

# CERTIFICATE OF COMPLIANCE

**Certificate Number** E60425  
**Report Reference** E60425-20000825  
**Date** 2022-August-17

**Issued to:** PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstrasse 8  
Blomberg 32825 DE

**This is to certify that  
representative samples of** TERMINAL BLOCKS - COMPONENT  
See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.

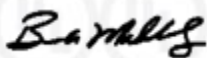
**Standard(s) for Safety:** UL 1059 , Terminal Blocks  
CAN/CSA C22.2 No. 158 , Terminal Blocks

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.



Bruce Mahrenholz, Director North American Certification Program

UL LLC



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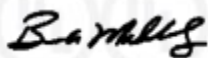
This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

USR, CNR - Component Terminal Blocks, Cat. Nos. SP2.5 w/wo suffixes /1-L, /1-M or /1-R. Cat. No. SP2.5 followed by /1 or /2 digit number. SPB2.5 w/wo suffixes /1-L, /1-M or /1-R, Cat. No. SPB2.5 followed by /1 or /2 digit number. SPV2.5 w/wo suffixes /1-L, /1-M or /1-R, Cat. No. SPV2.5 followed by /1 or /2 digit number. SPDB2.5 w/wo suffixes /1-L, /1-M or /1-R. Cat. No. SPDB2.5 followed by /1 or /2 digit number. ST2.5, ST2.5-MT, ST2.5-3L, ST2.5-3PV, ST2.5/1P, ST2.5/2P, ST2.5-TWIN, ST2.5-TWIN/1P, ST2.5-TWIN-MT, ST2.5-TWIN-MT, ST2.5-TWIN-MT/1P, ST2.5-TWIN-TG/1P(#), ST2.5-QUATTRO, ST2.5-QUATTRO-MT, ST2.5-QUATTRO-MT, with or without Suffix DIO/L-R or DIO/R-L, ST2.5-QUATTRO/2P, ST2.5-QUATTRO/2P BU, ST2.5-QUATTRO-U, STTB2.5 with or without Suffix -LA24 or -LA60, STTB2.5/2P, STTB2.5-PV, STTB2.5/2P-PV, STTB2.5/2P-PV, STTB2.5/2P-PV, Cat. Nos. STS2.5, -BU, STS2.5-TWIN, STS2.5-QUATTRO. Cat. Nos. STTB2.5 followed by Suffixes -DIO/U-O, -DIO/O-U, DIO/UL-UR, -DIO/O-UL/UR-UL, -DIO/O-UL/O-UR, -LA230, STTB2.5/2P-DIO-U. Cat. Nos. STS2.5-MT, STS2.5-TG(#). Cat. Nos. ST2.5-TG(#), ST2.5-TWIN-TG(#), ST2.5-QUATTRO-TG(#). Cat. Nos. STTB2.5-L/N, STTB2.5-PE/L, STTB2.5-PE/N, STTB2.5-TWIN, STTB2.5-TWIN-PV. Cat. Nos. STI2.5, -BU, STI2.5-L, STI2.5-L/L, STI2.5-L/N, STI2.5-PE/L/L, STI2.5-PE/L/N, STI2.5-PE/L/NT, STI2.5-PE/NTB and STI2.5-PE/LTB. Cat. Nos. ST2.5-QUATTRO/4P, ST2.5-QUATTRO/4P BU. Cat. Nos. SC2.5, SC2.5-RZ, SC2.5/1-L, SC2.5-NS/1-L. Cat. Nos. ST 2.5-4L/1P, ST 2.5-4L/2P, ST 2.5-4L/2P-Z, CP 2.5-4L and CP 2.5-4L-Z. Cat. No. ST 2.5 followed by suffixes -PCB or -PCBV; followed by /one or two digit number; followed by suffix -G-5.2. Cat. No. STU2.5-TWIN. Cat. Nos. STTB2.5/4P and STTB2.5/4P-PV. Cat. No. : STTB 2,5-DIO/UR-UL, STTB 2,5-DIO.1N5408K/U-O, STTB 2,5-LA 24 /DIO-UL-UR, STTB 2,5-2DIO/O-UL/O-UR, STTB 2,5-2DIO/UL-O/UR-O, STTB 2,5-2DIO/UL-O/UL-UR, STTB 2,5-2DIO/UR-OL/OR-UL, STTB 2,5-DIO/U-O, STTB 2,5-DIO/O-U.

