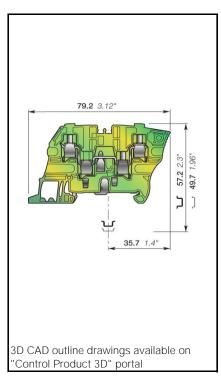
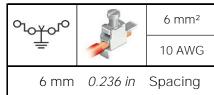
Technical Datasheet 1SNK161067D0201 Catalogue Page 1SNK161081S0201

# ZS6-4S-PE Screw Clamp Terminal Blocks Ground with 4 connections

- Improve the safety of your installation in the event of a short-circuit thanks to our screwless rail contact: rail contact non operator dependent, secured snap on or off the rail,
- Same profile as ZS6-4S for aligned marking and identical end section.







**Ordering Details** 

| Color        | Type      | Order Code      | EAN Code      | Pack <sup>(ing)</sup> | Weight    |
|--------------|-----------|-----------------|---------------|-----------------------|-----------|
|              |           |                 |               |                       | (1 pce) g |
| Green-yellow | ZS6-4S-PE | 1SNK506152R0000 | 3472595061525 | 25                    | 19.4      |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |
|              |           |                 |               |                       |           |

#### **Declarations and Certificates**

| <b>C</b> € | CB | RoHS<br>RoHS | <b>SU</b><br>USR | 40 | Gost R           | <b>€x</b><br>ATEX | IECEx<br>IECEx |  |
|------------|----|--------------|------------------|----|------------------|-------------------|----------------|--|
|            |    | (O)<br>BV    |                  |    | ATEX Declaration |                   |                |  |



