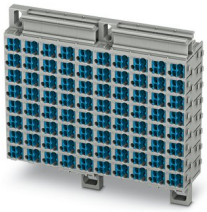
Marshalling patchboard - FTMC 1,5/80-2 /BU

3270369

https://www.phoenixcontact.com/us/products/3270369

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Marshalling patchboard, Labeled from 1 - 80, without actuation lever, nom. voltage: 500 V, nominal current: 17.5 A, connection method: Push-in connection, cross section: 0.14 mm^2 - 2.5 mm^2, mounting: Wall mounting, color: gray, color of connection elements: blue

Your advantages

- Blue version for using in intrinsically safe circuits in potentially explosive areas (type of protection Ex i)
- Tool-free wiring in a confined space thanks to compact size
- High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- Clear representation of actuation and terminal points through vertical conductor routing
- For mounting in a panel cutout

Commercial Data

Item number	3270369
Packing unit	6 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	BE6212
Catalog Page	Page 61 (C-1-2019)
GTIN	4055626058733
Weight per Piece (including packing)	246.6 g
Weight per Piece (excluding packing)	246.6 g
Customs tariff number	85369010
Country of origin	PL

Technical Data

Notes

General	Labeled from 1 - 80

Product properties

Product type	Marshalling terminal
Number of positions	80
Number of connections	320
Number of rows	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.56 W

Connection data

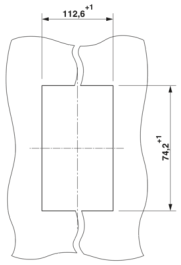
Number of connections per level	320
Nominal cross section	1.5 mm²
Rated cross section AWG	14
Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A1
Conductor cross section solid	0.14 mm² ... 2.5 mm²
Cross section AWG	26 ... 14
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section, flexible [AWG]	26 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.14 mm² ... 1.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² ... 1.5 mm²
Nominal current	17.5 A
Maximum load current	24 A (in case of a 2.5 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
	12 A (in case of a 2.5 mm² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	500 V

Connection cross sections directly pluggable

Conductor cross section solid	0.34 mm² ... 2.5 mm²
Conductor cross section, solid [AWG]	20 ... 14
Flexible conductor cross section flexible (ferrule, w/o plastic sleeve)	0.34 mm² ... 1.5 mm²

Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² ... 1.5 mm²

Dimensions

Dimensional drawing	
Width	110 mm
Height	30 mm
Length	73.2 mm

Material specifications

Color	gray
Color of connection elements	blue
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °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
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
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

Connector

Number of positions	80
Number of positions	80

Electrical tests

Surge voltage test

Test voltage setpoint	7.3 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 1.5 mm²	0.18 kA
Short-time withstand current 2.5 mm²	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.89 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	No

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm² / 0.2 kg
	1.5 mm² / 0.4 kg
	2.5 mm² / 0.7 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):2008-03
Spectrum	Service life test category 1, class B, body mounted
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
ASD level	0.964 (m/s²)²/Hz

Acceleration	0.58g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 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 ... 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)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

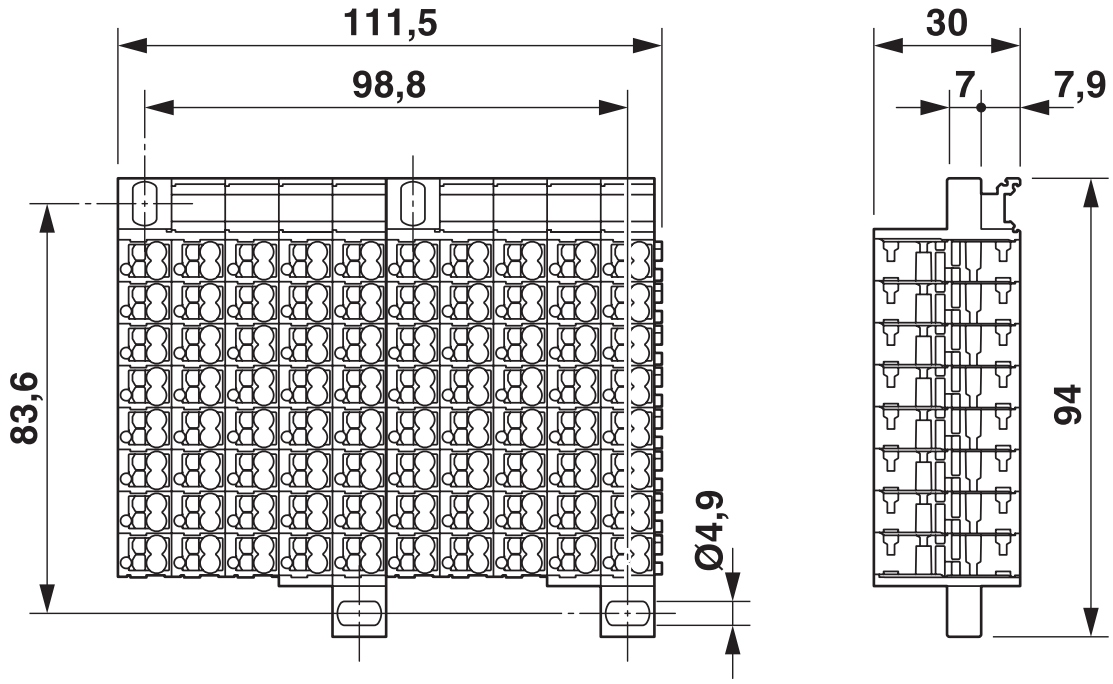
Connection in acc. with standard	IEC 60947-7-1

