



## Bulletin 700-HB

- 15 A Contact Rating
- DPDT, 3PDT
- Blade Style Quick Connect Terminals
- Standard ON/OFF Flag Indicator
- Clear cover for easy visual inspection
- Optional Push-to-test and Manual Override
- Optional LED

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#### Description

The Bulletin 700-HB General Purpose Relays have blade-style quick connect terminals and are available in 2-pole (DPDT) or 3-pole (3PDT) configurations. They feature a standard ON/OFF flag indicator. Coils are available in a wide range of AC and DC voltages. Contacts are rated up to 15 A.

#### Conformity to Standards:

EN 60947-4-1  
 EN 60947-5-1  
 IEC 947  
 CSA 22.2  
 UL 508  
 NEMA/EEMAC ICS2 compliant

#### Approvals:

cURus Recognized, File E3125  
 Guide NLDX 2  
 cULus Listed, with Allen-Bradley socket  
 CE Marked (per EU Low Voltage Directive 73/23 EEC 93/68 EEC)  
 ABS (American Bureau of Shipping), File 00-GE 195140-PDA  
 RINA listed

#### Third Party Approvals:

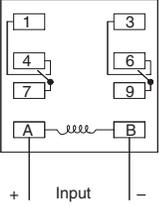
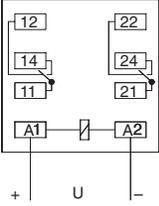
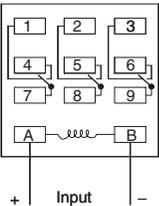
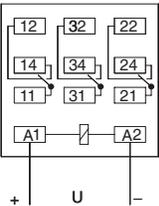
IMQ listed

#### Your order must include:

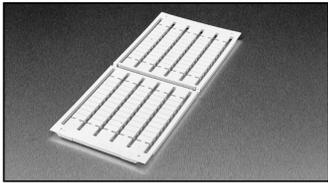
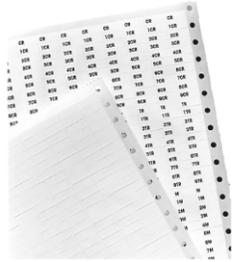
- Cat. No. of the plug-in relay plus suffixes of selection options.
- Cat. No. of socket required.
- If required, Cat. No. of any accessories.

**Bulletin 700-HB**  
**General Purpose Relays**  
**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. ①②③	Factory-stocked Item	
			U.S./Canada	International			⑤	⑥
 Cat. No 700-HB...	DPDT 2-Pole 2 Form C Single AgCdO Contact	15 A B300	 + Input -	 + U -	6V AC	700-HB32A06		
					12V AC	700-HB32A12		
					24V AC	700-HB32A24	✓	
					120V AC	700-HB32A1 ④	✓	✓
					240V AC	700-HB32A2		
					6V DC	700-HB32Z06		
					12V DC	700-HB32Z12	✓	
					24V DC	700-HB32Z24	✓	
					48V DC	700-HB32Z48		
	110V DC	700-HB32Z1						
	Sockets		700-HN154	700-HN153				
	3PDT 3-Pole 3 Form C Single AgCdO Contact	15 A B300	 + Input -	 + U -	6V AC	700-HB33A06		
					12V AC	700-HB33A12		
					24V AC	700-HB33A24	✓	
					120V AC	700-HB33A1 ④	✓	✓
					240V AC	700-HB33A2		
					6V DC	700-HB33Z06		
					12V DC	700-HB33Z12	✓	
					24V DC	700-HB33Z24 ④	✓	
48V DC					700-HB33Z48			
110V DC	700-HB33Z1							
Sockets		700-HN154	700-HN153					

- ① LED Option: Add suffix (-4) to the selected Bulletin 700-HB Relay Cat. No., except for the 240V AC Units, add (-4L).
- ② 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).
- ③ Bulk Package Option: Relay can be purchased at discounted prices in bulk quantities of 10. Add suffix (-99) to the selected relay Catalog Number. The following relays are also available in the Bulk Package Option: Cat. Nos. 700-HB33A1-4 and 700-HB33Z24-4.
- ④ Push-to-test and Manual Override option: Add suffix (-3) to the selected Bulletin 700-HB relay.
- ⑤ Single Pack.
- ⑥ Bulk pack

