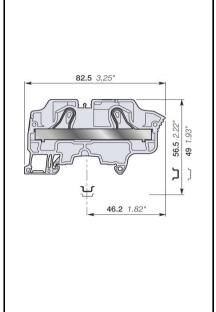
Catalogue Page 1SNK162031S0201

ZK10 PI-Spring Terminal Blocks Feed-through

Combine high performance with compact dimensions: - 1000 V IEC 600 V UL, - 57 A IEC 65 A UL.





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

o <u>~v</u> o	PI-Spring	10 mm ²	
	Terminal Blocks	6 AWG	
10 mm	0.394 in	Spacing	

Ordering Details

Color	Туре	Order Code	EAN Code	Pack ^(ing)	Weight
					(1 pce) g
Grey	ZK10	1SNK710010R0000	3472597100109	20	27.2
Blue	ZK10-BL	1SNK710020R0000	3472597100208	20	27.2
Orange	ZK10-OR	1SNK710030R0000	3472597100307	20	27.2

Declarations and Certificates

CE	CB	RoHS RoHS	CRUSS USR CNR	SP:	Gost R	Ex ATEX	IECEx IECEx	
		BV			ATEX Declaration			



Declarations and Certi	ficates	
CE	CE	1SND225150C10*
CB	СВ	1SND162011A02*
RoHS RoHS	RoHs	1SND230535F02*
	USR CNR	1SND162012A02*
SE .	CSA	1SND162014A02*
Cy Gost R	GOST R	1SND161005A11*
(Ex) ATEX	ATEX	1SND162009A17*
IECEx IECEx	IECEx	1SND162010A17*
BV	BV	1SND162013A02*
Atex Declaration	Atex Declaration	1SND225085C10*

Explosive Atmosphere: ATEX Classification

Group Category	Protection Method
IM2 II 2 GD Ex eb I/IIC/IIIC	Ex e: increased security

In the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D

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,						
	L L	TH 35-15						
Wire stripping length		15 mm	0.591 in					

				Screw rail contact (Maximum value)		Disconnect device		
Operating tool		Flat screwdriv	er					
	\bigcirc	4 mm	0.157 in					
Torque	(

Material Specifications

Insulating material		Polyamide
CTI		600 V
Flammability	UL94	VO
	NF F 16101	I2F2
	Needle flame test C 6061E 11 E	Compliant

Needle flame test C 60615-11-5 Compliant

Connecting capacity per clamp	С	PI S	pring		
1 Divid Colid / Strandad conductor	Norme	IEC60947-7-1	UL1059		
1 Rigid - Solid / Stranded conductor —	Value	0.5 16 mm ²	20 6 AWG		
1 Flexible conductor —	Norme	IEC60947-7-1			
	Value	0.5 10 mm ²			
1 Flexible conductor with non	Norme	Manufacturer data	Manufacturer data		
insulated ferrule	Value	0.5 10 mm ²	20 8 AWG		
1 Flexible conductor with insulated	Norme	Manufacturer data	Manufacturer data		
ferrule	Value	0.5 10 mm ²	20 8 AWG		
Cauga			5.3 mm		
Gauge		IEC 60947-1			
Ferrule maximum outer diameter or conc insulation maximum outer diameter	luctor	Ø Max.	Manufacturer data	8.3 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	Norme					
conductors	Value					
2 Flexible conductors	Norme					
	Value					
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data			
ferrule	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 mm ²	UL1059	6 AWG
Maximum Cross section	Manufacturer data		Manufacturer data	6 AWG

Electrical characteristics

Current

Rated current			IEC60947-7-1	57 A	
	Field and factory wiring Cat.2		UL 1059	55 A	
	Factory wiring Cat.1		UL 1059		
			CSA-C-22.2 n°158	55 A	
Maximum Exe current			IEC/EN 60079-7	51 A	
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		
Maximum short circuit current (1s)			Manufacturer data	1200 A	•

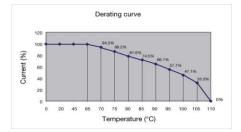
	CCR) SA UL 1059 supplement		100 14
SCCR		UL 1059	100 KA
With the following configurations:			10 / 11/0
	Suitable conductor wire range		10 6 AWG
	Maximum voltage		600 V
	Fuse class / Max. amp. Rating	J	250 A
		T	250 A
		RK1	200 A
		RK5	100 A
		G	60 A
		CC	30 A

Voltage		
Rated voltage	IEC 60947-1	1000 V
Rated voltage	UL 1059	600 V
Use Group	UL 1059	B, C, D
Rated voltage	CSA-C-22.2 n°158	600 V
Rated voltage Ex e	IEC/ EN 60079-7	630 V
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	

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



1 fuse and 4 feed-through blocks

5 fuse blocks

Dissipated power

Maximum dissipated power at rated current	IEC 60947-1	1.8 W
Maximum dissipated power at maximum Exe current	IEC 60079-7	1.6 W

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
Compound arrangement / Overload and short-circuit protection
Compound arrangement / Exclusive short-circuit protection

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 1000 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/s ²
Functional random vibrations		IEC 61373 Compliant
Category 1 Class B 3 axes	Conditions	Duration of test 20 mn
		Frequency range 5 150 Hz
		Acceleration 1 m/s ²
Long life testing at increased random v	ibrations	IEC 61373 Compliant
Category 1 Class B 3 axes	Conditions	Duration of test 5 h
		Frequency range 5 150 Hz
		Acceleration 5.7 m/s ²
Shock		IEC 61373 Compliant
Category 1 Class B 3 axes	Conditions	Duration of test 30 ms
		Acceleration 5 G

ZK10 Terminal Block Accessories Compatibility

Description	Туре	Order Code	Pack ^(ing)	Weight	
			pieces	g (1 pce)	
1 End Stops	BAM3	1SNK900001R0000	50	13.80	
	BAZ1	1SNK900002R0000	20	5.30	
	BAZH1	1SNK900102R0000	20	23.90	
2 End Sections	EK10	1SNK710910R0000	20	3.3	
3 Jumper Bars	JB10-2	1SNK910302R0000	50	4.60	
	JB10-3	1SNK910303R0000	50	7.10	
	JB10-4	1SNK910304R0000	40	9.40	
	JB10-5	1SNK910305R0000	30	12.00	
	JB10-10	1SNK910310R0000	20	24.00	
4 Circuit Separators	CS-R3	1SNK900107R0000	20	6.4	
5 Test Adapters	TP2	1SNK900203R0000	20	1.73	
	TP4	1SNK900205R0000	20	2.41	
6 Test Connectors	TC5-R1	1SNK900201R0000	10	5.23	
7 Mounting Rails	PR3.G2	1SNA164800R0300	2		
	PR4	1SNA168500R1200	2	915.00	
	PR5	1SNA168700R2200	2		
	PR30	1SNA173220R0500	2	328.00	
	PR3.Z2	1SNA174300R1700	2		
	PR50	1SNA178529R0400	2	1 288.00	
8 Tools	PS-3	1SNK900650R0000	1	380.00	
9 Terminal Block Markers	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	
	MC812	1SNK160000R0000	22	10.00	
	MC812-YL	1SNK160004R0000	22	10.00	
	MC812PA	1SNK169999R0000	20	14.00	
	PROCAP5	1SNK900609R0000	20	0.69	
	UMH	1SNK900611R0000	10	0.20	
	PROCAP6	1SNK900612R0000	20	0.78	
	PROCAP8	1SNK900613R0000	20	1.00	
	SAT5	1SNK900614R0000	5	6.00	

Contact us

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