(#)Optional Suffixes for Cat. Nos. with Suffix -TG or TG/1P:

| Suffixes: | followed by                                                                     |
|-----------|---------------------------------------------------------------------------------|
| P-FU 5X20 | -5, LED 24, LED 24-5, LED 60, LED 60-5, LED 250, LED 250-5<br>or LED 24 120KOHM |
| FP 5X20   | 24, 60 or 250                                                                   |

Protective conductor terminal blocks, Cat. Nos. ST2.5-PE, ST2.5/1P-PE, ST2.5/2P-PE, ST2.5-3PE, ST2.5-PE/3L, ST2.5-TWIN-PE, ST2.5-TWIN/1P-PE, ST2.5-QUATTRO-PE. Cat. Nos. STS2.5-PE, STS2.5-TWIN-PE, STS2.5-QUATTRO-PE, ST2.5-QUATTRO/2P-PE, STTB2.5-PE, STTB2.5/2P-PE, STTB2.5-PE, STTB2.5-TWIN-PE, ST2.5-PE/L/L, ST2.5-PE/L/N, ST2.5-PE-2PV, STI2.5-PE. ST2.5-QUATTRO/4P-PE, ST 2.5-L/L/N. Cat. No. ST 2.5-PE/3L/1P. Cat. No. STU2.5-TWIN-PE. . Cat. No. STTB2.5/4P-PE.



Bruce Mahrenholz, Director North American Certification Program

UL LLC



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# DESCRIPTION

## PRODUCT COVERED:

USR, CNR - Component Terminal Blocks, Cat. Nos. SP2.5 w/o suffixes /1-L, /1-M or /1-R. Cat. No. SP2.5 followed by /1 or /2 digit number. SPB2.5 w/o suffixes /1-L, /1-M or /1-R, Cat. No. SPB2.5 followed by /1 or /2 digit number. SPV2.5 w/o suffixes /1-L, /1-M or /1-R, Cat. No. SPV2.5 followed by /1 or /2 digit number. SPDB2.5 w/o suffixes /1-L, /1-M or /1-R. Cat. No. SPDB2.5 followed by /1 or /2 digit number. ST2.5, ST2.5-MT, ST2.5-3L, ST2.5-3PV, ST2.5/1P, ST2.5/2P, ST2.5-TWIN, ST2.5-TWIN/1P, ST2.5-TWIN-MT, ST2.5-TWIN-MT/1P, ST2.5-TWIN-TG/1P(#), ST2.5-QUATTRO, ST2.5-QUATTRO-MT, ST2.5-QUATTRO-MT, with or without Suffix DIO/L-R or DIO/R-L, ST2.5-QUATTRO/2P, ST2.5-QUATTRO/2P BU, ST2.5-QUATTRO-U, STTB2.5 with or without Suffix -LA24 or -LA60, STTB2.5/2P, STTB2.5-PV, STTB2.5/2P-PV, STTB2.5, STTB2.5-PV. Cat. Nos. STS2.5, -BU, STS2.5-TWIN, STS2.5-QUATTRO. Cat. Nos. STTB2.5 followed by Suffixes -DIO/U-0, -DIO/O-U, DIO/UL-UR, -2IO/O-UL/UR-UL, -DIO/O-UL/O-UR, -LA230, STTB2.5/2P-DIO-U. Cat. Nos. STS2.5-MT, STS2.5-TG(#). Cat. Nos. ST2.5-TG(#), ST2.5-TWIN-TG(#), ST2.5-QUATTRO-TG(#). Cat. Nos. STTB2.5-L/N, STTB2.5-PE/L, STTB2.5-PE/N, STTB2.5-TWIN, STTB2.5-TWIN-PV. Cat. Nos. STI2.5, -BU, STI2.5-L, STI2.5-L/L, STI2.5-L/N, STI2.5-PE/L/L, STI2.5-PE/L/N, STI2.5-PE/L/NT, STI2.5-PE/NTB and STI2.5-PE/LTB. Cat. Nos. ST2.5-QUATTRO/4P, ST2.5-QUATTRO/4P BU. Cat. Nos. SC2.5, SC2.5-RZ, SC2.5/1-L, SC2.5-NS/1-L. Cat. Nos. ST 2.5-4L/1P, ST 2.5-4L/2P, ST 2.5-4L/2P-Z, CP 2.5-4L and CP 2.5-4L-Z. Cat. No. ST 2.5 followed by suffixes -PCB or -PCBV; followed by /one or two digit number; followed by suffix -G-5.2. Cat. No. STU2.5-TWIN. Cat. Nos. STTB2.5/4P and STTB2.5/4P-PV. Cat. No. : STTB 2,5-DIO/UR-UL, STTB 2,5-DIO.1N5408K/U-O, STTB 2,5-LA 24 /DIO-UL-UR, STTB 2,5-2DIO/O-UL/O-UR, STTB 2,5-2DIO/UL-O/UR-O, STTB 2,5-2DIO/UL-O/UL-UR, STTB 2,5-2DIO/UR-OL/OR-UL, STTB 2,5-DIO/U-O, STTB 2,5-DIO/O-U.