	Description	Pkg. Qty.	Cat. No.	Factory-stocked Item
 Cat. No. 700-HN153	<b>Screw Terminal Socket – Panel or DIN Rail Mounting. Guarded Terminal Construction</b> 11-blade socket for use with Bulletin 700-HB and -HJ relays and -HS timing relays. Order must be for 10 sockets or multiples of 10. Safe separation between coil and contacts.	10	700-HN153	✓
 Cat. No. 700-HN154	<b>Screw Terminal Base Socket – Panel or DIN Rail Mounting. Open Style Construction</b> 11-blade for use with Bulletin 700-HB and -HJ relays and -HS timing relays. Order must be for 10 sockets or multiples of 10.	10	700-HN154	✓
 Cat. No. 199-DR1	<b>DIN Rail Mounting Pack</b> Standard 35 x 7.5 mm DIN Rail, 1 meter long, 10 rails per package. Order must be for 10 rails or multiples of 10.	10	199-DR1	✓
 Sample Retainer Clips	<b>Retainer Clip for Cat. No. -HN154 open terminal socket with 700-HB relays ❶</b> Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN156	✓
	<b>Retainer clip for cat. nos. 700-HN 153 guarded terminal socket with 700-HB relays ❶</b> Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN158	✓
 Snap-in markers	<b>Relay Identification Snap-in Markers ❷</b> Snap-in markers fit on top of Bulletin 700-HA relay covers. The following are blank cards. Squares slip into molded slot on top of <b>Bulletin 700-HA or 700-HB</b> relay cover.	100	1492-SM5X12 1492-SM6X9 1492-SM6X12 1492-SM8X9 1492-SM8X12 1492-MP-Blank	❷
	<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	
	<b>Blank identification tags</b> – 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.	10	700-N41	

❶ Bulletin 700-HB Square Base Relay, Socket, and Retainer Clip Reference Chart

❷ Refer to terminal block marking systems within the Industrial Control Catalog

❸ For pre-printed marker cards, turn to the following 1492 sections of publication A113: 1492-SM5X12\_, 1492-SM6X9\_, 1492-SM8X9\_, 1492-SM8X12\_, 1492-MP\_

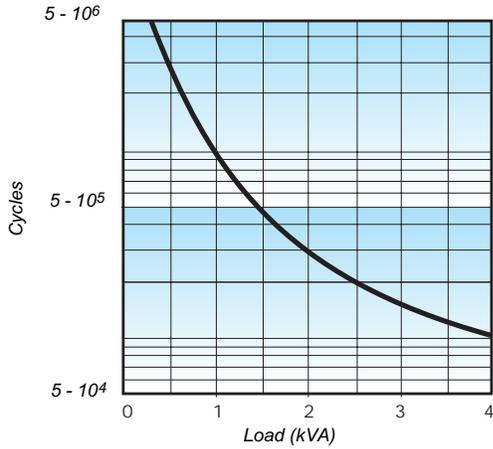
Relay Type	Socket Cat. No.	Retainer Clip Cat. No.
700-HB	700-HN153	700-HN158
	700-HN154	700-HN156

