Data Sheet | Item Number: 2000-409

Jumper; 9-way; insulated; light gray

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

Color: light gray

Similar to illustration

Electrical data

Ratings per IEC/EN

Nominal voltage (III/3)	800 V
Rated current	14 A

Ex information

Rated current (Ex e II)	12 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	light gray
Fire load	0.021 MJ
Weight	2.6 g

Environmental requirements

Environmental Testing (Environmental Conditions)

Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Installation location	Service life test, Category 1, Class A/B
Function test with noise-like vibration	Test passed according to Section 8 of the standard
Frequency	f_1 = 5 Hz to f_2 = 150 Hz f_1 = 5 Hz to f_2 = 150 Hz

Environmental Testing (Environmental Conditions)

Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
Test duration per axis	10 min. 5 h
Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
Monitoring for contact faults/interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard

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Environmental Testing (Environmental Conditions)

Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
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	4055143696982
Customs tariff number	85366990990

Product classification

UNSPSC	39121421

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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 2000-409

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Documentation

Bid Text			
2000-409	19.02.2019	xml 2.51 KB	
2000-409	27.04.2017	doc 23.50 KB	

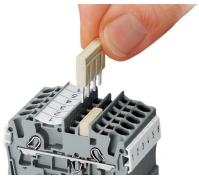
CAD/CAE-Data

CAD data
2D/3D Models 2000-409

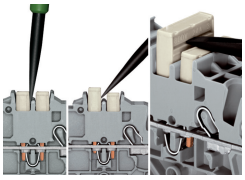
CAE data
EPLAN Data Portal 2000-409
WSCAD Universe 2000-409
ZUKEN Portal 2000-409

Installation Notes

Commoning

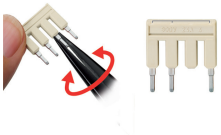


Insert push-in type jumper bar and push down until it hits backstop.

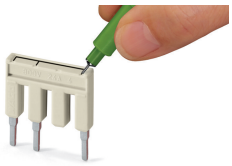


Removing a push-in type jumper bar:
Insert the operating tool between the jumper and partition wall of the dual jumper slots, then lift up the jumper.
Place the operating tool in the center of jumpers for up to five contacts (see above), or alternately on both sides for jumpers with more than five contacts.

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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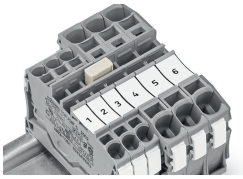
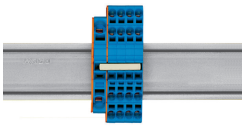
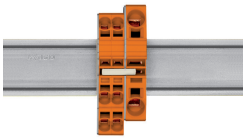
Commoning



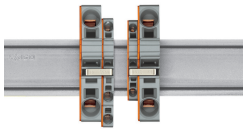
Stepping down via push-in type jumper bar.



Stepping down via push-in type jumper bar:
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 bar:
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.