| <b>Declarations and Ce</b>     |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
|--------------------------------|-------------------|------------------|------------------------|----------------|----------------------------------|------------------|--------|------------------|-------------|--------------|---|
| CE<br>CE                       | CE                |                  |                        |                | 1SND225094C10*                   |                  |        |                  |             |              |   |
| CB<br>RoHS                     | СВ                |                  |                        |                | 1SND161098A02*<br>1SND230491F02* |                  |        |                  |             |              |   |
| RoHS                           | RoHs<br>USR       |                  |                        |                |                                  |                  |        | )23049<br>)16104 |             |              |   |
| USR                            | USK               |                  |                        |                |                                  |                  | ISINL  | 710104           | TAU2        |              |   |
| <b>®</b>                       | CSA               |                  |                        |                |                                  |                  | 1SNE   | 016107           | 0A02*       |              |   |
| Gost R                         | GOST              | R                |                        |                |                                  |                  |        | 016100           |             |              | - |
| €x<br>ATEX                     | ATEX              |                  |                        |                |                                  |                  |        | 016200           |             |              |   |
| IECEx<br>IECEx                 | IECEx             |                  |                        |                |                                  |                  | 1SNE   | 016200           | 5A17*       |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
| ©<br>BV                        | BV                |                  |                        |                |                                  |                  | 1SNIF  | 016107           | 3ΔΩ2*       |              |   |
| BV                             | DV                |                  |                        |                |                                  |                  | IJINL  | 210107           | J/102       |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
| Atex Declaration               | n Atex D          | eclaration       |                        |                |                                  |                  | ISNL   | )22508           | 5C10*       |              |   |
| Explosive Atmos                | nhere ATF)        | ( Classific      | ration                 |                |                                  |                  |        |                  |             |              |   |
| Group Category                 | ρησιοι σ. / (1 L/ | Classific        | Sation                 |                | Protectio                        | n Method         |        |                  |             |              |   |
| IM2 II 2 GD Ex eb I/II/        | IIIC              |                  |                        |                |                                  | reased security  | \/     |                  |             |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
| In the presence of exp         | olosive dust atm  | osphere, ter     | minal blocks are       | to be          | installed                        | in certified end | losure | e II 2D          |             |              |   |
| General Information            |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
| The following information must |                   | d to in order to | guarantee the term     | ninal bl       | ock electric                     | al mechanical a  | nd env | ironmenta        | l nerforman |              |   |
| Protection                     | IEC 60947-1       |                  | NEMA250                |                | OCK CICCUIC                      |                  |        | II OTIITICITE    | Periorman   |              |   |
| Rail                           |                   | TH 35-7.5,       |                        |                |                                  |                  |        |                  |             |              |   |
|                                |                   | TH 35-15         |                        |                |                                  |                  |        |                  |             |              |   |
| Wire stripping length          |                   | 10.5 mm          | 0.413 in               |                |                                  |                  |        |                  |             |              |   |
|                                |                   | Coroux olon      | 20                     | Core           | ew rail cor                      | ato ot           | Dicc   | onnect d         | ouloo       |              |   |
|                                |                   | Screw clan       | ıρ                     |                | ximum val                        |                  | DISC   | onnecta          | evice       |              |   |
| Operating tool                 |                   | Flat screwo      | driver                 | ,              |                                  | ,                |        |                  |             |              |   |
|                                |                   | 4 mm             | 0.157 in               |                |                                  |                  |        |                  |             |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
| Torque                         |                   | 0.75 N.m         | 6.64 lb.in             |                |                                  |                  |        |                  |             |              |   |
|                                |                   | ± 0.05 N.m       | ± 0.44 lb.in           |                |                                  |                  |        |                  |             |              |   |
| Material Specificatio          | one               |                  |                        |                |                                  |                  |        |                  |             |              |   |
| nsulating material             | 2113              |                  |                        |                |                                  |                  |        | Polyami          | de          |              |   |
| CTI                            |                   |                  |                        |                |                                  |                  |        | 600 V            |             |              |   |
| Flammability                   |                   |                  |                        |                |                                  |                  | UL94   | VO               |             |              |   |
|                                |                   |                  |                        |                |                                  | NF F 1           | 6101   | I2F2             |             |              |   |
|                                |                   |                  |                        |                |                                  |                  |        |                  |             |              |   |
|                                |                   |                  |                        | Ne             | edle flame                       | e test C 60615   | -11-5  | Complia          | nt          |              |   |
| Connecting capacity            | uner clamn        | _                |                        | Scrov          | , clamp                          |                  |        |                  |             |              |   |
|                                |                   | Norme            | IEC60947-7-2           |                | r clamp<br>ι                     | JL1059           |        |                  |             | Τ            |   |
| 1 Rigid - Solid / Stranded of  | conductor —       | Value            | 0.2 6 mm <sup>2</sup>  |                | 1                                | 10 AWG           |        |                  |             | +            |   |
| 1 Flavilala a series 1         |                   | Norme            | IEC60947-7-2           |                |                                  |                  |        |                  |             | +            |   |
| 1 Flexible conductor           |                   | Value            | 0.22 6 mm <sup>2</sup> | 2              |                                  |                  |        |                  |             |              |   |
| Flexible conductor with r      | non               | Norme            | Manufacturer d         |                |                                  | acturer data     |        |                  |             |              |   |
| nsulated ferrule               |                   | Value            | 0.22 4 mm              |                | 1                                | 12 AWG           |        |                  |             |              |   |
| Flexible conductor with in     | nsulated          | Norme            | Manufacturer d         |                |                                  | acturer data     |        |                  |             | <del> </del> |   |
| errule                         |                   | Value            | 0.22 4 mm<br>A4-B3     | l <sup>2</sup> |                                  | 12 AWG<br>3 mm   |        |                  |             | +            |   |
| Gauge                          |                   |                  | IEC 60947-1            |                |                                  | וווווו           |        |                  |             | -            |   |
| Ferrule maximum outer dia      | ameter or condu   | ctor             |                        |                |                                  | . ,              |        |                  |             |              |   |
| insulation maximum outer       |                   |                  | 0                      | Max.           | Manuf                            | acturer data     |        | 5.5 m            | ım          |              |   |

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3 (crimping capacity up to 10 mm²).

