

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Distribution block, Block with horizontal alignment and integrated supply, nom. voltage: 500 V, nominal current: 24 A, connection method: Push-in connection, Push-in connection, number of connections: 19, cross section:0.14 mm² - 4 mm², AWG: 26 - 12, width: 56 mm, height: 30 mm, color: red, mounting type: NS 15

Why buy this product

- Time savings of up to 80%, thanks to ready-to-mount blocks without manual bridging
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Clear wiring, thanks to eleven different color variants
- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Space savings of up to 50% on the DIN rail, thanks to transverse mounting



Key Commercial Data

Packing unit	8 STK
Minimum order quantity	8 STK
GTIN	4 055626 394039
GTIN	4055626394039

Technical data

General

Note	Notes on operation The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories	
Number of levels	1	
Number of connections	19	
Potentials	1	
Nominal cross section	2.5 mm ²	
Nominal cross section feed-in	6 mm²	
Color	red	
Insulating material	PA	
Flammability rating according to UL 94	V0	
Rated surge voltage	6 kV	



Technical data

General

Degree of pollution	3	
Overvoltage category	III	
Insulating material group	1	
Maximum power dissipation for nominal condition	1.31 W (the value is based on one connection block and is multiplied according to the pin assignment)	
Maximum load current	24 A	
Nominal current I _N	24 A	
Nominal voltage U _N	500 V	
Maximum load current	57 A (with 10 mm² conductor cross section)	
Nominal current I _N	41 A (with 6 mm² conductor cross section)	
Nominal voltage U _N	500 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	1.89 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	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	0.5 mm²	
Tractive force setpoint	20 N	
Conductor cross section tensile test	6 mm²	
Tractive force setpoint	80 N	
Conductor cross section tensile test	10 mm ²	
Tractive force setpoint	90 N	
Result of tight fit on support	Test passed	
Tight fit on carrier	NS 35	
Setpoint	5 N	
Result of voltage-drop test	Test passed	



