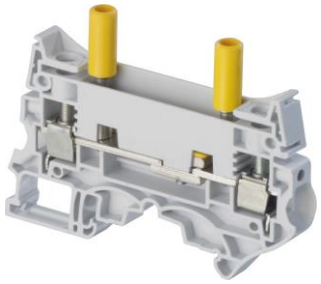
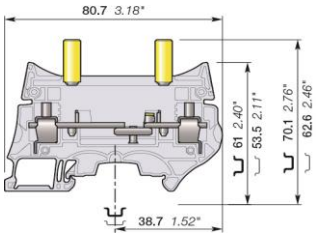
ZS10-ST-T4 Screw Clamp Terminal Blocks

Test disconnect with sliding link for Current Transformer circuits

Test terminal blocks especially designed for Current Transformers circuits:
- easy and safe current measurement thanks to the two insulated built-in test sockets compatible with IP20 DIA 4 mm 0.157 in test plugs (per IEC60101-031),
- convenient short-circuit operations with the SC-JB insulated sliding bridges.





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-T4	1SNK508311R0000	3472595083114	25	31.90

Declarations and Certificates

CE	CB	RoHS	USR CNR			EAC			
		BV		DNV					

Power and productivity for a better world™

Declarations and Certificates

CE	CE	1SND225102U10*
CB	CB	1SND161091A02*
RoHS	RoHS	1SND230516F02*
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.

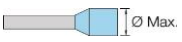
Protection	IEC 60947-1	IP20		*NEMA 1*				
Rail		TH 35-7.5, TH 35-15						
Wire stripping length		13 mm	*0.512 in*					

		Screw clamp		Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriver						
		3.5 mm	*0.138 in*			3.5 mm	0.138 in	
Torque		1.3 N.m	*11.5 N.m*			0.4 N.m	3.5 lb.in	
		± 0.3 N.m	*± 2.65 N.m*			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				
	Value	0.5 ... 10 mm²	24 ... 6 AWG		
1 Flexible conductor	Norme				
	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				
	Value	0.5 ... 4 mm²	20 ... 12 AWG		
2 Flexible conductors	Norme				
	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		10 mm²		6 AWG
Maximum Cross section	Manufacturer data	10 mm²	Manufacturer data	*6 AWG*

Electrical characteristics

Current

Rated current				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)				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			UL 1059	
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

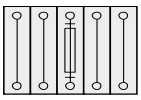
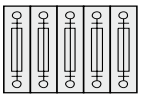
Temperature range

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		
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	+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-T4 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	
		MC812	**1SNK160000R0000**	22	10.00	
		MC812PA	**1SNK160011R0000**	1	14.00	
		MC812PA	**1SNK169999R0000**	20	14.00	
		UMH	**1SNK900611R0000**	10	0.20	
		SAT8	**1SNK900616R0000**	5	6.00	
2	End Sections	**ES10-ST**	**1SNK508910R0000**	20	3.5	
3	End Stops	**BAM4**	**1SNK900001R0000**	50	14.00	
		BAZ1	**1SNK900002R0000**	50	5.30	
		BAZH1	**1SNK900102R0000**	20	24.00	
4	Circuit Separators	**CS-R3**	**1SNK900107R0000**	20	6.40	
5	Protecting Covers	**CO**	**1SNK900604R0000**	1	300.00	
6	Protecting Cover Kits	**KCO**	**1SNK900624R0000**	1	47.80	
7	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	7.80	
		PC8-R3	**1SNA400713R0000**	10	9.00	
		PC8-R4	**1SNA400724R0300**	10	4.50	
			1SNA400842R0000			
			1SNA400843R0000			
			1SNA400849R0000			
			1SNA400850R0000			
8	Short Circuit Plugs	**BP8.A4**	**1SNA173888R2000**	10		
9	Short Circuit Bridges	**SC-JB8-2**	**1SNK900652R0000**	25	2.00	
		SC-JB8-3	**1SNK900653R0000**	25	3.4	
		SC-JB8-4	**1SNK900654R0000**	25	4.7	
		SC-JB8-5	**1SNK900655R0000**	25	4.7	
			1SNK900657R0000			
			1SNK900658R0000			

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