



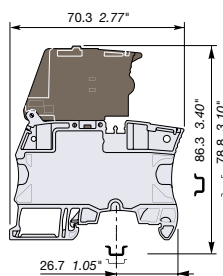
ZS4-SF-R Screw Clamp Terminal Block



4 mm²
10 AWG

6 mm 0.236 in Spacing

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,
- Quickly identify the defective circuit thanks to the blown fuse indicator (with leakage current $< 0.5 \text{ mA}$).

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

Ordering Details		Type	Order Code	EAN Code	Pack ^(ing)	Weight g (1 pce)
Grey-Dark Grey		ZS4-SF-R1	1SNK 506 412 R0000	3472595064120	50	18.60
Grey-Dark Grey		ZS4-SF-R3	1SNK 506 415 R0000	3472595064151	50	18.60

[illegible]

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 mm ²		24-10 AWG
1 Flexible conductor without ferrule			0.22-4 mm ²		24-10 AWG
1 Flexible conductor with ferrule			0.22-4 mm ²		24-12 AWG
Ferrule maximum outer diameter			5.5 mm	0.216 in	
Multi Connecting capacity per clamp					
2 Rigid conductors			0.2-1 mm ²		24-18 AWG
2 Flexible conductors without ferrule			0.22-1 mm ²		24-18 AWG
2 Flexible conductors with twin ferrule			0.22-1.5 mm ²		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 mm ²		10 AWG
Maximum Cross section		Manufacturer data	4 mm ²	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 (I _{cw})				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 (mm ²)				Manufacturer data	6.3 A 4 mm ²
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			

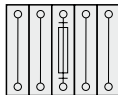
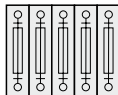
Voltage

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	
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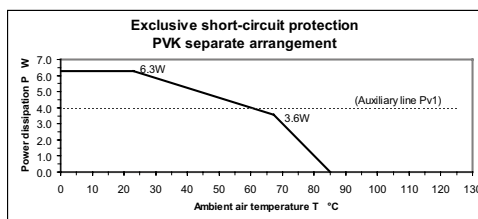
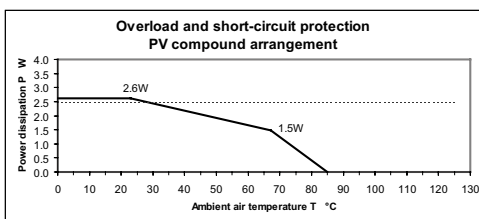
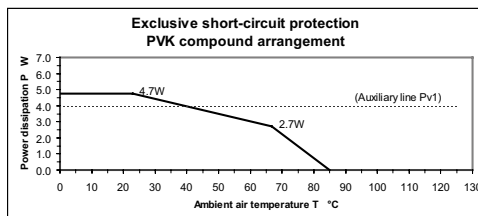
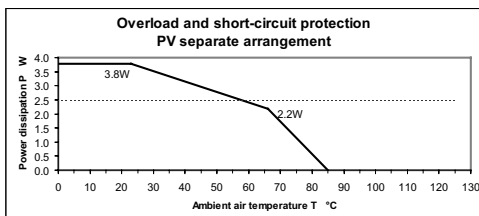
Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Overload and short-circuit protection Separate arrangement		2.5 W
Exclusive short-circuit protection Separate arrangement	1 fuse and 4 feed-through blocks	4 W
Overload and short-circuit protection Compound arrangement		2.5 W
Exclusive short-circuit protection Compound arrangement	5 fuse blocks	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	Conditions	IEC 60068-2-2	Compliant	
		Temperature	+100 °C	
		Duration of test	96 h	
Cyclic damp heat	Conditions	IEC 60068-2-30	Compliant	
		Temperature	+55 °C	
		Number of cycles	2	
Cold	Conditions	IEC 60068-2-1	Compliant	
		Temperature	-40 °C	
		Duration of test	96 h	
Z/ABDM climatic sequence	Conditions	IEC 60068-2-61	Compliant	
		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	Conditions	IEC 60068-2-11	Compliant	
		Duration of test	96 h	
		Concentration	5 %	
SO ₂	Conditions	ISO 6988	Compliant	
		Duration of test	48 h	
		Concentration	0.2 dm³	
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	Compliant	
		Frequency range	10-55 Hz	
		Number of cycles	10	
		Amplitude		
		Acceleration	10 m/s²	
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-SF-R 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 Tools	PS-3	1SNK 900 650 R0000	1	380.00	1SNK 160 024 D0201
7 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