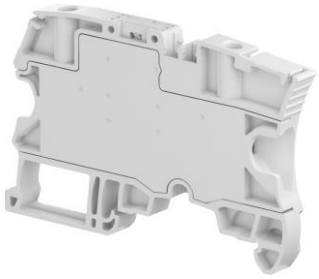
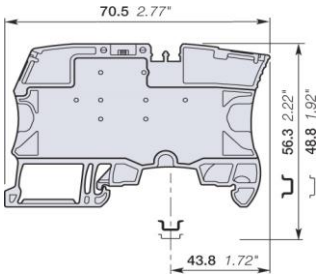
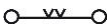
ZS4-R2 Screw Clamp Terminal Blocks
Feed-through

- Simplify the distribution of circuits in marshalling cabinets thanks to our feed-through terminal blocks with the same profile as ZS4-SF fuse, ZS4-S-R1 disconnect and ZS4-PE-R2 ground terminal blocks: aligned conductor entries, jumper channels and marking in just 6 mm 0.236 in spacing,
- No end section needed: closed block.





3D CAD outline drawings available on "Control Product 3D" portal

		**4 mm²**
		10 AWG
6 mm	*0.236 in*	**Spacing**

Ordering Details

Color	Type	Order Code	EAN Code	Pack[ing]	Weight (1 pce) g
Grey	ZS4-R2	1SNK506013R0000	3472595060139	50	12.40

Declarations and Certificates

CE	CB	RoHS	USR CNR			EAC			
		BV		DNV					

Declarations and Certificates

CE	CE	1SND225100U10*
CB	CB	1SND161097A02*
RoHS	RoHS	1SND230491F02*
USR CNR	USR CNR	1SND161041A02*
CSA	CSA	1SND161070A02*
EAC	EAC	1SND161009A11*
BV	BV	1SND161073A02*
DNV	DNV	1SND161087A02*

General Information

The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

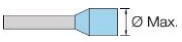
Protection	IEC 60947-1	IP20		*NEMA 1*				
Rail		TH 35-7.5, TH 35-15						
Wire stripping length		10.5 mm	*0.413 in*					

		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		3.5 mm	*0.138 in*					
Torque		0.6 N.m	*5.31 N.m*					
		± 0.1 N.m	*± 0.885 N.m*					

Material Specifications

Insulating material		Polyamide
CTI		600 V
Flammability	UL94	V0
	NF F 16101	I2F2
	Needle flame test IEC 60615-11-5	Compliant

Connecting capacity per clamp

		Screw clamp			
1 Rigid - Solid / Stranded conductor	Norme	IEC60947-7-1	UL1059		
	Value	0.2 ... 4 mm²	24 ... 10 AWG		
1 Flexible conductor	Norme	IEC60947-7-1			
	Value	0.22 ... 4 mm²			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.22 ... 4 mm²	24 ... 12 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.22 ... 4 mm²	24 ... 12 AWG		
Gauge		A3-B3	3 mm		
		IEC 60947-1			
Ferrule maximum outer diameter or conductor insulation maximum outer diameter			Manufacturer data	5.5 mm	

The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3 (crimping capacity up to 10 mm²).

Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded conductors	Norme	IEC60947-7-1	UL1059		
	Value	0.2 ... 1.5 mm²	24 ... 16 AWG		
2 Flexible conductors	Norme	IEC60947-7-1			
	Value	0.2 ... 1.5 mm²			
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.22 ... 1.5 mm²	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 mm²)

Cross section

Rated cross section	IEC60947-7-1	4 mm²	UL1059	10 AWG
Maximum Cross section	Manufacturer data	4 mm²	Manufacturer data	*10 AWG*

Electrical characteristics

Current

Rated current			IEC60947-7-1	32 A	
	Field and factory wiring Cat.2		UL 1059	30 A	
	Factory wiring Cat.1		UL 1059		
			CSA-C-22.2 n°158	30 A	
Maximum Exe current			IEC/EN 60079-7		
Rated short-time withstand current 1 s (Icw)			IEC60947-7-1	480 A	
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	32 A	4 mm²
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 class / Max. amp. Rating		J	
			T	
			RK1	
			RK5	
			G	
			CC	

