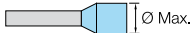




## Material Specifications

|                     |                                  |                  |
|---------------------|----------------------------------|------------------|
| Insulating material |                                  | <b>Polyamide</b> |
| IRC                 |                                  | <b>600 V</b>     |
| Flammability        | UL94                             | <b>V0</b>        |
|                     | NF F 16 101                      | <b>I2F2</b>      |
|                     | Needle flame test IEC 60695-11-5 | <b>Compliant</b> |

## Connecting capacity per clamp

|                                      |   |                              |  |           |
|--------------------------------------|---|------------------------------|--|-----------|
| 1 Rigid conductor                    |   | <b>0.2-4 mm<sup>2</sup></b>  |  | 24-10 AWG |
| 1 Flexible conductor without ferrule |   | <b>0.22-4 mm<sup>2</sup></b> |  | 24-10 AWG |
| 1 Flexible conductor with ferrule    |   | <b>0.22-4 mm<sup>2</sup></b> |  | 24-12 AWG |
| Ferrule maximum outer diameter       |  | <b>5.5 mm</b>                |  | 0.216 in  |

## Multi Connecting capacity per clamp

|   |  |                                |  |           |
|---|--|--------------------------------|--|-----------|
| 2 Rigid conductors                      |  | <b>0.2-1 mm<sup>2</sup></b>    |  | 24-18 AWG |
| 2 Flexible conductors without ferrule   |  | <b>0.22-1 mm<sup>2</sup></b>   |  | 24-18 AWG |
| 2 Flexible conductors with twin ferrule |  | <b>0.22-1.5 mm<sup>2</sup></b> |  | 24-16 AWG |

Don't mix **solid and flexible** conductors **in the same clamp**

Don't mix **solid or flexible** conductors of different sizes **in the same clamp**

The "Connecting capacity with ferrule " data is guaranteed with ABB crimping tool PS-3

## Cross section

|                       |                          |                         |                   |        |
|-----------------------|--------------------------|-------------------------|-------------------|--------|
| Rated cross section   |                          | <b>4 mm<sup>2</sup></b> |                   | 10 AWG |
| Maximum Cross section | <b>Manufacturer data</b> | <b>4 mm<sup>2</sup></b> | Manufacturer data | 10 AWG |

Gauge **A3-B3 / 3 mm / 0.118 in / IEC 60947-7-1**

## Electrical characteristics

### Current

|   |                                |                   |                                 |
|---|--------------------------------|-------------------|---------------------------------|
| Rated current   |                                | IEC 60947-7-1     | <b>20 A</b>                     |
|   | Field and factory wiring Cat.2 | UL 1059           | <b>20 A</b>                     |
|   | Factory wiring Cat.1           | UL 1059           | <b>20 A</b>                     |
|   |                                | CSA-C-22.2 n° 158 |                                 |
| Rated short-time withstand current 1 s (I <sub>cw</sub> )                       |                                |                   | <b>480 A</b>                    |
| Short-time withstand current  | 0.5 s                          | Manufacturer data |                                 |
|   | 5 s                            | Manufacturer data |                                 |
|   | 10 s                           | Manufacturer data |                                 |
|   | 30 s                           | Manufacturer data |                                 |
|   | 1 mn                           | Manufacturer data |                                 |
| Rated short circuit withstand   |                                | CSA-C-22.2 n° 158 |                                 |
| Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> ) |                                | Manufacturer data | <b>20 A    4 mm<sup>2</sup></b> |
| Maximum short circuit current (1s)  |                                | Manufacturer data | <b>480 A</b>                    |

## Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR UL 1059

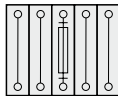
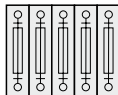
With the following configurations:

|                               |  |
|-------------------------------|--|
| Maximum voltage               |  |
| Suitable conductor wire range |  |
| Fuse rating                   |  |
| Fuse designation              |  |
| Fuse manufacturer name        |  |
| Fuse type                     |  |
| Short circuit current         |  |

| Voltage                         |                   |               |
|---------------------------------|-------------------|---------------|
| Rated voltage                   | IEC 60947-1       | <b>400 V</b>  |
| Rated voltage                   | UL 1059           | <b>150 V</b>  |
| Use Group                       | UL 1059           | <b>C</b>      |
| Rated voltage                   | CSA-C-22.2 n° 158 | <b>150 V</b>  |
| Rated voltage Ex e              | IEC/EN 60079-11   |               |
| Rated impulse withstand voltage |                   | <b>6000 V</b> |
| Dielectric test voltage         |                   | <b>1890 V</b> |
| Pollution degree                | IEC 60947-1       | <b>3</b>      |
| Overvoltage category            | IEC 60947-1       | <b>III</b>    |

| Dissipated power                          |     |              |
|---|-----|--------------|
| Maximum dissipated power at rated current | IEC | <b>0.6 W</b> |

### Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

|   |  |  |
|---|--|--|
| Overload and short-circuit protection<br>Separate arrangement |  |  |
| Exclusive short-circuit protection<br>Separate arrangement    | 1 fuse and 4 feed-through blocks   |  |
| Overload and short-circuit protection<br>Compound arrangement |  |  |
| Exclusive short-circuit protection<br>Compound arrangement    | 5 fuse blocks  |  |

| Temperature range           |            |                             |                                  |
|-----------------------------|------------|-----------------------------|----------------------------------|
| Ambient temperature min/max | Storage    | <b>-55 +110 °C</b>          | -67 +230 F                       |
|                             | Installing | <b>-5 +40 °C</b>            | -23 +104 F                       |
|                             | Service    | IEC 60068-2-1<br>EN 60079-7 | <b>-55 +110 °C</b><br>-67 +230 F |

Current Derating curve for continuous service temperature

## Environmental Characteristics

### Additional climatic tests

|                          |            |   |                  |               |
|--------------------------|------------|---|------------------|---------------|
| Dry heat                 | Conditions | IEC 60068-2-2                                   | <b>Compliant</b> |               |
|                          |            | Temperature                                     | <b>+100 °C</b>   |               |
|                          |            | Duration of test                                | <b>96 h</b>      |               |
| Cyclic damp heat         | Conditions | IEC 60068-2-30                                  | <b>Compliant</b> |               |
|                          |            | Temperature                                     | <b>+55 °C</b>    |               |
|                          |            | Number of cycles                                | <b>2</b>         |               |
| Cold                     | Conditions | IEC 60068-2-1                                   | <b>Compliant</b> |               |
|                          |            | Temperature                                     | <b>-40 °C</b>    |               |
|                          |            | Duration of test                                | <b>96 h</b>      |               |
| Z/ABDM climatic sequence | Conditions | IEC 60068-2-61                                  | <b>Compliant</b> |               |
|                          |            | Dry heat Duration of test / Temperature         | <b>16 h</b>      | <b>+85 °C</b> |
|                          |            | Cyclic damp heat Number of cycles / Temperature | <b>1</b>         | <b>+55 °C</b> |
|                          |            | Cold Duration of test / Temperature             | <b>2 h</b>       | <b>-25 °C</b> |
|                          |            |   |                  |               |

### Corrosion

|                                  |            |                           |                           |  |
|----------------------------------|------------|---------------------------|---------------------------|--|
| Salt mist                        | Conditions | IEC 60068-2-11            | <b>Compliant</b>          |  |
|                                  |            | Duration of test          | <b>96 h</b>               |  |
|                                  |            | Concentration             | <b>5 %</b>                |  |
| SO <sub>2</sub>                  | Conditions | ISO 6988                  | <b>Compliant</b>          |  |
|                                  |            | Duration of test          | <b>48 h</b>               |  |
|                                  |            | Concentration             | <b>0.2 dm<sup>3</sup></b> |  |
| Sulfur dioxide                   | Conditions | IEC 60068-2-42            |                           |  |
|                                  |            | Duration of test          |                           |  |
| Hydrogen sulfur                  | Conditions | IEC 60068-2-43            |                           |  |
|                                  |            | Duration of test          |                           |  |
| Flowing mixed gas corrosion test | Conditions | IEC 60068-2-60            |                           |  |
|                                  |            | Number of the test method |                           |  |
|                                  |            | Duration of test          |                           |  |

