

# TBOC6 Optocoupler Module



## TBOC6 Optocoupler Terminal Block Module

The TBOC6 Optocoupler Terminal Block Module is an optional module which connects, through a standard cable, to the input ports of Velocio PLCs. This module interfaces, either 120VAC or 24V (AC or DC) signals and converts them to DC signals compatible with the PLC. It also optically isolates the signals, so no direct electrical connection is present between the external device originating the signal and the PLC.

The six input signals are divided into two groups of three. Each group provides an individual terminal block input for each external input signal. The return connection for each group of three is a common connection for that group.

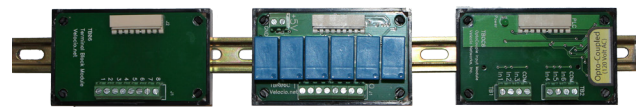
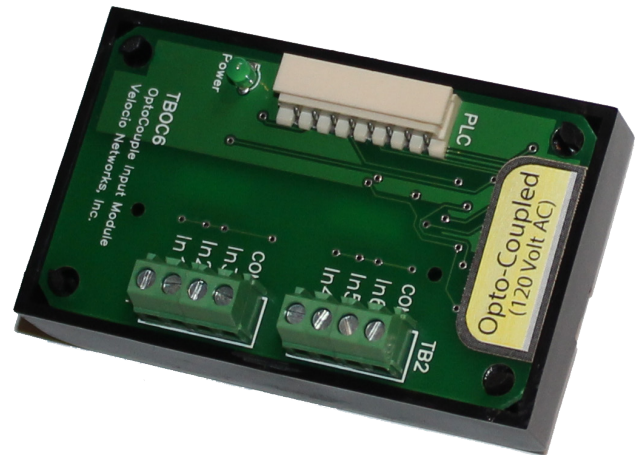
This module mounts to a 15mm DIN rail, or over two appropriately spaced screws. The DIN rail mount of this module, along with other terminal block modules, is illustrated on the right.

The TBOC6 Optocoupler module comes with a Terminal Cable. This cable can be used to connect the 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 Optocoupler module with the connector pre-installed on the other end of the cable.



## Specifications :

◇	<b>Part Numbers</b>	
	TBOC6-24	24V Optocoupler TB
	TBOC6-120	120VAC Optocoupler TB
◇	<b>Power (from PLC)</b>	
	Voltage :	4.8 to 5.5VDC
	current	15mA maximum
◇	<b>Input signals</b>	
	-120 version	
	AC voltage	80 to 132 VAC
	Input resistance	33K ohm
	-24 version	
	AC or DC voltage	16 to 36V
	Input resistance	3.3K ohm
◇	<b>Terminals</b>	
	Spacing	3.5mm
	Wire size	26 to 16 AWG
◇	<b>Mounting :</b>	
	DIN rail option :	
	standard 15mm DIN rail (snap on)	
	Mounting screw option :	
	over two #6 screws, placed 1.5 inches apart	

Power is provided from the PLC, over the Terminal cable connection. When the cable is plugged in and the PLC is powered the power indicator light will be on.

