TERMINAL BLOCK RELAYS

SERIES TBR PRODUCT PROFILE

c3controls Terminal Block Relays are designed for control and automation applications that require reliable switching, safe connections, and isolation between electronic controls and process I/O. Series TBR offers both electromechanical and solid-state relay options, with screw and push-in terminal configurations to meet different application needs. Their compact design helps save valuable panel space while providing flexibility for a range of control system requirements. Just look and see what Series TBR has to offer!



DELIVERING SUPERIOR PRODUCT QUALITY AND MANUFACTURING EXCELLENCE

✓ Proven	Our Terminal Block Relays are UL Recognized and CE marked, meeting global standards requirements.
✓ Ultra Compact Size	Only 6.2 mm width for a Single-Pole, Double-Throw relay as well as a Single-Pole, Single-Throw relay, allowing you to control more devices and use less space.
✓ Flexibility	Pluggable relay attached on the socket can be replaced in case of malfunction, providing flexibility for repair or maintenance work.
✓ 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.
✓ 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 cash-flow—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.

*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.

Push-In Terminal

- Push-In Connection significantly reduces installation time. Ideal for high-volume panel manufacturing.

Accessories

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



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series TBR TERMINAL BLOCK RELAYS

SPECIFICATIONS

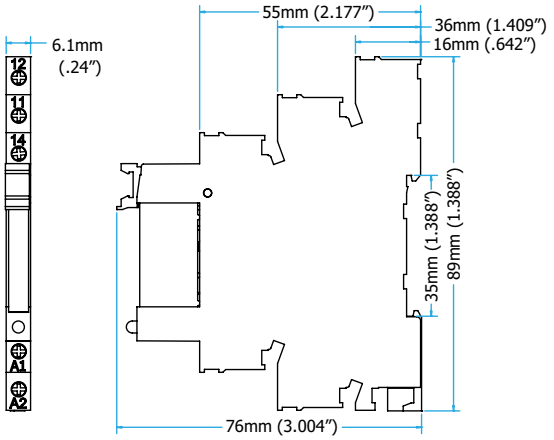
ELECTROMECHANICAL TERMINAL BLOCK RELAY SPECIFICATION					
Input Data	UNITS				
Rated Voltage	VAC/VDC	12	24	110-125	220-240
pickup Voltage	%	90			
Dropout Voltage	%	10			
Maximum Allowable Voltage	VAC/VDC	14	28	132	264
Coil Consumption	W	0.17		0.21	
Contact Ratings					
Contact Configuration		SPDT			
Contact Material		AgNi			
Rated Load		6A, 250VAC / 30VDC			
Maximum Switchin Voltage	VAC/VDC	400/125			
Maximum Switchin Power	VA/W	1500/180			
General					
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			
Wire Size Screw / Push-In	AWG	14-26 / 14-22			
Torque	Nm	0.5			
Degree of Protection		IP20			
RoHS Compliance		For RoHS compliance documentation by product, refer to www.c3controls.com			

SOLID STATE TERMINAL BLOCK RELAY SPECIFICATION			
INPUT SPECIFICATION	UNITS		
	VDC	12	24
Control Voltage Range	VDC	9.6 ~14.4	19.2 ~28.8
Must Turn-On Voltage	VDC	9.6	19.2
Must Turn-Off Voltage	VDC	3	9
Max. Input Current	mA	25	
OUTPUT SPECIFICATION			
		240VAC	24VDC
Load Voltage Range		(48~280)VAC	(3~28.8) VDC
Load Current Range		(0.1~2)A	(0.02~4)A
GENERAL SPECIFICATION			
Contact Configuration		SPST NO	
Operating Temperature	°C	~30~80	
Storage Temperature	°C	~30~100	
Ambient Humidity	%RH	45~85	
Unit weight		29g	
Altitude	m	0-2000	
Pollution Degree		2	
Wire Size Screw / Push-In	AWG	14-26 / 14-22	
Torque (Screw Terminal)	Nm	0.5	
Degree of Protection		IP20	
RoHS Compliance		For RoHS compliance documentation by product, refer to www.c3controls.com	

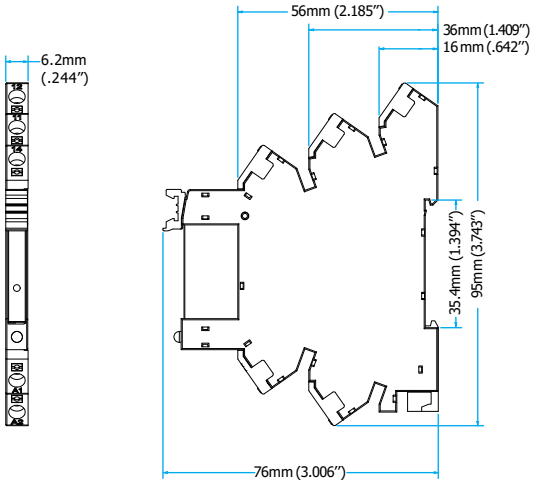
For complete ratings and detailed specifications refer to www.c3controls.com.

DIMENSIONS

SCREW TERMINAL BLOCK RELAY



PUSH-IN TERMINAL BLOCK RELAY



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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