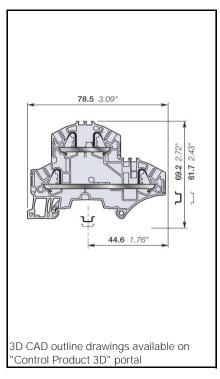
Technical Datasheet 1SNK162037D0201 Catalogue Page 1SNK162033S0201

# ZK2.5-D2 PI-Spring Terminal Blocks Double deck with 2 feed-through circuits

Combine high performance with compact dimensions:

- 800 V IEC 600 V UL,
- 2 jumper channels and a large input and output marker zone on each deck.





0- <u>^^</u> 0	PI-Spring	2.5 mm <sup>2</sup>
00	Terminal Blocks	12 AWG
5.2 mm	0.205 in	Spacing

**Ordering Details** 

Color	Туре	Order Code	EAN Code	Pack <sup>(ing)</sup>	Weight
					(1 pce) g
Grey	ZK2.5-D2	1SNK705210R0000	3472597052101	50	11.2
Blue	ZK2.5-D2-BL	1SNK705220R0000	3472597052200	50	11.2

### **Declarations and Certificates**

<b>C€</b> ©E	CB	RoHS RoHS	c <b>SU</b> us USR CNR	<b>(F)</b>	Gost R	<b>€x</b> ATEX	IECEx IECEx	
		BV			ATEX Declaration	-		

