Feed-through header - ICV 2,5/14-G-5,08 - 1786064

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The figure shows a 10-position version of the product

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

Your advantages

- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Easy PCB replacement thanks to plug-in modules
- Well-known mounting principle allows worldwide use
- Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections

Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	4 017918 042219
GTIN	4017918042219
Weight per Piece (excluding packing)	12.880 g
Custom tariff number	85366930
Country of origin	Germany

Technical data

Item properties

Brief article description	Feed-through header
Plug-in system	CLASSIC COMBICON
Type of contact	Female connector
Range of articles	ICV 2,5/..-G

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Technical data

Item properties

Pitch	5.08 mm
Number of positions	14
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	14
Number of potentials	14

Electrical parameters

Nom. voltage	320 V

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 contact area (top layer)	Tin (4 - 8 µm Sn)
Metal surface soldering area (top layer)	Tin (4 - 8 µm Sn)

Material data - housing

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

Dimensions for the product

Length [l]	10.2 mm
Width [w]	73.12 mm
Height [h]	22.4 mm
Pitch	5.08 mm
Height (without solder pin)	18.9 mm
Solder pin [P]	3.5 mm
Pin spacing	5.08 mm
Pin dimensions	0.47 x 1.15 mm
Dimension a	66.04 mm

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Dimensions for PCB design

Hole diameter	1.4 mm
Pin spacing	5.08 mm

Packaging information

Type of packaging	packed in cardboard
Pieces per package	50
Denomination packing units	Pcs.

Ambient conditions

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

Air clearances and creepage distances

Clearances and creepage distances	IEC 60664-1:2007-04
Specification	IEC 60664-1:2007-04
Rated insulation voltage (III/3)	320 V
Rated insulation voltage (III/2)	320 V
Rated insulation voltage (II/2)	630 V
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	4 kV
Minimum clearance - inhomogeneous field (III/3)	3 mm
Minimum clearance - inhomogeneous field (III/2)	3 mm
Minimum clearance - inhomogeneous field (II/2)	3 mm
Minimum creepage distance value (III/3)	4 mm
Minimum creepage distance value (III/2)	3 mm
Minimum creepage distance value (II/2)	3.2 mm

Mechanical tests (A)

Insertion strength per pos. approx.	8 N
Withdraw strength per pos. approx.	6 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

Durability tests (B)

Specification	IEC 60512-9-1:2010-03
Contact resistance R_1	1.5 mΩ
Insertion/withdrawal cycles	25
Contact resistance R_2	1.5 mΩ

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Durability tests (B)

Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV
Insulation resistance, neighboring positions	> 0.3 TΩ

Climatic tests (D)

Specification	ISO 6988:1985-02
Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm^3 SO_2 on 300 dm^3/40 °C/1 cycle
Impulse withstand voltage at sea level	4.8 kV
Power-frequency withstand voltage	2.21 kV

Environmental and durability tests (E)

Specification	IEC 61984:2008-10
Result, degree of protection, IP code	Finger safety with IP20 test finger

Vibration test

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

Standards and Regulations

Connection in acc. with standard	EN-VDE
	CSA
Flammability rating according to UL 94	V0

