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Distribution block, Block with horizontal alignment, The blocks can be bridged with one another via the conductor shaft. For corresponding plug-in bridges, see accessories, nom. voltage: 690 V, nominal current: 24 A, connection method: Push-in connection, number of connections: 12, cross section: 0.14 mm² - 4 mm², AWG: 26 - 12, width: 31.5 mm, color: brown, mounting type: NS 15

Your advantages

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



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	8 pc
GTIN	4 055626 393582
GTIN	4055626393582
Weight per Piece (excluding packing)	25.000 g
Custom tariff number	85369010
Country of origin	Poland

Technical data

General

I NOTA	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	12

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Technical data

General

Potentials	1
Nominal cross section	2.5 mm²
Color	brown
Insulating material	PA
Flammability rating according to UL 94	V0
Rated surge voltage	8 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	0.77 W (the value is based on one connection block and is multiplied according to the pin assignment)
Maximum load current	32 A
Maximum total current	48 A
Nominal current I _N	24 A
Nominal voltage U _N	690 V
Open side panel	No
Ambient temperature (operation)	-60 °C 105 °C (max. short-term operating temperature 130°C)
Ambient temperature (storage/transport)	-25 °C 60 °C (for a short time, not exceeding 24h, -60°C to +70°C)
Permissible humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 70 °C
Ambient temperature (actuation)	-5 °C 70 °C
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
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	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Tensile test result	Test passed
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35

