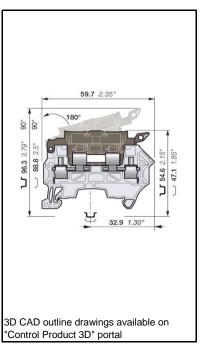
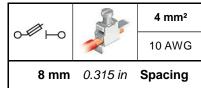
ZS4-SF1 Screw Clamp Terminal Blocks For 5 x 20 and 5 x 25 fuses

Protect your circuit with 5x25 and 5x20 fuse terminal blocks, compliant with IEC 60947-7-3 standard (fuse not supplied with the terminal blocks).







Ordering Details

Color	Type	Order Code	EAN Code	Pack ^(ing)	Weight
					(1 pce) g
Grey, Dark Grey	ZS4-SF1	1SNK508410R0000	3472595084104	50	13.30

Declarations and Certificates

(€ 	CB	RoHS RoHS	c Flus USR CNR		®	EAC		
		®) BV	(ina)	DNV			-	



RoHS	C € ar m <u>**</u>	CE				18	SND22	25103	8U10*	
Semeral Information	<u> </u>	СВ								
General Information By CSA ISND161070A02* EAC EAC ISND161009A11* By ISND161073A02* RINA ISND16108A02* DNV ISND16108A02* DNV ISND16108A02* TSND16108A02* TSND16108A02* Screw clamp Isometic in content to guarantee the terminal block electrical, mechanical and environmental performance. Protection Isometic in content in content to guarantee the terminal block electrical, mechanical and environmental performance. Protection Isometic in content in content to guarantee the terminal block electrical, mechanical and environmental performance. Protection Isometic in content in content to guarantee the terminal block electrical, mechanical and environmental performance. Protection Isometic in content in cont	RoHS									
General Information Ref Comment of 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 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Screw rail contact (Maximum value) Screw clamp Screw rail contact (Maximum value) Flat screwdriver (Maximum value) Departing tool Flat screwdriver 0.6 N.m 5.31 N.m 1.0 N.m	e W e		NR							
BV 1SND161009A11* BV 1SND161073A02* RINA 1SND16108A02* DNV 1SND161087A02* RINA 1SND161087A02* Protection IEC 60947-1 IP20 NEMA 1 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Disconnect device (Maximum value) Screw clamp Screw rail contact (Maximum value) Flat screwdriver (Maximum value) Flat screwdriver (Maximum value) Torque 0.6 N.m 5.31 N.m 1.0.885 N.m Polyamide Rould on V										
BV 1SND161073A02* RINA 1SND161088A02* DNV 1SND161087A02* BY 1SND161087A02* RINA 1SND161087A02* BY 1SND161088A02* BY 1SND161	@									
RINA 1SND161088A02* DNV 1SND161087A02* Semeral Information ISND161087A02* ISND16108	EAC	EAC				15	SND16	31009	A11*	
RINA 1SND161088A02* DNV 1SND161087A02* 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 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Screw clamp Screw rail contact (Maximum value) Deparating tool Flat screwdriver (Maximum value) Torque 0.6 N.m 5.31 N.m ± 0.885 N.m Material Specifications IPOlyamide IPOlyamide IPOlyamide IPOlyamide ISND161088A02* IS										
RINA 1SND161088A02* DNV 1SND161087A02* Seneral 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 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Screw clamp Screw rail contact (Maximum value) Performance (Maximum value) Flat screwdriver Screw rail contact (Maximum value) Deparating tool Flat screwdriver Screw rail contact (Maximum value) Operating tool Flat screwdriver Path 1.1 mm 0.138 in 1.1 mm 1.1 m										
