



Bulletin 700-HB — Square Base Relay

- 15 A contact rating
- DPDT, 3PDT
- Blade-style quick connect terminals
- Standard ON/OFF flag indicator
- Options: LED, push-to-rest, and manual override
- Faston 187 (4.8 x 0.5 mm)

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Product Selection

Bulletin 700-HB Square Base Relay with Blade Style Quick Connect/Solder Terminations — Mechanical ON/OFF Indicator Included

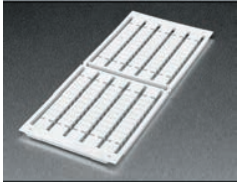
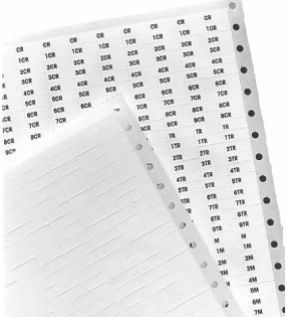

	Description	Contact Rating	Wiring Diagrams		Coil Voltage	Cat. No.*§		
			U.S./Canada	International				
	DPDT 2-Pole 2 Form C Single AgCdO Contact	15 A B300			6V AC	700-HB32A06		
					12V AC	700-HB32A12		
					24V AC	700-HB32A24		
					120V AC	700-HB32A1		
					240V AC	700-HB32A2		
					6V DC	700-HB32Z06		
	Sockets			700-HN154	700-HN153	12V DC	700-HB32Z12	
						24V DC	700-HB32Z24	
						48V DC	700-HB32Z48	
						110V DC	700-HB32Z1	
		3PDT 3-Pole 3 Form C Single AgCdO Contact	15 A B300			6V AC	700-HB33A06	
						12V AC	700-HB33A12	
				24V AC	700-HB33A24			
				120V AC	700-HB33A1			
				240V AC	700-HB33A2			
				6V DC	700-HB33Z06			
Sockets					700-HN154	700-HN153	12V DC	700-HB33Z12
							24V DC	700-HB33Z24
							48V DC	700-HB33Z48
							110V DC	700-HB33Z1

* LED Option: Add suffix **(-4)** to the selected Bulletin 700-HB Relay Cat. No., except for the 240V AC Units, add **(-4L)**.
 § Push-to-test, Manual Override, and LED Option: Add suffix **(-3-4)** to the selected Bulletin 700-HB Relay Cat. No., except for the 240V AC units, add **(-3-4L)**.
 § Push-to-test and Manual Override option: Add suffix **(-3)** to the selected Bulletin 700-HB relay.

	Description	Pkg. Qty.	Cat. No.																					
	Diode Surge Suppressor Voltage Range: 6...220V DC used with 700-HN153 socket	10	700-ADR																					
	Diode with LED Surge Suppressor Voltage Range: 6...24V DC used with 700-HN153 socket	10	700-ADL1R																					
	Diode with LED Surge Suppressor Voltage Range: 28...60V DC used with 700-HN153 socket	10	700-ADL2R																					
	Diode with LED Surge Suppressor Voltage Range: 110...220V DC used with 700-HN153 socket	10	700-ADL3R																					
	Varistor with LED Surge Suppressor Voltage Range: 6...24V AC used with 700-HN153 socket	10	700-AV1R																					
	Varistor with LED Surge Suppressor Voltage Range: 110...240V AC used with 700-HN153 socket	10	700-AV3R																					
	RC Surge Suppressor Voltage Range: 6...24V AC/DC used with 700-HN153 socket	10	700-AR1																					
	RC Surge Suppressor Voltage Range: 110...240V AC/DC used with 700-HN153 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-HT3	Multi-Function Multi-Range Time Module Voltage range 12...240V AC 50/60 Hz and 12...240V DC, with a voltage variation of 85...110%. Repeat accuracy of ±1%. Reset time <50 ms. For use with 700-HN153 socket. Refer to page 9-23 for Specifications. Eight Timing Modes Seven Timing Ranges:	1	700-HT3																					
	<table border="0"> <tr> <td>1. 1 s</td> <td>0.05 s...1 s</td> <td></td> </tr> <tr> <td>2. 10 s</td> <td>0.5 s...10 s</td> <td></td> </tr> <tr> <td>3. 100 s</td> <td>5 s...100 s</td> <td></td> </tr> <tr> <td>4. 10 min.</td> <td>0.5 min...10 min</td> <td></td> </tr> <tr> <td>5. 100 min.</td> <td>5 min...100 min</td> <td></td> </tr> <tr> <td>6. 10 hours</td> <td>0.5 hr...10 hr</td> <td></td> </tr> <tr> <td>7. 100 hours</td> <td>5 hr...100 hr</td> <td></td> </tr> <tr> <td>8. LED Indicator</td> <td></td> <td></td> </tr> </table>			1. 1 s	0.05 s...1 s		2. 10 s	0.5 s...10 s		3. 100 s	5 s...100 s		4. 10 min.	0.5 min...10 min		5. 100 min.	5 min...100 min		6. 10 hours	0.5 hr...10 hr		7. 100 hours	5 hr...100 hr	
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 Cat. No. 700-HN153	Screw Terminal Socket — Panel or DIN Rail Mounting. Guarded Terminal Construction 11-blade socket for use with Bulletin 700-HB relays. This socket has coil and contact separation as well as the ability to use optional plug-in modules (700-A__ accessories, LED, surge suppression, timing modules).	10	700-HN153																					
 Cat. No. 700-HN154	Screw Terminal Base Socket — Panel or DIN Rail Mounting. Open Style Construction 11-blade for use with Bulletin 700-HB relays.	10	700-HN154																					
 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. No. -HN154 open terminal socket with 700-HB relays* Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN156																					
	Retainer Clip for Cat. No. 700-HN153 Sockets with 700-HB Relays* . Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN158																					

