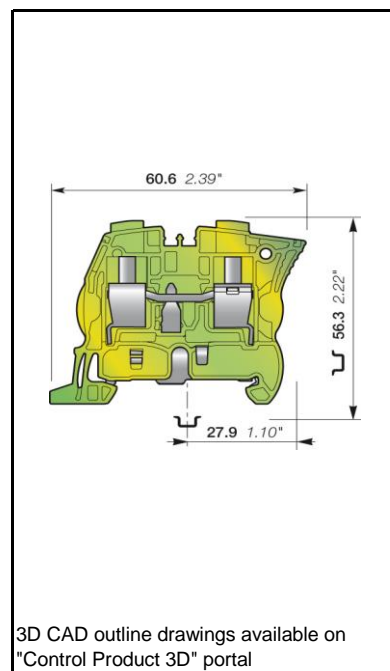


# ZS16-PE Screw Clamp Terminal Blocks Ground

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,
- PE.N function available by combining ZS16-PE with ZS16-BL and 2 poles jumper bar JB10-2.



		<b>16 mm<sup>2</sup></b>
		4 AWG
<b>10 mm 0.394 in Spacing</b>		

### Ordering Details

Color	Type	Order Code	EAN Code	Pack <sup>(mg)</sup>	Weight (1 pce) g
Green-Yellow	ZS16-PE	1SNK510150R0000	3472595101504	20	32.00

### Declarations and Certificates

CE	CB	RoHS	USR CNR		EAC Ex	ATEX	IECEX	
					ATEX Declaration			
BR-Ex e II	Haz Loc	BV	Rina	DNV				

## Declarations and Certificates

	CE	1SND225101U10*
	CB	1SND161022A02*
	RoHS	1SND230491F02*
	USR CNR	1SND161040A02*
	CSA	1SND161070A02*
	EAC Ex	
	ATEX	1SND162004A17*
	IECEX	1SND162005A17*
	BR-Ex e II	1SND161042A02*
	USR CNR Haz Loc	1SND161047A02*
	BV	1SND161073A02*
	RINA	1SND161088A02*
	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		TH 35-7.5, TH 35-15						
Wire stripping length		13.5 mm	0.531 in					
		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		5.5 mm	0.217 in					
Torque		1.8 N.m	15.9 N.m					
		± 0.2 N.m	± 1.77 N.m					

## Material Specifications

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

## Connecting capacity per clamp

	Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme			
	Value	0.5 ... 16 mm <sup>2</sup>	24 ... 4 AWG	
1 Flexible conductor	Norme			
	Value	0.5 ... 16 mm <sup>2</sup>		
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.5 ... 16 mm <sup>2</sup>	24 ... 4 AWG	
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.5 ... 10 mm <sup>2</sup>	24 ... 8 AWG	
Gauge		A6-B6	6.4 mm	
		IEC 60947-1	0.252 in	
Ferrule maximum outer diameter or conductor insulation maximum outer diameter		Manufacturer data	8.2 mm	0.323 in

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3 (crimping capacity up to 10 mm<sup>2</sup>).

As part of its on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not contractual. For further details please contact the ABB company marketing these products in your country.

## 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 mm<sup>2</sup>)

## Cross section

Rated cross section		16 mm <sup>2</sup>		4 AWG
Maximum Cross section	Manufacturer data	16 mm <sup>2</sup>	Manufacturer data	4 AWG

## Electrical characteristics

### Current

Rated current	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 (I <sub>cw</sub> )			1920 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			UL 1059 2544 A
Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> )	Manufacturer data		16 mm <sup>2</sup>
Maximum short circuit current (1s)	Manufacturer data		1920 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

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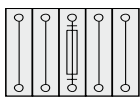
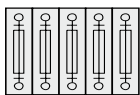
## Temperature range

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 %
SO <sub>2</sub>		ISO 6988	Compliant
	Conditions	Duration of test	48 h
		Concentration	0.2 dm <sup>3</sup>
Flowing mixed gas corrosion test		IEC 60068-2 60	Compliant
	Conditions	Number of the test method	3
		Duration of test	21 j

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