



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Rittal GmbH & Co. KG
Address	Auf dem Stuetzelberg, Herborn, 35745, Germany
Type	Switchboard Accessories
Description	Busbar System
Trade Name	VX25 Ri4Power
Application	Marine, Offshore and industrial applications
Specified Standard	IEC 61439-1: 2020-05/ EN 61439-1: 2011 IEC 61439-2: 2020-07/ EN 61439-2: 2011 IEC 60092-302-2: 2019-09 IEC 60529: 2013-08/DIN EN 60529: 2019-02
Ratings	see appendix

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This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document HPC2262010-23/JK and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

PRODUCT Busbar System

TRADE NAME VX25 Ri4Power

Consisting of:

Rittal No.	Discription	Dimension
9682.324	Front trim panel, top	400 x 300
9682.326	Front trim panel, top	600 x 300
9682.328	Front trim panel, top	800 x 300
9682.141	Partial door for VX	400 x 150
9682.142	Partial door for VX	400 x 200
9682.143	Partial door for VX	400 x 300
9682.144	Partial door for VX	400 x 400
9682.146	Partial door for VX	400 x 600
9682.161	Partial door for VX	600 x 150
9682.162	Partial door for VX	600 x 200
9682.163	Partial door for VX	600 x 300
9682.164	Partial door for VX	600 x 400
9682.166	Partial door for VX	600 x 600
9682.181	Partial door for VX	800 x 150
9682.182	Partial door for VX	800 x 200
9682.183	Partial door for VX	800 x 300
9682.184	Partial door for VX	800 x 400
9682.186	Partial door for VX	800 x 600
9682.334	Front trim panel, bottom	400 x 100
9682.336	Front trim panel, bottom	600 x 100
9682.338	Front trim panel, bottom	800 x 100
9683.200	Retaining plate for cable connection space	
9683.210	Retaining plate for cable connection space	
9649.010	End supports for Maxi-PLS busbars	45 x 45
9659.010	End supports for Maxi-PLS busbars	60 x 60



9640.207	Maxi-PLS busbar, E-Cu for Maxi-PLS 45-S system	600
9640.237	Maxi-PLS busbar, E-Cu for Maxi-PLS 45-S system	800
9640.202	Maxi-PLS busbar, E-Cu for Maxi-PLS 45 system	600
9640.232	Maxi-PLS busbar, E-Cu for Maxi-PLS 45 system	800
9650.202	Maxi-PLS busbar, E-Cu for Maxi-PLS 60 system	600
9650.232	Maxi-PLS busbar, E-Cu for Maxi-PLS 60 system	800
9660.205	Support set (stabiliser) for connector kit	
9686.495	Angle bracket for support set (stabiliser)	
9686.400	Arc flash kit, class A for VX for single-door	
9686.410	Arc flash kit, class A for VX double-door	
9686.420	Arc flash kit, class B for VX	
9686.912	Connector kit for air circuit-breakers	
9684.004	Busbar E-Cu, slotted	400
9684.006	Busbar E-Cu, slotted	600
9684.008	Busbar E-Cu, slotted	800
9686.000	Busbar support for busbar baying (roof section)	30 x 10
9686.010	Busbar support for busbar entry (roof section)	30 x 10
9686.030	Busbar support for busbar baying (roof section)	50 x 10



9686.040	Busbar support for busbar entry (roof section)	50 x 10
9686.200	Longitudinal connector E-Cu for busbar baying	
9686.210	Longitudinal connector E-Cu for busbar baying	
9686.250	Longitudinal connector E-Cu for busbar baying	
9686.260	Longitudinal connector E-Cu for busbar baying	
9683.016	Compartment side panel for VX	2000 x 600
9683.018	Compartment side panel for VX	2000 x 800
9683.036	Compartment side panel for VX	2200 x 600
9683.038	Compartment side panel for VX	2200 x 800
9683.444	Compartment divider for VX	400x400
9683.446	Compartment divider for VX	400x600
9683.448	Compartment divider for VX	400x800
9683.464	Compartment divider for VX	600x400
9683.466	Compartment divider for VX	600x600
9683.468	Compartment divider for VX	600x800
9683.484	Compartment divider for VX	800x400
9683.486	Compartment divider for VX	800x600
9683.488	Compartment divider for VX	800x800



RATINGS

Rated voltage U_e :	690 V AC, 1500 V DC
Rated frequency f_n :	50-60 Hz
Rated insulation voltage U_i :	1000V
Rated impulse withstands voltage U_{imp} :	up to 12 kV
Rated current I_n :	3840 A (IP2X /IP54 ventilated) 3010 A (IP2X) 2860 A (IP54)
Short circuit current main busbar:	
Rated peak withstands current I_{pk} :	220 kA
Rated short-time withstands current I_{cw} :	100 kA/ 1 sec.
Short circuit current distribution busbar:	
Rated peak withstands current I_{pk} :	up to 220 kA
Rated short-time withstands current I_{cw} :	up to 100 kA/ 1sec.
Rated conditional short-circuit current I_{cc} :	up to 100 kA
Rated degree of protection:	IP2X / IP54
Dimensions: Height:	up to 2200 mm
Width:	up to 1200 mm
Depth:	up to 800 mm

OTHER CONDITIONS

The complete switchboard assembly is subject to a plan appraisal process for each individual application, considering i.e. redundancy as per i.e. LR Rules and Regulations for the Classification of Ships, July 2022, Part 6, Chapter 2, Section 5.

See also Montageanleitung (assembly instructions), doc. No.: D-0000-00001893-14, dated 08.2021, sections 11 and 12.