



ZS4 Screw Clamp Terminal Block Feed-through

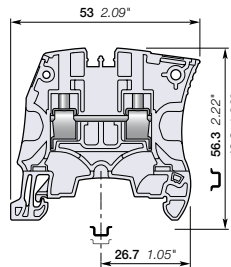


4 mm²
12 AWG

5.2 mm 0.205 in Spacing

Features and Benefits

Save space by connecting conductors up to 4 mm² (CB certified) 12 AWG in just 5.2 mm 0.205 in spacing.



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	1SNK 505 010 R0000	3472595050109	50	8.77
Blue	ZS4-BL	1SNK 505 020 R0000	3472595050208	50	8.77
Orange	ZS4-OR	1SNK 505 030 R0000	3472595050307	50	8.77
Yellow	ZS4-YL	1SNK 505 060 R0000	3472595050604	50	8.77
Green	ZS4-GN	1SNK 505 061 R0000	3472595050611	50	8.77
Red	ZS4-RD	1SNK 505 062 R0000	3472595050628	50	8.77
Purple	ZS4-PR	1SNK 505 063 R0000	3472595050635	50	8.77
Brown	ZS4-BR	1SNK 505 064 R0000	3472595050642	50	8.77
White	ZS4-WH	1SNK 505 065 R0000	3472595050659	50	8.77
Black	ZS4-BK	1SNK 505 066 R0000	3472595050666	50	8.77

Declarations and Certificates		Document Part Number
CE	UE Directive	1SND 225 081 C1006
CB	Third Party Certificate	1SND 161 017 A0201
RoHS	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		IP 20	<i>NEMA 1</i>		
Rail		DIN3-TH35			
Wire stripping length		10.5 mm	<i>0.413 in</i>		
		Screw clamp		Screw rail contact (Maximum value)	
		Flat screwdriver			
Operating tool		3.5 mm	<i>0.138 in</i>		
Torque		0.6 Nm ± 0.1 Nm	<i>5.31 lb.in</i> <i>± 0.885 lb.in</i>	± 0.1 Nm <i>± 0.885 lb.in</i>	
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		<i>24-10 AWG</i>
1 Flexible conductor without ferrule		0.22-4 mm²		<i>24-12 AWG</i>
1 Flexible conductor with ferrule		0.22-4 mm²		<i>24-12 AWG</i>
Ferrule maximum outer diameter		4.7 mm	<i>0.185 in</i>	

Multi Connecting capacity per clamp

2 Rigid conductors		0.2-1 mm²		<i>24-18 AWG</i>
2 Flexible conductors without ferrule		0.22-1 mm²		<i>24-18 AWG</i>
2 Flexible conductors with twin ferrule		0.22-1.5 mm²		<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		4 mm²		<i>12 AWG</i>
Maximum Cross section	Manufacturer data	4 mm²	<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	32 A	
	Field and factory wiring Cat.2	UL 1059	20 A	
	Factory wiring Cat.1	UL 1059		
		CSA-C-22.2 n° 158	20 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	32 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

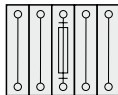
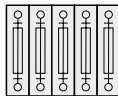
Voltage

Rated voltage	IEC 60947-1	1000 V
Rated voltage	UL 1059	600 V
Use Group	UL 1059	C
Rated voltage	CSA-C-22.2 n° 158	600 V
Rated voltage Ex e	IEC/EN 60079-11	630 V
Rated impulse withstand voltage		8000 V
Dielectric test voltage		2200 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

Dissipated power

Maximum dissipated power at rated current	IEC	1 W
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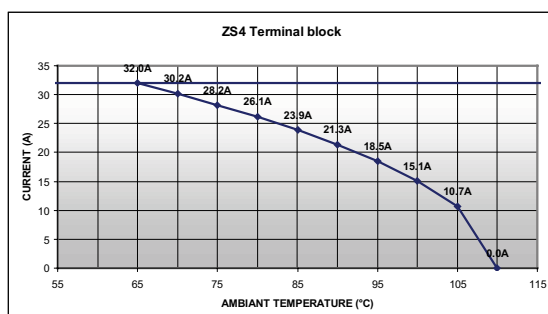
Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

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	-55 +110 °C	-67 +230 F
	Installing	-5 +40 °C	-23 +104 F
	Service	IEC 60068-2-1	-55 +110 °C
		EN 60079-7	-55 +85 °C

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 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 End Sections	ES4	1SNK 505 910 R0000	20	2.18	1SNK 160 022 D0201
3 Jumper Bars	JB5-2	1SNK 905 302 R0000	50	1.30	1SNK 160 027 D0201
	JB5-3	1SNK 905 303 R0000	50	2.00	1SNK 160 027 D0201
	JB5-4	1SNK 905 304 R0000	50	2.70	1SNK 160 027 D0201
	JB5-5	1SNK 905 305 R0000	50	3.50	1SNK 160 027 D0201
	JB5-10	1SNK 905 310 R0000	30	7.10	1SNK 160 027 D0201
	JB5-50	1SNK 905 350 R0000	10	36.10	1SNK 160 027 D0201
4 Cross Spacing Jumpers	JB85-3	1SNK 900 603 R0000	10	2.80	1SNK 160 035 D0201
5 Circuit Separators	CS	1SNK 900 101 R0000	20	0.20	1SNK 160 018 D0201
	CS-R1	1SNK 900 103 R0000	20	5.20	1SNK 160 018 D0201
6 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
7 Test Connectors	TC5	1SNK 900 200 R0000	10	5.23	1SNK 160 042 D0201
	TC5-R1	1SNK 900 201 R0000	10	5.23	1SNK 160 042 D0201
8 Component Plugs	PG5-R2	1SNK 900 403 R0000	20	8.01	1SNK 160 039 D0201
9 Shield Connectors	SHBS	1SNK 900 600 R0000	20	3.50	1SNK 160 025 D0201
10 Protecting Covers	CO	1SNK 900 604 R0000	1	300.00	1SNK 160 020 D0201
	PL5	1SNK 900 618 R0000	20	1.50	1SNK 160 021 D0201
11 Protecting Cover Kits	KCO	1SNK 900 624 R0000	1	47,8	1SNK 160 028 D0201
12 Tools	PS-3	1SNK 900 650 R0000	1	380.00	1SNK 160 024 D0201
13 Terminal Block Markers	MC512	1SNK 140 000 R0000	22	0.06	1SNK 160 003 D0201
	PROCAP5	1SNK 900 609 R0000	20	0.70	1SNK 160 013 D0201
	UMH	1SNK 900 611 R0000	10	0.20	1SNK 160 001 D0201
	SAT5	1SNK 900 614 R0000	5	6.00	1SNK 160 013 D0201