(#)Optional Suffixes for Cat. Nos. with Suffix -TG or TG/1P:

|           |                                                                              |
|-----------|------------------------------------------------------------------------------|
| Suffixes: | followed by                                                                  |
| P-FU 5X20 | -5, LED 24, LED 24-5, LED 60, LED 60-5, LED 250, LED 250-5 or LED 24 120KOHM |
| FP 5X20   | 24, 60 or 250                                                                |

Protective conductor terminal blocks, Cat. Nos. ST2.5-PE, ST2.5/1P-PE, ST2.5/2P-PE, ST2.5-3PE, ST2.5-PE/3L, ST2.5-TWIN-PE, ST2.5-TWIN/1P-PE, ST2.5-QUATTRO-PE. Cat. Nos. STS2.5-PE, STS2.5-TWIN-PE, STS2.5-QUATTRO-PE, ST2.5-QUATTRO/2P-PE, STTB2.5-PE, STTB2.5/2P-PE, STTB2.5-PE, STTB2.5-TWIN-PE, ST2.5-PE/L/L, ST2.5-PE/L/N, ST2.5-PE-2PV, STI2.5-PE. ST2.5-QUATTRO/4P-PE, ST 2.5-L/L/N. Cat. No. ST 2.5-PE/3L/1P. Cat. No. STU2.5-TWIN-PE. . Cat. No. STTB2.5/4P-PE.

## \*Note -

USR - Products designated USR have been investigated using US requirements as noted in the Test Record.

CNR - Products designated CNR have been investigated using Canadian requirements as noted in the Test Record.

## GENERAL:

These are single pole DIN rail-mountable terminal blocks intended for copper conductors. They may be grouped together to form multi-pole units of indefinite length.

(#)Optional Suffixes for Cat. Nos. with Suffix -TG or -TG/1P: See III. 85, III.86, III.87, III.88, III.89 and III.90 for details

|           |                                                                                                |
|-----------|------------------------------------------------------------------------------------------------|
| Suffixes: | followed by                                                                                    |
| P-FU 5X20 | -5, LED 24, LED 24-5, LED 60, LED 60-5, LED 250, LED 250-5, LED 24 120KOHM or LED 24-5 120KOHM |
| FP 5X20   | 24, 60 or 250                                                                                  |

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Issued: 2000-08-25  
New: 2013-06-06

Application -

Commercial appliances (such as business and EDP equipment, etc.).  
Industrial control devices (such as motor controllers, push-button stations, etc.).

Terminal Type - Spring action terminals and plug-in contacts for Cat. Nos. SP2.5,  
SPB2.5, SPDB2.5.

Spring action and screw terminals for Cat. No. STU2.5-TWIN.

Spring action and plug-in blade terminals for Cat. Nos. with Suffix /1P or /2P and for  
Cat. Nos. SC2.5, SC2.5-RZ.

Plug-in blade terminals on both line and load sides for Cat. Nos. with Suffix /4P.

Spring action terminals on line and load sides for all other Cat. Nos.

Type Wiring - Field and factory-wiring for spring action and screw terminals.  
Factory-wiring for plug-in blade and contact terminals.