As part of its on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not contractual. For further details please contact the ABB company marketing these products in your country.

Multi Connecting capacity per clamp

| 2 Rigid - Solid / Stranded      | Norme |  |  |
|---------------------------------|-------|--|--|
| conductors                      | Value |  |  |
| 2 Flexible conductors           | Norme |  |  |
| 2 Flexible colludations         | Value |  |  |
| 2 Flexible conductors with twin | Norme |  |  |
| ferrule                         | Value |  |  |

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 (crimping capacity up to 10 mm²)

#### Cross section

| Rated cross section   | IEC60947-7-2      | 4 mm²             | UL1059            | 10 AWG |
|-----------------------|-------------------|-------------------|-------------------|--------|
| Maximum Cross section | Manufacturer data | 6 mm <sup>2</sup> | Manufacturer data | 10 AWG |

#### Electrical characteristics Current

| Rated current                                 |                                |       | IEC60947-7-2      |       |                   |
|---|--------------------------------|-------|-------------------|-------|-------------------|
|   | Field and factory wiring Cat.2 |       | UL 1059           |       |                   |
|   | Factory wiring Cat.1           |       | UL 1059           |       |                   |
|   |                                |       | CSA-C-22.2 n°158  |       |                   |
| Maximum Exe current                           |                                |       | IEC/EN 60079-7    |       |                   |
| Rated short-time withstand current 1 s (Icw)  |                                |       | IEC60947-7-2      | 480 A |                   |
| Short-time withstand current                  |                                | 0.5 s | Manufacturer data |       |                   |
|   |                                | 5 s   | Manufacturer data |       |                   |
|   |                                | 10 s  | Manufacturer data |       |                   |
|   |                                | 30 s  | Manufacturer data |       |                   |
|   |                                | 1 min | Manufacturer data |       |                   |
| Rated short-circuit withstand current         |                                |       | CSA-C-22.2 n°158  |       |                   |
| Max. current (45° temperature increase) / Max | cross section (mm²)            |       | Manufacturer data |       | 6 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 | 100 kA |
|------------------------------------|-------------------------------|---------|--------|
| With the following configurations: |                               |         |        |
|                                    | Suitable conductor wire range |         |        |
|                                    | Maximum voltage               |         |        |
|                                    | Fuse class / Max. amp. Rating | J       |        |
|                                    |                               | Т       |        |
|                                    |                               | RK1     |        |
|                                    |                               | RK5     |        |
|                                    |                               | G       |        |
|                                    |                               | CC      |        |

#### Voltage

| IEC 60947-1      |  |
|------------------|--|
| UL 1059          |  |
| UL 1059          | B, C   |
| CSA-C-22.2 n°158 |  |
| IEC/ EN 60079-7  | 500 V  |
| IEC 60947-1      | 8000 V   |
| IEC 60947-1      | 2000 V   |
| IEC 60947-1      | 3  |
| IEC 60947-1      | III  |
|                  | IEC 60947-1  UL 1059  UL 1059  CSA-C-22.2 n°158  IEC/ EN 60079-7  IEC 60947-1  IEC 60947-1  IEC 60947-1  IEC 60947-1 |

3

Temperature range

| Ambient temperature min/max | Storage    | -55 +110 °C | -67 +230 °F |
|-----------------------------|------------|-------------|-------------|
|                             | Installing | -5 +40 °C   | -23 +104 °F |
|                             | Service    | -55 +110 °C | -67 +230 °F |
|                             |            |             |             |

