

Bulletin 700-HF

- Miniature Square Base
- 10 A Contact Rating
- DPDT
- 3PDT
- 4PDT
- Plug-in Quick Connect Solder Terminals
- Panel or DIN Rail Mounting
- Optional Push-to-Test Operator
- Optional LED

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Description

The Bulletin 700-HF General Purpose Relays feature a plug-in square base with quick connect/solder style terminals and are available in DPDT, 3PDT, or 4PDT. All relays come with AgCdO contacts and opposite polarity arc barriers as standard features. Coils are available in a variety of AC and DC voltages.

Conformity to Standards:

CSA 22.2
UL 508
pr EN 60255-1-0
IEC 255-1-00
IEC 255-0-20

Approvals:


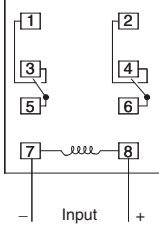
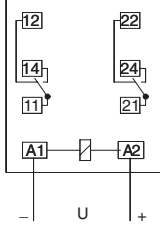
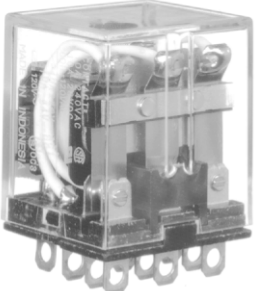
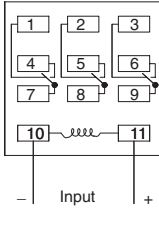
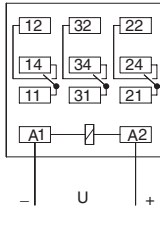
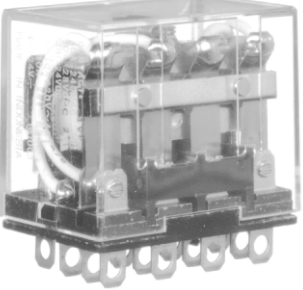
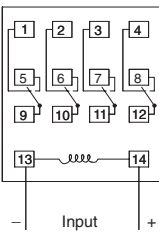
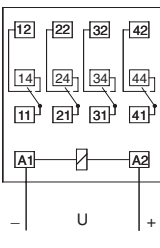
CSA Certified, File LR75088
UL Recognized, File E3125
Guide NLDX 2
CE Marked (per EU Low Voltage
Directive 73/23 EEC 93/68 EEC)

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-HF
General Purpose Relays
Product Selection

Miniature Square Base with Quick Connect/Solder Style Terminations

	Description	Contact Rating	Wiring Diagrams		Coil Voltage	Cat. No. ① ②	Factory-stocked Item	
			U.S./Canada	International			⑤	⑥
	DPDT 2-pole 2 Form C AgCdO Contacts Socket	10 A	 700-HN116	 700-HN116	6V AC	700-HF32A06		
					12V AC	700-HF32A12		
					24V AC	700-HF32A24 ③	✓	✓
					120V AC	700-HF32A1 ③	✓	
					240V AC	700-HF32A2	✓	
					6V DC	700-HF32Z06		
					12V DC	700-HF32Z12	✓	
					24V DC	700-HF32Z24 ③	✓	
					48V DC	700-HF32Z48		
					110V DC	700-HF32Z1		
	3PDT 3-pole 3 Form C AgCdO Contacts Socket	10 A	 700-HN138	 700-HN138	6V AC	700-HF33A06		
					12V AC	700-HF33A12		
					24V AC	700-HF33A24 ④	✓	
					120V AC	700-HF33A1 ④	✓	
					240V AC	700-HF33A2 ④	✓	
					6V DC	700-HF33Z06		
					12V DC	700-HF33Z12 ④		
					24V DC	700-HF33Z24 ④	✓	
					48V DC	700-HF33Z48 ④		
					110V DC	700-HF33Z1		
	4PDT 4-pole 4 Form C AgCdO Contacts Socket	10 A	 700-HN139	 700-HN139	6V AC	700-HF34A06		
					12V AC	700-HF34A12		
					24V AC	700-HF34A24 ④	✓	
					120V AC	700-HF34A1 ④	✓	
					240V AC	700-HF34A2	✓	
					6V DC	700-HF34Z06		
					12V DC	700-HF34Z12		
					24V DC	700-HF34Z24 ④	✓	
					48V DC	700-HF34Z48 ④		
					110V DC	700-HF34Z1		

