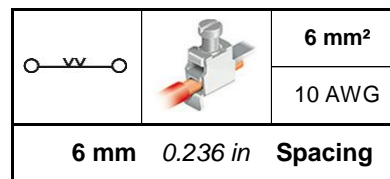
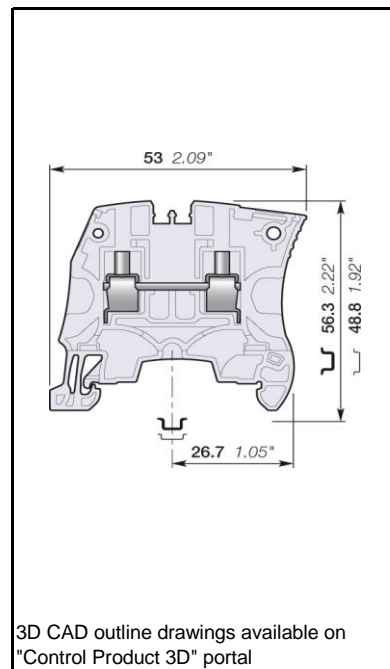


# ZS6 Screw Clamp Terminal Blocks Feed-through

Save space by connecting conductors up to 6 mm<sup>2</sup> (without insulated ferrule, CB certified) 10 AWG in just 6 mm 0.236 in spacing,  
- Perfectly adapted to solar applications: voltage is rated 1000 V AC / DC IEC.



### Ordering Details

Color	Type	Order Code	EAN Code	Pack <sup>(mg)</sup>	Weight (1 pce) g
Grey	ZS6	1SNK506010R0000	3472595060108	50	10.60
Blue	ZS6-BL	1SNK506020R0000	3472595060207	50	10.60
Orange	ZS6-OR	1SNK506030R0000	3472595060306	50	10.60
Yellow	ZS6-YL	1SNK506060R0000	3472595060603	50	10.60
Green	ZS6-GN	1SNK506061R0000	3472595060610	50	10.60
Red	ZS6-RD	1SNK506062R0000	3472595060627	50	10.60
Purple	ZS6-PR	1SNK506063R0000	3472595060634	50	10.60
Brown	ZS6-BR	1SNK506064R0000	3472595060641	50	10.60
White	ZS6-WH	1SNK506065R0000	3472595060658	50	10.60
Black	ZS6-BK	1SNK506066R0000	3472595060665	50	10.60

### Declarations and Certificates

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

## Declarations and Certificates

	CE	1SND225100U10*
	CB	1SND161025A02*
	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		10.5 mm	0.412 in					
		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		4 mm	0.157 in					
Torque		0.85 N.m ± 0.15 N.m	7.52 N.m ± 1.33 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	0.2 ... 6 mm <sup>2</sup>	24 ... 10 AWG	
1 Flexible conductor	Norme			
	Value	0.2 ... 6 mm <sup>2</sup>		
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.22 ... 4 mm <sup>2</sup>	24 ... 12 AWG	
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.22 ... 4 mm <sup>2</sup>	24 ... 12 AWG	
Gauge		A4-B3	3 mm	
		IEC 60947-1	0.118 in	
Ferrule maximum outer diameter or conductor insulation maximum outer diameter		Max.	Manufacturer data	5.5 mm 0.216 in

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

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## Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded conductors	Norme			
	Value	0.2 ... 2.5 mm <sup>2</sup>	24 ... 14 AWG	
2 Flexible conductors	Norme			
	Value	0.2 ... 2.5 mm <sup>2</sup>		
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.22 ... 2.5 mm <sup>2</sup>	24 ... 14 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		6 mm <sup>2</sup>		10 AWG
Maximum Cross section	Manufacturer data	6 mm <sup>2</sup>	Manufacturer data	10 AWG

