

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

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.



DIN rail connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Pin, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: UMSTBVK 2,5/...-G, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: DIN rail, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

Your advantages

- Direct plug-in block with universal foot for mounting on NS 32 or NS 35 DIN rail
- Can be combined with the MSTB 2,5 range
- Well-known connection principle allows worldwide use

Commercial data

Item number	1788305
Packing unit	50 pc
Minimum order quantity	1 pc
Product key	AACMFC
Catalog page	Page 205 (CC-2005)
GTIN	4017918043360
Weight per piece (including packing)	59.64 g
Weight per piece (excluding packing)	59.64 g
Customs tariff number	85366990
Country of origin	DE

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

Technical data

Product properties

Product type	DIN rail connector
Product family	UMSTBVK 2,5/..-G
Product line	COMBICON Connectors M
Type	DIN rail mounting
Number of positions	21
Pitch	5.08 mm
Number of connections	21
Number of rows	1
Number of potentials	21
Mounting flange	without
Solder pins per potential	1

Electrical properties

Nominal current I_N	12 A
Nominal voltage U_N	320 V
Degree of pollution	3
Rated voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Rated voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV

Connection data

Connection technology

Type	DIN rail mounting
Connector system	COMBICON MSTB 2,5
Nominal cross section	2.5 mm ²
Contact connection type	Pin

Interlock

Locking type	without
Mounting flange	without

Conductor connection

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Conductor cross section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12
Conductor cross section flexible, with ferrule without plastic	0.25 mm ² ... 2.5 mm ²

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

sleeve	
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.25 mm ² ... 2.5 mm ²
2 conductors with same cross section, solid	0.2 mm ² ... 1 mm ²
2 conductors with same cross section, flexible	0.2 mm ² ... 1.5 mm ²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1 mm ²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm ² ... 1.5 mm ²
Cylindrical gauge a x b / diameter	2.8 mm x 2.0 mm / 2.4 mm
Stripping length	7 mm
Tightening torque	0.5 Nm ... 0.6 Nm

Mounting

Mounting type	DIN rail
Drive form screw head	Slotted (L)

Material specifications

Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Tin-plated
Metal surface terminal point (top layer)	Tin (5 - 7 µm Sn)
Metal surface terminal point (middle layer)	Nickel (2 - 3 µm Ni)
Metal surface contact area (top layer)	Tin (5 - 7 µm Sn)
Metal surface contact area (middle layer)	Nickel (2 - 3 µm Ni)

Material data - housing

Color (Housing)	green (6021)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

Notes

Notes on operation	In accordance with IEC 61984, COMBICON connectors have no switching power (COC). During designated use, they must not be plugged in or disconnected when carrying voltage or under load.
--------------------	--

Dimensions

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

Dimensional drawing	
Pitch	5.08 mm
Width [w]	108.18 mm
Height [h]	34.5 mm
Length [l]	42.52 mm

Electrical tests

Air clearances and creepage distances |

Specification	IEC 60664-1:2007-04
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
minimum clearance value - non-homogenous field (III/3)	3 mm
minimum creepage distance (III/3)	4 mm
Rated insulation voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
minimum clearance value - non-homogenous field (III/2)	3 mm
minimum creepage distance (III/2)	3 mm
Rated insulation voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
minimum clearance value - non-homogenous field (II/2)	3 mm
minimum creepage distance (II/2)	3.2 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

Packaging specifications

Type of packaging	packed in cardboard
-------------------	---------------------

UMSTBVK 2,5/21-G-5,08 - DIN rail connector

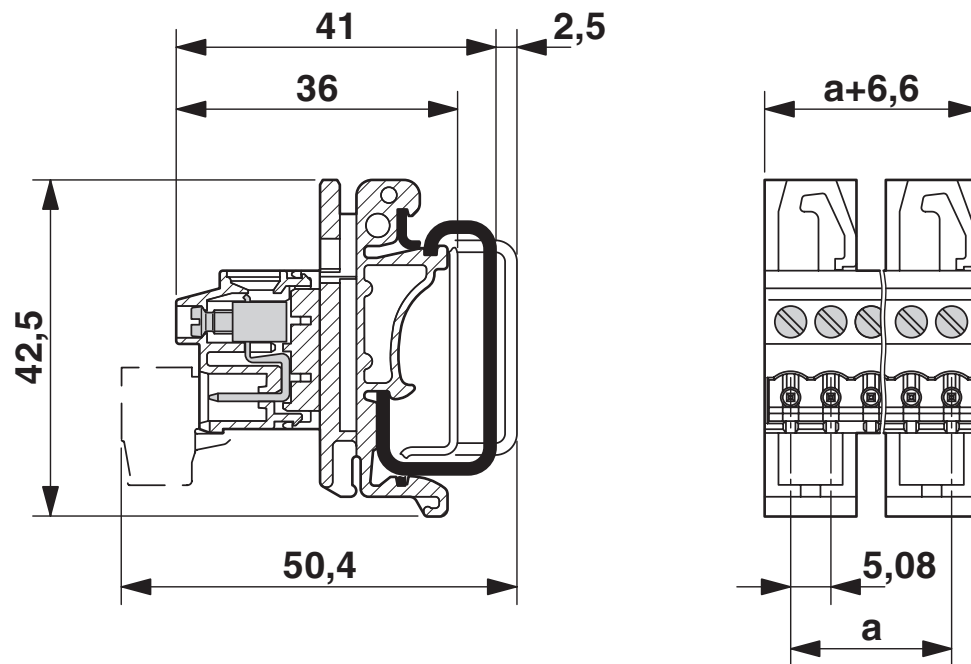
1788305

<https://www.phoenixcontact.com/pc/products/1788305>



Drawings

Dimensional drawing



UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1788305>

 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	28 - 12	-
Use group D				
	300 V	10 A	28 - 12	-

 cULus Recognized Approval ID: E60425-19931014				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	250 V	12 A	30 - 12	-
Use group D				
	300 V	10 A	30 - 12	-