## RATINGS:

| Cat. No.                                                                            | Wire Range<br>AWG Cu.<br>Sol/Str | Max<br>Volts | Max<br>Amperes | UG         |
|-------------------------------------------------------------------------------------|----------------------------------|--------------|----------------|------------|
| SP2.5, SPB2.5, SPV 2.5, SPDB2.5,<br>With or without Suffixes /1-L, /1-M,<br>or /1-R | 26-12                            | 300/600      | 20 (2)         | BC/D       |
| SP2.5, SPB2.5, SPBV2.5, SPDB2.5<br>foll. by /1 or /2 digit No.                      | 26-12                            | 300/600      | 20 (2)         | BC/D       |
| *ST2.5/1P                                                                           |                                  | 300/600      | 20 (2)         | BC/D       |
|                                                                                     | 28-12                            | 500          | 20             | F          |
| ST2.5/2P                                                                            | N/A                              | 300/600      | 20 (2)         | BC/D       |
|                                                                                     |                                  | 500          | 20             | F          |
| ST2.5                                                                               | 28-12                            | 600          | 20             | BC         |
| ST2.5-MT                                                                            | 28-12                            | 300/600      | 16             | BC/D       |
| ST2.5-TWIN, ST2.5-TWIN/1P                                                           | 28-12                            | 600          | 20             | BC         |
|                                                                                     |                                  | 500          | 20             | F          |
| ST2.5-TWIN-MT, ST2.5-TWIN-MT/1P,                                                    | 28-12                            | 300/600      | 16 (2)         | BC/D       |
| ST2.5-QUATTRO/2P, BU                                                                | 28-12                            | 300/600      | 20 (2)         | BC/D,<br>F |
| ST2.5-QUATTRO/4P, BU                                                                | N/A                              | 300/600      | 20 (2)         | BC/D       |
|                                                                                     |                                  | 500          | 20             | F          |
| *ST2.5-QUATTRO-MT                                                                   | 28-12                            | 300/600      | 16 (2)         | BC/D       |
| ST2.5-QUATTRO, -U                                                                   | 28-12                            | 600          | 20             | BC         |
| STTB2.5, -LA24, -LA60                                                               | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| STTB2.5/2P                                                                          | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| STTB2.5-PV                                                                          | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| STTB2.5/2P-PV                                                                       | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| ST2.5-PE                                                                            | 28-12                            | N/A          | N/A            | BC/D       |
| ST2.5-TWIN-PE, ST2.5-TWIN/1P-PE                                                     | 28-12                            | N/A          | N/A            | BC/D,<br>F |
| ST2.5-TWIN-PE                                                                       | 28-12                            | N/A          | N/A            | BC/D       |
| ST2.5-QUATTRO-PE                                                                    | 28-12                            | N/A          | N/A            | BC/D       |
| ST2.5-DIO/L-R, -DIO/R-L                                                             | 28-12                            | 300          | 0.5            | BC         |
| ST2.5-TWIN-DIO/L-R, -DIO/R-L                                                        | 28-12                            | 300          | 0.5            | BC         |
|                                                                                     |                                  |              | 0.5            | BC         |
| ST2.5-QUATTRO-DIO/L-R, -DIO/R-L                                                     | 28-12                            | 300          | 20/1 (1)       |            |
|                                                                                     |                                  |              | 5/1 (1)        |            |
| STS2.5, -BU, STS2.5-TWIN                                                            | 28-12                            | 600          | 20             |            |
| STS2.5-PE, STS2.5-TWIN-PE                                                           | 28-12                            | N/A          | N/A            |            |
| STS2.5-QUATTRO                                                                      | 28-12                            | 600          | 20             |            |
| STS2.5-QUATTRO-PE                                                                   | 28-12                            | N/A          | N/A            |            |
| ST2.5-3L, ST 2.5-L/L/N                                                              | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| ST2.5-3PV                                                                           | 28-12                            | 300/600      | 20 (2)         | BC/D       |
| ST2.5-3PE                                                                           | 28-12                            | N/A          | N/A            | BCD        |
| ST2.5-PE/3L                                                                         | 28-12                            | 600          | 20 (2)         | BCD        |
| STTB2.5-DIO/U-O                                                                     | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-DIO.1N5408K/U-O                                                            | 28-12                            | 300          | 0.5            | BC         |
| STTB2.5-DIO/O-U                                                                     | 28-12                            | 300          | 0.5            | BC         |
| STTB2.5-DIO/UL-UR                                                                   | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-DIO/UR-UL                                                                  | 28-12                            | 300          | 0.5            | BC         |
| STTB2.5-2DIO/O-UL/UR-UL                                                             | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-2DIO/O-UL/O-UR                                                             | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-2DIO/UL-O/UR-O                                                             | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-2DIO/UL-O/UL-UR                                                            | 28-12                            | 300          | 0.5            | BC         |
| STTB 2.5-2DIO/UR-OI/OR-UL                                                           | 28-12                            | 300          | 0.5            | BC         |
| STTB2.5-DIO/O-UL/O-UR                                                               | 28-12                            | 300          | 0.5            | BC         |
| STTB 2,5-LA 24/DIO-UL-UR                                                            | 28-12                            | 30           | 0.5            | BC         |

|             |         |            |           |                     |
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RATINGS:

|                     |       |     |     |             |
|---------------------|-------|-----|-----|-------------|
| *STTB2.5-LA230      | 28-12 | 250 | 20  | EC          |
| *ST2.5/1P-PE        | 28-12 | N/A | N/A | <b>ECDF</b> |
| ST2.5/2P-PE         | 28-12 | N/A | N/A | ECDF        |
| *STTB2.5/2P-DIO/O-U | 28-12 | 300 | 0.5 | EC          |

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RATINGS:

| Cat. No.      | Wire Range<br>AWG Cu.<br>Sol/Str | Max<br>Volts | Max<br>Amperes | UG   |
|---------------|----------------------------------|--------------|----------------|------|
| STTB2.5/4P    | N/A                              | 300          | 20 (2)         | BC/D |
| STTB2.5/4P-PV | N/A                              | 300          | 20 (2)         | BC/D |
| STTB2.5/4P-PE | N/A                              | N/A          | N/A            | BCD  |

