

**SERIES:** TB004-508 | **DESCRIPTION:** TERMINAL BLOCK**FEATURES**

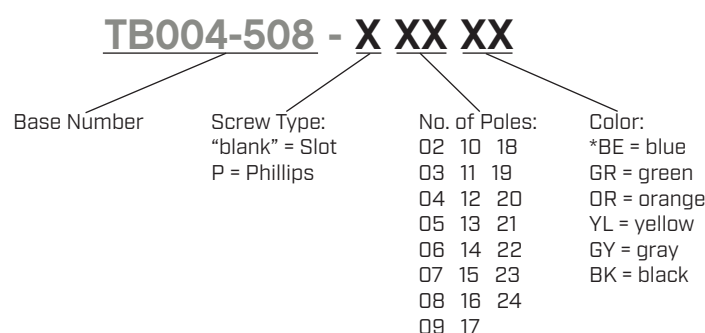
- 2~24 poles
- horizontal with board
- interlocking (side)
- 5.08 mm pitch
- UL and CE safety approvals

**SPECIFICATIONS**

| parameter                   | conditions/description                      | min | typ  | max  | units |
|-----------------------------|---------------------------------------------|-----|------|------|-------|
| rated voltage (per contact) | UL                                          |     |      | 300  | V     |
|                             | IEC                                         |     |      | 250  | V     |
| rated current (per contact) | UL                                          |     |      | 16   | A     |
|                             | IEC                                         |     |      | 18   | A     |
| withstanding voltage        |                                             |     | 2500 |      | Vac   |
| surge voltage               |                                             |     |      | 4000 | V     |
| contact resistance          |                                             |     |      | 20   | mΩ    |
| insulation resistance       | at 500 Vdc                                  | 500 |      |      | MΩ    |
| operating temperature       |                                             | -40 |      | 105  | °C    |
| safety approvals            | UL 1059, EN 60998-1:2004, EN 60998-2-1:2004 |     |      |      |       |
| flammability rating         | UL94V-0                                     |     |      |      |       |
| RoHS                        | yes                                         |     |      |      |       |

**SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for maximum 10 seconds | 345 | 350 | 355 | °C    |
| wave soldering | for maximum 5 seconds  | 255 | 260 | 265 | °C    |

**PART NUMBER KEY**

\*Standard housing color is blue. All other colors are subject to higher MOQ. Please inquire with CUI Devices sales for details.

units: mm  
tolerance (per module):  
 $X \leq 6.00$ :  $\pm 0.25$  mm  
 $6.00 < X \leq 30.00$ :  $\pm 0.40$  mm  
unless otherwise noted

Technical drawing of the TB004-508 terminal block, showing dimensions and PCB layout.

**Top View Dimensions:**

- Overall Width: 10.20
- Pin Pitch (P): 5.08
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$
- Pin Diameter:  $\phi 1.60$
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$

**Side View Dimensions:**

- Overall Height: 14.10
- Pin Height: 3.00
- Pin Diameter:  $\phi 1.60$
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$

**Front View Dimensions:**

- Overall Width: 10.20
- Pin Pitch (P): 5.08
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$

**PCB LAYOUT:**

Dimensions for PCB layout:

- Overall Width: 10.20
- Pin Pitch (P): 5.08
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$

**SECTION A-A:**

Dimensions for Section A-A:

- Overall Height: 14.10
- Pin Height: 3.00
- Pin Diameter:  $\phi 1.60$
- Pin Spacing (B):  $B = P \times (N - 1)$
- Overall Length (L):  $L = P \times N$

**WIRE ASSEMBLY:**

|              | UL        | IEC                 |
|--------------|-----------|---------------------|
| Wire Range   | 24~12 AWG | 2.5 mm <sup>2</sup> |
| Strip Length | 7 mm      |                     |
| Screw Size   | M3        |                     |
| Screw Torque | 0.5 N·m   |                     |

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|                                                                                                                                   |       |       |       |       |       |       |        |        |        |        |        |       |
|-----------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|
| This series can be constructed of 2 and 3 pole modules where L is the total length, P is the pitch, and N is the number of poles. |       |       |       |       |       |       |        |        |        |        |        |       |
| N                                                                                                                                 | 02    | 03    | 04    | 05    | 06    | 07    | 08     | 09     | 10     | 11     | 12     | 13    |
| L                                                                                                                                 | 10.16 | 15.24 | 20.32 | 25.40 | 30.48 | 35.56 | 40.64  | 45.72  | 50.80  | 55.88  | 60.96  | 66.04 |
| B                                                                                                                                 | 5.08  | 10.16 | 15.24 | 20.32 | 25.40 | 30.48 | 35.56  | 40.64  | 45.72  | 50.80  | 55.88  | 60.96 |
| N                                                                                                                                 | 14    | 15    | 16    | 17    | 18    | 19    | 20     | 21     | 22     | 23     | 24     | --    |
| L                                                                                                                                 | 71.12 | 76.20 | 81.28 | 86.36 | 91.44 | 96.52 | 101.60 | 106.68 | 111.76 | 116.84 | 121.92 | --    |
| B                                                                                                                                 | 66.04 | 71.12 | 76.20 | 81.28 | 86.36 | 91.44 | 96.52  | 101.60 | 106.68 | 111.76 | 116.84 | --    |

## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 03/12/2019 |
| 1.01 | brand update                 | 02/06/2020 |
| 1.02 | updated datasheet            | 04/22/2020 |
| 1.03 | updated housing mold         | 08/31/2020 |
| 1.04 | logo, datasheet style update | 08/15/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.



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