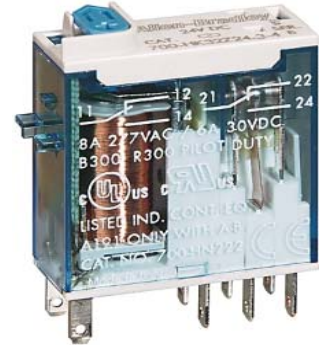


Product Details and Certifications

Cross Reference RA Part Number: 700-HK36Z12 B

 **Product: 700-HK36Z12**

Description: 700-HK General Purpose Slim Line Relay, 16 Amps
Contact, SPDT, 12V DC



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

CONTROL RELAY DATA

Bulletin Number	700-HK General Purpose Relay
Contact Rating	16A Contact (Slim Line Relay)
Contact Configuration	SPDT Contact Arrangement
Coil Voltage	12V 50/60 Hz
Relay Options	No Additional Options

CERTIFICATIONS AND APPROVALS

UL

CSA

CE

For UL Certifications Directory:

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



Bulletin No.	700-HC	700-HK	700-HL	700-HP
Type	Interposing/Isolation Relay	Interposing/Isolation Relay	Interposing/Isolation Relay	Interposing/Isolation Relay
Features	<ul style="list-style-type: none"> Blade-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"> Optional pilot light Retainer clip (comes with socket) Low switching capacity Push-to-test & manual override 	<ul style="list-style-type: none"> Ideal for PLC Interfaces Built-in Coil Surge Protection Fully Assembled Relay/Socket Standard LED Relay or Solid-state Output Optional: Leakage Current Suppression Solution 	<ul style="list-style-type: none"> PCB "Pin Style" mounting 5 mm pin spacing
Contact Ratings				
Contact Form	DPDT, 4PDT	SPDT, DPDT	SPDT 1 N.O. (SSR)	DPDT
Contact Type	Single	Single	Single	Single
Contact Material	AgNi, AgNi + Gold	AgNi, AgNi + Gold	AgSnO	AgNi, AgNi + Gold
Max. operating current under resistive load	10 A (DPDT) 7 A (4PDT)	8 A (DPDT), 16 A (SPDT)	6 A (SPDT), 2 A (SSR DC output), 1 A (SSR AC output)	8 A
Min. permissible load	10V, 10 mA (Gold), 5V, 10 mA or 25V, 2 mA (Silver)	5V 60 mA (Silver), 5V 10 mA (Gold)	12V 6 mA (72 mW) Silver 8V, 2.5 mA (20 mW) Gold	5V 5 mA (50 mW) Gold, 5V 5 mA (300 mW) Silver
Coil Ratings				
Coil Voltage	AC: 6, 12, 24, 120, 240V DC: 6, 12, 24, 48, 110V	AC: 6, 12, 24, 120, 240V DC: 6, 12, 24, 48, 110V	AC: 12, 24, 48, 110, 120, 230, 240V DC: 12, 24, 48, 125, 230, 240V	AC: 6, 12, 24, 120, 240V DC: 6, 12, 24, 48, 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 73...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	80...110% of Nominal Voltage at 50 Hz 80...110% of Nominal Voltage at 60 Hz 73...150% of Nominal Voltage at DC
Electrical Ratings				
Dielectric Withstand Voltage	Pole-to-pole: 1000V Contact-to-coil: 2000V Contact-to-frame: 2000V	Pole-to-pole: 1500V AC Contact-to-coil: 1500V AC Contact-to-frame: 1500V AC	Pole-to-pole: 1000V AC Contact-to-coil: 4000V Contact-to-frame: 1500V	Pole-to-pole: 2000V Contact-to-coil: 5000V
Electric Service Life (cycles)	100 000 minimum	100 000 minimum	100 000 minimum	100 000 minimum
Reference				
Certifications	CE, cULus, cURus, CSA, Lloyds	CE, UL, UR, CSA	CE, cURus, cULus, ABS	CE, cULus, cURus, CSA, Lloyds
Socket Type	700-HN103, 700-HN128, 700- HN104	700-HN121, -HN221 700-HN122, -HN222 700-HN223, -HN224	—	700-HN123, -HN230
Page Number	page 9-34	page 9-39	page 9-45	page 9-58





