







## General Information

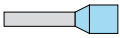
The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

Protection		<b>IP 20</b>	<i>NEMA 1</i>		
Rail		<b>DIN3-TH35</b>			
Wire stripping length		<b>10 mm</b>	<i>0.394 in</i>		
		Screw clamp		Screw rail contact (Maximum value)	
Operating tool		<b>Flat screwdriver</b>			
		<b>3.5 mm</b>	<i>0.138 in</i>		
Torque		<b>0.6 Nm</b> <b>± 0.1 Nm</b>	<i>5.31 lb.in</i> <i>± 0.885 lb.in</i>	<b>± 0.1 Nm</b>	<i>± 0.885 lb.in</i>
Mechanical endurance of disconnect system					

## Material Specifications

Insulating material	<b>Polyamide</b>
IRC	<b>600 V</b>
Flammability	UL94
	<b>NF F 16 101</b>
	<b>V0</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>		<i>24-10 AWG</i>
1 Flexible conductor without ferrule		<b>0.22-4 mm<sup>2</sup></b>		<i>24-12 AWG</i>
1 Flexible conductor with ferrule		<b>0.22-4 mm<sup>2</sup></b>		<i>24-12 AWG</i>
Ferrule maximum outer diameter		<b>4.7 mm</b>	<i>0.185 in</i>	

## Multi Connecting capacity per clamp

2 Rigid conductors		<b>0.2-1 mm<sup>2</sup></b>		<i>24-18 AWG</i>
2 Flexible conductors without ferrule		<b>0.22-1 mm<sup>2</sup></b>		<i>24-18 AWG</i>
2 Flexible conductors with twin ferrule		<b>0.22-1.5 mm<sup>2</sup></b>		<i>22-16 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>4 mm<sup>2</sup></b>		<i>12 AWG</i>
Maximum Cross section	<b>Manufacturer data</b>	<b>4 mm<sup>2</sup></b>	<i>Manufacturer data</i>	<i>10 AWG</i>

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

## Electrical characteristics

### Current

Rated current		IEC 60947-7-1	<b>29 A</b>
	Field and factory wiring Cat.2	UL 1059	<b>20 A</b>
	Factory wiring Cat.1	UL 1059	
		CSA-C-22.2 n° 158	<b>20 A</b>
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>29 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

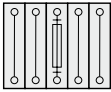
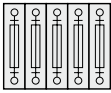
### Voltage

Rated voltage	IEC 60947-1	<b>800 V</b>
Rated voltage	UL 1059	<b>300 V</b>
Use Group	UL 1059	<b>C</b>
Rated voltage	CSA-C-22.2 n° 158	<b>300 V</b>
Rated voltage Ex e	IEC/EN 60079-11	<b>400 V</b>
Rated impulse withstand voltage		<b>8000 V</b>
Dielectric test voltage		<b>2000 V</b>
Pollution degree	IEC 60947-1	<b>3</b>
Overtoltage category	IEC 60947-1	<b>III</b>

### Dissipated power

Maximum dissipated power at rated current	IEC	<b>1.9 W</b>
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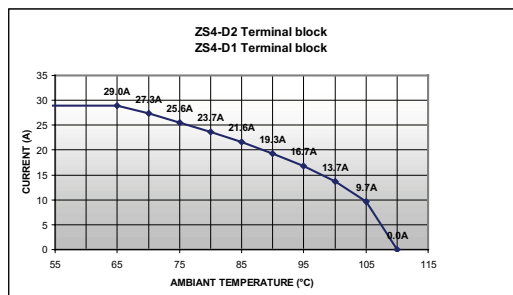
### Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

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

### 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	<b>-55 +110 °C</b>
		EN 60079-7	<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		
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-D2 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>BAZH1</b>	<b>1SNK 900 102 R0000</b>	20	23.90	<b>1SNK 160 026 D0201</b>
<b>2</b> End Sections	<b>ES4-D2</b>	<b>1SNK 505 960 R0000</b>	20	4.10	<b>1SNK 160 022 D0201</b>
<b>3</b> Jumper Bars	<b>JB5-2</b>	<b>1SNK 905 302 R0000</b>	50	1.30	<b>1SNK 160 027 D0201</b>
	<b>JB5-3</b>	<b>1SNK 905 303 R0000</b>	50	2.00	<b>1SNK 160 027 D0201</b>
	<b>JB5-4</b>	<b>1SNK 905 304 R0000</b>	50	2.70	<b>1SNK 160 027 D0201</b>
	<b>JB5-5</b>	<b>1SNK 905 305 R0000</b>	50	3.50	<b>1SNK 160 027 D0201</b>
	<b>JB5-10</b>	<b>1SNK 905 310 R0000</b>	30	7.10	<b>1SNK 160 027 D0201</b>
<b>4</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>5</b> Test Connectors	<b>TC5</b>	<b>1SNK 900 200 R0000</b>	10	5.23	<b>1SNK 160 042 D0201</b>
	<b>TC5-R1</b>	<b>1SNK 900 201 R0000</b>	10	5.23	<b>1SNK 160 042 D0201</b>
<b>6</b> Shield Connectors	<b>SHB</b>	<b>1SNK 900 602 R0000</b>	20	4.90	<b>1SNK 160 025 D0201</b>
<b>7</b> Tools	<b>PS-3</b>	<b>1SNK 900 650 R0000</b>	1	380.00	<b>1SNK 160 024 D0201</b>
<b>8</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>