



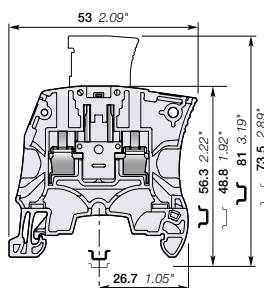
## ZS4-SP Screw Clamp Terminal Block Disconnect



**4 mm<sup>2</sup>**  
10 AWG

**5.2 mm 0.205 in Spacing**

## Features and Benefits



- Save time with our screwless component holder plug,
- Same profile as ZS4 feed-through terminal block for aligned marking and identical end section use.

3D CAD outline drawings available on "Control Product 3D" portal

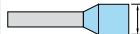
| Ordering Details | Type                                                                                            | Order Code                | EAN Code             | Pack <sup>(ing)</sup> | Weight g (1 pce) |
|------------------|-------------------------------------------------------------------------------------------------|---------------------------|----------------------|-----------------------|------------------|
| Grey             |  <b>ZS4-SP</b> | <b>1SNK 505 313 R0000</b> | <b>3472595053131</b> | <b>50</b>             | <b>8.20</b>      |

[illegible]

## General Information

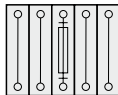
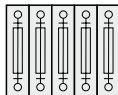
The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

|                                              |                                                                                     |                    |                             |                                       |               |  |  |
|----------------------------------------------|-------------------------------------------------------------------------------------|--------------------|-----------------------------|---------------------------------------|---------------|--|--|
| Protection                                   |                                                                                     | IP 20              | NEMA 1                      |                                       |               |  |  |
| Rail                                         |  | DIN3-TH35          |                             |                                       |               |  |  |
| Wire stripping length                        |  | 10.5 mm            | 0.413 in                    |                                       |               |  |  |
|                                              |                                                                                     | Screw clamp        |                             | Screw rail contact<br>(Maximum value) |               |  |  |
| Operating tool                               |                                                                                     | Flat screwdriver   |                             |                                       |               |  |  |
|                                              |  | 3.5 mm             | 0.138 in                    |                                       |               |  |  |
| Torque                                       |  | 0.6 Nm<br>± 0.1 Nm | 5.31 lb.in<br>± 0.885 lb.in | ± 0.1 Nm                              | ± 0.885 lb.in |  |  |
| Mechanical endurance<br>of disconnect system |                                                                                     |                    |                             |                                       |               |  |  |

