

# Feed-through header - IPCV 16/ 6-G-10,16 - 1969739

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PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm


The figure shows a 5-pos. version of the product

## Your advantages

- Well-known mounting principle allows worldwide use
- Maximum flexibility when it comes to device design – one header for connectors with different connection technologies
- Inverted header with socket contacts for touch-proof device outputs or PCB/PCB connections
- Integrated double steel spring provides additional safety in the event of temperature and power fluctuations



## Key Commercial Data

Packing unit	50 pc
GTIN	 4 017918 946753
GTIN	4017918946753

## Technical data

### Item properties

Brief article description	Feed-through header
Plug-in system	POWER COMBICON 16
Type of contact	Female connector
Range of articles	IPCV 16/..-G
Pitch	10.16 mm
Number of positions	6
Mounting type	Wave soldering
Pin layout	Linear pinning
Locking	without
Number of levels	1
Number of connections	6

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## Technical data

### Item properties

Number of potentials	6
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### Electrical parameters

Nominal current	76 A
Nom. voltage	1000 V
Rated voltage	1000 V
Rated voltage (III/2)	1000 V
Rated voltage (II/2)	1000 V
Rated surge voltage (III/3)	8 kV
Rated surge voltage (III/2)	8 kV
Rated surge voltage (II/2)	8 kV

### 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	Electroplated silver
Metal surface contact area (top layer)	Silver (4 - 8 µm Ag)
Metal surface soldering area (top layer)	Silver (4 - 8 µm Ag)

### 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

### Dimensions for the product

Length [ l ]	13.6 mm
Width [ w ]	61.76 mm
Height [ h ]	36.1 mm
Pitch	10.16 mm
Height (without solder pin)	32.1 mm
Solder pin [P]	4 mm
Pin spacing	10.16 mm
Pin dimensions	0.8 x 1.2 mm

### Dimensions for PCB design

Hole diameter	1.7 mm
Pin spacing	10.16 mm

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## Technical data

### 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
Minimum clearance - inhomogeneous field (III/3)	8 mm
Minimum clearance - inhomogeneous field (III/2)	8 mm
Minimum clearance - inhomogeneous field (II/2)	5.5 mm
Minimum creepage distance value (III/3)	12.5 mm
Minimum creepage distance value (III/2)	8 mm
Minimum creepage distance value (II/2)	5.5 mm

### Mechanical tests (A)

Test specification	IEC 61984
Insertion strength per pos. approx.	12 N
Withdraw strength per pos. approx.	15 N
Polarization when inserted requirement >20 N	Test passed
Contact holder in insert requirements >20 N	Test passed

### Durability tests (B)

Specification	IEC 60512-5:1992-08
Contact resistance R <sub>1</sub>	0.4 mΩ
Insertion/withdrawal cycles	50
Contact resistance R <sub>2</sub>	0.5 mΩ
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV
Insulation resistance, neighboring positions	10 <sup>12</sup> Ω

### Thermal tests (C)

Specification	IEC 60512-5-1:2002-02
Number of positions	9
Conductor cross section	16 mm <sup>2</sup>
Test current	76 A
Upper limiting temperature requirements <100 °C	Test passed

### Climatic tests (D)

Specification	ISO 6988:1985-02
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### Technical data

#### Climatic tests (D)

Cold stress	-40 °C/2 h
Thermal stress	100 °C/168 h
Corrosive stress	0.2 dm <sup>3</sup> SO <sub>2</sub> on 300 dm <sup>3</sup> /40 °C/1 cycle
Impulse withstand voltage at sea level	9.8 kV
Power-frequency withstand voltage	4.26 kV

#### Environmental and durability tests (E)

Result, degree of protection, IP code	Finger safety with IP20 test finger
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#### Vibration test

Specification	IEC 60068-2-6:1995-03
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	CUL
Flammability rating according to UL 94	V0

