Potential collective terminal - PTU 35/4X6/6X2,5-FE - 3214082

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Potential collective terminal, nom. voltage: 1000 V, nominal current: 105 A, connection method: Screw connection, Push-in connection, number of connections: 11, cross section: 1.5 mm² - 50 mm², AWG: 16 - 1/0, width: 16.3 mm, color: black/yellow, mounting type: NS 35/7,5, NS 35/15

Your advantages

- The terminal block base is ideal for use in building installation and machine building applications
- The Push-in connection terminal blocks are characterized by the system features of the CLIPLINE complete system and by easy and tool-free wiring of conductors with ferrules or solid conductors
- The compact design and front connection enable wiring in a confined space
- In addition to the testing facility in the double function shaft, all terminal blocks provide an additional test connection

RoHS

Key Commercial Data

Packing unit	20 pc
GTIN	4 055626 170572
GTIN	4055626170572

Technical data

General

Note	In the end application, the applicable safety regulations for overload and short-circuit protection on the connected conductors must be considered.
Number of levels	1
Number of connections	11
Color	black/yellow
Insulating material	PA
Flammability rating according to UL 94	V0
Degree of pollution	2
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	4.06 W (the value is multiplied when connecting multiple levels)

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General

Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	105 A (The maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal current I_N	105 A
Nominal voltage U_N	1000 V
Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Maximum load current	41 A
Nominal current I_N	41 A
Nominal voltage U_N	1000 V
Open side panel	No
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	9.8 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	2.2 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of bending test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	1.5 mm² / 0.4 kg
	35 mm² / 6.8 kg
	50 mm² / 9.5 kg
	0.5 mm² / 0.3 kg
	6 mm^2 / 1.4 kg
	10 mm² / 2 kg
	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	1.5 mm²
Tractive force setpoint	40 N
Conductor cross section tensile test	35 mm²
Tractive force setpoint	190 N
Conductor cross section tensile test	50 mm²
Tractive force setpoint	236 N
Conductor cross section tensile test	0.5 mm²

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Tractive force setpoint	20 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35
Setpoint	10 N
Result of voltage-drop test	Test passed
Requirements, voltage drop	≤ 1.6 mV
Result of temperature-rise test	Test passed
Short circuit stability result	Test passed
Conductor cross section short circuit testing	35 mm²
Short-time current	3 kA
Conductor cross section short circuit testing	50 mm²
Short-time current	4.8 kA
Result of aging test	Test passed
Ageing test for screwless modular terminal block temperature cycles	192
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result	Test passed
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 $(m/s^2)^2/Hz$
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock test result	Test passed
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Static insulating material application in cold	-60 °C
Behavior in fire for rail vehicles (DIN 5510-2)	Test passed
Flame test method (DIN EN 60695-11-10)	V0
Oxygen index (DIN EN ISO 4589-2)	>32 %
NF F16-101, NF F10-102 Class I	2
NF F16-101, NF F10-102 Class F	2
Surface flammability NFPA 130 (ASTM E 162)	passed

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Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

Dimensions

Width	16.3 mm
Length	110.4 mm
Height NS 35/7,5	48.8 mm
Height NS 35/15	56.3 mm

Connection data

Connection method	Screw connection
Connection in acc. with standard	IEC 60947-7-1
Screw thread	M6
Tightening torque, min	3.2 Nm
Tightening torque max	3.7 Nm
Stripping length	18 mm
Conductor cross section solid min.	1.5 mm²
Conductor cross section solid max.	50 mm²
Conductor cross section AWG min.	16
Conductor cross section AWG max.	1/0
Conductor cross section flexible min.	1.5 mm²
Conductor cross section flexible max.	50 mm²
Min. AWG conductor cross section, flexible	16
Max. AWG conductor cross section, flexible	1/0
Conductor cross section flexible, with ferrule without plastic sleeve min.	1.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	35 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	1.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	35 mm²
2 conductors with same cross section, solid min.	1.5 mm²
2 conductors with same cross section, solid max.	16 mm²
Two conductors with the same cross section, AWG solid min.	16
Two conductors with the same cross section, AWG solid max.	6
2 conductors with same cross section, stranded min.	1.5 mm²
2 conductors with same cross section, stranded max.	10 mm²
Two conductors with the same cross section, AWG stranded, min.	16
Two conductors with the same cross section, AWG stranded, max.	8

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2 conductors with same cross section, stranded, ferrules without plastic sleeve, min.	1.5 mm²
2 conductors with same cross section, stranded, ferrules without plastic sleeve, max.	10 mm²
Internal cylindrical gage	B9
Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Stripping length	12 mm
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	10 mm²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	6 mm²
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm²
Conductor cross section solid min.	1 mm²
Conductor cross section solid max.	10 mm²
Conductor cross section AWG min.	18
Conductor cross section AWG max.	8
Conductor cross section flexible, with ferrule with plastic sleeve min.	1 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm²
Conductor cross section flexible, with ferrule without plastic sleeve min.	1 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm²
Connection method	Push-in connection
Connection in acc. with standard	IEC 60947-7-1
Stripping length	8 mm ... 10 mm
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm²
Conductor cross section flexible max.	2.5 mm²
Min. AWG conductor cross section, flexible	26

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Max. AWG conductor cross section, flexible	14
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.14 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, min.	0.5 mm²
2 conductors with same cross section, stranded, TWIN ferrules with plastic sleeve, max.	1.5 mm²
Conductor cross section solid min.	0.34 mm²
Conductor cross section solid max.	4 mm²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.34 mm²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm²
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.34 mm²
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm²

Standards and Regulations

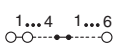
Connection in acc. with standard	IEC 60947-7-1
	IEC 60947-7-1
Flammability rating according to UL 94	V0
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Circuit diagram



Approvals

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CSA / UL Recognized / cUL Recognized / EAC / cULus Recognized

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Approvals

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	102 A	102 A
mm²/AWG/kcmil	14-2	14-2

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	102 A	102 A
mm²/AWG/kcmil	14-2	14-2

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 60425

	B	C
Nominal voltage UN	600 V	600 V
Nominal current IN	102 A	102 A
mm²/AWG/kcmil	14-2	14-2

EAC		RU C-DE.AI30.B.01102

cULus Recognized	

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