| Cat.No.                         | Wire<br>size<br>(AWG) | Wire<br>type | FW  | TQ<br>Nm | V       | A      | UG     |
|---------------------------------|-----------------------|--------------|-----|----------|---------|--------|--------|
| ST2.5-QUATTRO/2P-PE             | 28-12                 | N/A          | N/A | 2        | 300/600 |        | BCD, F |
|                                 |                       |              |     |          |         |        |        |
| ST2.5-QUATTRO/4P-PE             | N/A                   | N/A          | N/A |          |         |        | BCD, F |
|                                 |                       |              |     |          |         |        |        |
| STTB2.5/2P-PE                   | 28-12                 | N/A          | N/A |          |         |        | BCD    |
| STTB2.5-PE                      | 28-12                 | N/A          | N/A |          |         |        | BCD    |
| STTBS2.5                        | 28-12                 |              |     |          | 300     | 20     |        |
| STTBS 2,5-DIO/U-O               | 28-12                 |              |     |          | 300     | 0.5    | BC     |
| STTBS 2,5-DIO/O-U               | 28-12                 |              |     |          | 300     | 0.5    | BC     |
| *STTBS2.5                       | 28-12                 | Cu           | 2   | NA       | 300/600 | 20 (2) | BC/D   |
| STTBS2.5-PV                     | 28-12                 | Cu           | 2   | NA       | 300/600 | 20 (2) | BC/D   |
|                                 |                       |              |     |          |         |        |        |
| STTBS2.5-PE                     | 28-12                 | Cu           | 2   | NA       | N/A     | N/A    | BCD    |
| ST 2.5-PE/2PV                   | 28-12                 | Cu           | 2   | NA       | 300 (3) | 20 (3) | B, C   |
|                                 |                       |              |     |          | 500 (3) | 20 (3) | F      |
| ST 2.5-PE/L/N,<br>ST 2.5-PE/L/L | 28-12                 | Cu           | 2   | NA       | 300 (3) | 20 (3) | B, C   |
|                                 |                       |              |     |          | 500 (3) | 20 (3) | F      |

- (1) - 1 ampere for current path(s) with diode.  
(2) - See spacings for limited ampere rating at 600 V  
(3) - Ampere and voltage rating not applicable for lower level grounding

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| <u>Cat. No.</u>          | <u>Wire Range</u><br><u>AWG Cu.</u><br><u>Sol/Str</u> | <u>Max</u><br><u>Volts</u> | <u>Max</u><br><u>Amperes</u> | <u>Torque</u><br><u>Lbs-In</u> |
|--------------------------|-------------------------------------------------------|----------------------------|------------------------------|--------------------------------|
| STS2.5-MT                | 28-12                                                 | 300                        | 16                           |                                |
| STS2.5-TG                | 28-12                                                 | 300                        | 16                           |                                |
| STS2.5-TG (#)            | 28-12                                                 | 300                        | 10                           |                                |
| ST2.5-TG                 | 28-12                                                 | 300                        | 16                           |                                |
| ST2.5-TG (#)             | 28-12                                                 | 300                        | 10                           |                                |
| ST2.5-TWIN-TG            | 28-12                                                 | 300                        | 16                           |                                |
| ST2.5-TWIN-TG (#)        | 28-12                                                 | 300                        | 10                           |                                |
| ST2.5-TWIN-TG/1P         | 28-12                                                 | 300                        | 16                           |                                |
| ST2.5-TWIN-TG/1P (#)     | 28-12                                                 | 300                        | 10                           |                                |
| ST2.5-QUATTRO-TG         | 28-12                                                 | 300                        | 16                           |                                |
| ST2.5-QUATTRO-TG (#)     | 28-12                                                 | 300                        | 10                           |                                |
| STTB2.5-L/N              | 28-12                                                 | 300                        | 20                           |                                |
| STTB2.5-PE/L             | 28-12                                                 | 300 (3)                    | 20 (3)                       |                                |
| STTB2.5-PE/N             | 28-12                                                 | 300 (3)                    | 20 (3)                       |                                |
| STI2.5, -BU              | 28-12                                                 | 600                        | 20                           |                                |
| STI2.5-PE                | 28-12                                                 | N/A                        | N/A                          |                                |
| STI2.5-L                 | 28-12                                                 | 150/300                    | 20/10                        |                                |
| STI2.5-L/L               | 28-12                                                 | 150/300                    | 20/10                        |                                |
| STI2.5-L/N               | 28-12                                                 | 150/300                    | 20/10                        |                                |
| STI2.5-PE/L/L            | 28-12                                                 | 150/300 (3)                | 20/10 (3)                    |                                |
| STI2.5-PE/L/N            | 28-12                                                 | 150/300 (3)                | 20/10 (3)                    |                                |
| STI2.5-PE/L/NT           | 28-12                                                 | 150/300 (3)                | 20/10 (3)                    |                                |
| STI2.5-PE/LTB            | 28-12                                                 | 150/300 (3)                | 20/10 (3)                    |                                |
| STI2.5-PE/NTB            | 28-12                                                 | 150/300 (3)                | 20/10 (3)                    |                                |
| STTB2.5-TWIN             | 28-12                                                 | 300                        | 20                           |                                |
| STTB2.5-TWIN-PV          | 28-12                                                 | 300                        | 20                           |                                |
| STTB2.5-TWIN-PE          | 28-12                                                 | N/A                        | N/A                          |                                |
| SC2.5, SC2.5-RZ,         | 28-12                                                 | 300                        | 20                           |                                |
| SC2.5/1-L, SC2.5-NS/1-L. |                                                       |                            |                              |                                |
| ST 2.5-4L/1P             | 28-12                                                 | 300                        | 10                           |                                |
| ST 2.5-4L/2P, -Z         | 28-12                                                 | 300                        | 10                           |                                |
| ST 2.5-PE/3L/1P          | 28-12                                                 | 300 / N/A                  | 10 / N/A                     |                                |
| CP 2.5-4L, -Z            | 20-14                                                 | 300                        | 10                           |                                |
| ST 2.5-PCB/...-G-5.2     | -                                                     | 300                        | 20                           |                                |
| ST 2.5-PCBV/...-G-5.2    | -                                                     | 300                        | 20                           |                                |
| STU2.5-TWIN              | 28-12                                                 | 600                        | 20                           | -                              |
|                          | 26-12                                                 |                            |                              | 5-7                            |
| STU2.5-TWIN-PE           | 28-12                                                 | N/A                        | N/A                          | -                              |
|                          | 26-12                                                 |                            |                              | 5-7                            |

