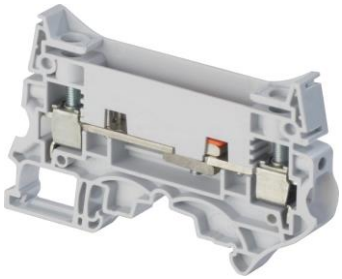
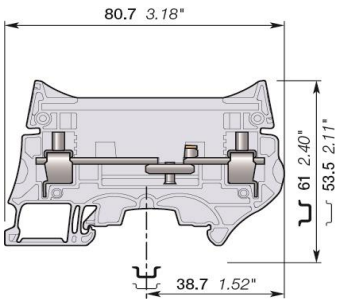
ZS10-ST-1 Screw Clamp Terminal Blocks
Test disconnect with sliding link for Potential Transformer circuits

- Test terminal blocks especially designed for Potential Transformers circuits:
- low profile voltage measurement thanks to the two compact built-in test sockets compatible with DIA 4 mm 0.157 in test plugs,
- Installed with our aligned feed-through and ground terminal blocks, you benefit of a complete and compact solution for your PT circuits.





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

10 mm²

6 AWG

8 mm *0,315 in* **Spacing**

Ordering Details

Color	Type	Order Code	EAN Code	Pack(ing)	Weight (1 pce) g
Grey	ZS10-ST-1	1SNK508312R0000	3472595083121	25	27.00

Declarations and Certificates

CE | CB | RoHS | USR | | | Gost R

BV

Declarations and Certificates

CE	CE	1SND225113C10*
CB	CB	1SND161091A02*
RoHS	RoHS	1SND230516F02*
USR	USR	1SND161041A02*
CSA	CSA	1SND161070A02*
Gost R	GOST R	1SND161005A11*
BV	BV	1SND161073A02*

General Information

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

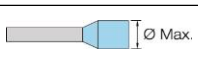
Protection	IEC 60947-1	IP10		*NEMA 1*				
Rail	TH35-7.5, TH35-15	TH35-7.5, TH35-15						
Wire stripping length		13 mm	*0.512 in*					

		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver				Flat Screwdriver		
		3.5 mm	*0.138 in*			3,5 mm	0,138 in	
Torque		1,3 N.m	*11,5 lb.in*			0.4 N.m	3.5 lb.in	
		± 0,3 N.m	*± 2.65 lb.in*			0,6 N.m	*5,3 lb.in*	

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	0.5 ... 10 mm²	24 ... 6 AWG		
1 Flexible conductor	Norme	IEC60947-7-1			
	Value	0.5 ... 10 mm²			
1 Flexible conductor with non insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5 ... 10 mm²	24 ... 8 AWG		
1 Flexible conductor with insulated ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5 ... 6 mm²	24 ... 10 AWG		
Gauge		A5-B5	5.2 mm		
		IEC 60947-1	*0.205 in*		
Ferrule maximum outer diameter or conductor insulation maximum outer diameter			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).

Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded conductors	Norme	IEC60947-7-1	UL1059		
	Value	0.5 ... 4 mm²	20 ... 12 AWG		
2 Flexible conductors	Norme	IEC60947-7-1			
	Value	0.5 ... 4 mm²			
2 Flexible conductors with twin ferrule	Norme	Manufacturer data	Manufacturer data		
	Value	0.5 ... 4 mm²	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 mm²	UL1059	6 AWG
Maximum Cross section	Manufacturer data	10 mm²	Manufacturer data	*6 AWG*

Electrical characteristics

Current

Rated current			IEC60947-7-1	50 A
	Field and factory wiring Cat.2		UL 1059	53 A
	Factory wiring Cat.1		UL 1059	53 A
			CSA-C-22.2 n°158	53 A
Maximum Exe current			IEC/EN 60079-7	
Rated short-time withstand current 1 s (Icw)			IEC60947-7-1	1200 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			CSA-C-22.2 n°158	
Max. current (45° temperature increase) / Max. cross section (mm²)			Manufacturer data	10 mm²
Maximum short circuit current (1s)			Manufacturer data	1200 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	630 V
Rated voltage	UL 1059	300 V
Use Group	UL 1059	B, C
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	2000 V
Pollution degree	IEC 60947-1	3
Overvoltage category	IEC 60947-1	III

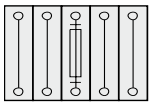
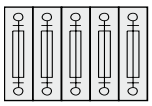
Temperature range

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	2,6 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	 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		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

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	

Vibrations and shocks

Sinusoidal vibrations		IEC 60068-2-6	
	Conditions	Frequency range	10 ... 55 Hz
		Number of cycles	10
		Acceleration	10 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	

ZS10-ST-1 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	End Stops	**BAM3**	**1SNK900001R0000**	50	13.80	
		BAZ1	**1SNK900002R0000**	20	5.30	
		BAZH1	**1SNK900102R0000**	20	23.90	
2	End Sections	**ES10-ST**	**1SNK508910R0000**	20	3,52	
3	Lateral Jumper Bars	**PC8-2**	**1SNA116538R1700**	10	3.00	
		PC8-3	**1SNA116539R1000**	10	4.00	
		PC8-4	**1SNA116540R2500**	10	6.00	
		PC8-10	**1SNA163313R2400**	10	14.00	
		PC8-R1	**1SNA400711R0600**	10	6.60	
		PC8-R2	**1SNA400712R0700**	10	7.84	
		PC8-R3	**1SNA400713R0000**	10	9.00	
		PC8-R4	**1SNA400724R0300**	10	4.50	
4	Protecting Cover Kits	**KCO**	**1SNK900624R0000**	1	47.80	
5	Protecting Covers	**CO**	**1SNK900604R0000**	1	300.00	
6	Short Circuit Plugs	**BP8.A4**	**1SNA173888R2000**	10		
7	Terminal Block Markers	**MC812**	**1SNK160000R0000**	22	10.00	
		MC812PA	**1SNK160011R0000**	1	14.00	
		UMH	**1SNK900611R0000**	10	0.20	
		SAT8	**1SNK900616R0000**	5	6.00	
8	Screw Clamp Terminal Blocks	**ZS10-ST-1**	**1SNK508312R0000**	25	27.00	

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