

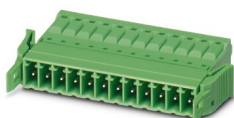
Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



1844248

<https://www.phoenixcontact.com/us/products/1844248>

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PCB connector, nominal cross section: 1.5 mm², color: green, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Male connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IFMC 1,5/-ST-RF, pitch: 3.5 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: Snap-in locking, mounting: Self-locking flange, type of packaging: packed in cardboard

Your advantages

- Time saving push-in connection, tools not required
- Defined contact force ensures that contact remains stable over the long term
- Intuitive use through colour coded actuation lever
- Inverted connector with pin contacts for touch-proof device outputs or free-hanging cable/cable connections
- Intuitive locking mechanism prevents accidental disconnection

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Commercial Data

Item number	1844248
Packing unit	1 pc
Minimum order quantity	50 pc
Sales Key	A01
Product Key	AABFIB
GTIN	4046356947374
Weight per Piece (including packing)	3.657 g
Weight per Piece (excluding packing)	3.657 g
Customs tariff number	85366990
Country of origin	SK

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Technical Data

Product properties

Type	Inverted
Product line	COMBICON Connectors S
Product type	PCB plug
Number of positions	5
Pitch	3.5 mm
Number of connections	5
Number of rows	1
Mounting flange	Self-locking flange
Number of potentials	5

Electrical properties

Nominal current I_N	8 A
Nominal voltage U_N	160 V
Pollution degree	3
Contact resistance	2.1 mΩ
Rated voltage (III/3)	160 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV

Connection data

Connection technology

Type	Inverted
Connector system	COMBICON MC 1,5
Nominal cross section	1.5 mm ²
Type of contact	Male connector

Interlock

Locking type	Snap-in locking
Mounting flange	Self-locking flange

Conductor connection

Connection method	Push-in spring connection
Conductor/PCB connection direction	0 °
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	24 ... 16
Conductor cross section flexible, with ferrule without plastic sleeve	0.25 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.14 mm ² ... 0.75 mm ²
Cylindrical gauge a x b / diameter	2.4 mm x 1.5 mm / -

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Stripping length	10 mm
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Specifications for ferrules without insulating collar

recommended crimping tool	1212034 CRIMPFOX 6
ferrules without insulating collar, according to DIN 46228-1	Cross section: 0.25 mm ² ; Length: 5 mm ... 7 mm
	Cross section: 0.34 mm ² ; Length: 7 mm
	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 1.5 mm ² ; Length: 10 mm

Specifications for ferrules with insulating collar

recommended crimping tool	1212034 CRIMPFOX 6
ferrules with insulating collar, according to DIN 46228-4	Cross section: 0.14 mm ² ; Length: 8 mm
	Cross section: 0.25 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.34 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.5 mm ² ; Length: 8 mm ... 10 mm
	Cross section: 0.75 mm ² ; Length: 10 mm

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	hot-dip tin-plated
Metal surface terminal point (top layer)	Tin (2 - 4 µm Sn)
Metal surface contact area (top layer)	Tin (2 - 4 µm Sn)

Material data - housing

Housing color	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

Material data – actuating element

Insulating material	PBT
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0

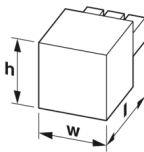
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Dimensions

Dimensional drawing	
Pitch	3.5 mm
Width [w]	27.6 mm
Height [h]	7.8 mm
Length [l]	24.6 mm

Mechanical tests

Test for conductor damage and slackening

Specification	IEC 60999-1:1999-11
Result	Test passed

Repeated connection and disconnection

Specification	IEC 60999-1:1999-11
Result	Test passed

Pull-out test

Specification	IEC 60999-1:1999-11
Conductor cross section/conductor type/tractive force setpoint/actual value	0.2 mm ² / solid / > 10 N
	0.2 mm ² / flexible / > 10 N
	1.5 mm ² / solid / > 40 N
	1.5 mm ² / flexible / > 40 N