- ① Pilot Light Option: Add suffix (-4) to the selected Bulletin 700-HF Relay Cat. No. except for the 240V AC units, add (-4L).
- ② Manual Operator and LED Option: Add suffix (-1-4) to the selected Bulletin 700-HF Relay Cat. No., except for the 240V AC units, add (-1-4L).
- ③ Bulk Package Option: Relay can be purchased at discounted prices in bulk quantities of 50. Add suffix (-99) to the selected relay Catalog Number. The following relay is also available in the Bulk Package Option: Cat. No. 700-HF32A1-4.
- ④ Bulk Package Option: Relay can be purchased at discounted prices in bulk quantities of 20. Add suffix (-99) to the selected relay Catalog Number. The following relays are also available in the Bulk Package Option: Cat. Nos. 700-HF33A1-4, 700-HF33Z24-4, 700-HF34A24-4, 700-HF34A1-4, and 700-HF34Z24-4.
- ⑤ Single Pack
- ⑥ Bulk Pack

	Description	Pkg. Qty.	Cat. No.	Factory-stocked Item
 Cat. No 700-HN116	Screw Terminal Socket – Panel or DIN Rail Mounting 8-blade miniature socket for use with DPDT Bulletin 700-HF relays. Order must be for 10 sockets or multiples of 10.	10	700-HN116	✓
 Cat. No. 700-HN138	Screw Terminal Socket – Panel or DIN Rail Mounting 11-blade socket for use with 3PDT Bulletin 700-HF relays.	1	700-HN138	✓
 Cat. No. 700-HN139	Screw Terminal Socket – Panel or DIN Rail Mounting 14-blade socket for use with 4PDT Bulletin 700-HF relays.	1	700-HN139	✓
 Cat. No 199-DR1	DIN Rail Mounting Pack 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	Retainer Clip for Cat. Nos. 700-HN103, -HN104, -HN105, and -HN128 Sockets with 700-HC Relays and Cat. Nos. 700-HN116, -HN117 and -HN118 Sockets with Bulletin 700-HF DPDT Relays ❶ Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN114	✓
	Retainer Clip for Cat. Nos. 700-HN138 and -HN139 Sockets with Bulletin 700-HF 3PDT and 4PDT Relays ❶ Secures relay in socket. Order must be for 10 clips or multiples of 10.	10	700-HN140	✓
	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.	10	700-N40	
	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.	10	700-N41	

❶ Bulletin 700-HF Miniature Square Base Relay, Socket, and Retainer Clip Reference

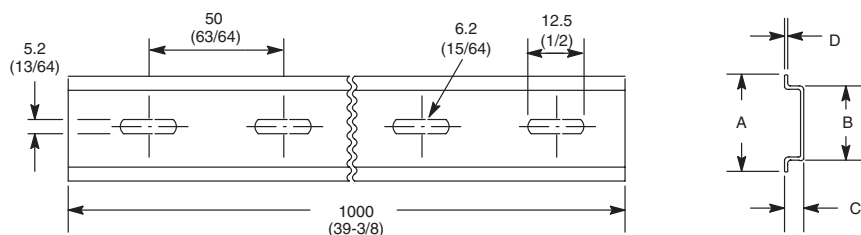
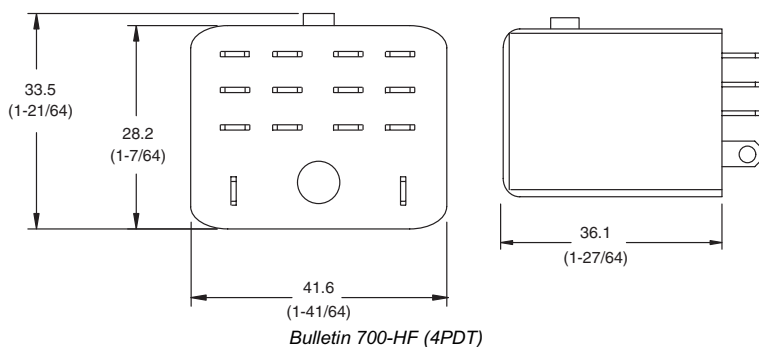
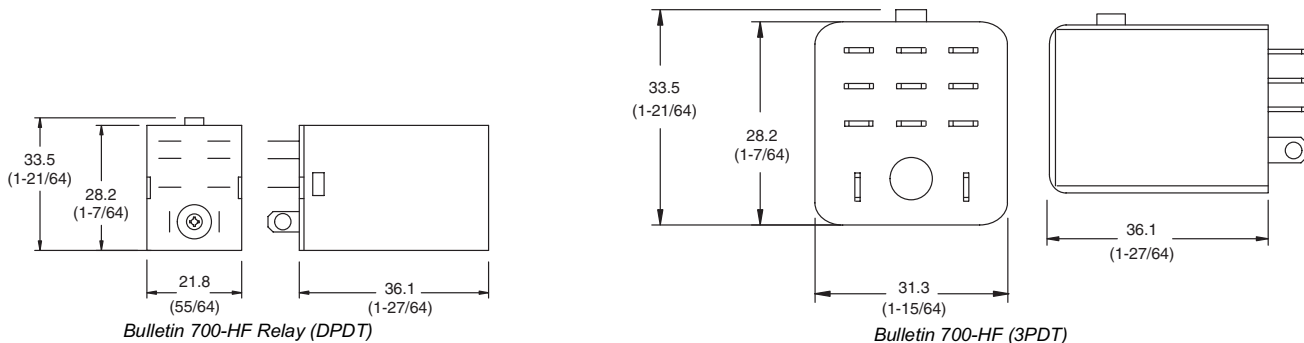
Relay Type	Cat. No. Socket	Cat. No. Retainer Clip
700-HF32	700-HN116	700-HN114
700-HF33	700-HN138	700-HN140
700-HF34	700-HN139	700-HN140