**Bulletin 700-HB**  
**General Purpose Relays**  
**Specifications ❶**

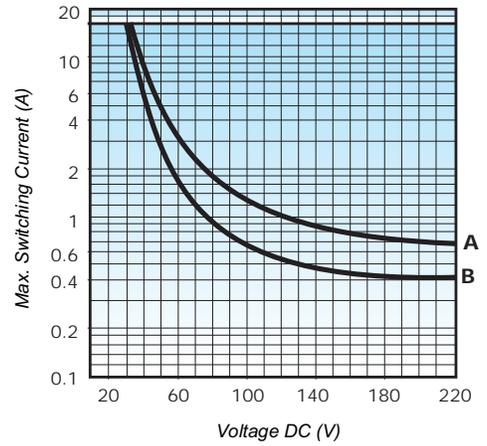
		Cat. No. 700-HB...		
<b>Electrical Ratings</b>				
Pilot Duty Rating ❷		NEMA B300		
Rated Thermal Current (I <sub>th</sub> )		15 A – 120V, 240V		
Rated Insulation Voltage (U <sub>i</sub> )		250V IEC-300V UL/CSA		
Contacts	Inductive	<b>Make</b>	<b>Break</b>	<b>Hp</b>
	120V AC	▶ ◀	◀ ▶	3/4
	240V AC	60 A	6 A	2
	DC	30 A	3 A	
Min. Low Energy Permissible Load		30V DC, 15 A		
Permissible Coil Voltage Variation		10V 50 mA		
		85...110% of Nominal Voltage at 50 Hz 85...110% of Nominal Voltage at 60 Hz 80...110% of Nominal Voltage at DC		
Coil Consumption ±10%	AC Coils Inrush	<b>50 Hz</b>	<b>60 Hz</b>	
	Sealed	3.0 VA	2.85 VA	
		2.0 VA	1.9 VA	
	DC Coils	1.3 W		
Max. Allowable Leakage		25% of VA		
		10% of W		
<b>Design Specification/Test Requirements</b>				
<b>Electrical</b>				
Dielectric Withstand Voltage				
Pole-to-Pole		2500V		
Contact to Coil		4000V		
Contact to Frame		2500V		
<b>Mechanical</b>				
Degree of Protection (Open Type) IEC 529		IP 40		
Mechanical Life Operations		> 10 x 10 <sup>6</sup> / 30 x 10 <sup>6</sup>		
Switching Frequency Operations		3600/HR		
Coil Voltages		See Product Selection		
Operating Time (ms)	Pickup	15 ms		
	Dropout	15 ms		
Maximum Operating Rate		4 Ops/s		
Vibration	Endurance	5 G		
	Operational	2.5 G		
Shock	Endurance	50 G		
	Operational	15 G		
<b>Environmental</b>				
Temperature	Operating	AC/DC	-40...+70°C	
	Storage	AC/DC	-40...+100°C	
Altitude		2000 m (6560 ft)		
<b>Construction</b>				
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		CE, cULus, cURus, IMQ, RINA, ABS		

❶ Performance Data – See page Important 2, publication A113.

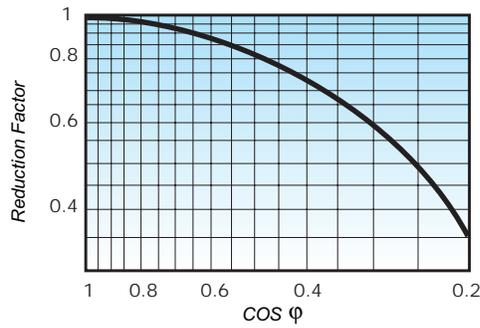
❷ NEMA Rating Chart is on page 29.



