

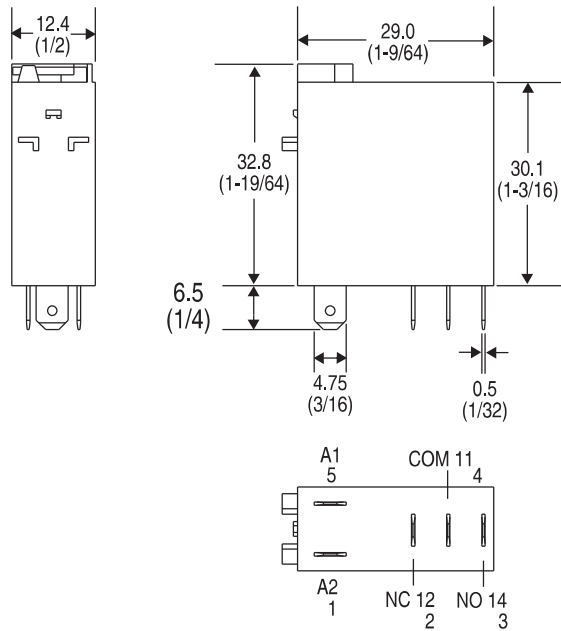
Relays and Timer Specifications

700-HK Relay

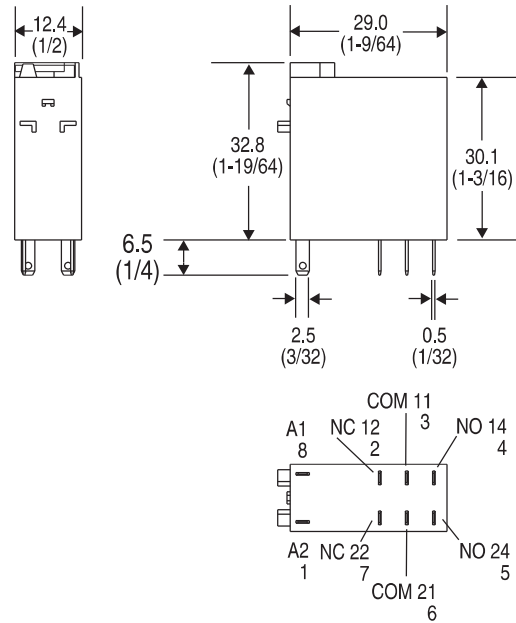
		Cat. No. 700-HK...			
		Electrical Ratings			
Rated Thermal Current (I_{th})		1-Pole, 1 CO, SPDT — 16 A		2-Pole, 2 CO, DPDT — 8 A	
Rated Insulation Voltage (U_i)		250V IEC, 300V UL/CSA			
Contacts	Inductive V AC	120V AC	AC-15, 6.2 A B300 Pilot Duty, 3 A A300 (700-HKM_) 1/3 Hp (0.24 kW) 1-phase	120V AC	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_) 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_) 50 mW (5V/10 mA or 25V/2 mA) for AgNi + Gold Contacts (700-HKX_) 500 mW (100V/5 mA or 5V/100 mA) for AgSnO ₂ Contacts (700-HKM_)			
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	Pole to Pole (VRMS)		2000V AC		
	Contact to Coil (VRMS)		4000V 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_): 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_: Silver nickel (AgNi); 700-HKX_: Silver Nickel + Gold Plating (AgNi + Au); 700-HKM_: 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					

Approximate Dimensions

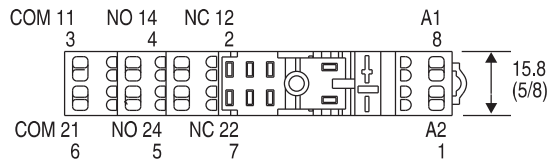
Approximate Dimensions are shown in millimeters (inches). Approximate Dimensions are not intended to be used for manufacturing purposes.



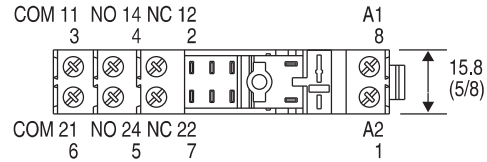
Cat. No. 700-HK36_ (SPDT)



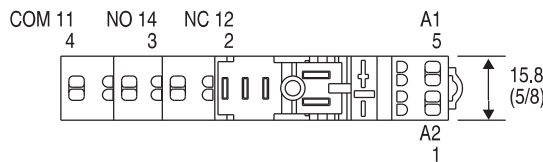
Cat. No. 700-HK32_ (DPDT)