* See Bulletin 700-HB square base relay socket and retainer clip reference chart (see page 9-22).

Bulletin 700-HB
General Purpose 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. The following are blank cards. Squares slip into molded slot on top of product covers.</p>	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>	10	700-N40
	<p>Blank Identification Tags — contains 10 sheets of blank identification tags for customer specialized printing. Each sheet contains 546 blank tags. Tags are peel-off with sticky backing for easy placement on relays.</p>	10	700-N41

† For pre-printed marker cards, turn to the following 1492 sections of publication A115: 1492-MS5X12_, 1492-MS6X9_, 1492-MS8X9_, 1492-MS8X12_, 1492-MP_.

Relay Type	Socket Cat. No.	Retainer Clip Cat. No.
700-HB	700-HN153 700-HN154	700-HN158 700-HN156

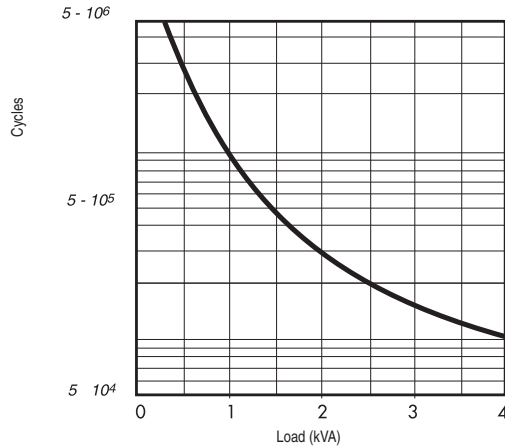
Specifications

Cat. No. 700-HB...						
Electrical Ratings						
Pilot Duty Rating*	NEMA B300					
Rated Thermal Current (I_{th})	15 A – 120V, 240V					
Rated Insulation Voltage (U)	250V IEC-300V UL/CSA					
Contacts	Inductive	Make		Break		Hp
		▶ ◀		◀ ▶		
		2 -Pole	3 -Pole	2 -Pole	3 -Pole	
	120V AC	60 A	30 A	6 A	3 A	3/4
	240V AC	30 A	15 A	3 A	1.5 A	2
	General Purpose	15 A, 240V AC				
	Resistive	15 A, 30V DC				
Min. Low Energy Permissible Load	1000 mW (10V, 10 mA)					
Permissible Coil Voltage Variation	80...110% of Nominal Voltage at 50 Hz					
	80...110% of Nominal Voltage at 60 Hz					
	80...110% of Nominal Voltage at DC					
Coil Consumption ±10%	AC Coils	50 Hz		60 Hz		
	Inrush	3.3 VA		2.85 VA		
	Sealed	2.2 VA		1.9 VA		
	DC Coils	1.3 W				
Max. Allowable Leakage	25% of VA					
	10% of W					
Max. Contact Resistance	50 mΩ					
Design Specification/Test Requirements Electrical						
Dielectric Withstand Voltage						
Pole-to-Pole	1500V					
Contact to Coil	6000V					
Contact to Frame	4000V					
Mechanical						
Degree of Protection (Open Type) IEC 529	IP 40					
Mechanical Life Cycles (AC/DC)	> 10 x 10 ⁶ /30 x 10 ⁶					
Switching Frequency Operations	3600/HR					
Coil Voltages	See Overview/Product Selection					
Operating Time (ms)	Pickup	20 ms				
	Dropout	4 ms				
Maximum Operating Rate	4 Ops/s					
Vibration	Endurance	5 G				
	Operational	1.5 G				
Shock	Endurance	50 G				
	Operational	15 G				
Environmental						
Temperature	Operating	AC/DC		-40...+70 °C		
	Storage	AC/DC		-40...+100 °C		
Altitude	2000 m (6560 ft)					
Construction						
Insulating Material	Molded High Dielectric Material					
Enclosure	Transparent Dust Cover					
Contact Material	AgCdO					
Terminal Markings on Socket	In accordance with EN50 0005					
Sockets	700-HN153, -HN154					
Certifications	cURus Recognized (File No. E3125, Guide NLDX2/NLDX8), cULus Listed when used with Bulletin 700-HN sockets noted above (File No. E3125, Guide NLDX/NLDX7), CE Marked, CSA Certified, UR Certified (File No. 229473)					
Standards	UL508, CSA C22.2 No. 14, EN 61810-1, EN 60255-23					

