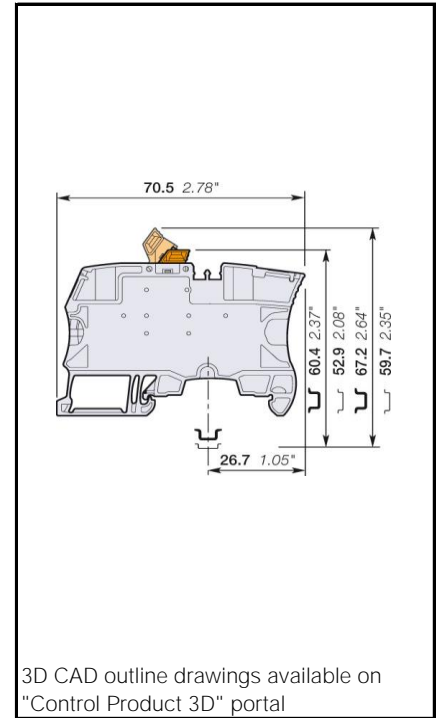







# ZS4-S-R1 Screw Clamp Terminal Blocks

- Simplify the alternated distribution thanks to the two jumper channels aligned with ZS4 feed-through terminal blocks,
- Ease your disconnect operations with the disconnect blade operated by hand or with a screwdriver.












		4 mm <sup>2</sup>
		10 AWG
6 mm 0.236 in Spacing		










## Ordering Details

Color	Type	Order Code	EAN Code	Pack <sup>(ing)</sup>	Weight (1 pce) g
Grey 	ZS4-S-R1	1SNK506310R0000	3472595063109	50	13.20
Blue 	ZS4-S-R1-BL	1SNK506320R0000	3472595063208	50	13.20
Orange 	ZS4-S-R1-OR	1SNK506330R0000	3472595063307	50	13.20

## Declarations and Certificates





								
CE	CB	RoHS	USR CNR		Gost R			
								
		BV	Rina	DNV				

## Declarations and Certificates

	CE	1SND225099C1004
	CB	1SND161077A0201
	RoHS	1SND230491F0205
	USR CNR	1SND161040A0204
	CSA	1SND161070A0203
	GOST R	1SND161005A1103
	BV	1SND161073A0201
	RINA	1SND161088A0200
	DNV	1SND161087A0200

## 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	NEMA250				
Rail		TH 35-7.5, TH 35-15					
Wire stripping length		10.5 mm	0.413 in				
		Screw clamp		Screw rail contact (Maximum value)		Disconnect device	
Operating tool		Flat screwdriver					
Torque		3.5 mm ± 0.1 N.m	0.138 in ± 0.885 lb.in			3.5 mm	

## 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 I2F3
	Needle flame test C 60615-11-5 Compliant

## Connecting capacity per clamp

		Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme	IEC60947-7-1	UL1059		
	Value	0.2-4 mm <sup>2</sup>	24-10 AWG		
1 Flexible conductor	Norme	IEC60947-7-1			
	Value	0.22-4 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		A3-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	IEC60947-7-1	UL1059	
	Value	0.2-1.5 mm <sup>2</sup>	24-16 AWG	
2 Flexible conductors	Norme	IEC60947-7-1		
	Value	0.2-1.5 mm <sup>2</sup>		
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data	
	Value	0.22-1.5 mm <sup>2</sup>	24-16 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	IEC60947-7-1	4 mm <sup>2</sup>	UL1059	10 AWG
Maximum Cross section	Manufacturer data	4 mm <sup>2</sup>	Manufacturer data	10 AWG

## Electrical characteristics

### Current

Rated current		IEC60947-7-1	26 A
	Field and factory wiring Cat.2	UL 1059	26 A
	Factory wiring Cat.1	UL 1059	26 A
		CSA-C-22.2 n°158	
Rated short-time withstand current 1 s (I <sub>cw</sub> )		IEC60947-7-1	480 A
Short-time withstand current		Manufacturer data	
		Manufacturer data	
		Manufacturer data	
		Manufacturer data	
		Manufacturer data	
Rated short-circuit withstand current		CSA-C-22.2 n°158	
Max. current (45° temperature increase) / Max. cross section (mm <sup>2</sup> )		Manufacturer data	26 A   4 mm <sup>2</sup>
Maximum short circuit current (1s)		Manufacturer data	480 A

