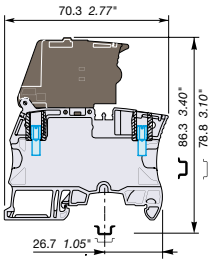
Technical Datasheet
1SNK 161 038 D0201

Catalogue Page
1SNK 161 038 S0201

ZS4-SF-T Screw Clamp Terminal Block
Fuse

4 mm²
10 AWG

6 mm *0.236 in* Spacing



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

Features and Benefits

- Protect your circuits with 5x20 Fuse terminal blocks compliant with IEC 60947-7-3 standard (fuse not supplied with the terminal blocks),
- Simplify the distribution thanks to the two jumper channels aligned with ZS4 feed-through and ZS4-S-R1 disconnect terminal blocks,
- Ease the test with built-in test socket screws.

Ordering Details		Type	Order Code	EAN Code	Pack[ing]	Weight g (1 pce)
Grey-Dark Grey		**ZS4-SF-T2**	**1SNK 506 411 R0000**	**3472595064113**	**50**	**18.60**

Declarations and Certificates	Document Part Number
CE — **UE Directive**	**1SND 225 098 C1002**
CB — **Third Party Certificate**	**1SND 161 029 A0200**
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.

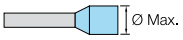
Protection		**IP 20**	*NEMA 1*			
Rail		**DIN3-TH35**				
Wire stripping length		**10.5 mm**	*0.413 in*			
		Screw clamp		Screw rail contact (Maximum value)		
Operating tool		**Flat screwdriver**				
		3.5 mm	*0.138 in*			
Torque		**0.6 Nm ± 0.1 Nm**	*5.31 lb.in ± 0.885 lb.in*	**± 0.1 Nm**	*± 0.885 lb.in*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

Material Specifications

Insulating material		**Polyamide**
IRC		**600 V**
Flammability	UL94	**V0**
	NF F 16 101	**I2F2**
	Needle flame test IEC 60695-11-5	**Compliant**

Connecting capacity per clamp

1 Rigid conductor		**0.2-4 mm²**		*24-10 AWG*
1 Flexible conductor without ferrule		**0.22-4 mm²**		*24-10 AWG*
1 Flexible conductor with ferrule		**0.22-4 mm²**		*24-12 AWG*

Ferrule maximum outer diameter		**5.5 mm**	*0.216 in*

Multi Connecting capacity per clamp

2 Rigid conductors		**0.2-1 mm²**		*24-18 AWG*
2 Flexible conductors without ferrule		**0.22-1 mm²**		*24-18 AWG*
2 Flexible conductors with twin ferrule		**0.22-1.5 mm²**		*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		**4 mm²**		*10 AWG*
Maximum Cross section	**Manufacturer data**	**4 mm²**	*Manufacturer data*	*10 AWG*

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

Electrical characteristics

Current

Rated current		IEC 60947-7-1	**6.3 A**	
	Field and factory wiring Cat.2	UL 1059	**6.3 A**	
	Factory wiring Cat.1	UL 1059	**6.3 A**	
		CSA-C-22.2 n° 158	**6.3 A**	
Rated short-time withstand current 1 s (Icw)			**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 (mm²)		Manufacturer data	**6.3 A**	**4 mm²**
Maximum short circuit current (1s)		Manufacturer data	**480 A**	

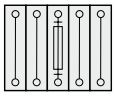
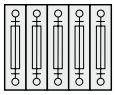
Short Circuit Current Rating (SCCR) SA UL 1059 supplement

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	

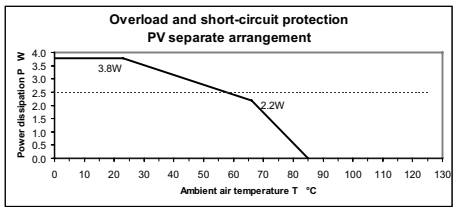
Voltage		
Rated voltage	IEC 60947-1	**250 V**
Rated voltage	UL 1059	**150 V**
Use Group	UL 1059	**D**
Rated voltage	CSA-C-22.2 n° 158	**150 V**
Rated voltage Ex e	IEC/EN 60079-11	
Rated impulse withstand voltage		**6000 V**
Dielectric test voltage		**1890 V**
Pollution degree	IEC 60947-1	**3**
Overvoltage category	IEC 60947-1	**III**

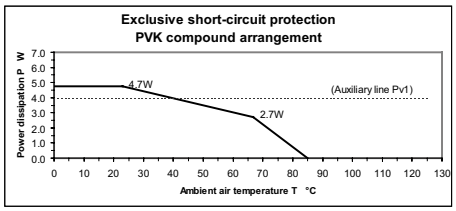
Dissipated power		
Maximum dissipated power at rated current	IEC	