- (1) - 1 ampere for current path(s) with diode.  
(2) - See spacings for limited ampere rating at 600 V.  
(3) - Ampere and voltage rating not applicable for lower level grounding terminals.

\*



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(#)Optional Suffixes for Cat. Nos. with Suffix -TG or -TG/1P: See III. 85, I11.86, I11.87, I11.88, I11.89 and I11.90 for details

| Suffixes: | followed by                                                                                  |
|-----------|----------------------------------------------------------------------------------------------|
| P-FU 5X20 | -5, LED 24, LED 24-5,LED 60, LED 60-5,LED 250, LED 250-5, LED 24 120KOHM or LED 24-5 120KOHM |
| FP 5X20   | 24, 60 or 250                                                                                |

The terminal blocks tabulated below have optional 3-phase short circuit current ratings. The Terminal Blocks must be protected by the max ampere and Class of overcurrent protective device noted below.

| Cat. No.                | Suitable<br>Conductors<br>kcmil/AWG<br>Str. |          | Overcurrent Protection<br>Fuse Required<br>Class/Max Amp Rating |    |     |     |    |    | SCCR,<br>RMS<br>Sym A | Volts<br>Max |
|-------------------------|---------------------------------------------|----------|-----------------------------------------------------------------|----|-----|-----|----|----|-----------------------|--------------|
|                         | Line                                        | Load     | J                                                               | T  | RK1 | RK5 | G  | CC |                       |              |
| ST 2.5 MT               | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| ST 2.5 QUATTRO-MT       | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5 QUATTRO-TG       | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5 TG               | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5 TWIN MT          | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| ST 2.5 TWIN TG          | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5-3PV              | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5-3L, ST 2.5-L/L/N | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST2.5-3L BU             | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| ST 2.5-3PE              | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| ST 2.5                  | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| ST 2.5 PE               | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| ST 2.5-QUATTRO          | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| ST 2.5-QUATTRO PE       | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| ST 2.5-TWIN             | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| ST 2.5-TWIN-PE          | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| STU 2.5-TWIN            | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 600          |
| STU 2.5-TWIN-PE         | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| STTB 2.5                | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| STTB 2.5-PE             | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |
| STTB 2.5-TWIN           | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | 300          |
| STTB 2.5-TWIN-PE        | 14-12 Cu                                    | 14-12 Cu | 60                                                              | 60 | -   | -   | 30 | 30 | 100,000               | N/A          |

Nomenclature - The Cat. Nos. are designated as follows:

|                  |              |              |            |
|------------------|--------------|--------------|------------|
| Typical Cat. No. | <u>ST2.5</u> | <u>-TWIN</u> | <u>-PE</u> |
|                  | 1            | 2            | 3          |