Bulletin 700-HK — “Slim Line” Relay

- 8 A/16 A contact ratings
- DPDT/SPDT
- Plug-in blade-style terminals
- Retainer clip with sockets
- Options: LED, push-to-test and manual override, socket-mounted surge suppressor module, or timer module
- Standard ON/OFF flag indicator
- Relay faceplate accepts optional Bulletin 1492 snap-in markers
- Choice of standard silver/nickel contacts or silver/nickel with gold plated contacts
- Maximum duty version available


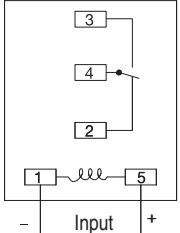
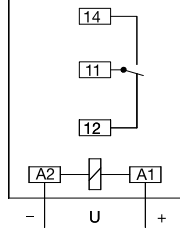

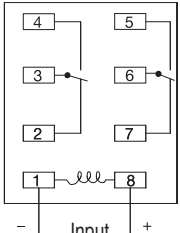
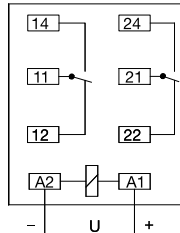
Table of Contents

Product Selection this page
 Accessories..... 9-40
 Specifications..... 9-44
 Approximate Dimensions..... 9-43

Standards Compliance and Certifications

See Specification table in this section, page 9-42.

Product Selection
Slim Line Relay with Plug-in Quick Connect Terminations

	Description	Contact Rating	Wiring Diagrams		Coil Voltage	Cat. No. * ‡ † §
			U.S./Canada	International		
 Bulletin 700-HK SPDT	SPDT 1-Pole 1 Form C AgNi Contacts	16 A	 700-HN121, 700-HN221, 700-HN223	 700-HN121, 700-HN221, 700-HN223	6V AC	700-HK36A06
					12V AC	700-HK36A12
					24V AC	700-HK36A24
					120V AC §	700-HK36A1
					240V AC §	700-HK36A2
					6V DC	700-HK36Z06
					12V DC	700-HK36Z12
					24V DC §	700-HK36Z24
48V DC	700-HK36Z48					
110V DC	700-HK36Z1					
 Bulletin 700-HK DPDT	DPDT 2-Pole 2 Form C AgNi Contacts	8 A	 700-HN122, 700-HN222, 700-HN224	 700-HN122, 700-HN222, 700-HN224	6V AC	700-HK32A06
					12V AC	700-HK32A12
					24V AC	700-HK32A24
					120V AC	700-HK32A1
					240V AC	700-HK32A2
					6V DC	700-HK32Z06
					12V DC	700-HK32Z12
					24V DC	700-HK32Z24
48V DC	700-HK32Z48					
110V DC	700-HK32Z1					

* LED Option: Add suffix (-4) to the selected Bulletin 700-HK relay Cat. No. except for the 240V AC units, add (-4L).
 ‡ For AgNi Contact with Gold Plating: Replace “3” with “X” in Cat. No. For example, if Cat. No. 700-HK36A1 is required with Gold Plating, the new catalog number is 700-HKX6A1.
 † Push-to-Test + Manual Override + LED Option: Add suffix (-3-4) to the selected 700-HK Relay catalog number, except for the 240V AC Units, add (-3-4L).
 § For high inductive, Tungsten, or Capacitive load applications, replace the “3” with a “M” in the catalog number. Only available in a SPDT configuration and with 24V DC, 120V AC or 240V AC coil voltages.

