

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

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.



PCB terminal block, nominal current: 16 A, rated voltage (III/2): 150 V, nominal cross section: 1.5 mm<sup>2</sup>, number of potentials: 4, number of rows: 1, number of positions per row: 4, product range: ICC...TS1,5/..L3,5, pitch: 3.5 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, mounting: Wave soldering, conductor/PCB connection direction: 0 °, color: light gray, Pin layout: Linear pinning, Solder pin [P]: 3.55 mm, number of solder pins per potential: 1, type of packaging: packed in cardboard. Product with pin output on left side

## Your advantages

- Orthogonal alignment of the terminal block with the PCB for optimum accessibility in DIN-rail-mounted devices
- Internationally recognized and proven screw connection
- Easy handling in just a few steps
- Fixed wiring and a reduced number of individual parts
- Choice between different pitches

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1380291       |
| Packing unit                         | 50 pc         |
| Minimum order quantity               | 50 pc         |
| Sales key                            | AC08          |
| Product key                          | ACHAFA        |
| GTIN                                 | 4063151750145 |
| Weight per piece (including packing) | 6.19 g        |
| Weight per piece (excluding packing) | 4.83 g        |
| Customs tariff number                | 85369010      |
| Country of origin                    | PL            |

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

## Technical data

### Product properties

|                           |                      |
|---------------------------|----------------------|
| Product type              | PCB terminal block   |
| Product family            | ICC...-TS1,5/...L3,5 |
| Number of positions       | 4                    |
| Pitch                     | 3.5 mm               |
| Number of connections     | 4                    |
| Number of rows            | 1                    |
| Number of potentials      | 4                    |
| Pin layout                | Linear pinning       |
| Solder pins per potential | 1                    |

### Electrical properties

#### Properties

|                             |        |
|-----------------------------|--------|
| Nominal current $I_N$       | 16 A   |
| Nominal voltage $U_N$       | 150 V  |
| Rated voltage (III/3)       | 150 V  |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated voltage (III/2)       | 150 V  |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated voltage (II/2)        | 250 V  |
| Rated surge voltage (II/2)  | 2.5 kV |

### Connection data

#### Connection technology

|                       |                     |
|-----------------------|---------------------|
| Nominal cross section | 1.5 mm <sup>2</sup> |
|-----------------------|---------------------|

#### Interlock

|              |         |
|--------------|---------|
| Locking type | without |
|--------------|---------|

#### Conductor connection

|                                                                         |                                              |
|-------------------------------------------------------------------------|----------------------------------------------|
| Connection method                                                       | Screw connection with tension sleeve         |
| Conductor cross-section rigid                                           | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Conductor cross-section flexible                                        | 0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Conductor cross-section AWG                                             | 28 ... 16                                    |
| Conductor cross-section, flexible, with ferrule, without plastic sleeve | 0.25 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> |
| Conductor cross-section, flexible, with ferrule, with plastic sleeve    | 0.25 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> |
| Stripping length                                                        | 8 mm                                         |
| Drive form screw head                                                   | Slotted (L)                                  |
| Tightening torque                                                       | 0.22 Nm ... 0.25 Nm                          |

### Mounting

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

|                  |                |
|------------------|----------------|
| Mounting type    | Wave soldering |
| Pin layout       | Linear pinning |
| Processing notes |                |
| Process          | Wave soldering |

## 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 (4 µm - 8 µm Sn)                                                             |
| Metal surface terminal point (middle layer) | Nickel (1.3 µm - 4 µm Ni)                                                        |
| Metal surface soldering area (top layer)    | Tin (4 µm - 8 µm Sn)                                                             |
| Metal surface soldering area (middle layer) | Nickel (1.3 µm - 4 µm Ni)                                                        |

### 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 |

## Notes

|                |                                                                                                                                                                                                                 |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recommendation | Further information and detailed dimensions are available in the download area.                                                                                                                                 |
| Assembly note  | For reliable conductor connection, always adhere to a defined tightening torque.<br>During conductor connection (mounting), the terminal blocks must be supported (held with one hand, support on the housing). |
| General        | We recommend using a soldering frame.                                                                                                                                                                           |

## Dimensions

|                       |              |
|-----------------------|--------------|
| Pitch                 | 3.5 mm       |
| Width [w]             | 20 mm        |
| Height [h]            | 22.4 mm      |
| Length [l]            | 22.63 mm     |
| Solder pin length [P] | 3.55 mm      |
| Pin dimensions        | 0.6 x 0.8 mm |

### PCB design

|               |        |
|---------------|--------|
| Hole diameter | 1.2 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 | 0.14 mm <sup>2</sup> / solid / > 10 N    |
|                                                                             | 0.14 mm <sup>2</sup> / flexible / > 10 N |
|                                                                             | 1.5 mm <sup>2</sup> / solid / > 40 N     |
|                                                                             | 1.5 mm <sup>2</sup> / flexible / > 40 N  |

## Electrical tests

### Temperature-rise test

|                                   |                                                                                                                                |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Specification                     | IEC 60947-7-4:2019-01                                                                                                          |
| Requirement temperature-rise test | The sum of ambient temperature and temperature rise of the PCB terminal block shall not exceed the upper limiting temperature. |

### Short-time withstand current

|               |                       |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2019-01 |
|---------------|-----------------------|

