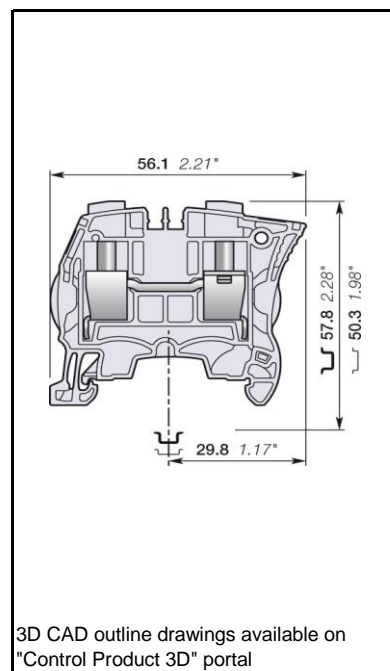
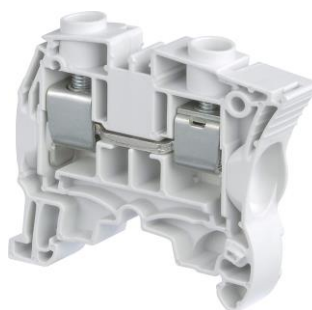


ZS16 Screw Clamp Terminal Blocks Feed-through

- Save space by connecting conductors up to 16 mm² (without insulated ferrule, CB certified) 4 AWG in just 10 mm 0.394 in spacing,
- Perfectly adapted to solar applications: voltage is rated 1000 V AC / DC IEC.



		16 mm²
		4 AWG
10 mm 0.394 in Spacing		

Ordering Details

Color	Type	Order Code	EAN Code	Pack ^(mg)	Weight (1 pce) g
Grey	ZS16	1SNK510010R0000	3472595100101	25	20.20
Blue	ZS16-BL	1SNK510020R0000	3472595100200	25	20.20
Orange	ZS16-OR	1SNK510030R0000	3472595100309	25	20.20

Declarations and Certificates

CE	CB	RoHS	UL US	UL US	UL US	UL US	UL US	UL US	UL US	UL US
										ATEX Declaration
BR-Ex e II	Haz Loc	BV	Rina	DNV						

Declarations and Certificates

	CE	1SND225100U10*
	CB	1SND161021A02*
	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 I2F2
	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 ²	24 ... 4 AWG		
1 Flexible conductor	Norme				
	Value	0.5 ... 16 mm ²			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5 ... 16 mm ²	24 ... 4 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5 ... 10 mm ²	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 mm²).

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Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded conductors	Norme			
	Value	0.5 ... 6 mm ²	20 ... 10 AWG	
2 Flexible conductors	Norme			
	Value	0.5 ... 6 mm ²		
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.5 ... 6 mm ²	20 ... 10 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 mm²)

Cross section

Rated cross section		16 mm ²		4 AWG
Maximum Cross section	Manufacturer data	16 mm ²	Manufacturer data	4 AWG

Electrical characteristics

Current

Rated current				76 A
	Field and factory wiring Cat.2		UL 1059	67 A
	Factory wiring Cat.1		UL 1059	67 A
			CSA-C-22.2 n°158	67 A
Maximum Exe current			IEC/EN 60079-7	76 A
Rated short-time withstand current 1 s (I _{cw})				1920 A
Short-time withstand current	0.5 s	Manufacturer data		4028 A
	5 s	Manufacturer data		1216 A
	10 s	Manufacturer data		836 A
	30 s	Manufacturer data		456 A
	1 min	Manufacturer data		304 A
Rated short-circuit withstand current			UL 1059	
Max. current (45° temperature increase) / Max. cross section (mm ²)			Manufacturer data	76 A 16 mm ²
Maximum short circuit current (1s)			Manufacturer data	1920 A

Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		UL 1059	100 kA
With the following configurations:			
Suitable conductor wire range			14 ... 4 AWG
Maximum voltage			600 V
Fuse class / Max. amp. Rating		J	150 A
		T	150 A
		RK1	100 A
		RK5	30 A
		G	60 A
		CC	30 A

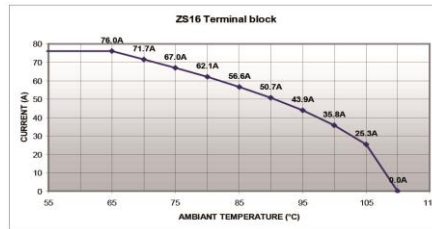
Voltage

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

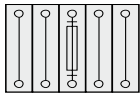
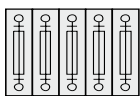
Current Derating curve for continuous service temperature



Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	2.4 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 ₂	Conditions	ISO 6988	Compliant
		Duration of test	48 h
		Concentration	0.2 dm ³
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 ²
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	

ZS16 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 ^(mg) pieces	Weight g (1 pce)
1 Terminal Block Markers	MG-CPM 13	1SNB041791R0612	1680	0.273
	MC812	1SNK160000R0000	22	10.00
	MC812-YL	1SNK160004R0000	22	10.00
	MC812PA	1SNK169999R0000	20	14.00
	UMH	1SNK900611R0000	10	0.20
	PROCAP8	1SNK900613R0000	20	1.00
	SAT8	1SNK900616R0000	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 Cross Spacing Jumpers	JB85-3	1SNK900603R0000	10	2.80
9 Protecting Covers	CO	1SNK900604R0000	1	300.00
	PL10	1SNK900621R0000	10	3.10
10 Protecting Cover Kits	KCO	1SNK900624R0000	1	47.80
11 Tools	PS-3	1SNK900650R0000	1	380.00
12 Jumper Bars	JB10-2	1SNK910302R0000	50	4.60
	JB10-3	1SNK910303R0000	50	7.10
	JB10-4	1SNK910304R0000	40	9.40
	JB10-5	1SNK910305R0000	30	12.00
	JB10-10	1SNK910310R0000	20	24.00

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