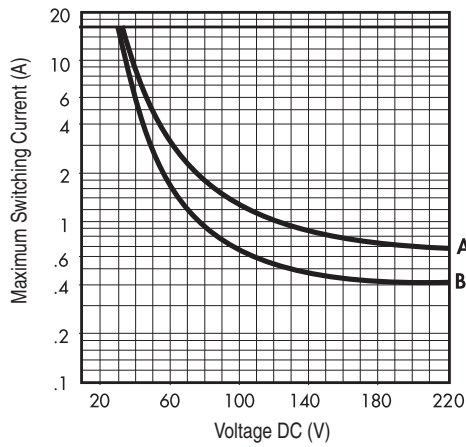
* Performance Data – See this catalog, Important- 3.

* NEMA Rating Chart is in publication 700-SG003*

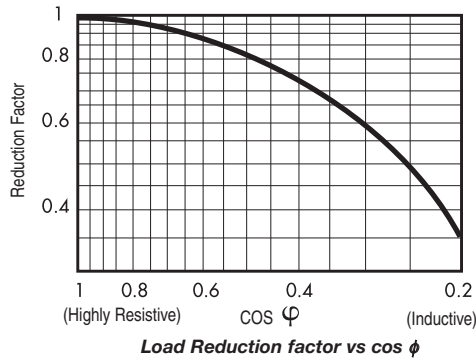
Technical Data



Contact life vs AC1 load at 600 cycles/h.



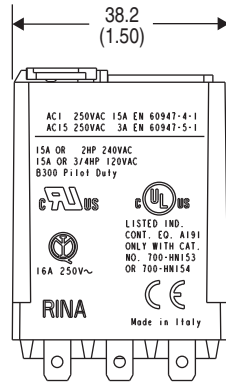
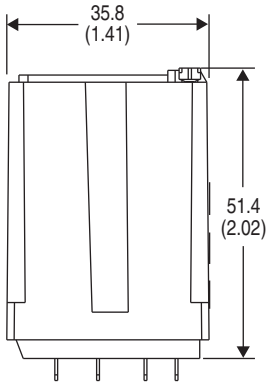
Breaking capacity for DC1 load at 600 cycles/h.
 Load applied to 1 contact.
 A = for N.O. types
 B = other types



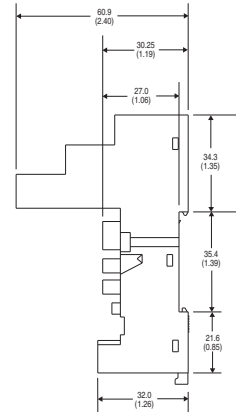
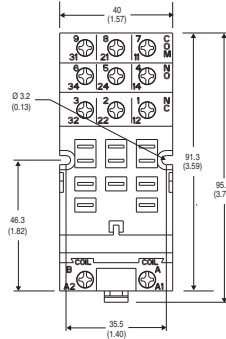
Load Reduction factor vs cos ϕ

Approximate Dimensions

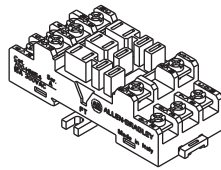
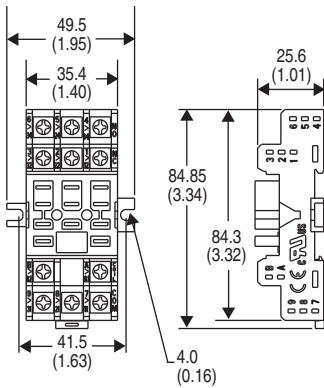
Approximate Dimensions are shown in millimeters (inches). Approximate Dimensions are not intended to be used for manufacturing purposes.



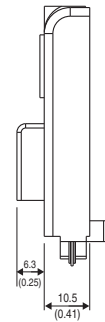
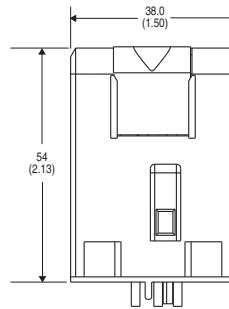
Bulletin 700-HB Relay



Cat. No. 700-HN153
Wire Size: 2 x 2.5 mm²
Single Wire – Up to #12 AWG
Double Wire – 2 x 2.5 mm² (#2–14 AWG... #2–20 AWG)
(Either Solid or Stranded)
Strip Length: 9 mm (3/8 in.) – Torque: 0.8 N•m (7 lb•in)



Cat. No. 700-HN154
Wire Size: 2 x 2.5 mm²
Single Wire – Up to #12 AWG
Double Wire – 2 x 2.5 mm² (#2–14 AWG... #2–20 AWG)
(Either Solid or Stranded)
Strip Length: 9 mm (3/8 in.) – Torque: 0.8 N•m (7 lb•in)



Cat. No. 700-HT3
Wire Size: 2 x 1.5 mm² (#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)