

date 03/18/2024

page 1 of 3

# SERIES: TBL-0020-500 | DESCRIPTION: TERMINAL BLOCK

#### **FEATURES**

- 2~20 poles
- 5.0 mm pitch
- blue, green, red, white, & yellow options
- UL safety approved





## **SPECIFICATIONS**

| parameter             | conditions/description                     | min | typ   | max   | units |
|-----------------------|--|-----|-------|-------|-------|
| rated voltage (UL)    | Use Group:                                 |     |       | 000   |       |
|                       | В, D                                       |     |       | 300   | V     |
|                       | Use Group:                                 |     |       |       |       |
| rated current (UL)    | В  |     |       | 20    | Α     |
|                       | D  |     |       | 10    | A     |
|                       | Overvoltage Category/Pollution Degree:     |     |       |       |       |
| rated voltage (IEC)   | III/3                                      |     |       | 250   | V     |
|                       | III/2                                      |     |       | 400   | V     |
|                       | II/2                                       |     |       | 630   | V     |
| reted correct (ICO)   | Overvoltage Category/Pollution Degree:     |     |       |       |       |
| rated current (IEC)   | III/3, III/2, II/2                         |     |       | 24    | Α     |
| withstanding voltage  | for 1 minute                               |     | 1,600 |       | Vac   |
| surge voltage         |  |     |       | 4,000 | V     |
| contact resistance    |  |     |       | 20    | mΩ    |
| insulation resistance | at 500 Vdc                                 | 500 |       |       | МΩ    |
| operating temperature |  | -40 |       | 105   | °C    |
| safety approvals      | UL 1059 certified, IEC 60947-7-4 compliant |     |       |       |       |
| flammability rating   | UL94V-0                                    |     |       |       |       |
| RoHS                  | yes  |     |       |       |       |

## **SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| wave soldering | for maximum 5 seconds  |     | 260 |     | °C    |

## PART NUMBER KEY

TBL - 0020 - 500 - XX XX

Base Number

No. of Poles: Body Color:

02 09 16 BE blue WT = white
03 10 17 GR = green YL = yellow

04 11 18 RD = red

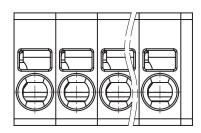
05 12 19 06 13 20

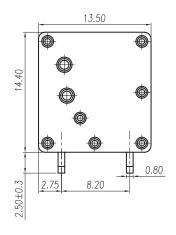
07 14 08 15

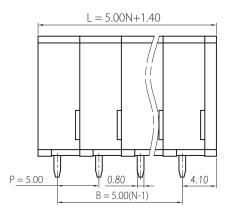
## **MECHANICAL DRAWING**

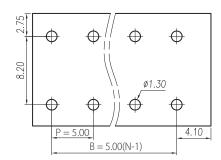
units: mm tolerance:  $X \le 6.00$ :  $\pm 0.20$  mm  $6.00 < X \le 10.00$ :  $\pm 0.30$  mm  $10.00 < X \le 30.00$ :  $\pm 0.50$  mm  $30.00 < X \le 60.00$ :  $\pm 0.70$  mm  $60.00 < X \le 100.00$ :  $\pm 1.00$  mm  $100.00 < X \le 160.00$ :  $\pm 1.30$  mm 100.00:  $\pm 1.60$  mm unless otherwise noted

| DESCRIPTION | MATERIAL       | PLATING/COLOR |
|-------------|----------------|---------------|
| housing     | PA66 (UL94V-0) |               |
| contacts    | copper alloy   | tin           |









 WIRE ASSEMBLY

 UL
 IEC

 Wire Range (solid/flexible)
 24~12 AWG
 0.2~ 2.5 mm²

 Strip Length
 10 mm

Recommended PCB Layout Top View

| This series is constructed of 1 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    |
| L   | 11.40 | 16.40 | 21.40 | 26.40 | 31.40 | 36.40 | 41.40 | 46.40 | 51.40  | 56.40 |
| В   | 5.00  | 10.00 | 15.00 | 20.00 | 25.00 | 30.00 | 35.00 | 40.00 | 45.00  | 50.00 |
| N   | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20     |       |
| L   | 61.40 | 66.40 | 71.40 | 76.40 | 81.40 | 86.40 | 91.40 | 96.40 | 101.40 |       |
| В   | 55.00 | 60.00 | 65.00 | 70.00 | 75.00 | 80.00 | 85.00 | 90.00 | 95.00  |       |

## **REVISION HISTORY**

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 03/18/2024 |

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



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