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Technical data

General

1 N		<u> </u>
Requirement temperature-rise test Increase in temperature < 45 K Requirement temperature rise test Increase in temperature < 45 K Short circuit stability result Test passed Conductor cross section short circuit testing 2.5 mm² Short-lime current 0.3 kA Conductor cross section short circuit testing 4 mm² Short-lime current 0.48 kA Result of thermal test Test passed Proof of thermal characteristics (needle flame) effective duration 30 s Result of thermal characteristics (needle flame) effective duration 30 s Result of screwless modular terminal block temperature cycles 192 Oscillation, broadband noise test result Test passed Test spacefication, oscillation, broadband noise test result Test passed DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise test result Test spacefication, broadband noise test result Test specification, broadband noise test result Test passed DIN EN 50155 (VDE 0115-200):2008-03 Test specification S, V, V and Z-axis Service life test category 2, bogie-mounted 5 h kD service life test category 2, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 3, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD service life test category 2, bogie-mounted 7 h kD ser	Setpoint	1 N
Requirement temperature-rise test Short circuit stability result Conductor cross section short circuit testing 2.5 mm² Short-time current 0.3 kA Conductor cross section short circuit testing 4 mm² Short-time current 0.48 kA Result of thermal test Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Test passed 7 est passed Oscillation, broadband noise test result Test spassed Oscillation, broadband noise test result Test spassed DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise Enter the specification, oscillation, broadband noise Test specification, socillation, broadband noise Test frequency f, = 5 Hz to f, = 250 Hz AsD level 6.12 (m/s³)²/Hz Ascoeleration 3.12 g Test duration per axis 5 h Test duration per axis 5 h Test passed Test specification, shock test DIN EN 50155 (VDE 0115-200)·2008-03 Shock test result Test specification, shock test DIN EN 50155 (VDE 0115-200)·2008-03 Shock form Half-sine Acceleration 3 g Shock form Half-sine Acceleration 3 n Test directions XY - and Z-axis (pos. and neg.) Temperature index of insulation material (DIN EN 6016-1 (VDE 0304-21)) 130 °C Static insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material (DIN EN 6020) Passed Calorimetric heat release NFPA 130 (ASTM E 162) passed Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Result of voltage-drop test	Test passed
Short circuit stability result Conductor cross section short circuit testing 2.5 mm² Short-time current 0.3 kA Conductor cross section short circuit testing 3.0 kA Conductor cross section short circuit testing 4 mm² Short-time current 0.48 kA Result of thermal test Test passed Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Ageing test for screwless modular terminal block temperature cycles 192 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 Service life test category 2, bogie-mounted Test frequency fi = 5 Hz to fz = 250 Hz ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test specification, shock test Test specification, shock test DIN EN 50155 (VDE 0115-200):2008-03 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 Shock form Half-sine Acceleration 30g Relative insulation material temperature index (Elec., UL 746 B) 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)) 130 °C Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Calorimetric heat release NFPA 130 (ASTM E 1662) passed Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Result of temperature-rise test	Test passed
Conductor cross section short circuit testing 2.5 mm² Short-time current 0.3 kA Conductor cross section short circuit testing 4 mm² Short-time current 0.48 kA Result of thermal characteristics (needle flame) effective duration 30 s Result of aging test Aging test for screwless modular terminal block temperature cycles 192 Oscillation, broadband noise test result Test passed Test spassed Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test spectrum Service life test category 2, bogie-mounted Test frequency 1, = 5 Hz to 6, = 250 Hz ASD level 8.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis Test directions X, Y- and Z-axis Shock test result Test specification, shock test DIN EN 50155 (VDE 0115-200):2008-03 The start frequency 1, = 5 Hz to 6, = 250 Hz ASD level 8.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis Test gassed Test specification, shock test DIN EN 50155 (VDE 0115-200):2008-03 The start of the control of th	Requirement temperature-rise test	Increase in temperature ≤ 45 K
Short-time current Conductor cross section short circuit testing 4 mm² 5hort-time current 0.48 kA Result of thermal test Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Test passed Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Test passed Ageing test for screwless modular terminal block temperature cycles 192 Oscillation, broadband noise test result Test passed 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 frequency f, = 5 Hz to f _z = 250 Hz ASD level 6.12 (m/s²)²/Hz Acceleration 3.12 g Test duration per axis Test duration per axis Test duration per axis 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 30 g 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)) 130 °C Static insulating material application in cold 70 °C Surface flammability NFPA 130 (ASTM E 162) passed 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	Short circuit stability result	Test passed
Conductor cross section short circuit testing 4 mm² Short-time current 0.48 kA Result of thermal test Test passed Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Test passed 192 Oscillation, broadband noise test result Test passed 192 Oscillation, broadband noise test result Test specification, oscillation, broadband noise DIN EN \$0155 (VDE 0115-200):2008-03 Test spectrum Service life test category 2, bogie-mounted First frequency fi, = 5 Hz to fi, = 250 Hz ASD level 6.12 (m/s³)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test directions X-, Y- and Z-axis Shock test result Test passed DIN EN \$0155 (VDE 0115-200):2008-03 Test specification, obook test DIN EN \$0155 (VDE 0115-200):2008-03 Test duration per axis 5 h Test directions X-, Y- and Z-axis Shock test result Test passed Test spassed Test passed Half-sine Acceleration 30g Shock duration 18 ms Number of shocks per direction 3 or Test directions X-, Y- and Z-axis (pos. and neg.) Relative insulation material temperature index (Elec., UL 746 B) 130 °C Static insulating material application in cold 60 °C Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (ASTM E 1354) Passed Fire protection for rail vehicles (DIN EN 45545-2) R22 HIL 1 - HL 3	Conductor cross section short circuit testing	2.5 mm ²
Short-time current Doctor Continue current Doctor Doctor	Short-time current	0.3 kA
Result of thermal test Proof of thermal characteristics (needle flame) effective duration 30 s Result of aging test Ageing test for screwless modular terminal block temperature cycles 192 Oscillation, broadband noise test result Test passed DIN EN 50155 (VDE 0115-200):2008-03 Test spectrum Service life test category 2, bogie-mounted Test frequency f, = 5 Hz to f ₂ = 250 Hz ASD level 6.12 (m/s²²²Hz Acceleration 3.12 g Test duration per axis 5 h Test duration per axis Test directions X-, Y- and Z-axis Shock test result 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) Test directions Test directions Test directions Ax-, Y- and Z-axis (pos. and neg.) Relative insulation material (DIN EN 60216-1 (VDE 0304-21)) 130 °C Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) 130 °C Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Calorimetric heat release NFPA 130 (ASTM E 1662) passed Fire protection for rail vehicles (DIN EN 4554-5) R22 HL 1 - HL 3	Conductor cross section short circuit testing	4 mm²
