## PRODUCT PROFILE

### **TERMINAL BLOCK RELAYS**

Rockwell Automation is introducing new Allen-Bradley 700-HL Terminal Block Relays (TBR). These new relays have been designed to meet the stringent requirements of hazardous location applications while maintaining the functionality of the existing 700-HL family of TBRs.

### HAZARDOUS LOCATION CERTIFICATION

These new relays have the following approvals:

- C-UL-US (24V DC versions) and UL (120V AC versions)
- Class 1 Div 2 Groups A,B,C,D
- Class 1 Zone 2 Group IIC

#### SPACE SAVINGS

Meets the demand for panel space savings with our 6.2 mm wide hazardous location approved version of the popular 700-HL TBR family.

## EASY, COST EFFECTIVE INSTALLATION

Electrical wiring costs can be reduced up to 50% on projects. For example, the use of the 20-way jumper wiring system requires only one wire to connect to a terminal.

## STANDARD BUILT-IN PROTECTION

Reverse DC polarity protection ensures DC coil devices are not damaged if improper polarity is connected.

### AVAILABLE PART NUMBERS:

700-HLT1Z24-EX 24V DC

Electromechanical

700-HLS1Z24-EX 24V DC Solid State

700-HIT1U1-EX 120V AC

Electromechanical

700-HLS1U1-EX 120V AC Solid State

# HAZARDOUS LOCATION APPLICATIONS





Relay Specification Overview			
Туре	Screw Terminal or Spring Clamp		
Output Style	SPDT (1C/O)		
Wire Range	0.14 mm² 2.5 mm² (#26 #14 AWG)		
Pilot Duty Rating	6A B300, R300		
Contacts	Inductive	1-Pole	
		Break:	Make:
	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 and Continuous V DV	24V DC	1.0 A
		120V DC	0.2 A
		240V DC	0.1 A
Min. Permissible	Standard Silver: 12V, 6 mA (72mW) Gold Plated: 8V, 2.5 mA (50mW)		
Contact Ratings			
Permissible Coil Voltage Variation	85 110% of Normal Voltage at 50HZ		
	85 110% of Normal Voltage at 60HZ		
	80 110% of Normal Voltage at DC		
Contact Material	Silver Ox., AgSnO Silver with Gold Plating, AgSnO/Au		
Output Ratings	Ith = 6 A		
Standards	cULus, cURus, ABS, RINA, CE		
Hazardous Location	Class 1, Div. 2 Groups A, B, C, D, Class 1, Zn 2, Groups IIC, Ex nC IIC T5 Ta <lt></lt> 55° C		
Approvals	700-HLT1Z24-EX, 700-HLS1Z24-EX (24V DC supply)		
	UL Listed	700-HLT1U1-EX, 700-HLS1U1-EX (110V/125V AC/DC supply)	
	CSA Certified	700-HLT1Z24-EX, 700-HLS1Z24-EX (24V DC supply)	
Solid State Relay Specification Overview			
Output Style	1N.O. Solid State		
Pilot Duty Rating	2A, 24V DC		
Control Circuit	Minimum Control Voltage	80% Nominal Voltage	
	Maximum Control Voltage	110% Nominal Voltage	
	Control Current	4 mA+/-10% (120/240V) 9 mA+/-10% (24V)	
	Release Voltage	0.4 x nominal voltage (24V), 0.35 x nominal voltage (120V/240V)	
	Minimum Control Circuit Resistance	3200 ohms (24V), x 16k ohms (120V), 32k ohms (240V)	
Outputs	Load Voltage Range	0 24V DC	
	Maximum Repetitive Blocking Voltage	33V	
	Maximum Switching Current	2A DC	
	On State Voltage Drop @ Maximum Switching Current	< 120 mV DC	
	Leakage Current	Maximum 100 A (@U = 24V)	

#### www.rockwellautomation.com

#### Power, Control and Information Solutions Headquarters

 $Americas: Rockwell\ Automation, 1201\ South\ Second\ Street,\ Milwaukee,\ WI\ 53204-2496\ USA,\ Tel:\ (1)\ 414.382.2000,\ Fax:\ (1)\ 414.382.4444$ Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640 Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846