

# TBR06C Relay Terminal Block



## TBR06C Relay Terminal Block Module

The TBR06C Relay Terminal Block Module provides Velocio PLCs relay contact connections for digital outputs. These relay contact outputs can switch AC or DC power at up to 5 amps of current.

The TBR06C module contains 6 relays. It connects to a Velocio PLC digital output port through a short cable (included with the module), and is designed to operate under control of the PLC.

The relay contacts are rated at 5A @ up to 250VAC. The relays are divided into two output groups. Relays 1, 2 and 3 each connect their respective output terminals to the common connection on terminal pin 1. Relays 4, 5 and 6 switch the common found on pin 8.

This module mounts to a 15mm DIN rail, or over two appropriately spaced screws. The DIN rail mount of this module, along with other terminal block modules, is illustrated on the right.

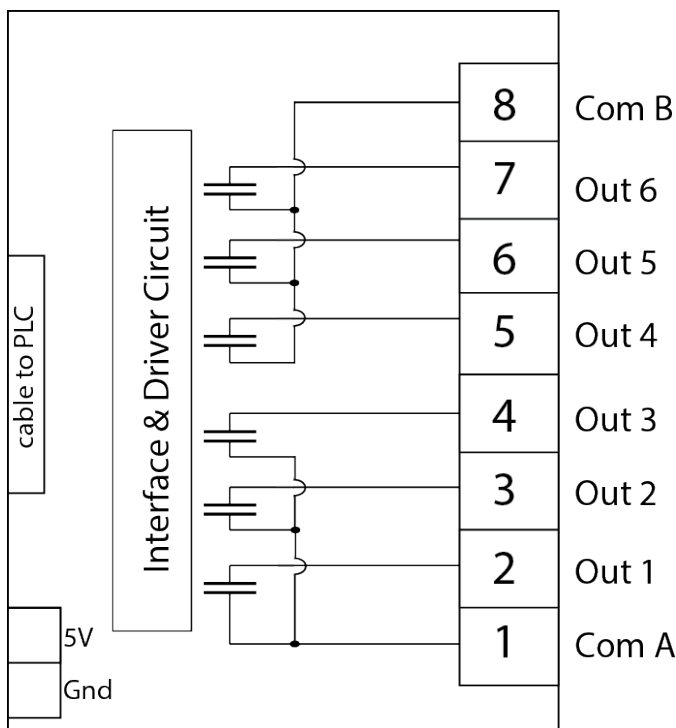
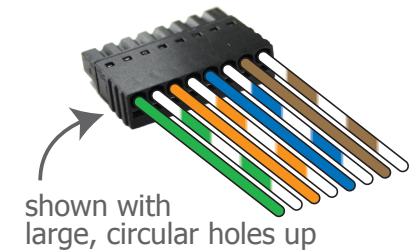
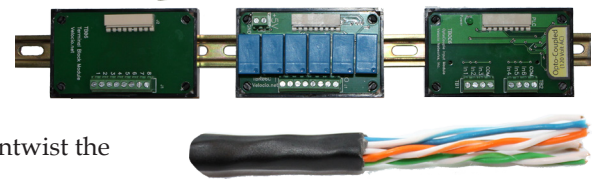
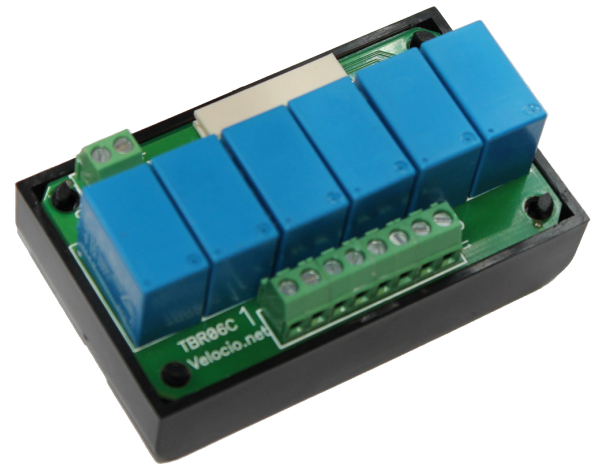
The TBR06C Relay module comes with a Terminal Cable. This cable can be used to connect the Relay module to the PLC. The cable is 18 inches long. You can cut this to the length that you wish, for panel neatness (remembering that you can cut again, but you can't add back). Once you have the required cable length, strip the cable covering back approximately 1.25 inches to expose the eight wires in the cable (4 pairs). Untwist the pairs, so you've got eight individual color coded wires.

Strip the insulation from each wire to expose about 1/8 inch length of 22 AWG solid copper wire. Push the wires into a port connector, which comes with the PLC, in the sequence shown on the right. Tug on each wire to confirm that it is pushed in and captured.

If you make a mistake and put the wrong wire in a position, use a Velocio connector tool (screwdriver) to extract the wire. Push the blade into the rectangular hole associated with the wire position, with the wide orientation of the blade aligned with the wide length of the hole. This will release the connector's spring clamp. Gently pull the wire out and then remove the blade.



The cable will connect the PLC output port, using the connector that you have just wired. It will connect to the Relay module with the connector pre-installed on the other end of the cable.



Power must be connected to the two position terminal block labeled GND and +5V. Connect ground to the terminal closest to the module corner and +5VDC to the other terminal, labeled +5V. The ground must be connected to the PLC's ground. When power is properly connected and on, the LED indicator will light.

### Specifications :

- ◇ **Power**  
Voltage : 4.8 to 5.5VDC  
current : 300mA maximum
- ◇ **Contact Rating :**  
AC Volts Maximum : 250VAC  
DC Voltage Maximum : 30VDC  
Current : 5Amps  
Current per common : 10Amps
- ◇ **Terminals**  
Spacing : 3.5mm  
Wire size : 26 to 16 AWG
- ◇ **Mounting :**  
DIN rail option : standard 15mm DIN rail (snap on)  
Mounting screw option : over two #6 screws, placed 1.5 inches apart