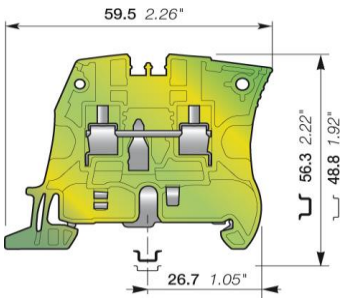
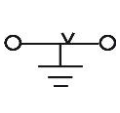
ZS4-PE Screw Clamp Terminal Blocks Ground

Improve the safety of your installation in the event of a short-circuit thanks to our screwless rail contact:
- Rail contact non operator dependent,
- Performances above the requirements of IEC 60947-7-2 terminal block standard,
- Secured snap on or remove from the rail.



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



4 mm²	
12 AWG	
5.2 mm *0.205 in*	**Spacing**

Ordering Details

Color	Type	Order Code	EAN Code	Pack(ing)	Weight (1 pce) g
Green-Yellow	ZS4-PE	1SNK505150R0000	3472595051502	20	12.10

Declarations and Certificates

CE	CB	RoHS	USR CNR			Gost R	ATEX	IECEx	

BR-Ex e II	Haz Loc	BV	Rina	DNV		ATEX Declaration

Power and productivity for a better world™

Declarations and Certificates

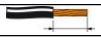
CE	CE	1SND225094C10*
CB	CB	1SND161024A02*
RoHS	RoHS	1SND230491F02*
USR CNR	USR CNR	1SND161040A02*
CSA	CSA	1SND161070A02*
Gost R	GOST R	1SND161005A11*
ATEX	ATEX	1SND162004A17*
IECEx	IECEx	1SND162005A17*
BR-Ex e II	BR-Ex e II	1SND161042A02*
Haz Loc	USR CNR Haz Loc	1SND161047A02*
BV	BV	1SND161073A02*
Rina	RINA	1SND161088A02*
DNV	DNV	1SND161087A02*
Atex Declaration	Atex Declaration	1SND225085C10*

Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM2 II 2 GD Ex eb I/II/IIIC	Ex e: increased security
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.

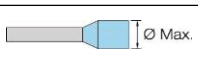
Protection	IEC 60947-1	IP20		*NEMA 1*				
Rail	TH35-7.5, TH35-15	TH35-7.5, TH35-15						
Wire stripping length		10.5 mm	*0.413 in*					

		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		3.5 mm	*0.138 in*					
Torque		0.6 N.m	*5.31 lb.in*					
		± 0.1 N.m	*± 0.885 lb.in*					

Material Specifications

Insulating material		Polyamide
CTI		600 V
Flammability	UL94	V0
	NF F 16101	I2F3
	Needle flame test IEC 60615-11-5	Compliant

Connecting capacity per clamp

		Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme	IEC60947-7-1	UL1059		
	Value	0.2 ... 4 mm²	24 ... 12 AWG		
1 Flexible conductor	Norme	IEC60947-7-1			
	Value	0.22 ... 4 mm²			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.22 ... 4 mm²	24 ... 12 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.22 ... 2.5 mm²	24 ... 14 AWG		
Gauge		A3-B3	3 mm		
		IEC 60947-1	*0.118 in*		
Ferrule maximum outer diameter or conductor insulation maximum outer diameter			Manufacturer data	4.7 mm	0.185 in

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3 (crimping capacity up to 10 mm²).

Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded conductors	Norme				
	Value				
2 Flexible conductors	Norme				
	Value				
2 Flexible conductors with twin ferrule	Norme				
	Value				

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 (crimping capacity up to 10 mm²)

Cross section

Rated cross section	IEC60947-7-1	4 mm²	UL1059	12 AWG
Maximum Cross section	Manufacturer data	4 mm²	Manufacturer data	*12 AWG*

Electrical characteristics

Current

Rated current			IEC60947-7-1	
	Field and factory wiring Cat.2		UL 1059	
	Factory wiring Cat.1		UL 1059	
			CSA-C-22.2 n°158	
Maximum Exe current			IEC/EN 60079-7	
Rated short-time withstand current 1 s (Icw)			IEC60947-7-1	480 A
Short-time withstand current		0.5 s	Manufacturer data	
		5 s	Manufacturer data	
		10 s	Manufacturer data	
		30 s	Manufacturer data	
		1 min	Manufacturer data	
Rated short-circuit withstand current			CSA-C-22.2 n°158	396 A
Max. current (45° temperature increase) / Max. cross section (mm²)			Manufacturer data	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:				
	Suitable conductor wire range			
	Maximum voltage			
	Fuse class / Max. amp. Rating		J	
			T	
			RK1	
			RK5	
			G	
			CC	