## Electrical characteristics

### Current

Rated current				41 A
	Field and factory wiring Cat.2		UL 1059	30 A
	Factory wiring Cat.1		UL 1059	30 A
			CSA-C-22.2 n°158	30 A
Maximum Exe current			IEC/EN 60079-7	41 A
Rated short-time withstand current 1 s (I <sub>cw</sub> )				720 A
Short-time withstand current		0.5 s	Manufacturer data	1845 A
		5 s	Manufacturer data	574 A
		10 s	Manufacturer data	410 A
		30 s	Manufacturer data	205 A
		1 min	Manufacturer data	164 A
Rated short-circuit withstand current			UL 1059	
Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> )			Manufacturer data	41 A   6 mm <sup>2</sup>
Maximum short circuit current (1s)			Manufacturer data	720 A

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

SCCR			UL 1059	100 kA
With the following configurations:				
	Suitable conductor wire range			14 ... 10 AWG
	Maximum voltage			600 V
	Fuse class / Max. amp. Rating		J	110 A
			T	110 A
			RK1	100 A
			RK5	30 A
			G	60 A
			CC	30 A

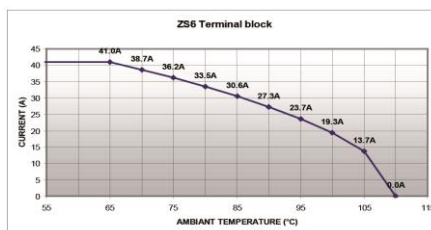
## Voltage

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	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

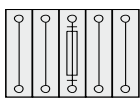
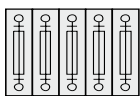
Current Derating curve for continuous service temperature



## Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	1.3 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	Compliant
		Number of the test method	3
		Duration of test	21 j

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## Vibrations and shocks

Sinusoidal vibrations		IEC 60068-2-6	Compliant
	Conditions	Frequency range	10 ... 55 Hz
		Number of cycles	10
		Acceleration	10 m/s <sup>2</sup>
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	

## ZS6 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 <sup>(ing)</sup> pieces	Weight g (1 pce)
1 Terminal Block Markers	MG-CPM 13	1SNB041791R0612	1680	0.273
	MC612	1SNK150000R0000	22	10.00
	MC612-YL	1SNK150004R0000	22	10.00
	MC612PA	1SNK159999R0000	20	11.00
	UMH	1SNK900611R0000	10	0.20
	PROCAP6	1SNK900612R0000	20	0.80
	SAT6	1SNK900615R0000	5	6.00
2 Mounting Rails	PR3.G2	1SNA164800R0300	2	718.00
	PR4	1SNA168500R1200	2	915.00
	PR5	1SNA168700R2200	2	700
	PR30	1SNA173220R0500	2	328.00
	PR3.Z2	1SNA174300R1700	2	718.00
3 End Sections	ES4	1SNK505910R0000	20	2.20
4 End Stops	BAM4	1SNK900001R0000	50	14.00
	BAZ1	1SNK900002R0000	50	5.30
5 Circuit Separators	CS	1SNK900101R0000	20	0.20
	CS-R1	1SNK900103R0000	20	5.20
6 Test Connectors	TC5-R1	1SNK900201R0000	10	5.20
7 Test Adapters	TP2	1SNK900203R0000	20	1.70
	TP4	1SNK900205R0000	20	2.40
8 Shield Connectors	SHBS	1SNK900600R0000	20	3.50
9 Cross Spacing Jumpers	JB85-3	1SNK900603R0000	10	2.80
10 Protecting Covers	CO	1SNK900604R0000	1	300.00
	PL6	1SNK900619R0000	10	1.80
11 Protecting Cover Kits	KCO	1SNK900624R0000	1	47.80
12 Tools	PS-3	1SNK900650R0000	1	380.00
13 Jumper Bars	JB6-2	1SNK906302R0000	50	1.30
	JB6-3	1SNK906303R0000	50	2.10
	JB6-4	1SNK906304R0000	50	2.90
	JB6-5	1SNK906305R0000	50	3.60
	JB6-10	1SNK906310R0000	20	7.40
	JB6-50	1SNK906350R0000	10	38.10
14 Spacers	ES-TC6	1SNK900105R0000	10	0.80

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