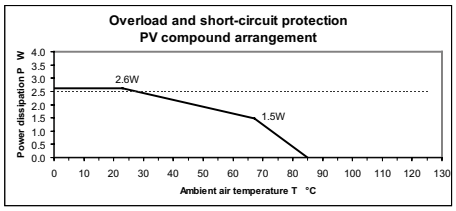
Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3		
Overload and short-circuit protection Separate arrangement	 1 fuse and 4 feed-through blocks	**2.5 W**
Exclusive short-circuit protection Separate arrangement		**4 W**
Overload and short-circuit protection Compound arrangement	 5 fuse blocks	**2.5 W**
Exclusive short-circuit protection Compound arrangement		**4 W**

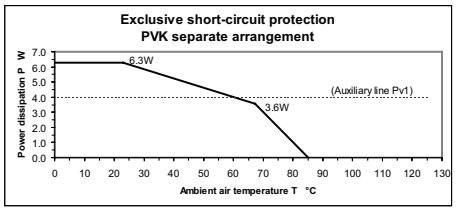
Temperature range				
Ambient temperature min/max	Storage		**-55 +110 °C**	*-67 +230 F*
	Installing		**-5 +40 °C**	*-23 +104 F*
	Service	IEC 60068-2-1	**-55 +110 °C**	*-67 +230 F*
		EN 60079-7		

Current Derating curve for continuous service temperature









Environmental Characteristics

Additional climatic tests

Dry heat		IEC 60068-2-2	**Compliant**	
	Conditions	Temperature	**+100 °C**	
		Duration of test	**96 h**	
Cyclic damp heat		IEC 60068-2-30	**Compliant**	
	Conditions	Temperature	**+55 °C**	
		Number of cycles	**2**	
Cold		IEC 60068-2-1	**Compliant**	
	Conditions	Temperature	**-40 °C**	
		Duration of test	**96 h**	
Z/ABDM climatic sequence		IEC 60068-2-61	**Compliant**	
	Conditions	Dry heat Duration of test / Temperature	**16 h**	**+85 °C**
		Cyclic damp heat Number of cycles / Temperature	**1**	**+55 °C**
		Cold Duration of test / Temperature	**2 h**	**-25 °C**

Corrosion

Salt mist		IEC 60068-2-11	**Compliant**	
	Conditions	Duration of test	**96 h**	
		Concentration	**5 %**	
SO2		ISO 6988	**Compliant**	
	Conditions	Duration of test	**48 h**	
		Concentration	**0.2 dm³**	
Sulfur dioxide		IEC 60068-2-42		
	Conditions	Duration of test		
Hydrogen sulfur		IEC 60068-2-43		
	Conditions	Duration of test		
Flowing mixed gas corrosion test		IEC 60068-2-60		
	Conditions	Number of the test method		
		Duration of test		

Vibrations

Vibrations		IEC 60068-2-6	**Compliant**	
	Conditions	Frequency range	**10-55 Hz**	
		Number of cycles	**10**	
		Amplitude		
		Acceleration	**10 m/s²**	
Ramdom vibrations and climatic sequence		IEC 60068-2-64		
	Conditions	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-SF-T Terminal Block Accessories Compatibility

	Description	Type	Order Code	Pack(ing) pieces	Weight g (1 pce)	Technical Datasheet PDF
1	End Stops	**BAM3**	**1SNK 900 001 R0000**	50	13.80	**1SNK 160 026 D0201**
2	Jumper Bars	**JB6-2**	**1SNK 906 302 R0000**	50	1.30	**1SNK 160 029 D0201**
		JB6-3	**1SNK 906 303 R0000**	50	2.10	**1SNK 160 029 D0201**
		JB6-4	**1SNK 906 304 R0000**	50	2.90	**1SNK 160 029 D0201**
		JB6-5	**1SNK 906 305 R0000**	50	3.60	**1SNK 160 029 D0201**
		JB6-10	**1SNK 906 310 R0000**	20	7.40	**1SNK 160 029 D0201**
3	Test Adapters	**TP2**	**1SNK 900 203 R0000**	20	1.73	**1SNK 160 036 D0201**
		TP4	**1SNK 900 205 R0000**	20	2.42	**1SNK 160 036 D0201**
4	Test Connectors	**TC5-R1**	**1SNK 900 201 R0000**	10	5.23	**1SNK 160 042 D0201**
5	Spacers	**ES-TC6**	**1SNK 900 105 R0000**	10	0.80	**1SNK 160 042 D0201**
6	Test Plugs	**FC2.MC**	**1SNA 107 239 R0300**	10	1.00	**1SNK 160 036 D0201**
7	Tools	**PS-3**	**1SNK 900 650 R0000**	1	380.00	**1SNK 160 024 D0201**
8	Terminal Block Markers	**MC612**	**1SNK 150 000 R0000**	22	0.06	**1SNK 160 006 D0201**
		UMH	**1SNK 900 611 R0000**	10	0.20	**1SNK 160 001 D0201**
		PROCAP6	**1SNK 900 612 R0000**	20	0.79	**1SNK 160 013 D0201**
		SAT6	**1SNK 900 615 R0000**	5	6.00	**1SNK 160 013 D0201**