Insertion and withdrawal forces

Result	Test passed
No. of cycles	25
Insertion strength per pos. approx.	3 N
Withdraw strength per pos. approx.	3 N

Contact holder in insert

Specification	IEC 60512-15-1:2008-05
Contact holder in insert Requirements >20 N	Test passed

Resistance of inscriptions

Specification	IEC 60068-2-70:1995-12
Result	Test passed

Polarization and coding

Specification	IEC 60512-13-5:2006-02
Result	Test passed

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Visual inspection

Specification	IEC 60512-1-1:2002-02
Result	Test passed

Dimension check

Specification	IEC 60512-1-2:2002-02
Result	Test passed

Environmental and real-life conditions

Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 - 60.1 Hz)
Sweep speed	5g (60.1 - 150 Hz)
Test duration per axis	2.5 h

Durability test

Specification	IEC 60512-9-1:2010-03
Impulse withstand voltage at sea level	2.95 kV
Contact resistance R_1	2.1 mΩ
Contact resistance R_2	2.3 mΩ
Insertion/withdrawal cycles	25
Insulation resistance, neighboring positions	> 5 MΩ

Climatic test

Specification	ISO 6988:1985-02
Corrosive stress	0.2 dm ³ SO ₂ on 300 dm ³ /40 °C/1 cycle
Thermal stress	100 °C/168 h
Power-frequency withstand voltage	1.39 kV

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

Electrical tests

Thermal test | Test group C

Specification	IEC 60512-5-1:2002-02
Tested number of positions	12

Insulation resistance

Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 5 MΩ

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Temperature cycles

Specification	IEC 60999-1:1999-11
Result	Test passed

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)	160 V
Rated surge voltage (III/3)	2.5 kV
minimum clearance value - non-homogenous field (III/3)	1.5 mm
minimum creepage distance (III/3)	2 mm
Rated insulation voltage (III/2)	160 V
Rated surge voltage (III/2)	2.5 kV
minimum clearance value - non-homogenous field (III/2)	1.5 mm
minimum creepage distance (III/2)	1.5 mm
Rated insulation voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
minimum clearance value - non-homogenous field (II/2)	1.5 mm
minimum creepage distance (II/2)	1.6 mm

Packaging specifications

Type of packaging	packed in cardboard
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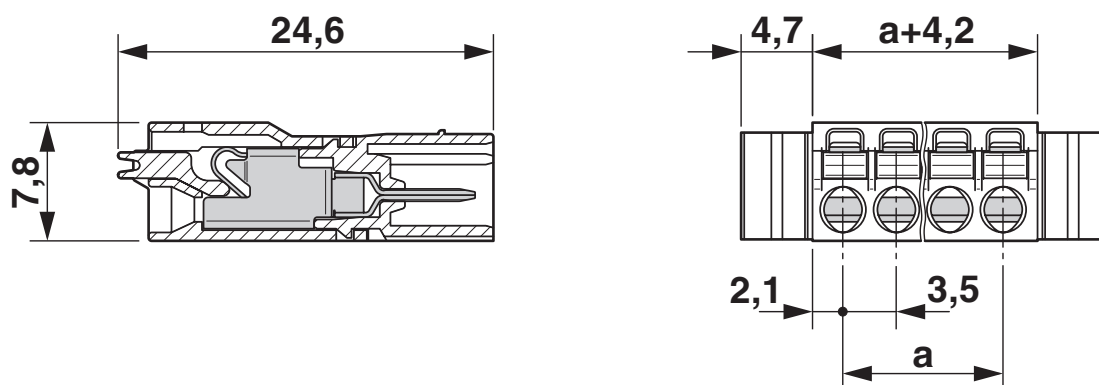