Bulletin 700-HK
Interposing/Isolation Relays
Specifications



		Cat. No. 700-HK...			
Electrical Ratings					
Rated Thermal Current (I_{th})		1-Pole, 1 CO, SPDT — 16 A		2-Pole, 2 CO, DPDT — 8 A	
Rated Insulation Voltage (U _i)		250V IEC, 300V UL/CSA			
Contacts	Inductive V AC	120V AC	AC-15, 6.2 A B300 Pilot Duty, 3 A A300 (700-HKM ₁) 1/3 Hp (0.24 kW) 1-phase	120V AC	AC-15, 2.9 A B300 Pilot Duty, 3.0 A 1/4 Hp (0.18 kW), 1-phase
		240V AC	AC-15, 3.1 A B300 Pilot Duty, 1.5 A A300 (700-HKM ₁) 3/4 Hp (0.55 kW), 1-phase	240V AC	AC-15, 1.4 A B300 Pilot Duty, 1.5 A 1/2 Hp (0.37 kW), 1-phase
		230V AC	0.55 kW, 1-phase	230V AC	0.37 kW, 1-phase
	Inductive V DC	24V DC	DC-13, 5.0 A	24V DC	DC-13, 3.0 A
		125V DC	DC-13, 0.2 A R300 Pilot Duty, 0.22 A	125V DC	DC-13, 0.2 A R300 Pilot Duty, 0.22 A
		250V DC	DC-13, 0.1 A R300 Pilot Duty, 0.11 A	5 A, 250V AC	DC-13, 0.1 A R300 Pilot Duty, 0.11 A
	Resistive	230V AC	AC-1, 16 A	230V AC	AC-1, 8 A
		277V AC	16 A, General Use	277V AC	8 A, General Use
	Make, Break & Continuous	30V DC	DC-1, 12 A 10 A, Resistive	30V DC	DC-1, 6 A 6 A, Resistive
Min. Permissible Contact Ratings		300 mW (5V/60 mA or 60V/5 mA) for AgNi Contacts (700-HK3 ₁) 50 mW (5V/10 mA or 25V/2 mA) for AgNi + Gold Contacts (700-HKX ₁) 500 mW (100V/5 mA or 5V/100 mA) for AgSnO ₂ Contacts (700-HKM ₁)			
Permissible Coil Voltage Variation	Pickup: holding Voltage: Must Dropout Voltage:	80...110% of Nominal Voltage at 50/60 Hz, 73...110% of Nominal Voltage at DC 80% of Nominal V AC at 50/60 Hz, 40% of Nominal V DC 20% of Nominal V AC at 50/60 Hz, 10% Nominal V DC			
Power Consumption		1.2V A (V AC Coils), 0.5 W (V DC Coils)			
Coil Voltages		See Overview/Product Selection			
Design Specification/Test Requirements					
Dielectric Withstand Voltage	Between Open Contacts (VRMS)	1000V AC			
	Contact to Coil (VRMS)	1600V AC			
Mechanical					
Degree of Protection		IP 20 (guarded terminal sockets), RT II — Flux-proof (Relay)			
Mechanical Life Operations		10 x 10 ⁶			
Electrical Life Cycles		230V AC, 16 A Resistive: 100 000 min. 277V AC, 16 A Resistive: 30 000 min. 30V DC, 10 A Resistive: 30 000 min. B300, R300, Hp (kW): 6000 min. A300 (700-HKM ₁): 100,000 min.		230V AC, 8 A Resistive: 100 000 min. 277V AC, 8 A Resistive: 30 000 min. 30V DC, 6 A Resistive: 30 000 min. B300, R300, Hp (kW): 6000 min.	
Switching Frequency		Mechanical: 18,000 cycles/hr. Electrical: 900 cycles/hr.			
Operating Time at Nominal Voltage at 20 °C (ms)	Pickup	15 ms max.			
	Dropout	5 ms max.			
Vibration	Operational	10...2000 Hz, 0.76 mm (0.03 in.) 2.5 G			
	Non-Operational	10...2000 Hz, 0.76 mm (0.03 in.) 5.0 G			
Shock	Operational	15 G			
	Non-Operational	50 G			
Environmental					
Temperature	Operating	-40...+70 °C (-40...+158 °F)			
	Storage	-40...+85 °C (-40...+185 °F)			
Altitude		2000 m (6560 ft)			
Construction					
Insulating Material		Molded High Dielectric Material			
Enclosure		Transparent Dust Cover			
Contact Material		700-HK3 ₁ : Silver nickel (AgNi); 700-HKX ₁ : Silver Nickel + Gold Plating (AgNi + Au); 700-HKM ₁ : Silver Tin Oxide (AgSnO ₂)			
Terminal Markings on Socket		In accordance with EN 50005			
Sockets	Screw Terminal	1-Pole		2-Pole	
		700-HN121 (10 A @ 70 °C) 700-HN221 (16 A @ 50 °C, 12 A @ 70 °C)		700-HN122 (2 x 5 A @ 70 °C) 700-HN222 (2 x 8 A @ 70 °C)	
	Spring Clamp (Available September 2006)	700-HN223 (15 A @ 40 °C with 2 conductors per terminal) (10 A @ 70 °C with 1 conductor per terminal)		700-HN224 (2 x 8 A @ 70 °C)	
Approvals					
Certifications		CSA Certified, File 75088, UL Recognized, File E3125 Guide NLDX2/NLCX8, cULus Listed with Allen-Bradley sockets (File No. 3125 Guide NLDX/NLDX7), CE Marked			
Standards		EN61810-1, CSA 22.2 No. 14, UL 508			