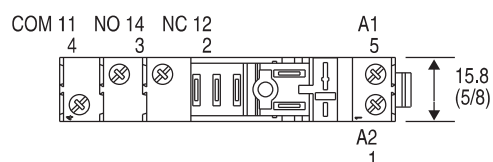
Cat. No. 700-HN224



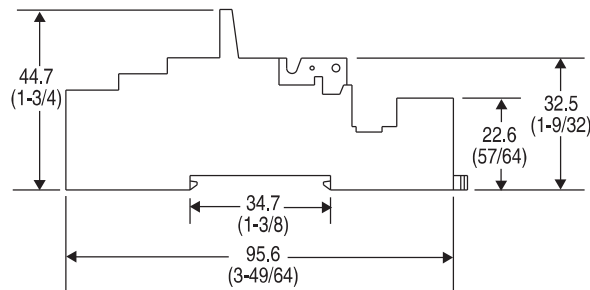
Cat. No. 700-HN222



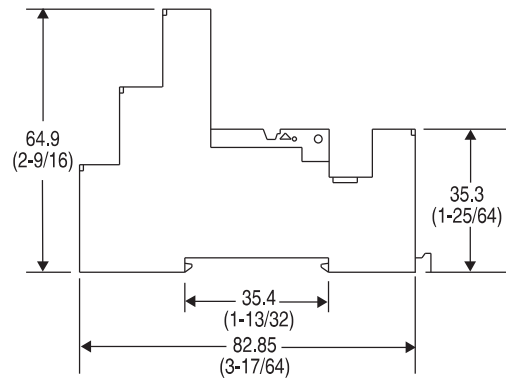
Cat. No. 700-HN223



Cat. No. 700-HN221

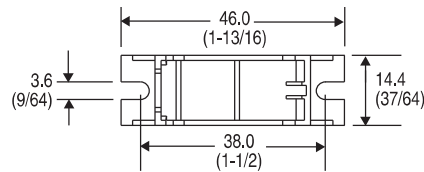


Cat. No. 700-HN223, 700-HN224
Wire Size: 0.2 mm²...1.5 mm² (#24 AWG...#14 AWG)
Either Solid or Stranded
Strip Length: 8 mm (5/16 in)

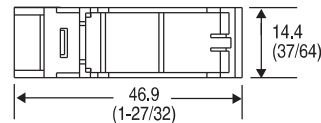


Cat. No. 700-HN221, 700-HN222
Wire Size: 0.2 mm²...2.5 mm² (#24 AWG...#12 AWG)
Either Solid or Stranded
Strip Length: 8 mm (5/16 in), Torque: 0.8Nm (7.0 lb.-in.)

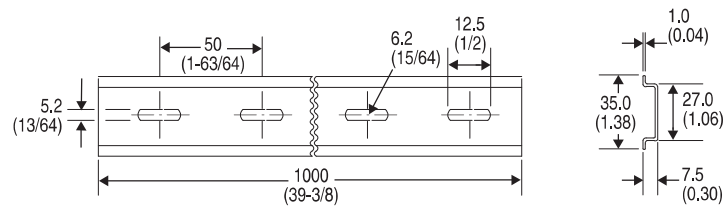
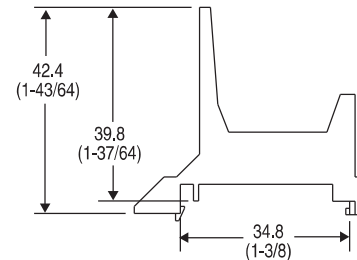
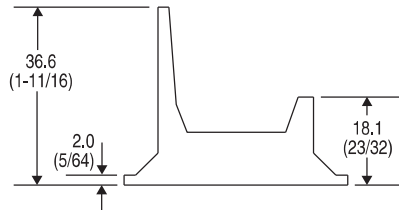
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Cat. No. 700-HN226

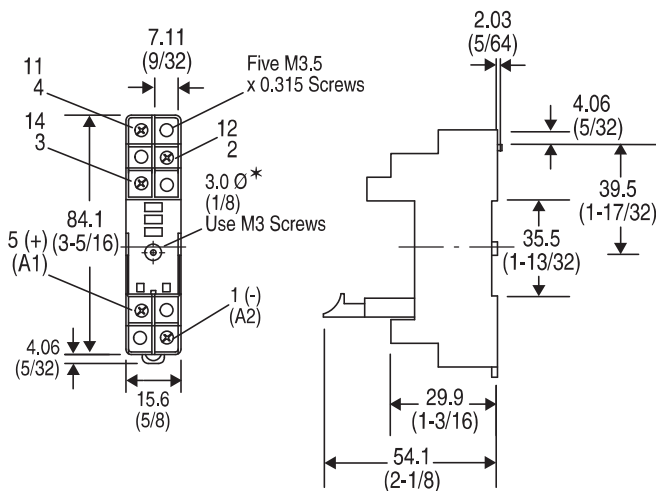


Cat. No. 700-HN227



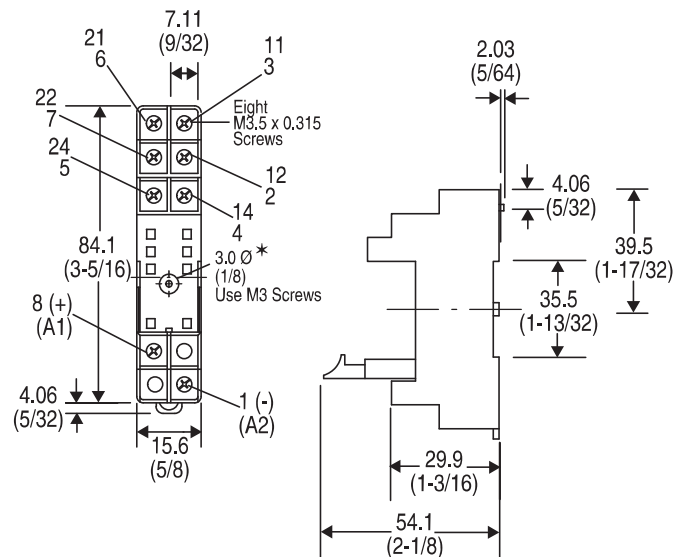
Cat. No. 199-DR4 DIN Mounting Rail Series B Has No Mounting Holes
Cat. No. 199-DR1 DIN Mounting Rail Series B

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



Cat. No. 700-HN121

Wire Size: 2 x 2.5 mm²
Single Wire – Up to #14 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 N•m (7 lb•in)



Cat. No. 700-HN122

Wire Size: 2 x 2.5 mm²
Single Wire – Up to #14 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 N•m (7 lb•in)

* Holes required for mounting [3 mm (1/8 in.) diameter].