 VDE Zeichengenehmigung Approval ID: 40050694				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	250 V	12 A	-	0.2 - 2.5

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

Classifications

ECLASS

ECLASS-11.0	27141106
ECLASS-12.0	27141106
ECLASS-13.0	27141106

ETIM

ETIM 9.0	EC001284
----------	----------

UNSPSC

UNSPSC 21.0	39121400
-------------	----------

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

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%

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

Accessories

SK 5,08/3,8:FORTL.ZAHLEN - Marker card

0804293

<https://www.phoenixcontact.com/pc/products/0804293>



Marker card, white, labeled, horizontal: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... (99)100, mounting type: adhesive, for terminal block width: 5.08 mm, lettering field size: 5.08 x 3.8 mm

CR-MSTB - Coding section

1734401

<https://www.phoenixcontact.com/pc/products/1734401>



Coding section, inserted into the recess in the header or the inverted plug, red insulating material

UMSTBVK 2,5/21-G-5,08 - DIN rail connector

1788305

<https://www.phoenixcontact.com/pc/products/1788305>



MSTB-BL - Accessories

1755477

<https://www.phoenixcontact.com/pc/products/1755477>



Keying cap, for forming sections, plugs onto header pin, green insulating material

SZS 0,6X3,5 - Screwdriver

1205053

<https://www.phoenixcontact.com/pc/products/1205053>



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

UMSTBVK 2,5/21-G-5,08 - DIN rail connector

1788305

<https://www.phoenixcontact.com/pc/products/1788305>



EBP 2- 5 - Insertion bridge

1733169

<https://www.phoenixcontact.com/pc/products/1733169>

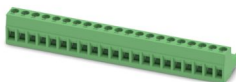
Insertion bridge for connectors with 5.0 mm or 5.08 mm pitch



MSTB 2,5/21-ST-5,08 - PCB connector

1757200

<https://www.phoenixcontact.com/pc/products/1757200>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MSTB 2,5/..-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



1788305

<https://www.phoenixcontact.com/pc/products/1788305>

MSTBP 2,5/21-ST-5,08 - PCB connector

1769201

<https://www.phoenixcontact.com/pc/products/1769201>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MSTBP 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

SMSTB 2,5/21-ST-5,08 - PCB connector

1850602

<https://www.phoenixcontact.com/pc/products/1850602>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: SMSTB 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -45 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



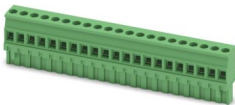
1788305

<https://www.phoenixcontact.com/pc/products/1788305>

MVSTBR 2,5/21-ST-5,08 - PCB connector

1792430

<https://www.phoenixcontact.com/pc/products/1792430>

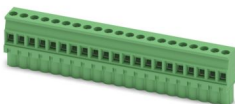


PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MVSTBR 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: 90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

MVSTBW 2,5/21-ST-5,08 - PCB connector

1792948

<https://www.phoenixcontact.com/pc/products/1792948>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MVSTBW 2,5/...-ST, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

UMSTBVK 2,5/21-G-5,08 - DIN rail connector



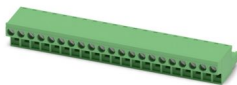
1788305

<https://www.phoenixcontact.com/pc/products/1788305>

FRONT-MSTB 2,5/21-ST-5,08 - PCB connector

1777471

<https://www.phoenixcontact.com/pc/products/1777471>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact surface: Tin, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: FRONT-MSTB 2,5/...-ST, pitch: 5.08 mm, connection method: Front screw connection, screw head form: L Slotted, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard

MSTBC 2,5/21-ST-5,08 - PCB connector

1809006

<https://www.phoenixcontact.com/pc/products/1809006>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MSTBC 2,5/...-ST, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

UMSTBVK 2,5/21-G-5,08 - DIN rail connector

1788305

<https://www.phoenixcontact.com/pc/products/1788305>



MSTBC 2,5/21-STZ-5,08 - PCB connector

1809695

<https://www.phoenixcontact.com/pc/products/1809695>



PCB connector, nominal cross section: 2.5 mm², color: green, nominal current: 12 A, rated voltage (III/2): 320 V, contact connection type: Socket, number of potentials: 21, number of rows: 1, number of positions: 21, number of connections: 21, product range: MSTBC 2,5/...-STZ, pitch: 5.08 mm, connection method: Crimp connection, conductor/PCB connection direction: 0 °, locking clip: - Locking clip, plug-in system: COMBICON MSTB 2,5, locking: without, mounting: without, type of packaging: packed in cardboard, Corresponding female crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/MSTBC-MT 0,5-1,0 (3190564); 10A/MSTBC-MT 0,5-1,0 BA (3190645); 12A/MSTBC-MT 1,5-2,5 (3190551); 12A/MSTBC-MT 1,5-2,5 BA (3190658). BA = Bandkontakte

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com