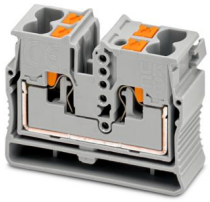
MPTD 2,5-M - Mini feed-through terminal block

1429280

https://www.phoenixcontact.com/ae/products/1429280

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 documentation. Our general terms of use for downloads are valid.



Mini feed-through terminal block, nom. voltage: 800 V, nominal current: 24 A, number of connections: 4, number of positions: 1, connection method: Push-in connection, Rated cross section: 2.5 mm^2, cross section: 0.14 mm^2 - 4 mm^2, color: gray

Your advantages

- Significant space savings with the compact design
- Increased flexibility with single function shafts
- Clear arrangement with marking grooves on each individual terminal point
- Time-saving conductor connection with tool-free and maintenance-free Push-in connection technology
- Testing options for all common test probes

Commercial data

Item number	1429280
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE2
Product key	BE2263
GTIN	4063151794620
Weight per piece (including packing)	9.9 g
Weight per piece (excluding packing)	9.9 g
Customs tariff number	85369010
Country of origin	CN

Downloaded from Arrow.com.

Technical data

Notes

Note on application	Modular

General

Note	The max. load current must not be exceeded by the total current of all connected conductors.

Product properties

Product type	Miniature terminal block
Number of positions	1
Number of connections	4
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	0.77 W

Connection data

Number of connections per level	4
Nominal cross section	2.5 mm²
Connection method	Push-in connection
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
	B3
Connection in acc. with standard	IEC 60947-7-1
Conductor cross-section rigid	0.14 mm² ... 4 mm²
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible	0.14 mm² ... 4 mm²
Conductor cross-section, flexible [AWG]	26 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.14 mm² ... 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm²
Nominal current	24 A
Maximum load current	30 A (with 4 mm² conductor cross-section)
Nominal voltage	800 V
Nominal cross section	2.5 mm²

Connection cross sections directly pluggable

Downloaded from Arrow.com.

Conductor cross-section rigid	0.34 mm² ... 4 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² ... 2.5 mm²
Flexible conductor cross-section (ferrule with plastic sleeve)	0.34 mm² ... 2.5 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	1075386 D-MPT 2,5-L
	3249019 D-MPT 2,5-RZ
	3249010 D-MPT 2,5-F
	1204517 SZF 1-0,6X3,5
	3022263 CLIPFIX 15
	3022218 CLIPFIX 35
List of bridges	Plug-in bridge / FBS 2-5 / 3030161
	Plug-in bridge / FBS 3-5 / 3030174
	Plug-in bridge / FBS 4-5 / 3030187
	Plug-in bridge / FBS 5-5 / 3030190
	Plug-in bridge / FBS 10-5 / 3030213
	Plug-in bridge / FBS 20-5 / 3030226
	Plug-in bridge / FBS 50-5 / 3038930
Bridge data	23 A (2.5 mm²)
Ex temperature increase	40 K (23 A / 2.5 mm²)
for bridging with bridge	550 V
- At bridging between non-adjacent terminal blocks	352 V
- At cut-to-length bridging	150 V
- At cut-to-length bridging with cover	150 V
Rated insulation voltage	500 V
output	(Permanent)

Ex level General

Rated voltage	550 V
Rated current	23 A
Maximum load current	29 A
Contact resistance	1.33 mΩ

Ex connection data General

Nominal cross section	2.5 mm²
Rated cross section AWG	14
Connection capacity rigid	0.14 mm² ... 4 mm²
Connection capacity AWG	26 ... 12
Connection capacity flexible	0.14 mm² ... 4 mm²
Connection capacity AWG	26 ... 12

Dimensions

Downloaded from Arrow.com.

Width	10.3 mm
Height	36 mm
Depth	27.3 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
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
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

Electrical tests

Surge voltage test

Test voltage setpoint	9.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 2.5 mm²	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

Result	Test passed

Downloaded from Arrow.com.

Note	When aligning several middle versions, the foot versions should be placed so that a maximum of 5 middle versions can be freely attached between them.
	Securing pin versions should be placed after 3 middle versions.
	Flange covers should be placed after 5 middle versions.
	Depending on the application case and mechanical load, other arrangements of the mounting accessory can also be chosen.

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross-section/weight	0.14 mm² / 0.2 kg
	2.5 mm² / 0.7 kg
	4 mm² / 0.9 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating; for max. short-term operating temperature, see RTI Elec.)

Downloaded from Arrow.com.

Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

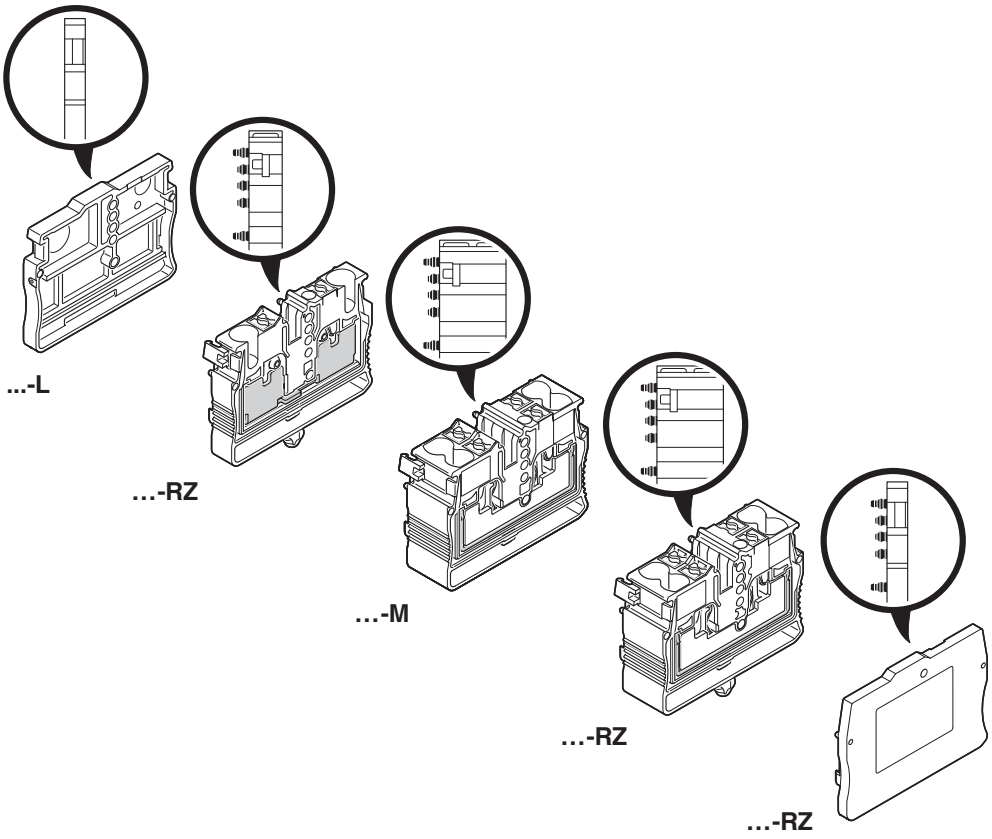
Standards and regulations

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

Downloaded from Arrow.com.

