

Data Sheet | Item Number: 2002-410

Șunt; 10 căi; izolat; gri deschis

<https://www.wago.com/2002-410>



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 inci
Height	4,1 mm / 0.161 inci
Depth	19 mm / 0.748 inci
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	gri deschis
Fire load	0.035 MJ
Weight	5 g

Environmental requirements

Environmental Testing (Environmental Conditions)		Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06	Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04	Shock test	Test passed according to Section 10 of the standard
Spectrum/Installation location	Service life test, Category 1, Class A/B	Shock form	Half sine
Function test with noise-like vibration	Test passed according to Section 8 of the standard	Shock duration	30 ms
Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$ $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$	Number of shocks per axis	3 pos. und 3 neg.
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)	Vibration and shock stress for rolling stock equipment	Passed
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		
Extended test scope: Monitoring for contact faults/interruptions	Passed Passed		



Commercial data	
Product Group	22 (TOPJOB S)
PU (SPU)	25 Buc.
Packaging type	Bag
Country of origin	DE
GTIN	4055143690386
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

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 2002-410	

Documentation

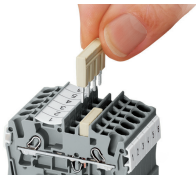
Bid Text			
2002-410	19.02.2019	xml 2.52 KB	
2002-410	27.04.2017	doc 23.50 KB	

CAD/CAE-Data

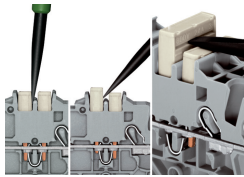
CAD data	CAE data
2D/3D Models 2002-410	EPLAN Data Portal 2002-410
	WSCAD Universe 2002-410
	ZUKEN Portal 2002-410

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

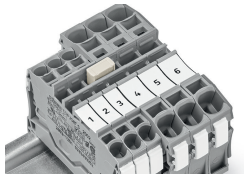


Custom jumpers are created by breaking and removing jumper contacts (2000, 2001, 2002, 2004 Series).

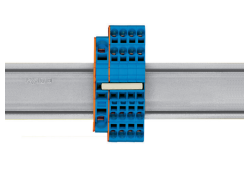


Marking with a felt-tip pen.

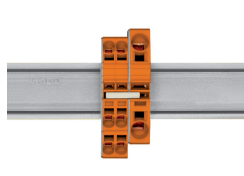
Commoning



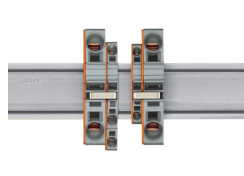
Stepping down via push-in type jumper bar.



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.