Technical data

General

Result of temperature-rise test Short circuit stability result Conductor cross section short circuit testing Short-time current Onductor cross section short circuit testing Short-time current 1.2 kA Conductor cross section short circuit testing Short-time current 1.2 kA Short-time current 1.2 kA Short-time current 1.2 kA Result of thermal test Ageing test for screwless modular terminal block temperature cycles Proof of thermal characteristics (needle flame) effective duration Short-time current Test passed Ageing test for screwless modular terminal block temperature cycles Proof of thermal characteristics (needle flame) effective duration Test passed Oscillation, broadband noise test result Test spassed Oscillation, broadband noise test result Test spassed Oscillation, broadband noise test result Test spassed Oscillation, broadband noise test result Test spectime Service life test category 2. bogie-mounted Test frequency I, 5 = 5 Hz to 5 = 250 Hz ASD level Acceleration Test direction per axis Shock test result Test direction per axis Test directions X, Y- and Z-axis Shock test result Test spassed DIN EN 50155 (VDE 0115-200):2008-03 Test directions Number of shock sper direction 30 g Shock duration Number of shocks per direction 30 g Shock duration Number of shocks per direction 30 g Shock duration Number of shocks per direction 30 g Static insulation material temperature index (Elec., UL 746 B) Test passed Test greater index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Test passed Test meter of insulation material (DIN EN 60216-1 (VDE 0304-21)) Test passed Test meters method (DIN EN 80989-11-10) V0 Oxygen index (DIN EN 180 4589-2) Say % Fife-10-11, NF F10-102 Class F 2 Surface flammability NFPA 130 (ASTM E 682) passed Smoke gas toxicity NFPA 130 (ASTM E 682) passed Test protection for rail vehicles (DIN EN 45545-2) R22 H. 1 - H. 1. 3 Fire protection for rail vehicles (DIN EN 45545-2) R22 H. 1 - H. 1. 3	Requirements, voltage drop	≤ 1.6 mV	
Short circuit stability result Conductor cross section short circuit testing 8 mm² Short-time current 0.72 kA Conductor cross section short circuit testing 10 mm² Short-time current 1.2 kA Result of thermal test Ageing test for screwless modular terminal block temperature cycles 192 Proof of thermal characteristics (needle flame) effective duration Result of aging test Oscillation, broadband noise test result Test passed Test spased DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise Call (m/s²)²/Hz ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test directions X, Y, and Z-axis Shock test result Test specification, shock test DIN EN 50155 (VDE 0115-200):2008-03 Test specification of the second of the			
Conductor cross section short circuit testing 0.72 kA 0.72 kA 1.00 mm² 1.00	·		
Conductor cross section short circuit testing	·	6 mm ²	
Short-time current	Short-time current	0.72 kA	
Result of thermal test	Conductor cross section short circuit testing	10 mm²	
Ageing test for screwless modular terminal block temperature cycles 192	Short-time current	1.2 kA	
Proof of thermal characteristics (needle flame) effective duration Result of aging test Test passed Oscillation, broadband noise test result Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test spectrum Service life test category 2, bogie-mounted Test frequency ft = 5 Hz to f₂ = 250 Hz ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test directions X-, Y- and Z-axis Shock test result Test specification, shock test DIN EN 50155 (VDE 0115-200):2008-03 Half-sine Acceleration 30g Shock form Half-sine Acceleration 30g Test directions X-, Y- and Z-axis (pos. and neg.) Test directions Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold Behavior in fire for rail vehicles (DIN 510-2) Test passed Passed Passed Passed NF F16-101, NF F10-102 Class I Surface flammability NFPA 130 (ASTM E 162) passed Fine protection for rail vehicles (DIN EN 54545-2) R22 HL 1 - HL 3	Result of thermal test	Test passed	
Test passed	Ageing test for screwless modular terminal block temperature cycles	192	
Descillation, broadband noise test result Test passed	Proof of thermal characteristics (needle flame) effective duration	30 s	
Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test spectrum Service life test category 2, bogie-mounted Test frequency f₁ = 5 Hz to f₂ = 250 Hz ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test duration per 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) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold Behavior in fire for rail vehicles (DIN 5510-2) Flame test method (DIN EN 60695-11-10) V0 Oxygen index (DIN EN 150 4589-2) NF F16-101, NF F10-102 Class I Specific optical density of smoke NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1634) Fire protection for rail vehicles (DIN EN 4545-2) R22 HL 1- HL 3	Result of aging test	Test passed	
Test spectrum Service life test category 2, bogie-mounted Test frequency f₁ = 5 Hz to f₂ = 250 Hz ASD level 6.12 (m/s²)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 F 2 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NF	Oscillation, broadband noise test result	Test passed	
Test frequency f, = 5 Hz to f₂ = 250 Hz ASD level 6.12 (m/s³²²/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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Smoke gas toxicity NFPA 130 (AST	Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2008-03	
ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis 5 h 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)) 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 Surface flammability NFPA 130 (ASTM E 162) passed Smoke gas toxicity NFPA 130 (ASTM E 162) passed Smoke gas toxicity NFPA 130 (ASTM E 1354) 28 MJ/kg Fire protection for rail vehicles (DIN EN 454545-2) R22 HL 1 - HL 3	Test spectrum	Service life test category 2, bogie-mounted	
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 I 2 Surface flammability NFPA 130 (ASTM E 162) passed 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 <tr< td=""><td>Test frequency</td><td>f₁ = 5 Hz to f₂ = 250 Hz</td></tr<>	Test frequency	f ₁ = 5 Hz to f ₂ = 250 Hz	
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 Surface flammability NFPA 130 (ASTM E 162) passed 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	ASD level	6.12 (m/s ²) ² /Hz	