Environmental Product Compliance

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

Drawings

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Drilling diagram

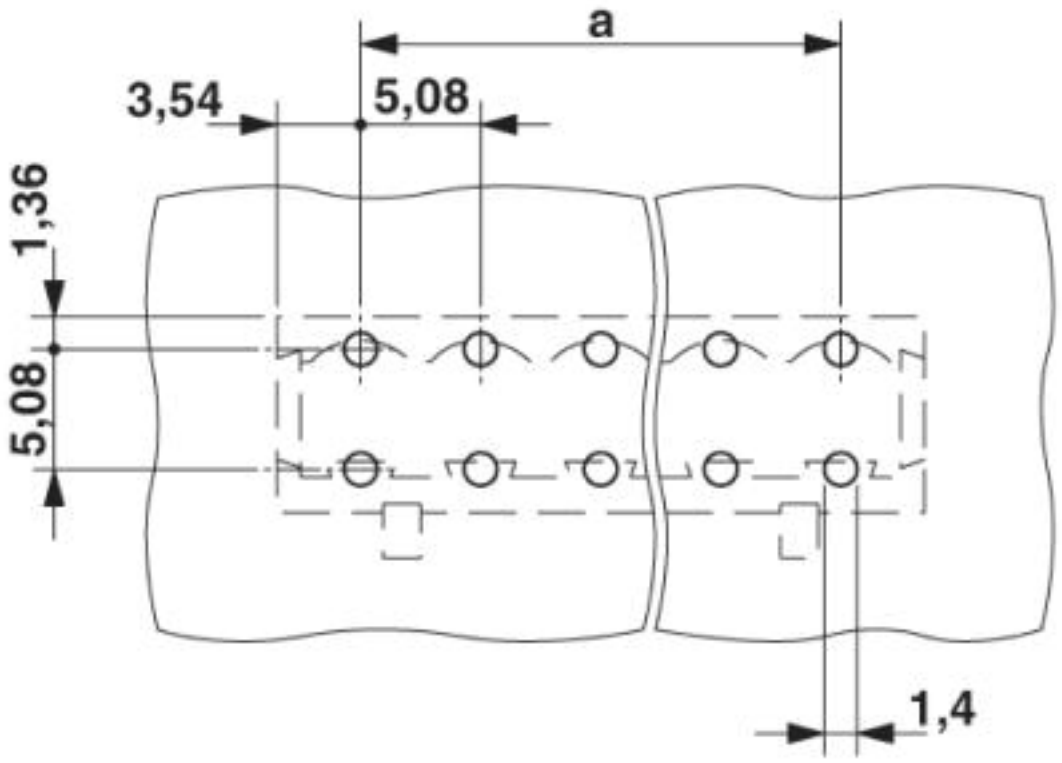

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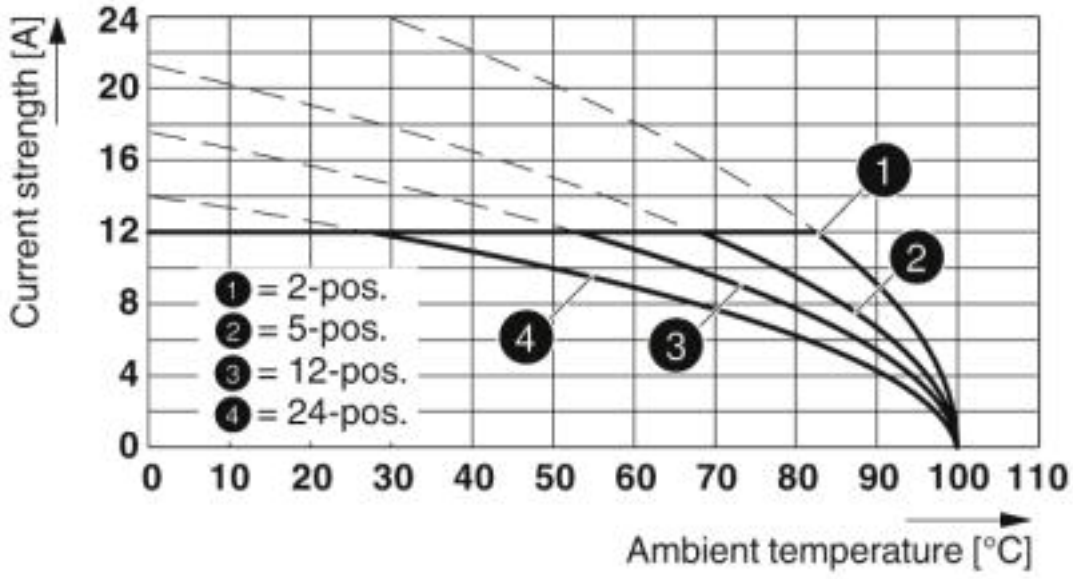
Diagram