1. Basic Cat. No.
  - ST2.5 - Vertical wire entry, one level.
  - STI2.5 - Derivative of ST2.5.
  - STU2.5 - Vertical wire entry input/screw terminal output.
  - STTB2.5 - Vertical wire entry, two levels.
  - STTBS2.5 - Angled wire entry version of STTB2.5.
  - STS2.5 - Angled wire entry, one level.
  - SP2.5 - Plug-in connector for use with /1P or /2P plug-in blade terminals
  - SPB2.5 - Same as SP2.5 except for housing dimensions and metering access hole.
  - SPV2.5 - Same as SPB2.5 except for vertical horizontal access.
  - SPDB2.5 - Same as SP2.5 except for housing dimensions, two spring action terminals and metering access hole. Mates with /1P or /2P plug-in blade terminals.
  - SC2.5 - Receptacle block (plug-in contacts) for use with SP2.5, SPB2.5, SPV2.5, SPDB2.5 plug-in blocks.
  - CP2.5 - Receptacle block (plug-in contacts) for use with ST2.5-4L, ST2.5-PE/3L plug-in blocks.
2. Variations -
  - TWIN - One level, three terminals.
  - QUATTRO - One level, four terminals.
  - QUATTRO-U - One level, four terminals, split current bar (2 circuits).
  - PV (STTB2.5 only) - Interconnected top and bottom level terminals.
  - DIO/U-O (STTB2.5) - 1N4007 diode connected between upper and lower level terminals.
  - DIO/O-U (STTB2.5, STTBS 2.5) - Same as -DIO/U-O except polarity reversed on 1N4007 diode.
  - DIO/UL-UR (STTB2.5, STTBS 2.5) - 1N4007 diode connected between lower level terminals.
  - DIO/UR-UL (STTB2.5) - diode connected between lower level terminals.
  - DIO.1N5408K/U-O (STTB2.5) - 1N5408K diode connected between lower and upper level terminals.
  - 2DIO/O-UL/UR-UL (STTB2.5) - 1N4007 diode connected between upper and lower level terminals, and between lower level terminals.
  - 2DIO/O-UL/O-UR (STTB2.5) - Two 1N4007 diodes connected between upper and lower level terminals.
  - 2DIO/O-UL/O-UR (STTB2.5) - Two diodes connected between upper and lower level terminals.
  - 2DIO/UL-O/UR-O (STTB2.5) - Two diodes connected between lower and upper level terminals.
  - DIO/L-R - 1N4007 diode connected across input and output terminals (left to right polarity).
  - DIO/R-L - 1N4007 diode connected across input and output terminals (right to left polarity).
  - LA24 (STTB2.5) - LED/resistor connected between upper and lower level terminals.

|             |         |         |         |                    |
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- LA 24/DIO-UL-UR (STTB2.5) - LED/resistor connected and diode connected between lower level terminals.
- LA230 (STTB2.5) - Neon lamp/resistor connected between upper and lower level terminals.
- LA60 - LED/resistor connected between upper and lower level terminals.  
/1P, /2P - 4P - One, two, or four pluggable termination points (blade terminal mates with SP, SPB, SPDB plug-in connectors).
- PV - Current bars used for common upper and lower level terminals.
- RZ - Locking pin for 3.5 mm diameter panel hole mounting.

## 2. Variations - (cont'd)

- DIO/O-U - 1N4007 diode between the levels.
- 3PV - Three levels, all current bars commoned.
- 3L - Three levels.
- MT - Designates knife-switch circuit disconnect.
- TG - Designates plug-in circuit disconnect
- L - One feed through current bar for phase conductor.
- L/L - Two feed through conductors for phase and neutral conductors.
- L/N - Designates two feed through current bars for phase and neutral conductors.
- L/L/N - Designates two feed through current bars for phase and neutral conductors.
- /4P - Two level, 4 blade terminals for STTB2.5
- 4L/1P - Four level for use with one CP2.5 receptacle block.
- 4L/2P - Four level for use with two CP2.5 receptacle blocks.
- Z - Insulator Housing interlocking pins
- PCB/X-G-5.2 - PCB header for use with SP2.5 plug-in blocks, horizontal entry, 5.2 mm pin spacing.
- PCBV/X-G-5.2 - PCB header for use with SP2.5 plug-in blocks, vertical entry, 5.2 mm pin spacing.
- /1-L - Used in multi-position assemblies, left end section. See Ill. 78 for details.
- /1-M - Used in multi-position assemblies, middle sections. See Ill. 78 for details.
- /1-R - Used in multi-position assemblies, right end section. See Ill. 78 for details.
- NS/1-L - Used in multi-position assemblies, left end section. See Ill. 78 for details.

Plug-in fuseholder for use with -TG or -TG/1P terminal blocks.

| Type:                       | Max Amp Rating | Max Voltage |
|-----------------------------|----------------|-------------|
| P-FU 5X20                   | 10             | 300         |
| P-FU 5X20-5                 | 10             | 300         |
| P-FU 5X20-LED 24            | 10             | 300         |
| P-FU 5X20 LED 24 120KOHM    | 10             | 300         |
| P-FU 5X20 LED 24-5          | 10             | 300         |
| P-FU 5X20 LED 24-5 120 KOHM | 10             | 300         |
| P-FU 5X20 LED 60            | 10             | 300         |
| P-FU 5X20 LED 60-5          | 10             | 300         |
| P-FU 5X20 LA 250            | 10             | 300         |
| P-FU 5X20 LED 250-5         | 10             | 300         |
| FP (5X20)                   | 10             | 300         |
| FP (5X20) 24, 60, 250       | 10             | 300         |

## Nomenclature:

|         |    |    |    |    |    |
|---------|----|----|----|----|----|
| FP/P-FU | X0 | X1 | X2 | X3 | X4 |
| A       | B  | C  | D  | E  | F  |

A : FP/P-FU: Fuse plug

B: with or without suffix X0

5X20: fuse size

|             |         |         |           |                    |
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C: with or without suffix X1  
LED : LED indicator

D: with or without suffix X2: Indicator Rating  
24: 24V LED  
60: 60V LED  
250: 250 V LED

E: with or without suffix X3  
-5 : 5 fuse terminal blocks in interconnected arrangement or fuse  
terminal block with 4 other feed through  
terminal blocks

F: with or without suffix X4  
120 kohm : resistance

With all colour variants are possible and that can be added at any  
position of nomenclature

Note: In nomenclature we can use /,- and space in between every suffix.

