



**ZS6 Screw Clamp Terminal Block**  
**Feed-through**

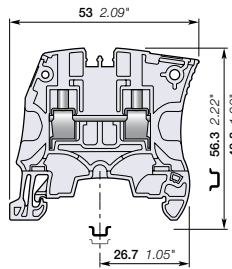


**6 mm<sup>2</sup>**  
**10 AWG**

6 mm *0.236 in* Spacing

**Features and Benefits**

Save space by connecting conductors up to 6 mm<sup>2</sup> 10 AWG in just 6 mm *0.236 in* spacing.



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	<input type="checkbox"/> ZS6	1SNK 506 010 R0000	3472595060108	50	10.64
Blue	<input type="checkbox"/> ZS6-BL	1SNK 506 020 R0000	3472595060207	50	10.64
Orange	<input type="checkbox"/> ZS6-OR	1SNK 506 030 R0000	3472595060306	50	10.64
Yellow	<input type="checkbox"/> ZS6-YL	1SNK 506 060 R0000	3472595060603	50	10.64
Green	<input type="checkbox"/> ZS6-GN	1SNK 506 061 R0000	3472595060610	50	10.64
Red	<input type="checkbox"/> ZS6-RD	1SNK 506 062 R0000	3472595060627	50	10.64
Purple	<input type="checkbox"/> ZS6-PR	1SNK 506 063 R0000	3472595060634	50	10.64
Brown	<input type="checkbox"/> ZS6-BR	1SNK 506 064 R0000	3472595060641	50	10.64
White	<input type="checkbox"/> ZS6-WH	1SNK 506 065 R0000	3472595060658	50	10.64
Black	<input type="checkbox"/> ZS6-BK	1SNK 506 066 R0000	3472595060665	50	10.64

Declarations and Certificates		Document Part Number
	UE Directive	1SND 225 081 C1006
	Third Party Certificate	1SND 161 025 A0201
	RoHS	1SND 230 491 F0203
Atex Declaration	Atex Declaration	1SND 225 085 C1003





**Explosive Atmosphere: ATEX Classification**

Group Category	Protection Method
IM 2	Ex e: increased security
II 2GD *	

\* in the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D

## General Information


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

Protection		<b>IP 20</b>	<i>NEMA 1</i>		
Rail		<b>DIN3-TH35</b>			
Wire stripping length		<b>10.5 mm</b>	<i>0.413 in</i>		
		Screw clamp		Screw rail contact (Maximum value)	
		<b>Flat screwdriver</b>			
Operating tool		<b>4 mm</b>	<i>0.157 in</i>		
Torque		<b>0.85 Nm</b> <b>± 0.15 Nm</b>	<i>7.52 lb.in</i> <i>± 1.33 lb.in</i>	<b>± 0.15 Nm</b>	<i>± 1.33 lb.in</i>
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>0.2-6 mm<sup>2</sup></b>		<i>24-10 AWG</i>
1 Flexible conductor without ferrule		<b>0.22-6 mm<sup>2</sup></b>		<i>24-10 AWG</i>
1 Flexible conductor with ferrule		<b>0.22-4 mm<sup>2</sup></b>		<i>24-10 AWG</i>
Ferrule maximum outer diameter		<b>5.5 mm</b>	<i>0.216 in</i>	

## Multi Connecting capacity per clamp

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

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>6 mm<sup>2</sup></b>		<i>10 AWG</i>
Maximum Cross section	<b>Manufacturer data</b>	<b>6 mm<sup>2</sup></b>	<i>Manufacturer data</i>	<i>10 AWG</i>
Gauge	<b>A4-B3 / 3 mm / 0.118 in / IEC 60947-7-1</b>			

