



# ZS4-SP Screw Clamp Terminal Block

Disconnect

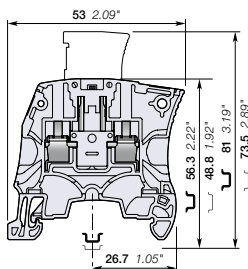


4 mm<sup>2</sup>

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>(fing)</sup>	Weight g (1 pce)
Grey	<input type="checkbox"/> ZS4-SP	1SNK 505 313 R0000	3472595053131	50	8.20

Declarations and Certificates	Document Part Number
CE CE	UE Directive 1SND 225 099 C1001
RoHS RoHS	RoHS 1SND 230 491 F0203

## General Information

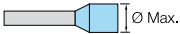
The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

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

## Material Specifications

Insulating material		<b>Polyamide</b>
IRC		<b>600 V</b>
Flammability	UL94	<b>V0</b>
	<b>NF F 16 101</b>	<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>4.7 mm</b>		0.185 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	<b>A3-B3 / 3 mm / 0.118 in / IEC 60947-7-1</b>			

## 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

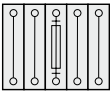
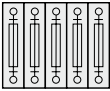
With the following configurations:

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

<b>Voltage</b>			
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>

<b>Dissipated power</b>			
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 Separate arrangement		
Exclusive short-circuit protection Separate arrangement	1 fuse and 4 feed-through blocks	
Overload and short-circuit protection Compound arrangement		
Exclusive short-circuit protection Compound arrangement	5 fuse blocks	

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

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		
Hydrogen sulfur	Conditions	IEC 60068-2-43		
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> pieces	Weight g (1 pce)	Technical Datasheet 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>