| Material Specifications                                                                   |                                                                                   |                          |                                  |                   |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|----------------------------------|-------------------|
| Insulating material                                                                       |                                                                                   |                          | Polyamide                        |                   |
| IRC                                                                                       |                                                                                   |                          | 600 V                            |                   |
| Flammability                                                                              |                                                                                   |                          | UL94                             | V0                |
|                                                                                           |                                                                                   |                          | NF F 16 101                      | I2F2              |
|                                                                                           |                                                                                   |                          | Needle flame test IEC 60695-11-5 |                   |
| Connecting capacity per clamp                                                             |                                                                                   |                          |                                  |                   |
| 1 Rigid conductor                                                                         |                                                                                   | 0.2-4 mm <sup>2</sup>    |                                  | 24-10 AWG         |
| 1 Flexible conductor without ferrule                                                      |                                                                                   | 0.22-4 mm <sup>2</sup>   |                                  | 24-10 AWG         |
| 1 Flexible conductor with ferrule                                                         |                                                                                   | 0.22-4 mm <sup>2</sup>   |                                  | 24-12 AWG         |
| Ferrule maximum outer diameter                                                            |  | 4.7 mm                   | 0.185 in                         |                   |
| Multi Connecting capacity per clamp                                                       |                                                                                   |                          |                                  |                   |
| 2 Rigid conductors                                                                        |                                                                                   | 0.2-1 mm <sup>2</sup>    |                                  | 24-18 AWG         |
| 2 Flexible conductors without ferrule                                                     |                                                                                   | 0.22-1 mm <sup>2</sup>   |                                  | 24-18 AWG         |
| 2 Flexible conductors with twin ferrule                                                   |                                                                                   | 0.22-1.5 mm <sup>2</sup> |                                  | 24-16 AWG         |
| Don't mix <b>solid and flexible</b> conductors <b>in the same clamp</b>                   |                                                                                   |                          |                                  |                   |
| Don't mix <b>solid or flexible</b> conductors of different sizes <b>in the same clamp</b> |                                                                                   |                          |                                  |                   |
| The "Connecting capacity with ferrule " data is guaranteed with ABB crimping tool PS-3    |                                                                                   |                          |                                  |                   |
| Cross section                                                                             |                                                                                   |                          |                                  |                   |
| Rated cross section                                                                       |                                                                                   | 4 mm <sup>2</sup>        |                                  | 10 AWG            |
| Maximum Cross section                                                                     | Manufacturer data                                                                 | 4 mm <sup>2</sup>        | Manufacturer data                | 10 AWG            |
| Gauge <b>A3-B3 / 3 mm / 0.118 in / IEC 60947-7-1</b>                                      |                                                                                   |                          |                                  |                   |
| Electrical characteristics                                                                |                                                                                   |                          |                                  |                   |
| Current                                                                                   |                                                                                   |                          |                                  |                   |
| Rated current                                                                             | IEC 60947-7-1                                                                     |                          | 20 A                             |                   |
|                                                                                           | Field and factory wiring Cat.2                                                    |                          | UL 1059                          |                   |
|                                                                                           | Factory wiring Cat.1                                                              |                          | UL 1059                          |                   |
|                                                                                           |                                                                                   |                          | CSA-C-22.2 n° 158                |                   |
| Rated short-time withstand current 1 s (I <sub>cw</sub> )                                 |                                                                                   |                          | 480 A                            |                   |
| 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        | 20 A                             | 4 mm <sup>2</sup> |
| Maximum short circuit current (1s)                                                        |                                                                                   | Manufacturer data        | 480 A                            |                   |
| 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              | <br>1 fuse and 4 feed-through blocks |  |
| Exclusive short-circuit protection<br>Separate arrangement                 |                                                                                                                        |  |
| Overload and short-circuit protection<br>Compound arrangement              | <br>5 fuse blocks                    |  |
| Exclusive short-circuit protection<br>Compound arrangement                 |                                                                                                                        |  |

| 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><b>-55 +110 °C</b> | -67 +230 F |
|                             |            | EN 60079-7                          |            |

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 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> End Sections            | <b>ES4</b>     | <b>1SNK 505 910 R0000</b> | 20                              | 2.18                | <b>1SNK 160 022 D0201</b>  |
| <b>3</b> Circuit Separators      | <b>CS-R1</b>   | <b>1SNK 900 103 R0000</b> | 20                              | 5.20                | <b>1SNK 160 018 D0201</b>  |
| <b>4</b> Component Plugs         | <b>PG5</b>     | <b>1SNK 900 401 R0000</b> | 20                              | 3.45                | <b>1SNK 160 038 D0201</b>  |
| <b>5</b> Disconnect Plugs        | <b>PG5-R1</b>  | <b>1SNK 900 402 R0000</b> | 20                              | 3.45                | <b>1SNK 160 037 D0201</b>  |
| <b>6</b> Shield Connectors       | <b>SHBS</b>    | <b>1SNK 900 600 R0000</b> | 20                              | 3.50                | <b>1SNK 160 025 D0201</b>  |
| <b>7</b> Protecting Covers       | <b>CO</b>      | <b>1SNK 900 604 R0000</b> | 1                               | 300.00              | <b>1SNK 160 020 D0201</b>  |
|                                  | <b>PL5</b>     | <b>1SNK 900 618 R0000</b> | 20                              | 1.50                | <b>1SNK 160 021 D0201</b>  |
| <b>8</b> Protecting Cover Kits   | <b>KCO</b>     | <b>1SNK 900 624 R0000</b> | 1                               | 47,8                | <b>1SNK 160 028 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>MC512</b>   | <b>1SNK 140 000 R0000</b> | 22                              | 0.06                | <b>1SNK 160 003 D0201</b>  |
|                                  | <b>PROCAP5</b> | <b>1SNK 900 609 R0000</b> | 20                              | 0.70                | <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>SAT5</b>    | <b>1SNK 900 614 R0000</b> | 5                               | 6.00                | <b>1SNK 160 013 D0201</b>  |