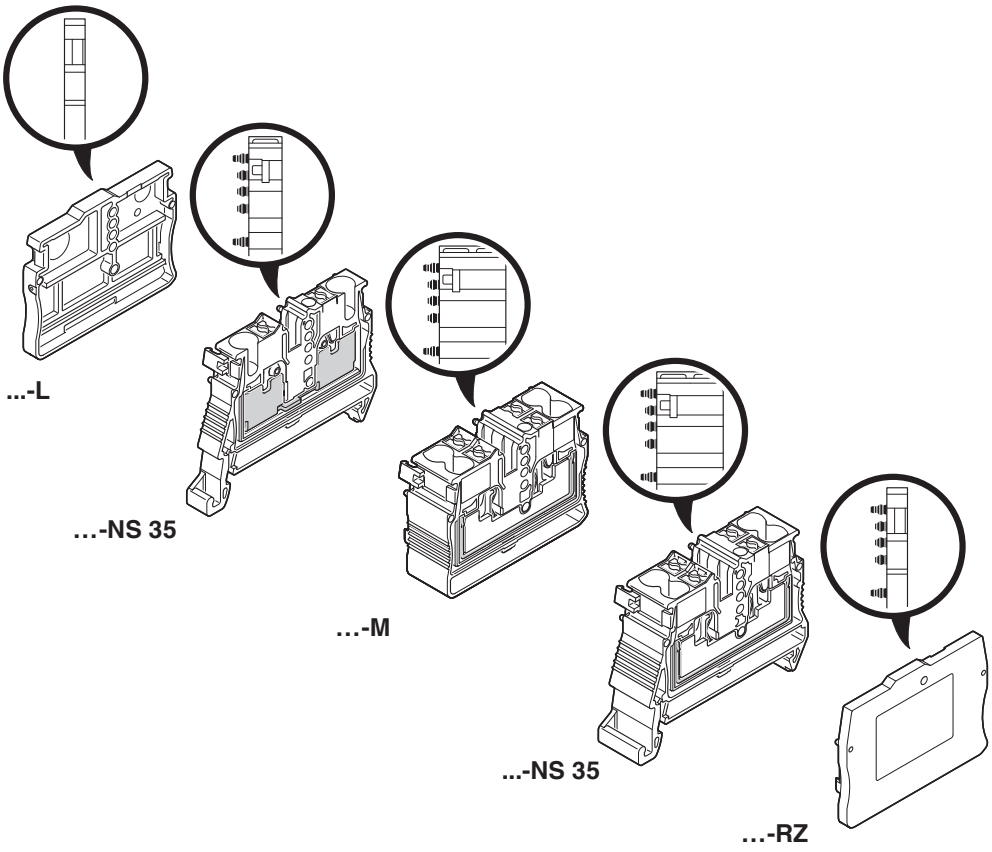
Drawings

Schematic diagram



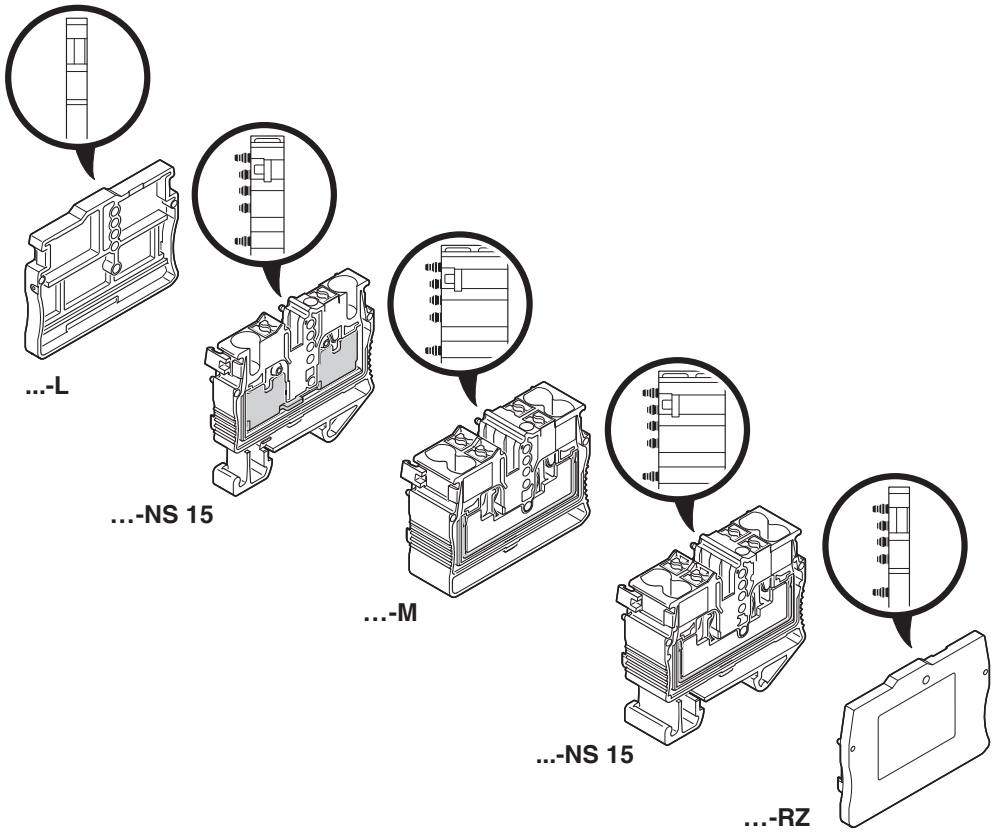
Downloaded from Arrow.com.

Schematic diagram

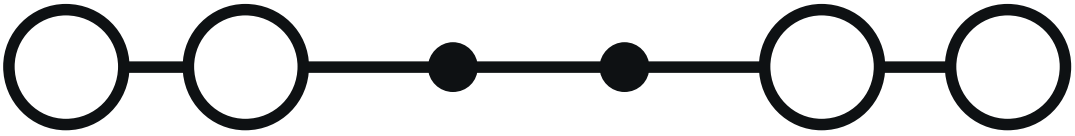


Downloaded from Arrow.com.

Schematic diagram



Circuit diagram



Downloaded from Arrow.com.

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/ae/products/1429280

CSA
Approval ID: 2030668

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	20 A	26 - 12	-
C				
	600 V	20 A	26 - 12	-
D				
	600 V	5 A	26 - 12	-

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
B				
	600 V	20 A	26 - 12	-
C				
	600 V	20 A	26 - 12	-
F				
	800 V	20 A	26 - 12	-
D				
	600 V	5 A	26 - 12	-

DNV GL
Approval ID: TAE00004WC

CCC
Approval ID: 2020322313000629

IECEx
Approval ID: IECEx SEV14.0010U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	550 V	23 A	-	0.14 - 4

ATEX
Approval ID: SEV14ATEX0140U

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2

Downloaded from Arrow.com.

keine				
	550 V	23 A	-	0.14 - 4

Downloaded from Arrow.com.

Classifications

ECLASS

ECLASS-13.0	27250101
ECLASS-15.0	27250101

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Downloaded from Arrow.com.

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact 2025 © - all rights reserved
https://www.phoenixcontact.com

PHOENIX CONTACT Middle East FZ LLC
1201N-1206N, Dubai Science Park Towers – North
P.O. Box 345002, Dubai, United Arab Emirates
(+971) 4 437-0324
info-me@phoenixcontact.com

Downloaded from Arrow.com.