

Product Details and Certifications

Cross Reference RA Part Number: 700-HB32Z24-3-4 E

 Product: **700-HB32Z24-3-4**

Description: 700-HB General Purpose Blade Base Relay, 15 Amps Contact, DPDT, 24V DC, Push-To-Test, Pilot Light and Manual Override Option



Representative Photo Only (actual product may vary based on configuration sections)

CONTROL RELAY DATA

Bulletin Number	700-HB General Purpose Square Base Relay
Contact Rating	15A Standard Contact
Contact Configuration	DPDT Contact Arrangement
Coil Voltage	24V DC
Relay Option	Push-To-Test, Pilot Light and Manual Override Option

CERTIFICATIONS AND APPROVALS

UL
CE
cULus
cURus
IMQ
ABS
CSA

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Bulletin No.	700-HA	700-HB	700-HD	700-HF
Type	General-Purpose Relay	General-Purpose Relay	General-Purpose Relay	General-Purpose Relay
Features	<ul style="list-style-type: none"> Pin-style terminals Standard ON/OFF flag indicator Electrical schematic on face Clear cover for visual inspection Optional Push-to-test and manual override Optional LED 	<ul style="list-style-type: none"> Blade-style quick connect terminals Standard ON/OFF flag indicator Electrical schematic on face Clear cover for visual inspection Optional push-to-test and manual override Optional LED 	<ul style="list-style-type: none"> Flange-mounted Blade-style quick connection terminals Clear cover for visual inspection 	<ul style="list-style-type: none"> Square-base Plug-in quick connect solder terminals Optional push-to-test and LED
Contact Ratings				
Contact Form	DPDT, 3PDT	DPDT, 3PDT	DPDT, 3PDT	DPDT, 3PDT, 4PDT
Contact Type	Single	Single	Single	Single
Contact Material	AgNi, AgNi + Gold	AgCdO	AgCdO	AgCdO
Max. operating current under resistive load	700-HA: 10 A -HAX: 6 A	15 A	15 A	10 A
Min. permissible load	700-HA 10V 5 mA 700-HAB 5V 5 mA 700-HAX 6V 1mA	10V 10 mA	10V 10 mA	5V 100 mA
Coil Ratings				
Coil Voltage	AC: 6, 12, 24, 48, 110, 120, 208, 230, 240, 277V DC: 6, 12, 24, 36, 48, 60, 80, 110, 125, 140, 220V	AC: 6, 12, 24, 120, 240V DC: 6, 12, 24, 48, 110V	AC: 6V, 12V, 24V, 120V, 208V, 240V DC: 6V, 12V, 24V, 48V, 110V	AC: 6V, 12V, 24V, 120V, 240V DC: 6V, 12V, 24V, 48V, 110V
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	80...110% of Nominal Voltage at 50 Hz 80...110% of Nominal Voltage at 60 Hz 80...110% of Nominal Voltage at DC	80...110% of Nominal Voltage at 50 Hz 80...110% of Nominal Voltage at 60 Hz 80...110% of Nominal Voltage at DC	85...110% of Nominal Voltage at 50 Hz 85...110% of Nominal Voltage at 60 Hz 80...110% of Nominal Voltage at DC
Electrical Ratings				
Dielectric Withstand Voltage	Pole-to-pole: 2000V Contact-to-coil: 2000V Contact-to-frame: 2000V	Pole-to-pole: 2500V Contact-to-coil: 4000V Contact-to-frame: 2500V	Pole-to-pole: 2500V Contact-to-coil: 4000V Contact-to-frame: 2500V	Pole-to-pole: 1500V AC Contact-to-coil: 1500V AC Contact-to-frame: 1500V AC
Electric Service Life (cycles)	100 000 minimum	100 000 minimum	100 000 minimum	200 000 minimum, 500 000 minimum (DPDT)
Reference				
Certifications	CE, cULus, cURus, CSA, Lloyds	CE, cULus, cURus, CSA, Lloyds	CE, UR, CSA, Lloyds	CE, UR, CSA
Socket Cat. No(s).	700-HN100, 700-HN101, 700-HN125, 700-HN126, 700-HN204, 700-HN205	700-HN153, 700-HN154	—	700-HN116, 700-HN138, 700-HN139
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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		
 <p>DPDT 2-Pole 2 Form C Single AgCdO Contact</p> <p>15 A B300</p> <p>Sockets</p>			<p>700-HN154</p>	<p>700-HN153</p>	6V AC	700-HB32A06
			12V AC	700-HB32A12		
			24V AC	700-HB32A24		
			120V AC	700-HB32A1		
			240V AC	700-HB32A2		
			6V DC	700-HB32Z06		
			12V DC	700-HB32Z12		
			24V DC	700-HB32Z24		
			48V DC	700-HB32Z48		
			110V DC	700-HB32Z1		
			<p>3PDT 3-Pole 3 Form C Single AgCdO Contact</p> <p>15 A B300</p> <p>Sockets</p>			<p>700-HN154</p>
12V AC	700-HB33A12					
24V AC	700-HB33A24					
120V AC	700-HB33A1					
240V AC	700-HB33A2					
6V DC	700-HB33Z06					
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.

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*