RINA 1SND161088A02* DNV 1SND161087A02* Seneral 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 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Screw clamp Screw rail contact (Maximum value) Deparating tool Flat screwdriver (Maximum value) The forque 0.6 N.m 5.31 N.m ± 0.885 N.m Material Specifications INSURATION TO SET TO S	867									
General Information The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance. Protection Rail TH 35-7.5, TH 35-15 TH 35-7.5, TH 35-15 Wire stripping length TH 35-7.5, TH 35-15 Screw clamp Screw rail contact (Maximum value) Operating tool Flat screwdriver 3.5 mm 0.138 in 0.6 N.m 5.31 N.m (0.138 in) 1.0 material Specifications Insulating material Polyamide CTI Polyamide	A Pins.									
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 TH 35-7.5, TH 35-15 Wire stripping length 11 mm 0.432 in Screw clamp Screw rail contact (Maximum value) Operating tool Flat screwdriver 3.5 mm 0.138 in Torque 0.6 N.m 5.31 N.m 1.0.1 N.m 1.0.885 N.m Material Specifications Insulating material Polyamide 600 V	DAN	DNV				15	SND16	61087	'A02*	
(Maximum value)										
3.5 mm	The following information mus Protection Rail	t be strictly adhered	IP20 TH 35-7.5, Th	H 35-15		ıl, mechanical and	environn	nental p	erformance.	
3.5 mm	The following information mus Protection Rail	t be strictly adhered	TH 35-7.5, Th	H 35-15	NEMA 1 Screw rail con	tact I				
# 0.1 N.m # 0.885 N.m Material Specifications Insulating material Polyamide 600 V	The following information mus Protection Rail Wire stripping length	t be strictly adhered	TH 35-7.5, The street clamp	1 35-15 0.432 in	NEMA 1 Screw rail con	tact I				
# 0.1 N.m # 0.885 N.m Material Specifications Insulating material Polyamide 600 V	The following information mus Protection Rail Wire stripping length	t be strictly adhered	IP20 TH 35-7.5, Th 11 mm Screw clamp Flat screwdriv	H 35-15 0.432 in	NEMA 1 Screw rail con	tact I				
nsulating material Polyamide CTI 600 V	The following information must Protection Rail Wire stripping length Deprating tool	t be strictly adhered	TH 35-7.5, The street clamp Screw clamp Flat screwdrive 3.5 mm	H 35-15 0.432 in ver 0.138 in	NEMA 1 Screw rail con	tact I				
nsulating material Polyamide CTI 600 V	The following information must Protection Rail Wire stripping length Departing tool	t be strictly adhered	IP20 TH 35-7.5, Th 11 mm Screw clamp Flat screwdriv 3.5 mm 0.6 N.m	O.432 in ver 0.138 in 5.31 N.m	NEMA 1 Screw rail con	tact I				
CTI 600 V	The following information must Protection Rail Wire stripping length Deprating tool	IEC 60947-1	IP20 TH 35-7.5, Th 11 mm Screw clamp Flat screwdriv 3.5 mm 0.6 N.m	O.432 in ver 0.138 in 5.31 N.m	NEMA 1 Screw rail con	tact I				
	The following information must Protection Rail Wire stripping length Departing tool Forque Material Specificati	IEC 60947-1	IP20 TH 35-7.5, Th 11 mm Screw clamp Flat screwdriv 3.5 mm 0.6 N.m	O.432 in ver 0.138 in 5.31 N.m	NEMA 1 Screw rail con	tact I	Disconn	nect de	vice	
Flammability UL94 V0	The following information must Protection Rail Wire stripping length Operating tool Forque Material Specifications usualing material	IEC 60947-1	IP20 TH 35-7.5, Th 11 mm Screw clamp Flat screwdriv 3.5 mm 0.6 N.m	O.432 in ver 0.138 in 5.31 N.m	NEMA 1 Screw rail con	tact I	Disconn	nect de	vice	