Bulletin 700-HF
General Purpose Relays
Specifications

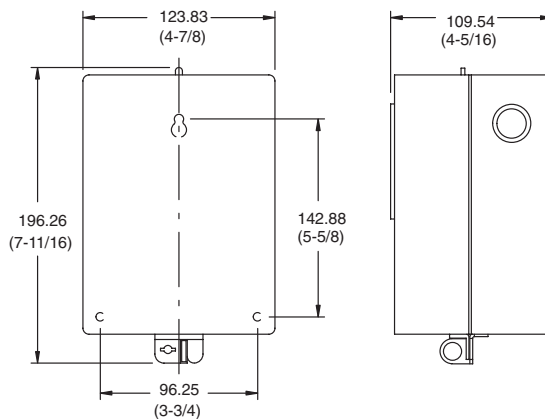
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Electrical Ratings				
Pilot Duty Rating		C300		
Rated Thermal Current (I_{th})		10 A		
Rated Insulation Voltage (U_i)		250V IEC, 300 UL/CSA		
Contacts	Inductive	Make	Break	Hp
	120V AC	▶ ◀ 30 A	◀ ▶ 3 A	1/3
	240V AC	15 A	1.5 A	1/2
DC		30V DC, 10 A		
Permissible Coil Voltage Variation		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 $\pm 10\%$ AC Coils	Inrush Sealed	50 Hz	60 Hz	
		2.4 VA 1.6 VA	2.1 VA 1.4 VA	
DC Coils		0.9 W		
Max. Allowable Leakage		25% of VA		
		10% of W		
Design Specification/Test Requirements				
Dielectric Withstand Voltage	Pole-to-Pole	1500V AC		
	Contact to Pole	1500V AC		
	Contact to Frame	1500V AC		
Mechanical				
Degree of Protection		Open Type (Sockets)		
Mechanical Life Operations		30 x 10 ⁶		
Switching Frequency Operations		3600/hr		
Coil Voltages		See Product Selection		
Operating Time at Nominal Voltage at 20°C	Pickup	15 ms		
	Dropout	15 ms		
Maximum Operating Rate		4 Ops/s		
Shock (Mechanical Durability)		100 G		
Shock (Malfunction Durability)		20 G		
Environmental				
Temperature	Operating	-30...+55°C (-22...+131°F)		
	Storage	-55...+85°C (-67...+185°F)		
Altitude		2000 m (6560 ft)		
Construction				
Insulating Material		Molded High Dielectric Material		
Enclosure		Transparent Dust Cover		
Contact Material		Silver Cad. Ox.		
Terminal Markings on Socket		In accordance with EN50 0005		
Sockets		8-Blade Socket (DPDT) Cat. No. 700-HN116 11-Blade Socket (3PDT) Cat. No. 700-HN138 14-Blade Socket (4PDT) Cat. No. 700-HN139		

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

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



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



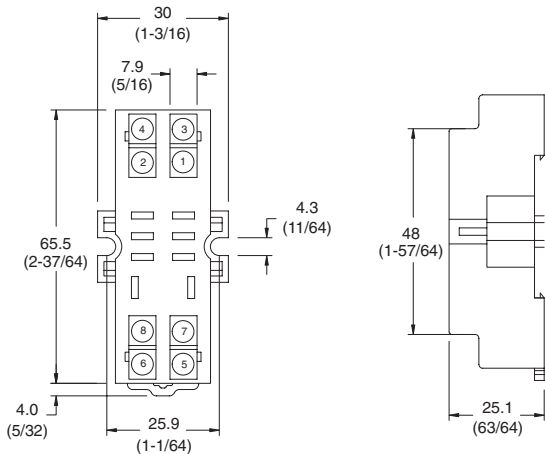
NEMA Type 1 Enclosure
 Cat. No. 700-HN120

