Data Sheet | Item Number: 2000-409/000-005

Jumper; 9-way; insulated; red

https://www.wago.com/2000-409/000-005







Color: ■ red

| Electrical data | | | |
|-------------------------|-------|-------------------------|------|
| Ratings per IEC/EN | | Ex information | |
| Nominal voltage (III/3) | 800 V | Rated current (Ex e II) | 12 A |
| Rated current | 14 A | | |

| Physical data | |
|-------------------|------------------------|
| Width | 30.5 mm / 1.201 inches |
| Height | 4.1 mm / 0.161 inches |
| Depth | 19 mm / 0.748 inches |
| Jumper assignment | 1-2-3-4-5-6-7-8-9 |

| Material data | |
|----------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | red |
| Fire load | 0.021 MJ |
| Weight | 2.6 g |

| Environmental requirements | | | | | |
|--|---|---|--|--|--|
| Environmental Testing | | Environmental Testing | | | |
| Railway applications – | DIN EN 50155 (VDE 0115-200):2022-06 | Monitoring of contact faults and interruptions | Passed | | |
| Rolling stock – Electronic equipment | | Voltage drop measurement before and after each axis | Passed | | |
| Test procedure: Railway applications – Rolling stock equipment – | DIN EN 61373 (VDE 0115-0106):2011-04 | Simulated service life test through increased levels of noise-like oscillations | Test passed according to Section 9 of the standard | | |
| Vibration and shock tests | | Frequency | $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$ | | |
| Spectrum/Mounting location | Service life test, Category 1, Class A/B | Acceleration | 0.572g (highest test level used for all | | |
| Functional test with noise-like oscillati- | Test passed according to Section 8 of | | axes) | | |
| ons | | | 5 h | | |
| Frequency | $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$ | Test directions | X, Y and Z axes | | |
| Acceleration | 0.101g (highest test level used for all axes) | Extended testing: Monitoring of contact faults and interruptions | Passed | | |
| Test duration per axis | 10 min. | Extended testing: Voltage drop measure- | Passed | | |
| Test directions | X, Y and Z axes | ment before and after each axis | | | |

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| Environmental Testing | |
|---|---|
| Shock test | Test passed according to Section 10 of the standard |
| Shock pulse form | Half sine |
| Acceleration | 5g (highest test level used for all axes) |
| Shock duration | 30 ms |
| Number of shocks (per axis) | 3 pos. und 3 neg. |
| Test directions | X, Y and Z axes |
| Extended testing: Monitoring of contact faults and interruptions | Passed |
| Extended testing: Voltage drop measurement before and after each axis | Passed |
| Vibration and shock stress for rolling stock equipment | Passed |

| Commercial data | |
|-----------------------|---------------|
| Product Group | 22 (TOPJOB S) |
| PU (SPU) | 25 pcs |
| Packaging type | Bag |
| Country of origin | DE |
| GTIN | 4055143698177 |
| Customs tariff number | 85366990990 |

| Product Classification | |
|------------------------|----------------------|
| UNSPSC | 39121421 |
| eCl@ss 10.0 | 27-14-11-40 |
| eCl@ss 9.0 | 27-14-11-40 |
| ETIM 9.0 | EC000489 |
| ETIM 8.0 | EC000489 |
| ECCN | NO US CLASSIFICATION |

| Environmental Product Compliance | |
|----------------------------------|------------------------|
| RoHS Compliance Status | Compliant,No Exemption |

Approvals / Certificates

Declarations of conformity and manufacturer's declarations



| Approval | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway WAGO GmbH & Co. KG | - | Railway Ready |

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https://www.wago.com/2000-409/000-005



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2000-409/000-005



Documentation

| 0 | ĸ | Text |
|---|---|------|
| | | |

| Diu lext | | | |
|------------------|------------|-----------------|--------------|
| 2000-409/000-005 | 19.02.2019 | xml 2.52 KB | <u>↓</u> |
| 2000-409/000-005 | 27.04.2017 | doc 23.50 KB | \downarrow |

CAD/CAE-Data

CAD data

2D/3D Models 2000-409/000-005



2000-409/000-005



ZUKEN Portal 2000-409/000-005

 $\underline{\downarrow}$

Installation Notes

Commoning



Insert push-in type jumper bar and push down until it hits backstop.



Removing a push-in type jumper bar: Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper. Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

Commoning







Custom jumpers are created by breaking and removing jumper contacts (2000, 2001, 2002, 2004 Series).

Marking with a felt-tip pen.

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Commoning



For example, colored push-in type jumper bars are used with sensor terminal blocks.

Commoning



Stepping down via push-in type jumper



Stepping down via push-in type jumper

Commoning via closed terminal side with end plate allows jumpering over two cross-section sizes, e.g., from 16 mm² (6 AWG) to 6 mm² (10 AWG) or from 6 mm² (10 AWG) to 2.5 mm² (14 AWG) (see illustration above).



Stepping down via push-in type jumper

Commoning via open terminal side with end plate allows jumpering over two cross-section sizes for 16 mm² (6 AWG) and 10 mm² (8 AWG) and one cross-section size for 6/4/2.5 mm² (10/12/14 AWG). An example: from 16 mm² (6 AWG) to 6 mm² (10 AWG) (see illustration above) or from 10 mm² (8 AWG) to 4 mm² (12 AWG).



Note:

The total current of the outgoing circuits must not exceed the nominal current of the step-down jumper/push-in type jumper bar.

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

Current addresses can be found at:: $\underline{www.wago.com}$