Proof of thermal characteristics (needle flame) effective duration Result of aging test for screwless modular terminal block temperature cycles 192 Oscillation, broadband noise test result Test passed Test spassed Test spassed Test passed DIN EN 50155 (VDE 0115-200):2008-03 Test specification, oscillation, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test specification, specification, broadband noise DIN EN 50155 (VDE 0115-200):2008-03 Test specification, specification, broadband noise Service life test category 2, bogie-mounted frest frequency frest of 2 btz of 2 e 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 Shock form Half-sine Acceleration 30g Shock duration 18 ms Number of shocks per direction 3 dy 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 5 do °C Surface flammability NFPA 130 (ASTM E 162) passed 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	Short-time current	0.48 kA
Result of aging test Ageing test for screwless modular terminal block temperature cycles 192 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, = 5 Hz to f ₂ = 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 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 Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Calorimetric heat release NFPA 130 (ASTM E 1634) Smoke gas toxicity NFPA 130 (GNT 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Result of thermal test	Test passed
Ageing test for screwless modular terminal block temperature cycles 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/s³)²/Hz Acceleration 3.12 g Test duration per axis 5 h Test directions X-, Y- and Z-axis Shock test result Test spescification, 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 ms Number of shocks per direction 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)) Surface flammability NFPA 130 (ASTM E 162) passed Calorimetric heat release NFPA 130 (ASTM E 1652) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Proof of thermal characteristics (needle flame) effective duration	30 s
Oscillation, broadband noise test result Test spassed 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/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 Shock form Acceleration 3.0g Shock duration 18 ms Number of shocks per direction 3 dy Test directions X-, Y- and Z-axis (pos. and neg.) Relative insulation material temperature index (Elec., UL 746 B) Temperature index of insulation material polication in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Calorimetric heat release NFPA 130 (ASTM E 1634) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Result of aging test	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 $f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$ ASD level 6.12 $(m/s^2)^2/\text{Hz}$ 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 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 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Ageing test for screwless modular terminal block temperature cycles	192
Test spectrum Service life test category 2, bogie-mounted Test frequency $f_1 = 5 \text{Hz} \text{ to } f_2 = 250 \text{Hz}$ 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) Static insulation material application in cold Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 1654) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Oscillation, broadband noise test result	Test passed
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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	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 directions X-, Y- and Z-axis Shock test result 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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed Fire protection for rail vehicles (DIN EN 45545-2) 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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Test frequency	$f_1 = 5 \text{ Hz to } f_2 = 250 \text{ Hz}$
Test duration per axis Test directions X-, Y- and Z-axis Shock test result Test passed DIN EN 50155 (VDE 0115-200):2008-03 Shock form Half-sine Acceleration 30g Shock duration Number of shocks per direction 3 test directions Relative insulation material temperature index (Elec., UL 746 B) Static insulating material application in cold Static insulating material application in cold Specific optical density of smoke NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	ASD level	6.12 (m/s²)²/Hz
Test directions X-, Y- and Z-axis Shock test result 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 7 est 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 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Acceleration	3.12 g
Shock test result 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 (Selative 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 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 364) Smoke gas toxicity NFPA 130 (SMP 800C) 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 7 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 5 to °C Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Test directions	X-, Y- and Z-axis
Shock form Acceleration 30g Shock duration 18 ms Number of shocks per direction 7 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 5 Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) 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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed 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 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 Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed 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) Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Acceleration	30g
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 -60 °C Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) 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)) 130 °C Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Number of shocks per direction	3
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21)) 130 °C Static insulating material application in cold -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed 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 -60 °C Surface flammability NFPA 130 (ASTM E 162) passed Specific optical density of smoke NFPA 130 (ASTM E 662) passed Calorimetric heat release NFPA 130 (ASTM E 1354) 28 MJ/kg Smoke gas toxicity NFPA 130 (SMP 800C) passed 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
Surface flammability NFPA 130 (ASTM E 162) Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Specific optical density of smoke NFPA 130 (ASTM E 662) Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Static insulating material application in cold	-60 °C
Calorimetric heat release NFPA 130 (ASTM E 1354) Smoke gas toxicity NFPA 130 (SMP 800C) Fire protection for rail vehicles (DIN EN 45545-2) R22 HL 1 - HL 3	Surface flammability NFPA 130 (ASTM E 162)	passed
Smoke gas toxicity NFPA 130 (SMP 800C) passed 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	Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
	Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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