Mounting

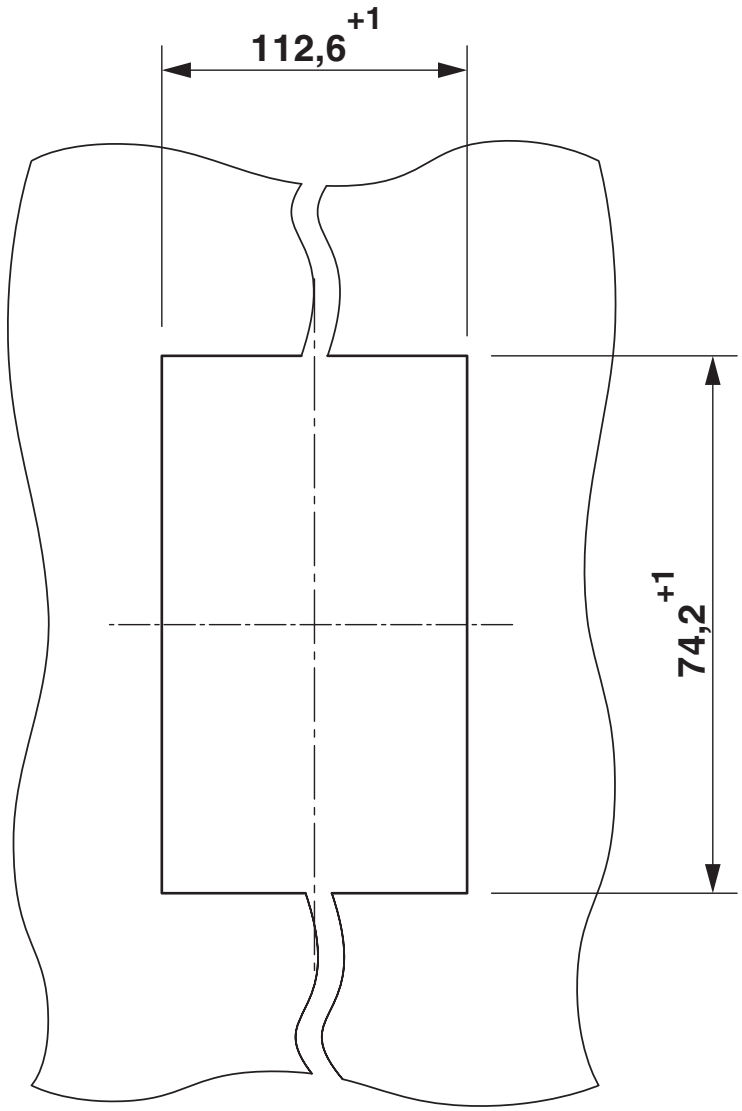
Mounting type	Wall mounting

Drawings

Dimensional drawing

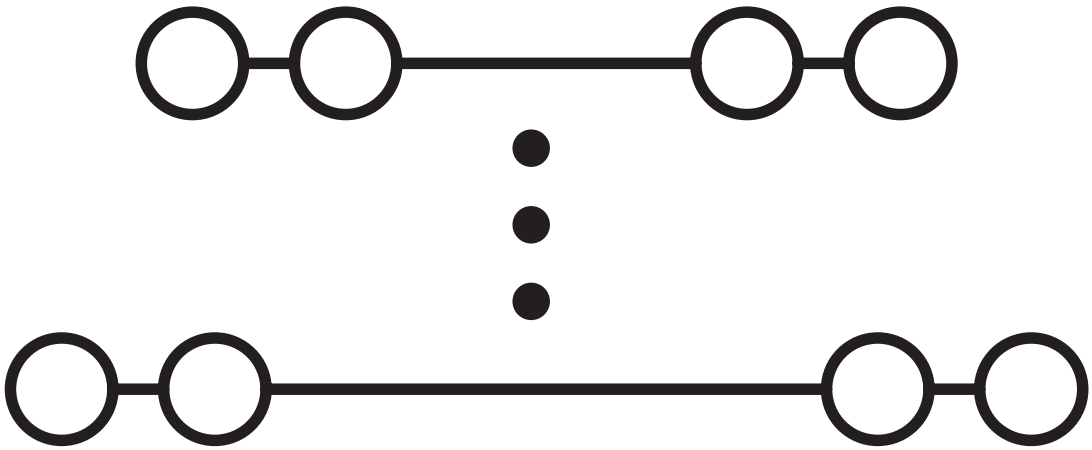


Dimensional drawing



Panel cutout

Circuit diagram



Approvals

CSA
Approval ID: 13631

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	10 A	24 - 16	-
Use group C				
	300 V	10 A	24 - 16	-
Use group D				
	300 V	10 A	24 - 16	-

EAC
Approval ID: RU C-DE.BL08.B.00682

cULus Recognized
Approval ID: E60425

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Use group B				
	300 V	10 A	24 - 16	-
Use group C				
	300 V	10 A	24 - 16	-

Classifications

ECLASS

ECLASS-9.0	27141120
ECLASS-10.0.1	27141120
ECLASS-11.0	27141120

ETIM

ETIM 8.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

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

Accessories

Note: Applying some accessories below might limit this product.

