

# TERMINAL BLOCK RELAYS



## SERIES TBR PRODUCT PROFILE

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

\*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.



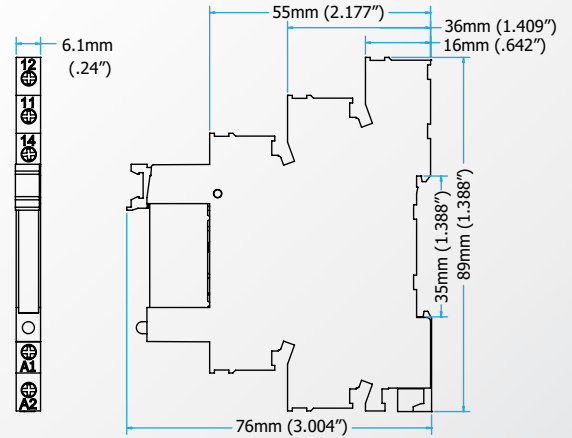
# TERMINAL BLOCK RELAYS

## SPECIFICATIONS

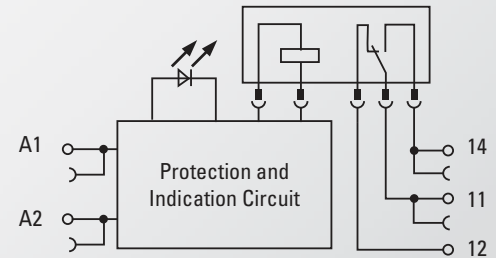
TERMINAL BLOCK RELAYS					
	UNITS				
<b>INPUT DATA</b>					
Rated Voltage	VAC/VDC	12	24	110~125V	220~240
Typical Response Time	ms	≤8			
Typical Release Time	ms	≤4			
Pickup Voltage	%	90			
Dropout Voltage	%	10			
Maximum Allowable Voltage	VAC/VDC	14	28	132	264
Coil Consumption	W	0.17		0.21	
<b>CONTACT RATINGS</b>					
Contact Configuration		SPDT			
Contact Material		AgNi			
Rated Load		6A, 250VAC / 30VDC			
Maximum Switching Voltage	VAC/VDC	400/125			
Minimum Switching Voltage	V	5			
Minimum Switching Current	mA	100			
<b>GENERAL</b>					
Mechanical Service Life		1 x 10 <sup>7</sup> cycles			
<b>ELECTRICAL LIFE</b>					
NO Operations		3 x 10 <sup>4</sup> cycles			
NC Operations		1 x 10 <sup>4</sup> cycles			
<b>DIELECTRIC STRENGTH</b>					
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			
<b>SHOCK RESISTANCE</b>					
Functional	m/s <sup>2</sup>	49			
Destructive	m/s <sup>2</sup>	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			
<b>ROHS COMPLIANCE</b>	For RoHS compliance documentation by product, refer to <a href="http://www.c3controls.com">www.c3controls.com</a>				

For complete ratings and detailed specifications refer to [www.c3controls.com](http://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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