Data Sheet | Item Number: 2002-410/000-005

Jumper; 10-way; insulated; red

https://www.wago.com/2002-410/000-005







Color: red

Electrical data			
Ratings per IEC/EN		Ex information	
Nominal voltage (III/3)	800 V	Rated current (Ex e II)	20 A
Rated current	25 A		

Physical data	
Width	50.4 mm / 1.984 inches
Height	4.1 mm / 0.161 inches
Depth	19 mm / 0.748 inches
Jumper assignment	1-2-3-4-5-6-7-8-9-10

Material data	
Note (material data)	Information on material specifications can be found here
Color	red
Fire load	0.036 MJ
Weight	4.9 g

Environmental requirements			
Environmental Testing		Environmental Testing	
Test specification: DIN EN 50155 (VDE 0115-200):2022-06		Monitoring of contact faults and interrup-	Passed
Railway applications – Rolling stock –		tions Voltage drop measurement before and	Passed
Electronic equipment	DIN EN 04070 (VDE 0445 0400) 0044 04	after each axis	Passeu
Test procedure: DIN EN 61373 (VDE 0115-0106):2011-04 Railway applications – Rolling stock equipment –	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 axes)
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard	Test duration per axis	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	
PU (SPU)	25 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4055143690508
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/2002-410/000-005



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2002-410/000-005



Documentation

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DIG TEXT			
2002-410/000-005	19.02.2019	xml 2.52 KB	\perp
2002-410/000-005	27.04.2017	doc 23.50 KB	\downarrow

CAD/CAE-Data

CAD data

2D/3D Models 2002-410/000-005



EPLAN Data Portal 2002-410/000-005



ZUKEN Portal 2002-410/000-005

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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:: $\underline{www.wago.com}$