RoHS ROHS ISND162020A02*  ROHS ROHS ISND162020A02*  SCSA ISND162012A02*  CSA ISND162014A02*  GOST R ISND162009A17*  IECEX ISND162010A17*  BY IECEX ISND162010A17*  Explosive Atmosphere: ATEX Classification  Group Category Protection Method  IM2 II 2 GD Ex eb I/II/C/IIIC  In the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D  Seneral Information  be following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance. The stripping length Image: The stripping length Image: The stripping length Image: Screw rail contact (Maximum value)  Screw clamp Screw rail contact (Maximum value)  Screw clamp Screw rail contact (Maximum value)  Flat screwdriver  3.5 mm 0.138 in	<b>Declarations and Ce</b>											
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GOST R  STATEX  STATEX		USRC	NK					ISINL	10201	ZAUZ"		
GOST R  STATEX  STATEX	<b>6</b>	CSA						1SNE	016201	4A02*		
BV	<b>®</b>		R									
Alex Declaration Alex Declaration ISND225085C10*    Explosive Atmosphere: ATEX Classification   Group Category   Protection Method   Fx e: Increased security   In the presence of explosive dust atmosphere, terminal blocks are to be installed in certified enclosure II 2D	⟨Ex⟩											
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Protection IEC 60947-1   IP20   NEMA250   IR3	General Information											
TH 35-7.5, TH 35-15  Wire stripping length  Screw clamp  Screw rall contact (Maximum value)  Perating tool  Flat screwdriver  3.5 mm  0.138 in  O138 in  O138 in  O138 in  O199 in  O19				-	ninal bl	ock electric	al, mechanical a	nd env	ironmenta	l performar	nce.	
Alterial Specifications  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw clamp Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length Screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping length screw rall contact (Maximum value)  In the stripping					_							
Screw clamp   Screw rall contact (Maximum value)   Disconnect device (Maximum value)	lail	ר בי		1								
Screw clamp Screw rall contact (Maximum value)  Flat screwdriver  3.5 mm  0.138 in  Decirications  Susulating material  The subulating material  Ammability  Decirications  Norme Sconnecting capacity per clamp  Rigid - Solid / Stranded conductor  Norme Flexible conductor  Norme Flexible conductor with non  Norme Sustated ferrule  Norme Norme Norme Norme Norme Manufacturer data Norme Manufacturer data Manuf	/ire stripping length			0.433 in						+	+	
Connecting capacity per clamp   Polyamide   Polyamid	11 3 3				-1			-				
Polyamide   Poly			Screw cla	mp				Disc	onnect d	evice		
3.5 mm   0.138 in			F1 .	1.	(IVIa:	ximum va	lue)					
Adaterial Specifications  Insulating material  Insu	operating tool		Flat Screw	ariver								
Material Specifications  Insulating material Polyamide  Connecting capacity per clamp  Rigid - Solid / Stranded conductor Value Norme  Flexible conductor Value Norme  Flexible conductor Value Norme  Flexible conductor Walue Norme  Flexible conductor with non Norme Manufacturer data Manufacturer data  Flexible conductor with insulated Norme Manufacturer data  Flexible conductor with Norme Manufacturer data  Flexible conductor with Norme Manufacturer data  Flexible co			3.5 mm	0.138 in								
Polyamide   Poly	orque											
Polyamide   Poly												
Polyamide   Poly	4 1 1 0 10 10											
Alammability    Solid   Stranded conductor   Solid   Stranded conductor		ns							Dolyami	do		
Needle flame test C 60615-11-5   Compliant										ue		
Needle flame test C 60615-11-5 Compliant    Connecting capacity per clamp												
Needle flame test C 60615-11-5 Compliant    Connecting capacity per clamp	iairiiriabiiity		=									
Connecting capacity per clamp  Rigid - Solid / Stranded conductor  Rigid - Solid / Stranded conductor  Value  Norme  IEC60947-7-1  Value  0.2 4 mm²  26 12 AWG  Norme  Flexible conductor  Value  0.22 2.5 mm²  Flexible conductor with non  Norme  Manufacturer data			_									
Norme   IEC60947-7-1   UL1059			_		Ne	edle flame	e test C 60615	-11-5	Complia	nt		
Norme   IEC60947-7-1   UL1059	Composting assessing		-		F: 6			1				
Rigid - Solid / Stranded conductor  Value  0.2 4 mm²  26 12 AWG  Norme  IEC60947-7-1  Value  0.22 2.5 mm²  Flexible conductor with non Insulated ferrule  Value  Value  Value  0.22 2.5 mm²  Value  0.22 2.5 mm²  26 14 AWG  Flexible conductor with insulated  Norme  Manufacturer data  Manufacturer data  Manufacturer data  Manufacturer data  Manufacturer data  Value  0.22 2.5 mm²  26 14 AWG  Flexible conductor with insulated  Perrule  Value  Value  0.22 2.5 mm²  Value  0.22 2.5 mm²  Value  0.24 14 AWG  Alexander  A 65 mm	connecting capacity	per clamp	Norma	IEC60047-7-1			II 1050	-				
Flexible conductor    Norme   IEC60947-7-1	Rigid - Solid / Stranded of	conductor —				1						
Flexible conductor with non Norme Manufacturer data Manufacturer data nsulated ferrule Value 0.22 2.5 mm² 26 14 AWG  Flexible conductor with insulated Norme Manufacturer data Manufacturer data Manufacturer data Perrule Value 0.22 2.5 mm² 26 14 AWG  Flexible conductor with insulated Norme Manufacturer data Manufacturer	Flouible constructor											
Sulated ferrule  Value  0.22 2.5 mm²  26 14 AWG  Flexible conductor with insulated  Norme  Manufacturer data  Value  0.22 2.5 mm²  26 14 AWG  Manufacturer data  Value  0.22 2.5 mm²  26 14 AWG  2.4 mm  IEC 60947-1  errule maximum outer diameter or conductor  A 65 mm	Flexible conductor											
Flexible conductor with insulated Norme Manufacturer data Manufacturer data errule Value 0.22 2.5 mm² 26 14 AWG  Sauge IEC 60947-1  errule maximum outer diameter or conductor Manufacturer data Manufacturer data Manufacturer data 26 14 AWG  2.4 mm  IEC 60947-1	Flexible conductor with n	ion	Norme									
Value         0.22 2.5 mm²         26 14 AWG           Sauge         2.4 mm           IEC 60947-1         IEC 60947-1						1						
Sauge 2.4 mm  IEC 60947-1  errule maximum outer diameter or conductor  Manufacturer data 4.65 mm		nsulated										
errule maximum outer diameter or conductor    IEC 60947-1	errule		Value	0.22 2.5 mr	m²							
errule maximum outer diameter or conductor  Manufacturer data  4.65 mm	auge			IEC 40047 1		2	2.4 mm	-				
Manufacturer data 1 4.65 mm		meter or condu	ctor	IEC 60947-1								
			CiOi	Ø	Max.	Manuf	acturer data		4.65 r	mm		

