



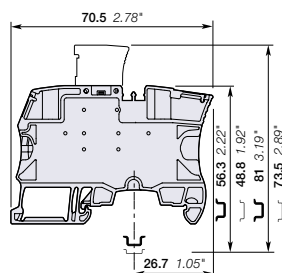
ZS4-SP-R1 Screw Clamp Terminal Block Disconnect



4 mm²
10 AWG

6 mm 0.236 in Spacing

Features and Benefits



- Simplify the alternated distribution between feed-through and disconnect circuits thanks to the two aligned jumper channels,
- Save time with our screwless component holder plug.

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

Ordering Details		Type	Order Code	EAN Code	Pack ^(ing)	Weight g (1 pce)
Grey	☐	ZS4-SP-R1	1SNK 506 313 R0000	3472595063130	50	14.20

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General Information

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

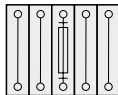
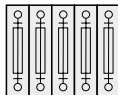
Protection		IP 20	NEMA 1				
Rail		DIN3-TH35					
Wire stripping length		10.5 mm	0.413 in				
		Screw clamp		Screw rail contact (Maximum value)			
Operating tool		Flat screwdriver					
		3.5 mm	0.138 in				
Torque		0.6 Nm ± 0.1 Nm	5.31 lb.in ± 0.885 lb.in	± 0.1 Nm	± 0.885 lb.in		
Mechanical endurance 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	
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	 Ø Max.	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		20 A	
	Field and factory wiring Cat.2		UL 1059	
	Factory wiring Cat.1		UL 1059	
	CSA-C-22.2 n° 158			
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		20 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	400 V
Rated voltage	UL 1059	150 V
Use Group	UL 1059	C
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	0.6 W

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	
Exclusive short-circuit protection Separate arrangement		
Overload and short-circuit protection Compound arrangement	 5 fuse blocks	
Exclusive short-circuit protection Compound arrangement		

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-SP-R1 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 Component Plugs	PG5	1SNK 900 401 R0000	20	3.45	1SNK 160 038 D0201
7 Disconnect Plugs	PG5-R1	1SNK 900 402 R0000	20	3.45	1SNK 160 037 D0201
8 Tools	PS-3	1SNK 900 650 R0000	1	380.00	1SNK 160 024 D0201
9 Terminal Block Markers	MC612	1SNK 150 000 R0000	22	0.06	1SNK 160 006 D0201
	PROCAP6	1SNK 900 612 R0000	20	0.79	1SNK 160 013 D0201
	UMH	1SNK 900 611 R0000	10	0.20	1SNK 160 001 D0201
	SAT6	1SNK 900 615 R0000	5	6.00	1SNK 160 013 D0201