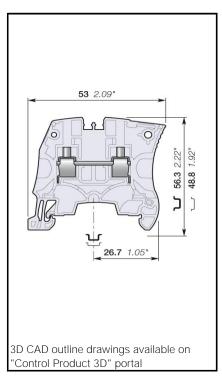
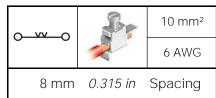
Technical Datasheet 1SNK161004D0201 Catalogue Page 1SNK161004S0201

## 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.







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**

Decial ations and Certificates									
<b>C</b> €	CB	RoHS RoHS	c <b>SL</b> us USR CNR		<b>(I)</b>	Gost R	€x ATEX	IECEx IECEx	
		•							
BR-Ex e II	c <b>Sl</b> us Haz Loc	BV	Rina	DNV		ATEX Declaration	•		



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<b>€</b> ©E	CE	1SND225081C1009
CB	СВ	1SND161018A0202
RoHS RoHS	RoHS	1SND230491F0205
c <b>&gt;\U</b> us USR CNR	USR CNR	1SND161040A0204
	CSA	1SND161070A0203
<u>●</u>		
Gost R	GOST R	1SND161005A1103
€ <sub>X</sub> ATEX	ATEX	1SND162004A1703
IECEX IECEX	IECEx	1SND162005A1703
BR-Exell	BR-Ex e II	1SND161042A0200
c <b>Alus</b> Haz Loc	USR CNR Haz Loc	1SND161047A0201
(©) BV	BV	1SND161073A0201
₩ Rina	RINA	1SND161088A0200
DNV	DNV	1SND161087A0200
Atex Declaration	Atex Declaration	1SND225085C1004

#### Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM2 II 2 GD Ex eb I/II/IIIC	Ex e: increased security

<sup>\*</sup> in the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D

#### **General Information**

The following information mu	ust be strictly adhered	to in order to g	uarantee the term	inal block electric	cal, mechani	ical and environmental	performance.	
Protection	IEC 60947-1	IP20	NEMA250					
Rail	<u></u> ר	TH 35-7.5, TH 35-15						
Wire stripping length		12 mm	0.472 in					
		Screw clamp	)	Screw rail cor (Maximum va		Disconnect d	evice	
Operating tool		Flat screwdri	ver					
		4 mm	0.157 in					
Torque		1.3 N.m	11.5 lb.in					
		± 0.3 N.m	± 2.65 lb.in					

#### **Material Specifications**

Insulating material		Polyamide
CTI		600 V
Flammability	UL94	VO
	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 clam	ıp _	Screw	clamp		
1 Rigid - Solid / Stranded conductor -	Norme	IEC60947-7-1	UL1059		
Rigid - Solid / Stranded Conductor -	Value	0.5-10 mm <sup>2</sup>	24-6 AWG		
1 Claudele e endusten	Norme	IEC60947-7-1			
1 Flexible conductor -	Value	0.5-10 mm <sup>2</sup>			
1 Flexible conductor with non	Norme	Manufacturer data	Manufacturer data		
insulated ferrule	Value	0.5-10 mm <sup>2</sup>	24-8 AWG		
1 Flexible conductor with insulated	Norme	Manufacturer data	Manufacturer data		
ferrule	Value	0.5-6 mm <sup>2</sup>	24-10 AWG		
Caugo		A5-B5	5.2 mm		
Gauge		IEC 60947-1	0.205 in		
Ferrule maximum outer diameter or cor insulation maximum outer diameter	iductor	Ø 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 mm²).

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Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded	Norme	IEC60947-7-1	UL1059	
conductors	Value	0.5-4 mm <sup>2</sup>	20-12 AWG	
2 Flexible conductors	Norme	IEC60947-7-1		
2 Flexible Conductors	Value	0.5-4 mm <sup>2</sup>		
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data	
ferrule	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 mm²)

#### 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 (Icw)		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	k. cross section (mm²)	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

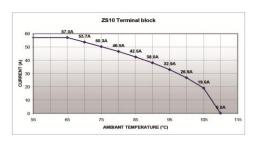
Voltage		
Rated voltage	IEC 60947-1	1000 V
Rated voltage	UL 1059	600 V
Use Group	UL 1059	B, C
Rated voltage	CSA-C-22.2 n°158	600 V
Rated voltage Ex e	IEC/ EN 60079-7	630 V
Rated impulse withstand voltage	IEC 60947-1	8000 V
Dielectric test voltage	IEC 60947-1	2200 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

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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

Current Derating curve for continuous service temperature



Dissipated power

Maximum dissipated power at rated current	IEC 60947-1 1.8 W

Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Separate arrangement / Overload and short-circuit protection  Separate arrangement / Exclusive short-circuit protection	
Compound arrangement / Overload and short-circuit protection	
Compound arrangement / Exclusive short-circuit protection	