Flammability		UL94 V0				
	_		NF F 1	6101 I2F	2	
		Ne	edle flame test EC 60615-	-11-5 Co	mpliant	
Connecting conscity per class	-	0		I		
Connecting capacity per clam		Screw	clamp			
1 Rigid - Solid / Stranded conductor -	Norme					
Rigid - Solid / Stranded conductor -	Value	0.2 4 mm ²	24 10 AWG			
1 Flexible conductor -	Norme					
i Flexible colluctor	Value	0.22 4 mm ²				
1 Flexible conductor with non	Norme	Manufacturer data	Manufacturer data			
insulated ferrule	Value	0.22 4 mm ²	24 12 AWG			
1 Flexible conductor with insulated	Norme	Manufacturer data	Manufacturer data			
ferrule	Value	0.22 4 mm ²	24 12 AWG			
Cougo		A3-B3	3 mm			
Gauge		IEC 60947-1	0.118 in			
Ferrule maximum outer diameter or conductor insulation maximum outer diameter		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).

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.

2 Technical Datasheet 1SNK161011D0201 | ABB

Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded	Norme			
conductors	Value	0.2 2.5 mm ²	24 14 AWG	
2 Flexible conductors	Norme			
2 Flexible colluctors	Value	0.2 2.5 mm ²		
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data	
ferrule	Value	0.22 2.5 mm ²	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	4	4 mm²		10 AWG
Maximum Cross section	Manufacturer data 4	4 mm²	Manufacturer data	10 AWG

Electrical characteristics Current

Rated current				6.3 A	
	Field and factory wiring Cat.2		UL 1059	10 A	
	Factory wiring Cat.1		UL 1059	10 A	
			CSA-C-22.2 n°158	6.3 A	
Maximum Exe current			IEC/EN 60079-7		
Rated short-time withstand current 1 s (Icw)					
Short-time withstand current		0.5 s	Manufacturer data		
		5 s	Manufacturer data		
		10 s	Manufacturer data		
		30 s	Manufacturer data		
		1 min	Manufacturer data		
Rated short-circuit withstand current			UL 1059		
Max. current (45° temperature increase) / Max	. cross section (mm²)		Manufacturer data	6.3 A	4 mm ²
Maximum short circuit current (1s)			Manufacturer data		

Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		UL 1059	
With the following configurations:			
	Suitable conductor wire range		
	Maximum voltage		
	Fuse class / Max. amp. Rating	J	
		Т	
		RK1	
		RK5	
		G	

Voltage

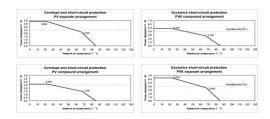
IEC 60947-1	630 V
UL 1059	300 V
UL 1059	B, C, D
CSA-C-22.2 n°158	300 V
IEC/ EN 60079-7	
IEC 60947-1	8000 V
IEC 60947-1	2200 V
IEC 60947-1	3
IEC 60947-1	III
	IEC 60947-1 UL 1059 UL 1059 CSA-C-22.2 n°158 IEC/EN 60079-7 IEC 60947-1 IEC 60947-1 IEC 60947-1 IEC 60947-1

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.

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	
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		2.5
Separate arrangement / Exclusive short-circuit protection		4
Compound arrangement / Overload and short-circuit protection	1	1.6
Compound arrangement / Exclusive short-circuit protection		4

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
		Relative humidity	
		Number of cycles (1 cycle = 24h)	2
Cold		IEC 60068-2 1	Compliant
	Conditions	Temperature -	-40 °C
		Duration of test	96 h
Damp heat steady state		IEC 60068-2-78	
	Conditions	Temperature	
		Relative humidity	
		Duration of test	

Corrosion

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 ³
Flowing mixed gas corrosion test		IEC 60068-2 60	
	Conditions	Number of the test method	
		Duration of test	

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.

4 Technical Datasheet 1SNK161011D0201 | ABB

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

ZS4-SF1 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 ^(ing)	Weight	
			pieces	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-SF	1SNK508960R0000	20	1.80	
4 End Stops	BAM4	1SNK900001R0000	50	14.00	
•	BAZ1	1SNK900002R0000	50	5.30	
5 Protecting Covers	СО	1SNK900604R0000	1	300.00	
6 Protecting Cover Kits	ксо	1SNK900624R0000	1	47.80	
7 Tools	PS-3	1SNK900650R0000	1	380.00	
8 Lateral Jumper Bars	PC81-10	1SNA173523R1100	10	5.00	
9 Fuses	FU520	1SNA008288R1500	10	2.00	
	FU520	1SNA008289R1600	10		
	FU520	1SNA008290R1300	10		
	FU520	1SNA008291R0000	10		
	FU520	1SNA008292R0100	10		
	FU525	1SNA167546R2200	10		
	FU525	1SNA167547R2300	10		
	FU525	1SNA167548R0400	10		
	FU525	1SNA167549R0500	10		
	FU525	1SNA167550R0200	10		
10 Assembly Rods	TGA8	1SNA168672R1100	10	1.00	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	TGA8	1SNA168673R1200	10	1.50	
	TGA8	1SNA168674R1300	10	2.00	
11 Spring Retaining Rings	ANT	1SNA168675R1400	10		
The opining reasoning range					
As part of its on going product improvement. ADD recon					

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.

1SNK161011D0201 - PDF

Contact us

ABB France Electrification Products Division PG Connection 3, rue Jean Perrin F-69687 Chassieu cedex / France Tel. +33 (0)4 7222 1722 Fax +33 (0)4 7222 1935

Note

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

Copyright© 2011 ABB All rights reserved