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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	31.5 mm
Length	28.6 mm
Height NS 15	31.4 mm

Connection data

Connection method	Push-in connection
Stripping length	8 mm 10 mm
Connection in acc. with standard	IEC60947-7-1
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	4 mm ²
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 mm ²
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 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm ²
Connection cross sections directly pluggable	0.34 mm² 4 mm² 24 12
Conductor cross section solid min.	0.34 mm ²
Conductor cross section solid max.	4 mm ²
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 mm ²
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 mm ²
Internal cylindrical gage	A3

Standards and Regulations

Connection in acc. with standard	IEC60947-7-1
Flammability rating according to UL 94	V0

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e

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Technical data

Environmental Product Compliance

No hazardous substances above threshold values
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Drawings

Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	27141120
eCl@ss 4.0	27141121
eCl@ss 4.1	27141121
eCl@ss 5.0	27141120
eCl@ss 5.1	27141120
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 8.0	27141120
eCl@ss 9.0	27141120

ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 5.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410

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Classifications

UNSPSC

UNSPSC 21.0	39121410
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Approvals

Approvals

Approvals

DNV GL / CSA / EAC / UL Recognized / cUL Recognized / EAC / LR / BV / cULus Recognized

Ex Approvals

Approval details

DNV GL	DAVGE	https://approvalfinder.dnvgl.com/	TAE00002TT
Nominal voltage UN		500 V	
Nominal current IN		24 A	

CSA	http://www.cs	http://www.csagroup.org/services-industries/product-listing/	
	В	С	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	26-12	26-12	26-12

EAC RU C-DE.Al30.B.01102

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60425			
	В	С	D	
Nominal voltage UN	300 V	300 V	600 V	

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Approvals

	В	С	D
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	26-12	26-12	26-12

cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm FILE E 60		
	В	С	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	20 A	20 A	5 A
mm²/AWG/kcmil	26-12	26-12	26-12

EAC	EAC	RU C- DE.BL08.B.00644
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LR Lloyd's Register	http://www.lr.org/en	LR2002627TA
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BV	http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	59146/A0 BV
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cULus Recognized

Accessories

Accessories

Bridge

Wire bridge - FBSW 2-5/250MM - 3030172



Wire bridge, length: 250 mm, width: 5.1 mm, number of positions: 1, color: red/black



Accessories

Wire bridge - FBSW 2-5/60MM - 3030170



Wire bridge, length: 60 mm, width: 5.1 mm, number of positions: 1, color: red/black

Wire bridge - FBSW 2-5/110MM - 3030171



Wire bridge, length: 110 mm, width: 5.1 mm, number of positions: 1, color: red/black

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue





Accessories

Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Insulating sleeve - ISH 2,5/0,2 - 3002843



Insulating sleeve, color: white



Accessories

Insulating sleeve - ISH 2,5/0,5 - 3002856



Insulating sleeve, color: gray

Insulating sleeve - ISH 2,5/1,0 - 3002869



Insulating sleeve, color: black

Jumper

Plug-in bridge - FBS 2-5 - 3030161



Plug-in bridge, pitch: 5.2 mm, length: 22.7 mm, width: 9 mm, number of positions: 2, color: red

Plug-in bridge - FBS 2-5 GN - 3032143



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: green

Plug-in bridge - FBS 2-5 BU - 3036877



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue



Accessories

Plug-in bridge - FBS 2-5 GY - 3038969



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

Labeled terminal marker

Marker card - SK 3,8 REEL P5,2 WH CUS - 8199989



Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8#mm

Marker card - SK 2,8 REEL P5,2 WH CUS - 8199986



Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8#mm

Marker card - SK 3,8 REEL P5,2 WH CUS - 8199989



Marker card, Card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8#mm

Marker carriers

Terminal strip marker carrier - KLM 2 - 0807575



Terminal strip marker carrier, gray, unlabeled, mounting type: plug in, lettering field size: 20 mm x 8 mm

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Accessories

Terminal strip marker carrier - KLM 3-L - 0814788



Terminal strip marker carrier, height-adjustable, for end brackets CLIPFIX 15, CLIPFIX 35 and CLIPFIX 35-5, can be labeled with BMK...20 x 8 labels, or directly with the M-PEN or X-PEN

Screwdriver tools

Screwdriver - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

Terminal marking

Marking foil for zack marker strip - TML (EX3,8)R - 0801837



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000x3.8mm, Number of individual labels: 1

Marking foil for zack marker strip - TML (104X3,8)R - 0801833



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500



Accessories

Marking foil for zack marker strip - TML (104X2,8)R - 0801832



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

Marking foil for zack marker strip - TML (EX2,8)R - 0801836



Marking foil for zack marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: 30000x2.8mm, Number of individual labels: 1

Marker for terminal blocks - US-TML (104X3,8) - 0830768



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARKIDCOLOR, BLUEMARKID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22

Marker for terminal blocks - US-TML (104X2,8) - 0830767



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARKIDCOLOR, BLUEMARKID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

Marker card - SK U/3,8 WH:UNBEDRUCKT - 0803906



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

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Accessories

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

Label - MM-TML (EX3,8)R C1 WH/BK - 1092026



Label, Roll, white, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, for terminal block width: 8000 mm, lettering field size: continuous x 3.8#mm

Test plug terminal block

Test plugs - MPS-MT SN - 3212251



Test plugs, with solder connection up to 1 mm² conductor cross section, tin-plated surface, color: silver

Test plugs - MPS-MT 1-S - 1944372



Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray



Accessories

Test socket

Test adapter - PAI-4-N GY - 3032871



4 mm test adapter, for terminal blocks with 5.2mm, 6.2mm and 8.2mm pitch

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