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)

General Purpose Relays

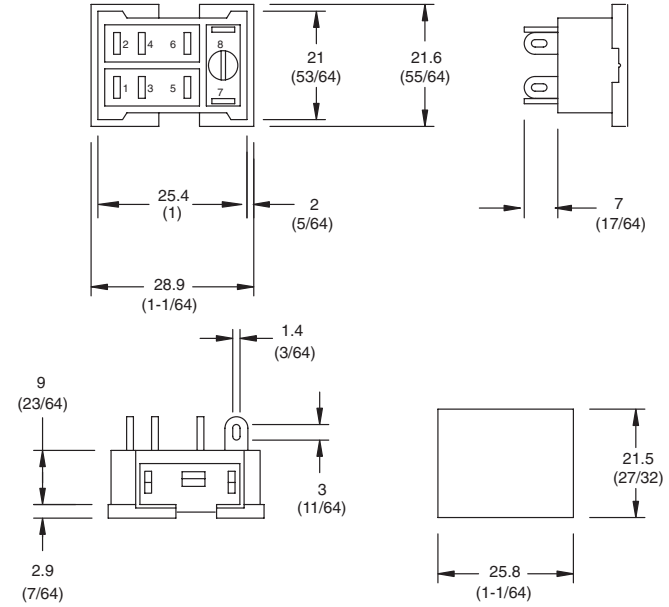
Approximate Dimensions, Continued

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

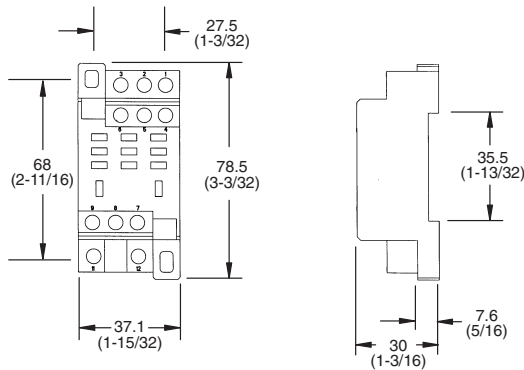


Cat. No. 700-HN116

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 Nm (7 lb.-in.)

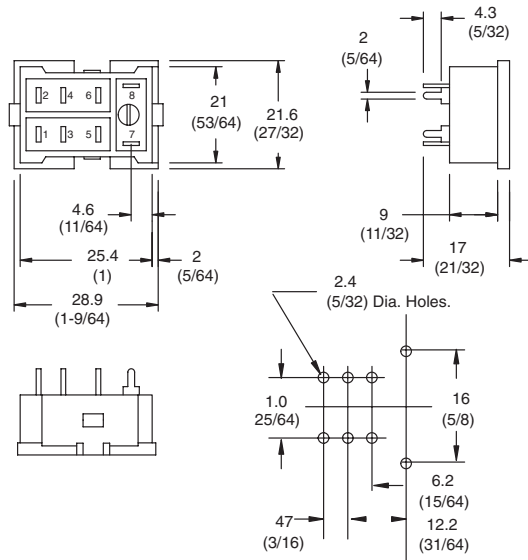


Cat. No. 700-HN117



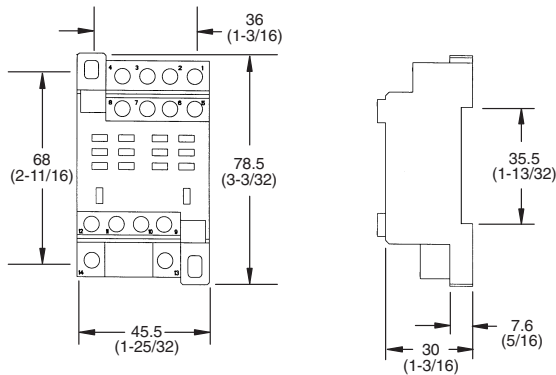
Cat. No. 700-HN138

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 Nm (7 lb.-in.)



P.C. Board Layout

Cat. No. 700-HN118



Cat. No. 700-HN139

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 Nm (7 lb.-in.)