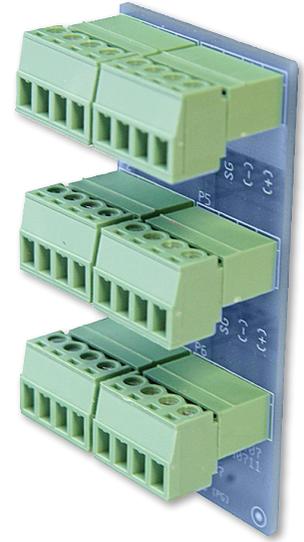


### Overview

The COMBLK2 - Communication Cable Terminal Block 2, is a small circuit board designed to simplify the task of terminating communications wiring. The COMBLK2 fits into the TRK18 snaptrack or any other industry standard 2.75" snaptrack. Each COMBLK2 contains two independent circuits with three connectors - one for bus in, one for bus out and a third for wiring to the controller.

The small size of the COMBLK2 makes it ideal for installing within VFD enclosures, power meter cabinets, etc. where Modbus or other protocol communication must be connected to a remote communicating device. Be sure to keep low voltage and power cabling separated.

The COMBLK2 allows each bus to be quickly isolated and tested in each direction to simplify troubleshooting of communications problems. A common ground connector provides a convenient means of grounding all shield drain wires. The COMBLK2 also accommodates the COMSRG surge suppressor, which plugs directly inline between the COMBLK2 and the communications bus segment. The COMBLK2 is suitable for RS-485, Modbus, Echelon®, or virtually any other communications standard that talks over two or three wires.



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### Mounting

The COMBLK2 mounts in a piece of snaptrack as shown in Fig. 1.

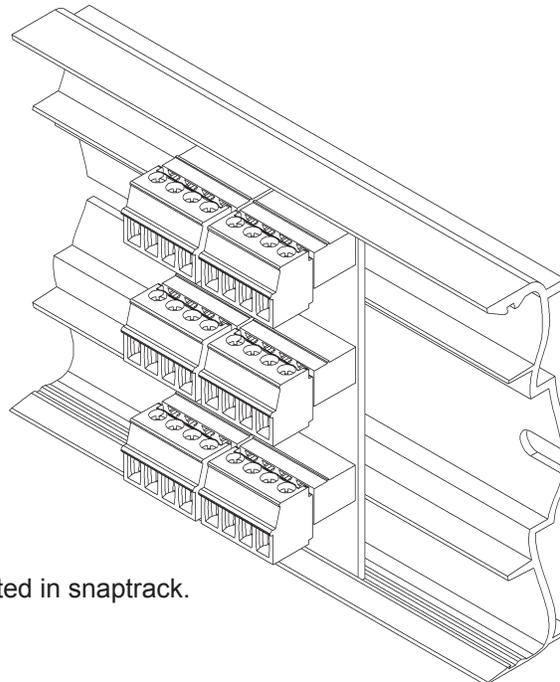


Fig. 1: COMBLK2 mounted in snaptrack.

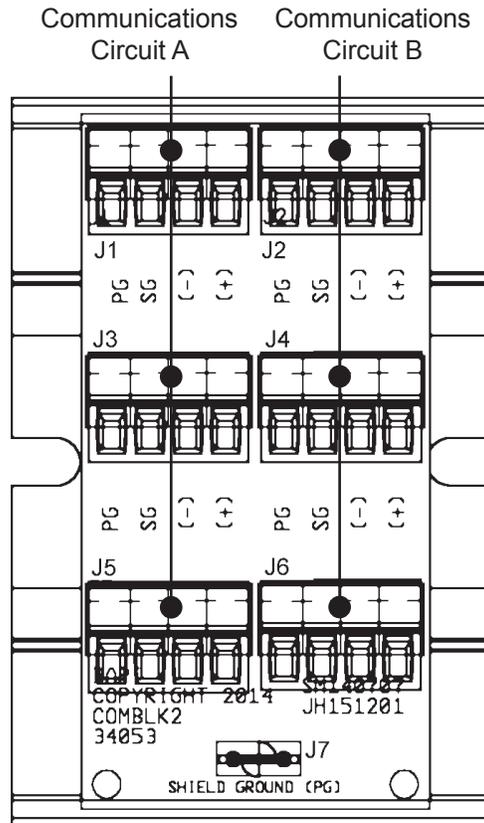
### Specifications

**Wire Size:** 16 to 22 gauge

Specifications subject to change without notice.

## Termination

**Fig. 2:**  
COMBLK2  
component  
identifier



Connectors J1, J2 and J3 make up Circuit A. Connectors J4, J5 and J6 make up Circuit B. In each circuit, all three connectors' pin (+) are connected together, all three connectors' pin (-) are connected together and all three connectors' pin SG are connected together. Additionally, all six connectors' (J1 through J6) pin PG are connected together and to the 1/4" quick connect J7.

Terminal jacks in each communication circuit and their suggested usages are shown in Table 1. Suggested pin usage is shown in Table 2.

A wire connected to a good earth ground should be connected to 1/4" quick connect J7.

Note: The male connectors that plug into the jacks on the board use a rising block screw terminal to hold the wires. It is possible for the block to be in a partially up position allowing the wire to be inserted under the block. Be sure that the male connector screws are turned fully counterclockwise before inserting the wire. Lightly tug on each wire after tightening to verify proper termination.

Note: Best practice is to pick a wiring standard and stick with it for all subsequent terminations. For example; if you have three wires plus shield in your communications cable always wire the same color wire to the same terminal.

Communications Circuit	Connectors Used
A	J3(Bus Input), J2(Controller), J1(Bus Out)
B	J6(Bus Input), J5(Controller), J4(Bus Out)

Connector Pin	Circuit Function	Suggested Wire Color
(+)	Comm A (+)	Red
(-)	Comm B (-)	Black
SG	Signal Ground (if needed)	White
PG	Communications Cable Shield	Shield

## Diagnostics

### Possible Problem:

Controller cannot talk on bus

### Possible Solutions:

- Make sure that the connections are all in the same communications circuit.
- Make sure that polarity is correct on the two communication wires.

Specifications subject to change without notice.