

PRODUCT PROFILE

BULLETIN 700-HK

BULLETIN 700-HK RELAYS

The new 700 HK relays have improved contact ratings and expanded options available to meet ever changing market demands. They have been designed for a variety of high-density isolation and interposing applications. The new 700-HK relays have the following features:

- Slim build that meets the demand for panel space-savings
- LED and LED with push-to-test options available
- 16 Amp SPDT contact rating
- 8 Amp DPDT contact rating
- Separation of coil and contact terminals
- Snap-in marker system
- Color code to identify control voltage type
- cULus Listed relay and socket combinations

ADVANTAGES

Easy, Cost Effective Installation

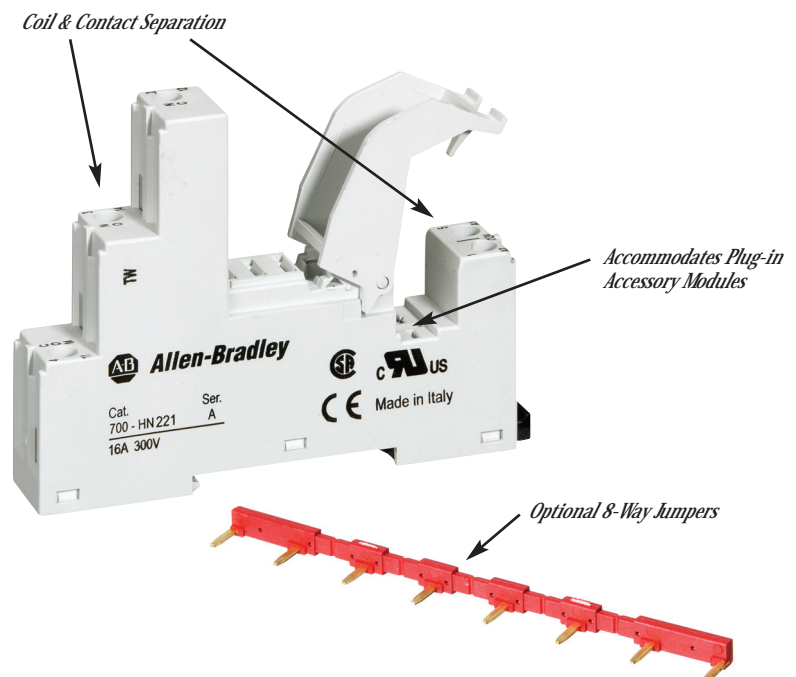
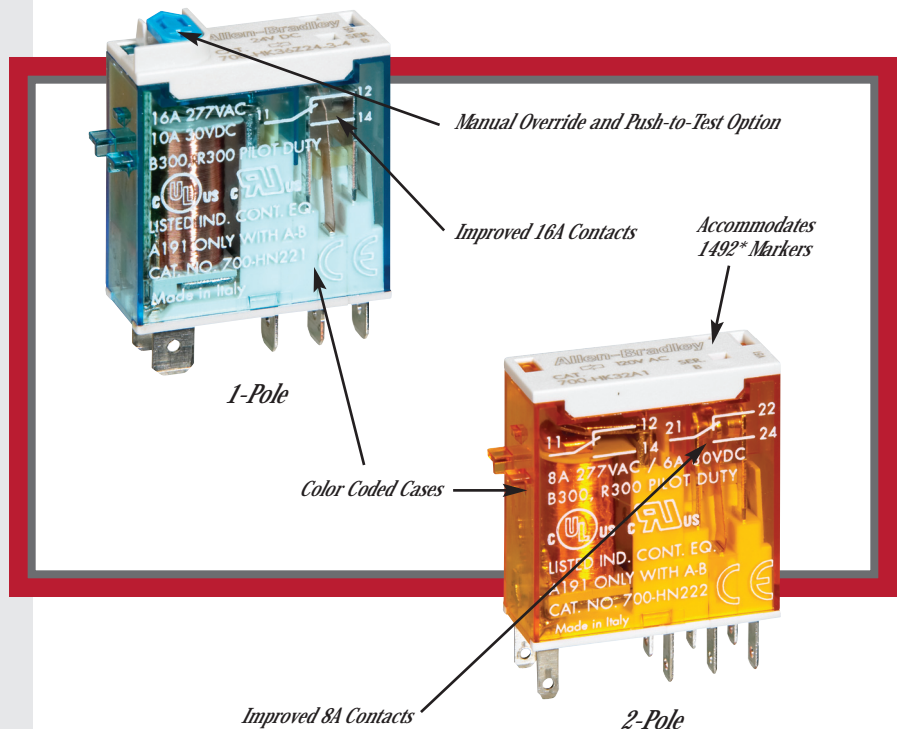
- Requires only one wire to connect to a coil, common or contact power distribution terminal through the use of the 8-way jumper wiring system
- Coil contact separation organizes the panel reducing wiring costs

Optional Plug-in Accessory Modules

- Surge suppressors to protect the control device
- Timers that can turn an existing relay into a timing relay

Gold Plated Contacts – Optional

- Ensures corrosion will not form on the contact surface over time
- Switches low energy loads reliably as low as 5V, 10mA, 50mW



BULLETIN 700 RELAYS AND TIMERS SPECIFICATIONS

Electrical Ratings					
Rated Thermal Current (I_n)		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 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 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 Silver Contacts 50 mW (5V/10 mA or 25V/2 mA) for Silver + Gold Contacts		
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		1.2VA (V AC Coils), 0.5W (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 Cycles		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): 6,000 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): 6,000 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		Silver Nickel (AgNi), Silver Nickel + Gold Plating (AgNi + Au)			
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 LR75088, UL Recognized, File E3125 Guide NLDX2, UL Listed, File E3125 Guide NLDX2 when used with Allen-Bradley Sockets 700-HN221, 700-HN222, CE-Marked (per EU Low Voltage Directive 73/23 EEC 93/68 EEC)			
Standards		EN61810-1, CSA 22.2, UL 508			

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