119
700-HP32	700-HN123	700-HN119

**Specifications \***

Cat. No. 700-HP...			
Electrical Ratings			
Pilot Duty Rating*		C300, R300	
Rated Thermal Current ( $I_{th}$ )		2-Pole — 8A	
Rated Insulation Voltage ( $U_i$ )		250V IEC, 300V UL/CSA	
Contacts	Inductive	2-Pole	
		▶][◀	◀][▶
	120V AC, 1-phase	15 A	1.5 A
	240V AC, 1-phase	7.5 A	0.75 A
	General Purpose	8 A, 277V AC	
	Resistive	8 A, 30V DC	
Min. Permissible Contact Ratings		700-HP32 = 300 mW (5V, 5 mA) 700-HPX = 50 mW (5V, 5 mA)	
Permissible Coil Voltage Variation		Pickup: 80...110% of Nominal Voltage at 50 Hz 80...110% of Nominal Voltage at 60 Hz 73...150% of Nominal Voltage at DC	Must Drop-out Voltage: 20% of Nominal Coil Voltage AC 10% of Nominal Coil Voltage DC
Sealed Power Consumption ±10%	AC Coils	Max. Allowable Leakage OFF 25% of VA‡ 1.2 VA 50 Hz 1.0 VA 60 Hz	
	DC Coils	Max. Allowable Leakage of 10% of W 0.5 W	
Design Specification/Test Requirements			
Dielectric Withstand Voltage for One Minute	Pole to Pole (VRMS)	1000V AC	
	Contact to Coil (VRMS)	5000V AC	
Mechanical			
Degree of Protection		Open Type (Sockets)	
Mechanical Life Cycles		10 x 10 <sup>6</sup> (AC Coils), 20 x 10 <sup>6</sup> (DC coils)	
Switching Frequency Operations		1800/hr (no load)	
Coil Voltages		See Overview/Product Selection	
Operating Time at Nominal Voltage at 20 °C (ms)	Pickup	12	
	Dropout	4	
Maximum Operating Rate		16 Ops/s (full load)	
Vibration	Enclosure	5 G	
	Fragility	2.5 G	
Shock	Endurance	50 G	
	Fragility	15 G	
Max. Socket Torque		0.5 N•m (4.4 lb•in)	
Environmental			
Temperature	Operating	-40...+85 °C	
	Storage	-45...+100 °C	
Altitude		2000 m (6560 ft)	
Construction			
Insulating Material		Molded High-Dielectric Material	
Enclosure		Transparent Dust Cover	
Contact Material		Silver Nickel, (AgNi) (700-HP3), Silver Nickel + Gold Plating (AgNi + Au) (700-HPX)	
Terminal Markings on Socket		In accordance with EN50 0005	
Sockets		2-Pole	
		700-HN123	
Approvals			
Certifications		cURus Recognized (File No. E3125, Guide NLDX2/NLDX8), cULus Listed when used with Bulletin 700-HN123 socket (File No. E3125, Guide NLDX/NLDC7), CSA Certified (files 229473), CE Marked, LR Certified	
Standards		UL 508, CSA 22.2 No. 14, EN 61812-1, EN 60255-23	

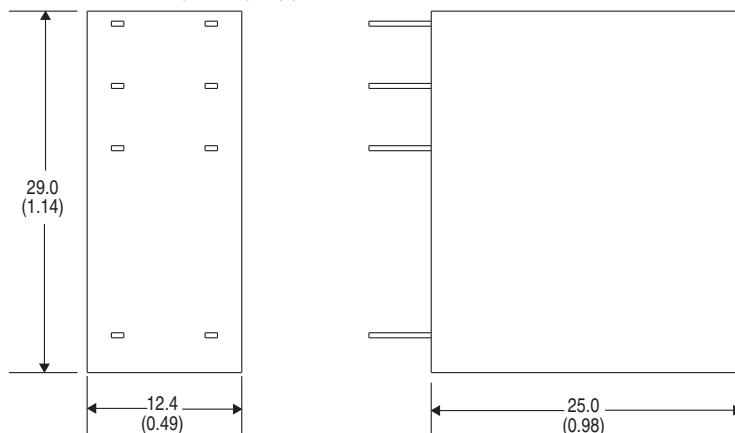
\* Performance Data – See this catalog, Important- 3.

⊛ NEMA Rating Chart is in publication 700-SG003\*

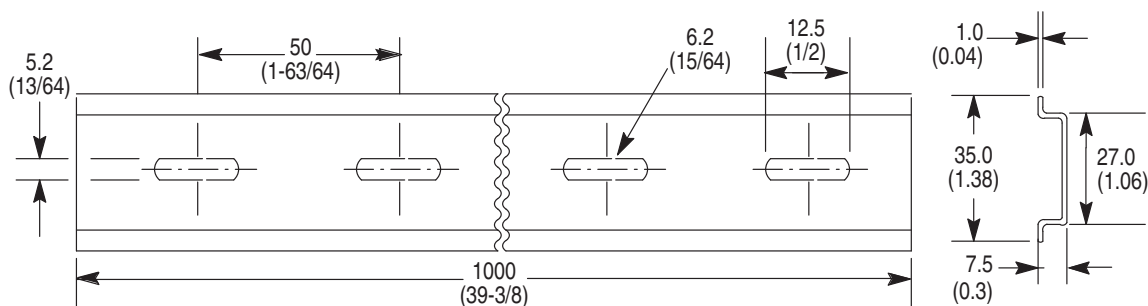
‡ The inrush VA equals 1.5 times the sealed VA.

**Approximate Dimensions**

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



**Bulletin 700-HP Relay**



**Cat. No. 700-HN123**  
 Single Wire: 0.2.....2.5 mm<sup>2</sup> (#24.....14 AWG)  
 Double Wire: 2 X 0.2.....2 X 2.5 mm<sup>2</sup> (#2 X 24.....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.	A	B	C	D	Approx. Shipping Wt.
199-DR1	35 (1-3/8)	27 (1-1/16)	7.5 (19/64)	1.02 (1/64)	1.85 kg (4.07 lb) (10/pkg)
199-DR4	35 (1-3/8)	27 (1-1/16)	15 (19/32)	2.3 (3/32)	3.68 kg (8 lb) (5/pkg)



**Cat. No. 700-HN123**  
 Single Wire: 0.2.....2.5 mm<sup>2</sup> (#24.....14 AWG)  
 Double Wire: 2 X 0.2.....2 X 2.5 mm<sup>2</sup> (#2 X 24.....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)