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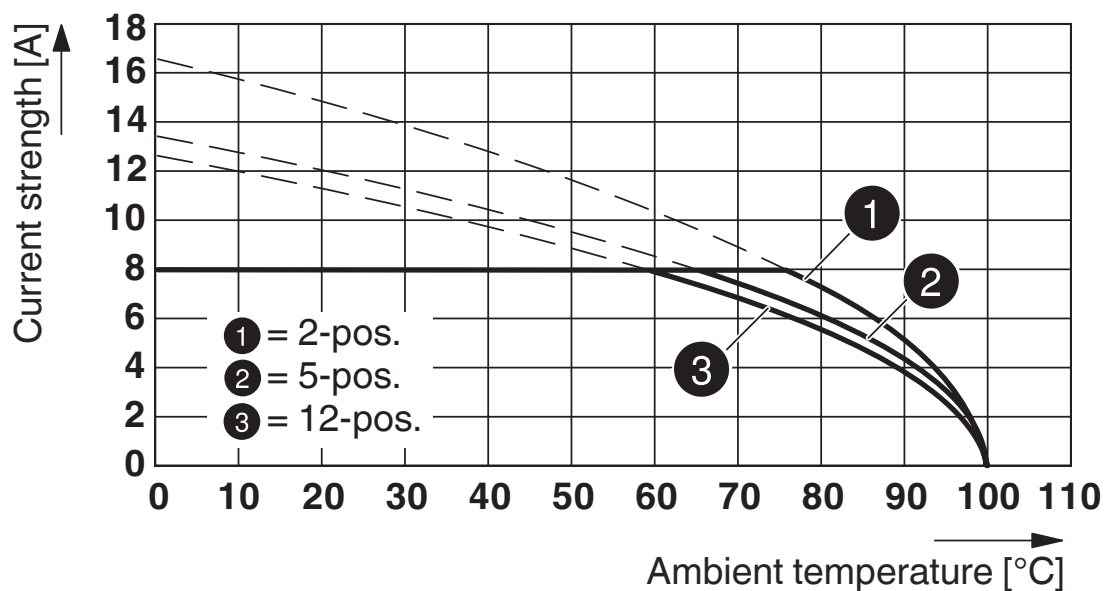
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Drawings

Dimensional drawing



Diagram



Type: IFMC 1,5/...-ST-3,5-RF with IMC 1,5/...-G-3,5 RN P20 THR


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Approvals

	IECEE CB Scheme Approval ID: DE1-60987-B1B2			
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
	160 V	8 A	-	0.2 - 1.5

	EAC Approval ID: B.01687
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	cULus Recognized Approval ID: E60425-19920306			
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
Use group B				
	150 V	8 A	24 - 16	-
Use group C				
	50 V	8 A	24 - 16	-

	VDE report with production monitoring Approval ID: 40011723			
	Nominal Voltage U _N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
	160 V	8 A	-	0.2 - 1.5

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Classifications

ECLASS

ECLASS-9.0	27440309
ECLASS-10.0.1	27440309
ECLASS-11.0	27460202

ETIM

ETIM 8.0	EC002638
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

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

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Accessories

Marker card

Marker card - SK U/2,8 WH:UNBEDRUCKT - 0803883

<https://www.phoenixcontact.com/us/products/0803883>



Marker card, Sheet, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600

Marker pen

Marker pen - B-STIFT - 1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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Crimping pliers

Crimping pliers - CRIMPFOX 6 - 1212034

<https://www.phoenixcontact.com/us/products/1212034>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.25 mm² ... 6.0 mm², lateral entry, trapezoidal crimp

Screwdriver

Screwdriver - SZS 0,4X2,5 VDE - 1205037

<https://www.phoenixcontact.com/us/products/1205037>



Screwdriver, slot-headed, VDE insulated, size: 0.4 x 2.5 x 80 mm, 2-component grip, with non-slip grip

