



Overview

When troubleshooting complex pieces of equipment, it is often necessary to be able to break connections, or connect one device to another driver. BAPI comes to the rescue again with a device called the TB18. Simply, the TB18 is a small card that allows you to make, break, or change connections by simply moving pluggable terminal blocks around. It has two, 18 pin connectors on it that are wired together. Since the connectors are pluggable terminal blocks, it is easy to create a situation where you can connect 2 devices together with pluggable terminal blocks, while giving you the flexibility to change or remove connections, giving you a miniature switchboard. This device is offered with (TB18-TRK) or without (TB18) a 2" snap track.

The TB18 is offered in two common terminal configurations; The TB18C has all odd numbered terminals common; the TB18C2 has all even numbered terminals common and all odd numbered terminals common. Both the C and C2 versions are offered with snap track, just add a -TRK to the end of the part number. The common terminal option makes wiring things such as relays (where you might want a common connection) easier, cleaner, and gives you the miniature switchboard functionality that will make your troubleshooting job much easier. The common terminal option makes wiring items such as relays (where you might want a common connection) easier, cleaner, and gives you the miniature switchboard functionality that will make your troubleshooting job much easier.

Mounting

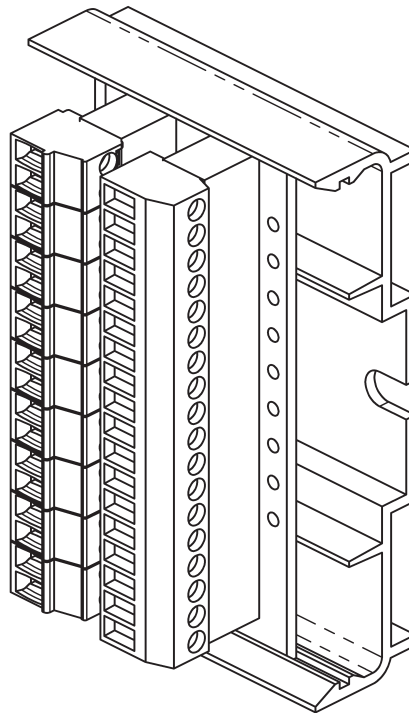


Figure 1

TB18 mounted in a 2" piece of snap track. (The combination is BA/TB18-TRK)

Specifications subject to change without notice.

Termination

Two 18-pin connectors, J1 and J2, are mounted on the TB18 printed wiring board. Figure 2 shows the pin numbers on J1 and J2, and Tables 1, 2 and 3 below show which pin numbers on J1 are connected to which in pin numbers on J2 for the TB18, TB18-C and TB18-C2.

Table 1

Wiring Diagram for TB18

J1	J2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18

Table 2

Wiring Diagram for TB18-C

J1	J2
1, 3, 5, 7, 9, 11, 13, 15, 17	1, 3, 5, 7, 9, 11, 13, 15, 17
2	2
4	4
6	6
8	8
10	10
12	12
14	14
16	16
18	18

Table 3

Wiring Diagram for TB18-C2

J1	J2
1, 3, 5, 7, 9, 11, 13, 15, 17	1, 3, 5, 7, 9, 11, 13, 15, 17
2, 4, 6, 8, 10, 12, 14, 16, 18	2, 4, 6, 8, 10, 12, 14, 16, 18

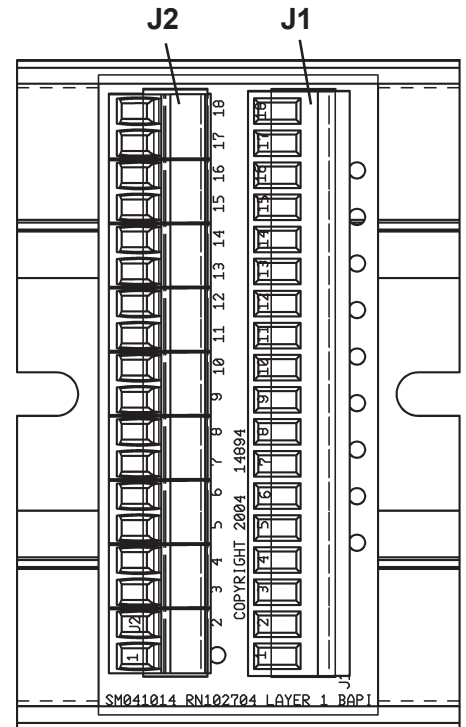


Figure 2
TB18 pin numbers

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 terminal block. Be sure that the male connector screws are turned fully clockwise 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 cable always wire the same color wire to the same terminal.

Troubleshooting

Problems

Open Connections

Controller cannot read signal

Solutions

- Make sure the wire is properly terminated on the terminal block.
- Make sure the terminal block is pushed all the way down into the board connector
- Make sure that the connections are all in the same circuit
- Make sure that polarity is correct on the wires.

Specifications

Wire Size 16 to 22 gauge
Voltage & Current..... NEC Class 2

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