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3. Grounding -
- PE - Grounding type
  - 3PE - Three level grounding block.
  - PE/3L - Three levels, bottom level grounding.
  - No Suffix - Non-grounding type
  - PE/L - One feed through current bar for phase, one for ground.
  - PE/N - One feed through current bar for neutral, one for ground.
  - PE/L/L - Three level terminal block, lower level grounding
  - PE/L/N - Three level terminal block, lower level grounding, blue top.
  - PE/L/NT - One phase conductor feed through, one neutral feed to the bus bar, and one grounding connection.
  - PE/NTB - One phase conductor feed through, one neutral feed to the bus bar through a knife switch circuit disconnect, and one grounding connection.
  - PE/LTB - One phase conductor feed through, one feed to the bus bar through a knife switch circuit disconnect, and one grounding connection.
  - PE/3L/1P - Three levels, bottom level grounding for use with one CP2.5 receptacle block.
  - 2PV- with two level equipotential bonder

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only in or with products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability -

1. The mounting suitability shall be determined in the end-use equipment.
2. The spring action pressure wire connectors and screw clamp terminals comply with field wiring requirements in UL 486E Standard for Equipment Wiring Terminals, Third Edition.
3. Cat. Nos. with Suffix -PE comply with Short Time Current requirements in UL 467 Standard for Grounding and Bonding Equipment, Seventh Edition.
4. These terminal blocks have been investigated for copper conductors only.
5. The insulating bodies are molded of Recognized Component polymeric materials (QMFZ2). Identification of these plastic materials by manufacturer's name, Grade designation, maximum operating temperature, and flame rating are specified in the "Section General" pages in this Procedure. The acceptability of these materials shall be judged in the end use application.
6. The suitability of electrical components (LED, neon indicators, resistors), diodes provided for STTB2.5 shall be determined in the end use equipment.
7. The Plug-in contacts for Cat. Nos. SP2.5, SPB2.5, SPV2.5, SC2.5, SPDB21.5 and blade terminals for Cat. Nos. with Suffix /1P, /2P, or 4P are suitable for factory-wiring only. These terminals have not been investigated for current-rupturing (make and break under load).
8. Types ST2.5 with Suffix -MT, STI2.5-PE/NTB and STI2.5-PE/LTB are provided with a knife-switch circuit disconnect feature. The suitability for current rupturing (make and break under load) shall be determined in the end-use equipment.
9. The Cat. No. CP2.5 crimp barrel terminals are to be factory wired only and the suitability of the connection (including spacings between factory connectors) shall be determined in the end use.

\*



10. The Cat. No. CP2.5 socket contacts are intended for use with the manufacturer's Recognized ST2.-4L/..P or ST2.5-PE/3L/1P terminal blocks covered by this report.
11. The assembly of wires to the STG crimp barrel terminals is made using AMP, Inc. crimp tool Part No. 169400 having an 0.5 to 2.5 mm<sup>2</sup> die. The crimp terminals are identified as follows:
- | Part No.         | Wire Range          |
|------------------|---------------------|
| STG-MTN0.5 - 1.0 | No. 20 - 18 cu.str. |
| STG-MTN1.5 - 2.5 | No. 16 - 14 cu.str. |
- Note - The above contacts may be provided in strip form with the Suffix "BAND".
12. The suitability of plug-in accessories used with -TG, -TG-P/P types specified under "Nomenclature" and the connection of these components shall be evaluated in the end-use equipment.
13. The suitability of 5X20 mm miscellaneous fuses used with fuseholder plug-in modules (Suffix -TG, or -TG-P/P) shall be determined in the end use equipment. They are not intended for branch circuit protection. Markings concerning fuse replacement and location should be considered in the end-use products.
14. **The terminal block (Cat. No.: ST 2,5/2P, ST 2,5-QUATTRO/4P, ST 2,5-TWIN/1P, ST 2,5/ 1P, ST 2,5-QUATTRO/2P) spacing requirements were determined based on use in circuits where an alternative spacing investigation is conducted in accordance with ANSI/UL 508, "Industrial Control Equipment," and UL 61800-5-1, "Safety Requirements - Electrical, Thermal and Energy". Terminal blocks were investigated for Pollution Degree 3, and Overvoltage Category [III]. Through-air (clearance) spacings are minimum [3] mm; over-surface (creepage) spacings are minimum [7.1] mm.**