

Specifications Sheet

Bulletin 700-HL Interposing/Isolation Relays Specifications

Cat. No. 700-HLT... (Relay Output)								
Electrical Ratings								
Pilot Duty Rating	6 A NEMA B 300, R 300							
Rated Thermal Current (I_{th})	1-Pole — 6 A							
Rated Insulation Voltage (U _i)	250V IEC, 300V UL/CSA							
Contacts	Inductive	24V AC, 1-phase	30 A	▶ ◀	5 A	◀ ▶		
		120V AC, 1-phase	30 A		3 A			
		240V AC, 1-phase	15 A		1.5 A			
		Make, Break, & Continuous V DC	24V DC		120V DC		1.0 A	0.2 A
			240V DC			0.1 A		
Min. Permissible Contact Ratings	12V, 6 mA (72 mW) for Silver Contacts, 8V, 2.5 mA (20 mW) for Gold Contacts							
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							
Power Consumption ±10%	AC						0.3 VA	
	DC						0.2 W	
Design Specification/Test Requirements								
Dielectric Withstand Voltage	Pole to Pole (VRMS)	1500 VA						
	Contact to Coil (VRMS)	4000 VA						
Input Voltage	12V AC/DC	24V AC/DC	48V AC/DC	120V AC/DC	240V AC/DC	120V LCSC	240V LCSC	
Impedance (Ohms)	1 K	2 K	6 K	26 K	56 K	16 K	35 K	
Mechanical								
Degree of Protection	IP20							
Mechanical Life Operations	1 x 10 ⁷							
Electrical Life Operations	6 A Resistive: 100,000 min. 24V DC, 1 A Inductive: 200,000 min. 120V AC 1 A Inductive: 300,000 min.							
Switching Frequency Operations (no-load)	10 cycles/sec							
Coil Voltages	See Overview/Product Selection							
Operating Time at Nominal Voltage at 20°C (ms)	Pickup						7 ms	
	Dropout						3 ms	
Maximum Operating Rate (full load = 6 A)	6 cycles/min.							
Coil Surge Protection	Per EN 61000-4-5; Surge Immunity (801-5) Class III: 2 kV common and 1 kV differential mode							
Environmental								
Temperature	Operating	-40...+55°C						
	Storage	-40...+100°C						
Altitude	2000 m (6560 ft)							
Construction								
Insulating Material	Molded High Dielectric Material							
Enclosure	Relay IP67							
Contact Material	Silver Tin Ox., AgSnO or Silver with Gold Plating, AgSnO + Au							
Terminal Markings on Socket	In accordance with EN50 0005							
Certifications	cULus Recognized, File E3125, Guide NLDX 2, cULus Listed, with Allen-Bradley socket, CE Marked (per EU Low Voltage Directive 73/23 EEC 93/68 EEC), ABS (American Bureau of Shipping)							
Standards	EN60947-4-1, EN60947-5-1, IEC 947CSA 22.2, UL 508, NEMA IEE MAC Compliant, ICS-2 Compliant							

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

Specifications Sheet

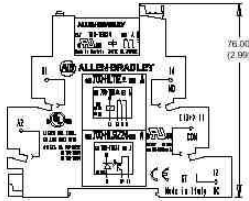
Bulletin 700-HL
Interposing/Isolation Relays
Specifications, Continued

Cat. No. 700-HLS... (Solid State Output)						
Electrical						
Rated Thermal Current (I_{th})	2 A					
Rated Insulation Voltage (U_i)	250V IEC, 300V UL/CSA					
Control Circuit	Min. Control Voltage	80% nominal voltage				
	Maximum Control Voltage	110% nominal voltage				
	Control Current	9 mA \pm 10% (24V) 4 mA \pm 10% (120/240V)				
	Release Voltage	0.4 x nominal voltage (24V), 0.35 x nominal voltage (120/240V)				
	Min. Control Circuit Resistance	3200 ohms (24V), 16k ohms (120V), 32k ohms (240V)				
Outputs	Load Voltage Range	0...24V DC				
	Max. Repetitive Blocking Voltage	33V				
	Max. Switching Current	2 A DC				
	On State Voltage Drop @ Max. Switching Current	< 120 mV DC				
	Leakage Current	max. 100 μ A (@ U = 24V)				
Power Consumption \pm 10%	AC					0.3 VA
	DC					0.2 W
Design Specification/Test Requirements						
Dielectric Withstand Voltage	Pole to Pole (VRMS)	2500 VA				
	Contact to Coil (VRMS)	2500 VA				
Input Voltage	24V DC	48V DC	120V AC/DC	240V AC/DC	120V LCSC	240V LCSC
Impedance (Ohms)	2K	9 K	26 K	58 K	16 K	35 K
Mechanical						
Degree of Protection	IP20					
Input Voltages	See Overview/Product Selection					
Operating Time at Nominal Voltage at 20°C (ms)	Turn on Time	30 μ s (DC only input voltage), 7 ms (AC/DC input voltage)				
	Drop Off Time	350 μ s (DC only input voltage), 10 ms (AC/DC input voltage)				
Maximum Operating Rate	300 Hz					
Environmental						
Temperature	Operating	-20...+55°C				
	Storage	-40...70°C				
Altitude	2000 m (6560 ft)					
Construction						
Insulating Material	Molded High Dielectric Material					
Enclosure	Relay IP67					
Terminal Markings on Socket	In accordance with EN50 005					
Certifications	cULus, cURus, ABS, CE					

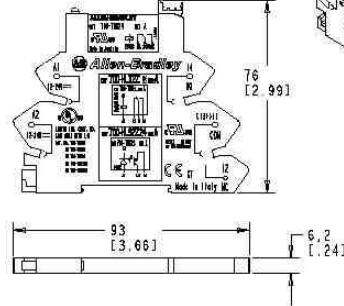
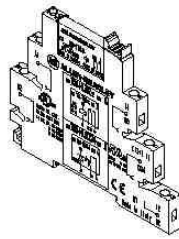
Dimension Sheet

Bulletin 700-HL Interposing/Isolation Relays Approximate Dimensions

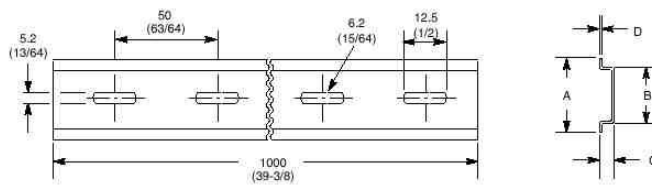
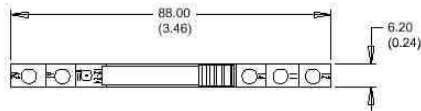
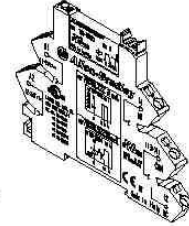
Approximate Dimensions are shown in millimeters (inches). Approximate Dimensions are not intended to be used for manufacturing purposes.



Bulletin 700-HL Screw Terminal Design



Bulletin 700-HL Spring Terminal Design



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

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)