Actuation tool

Actuation tool - ST-BW 0 - 1200135

https://www.phoenixcontact.com/us/products/1200135



Actuation tool, for all 1.5 mm^2 spring cages from PT 1,5/S and FT 1,5/S

Screwdriver

Screwdriver - SZF 0-0,4X2,5 - 1204504

https://www.phoenixcontact.com/us/products/1204504

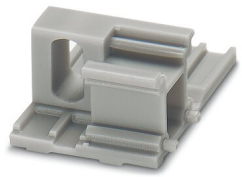


Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.4 x 2.5 x 75 mm, 2-component grip, with non-slip grip

Flange cover

Flange cover - DF-PTMC-O - 3270400

https://www.phoenixcontact.com/us/products/3270400



Flange cover, for direct mounting on top and for accommodating the marking, length: 30 mm, width: 22 mm, height: 13 mm, color: gray

Flange cover

Flange cover - DF-PTMC-U - 3270401

https://www.phoenixcontact.com/us/products/3270401



Flange cover, for direct mounting below, length: 29.1 mm, width: 22 mm, height: 12.8 mm, color: gray

Reducing plug

Reducing plug - RPS - 0201647

https://www.phoenixcontact.com/us/products/0201647



Reducing plug, color: gray

Wire bridge

Wire bridge - DB 50- 90 BU - 2821180

https://www.phoenixcontact.com/us/products/2821180

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2, loop length: 90 mm, ferrule length: 8 mm, color: blue



Max. current carrying capacity: 8 A

Wire bridge

Wire bridge - DB 50- 90 BK - 2820916

https://www.phoenixcontact.com/us/products/2820916

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2, loop length: 90 mm, ferrule length: 8 mm, color: black



Max. current carrying capacity: 8 A

Wire bridge

Wire bridge - DB 50- 90 GY - 2820929

https://www.phoenixcontact.com/us/products/2820929

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2, loop length: 90 mm, ferrule length: 8 mm, color: gray



Max. current carrying capacity: 8 A

Wire bridge

Wire bridge - DB 50- 90 RD - 2864639

https://www.phoenixcontact.com/us/products/2864639

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm^2, loop length: 90 mm, ferrule length: 8 mm, color: red



Max. current carrying capacity: 8 A

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663

https://www.phoenixcontact.com/us/products/0201663

Insulating sleeve, color: white



Insulating sleeve

Insulating sleeve - MPS-IH RD - 0201676

https://www.phoenixcontact.com/us/products/0201676

Insulating sleeve, color: red

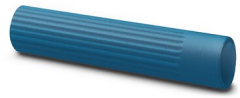


Insulating sleeve

Insulating sleeve - MPS-IH BU - 0201689

https://www.phoenixcontact.com/us/products/0201689

Insulating sleeve, color: blue



Insulating sleeve

Insulating sleeve - MPS-IH YE - 0201692

https://www.phoenixcontact.com/us/products/0201692

Insulating sleeve, color: yellow



Insulating sleeve

Insulating sleeve - MPS-IH GN - 0201702

https://www.phoenixcontact.com/us/products/0201702

Insulating sleeve, color: green



Insulating sleeve

Insulating sleeve - MPS-IH GY - 0201728

https://www.phoenixcontact.com/us/products/0201728

Insulating sleeve, color: gray



Insulating sleeve

Insulating sleeve - MPS-IH BK - 0201731

https://www.phoenixcontact.com/us/products/0201731

Insulating sleeve, color: black



Adapter

Adapter - DF-PTMC-NS - 3270403

https://www.phoenixcontact.com/us/products/3270403

Adapter, for mounting on a DIN rail, length: 64 mm, width: 22 mm, color: gray

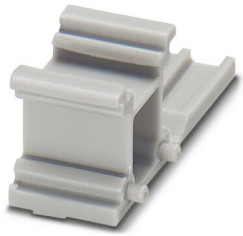


Marker adapter

Marker adapter - DF-PTMC-ZB - 3270410

https://www.phoenixcontact.com/us/products/3270410

Marker adapter, for direct mounting on top and for accommodating the marking, length: 30 mm, width: 11 mm, height: 13 mm, color: gray



Test plugs

Test plugs - MPS-MT - 0201744

https://www.phoenixcontact.com/us/products/0201744



Test plugs, with solder connection up to 1 mm^2 conductor cross section, color: gray

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