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 Specific optical density of smoke NFPA 130 (ASTM E 662) passed Smoke gas toxicity NFPA 130 (ASTM E 1354) 28 MJ/kg Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Acceleration	3.12 g	
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 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	Test duration per axis	5 h	
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 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	Test directions	X-, Y- and Z-axis	
Shock form Acceleration Shock duration Acceleration Shock duration 18 ms Number of shocks per direction 3 Test directions Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold 4-60 °C Behavior in fire for rail vehicles (DIN 5510-2) Test passed Flame test method (DIN EN 60695-11-10) Vo Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I VF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Shock test result	Test passed	
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 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	Test specification, shock test	DIN EN 50155 (VDE 0115-200):2008-03	
Shock duration 18 ms Number of shocks per direction Test directions Relative insulation material temperature index (Elec., UL 746 B) Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold -60 °C Behavior in fire for rail vehicles (DIN 5510-2) Flame test method (DIN EN 60695-11-10) Oxygen index (DIN EN 1SO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F 2 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Shock form	Half-sine	
Number of shocks per direction 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)) Static insulating material application in cold Ehavior in fire for rail vehicles (DIN 5510-2) Flame test method (DIN EN 60695-11-10) Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Acceleration	30g	
Test directions Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold Ehavior in fire for rail vehicles (DIN 5510-2) Fame test method (DIN EN 60695-11-10) Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Shock duration	18 ms	
Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold General Section of the formula of the following section of	Number of shocks per direction	3	
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) 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 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	Test directions	X-, Y- and Z-axis (pos. and neg.)	
Static insulating material application in cold Behavior in fire for rail vehicles (DIN 5510-2) Flame test method (DIN EN 60695-11-10) Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Relative insulation material temperature index (Elec., UL 746 B)	130 °C	
Behavior in fire for rail vehicles (DIN 5510-2) Flame test method (DIN EN 60695-11-10) Oxygen index (DIN EN ISO 4589-2) 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) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 Test passed 2 Test passed Passed 2 Multiplication of the passed of the pass		130 °C	
Flame test method (DIN EN 60695-11-10) Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F 2 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 V0 V0 Passed 2 Smoke MFPA 130 (ASTM E 1354) 28 MJ/kg Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Static insulating material application in cold	-60 °C	
Oxygen index (DIN EN ISO 4589-2) NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F 2 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 >32 % >32 % Passed 2 Calorimetric heat release NFPA 130 (ASTM E 1354) Passed 28 MJ/kg Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Behavior in fire for rail vehicles (DIN 5510-2)	Test passed	
NF F16-101, NF F10-102 Class I NF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 2 NF F16-101, NF F10-102 Class I 2 Dassed passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Smoke gas toxicity NFPA 130 (SMP 800C) Passed Label Surface flammability NFPA 130 (ASTM E 1354) Passed HL 1 - HL 3	Flame test method (DIN EN 60695-11-10)	V0	
NF F16-101, NF F10-102 Class F Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 2 Surface flammability NFPA 130 (ASTM E 162) passed 2 Smoke gas toxicity NFPA 130 (ASTM E 1354) 28 MJ/kg Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Oxygen index (DIN EN ISO 4589-2)	>32 %	
Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 passed 28 MJ/kg HL 1 - HL 3	NF F16-101, NF F10-102 Class I	2	
Specific optical density of smoke NFPA 130 (ASTM E 662) Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	NF F16-101, NF F10-102 Class F	2	
Smoke gas toxicity NFPA 130 (SMP 800C) Calorimetric heat release NFPA 130 (ASTM E 1354) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Surface flammability NFPA 130 (ASTM E 162)	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	Specific optical density of smoke NFPA 130 (ASTM E 662)	passed	
Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	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) R23 HL 1 - HL 3	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	



Technical data

General

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	56 mm
Length	28.2 mm
Height	30 mm
Height NS 15	33 mm

Connection data

Feed-in connection	Feed-in stage	
Connection method	Push-in connection	
Connection in acc. with standard	IEC 60947-7-1	
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	
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 mm ²	
Stripping length	8 mm 10 mm	
Internal cylindrical gage	A3	
Connection method	Push-in connection	
Connection in acc. with standard	IEC 60947-7-1	
Conductor cross section solid min.	0.5 mm²	
Conductor cross section solid max.	10 mm ²	
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	



Technical data

Connection data

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
Stripping length	10 mm 12 mm

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: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Circuit diagram



Approvals

Approvals

Approvals

CSA / DNV GL

Ex Approvals

Approval details

CSA	(P	http://www.csagroup.org/services-industries/product-listing/ 13631		13631	
	D		В	С	
Nominal voltage UN	600 V		300 V	300 V	
Nominal current IN	5 A		50 A	50 A	



Approvals

	D	В	С
mm²/AWG/kcmil	20-8	20-8	20-8

DNV GL	http://exchange.dnv.com/tari/	TAE00002TT
Nominal voltage UN	500 V	
Nominal current IN	24 A	

Phoenix Contact 2018 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com