

## Distribution block - PTFIX 6/6X2,5-TG - 1130751

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Distribution block, Basic terminal block with feed-in and multifunctional disconnect zone in the branches, nom. voltage: 400 V, nominal current: 20 A, Load contact, connection method: Push-in connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, Line contact, connection method: Push-in connection, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, mounting: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: gray

### Your advantages

- ✓ Time savings with ready-to-mount blocks without manual bridging
- ✓ Approx. 30% space savings on the DIN rail with transverse mounting
- ✓ Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- ✓ Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- ✓ Disconnect zone for accommodating CLIPLINE complete function accessories



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	8 pc
GTIN	 4 063151 058456
GTIN	4063151058456
Weight per Piece (excluding packing)	30.000 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of rows	1
Number of connections	7
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray

# Distribution block - PTFIX 6/6X2,5-TG - 1130751

## Technical data

### General

Insulating material	PA
Flammability rating according to UL 94	V0
Mounting type	for snapping onto a DIN rail adapter
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	20 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum total current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	400 V
	450 V (in accordance with IEC 60998-2-2)
Open side panel	No
General information	The max. load current must not be exceeded by the total current of all connected conductors. For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!
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	7.3 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 flexion and pull-out test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.5 mm <sup>2</sup> / 0.3 kg
	6 mm <sup>2</sup> / 1.4 kg
	10 mm <sup>2</sup> / 2 kg
	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N

## Distribution block - PTFIX 6/6X2,5-TG - 1130751

### Technical data

#### General

Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 15
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.
Result of voltage-drop test	Test passed
Requirements, voltage drop	$U_1 \leq 6,4 \text{ mV}$ (1,6 mV x number of conductor clamping units or disconnect unit contact points) $U_2 \leq 1,5 \times U_1$
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45 \text{ K}$
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of thermal 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
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2018-05
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 <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Test specification, shock test	DIN EN 50155 (VDE 0115-200):2018-05

## Distribution block - PTFIX 6/6X2,5-TG - 1130751

### Technical data

#### General

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))	125 °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)	27,5 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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	47.6 mm
Length	28.6 mm
Height	21.7 mm

#### Connection data

Connection	Load contact
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Note	The IEC 60947-7-1 standard applies for the use of mounting accessories.
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>

# Distribution block - PTFIX 6/6X2,5-TG - 1130751

## Technical data

### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Connection cross sections directly pluggable	0.34 mm <sup>2</sup> 4 mm <sup>2</sup> 22 18
Conductor cross section solid min.	0.34 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	22
Conductor cross section AWG max.	18
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.75 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Internal cylindrical gage	A3
	B3
Connection	Line contact
Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	8
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Connection cross sections directly pluggable	1 mm <sup>2</sup> 10 mm <sup>2</sup> 18 8
Conductor cross section solid min.	1 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Value	1.5 mm <sup>2</sup>
	6 mm <sup>2</sup>
	1 mm <sup>2</sup>
	6 mm <sup>2</sup>
Internal cylindrical gage	A5
	B4

# Distribution block - PTFIX 6/6X2,5-TG - 1130751

## Technical data

### Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -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

### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60998-2-2

## Classifications

### eCl@ss

eCl@ss 10.0.1	27141126
eCl@ss 11.0	27141126
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 9.0	27141126

### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000902

### 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

## Distribution block - PTFIX 6/6X2,5-TG - 1130751

### Classifications

#### UNSPSC

UNSPSC 21.0	39121410
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## Distribution block - PTFIX 6/6X2,5-MT - 1130757

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Distribution block, Basic terminal block with feed-in and disconnect knife in the branches, disconnection via screwdriver, nom. voltage: 400 V, nominal current: 20 A, Load contact, connection method: Push-in connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, Line contact, connection method: Push-in connection, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, mounting: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: gray

### Your advantages

- ✓ Time savings with ready-to-mount blocks without manual bridging
- ✓ Approx. 30% space savings on the DIN rail with transverse mounting
- ✓ Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- ✓ Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- ✓ Circuit disconnection via built-in disconnect knife, actuation via screwdriver



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	8 pc
GTIN	 4 063151 058364
GTIN	4063151058364
Weight per Piece (excluding packing)	35.000 g
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of rows	1
Number of connections	7
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray

# Distribution block - PTFIX 6/6X2,5-MT - 1130757

## Technical data

### General

Insulating material	PA
Flammability rating according to UL 94	V0
Mounting type	for snapping onto a DIN rail adapter
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	20 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum total current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	400 V
	450 V (in accordance with IEC 60998-2-2)
Open side panel	No
General information	The maximum load current of a single clamping unit must not be exceeded. For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!
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	7.3 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 flexion and pull-out test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.5 mm <sup>2</sup> / 0.3 kg
	6 mm <sup>2</sup> / 1.4 kg
	10 mm <sup>2</sup> / 2 kg
	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N

## Distribution block - PTFIX 6/6X2,5-MT - 1130757

### Technical data

#### General

Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 15
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.
Result of voltage-drop test	Test passed
Requirements, voltage drop	$U_1 \leq 1.6 \text{ mV}; U_2 \leq 1.5 \times U_1$
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45 \text{ K}$
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of thermal 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):2018-05
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 <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
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):2018-05

## Distribution block - PTFIX 6/6X2,5-MT - 1130757

### Technical data

#### General

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))	125 °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)	27,5 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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	47.6 mm
Length	28.6 mm
Height	23.3 mm