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Ferrule

Ferrule - A 0,25- 5 - 3202465

<https://www.phoenixcontact.com/us/products/3202465>

Ferrule, length: 5 mm, color: silver



Ferrule

Ferrule - A 0,25- 7 - 3202478

<https://www.phoenixcontact.com/us/products/3202478>

Ferrule, length: 7 mm, color: silver



Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - A 0,34- 7 - 3009202

<https://www.phoenixcontact.com/us/products/3009202>

Ferrule, length: 7 mm, color: silver



Ferrule

Ferrule - A 0,5 - 8 - 3202481

<https://www.phoenixcontact.com/us/products/3202481>

Ferrule, length: 8 mm, color: silver



Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - A 0,5 -10 - 3202494

<https://www.phoenixcontact.com/us/products/3202494>



Ferrule, length: 10 mm, color: silver

Ferrule

Ferrule - A 0,75- 8 - 3202504

<https://www.phoenixcontact.com/us/products/3202504>



Ferrule, length: 8 mm, color: silver

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - A 0,75-10 - 3200234

<https://www.phoenixcontact.com/us/products/3200234>



Ferrule, length: 10 mm, color: silver

Ferrule

Ferrule - A 1 - 8 - 3202517

<https://www.phoenixcontact.com/us/products/3202517>



Ferrule, length: 8 mm, color: silver

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - A 1 -10 - 3200250

<https://www.phoenixcontact.com/us/products/3200250>



Ferrule, length: 10 mm, color: silver

Ferrule

Ferrule - A 1,5 -10 - 3200276

<https://www.phoenixcontact.com/us/products/3200276>



Ferrule, length: 10 mm, color: silver

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - Al 0,14- 8 GY -1000 - 3203011

<https://www.phoenixcontact.com/us/products/3203011>



Ferrule, sleeve length: 8 mm, length: 12.5 mm, color: gray

Ferrule

Ferrule - Al 0,34- 8 TQ - 3203066

<https://www.phoenixcontact.com/us/products/3203066>



Ferrule, sleeve length: 8 mm, length: 12.5 mm, color: turquoise

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - Al 0,34-10 TQ - 3241129

<https://www.phoenixcontact.com/us/products/3241129>



Ferrule, sleeve length: 10 mm, length: 14.5 mm, color: turquoise

Ferrule

Ferrule - Al 0,5 - 8 WH - 3200014

<https://www.phoenixcontact.com/us/products/3200014>



Ferrule, sleeve length: 8 mm, length: 14 mm, color: white

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - Al 0,5 -10 WH - 3201275

<https://www.phoenixcontact.com/us/products/3201275>

Ferrule, sleeve length: 10 mm, length: 16 mm, color: white



Ferrule

Ferrule - Al 0,75- 8 GY - 3200519

<https://www.phoenixcontact.com/us/products/3200519>

Ferrule, sleeve length: 8 mm, length: 14 mm, color: gray



Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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Ferrule

Ferrule - Al 0,75-10 GY - 3201288

<https://www.phoenixcontact.com/us/products/3201288>



Ferrule, sleeve length: 10 mm, length: 16 mm, color: gray

Ferrule

Ferrule - Al 0,25- 8 YE - 3203037

<https://www.phoenixcontact.com/us/products/3203037>



Ferrule, sleeve length: 8 mm, length: 12.5 mm, color: yellow

Printed-circuit board connector - IFMC 1,5/ 5-ST-3,5-RF



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PCB header

PCB header - IMC 1,5/ 5-G-3,5 RN P20 THR - 1830595

<https://www.phoenixcontact.com/us/products/1830595>



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IMC 1,5/...-G-RN-THR, pitch: 3.5 mm, solder pin [P]: 2 mm, number of solder pins per potential: 2, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

PCB header

PCB header - IMCV 1,5/ 5-G-3,5 RN P20 THR - 1830896

<https://www.phoenixcontact.com/us/products/1830896>



PCB headers, nominal cross section: 1.5 mm², color: black, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: IMCV 1,5/...-G-RN-THR, pitch: 3.5 mm, pin layout: Linear pinning, solder pin [P]: 1.9 mm, number of solder pins per potential: 2, plug-in system: COMBICON MC 1,5, Pin connector pattern alignment: Standard, locking: Snap-in locking, mounting: Engagement nose, type of packaging: packed in cardboard

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com