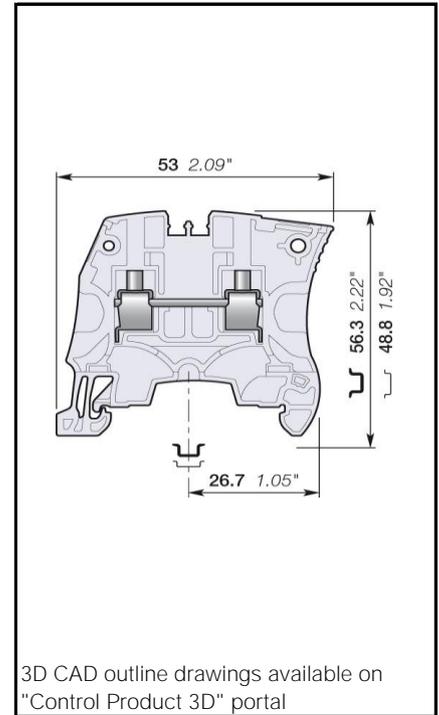


# ZS10 Screw Clamp Terminal Blocks

Save space by connecting conductors up to 10 mm<sup>2</sup> (CB certified) 6 AWG in just 8 mm 0.315 in spacing.



		10 mm <sup>2</sup>
		6 AWG
8 mm 0.315 in Spacing		

## Ordering Details

Color	Type	Order Code	EAN Code	Pack <sup>(ing)</sup>	Weight (1 pce) g
Grey	ZS10	1SNK508010R0000	3472595080106	50	14.10
Blue	ZS10-BL	1SNK508020R0000	3472595080205	50	14.10
Orange	ZS10-OR	1SNK508030R0000	3472595080304	50	14.10
Yellow	ZS10-YL	1SNK508060R0000	3472595080601	50	14.10
Green	ZS10-GN	1SNK508061R0000	3472595080618	50	14.10
Red	ZS10-RD	1SNK508062R0000	3472595080625	50	14.10
Purple	ZS10-PR	1SNK508063R0000	3472595080632	50	14.10
Brown	ZS10-BR	1SNK508064R0000	3472595080649	50	14.10
White	ZS10-WH	1SNK508065R0000	3472595080656	50	14.10
Black	ZS10-BK	1SNK508066R0000	3472595080663	50	14.10

## Declarations and Certificates

CE	CB	RoHS	USR CNR		Gost R	ATEX	IECEX

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

## Declarations and Certificates

	CE	1SND225081C1009
	CB	1SND161018A0202
	RoHS	1SND230491F0205
	USR CNR	1SND161040A0204
	CSA	1SND161070A0203
	GOST R	1SND161005A1103
	ATEX	1SND162004A1703
	IECEX	1SND162005A1703
	BR-Ex e II	1SND161042A0200
	USR CNR Haz Loc	1SND161047A0201
	BV	1SND161073A0201
	RINA	1SND161088A0200
	DNV	1SND161087A0200
Atex Declaration	Atex Declaration	1SND225085C1004

## Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM2 II 2 GD Ex eb I/II/III C	Ex e: increased security
* in the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D	

## General Information

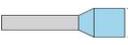
The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

Protection	IEC 60947-1	IP20	NEMA250				
Rail		TH 35-7.5, TH 35-15					
Wire stripping length		12 mm	0.472 in				
		Screw clamp	Screw rail contact (Maximum value)	Disconnect device			
Operating tool		Flat screwdriver					
Torque		4 mm ± 0.3 N.m	0.157 in ± 2.65 lb.in				

## Material Specifications

Insulating material	Polyamide
CTI	600 V
Flammability	UL94 V0
	Grey and Dark grey color only NF F 16101 I2F2
	Other colours and colours combination I2F3
	Needle flame test C 60615-11-5 Compliant

