

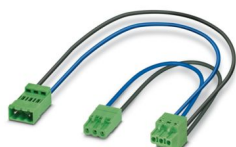
# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

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.



Assembled PCB connector / Y-cable with 3 printed circuit board connectors, rated current: 9 A, Head 1: 3-position, pitch: 5.08 mm, Crimp connection, Pin, Cable 1: cable length: 0.33 m, Color: black, blue, Cable type: mPPE litz wire, Head 2: 3-position, pitch: 5 mm, Push-in spring connection, Socket, Cable 2: cable length: 0.2 m, Color: black, blue, Cable type: mPPE litz wire, product feature: PCB connectors for Smart Meter Gateways (SMGW), mPPE litz wire, Header 3: 3-position, pitch: 5.08 mm

## Product description

PCB connectors for Smart Meter Gateways (SMGW)

## Your advantages

- Male connector with straight or bent conductor exit for optimal installation in control cabinets
- Handling-compatible cable lengths, harmonized with meter design 3.HZ
- Connection technology compatible with all FNN-compliant base meters, gateways, and control boxes
- Simple connection of auxiliary equipment using Y-cables with open conductor ends

## Commercial data

Item number	1714318
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AAHRDB
Product key	AAHRDB
GTIN	4055626356846
Weight per piece (including packing)	22.4 g
Weight per piece (excluding packing)	22.4 g
Customs tariff number	85444290
Country of origin	SK

# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

## Technical data

### Product properties

Product type	Assembled PCB connector
Product family	CC-Cabeling SMGW
Product line	COMBICON Connectors Special
Number of positions	1
Pitch	0.00 mm
Number of connections	2
Number of potentials	2

### Electrical properties

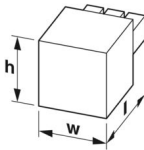
#### Properties

Nominal current $I_N$	9 A
-----------------------	-----

### 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

Dimensional drawing	
Pitch	0.00 mm

### Mechanical tests

#### Tensile strength of crimp connections

Result	Test passed
--------	-------------

#### Insertion and withdrawal forces

Result	Test passed
Insertion strength per pos. approx.	10 N
Withdraw strength per pos. approx.	10 N

### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (storage/transport)	-30 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %

# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

Ambient temperature (assembly)	-5 °C ... 100 °C
Ambient temperature (installation)	-40 °C ... 100 °C (dependent on the derating curve)
Ambient temperature (mobile installation)	-5 °C ... 100 °C (dependent on the derating curve)

## Connector

### Connection 1

Range of articles	ICC 2,5/...-STZ
Pitch	5.08 mm
Connection method	Crimp connection
Number of positions	3
Nominal cross section	2.5 mm²
Contact connection type	Pin
Mounting flange	without
Color	green
Insulating material	PA
CTI according to IEC 60112	600

### Connection 2

Range of articles	TVFKC 1,5/...-ST
Connection method	Push-in spring connection
Pitch	5 mm
Number of positions	3
Nominal cross section	1.5 mm²
Contact connection type	Socket
Mounting flange	without
Color	green
CTI according to IEC 60112	600
Insulating material	PA

### Connection 3

Range of articles	MSTBC 2,5/...-ST
Pitch	5.08 mm
Number of positions	3
Color	green

## Cable/line

Cable length	0.33 m
UL AWM Style	11028
Shielded	no
Conductor structure signal line	19x 0.25 mm
AWG signal line	18
Conductor cross section	2x 0.82 mm²
Wire diameter incl. insulation	1.85 mm

# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

Conductor material	Tin-plated Cu litz wires
Material wire insulation	mPPE
Single wire, color	black, blue
Thickness, insulation	0.29 mm
Max. conductor resistance	$\leq 19 \Omega/\text{m}$
Insulation resistance	$\geq 20 \text{ M}\Omega \cdot \text{km}$
Nominal voltage, cable	600 V
Test voltage	6000 V
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
UL AWM Style	11028
Shielded	no
Conductor structure signal line	19x 0.25 mm
AWG signal line	18
Conductor cross section	2x 0.82 mm <sup>2</sup>
Wire diameter incl. insulation	1.85 mm
Conductor material	Tin-plated Cu litz wires
Material wire insulation	mPPE
Single wire, color	black, blue
Thickness, insulation	0.29 mm
Max. conductor resistance	$\leq 19 \Omega/\text{m}$
Insulation resistance	$\geq 20 \text{ M}\Omega \cdot \text{km}$
Nominal voltage, cable	600 V
Test voltage	6000 V
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)

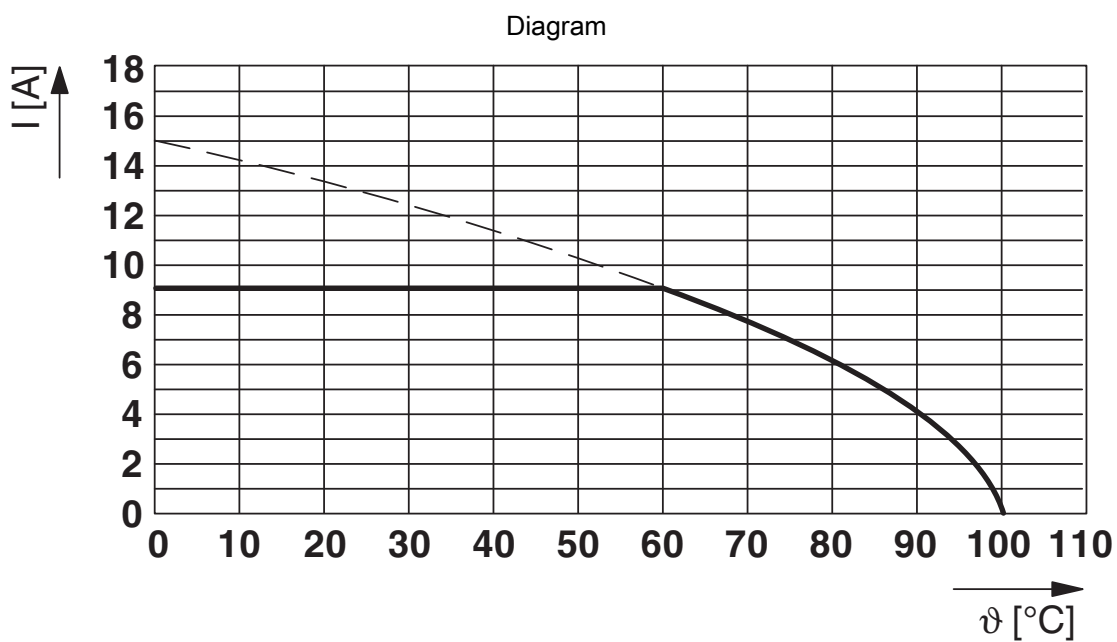
# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

## Drawings



Type: ICC/TVFKC/MSTBC/3P13L33-20SMGW

ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled  
PCB connectors



1714318  
<https://www.phoenixcontact.com/gb/products/1714318>

Classifications

ECLASS

ECLASS-13.0	27469090
-------------	----------

ETIM

ETIM 9.0	EC002943
----------	----------

UNSPSC

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

# ICC/TVFKC/MSTBC/3P13L33-20SMGW - Assembled PCB connectors



1714318

<https://www.phoenixcontact.com/gb/products/1714318>

## 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.)	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated(CAS: n/a)
SCIP	f63ef922-08f4-4d5c-9429-94664649aaf2

### EF3.0 Climate Change

CO2e kg	1.078 kg CO2e
---------	---------------

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

PHOENIX CONTACT Ltd  
Halesfield 13, Telford  
Shropshire, TF7 4PG  
01952 681700  
[info@phoenixcontact.co.uk](mailto:info@phoenixcontact.co.uk)