Voltage

Rated voltage	IEC 60947-1	
Rated voltage	UL 1059	
Use Group	UL 1059	B, C
Rated voltage	CSA-C-22.2 n°158	
Rated voltage Ex e	IEC/ EN 60079-7	
Rated impulse withstand voltage	IEC 60947-1	8000 V
Dielectric test voltage	IEC 60947-1	2200 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

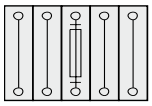
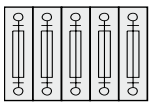
Temperature range

Ambient temperature min/max	Storage	-55 ... +110 °C	*-67 ... +230 °F*
	Installing	-5 ... +40 °C	*-23 ... +104 °F*
	Service	-55 ... +110 °C	*-67 ... +230 °F*

Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	
Maximum dissipated power at maximum Exe current	IEC 60079-7	

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

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

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
		Relative humidity	
		Number of cycles (1 cycle = 24h)	2
Cold		IEC 60068-2 1	Compliant
	Conditions	Temperature	-40 °C
		Duration of test	96 h
Damp heat steady state		IEC 60068-2-78	
	Conditions	Temperature	
		Relative humidity	
		Duration of test	

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 dm^3
Flowing mixed gas corrosion test		IEC 60068-2 60	Compliant
	Conditions	Number of the test method	3
		Duration of test	21 j

Vibrations and shocks

Sinusoidal vibrations		IEC 60068-2-6	Compliant
	Conditions	Frequency range	10 ... 55 Hz
		Number of cycles	10
		Acceleration	10 m/s²
Functional random vibrations		IEC 61373	
Category 1 Class B 3 axes	Conditions	Duration of test	
		Frequency range	
		Acceleration	
Long life testing at increased random vibrations		IEC 61373	
Category 1 Class B 3 axes	Conditions	Duration of test	
		Frequency range	
		Acceleration	
Shock		IEC 61373	
Category 1 Class B 3 axes	Conditions	Duration of test	
		Acceleration	

ZS4-PE Terminal Block Accessories Compatibility

Some accessories may modify the terminal block's rating. See complete information in the accessories catalog page.

	Description	Type	Order Code	Pack(ing) pieces	Weight g (1 pce)	
1	End Stops	**BAM3**	**1SNK900001R0000**	50	13.80	
		BAZ1	**1SNK900002R0000**	20	5.30	
2	End Sections	**ES4**	**1SNK505910R0000**	20	2.18	
3	Circuit Separators	**CS**	**1SNK900101R0000**	20	0.20	
		CS-R1	**1SNK900103R0000**	20	5.20	
4	Test Adapters	**TP2**	**1SNK900203R0000**	20	1.73	
		TP4	**1SNK900205R0000**	20	2.41	
5	Test Connectors	**TC5**	**1SNK900200R0000**	10	5.23	
		TC5-R1	**1SNK900201R0000**	10	5.23	
6	Protecting Cover Kits	**KCO**	**1SNK900624R0000**	1	47.80	
7	Protecting Covers	**CO**	**1SNK900604R0000**	1	300.00	
8	Mounting Rails	**PR3.G2**	**1SNA164800R0300**	2		
		PR4	**1SNA168500R1200**	2	915.00	
		PR5	**1SNA168700R2200**	2		
		PR30	**1SNA173220R0500**	2	328.00	
		PR3.Z2	**1SNA174300R1700**	2		
9	Tools	**PS-3**	**1SNK900650R0000**	1	380.00	
10	Terminal Block Markers	**MC512**	**1SNK140000R0000**	22	9.00	
		MC512-YL	**1SNK140004R0000**	22	9.00	
		MC512PA	**1SNK149999R0000**	20	10.00	
		PROCAP5	**1SNK900609R0000**	20	0.69	
		UMH	**1SNK900611R0000**	10	0.20	
		SAT5	**1SNK900614R0000**	5	6.00	
11	Screw Clamp Terminal Blocks	**ZS4-PE**	**1SNK505150R0000**	20	12.10	

Contact us

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