# Data Sheet | Item Number: 2004-410 Jumper; 10-way; insulated; light gray

https://www.wago.com/2004-410







Color: Ight gray

Electrical data		
Ratings per IEC/EN		Ex information
Nominal voltage (III/3)	800 V	Rated current (Ex e II) 30 A
Rated current	32 A	

Physical data	
Width	60.1 mm / 2.366 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	light gray
Fire load	0.038 MJ
Weight	7.5 g

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

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Environmental Testing (Environmental Testing	ntal Conditions)
Extended test scope: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shockform	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 test scope: Monitoring for contact faults/interruptions	Passed
Extended test scope: 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	4055143700634
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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## **Downloads**

# **Environmental Product Compliance**

#### Compliance Search

Environmental Product Compliance 2004-410

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## Documentation

Bid Text			
2004-410	19.02.2019	xml 2.52 KB	<u>↓</u>
2004-410	28.04.2017	doc 23.50 KB	$\overline{\downarrow}$

#### CAD/CAE-Data

#### CAD data

2D/3D Models 2004-410



EPLAN Data Portal 2004-410



2004-410

ZUKEN Portal

2004-410



# 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

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 har

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