# **TERMINAL BLOCK RELAYS**



c3controls **Terminal Block Relays** are designed to meet your control and automation system requirements, which need reliable, safe connections as well as isolation between electronic controls and process I/O. Due to their unmatched size, flexibility, and various other features, terminal block relays can help you save money and premium panel space. Just look and see what Series TBR has to offer!



## DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

<b>✓</b> Proven	Our Terminal Block Relays are UL Recognized and CE marked, meeting global standards requirements.		
<b>✓</b> Ultra Compact Size	Only 6.2mm width for a Single-Pole, Double-Throw relay, allowing you to control more devices and uses less space.		
<b>√</b> Flexibility	Pluggable relay attached on the socket can be replaced in case of malfunction, providing flexibility for repair or maintenance work.		
<b>✓</b> Secure Installation	Quick and simple snap-on installation on a 35mm DIN Rail.		
✓ Clear Visibility	LED indication allows you to see the contact status of the relay, making it very helpful in troubleshooting.		
Visible Certifications	Our product certifications and electrical ratings are clearly marked on the side of the device for easy reference during installation.		
<b>✓</b> Added Safety	Terminals are IP20 rated, guarding against accidental contact with live parts. The pluggable relay is also IP67 rated making it reliable in extreme conditions.		
✓ Lifetime Warranty*	Every product is backed by our lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.		
Guaranteed Same-Day Shipping*	Product availability reduces inventory, and improves cashflow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.		
✓ Advantage Pricing	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.		

<sup>\*</sup>See c3controls Terms & Conditions

### **UNIQUE FEATURES**

#### **Super Bright LED**

• Highly visible and bright LED on each unit gives indication of the relay's operating state.

#### **Easy Reference**

 All the necessary installation markings including wire size and torque are available on the side of each terminal block relay.

#### **Quick Identification**

• Marking system allows for fast and easy circuit identification. A marking strip is pre-supplied on each unit.

#### Pluggable Relay

• The marker base functions as a lever for installing or replacing the relay in case of troubleshooting or malfunction.

#### **Protection**

• Built-in Leakage Current Suppression and Coil Surge Protection.

#### Accessories

 Apart from the replacement relay, marker and separator, Series TBR consists of a jumper accessory to eliminate labor intensive wiring work.



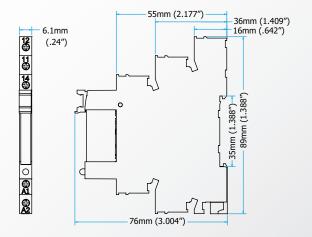


## **SPECIFICATIONS**

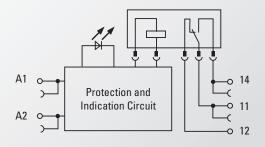
	UNITS		
INPUT DATA	05		
Rated Voltage	VAC/VDC	12 24 110~125V 220~2	
Typical Response Time		12 24 110~125V 220~2 ≤8	
Typical Release Time	ms	<u>≤</u> 0 <4	
Pickup Voltage	ms %	90	
Dropout Voltage	%	10	
Maximum Allowable Voltage	VACADO	14 28 132 264	
Coil Consumption	W	0.17 0.21	
CONTACT RATINGS	***	0.17	
		CDDT	
Contact Configuration Contact Material		SPDT	
Rated Load		AgNi	
	VA CA ID C	6A, 250VAC / 30VDC	
Maximum Switching Voltage	VAC/VDC	400/125	
Minimum Switching Voltage	V	5	
Minimum Switching Current	mA	100	
GENERAL			
Mechanical Service Life		1 x 10 <sup>7</sup> cycles	
ELECTRICAL LIFE			
NO Operations		3 x 10⁴ cycles	
NC Operations		1 x 10⁴ cycles	
DIELECTRIC STRENGTH			
Between Contact and Coil	VAC	4,000 for 1 minute	
Between Pole	VAC	1,000 for 1 minute	
Vibration Resistance		10 to 55Hz, double amplitude 1.0 mm	
SHOCK RESISTANCE			
Functional	m/s²	49	
Destructive	m/s²	980	
Ambient Temperature Range	°C/°F	-40 to 55 / -40 to 131	
Storage Temperature	°C/°F	-40 to 85 / -40 to 185	
Operating Humidity	%	5 to 85 (no condensation)	
Altitude	m	0 - 2,000	
Pollution Degree		2	
Maximum Wire Size	AWG	14	
Torque	Nm	0.5	
Degree of Protection		IP20	
ROHS COMPLIANCE	For RoHS co	mpliance documentation by product, refer to www.c3controls.o	

For complete ratings and detailed specifications refer to www.c3controls.com.

## **DIMENSIONS**



## WIRING DIAGRAM



## **CERTIFICATIONS**

**Conformity to Standards:** Socket

UL 508 CSA 22.2 No. 14 IEC 60947-1, 60947-5-1 Certifications:

UL File #: E236196 (Guide SWIV2, SWIV8)

CE Marked (per EU Low Voltage Directive 2014/35/EU and RoHS Directive EU 2015/863)

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