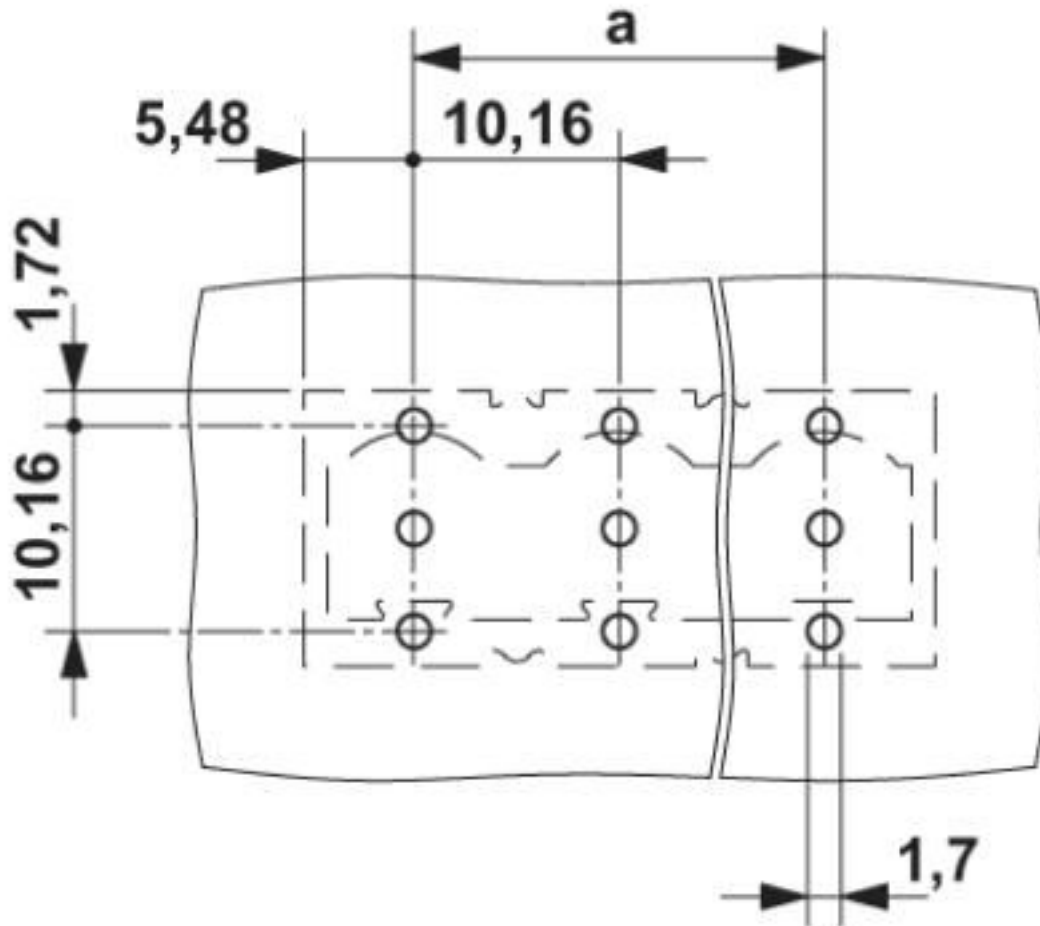
#### Environmental Product Compliance

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

### Drawings

# Feed-through header - IPCV 16/ 6-G-10,16 - 1969739

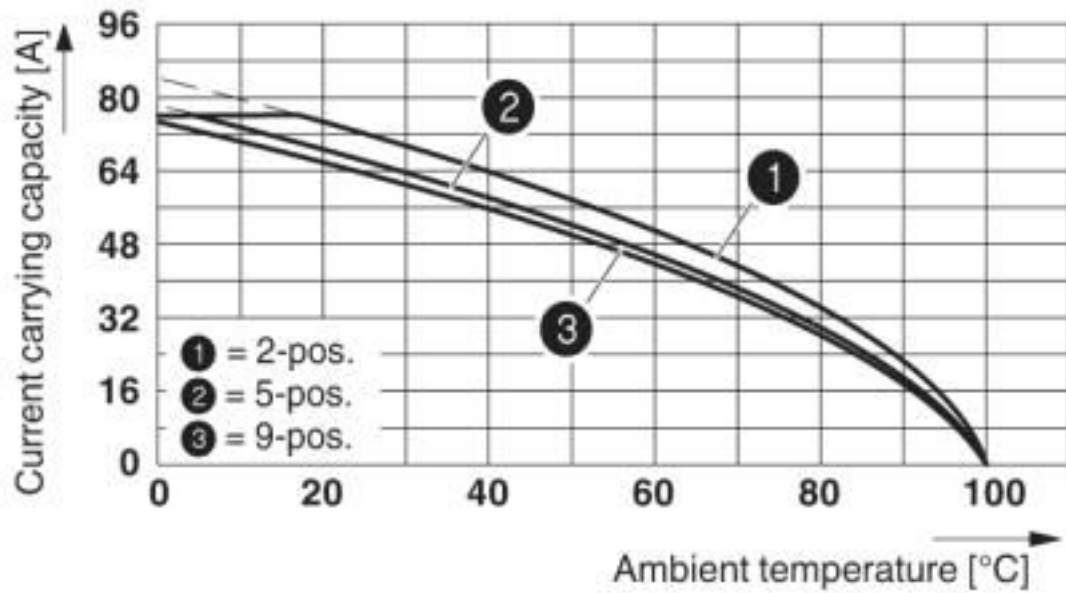
Drilling diagram



The figure shows the 3-pos. version

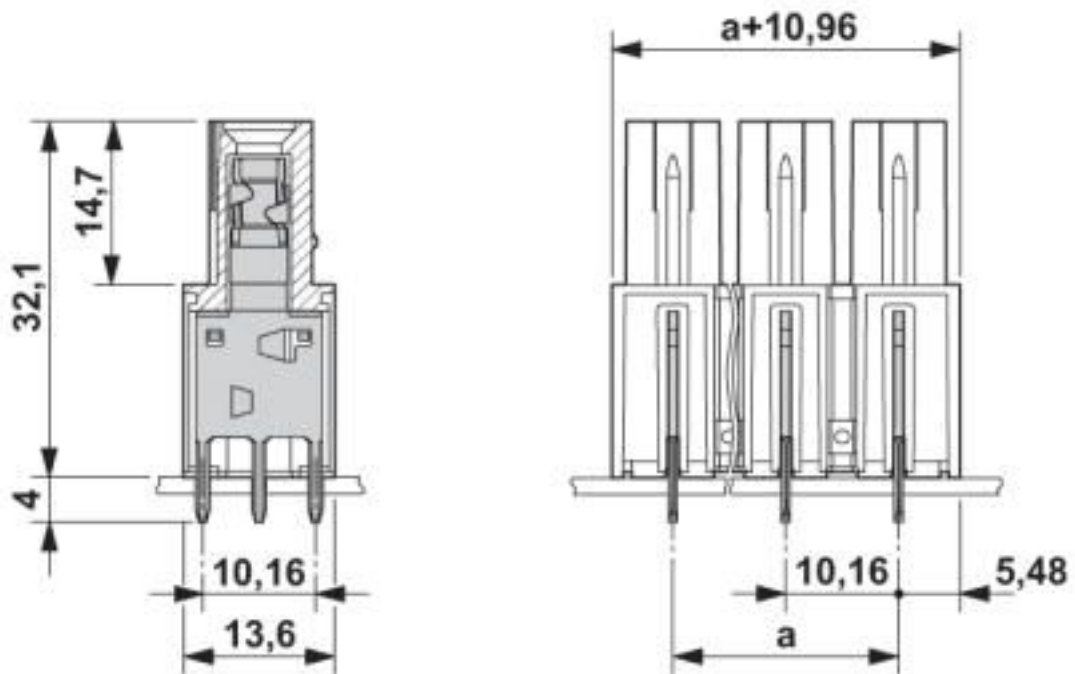
# Feed-through header - IPCV 16/ 6-G-10,16 - 1969739

Diagram



Derating curve for: ISPC 16/..-ST-10,16 with IPCV 16/..-G-10,16

Dimensional drawing



The figure shows the 3-pos. version

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## Classifications

### eCl@ss

eCl@ss 10.0.1	27440402
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
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

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#### Approvals

IECEE CB Scheme / SEV / EAC / cULus Recognized

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#### Ex Approvals

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### Approval details

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## Approvals

IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	CH-10653-M1
Nominal voltage UN	1000 V		
Nominal current IN	76 A		

SEV		<a href="https://www.eurofins.ch/de/">https://www.eurofins.ch/de/</a>	IK-4468-M1
Nominal voltage UN	1000 V		
Nominal current IN	76 A		

EAC			B.01687
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cULus Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	E60425-20040202
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	66 A	66 A	5 A

## Accessories

Accessories

Coding element

Coding profile - CP-PC RD - 1701967

Coding profile, for plugging into the coding ribs of the plug at a later date, insulating material, color: Red





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### Accessories

Coding element - CS-IPC 16/ 6 - 1970016



Coding pin, serves to ensure correct polarization on the PCB during manual mounting

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### Terminal marking

Marker card - SK U/5,0 WH:UNBEDRUCKT - 0803922



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 5 mm, Number of individual labels: 630

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### Additional products

Printed-circuit board connector - IPC 16/ 6-ST-10,16 - 1969412



PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, connection method: Screw connection with tension sleeve, color: green, contact surface: Silver

Printed-circuit board connector - ISPC 16/ 6-ST-10,16 - 1748587



PCB connector, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, connection method: Push-in spring connection, color: green, contact surface: Silver

Feed-through header - PC 6-16/ 6-G1-10,16 - 1998975



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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### Accessories

Feed-through header - PC 6-16/ 6-G1U-10,16 - 1996278



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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Feed-through header - PCV 6-16/ 6-G1-10,16 - 1998823



PCB headers, nominal current: 76 A, rated voltage (III/2): 1000 V, nominal cross section: 16 mm<sup>2</sup>, number of positions: 6, pitch: 10.16 mm, color: green, contact surface: Silver, mounting: Wave soldering, pin layout: Linear pinning, solder pin [P]: 4 mm

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