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

SCCR		UL 1059
With the following configurations:		
	Suitable conductor wire range	
	Maximum voltage	
	Fuse type / Fuse rating	J
		T
		RK1
		RK5
		G
		CC

## Voltage

Rated voltage	IEC 60947-1	400 V
Rated voltage	UL 1059	150 V
Use Group	UL 1059	B, C
Rated voltage	CSA-C-22.2 n°158	150 V
Rated voltage Ex e	IEC/ EN 60079-7	
Rated impulse withstand voltage	IEC 60947-1	6000 V
Dielectric test voltage	IEC 60947-1	1890 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

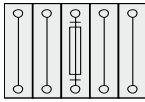
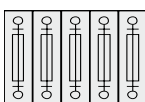
## Temperature range

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

## Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	0.8 W
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## Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Separate arrangement / Overload and short-circuit protection	 1 fuse and 4 feed-through blocks	
Separate arrangement / Exclusive short-circuit protection		
Compound arrangement / Overload and short-circuit protection	 5 fuse blocks	
Compound arrangement / Exclusive short-circuit protection		

## Environmental Characteristics

### Additional climatic tests

Dry heat	Conditions	IEC 60068-2 2	Compliant
		Temperature	+100 °C
Cyclic damp heat	Conditions	IEC 60068-2 30	Compliant
		Temperature	+55 °C
Cold	Conditions	IEC 60068-2 1	Compliant
		Temperature	-40 °C
Z/ABDM climatic sequence	Conditions	IEC 60068-2 61	Compliant
		Dry heat Duration of test / Temperature	16 h   +85 °C
		Cyclic damp heat Number of cycles / Temperature	1   +55 °C
		Cold Duration of test / Temperature	2 h   -25 °C

## Corrosion

Salt mist	Conditions	IEC 60068-2 11	Compliant
		Duration of test	96 h
SO <sub>2</sub>	Conditions	ISO 6988	Compliant
		Duration of test	48 h
Sulfur dioxide	Conditions	IEC 60068-2 42	
		Concentration	0.2 dm <sup>3</sup>
Hydrogen sulfur	Conditions	IEC 60068-2 43	
		Duration of test	
Flowing mixed gas corrosion test	Conditions	IEC 60068-2 60	
		Number of the test method	
		Duration of test	

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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 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		

## ZS4-S-R1 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)	Accessories catalogue page number
1 End Stops	BAM3	1SNK900001R0000	50	13.80	1SNK160026S0201
	BAZ1	1SNK900002R0000	20	5.30	1SNK160002S0201
2 Jumper Bars	JB6-2	1SNK906302R0000	50	1.30	1SNK160029S0201
	JB6-3	1SNK906303R0000	50	2.10	1SNK160029S0201
	JB6-4	1SNK906304R0000	50	2.90	1SNK160029S0201
	JB6-5	1SNK906305R0000	50	3.60	1SNK160029S0201
	JB6-10	1SNK906310R0000	20	7.40	1SNK160029S0201
	PC81-10	1SNA173523R1100	10	5.00	
3 Lateral Jumper Bars					
4 Test Adapters	TP2	1SNK900203R0000	20	1.73	1SNK160036S0201
	TP4	1SNK900205R0000	20	2.41	1SNK160036S0201
5 Test Connectors	TC5-R1	1SNK900201R0000	10	5.23	1SNK160042S0201
6 Spacers	ES-TC6	1SNK900105R0000	10	0.80	
7 Mounting Rails	PR3.G2	1SNA164800R0300	2		1SNK160040S0201
	PR4	1SNA168500R1200	2	915.00	1SNK160041S0201
	PR5	1SNA168700R2200	2		1SNK160041S0201
	PR30	1SNA173220R0500	2	328.00	1SNK160017S0201
	PR3.Z2	1SNA174300R1700	2		1SNK160017S0201
	PS-3	1SNK900650R0000	1	380.00	1SNK160028S0201
8 Tools					
	MC612	1SNK150000R0000	22	10.00	1SNK160006S0201
	MC612-YL	1SNK150004R0000	22	10.00	1SNK160006S0201
	MC612PA	1SNK159999R0000	20	11.00	1SNK160006S0201
	UMH	1SNK900611R0000	10	0.20	1SNK160001S0201
	PROCAP6	1SNK900612R0000	20	0.78	1SNK160013S0201
	SAT6	1SNK900615R0000	5	6.00	1SNK160013S0201
9 Terminal Block Markers					

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