Type: ICV 2,5/..-G-5,08 with MSTBA 2,5/..-G-5,08

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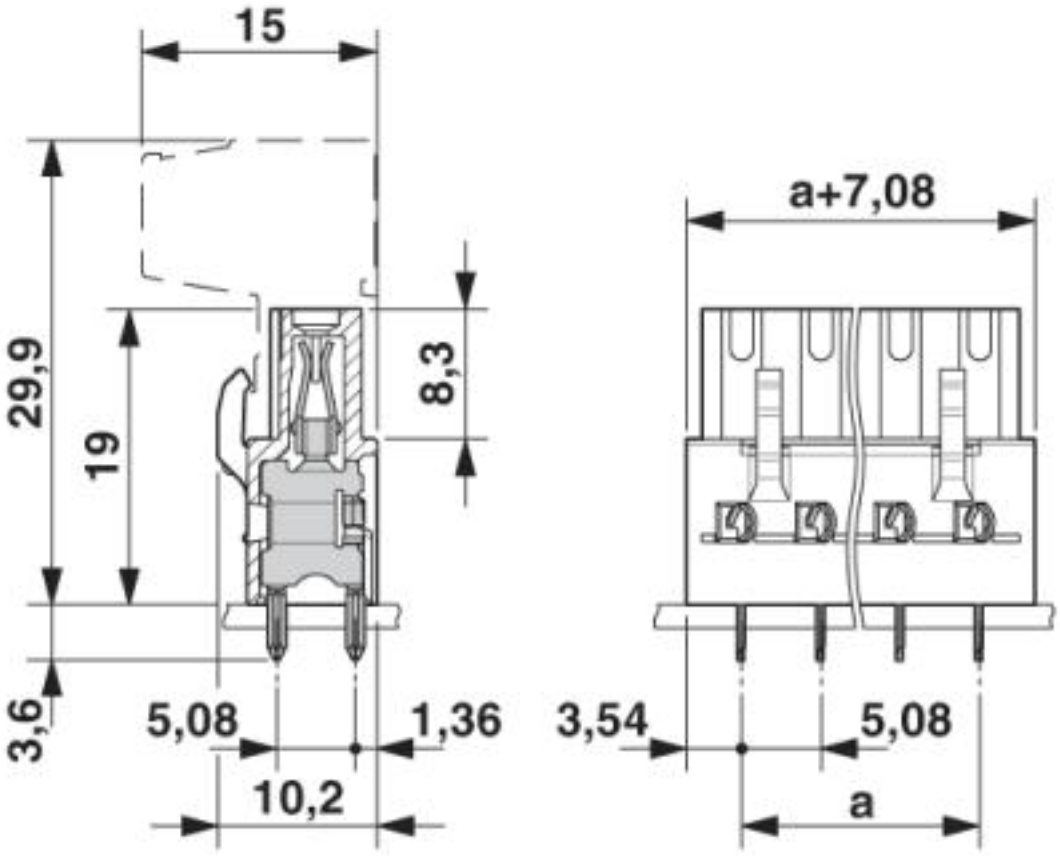
Dimensional drawing



Classifications

eCl@ss

eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440402
eCl@ss 8.0	27440402
eCl@ss 9.0	27440402

ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002637

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Classifications

ETIM

ETIM 5.0	EC002637
ETIM 6.0	EC002637
ETIM 7.0	EC002637

UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121409
UNSPSC 18.0	39121409
UNSPSC 19.0	39121409
UNSPSC 20.0	39121409
UNSPSC 21.0	39121409

Approvals

Approvals

Approvals

CSA / IECEE CB Scheme / VDE Gutachten mit Fertigungsüberwachung / EAC / cULus Recognized

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	13631

	B	D
Nominal voltage UN	300 V	300 V
Nominal current IN	10 A	10 A

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Approvals

IECEE CB Scheme	CB scheme	http://www.iecee.org/	DE1-60988-B1B2

Nominal voltage UN	250 V
Nominal current IN	12 A

VDE Gutachten mit Fertigungsüberwachung	VDE	http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx	40004701