#### **Environmental Characteristics** Additional climatic tests

Dry heat		IEC 60068-2 2	Compliant
	Conditions	Conditions Temperature	
	_	Duration of test 96 h	
Cyclic damp heat		IEC 60068-2 30	Compliant
	Conditions	Temperature	+55 °C
		Duration of test	2
Cold		IEC 60068-2 1	Compliant
	Conditions	Temperature	-40 °C
	_	Duration of test	96 h
Z/ABDM climatic sequence		IEC 60068-2 61	Compliant
	Conditions	Dry heat Duration of test / Temperature	16 h <i>+85 ℃</i>
	_	Cyclic damp heat Number of cycles / Temperature	1 +55 °C
		Cold Duration of test / Temperature	2 h <i>-25 ℃</i>

Corrosion		
Salt mist		IEC 60068-2 11 Compliant
	Conditions	Duration of test 96 h
		Concentration 5 %
SO2		ISO 6988 Compliant
	Conditions	Duration of test 48 h
		Concentration 0.2 dm <sup>3</sup>
Sulfur dioxide		IEC 60068-2 42
	Conditions	Duration of test
Hydrogen sulfur		IEC 60068-2 43
	Conditions	Duration of test
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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#### Vibrations

Sinusoidal vibrations		IEC 60068-2-6	Compliant		
	Conditions	Frequency range	10-55 Hz		
	-	Number of cycles	10		
	_	Amplitude			
	_	Acceleration	10-55 Hz 10 10 m/s²		
Random vibrations and climatic sequence		IEC 60068-2-4			
	Conditions	Duration of test			
	_	Frequency range			
	_	Acceleration			
		Climatic cycles			
	_	Step 1-> Temperature / Duration of test			
	_	Step 2-> Temperature / Duration of test			
	_	Temperature variation per minute			

## ZS10 Terminal Block Accessories Compatibility Some accessories may modify the terminal VIII III

Some accessories n	nay modify the terminal b	lock's rating. See complet	e information in the acces	sories catalog page

Description	Type	Order Code	Pack <sup>(ing)</sup>	Weight	Accessories catalogue
			pieces		page number
1 End Stops	BAM3	1SNK900001R0000	50		1SNK160026S0201
	BAZ1	1SNK900002R0000	20		1SNK160002S0201
2 End Sections	ES4	1SNK505910R0000	20		1SNK160022S0201
3 Jumper Bars	JB8-2	1SNK908302R0000	50		1SNK160030S0201
	JB8-3	1SNK908303R0000	50		1SNK160030S0201
	JB8-4	1SNK908304R0000	50	5.60	1SNK160030S0201
	JB8-5	1SNK908305R0000	40	7.00	1SNK160030S0201
	JB8-10	1SNK908310R0000	20	14.20	1SNK160030S0201
4 Cross Spacing Jumpers	JB85-3	1SNK900603R0000	10		1SNK160034S0201
5 Circuit Separators	CS	1SNK900101R0000	20	0.20	1SNK160018S0201
	CS-R1	1SNK900103R0000	20	5.20	1SNK160018S0201
6 Test Adapters	TP2	1SNK900203R0000	20	1.73	1SNK160036S0201
	TP4	1SNK900205R0000	20	2.41	1SNK160036S0201
7 Test Connectors	TC5	1SNK900200R0000	10	5.23	1SNK160042S0201
	TC5-R1	1SNK900201R0000	10	5.23	1SNK160042S0201
8 Spacers	ES-TC8	1SNK900104R0000	10	1.35	1SNK160042S0201
9 Protecting Cover Kits	KCO	1SNK900624R0000	1	47.80	1SNK160045S0201
10 Protecting Covers	CO	1SNK900604R0000	1	300.00	1SNK160045S0201
	PL8	1SNK900620R0000	10	2.55	1SNK160021S0201
11 Mounting Rails	PR3.G2	1SNA164800R0300	2		1SNK160040S0201
9	PR4	1SNA168500R1200	2	915.00	1SNK160041S0201
	PR5	1SNA168700R2200	2		1SNK160041S0201
	PR30	1SNA173220R0500	2	328.00	1SNK160017S0201
	PR3.Z2	1SNA174300R1700	2		1SNK160017S0201
12 Tools	PS-3	1SNK900650R0000	1	380.00	1SNK160028S0201
13 Terminal Block Markers	MC812	1SNK160000R0000	22		1SNK160009S0201
	MC812-YL	1SNK160004R0000	22		1SNK160009S0201
	MC812PA	1SNK169999R0000	20		1SNK160009S0201
	UMH	1SNK900611R0000	10		1SNK160001S0201
	PROCAP8	1SNK900613R0000	20		1SNK160013S0201
	SAT8	1SNK900616R0000	5		1SNK160013S0201
	JATO	131412 7000 10130000		0.00	13111110001330201

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