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

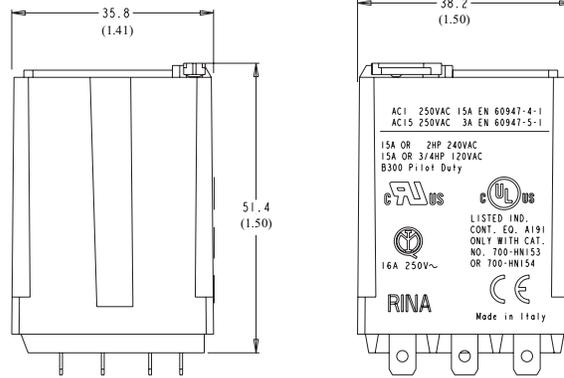


Load Reduction factor vs  $\cos \phi$

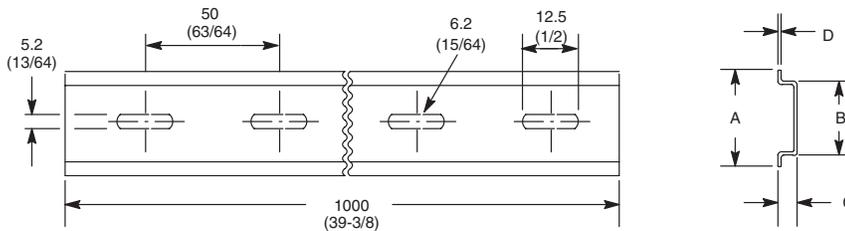
# General Purpose Relays

## Approximate Dimensions

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



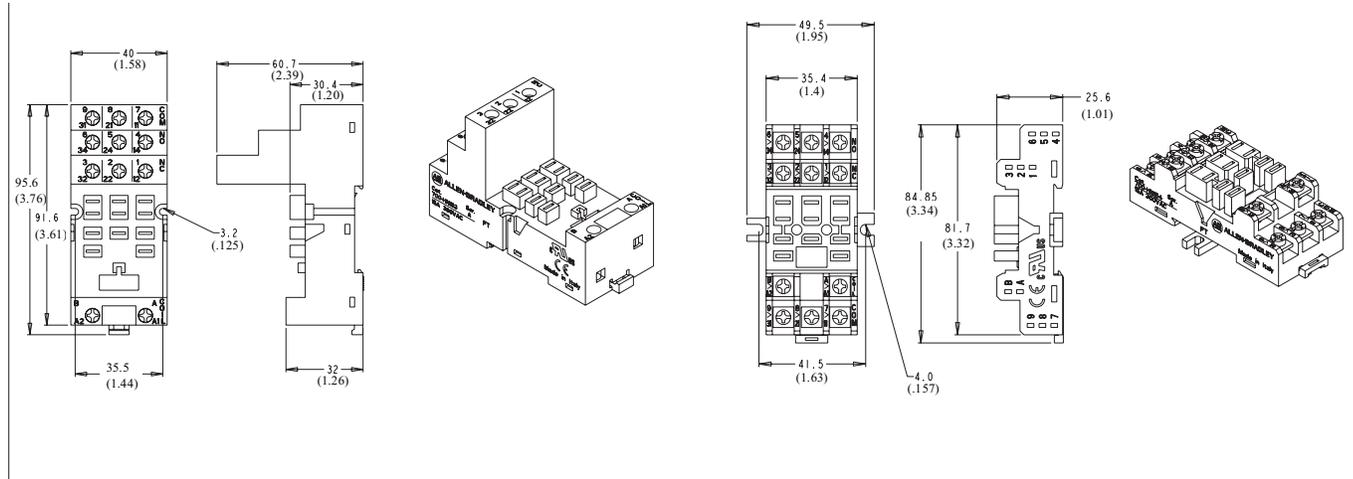
Bulletin 700-HB Relay



Cat. No. 199-DR1 DIN Mounting Rail Series B  
 Cat. No. 199-DR4 DIN Mounting Rail Series B Has No Mounting Holes

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 lbs.) (10/pkg)
199-DR4	35 (1-3/8)	27 (1-1/16)	15 (19/32)	2.3 (3/32)	3.68 kg (8 lbs.) (5/pkg)

Dimensions are shown in millimeters (inches). Dimensions are not intended for manufacturing purposes.



Cat. No. 700-HN153

Wire Size: 2 x 2.5 mm<sup>2</sup>  
 Single Wire – Up to #12 AWG  
 Double Wire – 2 x 2.5 mm<sup>2</sup> (#2–14 AWG... #2–20 AWG)  
 (Either Solid or Stranded)  
 Strip Length: 9 mm (3/8 in.) – Torque: 0.8 Nm (7 lb.-in.)

Cat. No. 700-HN154 ①

Wire Size: 2 x 2.5 mm<sup>2</sup>  
 Single Wire – Up to #12 AWG  
 Double Wire – 2 x 2.5 mm<sup>2</sup> (#2–14 AWG... #2–20 AWG)  
 (Either Solid or Stranded)  
 Strip Length: 9 mm (3/8 in.) – Torque: 0.8 Nm (7 lb.-in.)

① 199-FSM Surge Suppressors fit on the coil terminals. See page 195.