

**Data sheet | Item number: 232-735/045-000**

THT female header; straight; Pin spacing 7.5 mm; 5-pole; 0.6 x 1.0 mm solder pin; gray



[www.wago.com/232-735\\_045-000](http://www.wago.com/232-735_045-000)



**i** Picture differs from the item.

Color: —



Subject to changes. Please also observe the further product documentation!

WAGO Corporation  
Germantown, WI 53022  
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222  
Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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We are always happy to take your call at +49 (571) 887-44222.



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$

2- to 3-pole female connectors – one latch only

## Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- With coding fingers

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## Data

### Notes

#### Safety information 1

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must 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.

#### Variants:

Other pole numbers  
3.8 mm pin projection for male headers with straight solder pins  
Gold-plated or partially gold-plated contact surfaces  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>

## Electrical data

### IEC Approvals

| Ratings per                 | IEC/EN 60664-1  |
|-----------------------------|---|
| Rated voltage (III / 3)     | 500 V   |
| Rated surge voltage (III/3) | 6 kV  |
| Rated voltage (III/2)       | 630 V   |
| Rated surge voltage (III/2) | 6 kV  |
| Nominal voltage (II/2)      | 1000 V  |
| Rated surge voltage (II/2)  | 6 kV  |
| Rated current               | 12 A  |
| Legend (ratings)            | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

### UL Approvals

| 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   |
| Rated current UL (Use Group D) | 10 A    |

### Ratings per UL

|                       |       |
|-----------------------|-------|
| Rated voltage UL 1977 | 600 V |
| Rated current UL 1977 | 15 A  |

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## CSA Approvals

|                                 |       |
|---------------------------------|-------|
| 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 | 5 |
| Number of connection types | 1 |
| Number of levels           | 1 |

## Connection 1

|                 |   |
|-----------------|---|
| Number of poles | 5 |
|-----------------|---|

## Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 7.5 mm / 0.295 inch      |
| Width                                | 36.5 mm / 1.437 inch     |
| Height                               | 22.05 mm / 0.868 inch    |
| Height from the surface              | 18.25 mm / 0.719 inch    |
| Depth                                | 11.6 mm / 0.457 inch     |
| Solder pin length                    | 3.8 mm                   |
| Solder pin dimensions                | 0.6 x 1 mm               |
| Drilled hole diameter with tolerance | 1.3 <sup>(+0.1)</sup> mm |

## Plug-in connection

|                                    |               |
|------------------------------------|---------------|
| Contact type (pluggable connector) | Female header |
| Connector (connection type)        | for PCB       |
| Mismating protection               | No            |
| Mating direction to the PCB        | 90°           |
| Locking of plug-in connection      | Without       |

## PCB contact

|                        |  |
|------------------------|--|
| PCB Contact            | THT  |
| Solder pin arrangement | over the entire female connector (in-line) |

Subject to changes. Please also observe the further product documentation!

|                                     |   |
|-------------------------------------|---|
| Number of solder pins per potential | 1 |
|-------------------------------------|---|

### Material data

|                             |                  |
|-----------------------------|------------------|
| Color                       | gray             |
| Material group              | I                |
| Insulation material         | Polyamide (PA66) |
| Flammability class per UL94 | V0               |
| Contact material            | Copper alloy     |
| Contact plating             | tin-plated       |
| Fire load                   | 0.107 MJ         |
| Weight                      | 5.5 g            |

### Environmental requirements


|                         |                |
|-------------------------|----------------|
| Limit temperature range | -60 ... +85 °C |
|-------------------------|----------------|

### Commercial data


|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 50 Stück               |
| Packaging type        | box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918579780          |
| Customs tariff number | 8536694040             |

### Approvals / Certificates

#### Ship Approvals

| Logo  | Approval                         | Additional Approval Text | Certificate name |
|---|----------------------------------|--------------------------|------------------|
|  | <b>BV</b><br>Bureau Veritas S.A. | IEC 60998                | 11915/D0<br>BV   |

#### UL-Approvals

| Logo   | Approval                                    | Additional Approval Text | Certificate name |
|--|---|--------------------------|------------------|
|  | <b>UR</b><br>Underwriters Laboratories Inc. | UL 1059                  | E45172           |

Subject to changes. Please also observe the further product documentation!



UR  
Underwriters Laboratories Inc.

UL 1977

E 45171

## Counterpart



Item no. 731-605  
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 5-pole; 2,50 mm²; gray

[www.wago.com/731-605](http://www.wago.com/731-605)

## Optional accessories

### Testing accessories

#### Testing accessories



Item no.: 210-136  
Test plug; 2 mm Ø; with 500 mm cable

[www.wago.com/210-136](http://www.wago.com/210-136)



Item no.: 231-662  
Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm²; light gray

[www.wago.com/231-662](http://www.wago.com/231-662)

## Downloads

### Documentation

#### Additional Information

|                        |            |               |          |
|------------------------|------------|---------------|----------|
| Technical explanations | 2019 Apr 3 | pdf<br>2.0 MB | Download |
|------------------------|------------|---------------|----------|

## CAD files

### PCB Design

|                                      |     |          |
|--------------------------------------|-----|----------|
| Symbol and Footprint 232-735/045-000 | URL | Download |
|--------------------------------------|-----|----------|

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro

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- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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## Environmental Product Compliance

### Compliance Search

| Environmental Product Compliance 232-735/045-000                                       | URL | Download |
|--|-----|----------|
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## Installation Notes

### Product family

**MCS MIDI Classic**  
[Show all products from the family](#)

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