# Dissipated power

| Maximum dissipated power at rated current                       |   | IEC 60947 | 7-1 |
|---|---|-----------|-----|
| Maximum dissipated power at maximum Exe current                 | IEC 60079   | 9-7       |     |
| Rated power dissipation at an ambient tel                       | mperature of 23 °C - IEC 60947-   | 7-3       |     |
| Separate arrangement / Overload and short-circuit protection    |   |           |     |
| Separate arrangement / Exclusive short-circuit protection       | [ ]   [ ] | ks        |     |
| Compound arrangement /<br>Overload and short-circuit protection |   |           |     |
| Compound arrangement / Exclusive short-circuit protection       | [ <u>\$ \$ \$ \$ </u> \$]<br>5 fuse blocks  |           |     |

#### **Environmental Characteristics** Additional climatic tests

| Dry heat               |            | IEC 60068-2 2 Compliant            |
|------------------------|------------|------------------------------------|
|                        | Conditions | Temperature 110 °C                 |
|                        |            | Duration of test 96 h              |
| Cyclic damp heat       |            | IEC 60068-2 30 Compliant           |
|                        | Conditions | Temperature 55 °C                  |
|                        |            | Relative humidity 95 %             |
|                        |            | Number of cycles (1 cycle = 24h) 2 |
| Cold                   |            | IEC 60068-2 1 Compliant            |
|                        | Conditions | Temperature -55 °C                 |
|                        |            | Duration of test 96 h              |
| Damp heat steady state |            | IEC 60068-2-78 Compliant           |
|                        | Conditions | Temperature 40 °C                  |
|                        |            | Relative humidity 93 %             |
|                        |            | Duration of test 96 h              |

#### Corrosion

| Salt mist                        |            | IEC 60068-2 11 Complian           |
|----------------------------------|------------|-----------------------------------|
|                                  | Conditions | Duration of test 96 h             |
|                                  |            | Concentration 5 %                 |
| SO2                              |            | ISO 6988 Complian                 |
|                                  | Conditions | Duration of test 48 h             |
|                                  |            | Concentration 0.2 dm <sup>3</sup> |
| Flowing mixed gas corrosion test |            | IEC 60068-2 60 Complian           |
|                                  | Conditions | Number of the test method 3       |
|                                  |            | Duration of test 21 j             |

As part of its on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not contractual. For further details please contact the ABB company marketing these products in your country.

#### Vibrations and shocks

| Sinusoidal vibrations                            |            | IEC 60068-2-6 Compliant         |
|--|------------|---------------------------------|
|  | Conditions | Frequency range 5 100 Hz        |
|  |            | Number of cycles 1              |
|  |            | Acceleration 7 m/s <sup>2</sup> |
| Functional random vibrations                     |            | IEC 61373                       |
| Category 1 Class B 3 axes                        | Conditions | Duration of test                |
|  |            | Frequency range                 |
|  |            | Acceleration                    |
| Long life testing at increased random vibrations |            | IEC 61373                       |
| Category 1 Class B 3 axes                        | Conditions | Duration of test                |
|  | •          | Frequency range                 |
|  | •          | Acceleration                    |
| Shock  |            | IEC 61373                       |
| Category 1 Class B 3 axes                        | Conditions | Duration of test                |
|  |            | Acceleration                    |

#### ZS6-4S-PE Terminal Block Accessories Compatibility

| Some accessories may    | , modify | the terminal block's rating   | See complete information in the accessories catalog page. |  |
|-------------------------|----------|-------------------------------|---|--|
| JUITIC accessories iria | mouni    | y the terminal block 3 rating | occ complete information in the accessories catalog page. |  |

