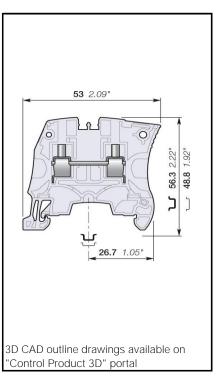
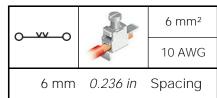
Technical Datasheet 1SNK161008D0201 Catalogue Page 1SNK161008S0201

# ZS6 Screw Clamp Terminal Blocks

Save space by connecting conductors up to 6 mm<sup>2</sup> (CB certified) 10 AWG in just 6 mm 0.236 in spacing.







Ordering Details

Color		Туре	Order Code	EAN Code	Pack <sup>(ing)</sup>	Weight
						(1 pce) g
Grey		ZS6	1SNK506010R0000	3472595060108	50	10.64
Blue		ZS6-BL	1SNK506020R0000	3472595060207	50	10.64
Orange		ZS6-OR	1SNK506030R0000	3472595060306	50	10.64
Yellow		ZS6-YL	1SNK506060R0000	3472595060603	50	10.64
Green		ZS6-GN	1SNK506061R0000	3472595060610	50	10.64
Red		ZS6-RD	1SNK506062R0000	3472595060627	50	10.64
Purple	Sec.	ZS6-PR	1SNK506063R0000	3472595060634	50	10.64
Brown		ZS6-BR	1SNK506064R0000	3472595060641	50	10.64
White		ZS6-WH	1SNK506065R0000	3472595060658	50	10.64
Black		ZS6-BK	1SNK506066R0000	3472595060665	50	10.64

# **Declarations and Certificates**

Deciaratio	Decidi ations and Certificates								
<b>C</b> €	CB	RoHS RoHS	C FLL 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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CE	CE	1SND225081C1009
CE		
CB	CB	1SND161025A0203
RoHS RoHS	RoHS	1SND230491F0205
c <b>RU</b> us USR ONR	USR CNR	1SND161040A0204
<b>®</b>	CSA	1SND161070A0203
€Gy Gost R	GOST R	1SND161005A1103
₹x ATEX	ATEX	1SND162004A1703
IECEX IECEX	IECEx	1SND162005A1703
Z ™ BR-Exe II	BR-Ex e II	1SND161042A0200
e <b>Al</b> us Haz Loc	USR CNR Haz Loc	1SND161047A0201
BV	BV	1SND161073A0201
Bina	RINA	1SND161088A0200
(I) 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	ıst be strictly adhered	to in order to g	uarantee the term	ninal block electric	cal, mechan	ical and environmenta	l performance.	
Protection	IEC 60947-1	IP20	NEMA250					
Rail	7	TH 35-7.5, TH 35-15						
Wire stripping length		10.5 mm	0.413 in					
		Screw clamp		Screw rail con (Maximum va		Disconnect of	levice	
Operating tool		Flat screwdri	ver					
		4 mm	0.157 in					
Torque	6	0.85 N.m	7.52 lb.in					
		± 0.15 N.m	± 1.33 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   12F3
	Needle flame test C 60615-11-5 Compliant

Connecting capacity per clam	- p	Screw	clamp		
4.51.1.0.11.1.01.1.1.1.1.1.1.1.1.1.1.1.1.	Norme	IEC60947-7-1	UL1059		
1 Rigid - Solid / Stranded conductor -	Value	0.2-6 mm <sup>2</sup>	24-10 AWG		
1 Flexible conductor -	Norme	IEC60947-7-1			
Flexible collauctor -	Value	0.2-6 mm <sup>2</sup>			
1 Flexible conductor with non	Norme	Manufacturer data	Manufacturer data		
insulated ferrule	Value	0.22-4 mm <sup>2</sup>	24-12 AWG		
1 Flexible conductor with insulated	Norme	Manufacturer data	Manufacturer data		
ferrule	Value	0.22-4 mm <sup>2</sup>	24-12 AWG		
Gauge		A4-B3	3 mm		
Gauge		IEC 60947-1	0.118 in		
Ferrule maximum outer diameter or cor insulation maximum outer diameter	nductor	Ø 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 mm²).

