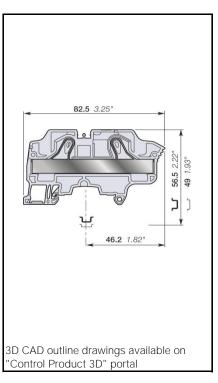
Technical Datasheet 1SNK162035D0201 Catalogue Page 1SNK162032S0201

ZK16 PI-Spring Terminal Blocks Feed-through

Combine high performance with compact dimensions:

- 1000 V IEC 600 V UL,
- 76 A IEC 85 A UL.





Q	PI-Spring Terminal Blocks	16 mm²	
0	Terminal Blocks	4 AWG	
12 mm	0.472 in	Spacing	

Ordering Details

Color	Туре	е	Order Code	EAN Code	Pack ^(ing)	Weight
						(1 pce) g
Grey	ZK1	6	1SNK712010R0000	3472597120107	20	33.8
Blue	ZK1	6-BL	1SNK712020R0000	3472597120206	20	33.8

Declarations and Certificates

CE CE	CB	RoHS RoHS	c FLL us USR CNR	(£)	Gost R	€x ATEX	IECEx IECEx	
		BV			ATEX Declaration			

Declarations and Ce											
(€ ○E	CE)22515			
©B CB RoHS	СВ				1SND161011A02*						
RoHS	RoHs	USR CNR			1SND230535F02* 1SND162012A02*						
USR CNR	USRC	NK					ISINL)16201	2AU2		
®	CSA						ISNE	016201	4A02*		
Gost R	GOST	R						016100			
€x ATEX	ATEX							016200			
IECEx IECEx	IECEx						ISNE	016201	0A17*		
© BV	BV						ISNI	016201	3Δ <u>0</u> 2*		
BV							IOIVL	710201	37102		
Atex Declaration	Atex D	eclaratio	n			1	SNE)22508	5C10*		
Explosive Atmos	nhara: ATE)	(Classifi	ication								
Group Category	pricie. ATE/	v Classil	ication		Protection	n Method					
	· //!! C										
IM2 II 2 GD Ex eb I/IIC						reased security					
In the presence of exp	losive dust atm	osphere, te	erminal blocks are	to be	installed i	n certified enc	losure	e II 2D			
General Information					1 1 1						
he following information must Protection	IEC 60947-1		NEMA250	inai bid	ock electric	ai, mechanicai ar	na envi	ironmenta	periorman	ce.	
Rail	120 00 947-1	TH 35-7.5									
	7	TH 35-15	"								
Wire stripping length		15 mm	0.591 in								
			•						•		
		Screw cla	mp	- 1	w rail cor		Disc	onnect d	levice		
Operating tool		Flat screw	udrivor	(IVIa)	kimum val	ue)					
Sperating tool		i lat sciew									
		4 mm	0.157 in								
Torque											
4											
Material Specification	ns						1	Dolyami	do		
nsulating material								Polyamio 600 V	ue		
Flammability							JL94				
·=·····g		_				NF F 1					
		-									
				Ne	edle flame	test:C 60615-	11-5	Complia	nt		
O		-					T				
Connecting capacity	per clamp	Normo	IEC60947-7-1		pring	JL1059				1	
Rigid - Solid / Stranded of	conductor —	Norme Value	0.5 25 mm			4 AWG					
		Norme	IEC60947-7-1		20.	17.000					
Flexible conductor		Value	0.5 16 mm								
Flexible conductor with n	on	Norme	Manufacturer d			acturer data					
nsulated ferrule		Value	0.5 16 mm			6 AWG					
Flexible conductor with ir	nsulated	Norme	Manufacturer d			acturer data					
errule		Value	0.5 16 mm) ²		6 AWG					
Sauge		-	IEC 60947-1		0	v. 7 111111					
Ferrule maximum outer dia	meter or conduc	ctor		Max.		acturer data		10.5 r			

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

As part of its on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not contractual. For further details please contact the ABB company marketing these products in your country.

Multi Connecting capacity per clamp

2 Rigid - Solid / Stranded	Norme			
conductors	Value			
2 Flexible conductors	Norme			
2 Flexible Colluctors	Value			
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data	
ferrule	Value	0.5 6 mm ²	20 10 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	16 mm²	UL1059	4 AWG
Maximum Cross section	Manufacturer data		Manufacturer data	4 AWG

Electrical characteristics Current

Rated current			IEC60947-7-1	76 A	
	Field and factory wiring Cat.2		UL 1059	75 A	
	Factory wiring Cat.1		UL 1059		
			CSA-C-22.2 n°158	75 A	
Maximum Exe current			IEC/EN 60079-7	69 A	
Rated short-time withstand current 1 s (lcw)			IEC60947-7-1	1960 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	1960 A	

Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		UL 1059	100 kA
With the following configurations:			
	Suitable conductor wire range		10 4 AWG
	Maximum voltage		600 V
	Fuse class / Max. amp. Rating	J	250 A
		Т	250 A
		RK1	200 A
		RK5	100 A
		G	60 A
		CC	30 A

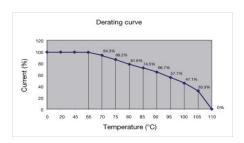
Voltage

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	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 2.4 W
Maximum dissipated power at maximum Exe current	IEC 60079-7 2.2 W

Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

	711 tomporataro er 20 e 120 ee 11 7 e	
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	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 C	Compliant
	Conditions	Duration of test 1	000 h
		Concentration 5	%
SO2		ISO 6988 C	Compliant
	Conditions	Duration of test 4	8 h
		Concentration 0	.2 dm³
Flowing mixed gas corrosion test		IEC 60068-2 60 C	Compliant
	Conditions	Number of the test method 3	
		Duration of test 2	1 j

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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	vibrations	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

ZK16 Terminal Block Accessories Compatibility

Some accessories may modify the terminal block's rating. See complete information in the accessories catalog page.

	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	3 Jumper Bars	JB12-2	1SNK912302R0000	50	4.9	
		JB12-3	1SNK912303R0000	50	7.6	
		JB12-5	1SNK912305R0000	20	12.9	
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	
		SAT6	1SNK900615R0000	5	6.00	
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