Nominal voltage UN	250 V
Nominal current IN	12 A

EAC	EAC	B.01742

cULus Recognized	c UL us	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E60425-19931014

	B	D
Nominal voltage UN	250 V	300 V
Nominal current IN	12 A	10 A

Accessories

Accessories

Coding element

Coding profile - CP-MSTB - 1734634

Coding profile, is inserted into the slot on the plug or inverted header, red insulating material

Test plug terminal block

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Accessories

Test plugs - MPS-MT - 0201744

Test plugs, with solder connection up to 1 mm² conductor cross section, color: gray

Reducing plug - RPS - 0201647

Reducing plug, color: gray

Mounting material - FLRP/ICV 80 - 1808353

Pair of guide rails, is inserted into the groove ICV/...G, height: 86 mm, hole diameter: 3.4 mm

Additional products

Printed-circuit board connector - DFK-MSTB 2,5/14-G-5,08 - 0707358

Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, connection method: Solder/Slip-on connection, color: green, contact surface: Tin, mounting: Direct mounting, solder pin [P]: 9.3 mm, accessory order no. 5030172 can only be used in conjunction with MSTB 2,5/...ST-5,08 and MSTBT 2,5/...ST-5,08.

Printed-circuit board connector - IC 2,5/14-ST-5,08 - 1786297

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Tin

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Accessories

Feed-through header - MSTBW 2,5/14-G-5,08 - 1735769

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

Printed-circuit board connector - MSTBVA 2,5/14-G-5,08 - 1755859

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.9 mm

Feed-through header - MSTBV 2,5/14-G-5,08 - 1758131

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.9 mm

Feed-through header - MSTB 2,5/14-G-5,08 - 1759130

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

Feed-through header - MSTBV 2,5/14-GEH-5,08 - 1808586

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.9 mm

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Accessories

Printed-circuit board connector - DFK-MSTBVA 2,5/14-G-5,08 - 1899252

Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning

Printed-circuit board connector - DFK-MSTBA 2,5/14-G-5,08 - 1898952

Feed-through header, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.2 mm

Printed-circuit board connector - FKIC 2,5/14-ST-5,08 - 1873472

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, connection method: Push-in spring connection, color: green, contact surface: Tin

Feed-through header - MSTBA 2,5/14-G-5,08-LA - 1768066

PCB headers, number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

Printed-circuit board connector - MSTBA 2,5/14-G-5,08 - 1757365

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

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Accessories

Feed-through header - MSTB 2,5/14-G-5,08-LA - 1770834

PCB headers, number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, Pin layout: Linear pinning, solder pin [P]: 3.2 mm

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Feed-through header - MDSTBV 2,5/14-G1-5,08 - 1762622

PCB headers, nominal current: 10 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.9 mm, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - MDSTB 2,5/14-G1-5,08 - 1762486

PCB headers, nominal current: 10 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm, In combination with MVSTB or FKCV plug components, both an MVSTBW (or FKCVW) and an MVSTBR plug (or FKCVR) must be used. Combination with TMSTBP plug components is not possible!

Feed-through header - SMSTBA 2,5/14-G-5,08 - 1767494

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

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Printed-circuit board connector - SMSTB 2,5/14-G-5,08 - 1769586

PCB headers, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, color: green, contact surface: Tin, mounting: Wave soldering, Pin layout: Linear pinning, solder pin [P]: 3.5 mm

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Feed-through header - ICV 2,5/14-G-5,08 - 1786064

Accessories

Printed-circuit board connector - ICC 2,5/14-STZ-5,08 - 1823969

PCB connector, nominal current: 12 A, rated voltage (III/2): 320 V, Nominal cross section: 2.5 mm², number of positions: 14, pitch: 5.08 mm, connection method: Crimp connection, color: green, Corresponding male crimp contacts with current [A] and conductor cross section range [mm²] data: 10A/ICC-MT 0,5-1,0 (3190577); 10A/ICC-MT 0,5-1,0 BA (3190603); 12A/ICC-MT 1,5-2,5 (3190580); 12A/ICC-MT 1,5-2,5 BA (3190593). BA = Bandkontakte