## Electrical characteristics

### Current

Rated current		IEC 60947-7-1	<b>41 A</b>
	Field and factory wiring Cat.2	UL 1059	<b>30 A</b>
	Factory wiring Cat. 1	UL 1059	<b>30 A</b>
		CSA-C-22.2 n° 158	<b>30 A</b>
Rated short-time withstand current 1 s (I <sub>cw</sub> )			<b>720 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>41 A    6 mm<sup>2</sup></b>
Maximum short circuit current (1s)		Manufacturer data	<b>720 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

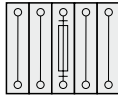
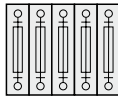
### Voltage

Rated voltage	IEC 60947-1	<b>1000 V</b>
Rated voltage	UL 1059	<b>600 V</b>
Use Group	UL 1059	<b>C</b>
Rated voltage	CSA-C-22.2 n° 158	<b>600 V</b>
Rated voltage Ex e	IEC/EN 60079-11	<b>630 V</b>
Rated impulse withstand voltage		<b>8000 V</b>
Dielectric test voltage		<b>2200 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>1.3 W</b>
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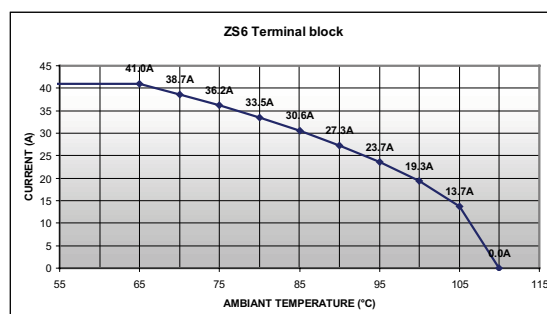
### Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

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	

### Temperature range

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> <b>-55 +85 °C</b>

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			

## ZS6 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> 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>JB6-50</b>	<b>1SNK 906 350 R0000</b>	10	38.10	<b>1SNK 160 029 D0201</b>
<b>4</b> Circuit Separators	<b>CS</b>	<b>1SNK 900 101 R0000</b>	20	0.20	<b>1SNK 160 018 D0201</b>
	<b>CS-R1</b>	<b>1SNK 900 103 R0000</b>	20	5.20	<b>1SNK 160 018 D0201</b>
<b>5</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>6</b> Test Connectors	<b>TC5-R1</b>	<b>1SNK 900 201 R0000</b>	10	5.23	<b>1SNK 160 042 D0201</b>
<b>7</b> Spacers	<b>ES-TC6</b>	<b>1SNK 900 105 R0000</b>	10	0.80	<b>1SNK 160 042 D0201</b>
<b>8</b> Shield Connectors	<b>SHBS</b>	<b>1SNK 900 600 R0000</b>	20	3.50	<b>1SNK 160 025 D0201</b>
<b>9</b> Protecting Covers	<b>CO</b>	<b>1SNK 900 604 R0000</b>	1	300.00	<b>1SNK 160 020 D0201</b>
	<b>PL6</b>	<b>1SNK 900 619 R0000</b>	20	1.84	<b>1SNK 160 021 D0201</b>
<b>10</b> Protecting Cover Kits	<b>KCO</b>	<b>1SNK 900 624 R0000</b>	1	47,8	<b>1SNK 160 028 D0201</b>
<b>11</b> Tools	<b>PS-3</b>	<b>1SNK 900 650 R0000</b>	1	380.00	<b>1SNK 160 024 D0201</b>
<b>12</b> Terminal Block Markers	<b>MC612</b>	<b>1SNK 150 000 R0000</b>	22	0.06	<b>1SNK 160 006 D0201</b>
	<b>UMH</b>	<b>1SNK 900 611 R0000</b>	10	0.20	<b>1SNK 160 001 D0201</b>
	<b>PROCAP6</b>	<b>1SNK 900 612 R0000</b>	20	0.79	<b>1SNK 160 013 D0201</b>
	<b>SAT6</b>	<b>1SNK 900 615 R0000</b>	5	6.00	<b>1SNK 160 013 D0201</b>