| Description               | Type     | Order Code        | Pack <sup>(ing)</sup> | Weight    | Weight |  |
|---------------------------|----------|-------------------|-----------------------|-----------|--------|--|
|                           |          |                   | pieces                | g (1 pce) |        |  |
| 1 End Stops               | BAM3     | 1SNK900001R0000   | 50                    | 13.80     |        |  |
|                           | BAZ1     | 1SNK900002R0000   | 20                    | 5.30      |        |  |
| 2 End Sections            | ES6-4S   | 1SNK505911R0000   | 20                    | 3.1       |        |  |
| 3 Jumper Bars             | JB6-2    | 1SNK906302R0000   | 50                    | 1.30      |        |  |
|                           | JB6-3    | 1SNK906303R0000   | 50                    | 2.10      |        |  |
|                           | JB6-4    | 1SNK906304R0000   | 50                    | 2.90      |        |  |
|                           | JB6-5    | 1SNK906305R0000   | 50                    | 3.60      |        |  |
|                           | JB6-10   | 1SNK906310R0000   | 20                    | 7.40      |        |  |
|                           | JB6-50   | 1SNK906350R0000   | 10                    | 38.10     |        |  |
| 4 Circuit Separators      | CS       | 1SNK900101R0000   | 20                    | 0.20      |        |  |
|                           | CS-R1    | 1SNK900103R0000   | 20                    | 5.20      |        |  |
| 5 Test Adapters           | TP2      | 1SNK900203R0000   | 20                    | 1.73      |        |  |
|                           | TP4      | 1SNK900205R0000   | 20                    | 2.41      |        |  |
| 5 Test Connectors         | TC5-R1   | 1SNK900201R0000   | 10                    | 5.23      |        |  |
| 7 Spacers                 | ES-TC6   | 1SNK900105R0000   | 10                    | 0.80      |        |  |
| 8 Mounting Rails          | PR3.G2   | 1SNA164800R0300   | 2                     |           |        |  |
| 3                         | PR4      | 1SNA168500R1200   | 2                     | 915.00    |        |  |
|                           | PR5      | 1SNA168700R2200   | 2                     |           |        |  |
|                           | PR30     | 1SNA173220R0500   | 2                     | 328.00    |        |  |
|                           | PR3.Z2   | 1SNA174300R1700   | 2                     |           |        |  |
|                           | PR50     | 1SNA178529R0400   | 2                     | 1 288.00  |        |  |
| 9 Tools                   | PS-3     | 1SNK900650R0000   | 1                     | 380.00    |        |  |
| 0 Terminal Block Markers  | MC512    | 1SNK140000R0000   | 22                    | 9.00      |        |  |
| TO TEITHING BIOCK WAIKERS | MC512-YL | 1SNK140004R0000   | 22                    | 9.00      |        |  |
|                           | MC512PA  | 1SNK149999R0000   | 20                    | 10.00     |        |  |
|                           | MC612    | 1SNK150000R0000   | 22                    | 10.00     |        |  |
|                           | MC612-YL | 1SNK150004R0000   | 22                    | 10.00     |        |  |
|                           | MC612PA  | 1SNK159999R0000   | 20                    | 11.00     |        |  |
|                           | UMH      | 1SNK900611R0000   | 10                    | 0.20      |        |  |
|                           | PROCAP6  | 1SNK900612R0000   | 20                    | 0.78      |        |  |
|                           | SAT6     | 1SNK900615R0000   | 5                     | 6.00      |        |  |
|                           | SAT      | 1SNK900623R0000   | 5                     | 6.00      |        |  |
|                           | JAT      | 13111700023110000 | 3                     | 0.00      |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |
|                           |          |                   |                       |           |        |  |

As part of its on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not contractual. For further details please contact the ABB company marketing these products in your country.

5

# 1SNK161073D0201 - PDF

### Contact us

ABB France Low Voltage Products Division Export Department 10, rue Ampère Z.I. - B.P. 114 F-69685 Chassieu cedex / France Tel. +33 (0)4 7222 1722 Fax +33 (0)4 7222 1935

#### Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

Copyright© 2011 ABB All rights reserved

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for entrelec manufacturer:

Other Similar products are found below:

<u>023103024 023000107 ISNK505310R0000 017322627 011762822 016511417 016340320 ISNK516020R0000 023300421</u> <u>1SNK510010R0000 018731214 011870703 010500220 011511607 023300227 016049626 017666704 ISNK508411R0000 023300320</u> 016548827 023300001 012511813 017301610 011546820 010500127