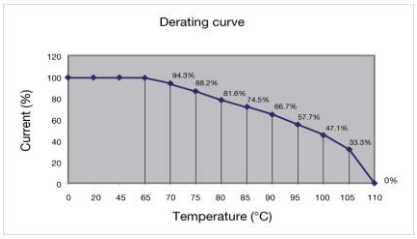
Voltage

Rated voltage	IEC 60947-1	800 V
Rated voltage	UL 1059	300 V
Use Group	UL 1059	B, C, D
Rated voltage	CSA-C-22.2 n°158	300 V
Rated voltage Ex e	IEC/ EN 60079-7	
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*

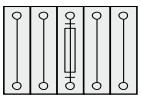
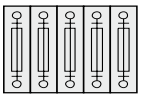
Current Derating curve for continuous service temperature



Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	1 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		
Separate arrangement / Exclusive short-circuit protection	1 fuse and 4 feed-through blocks	
Compound arrangement / Overload and short-circuit protection		
Compound arrangement / Exclusive short-circuit protection	5 fuse blocks	

Environmental Characteristics
Additional climatic tests

Dry heat		IEC 60068-2 2	Compliant
	Conditions	Temperature	110 °C
		Duration of test	96 h
Cyclic damp heat		IEC 60068-2 30	Compliant
	Conditions	Temperature	55 °C
		Relative humidity	95 %
		Number of cycles (1 cycle = 24h)	2
Cold		IEC 60068-2 1	Compliant
	Conditions	Temperature	-55 °C
		Duration of test	96 h
Damp heat steady state		IEC 60068-2-78	Compliant
	Conditions	Temperature	40 °C
		Relative humidity	93 %
		Duration of test	96 h

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	Compliant
	Conditions	Number of the test method	3
		Duration of test	21 j

Vibrations and shocks

Sinusoidal vibrations		IEC 60068-2-6	Compliant
	Conditions	Frequency range	5 ... 100 Hz
		Number of cycles	1
		Acceleration	7 m/s²
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-R2 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(ing) pieces	Weight g (1 pce)
1	Terminal Block Markers	**MG-CPM 13**	**1SNB041791R0612**	1680	0.273
		MC512	**1SNK140000R0000**	22	9.00
		MC512-YL	**1SNK140004R0000**	22	9.00
		MC512PA	**1SNK149999R0000**	20	10.00
		MC612	**1SNK150000R0000**	22	10.00
		MC612-YL	**1SNK150004R0000**	22	10.00
		MC612PA	**1SNK159999R0000**	20	11.00
		UMH	**1SNK900611R0000**	10	0.20
		PROCAP6	**1SNK900612R0000**	20	0.80
		SAT6	**1SNK900615R0000**	5	6.00
		SAT	**1SNK900623R0000**	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
		PR50	**1SNA178529R0400**	2	1288.00
3	End Stops	**BAM4**	**1SNK900001R0000**	50	14.00
		BAZ1	**1SNK900002R0000**	50	5.30
4	Test Connectors	**TC5-R1**	**1SNK900201R0000**	10	5.20
5	Test Adapters	**TP2**	**1SNK900203R0000**	20	1.70
		TP4	**1SNK900205R0000**	20	2.40
6	Component Plugs	**PG5-R2**	**1SNK900403R0000**	20	8.00
7	Cross Spacing Jumpers	**JB85-3**	**1SNK900603R0000**	10	2.80
8	Tools	**PS-3**	**1SNK900650R0000**	1	380.00
9	Jumper Bars	**JB6-2**	**1SNK906302R0000**	50	1.30
		JB6-3	**1SNK906303R0000**	50	2.10
		JB6-4	**1SNK906304R0000**	50	2.90
		JB6-5	**1SNK906305R0000**	50	3.60
		JB6-10	**1SNK906310R0000**	20	7.40
		JB6-50	**1SNK906350R0000**	10	38.10
10	Lateral Jumper Bars	**PC6-2**	**1SNA113546R1400**	10	2.00
		PC6-10	**1SNA113548R2600**	10	8.00
		PC6-3	**1SNA116536R0500**	10	2.00
		PC6-4	**1SNA116537R0600**	10	3.00
11	Spacers	**ES-TC6**	**1SNK900105R0000**	10	0.80

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