## Connecting capacity per clamp

		Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme	IEC60947-7-1	UL1059		
	Value	0.5-10 mm <sup>2</sup>	24-6 AWG		
1 Flexible conductor	Norme	IEC60947-7-1			
	Value	0.5-10 mm <sup>2</sup>			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5-10 mm <sup>2</sup>	24-8 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5-6 mm <sup>2</sup>	24-10 AWG		
Gauge		A5-B5	5.2 mm		
		IEC 60947-1	0.205 in		
Ferrule maximum outer diameter or conductor insulation maximum outer diameter		∅ Max.	Manufacturer data	7.5 mm	0.295 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	IEC60947-7-1	UL1059	
	Value	0.5-4 mm <sup>2</sup>	20-12 AWG	
2 Flexible conductors	Norme	IEC60947-7-1		
	Value	0.5-4 mm <sup>2</sup>		
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.5-4 mm <sup>2</sup>	20-12 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 (crimping capacity up to 10 mm<sup>2</sup>)

## Cross section

Rated cross section	IEC60947-7-1	10 mm <sup>2</sup>	UL1059	6 AWG
Maximum Cross section	Manufacturer data	10 mm <sup>2</sup>	Manufacturer data	6 AWG

## Electrical characteristics

### Current

Rated current		IEC60947-7-1	57 A
	Field and factory wiring Cat.2	UL 1059	42 A
	Factory wiring Cat.1	UL 1059	42 A
		CSA-C-22.2 n°158	42 A
Rated short-time withstand current 1 s (I <sub>cw</sub> )		IEC60947-7-1	1200 A
Short-time withstand current		Manufacturer data	2508 A
		Manufacturer data	798 A
		Manufacturer data	570 A
		Manufacturer data	285 A
		Manufacturer data	228 A
Rated short-circuit withstand current		CSA-C-22.2 n°158	
Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> )		Manufacturer data	57 A   10 mm <sup>2</sup>
Maximum short circuit current (1s)		Manufacturer data	1200 A

## Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		UL 1059	100 kA
With the following configurations:			
	Suitable conductor wire range		14-6 AWG
	Maximum voltage		600 V
	Fuse type / Fuse rating	J	110 A
		T	110 A
		RK1	100 A
		RK5	30 A
		G	60 A
		CC	30 A

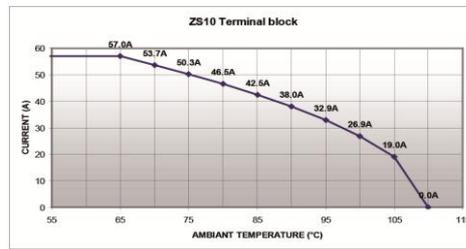
## Voltage

Rated voltage	IEC 60947-1	1000 V
Rated voltage	UL 1059	600 V
Use Group	UL 1059	B, C
Rated voltage	CSA-C-22.2 n°158	600 V
Rated voltage Ex e	IEC/ EN 60079-7	630 V
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

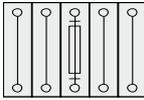
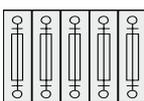
Current Derating curve for continuous service temperature



## Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	1.8 W
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## Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

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

## Environmental Characteristics

### Additional climatic tests

Dry heat	Conditions	IEC 60068-2 2	Compliant
		Temperature	+100 °C
Cyclic damp heat	Conditions	IEC 60068-2 30	Compliant
		Temperature	+55 °C
Cold	Conditions	IEC 60068-2 1	Compliant
		Temperature	-40 °C
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
SO <sub>2</sub>	Conditions	ISO 6988	Compliant
		Concentration	5 %
Sulfur dioxide	Conditions	IEC 60068-2 42	
		Duration of test	48 h
Hydrogen sulfur	Conditions	IEC 60068-2 43	
		Concentration	0.2 dm <sup>3</sup>
Flowing mixed gas corrosion test	Conditions	IEC 60068-2 60	Compliant
		Number of the test method	3
		Duration of test	21 j

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