

## Data sheet | Item number: 721-170/003-000

Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight;  
100% protected against mismating; Pin spacing 5 mm; 10-pole; light gray



721-170\_003-000



RoHS  
Compliant

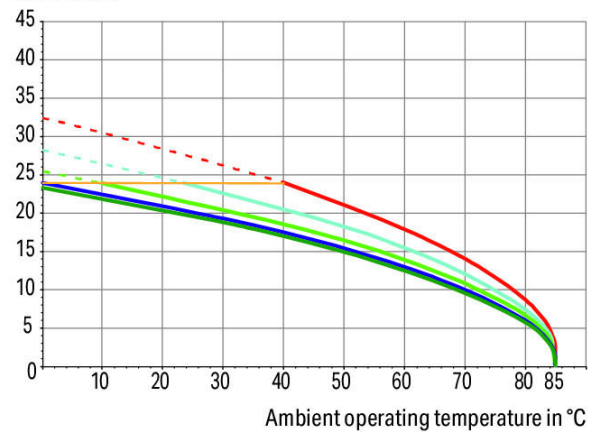
✓  
BOMcheck.net

Color: ■

### Derating Curve

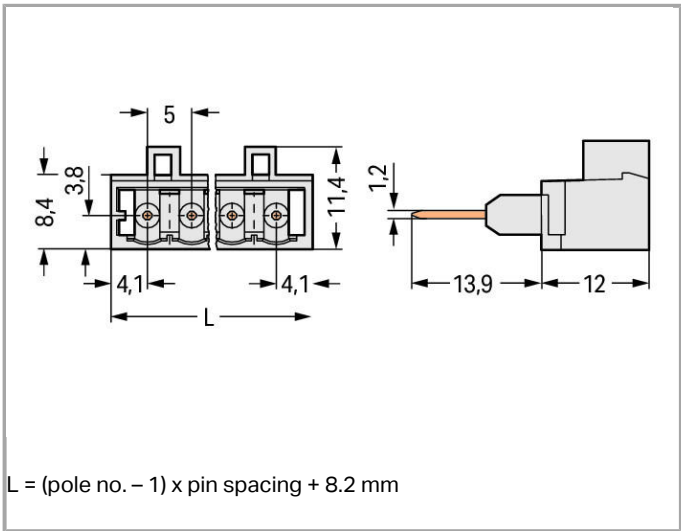
1-conductor female connector (721-102/026-000) with  
male connector (721-162/003-000)  
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



2-, 4-, 6-, 12-, 20- pole

— Conductor rated current



Item description

- Pluggable connectors for rail-mount terminal blocks equipped with CAGE CLAMP® connection
- Male connectors with long contact pins connect to the termination ports of 280 Series Rail-Mount Terminal Blocks
- Pins can be touched when the connector is unplugged, so power should be supplied via terminal block (observe rated voltage!)
- 100 % protected against mismating
- With coding fingers

Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Data

Electrical data

Ratings per IEC/EN 60664-1

|                                 |       |
|---------------------------------|-------|
| Rated voltage (III / 3)         | 250 V |
| Rated impulse voltage (III / 3) | 4 kV  |
| Rated voltage (III / 2)         | 320 V |
| Rated impulse voltage (III / 2) | 4 kV  |
| Rated voltage (II / 2)          | 630 V |
| Rated impulse voltage (II / 2)  | 4 kV  |
| Rated current                   | 16 A  |

Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 300 V |
|--------------------------------|-------|



|                                |       |
|--------------------------------|-------|
| Rated current UL (Use Group B) | 15 A  |
| Rated voltage UL (Use Group D) | 300 V |

### Approvals per UL 1977

|                                                 |       |
|-------------------------------------------------|-------|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 15 A  |

### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                            |    |
|----------------------------|----|
| Total number of potentials | 10 |
| Number of connection types | 1  |
| Number of levels           | 1  |
| No. of poles               | 10 |

### Geometrical Data

|                         |                      |
|-------------------------|----------------------|
| Pin spacing             | 5 mm / 0.197 inch    |
| Width                   | 53.2 mm / 2.094 inch |
| Height                  | 25.9 mm / 1.02 inch  |
| Height from the surface | 12 mm / 0.472 inch   |
| Depth                   | 11.4 mm / 0.449 inch |

### Plug connection

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Contact type (pluggable connector) | Male connector/plug                   |
| Connector connection type          | for front-entry wiring terminal block |
| Mismating protection               | Yes                                   |

### Material Data

|                             |                                  |
|-----------------------------|----------------------------------|
| Color                       | light gray                       |
| Material group              | I                                |
| Insulating material         | Polyamide 66 (PA 66)             |
| Flammability class per UL94 | V0                               |
| Contact material            | Electrolytic copper ( $E_{Cu}$ ) |
| Contact plating             | tin-plated                       |
| Fire load                   | 0.077 MJ                         |

|        |        |
|--------|--------|
| Weight | 5.68 g |
|--------|--------|

## Environmental Requirements

|                         |             |
|-------------------------|-------------|
| Limit temperature range | -60 +100 °C |
|-------------------------|-------------|

## Commercial data

|                    |                        |
|--------------------|------------------------|
| Product Group      | 3 (Multi Conn. System) |
| Country of origin  | PL                     |
| GTIN               | 4044918905848          |
| Customs Tariff No. | 85366990990            |

## Approvals / Certificates

### Radio-Approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|    | CSA<br>DEKRA Certification B.V.       | C22.2                    | 1466354          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984                 | 2190761.01       |

### Country specific Approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|                                                                                    | CB<br>DEKRA Certification B.V.        | IEC 61984                | NL-39756         |
|  | CSA<br>DEKRA Certification B.V.       | C22.2                    | 1466354          |
|  | KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984                 | 2190761.01       |

### Other Approvals

| Logo                                                                               | Approval                            | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|-------------------------------------|--------------------------|------------------|
|  | UL<br>UL International Germany GmbH | UL 1059                  | E45172           |



UR  
 UL International Germany GmbH

UL 1977

E45171

## UL-Approvals

| Logo                                                                             | Approval                             | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | UL<br>Underwriters Laboratories Inc. | UL 1059                  | E45172-19911118  |
|  | UR<br>UL International Germany GmbH  | UL 1977                  | E45171           |

## Compatible products

### tools



Item no.: 280-440  
 Operating tool; of insulating material; 10-way

280-440

### Coding



Item no.: 231-129  
 Coding key; snap-on type; light gray

231-129

### General accessories



Item no.: 280-650/056-000  
 Spacer of same profile; suitable for 3-conductor terminal blocks of horizontal type; orange

/ 556-555

280-650



Item no.: 280-654/056-000  
 Spacer of same profile; suitable for 3- and 4-conductor terminal blocks of angled type; orange

/ 556-555

280-654



Item no.: 280-835/056-000  
 Spacer of same profile; suitable for 4-conductor terminal blocks of horizontal type; orange

/ 556-555

280-835



Item no.: 280-902/056-000  
 Spacer of same profile; suitable for 2-conductor terminal blocks of horizontal type; orange

/ 556-555

280-902

## Downloads

### Documentation

### Additional Information



|                        |             |               |          |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf<br>3.6 MB | Download |
|------------------------|-------------|---------------|----------|

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CAD/CAE - Smart Data

CAD data

|                             |     |          |
|-----------------------------|-----|----------|
| 3D Download 721-170/003-000 | URL | Download |
|-----------------------------|-----|----------|

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EPLAN

|                   |          |
|-------------------|----------|
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Subject to changes.

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