### Insulation resistance

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

### Air clearances and creepage distances |

|                                                        |                                               |
|--------------------------------------------------------|-----------------------------------------------|
| Specification                                          | IEC 60947-1:2007-06 + A1:2010-12 + A2:2014-09 |
| Insulating material group                              | I                                             |
| Comparative tracking index (IEC 60112)                 | CTI 600                                       |
| Rated insulation voltage (III/3)                       | 150 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)                       | 150 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)                      | 0.8 mm                                        |
| Rated insulation voltage (II/2)                        | 250 V                                         |
| Rated surge voltage (II/2)                             | 2.5 kV                                        |
| minimum clearance value - non-homogenous field (II/2)  | 1.5 mm                                        |

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

|                                  |         |
|----------------------------------|---------|
| minimum creepage distance (II/2) | 1.25 mm |
|----------------------------------|---------|

## 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 Hz ... 60.1 Hz)              |
| Acceleration           | 20 m/s <sup>2</sup> (60.1 Hz ... 150 Hz) |
| Test duration per axis | 2.5 h                                    |
| Test directions        | X-, Y- and Z-axis                        |

### Glow-wire test

|                  |                        |
|------------------|------------------------|
| Specification    | IEC 60695-2-10:2013-04 |
| Temperature      | 850 °C                 |
| Time of exposure | 5 s                    |

### Aging

|               |                       |
|---------------|-----------------------|
| Specification | IEC 60947-7-4:2019-01 |
|---------------|-----------------------|

### Ambient conditions

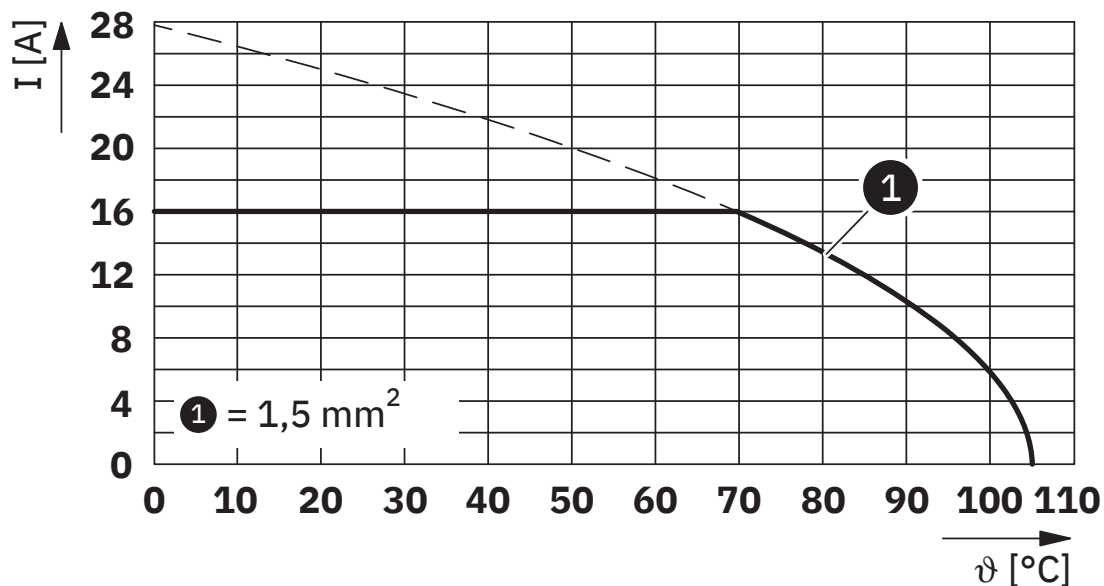
|                                         |                                                                               |
|-----------------------------------------|-------------------------------------------------------------------------------|
| Ambient temperature (storage/transport) | -40 °C ... 55 °C                                                              |
| Relative humidity (storage/transport)   | 30 % ... 70 %                                                                 |
| Ambient temperature (assembly)          | -5 °C ... 100 °C                                                              |
| Ambient temperature (operation)         | -40 °C ... 105 °C (Depending on the current carrying capacity/derating curve) |

## Packaging specifications

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

## Drawings

Diagram



Type: ICC...-TS1,5/...

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1380291>



### IECEE CB Scheme

Approval ID: DE1-69584



### cULus Recognized

Approval ID: E60425-20181123

|   | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| B |                       |                       |                   |                             |
|   | 300 V                 | 8 A                   | 28 - 16           | -                           |
| F |                       |                       |                   |                             |
|   | 150 V                 | 8 A                   | 28 - 16           | -                           |



### VDE Zeichengenehmigung

Approval ID: 40060011

|       | Nominal voltage $U_N$ | Nominal current $I_N$ | Cross section AWG | Cross section $\text{mm}^2$ |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine |                       |                       |                   |                             |
|       | 250 V                 | 16 A                  | -                 | 0.14 - 1.5                  |

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27460101 |
| ECLASS-15.0 | 27460101 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC002643 |
|-----------|----------|

# ICC20-TS1,5/4L3,5-7035 - PCB terminal block



1380291

<https://www.phoenixcontact.com/us/products/1380291>

## 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% |
|-------------------------------------|----------------------------|

### EF3.1 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 0.044 kg CO2e |
|---------|---------------|

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

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