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Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded	Norme	IEC60947-7-1	UL1059	
conductors	Value	0.2-2.5 mm <sup>2</sup>	24-14 AWG	
2 Flexible conductors	Norme	IEC60947-7-1		
2 Flexible Conductors	Value	0.2-2.5 mm <sup>2</sup>		
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data	
ferrule	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 mm²)

# Cross section

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

# Electrical characteristics Current

Rated current		IEC60947-7-1	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
Rated short-time withstand current 1 s (Icw)		IEC60947-7-1	720 A
Short-time withstand current		Manufacturer data	1845 A
		Manufacturer data	574 A
		Manufacturer data	410 A
		Manufacturer data	205 A
		Manufacturer data	164 A
Rated short-circuit withstand current		CSA-C-22.2 n°158	
Max. current (45° temperature increase) / Max	k. cross section (mm²)	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 type / Fuse rating	J	110 A
		T	110 A
		RK1	100 A
		RK5	30 A
		G	60 A
		CC	30 A

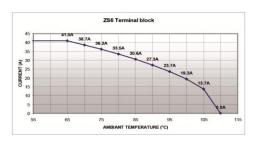
## Voltage

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

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

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

rated power dissipation at an ambient temperature of 20 ° 120 00717 7 °				
Separate arrangement / Overload and short-circuit protection				
Separate arrangement / Exclusive short-circuit protection	6666			
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 Temperature		+100 °C	
	_	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 Comp		
	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 dm³
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
	<del>-</del>	Amplitude	
	-	Acceleration	10 m/s <sup>2</sup>
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	

# ZS6 Terminal Block Accessories Compatibility

Some accessories may modify the terminal block's rating. See complete information in the accessories catalog page.

	Description	Туре	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	JB6-2	1SNK906302R0000	50		1SNK160029S0201
		JB6-3	1SNK906303R0000	50		1SNK160029S0201
		JB6-4	1SNK906304R0000	50		1SNK160029S0201
		JB6-5	1SNK906305R0000	50		1SNK160029S0201
		JB6-10	1SNK906310R0000	20		1SNK160029S0201
		JB6-50	1SNK906350R0000	10	38.10	1SNK160029S0201
4	Circuit Separators	CS	1SNK900101R0000	20	0.20	1SNK160018S0201
		CS-R1	1SNK900103R0000	20	5.20	1SNK160018S0201
5	Test Adapters	TP2	1SNK900203R0000	20	1.73	1SNK160036S0201
		TP4	1SNK900205R0000	20	2.41	1SNK160036S0201
6	Test Connectors	TC5-R1	1SNK900201R0000	10	5.23	1SNK160042S0201
7	Spacers	ES-TC6	1SNK900105R0000	10	0.80	
8	Protecting Cover Kits	KCO	1SNK900624R0000	1	47.80	1SNK160045S0201
9	Shield Connectors	SHBS	1SNK900600R0000	20	3.50	1SNK160044S0201
10	Protecting Covers	СО	1SNK900604R0000	1	300.00	1SNK160045S0201
		PL6	1SNK900619R0000	10		1SNK160021S0201
11	Mounting Rails	PR3.G2	1SNA164800R0300	2		1SNK160040S0201
	<u> </u>	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
	Terminal Block Markers	MC612	1SNK150000R0000	22		1SNK160006S0201
		MC612-YL	1SNK150004R0000	22		1SNK160006S0201
		MC612PA	1SNK159999R0000	20		1SNK160006S0201
		UMH	1SNK900611R0000	10		1SNK160001S0201
		PROCAP6	1SNK900612R0000	20		1SNK160013S0201
		SAT6	1SNK900615R0000	5		1SNK160013S0201
		37110	13141700013170000		0.00	10111110001000201

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# Contact us

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