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 corludctors	Value			
2 Flexible conductors with twin	Norme	Manufacturer data	Manufacturer data	
ferrule	Value	0.22 0.5 mm <sup>2</sup>	26 20 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	2.5 mm <sup>2</sup>	UL1059	12 AWG
Maximum Cross section	Manufacturer data		Manufacturer data	12 AWG

### Electrical characteristics Current

Rated current			IEC60947-7-1	24 A	
	Field and factory wiring Cat.2		UL 1059	20 A	
	Factory wiring Cat.1		UL 1059		
			CSA-C-22.2 n°158	20 A	
Maximum Exe current			IEC/EN 60079-7	21 A	
Rated short-time withstand current 1 s (Icw)			IEC60947-7-1	300 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	300 A	

### Short Circuit Current Rating (SCCR) SA UL 1059 supplement

SCCR		UL 1059	100 kA
With the following configurations:	/ith the following configurations:		
	Suitable conductor wire range		14 12 AWG
	Maximum voltage		600 V
	Fuse class / Max. amp. Rating	J	110 A
		T	110 A
		RK1	100 A
		RK5	30 A
		G	60 A
		CC	30 A

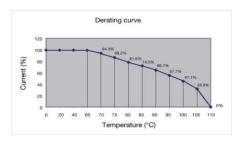
### Voltage

Rated voltage	IEC 60947-1	800 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	
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	1.6 W
Maximum dissipated power at maximum Exe current	IEC 60079-7	0.7 W

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

rtatea perrer areerpatrerr at arrantiere	711 tomporataro di 20 di 120 de 117 7 di	
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 <sup>3</sup>
Flowing mixed gas corrosion test		IEC 60068-2 60	Compliant
	Conditions	Number of the test method	3
		Duration of test	21 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 <sup>2</sup>
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 <sup>2</sup>
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 <sup>2</sup>
Shock		IEC 61373 Compliant
Category 1 Class B 3 axes	Conditions	Duration of test 30 ms
		Acceleration 5 G

### ZK2.5-D2 Terminal Block Accessories Compatibility

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

Description	Туре	Order Code	Pack <sup>(ing)</sup>	Weight	
			pieces	g (1 pce)	
End Stops	BAZH1	1SNK900102R0000	20	23.90	
2 End Sections	EK2.5-D2	1SNK705960R0000	20	3.4	
3 Jumper Bars	JB5-2	1SNK905302R0000	50	1.30	
	JB5-3	1SNK905303R0000	50	2.00	
	JB5-4	1SNK905304R0000	50	2.70	
	JB5-5	1SNK905305R0000	50	3.50	
	JB5-10	1SNK905310R0000	30	7.10	
	JB5-50	1SNK905350R0000	10	36.10	
4 Test Adapters	TP2	1SNK900203R0000	20	1.73	
·	TP4	1SNK900205R0000	20	2.41	
Test Connectors	TC5	1SNK900200R0000	10	5.23	
	TC5-R1	1SNK900201R0000	10	5.23	
Shield Connectors	SHB	1SNK900602R0000	20	4.90	
Component Plugs	PG5-R2	1SNK900403R0000	20	8.01	
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	
Tools	PS-3	1SNK900650R0000	1	380.00	
O Terminal Block Markers	MC512	1SNK140000R0000	22	9.00	
	MC512-YL	1SNK140004R0000	22	9.00	
	MC512PA	1SNK149999R0000	20	10.00	
	PROCAP5	1SNK900609R0000	20	0.69	
	UMH	1SNK900611R0000	10	0.20	
	SAT5	1SNK900614R0000	5	6.00	
	37110	13111766611116666		0.00	

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