#### Connection data

Connection	Load contact
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Note	The IEC 60947-7-1 standard applies for the use of mounting accessories.
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>

## Distribution block - PTFIX 6/6X2,5-MT - 1130757

### Technical data

#### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Connection cross sections directly pluggable	0.34 mm <sup>2</sup> 4 mm <sup>2</sup> 22 18
Conductor cross section solid min.	0.34 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	22
Conductor cross section AWG max.	18
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.75 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Internal cylindrical gage	A3
	B3
Connection	Line contact
Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	8
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Connection cross sections directly pluggable	1 mm <sup>2</sup> 10 mm <sup>2</sup> 18 8
Conductor cross section solid min.	1 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Value	1.5 mm <sup>2</sup>
	6 mm <sup>2</sup>
	1 mm <sup>2</sup>
	6 mm <sup>2</sup>
Internal cylindrical gage	A5
	B4

## Distribution block - PTFIX 6/6X2,5-MT - 1130757

### Technical data

#### Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -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

#### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60998-2-2

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Classifications

#### eCl@ss

eCl@ss 10.0.1	27141126
eCl@ss 11.0	27141126
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 9.0	27141126

#### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000902

#### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Distribution block - PTFIX 6/6X2,5-MT - 1130757

### Classifications

#### UNSPSC

UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

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Distribution block, Basic terminal block with feed-in and disconnect knife in the branches, disconnection via screwdriver or manually, nom. voltage: 400 V, nominal current: 20 A, Load contact, connection method: Push-in connection, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, Line contact, connection method: Push-in connection, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, mounting: for snapping onto a DIN rail adapter, Direct mounting with flange, Free-hanging, color: gray

### Your advantages

- ✓ Time savings with ready-to-mount blocks without manual bridging
- ✓ Approx. 30% space savings on the DIN rail with transverse mounting
- ✓ Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- ✓ Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- ✓ Circuit disconnection via built-in disconnect knife, actuation via screwdriver or by hand



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	8 pc
GTIN	 4 063151 058463
GTIN	4063151058463
Custom tariff number	85369010
Country of origin	Poland

### Technical data

#### General

Number of rows	1
Number of connections	7
Nominal cross section	2.5 mm <sup>2</sup>
Color	gray
Insulating material	PA

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Technical data

#### General

Flammability rating according to UL 94	V0
Mounting type	for snapping onto a DIN rail adapter
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum load current	20 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum total current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	20 A
Nominal voltage U <sub>N</sub>	400 V
	450 V (in accordance with IEC 60998-2-2)
Open side panel	No
General information	The maximum load current of a single clamping unit must not be exceeded. For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!
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	7.3 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 flexion and pull-out test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.5 mm <sup>2</sup> / 0.3 kg
	6 mm <sup>2</sup> / 1.4 kg
	10 mm <sup>2</sup> / 2 kg
	0.14 mm <sup>2</sup> / 0.2 kg
	2.5 mm <sup>2</sup> / 0.7 kg
	4 mm <sup>2</sup> / 0.9 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Conductor cross section tensile test	6 mm <sup>2</sup>

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Technical data

#### General

Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Conductor cross section tensile test	0.14 mm <sup>2</sup>
Tractive force setpoint	10 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 35/NS 15
Note	When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.
	When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.
Result of voltage-drop test	Test passed
Requirements, voltage drop	$U_1 \leq 1.6 \text{ mV}; U_2 \leq 1.5 \times U_1$
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45 \text{ K}$
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Conductor cross section short circuit testing	2.5 mm <sup>2</sup>
Short-time current	0.3 kA
Result of thermal 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):2018-05
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 <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12g
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):2018-05
Shock form	Half-sine

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Technical data

#### General

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))	125 °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)	27,5 MJ/kg
Smoke gas toxicity NFPA 130 (SMP 800C)	passed
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	47.6 mm
Length	28.6 mm
Height	28.2 mm

#### Connection data

Connection	Load contact
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Note	The IEC 60947-7-1 standard applies for the use of mounting accessories.
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Technical data

#### Connection data

Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Connection cross sections directly pluggable	0.34 mm <sup>2</sup> 4 mm <sup>2</sup> 22 18
Conductor cross section solid min.	0.34 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section AWG min.	22
Conductor cross section AWG max.	18
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.75 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	2.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	2.5 mm <sup>2</sup>
Internal cylindrical gage	A3
	B3
Connection	Line contact
Connection method	Push-in connection
Stripping length	10 mm ... 12 mm
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	10 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	8
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Connection cross sections directly pluggable	1 mm <sup>2</sup> 10 mm <sup>2</sup> 18 8
Conductor cross section solid min.	1 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Value	1.5 mm <sup>2</sup>
	6 mm <sup>2</sup>
	1 mm <sup>2</sup>
	6 mm <sup>2</sup>
Internal cylindrical gage	A5
	B4

#### Ambient conditions

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Technical data

#### Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -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

#### Standards and Regulations

Connection in acc. with standard	IEC 60947-7-1
	IEC 60998-2-2

#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Classifications

#### eCl@ss

eCl@ss 10.0.1	27141126
eCl@ss 11.0	27141126
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 9.0	27141126

#### ETIM

ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000902

#### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410

## Distribution block - PTFIX 6/6X2,5-MTL - 1130760

### Classifications

#### UNSPSC

UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410