### Vibrations

|   |  |                  |                           |  |
|---|--|------------------|---------------------------|--|
| Vibrations                              | Conditions                               | IEC 60068-2-6    | <b>Compliant</b>          |  |
|   |  | Frequency range  | <b>10-55 Hz</b>           |  |
|   |  | Number of cycles | <b>10</b>                 |  |
|   |  | Amplitude        |                           |  |
|   |  | Acceleration     | <b>10 m/s<sup>2</sup></b> |  |
| Random vibrations and climatic sequence | Conditions                               | IEC 60068-2-64   |                           |  |
|   |  | Duration of test |                           |  |
|   |  | Frequency range  |                           |  |
|   |  | Acceleration     |                           |  |
|   | Climatic cycles                          |                  |                           |  |
|   | Step 1 -> Temperature / Duration of test |                  |                           |  |
|   | Step 2 -> Temperature / Duration of test |                  |                           |  |
|   | Temperature variation per minute         |                  |                           |  |

**ZS4-SP-T2-R1 Terminal Block Accessories Compatibility**

| Description                      | Type           | Order Code                | Pack <sup>(ing)</sup><br>pieces | Weight<br>g (1 pce) | Technical Datasheet<br>PDF |
|----------------------------------|----------------|---------------------------|---------------------------------|---------------------|----------------------------|
| <b>1</b> End Stops               | <b>BAM3</b>    | <b>1SNK 900 001 R0000</b> | 50                              | 13.80               | <b>1SNK 160 026 D0201</b>  |
| <b>2</b> Jumper Bars             | <b>JB6-2</b>   | <b>1SNK 906 302 R0000</b> | 50                              | 1.30                | <b>1SNK 160 029 D0201</b>  |
|                                  | <b>JB6-3</b>   | <b>1SNK 906 303 R0000</b> | 50                              | 2.10                | <b>1SNK 160 029 D0201</b>  |
|                                  | <b>JB6-4</b>   | <b>1SNK 906 304 R0000</b> | 50                              | 2.90                | <b>1SNK 160 029 D0201</b>  |
|                                  | <b>JB6-5</b>   | <b>1SNK 906 305 R0000</b> | 50                              | 3.60                | <b>1SNK 160 029 D0201</b>  |
|                                  | <b>JB6-10</b>  | <b>1SNK 906 310 R0000</b> | 20                              | 7.40                | <b>1SNK 160 029 D0201</b>  |
| <b>3</b> Test Adapters           | <b>TP2</b>     | <b>1SNK 900 203 R0000</b> | 20                              | 1.73                | <b>1SNK 160 036 D0201</b>  |
|                                  | <b>TP4</b>     | <b>1SNK 900 205 R0000</b> | 20                              | 2.42                | <b>1SNK 160 036 D0201</b>  |
| <b>4</b> Test Connectors         | <b>TC5-R1</b>  | <b>1SNK 900 201 R0000</b> | 10                              | 5.23                | <b>1SNK 160 042 D0201</b>  |
| <b>5</b> Spacers                 | <b>ES-TC6</b>  | <b>1SNK 900 105 R0000</b> | 10                              | 0.80                | <b>1SNK 160 042 D0201</b>  |
| <b>6</b> Component Plugs         | <b>PG5</b>     | <b>1SNK 900 401 R0000</b> | 20                              | 3.45                | <b>1SNK 160 038 D0201</b>  |
| <b>7</b> Disconnect Plugs        | <b>PG5-R1</b>  | <b>1SNK 900 402 R0000</b> | 20                              | 3.45                | <b>1SNK 160 037 D0201</b>  |
| <b>8</b> Test Plugs              | <b>FC2.MC</b>  | <b>1SNA 107 239 R0300</b> | 10                              | 1.00                | <b>1SNK 160 036 D0201</b>  |
| <b>9</b> Tools                   | <b>PS-3</b>    | <b>1SNK 900 650 R0000</b> | 1                               | 380.00              | <b>1SNK 160 024 D0201</b>  |
| <b>10</b> Terminal Block Markers | <b>MC612</b>   | <b>1SNK 150 000 R0000</b> | 22                              | 0.06                | <b>1SNK 160 006 D0201</b>  |
|                                  | <b>PROCAP6</b> | <b>1SNK 900 612 R0000</b> | 20                              | 0.79                | <b>1SNK 160 013 D0201</b>  |
|                                  | <b>UMH</b>     | <b>1SNK 900 611 R0000</b> | 10                              | 0.20                | <b>1SNK 160 001 D0201</b>  |
|                                  | <b>SAT6</b>    | <b>1SNK 900 615 R0000</b> | 5                               | 6.00                | <b>1SNK 160 013 D0201</b>  |