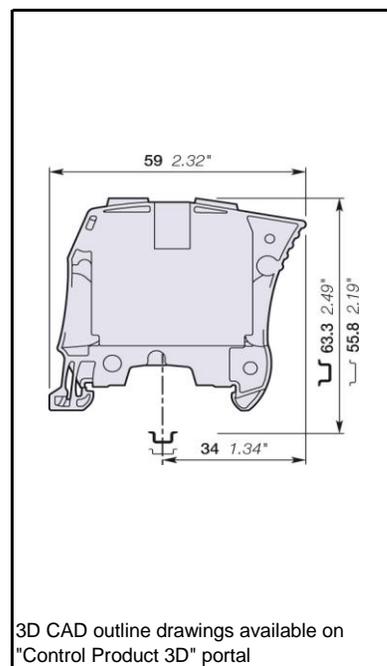


# ZS35 Screw Clamp Terminal Blocks Feed-through

Closed terminal block:

- No end section needed,
- Optimized rigidity,
- Perfectly adapted to solar applications: voltage is rated 1000 V AC / DC IEC.



		<b>35 mm<sup>2</sup></b>
		0 AWG
<b>16 mm 0.630 in Spacing</b>		

### Ordering Details

Color	Type	Order Code	EAN Code	Pack <sup>(mg)</sup>	Weight (1 pce) g
Grey	ZS35	1SNK516010R0000	3472595160105	20	53.40
Blue	ZS35-BL	1SNK516020R0000	3472595160204	20	53.40
Orange	ZS35-OR	1SNK516030R0000	3472595160303	20	53.40

### Declarations and Certificates

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

## Declarations and Certificates

	CE		1SND225100U10*
	CB		1SND161028A02*
	RoHS		1SND230491F02*
	USR		1SND161041A02*
	CSA		1SND161067A02*
	EAC Ex		
	ATEX		1SND162004A17*
	IECEX		1SND162005A17*
	BR-Ex e II		1SND161042A02*
	USR 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	IP10		NEMA 1				
Rail		TH 35-7.5, TH 35-15						
Wire stripping length		17 mm	0.669 in					
		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		6.5 mm	0.256 in					
Torque		2.9 N.m	25.7 N.m					
		± 0.1 N.m	± 0.885 N.m					

## Material Specifications

Insulating material	Polyamide
CTI	600 V
Flammability	UL94 V0
	NF F 16101 I2F2
	Needle flame test: C 60615-11-5
	Compliant

## Connecting capacity per clamp

		Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme				
	Value	6 ... 35 mm <sup>2</sup>	10 ... 0 AWG		
1 Flexible conductor	Norme				
	Value	6 ... 35 mm <sup>2</sup>			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	4 ... 35 mm <sup>2</sup>	10 ... 2 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	4 ... 35 mm <sup>2</sup>	10 ... 2 AWG		
Gauge		A9-B9	10 mm		
		IEC 60947-1	0.394 in		
Ferrule maximum outer diameter or conductor insulation maximum outer diameter		Max.	Manufacturer data	14 mm	0.551 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	6 ... 16 mm <sup>2</sup>	10 ... 6 AWG	
2 Flexible conductors	Norme			
	Value	6 ... 16 mm <sup>2</sup>		
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	4 ... 10 mm <sup>2</sup>	12 ... 8 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		35 mm <sup>2</sup>		0 AWG
Maximum Cross section	Manufacturer data	35 mm <sup>2</sup>	Manufacturer data	0 AWG

## Electrical characteristics

### Current

Rated current				125 A
	Field and factory wiring Cat.2		UL 1059	150 A
	Factory wiring Cat.1		UL 1059	150 A
			CSA-C-22.2 n°158	150 A
Maximum Exe current			IEC/EN 60079-7	125 A
Rated short-time withstand current 1 s (I <sub>cw</sub> )				4200 A
Short-time withstand current	0.5 s	Manufacturer data		8750 A
	5 s	Manufacturer data		2750 A
	10 s	Manufacturer data		1875 A
	30 s	Manufacturer data		1125 A
	1 min	Manufacturer data		750 A
Rated short-circuit withstand current			UL 1059	
Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> )			Manufacturer data	125 A   35 mm <sup>2</sup>
Maximum short circuit current (1s)			Manufacturer data	4200 A

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

SCCR		UL 1059	100 kA
With the following configurations:			
Suitable conductor wire range			10 ... 0 AWG
Maximum voltage			600 V
Fuse class / Max. amp. Rating		J	250 A
		T	250 A
		RK1	200 A
		RK5	100 A
		G	60 A
		CC	30 A

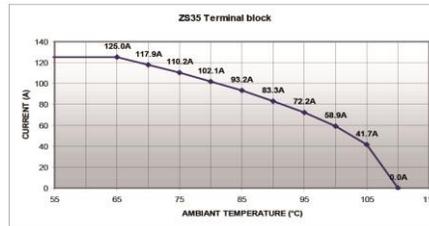
### Voltage

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	693 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

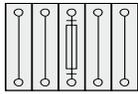
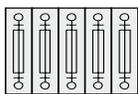
Current Derating curve for continuous service temperature



## Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	4 W
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	 <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
		Duration of test	96 h
Cyclic damp heat	Conditions	IEC 60068-2 30	Compliant
		Temperature	+55 °C
		Relative humidity	
		Number of cycles (1 cycle = 24h)	2
Cold	Conditions	IEC 60068-2 1	Compliant
		Temperature	-40 °C
		Duration of test	96 h
Damp heat steady state	Conditions	IEC 60068-2-78	
		Temperature	
		Relative humidity	
		Duration of test	

## Corrosion

Salt mist	Conditions	IEC 60068-2 11	Compliant
		Duration of test	96 h
		Concentration	5 %
SO <sub>2</sub>	Conditions	ISO 6988	Compliant
		Duration of test	48 h
		Concentration	0.2 dm <sup>3</sup>
Flowing mixed gas corrosion test	Conditions	IEC 60068-2 60	
		Number of the test method	
		Duration of test	

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