

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 18ATEX0117 X** Issue Number: **0**

(4) Product: **Power distribution, switchgear and control box Series IJB**

(5) Manufacturer: **Rose Systemtechnik GmbH**

(6) Address: **Erbeweg 13-15, 32457 Porta Westfalica, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR19.0096/00.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018

EN 60079-1 : 2014

EN 60079-31 : 2014

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex db ... IIB + H₂ T4, T5 or T6 Gb or
II 2 G Ex db ... IIB T4, T5 or T6 Gb
II 2 D Ex tb ... T85 °C, T100 °C or T135 °C Db

Date of certification: 4 February 2020

DEKRA Certification B.V.

R. Schuller
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 18ATEX0117 X**

Issue No. 0

(15) **Description**

Power distribution, switchgear and control assembly Series IJB, made of aluminium, stainless steel or cast iron with a flanged cover, with or without display window(s), are intended to be used in potentially explosive atmospheres. Inside and in the walls or cover of the enclosure electrical apparatus such as terminals, switching-, control-, regulating-, measuring- and indicating devices can be mounted.

Marking

Where applicable, the equipment making is completed by the types / levels of protection “i”, “[i]” and/or “m”.

The equipment is marked with Group IIB if at least 20% of each internal cross-sectional area remains free; it may be marked with Group IIB + H₂ if at least 40% of each internal cross-sectional area remains free.

Ambient temperature range

Maximum ambient temperature range (for details see table below):

- IJB 01 ... IJB 03: -20 °C or -60 °C to +110 °C,
- IJB 04 ... IJB 06: -20 °C to +110 °C.

Degree of protection

Degree of protection IP66 according to EN 60529 and EN IEC 60079-0.

Electrical ratings

The electrical ratings are dependent on the built-in components and equipment, but do not exceed 1,1 kV ac/dc nominal, 850 A and 500 mm². Actual ratings are stated on the nameplate.

Options

The flanged flamepaths may be provided with a max. 0,008 mm thick electro-plating.

The enclosures may be supplied in natural finish, electro-plated, powder coated or liquid painted. The painting thickness does not exceed 0,18 mm.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 18ATEX0117 X**

Issue No. **0**

Thermal data

The relation between enclosure type, temperature class, maximum surface temperature, maximum ambient temperature and maximum allowed power dissipation is given in the table below.

Temperature class	T6			T5					T4				
Max. surface temperature*	T85 °C			T100 °C					T135 °C				
Maximum ambient temperature (°C)	40	50	60	40	50	55	60	75	40	50	60	90	110
IJB Type:	Maximum allowed power dissipation (W):												
IJB 01	108	-	56	-	-	108	-	56	-	-	-	108	56
IJB 02	120	-	72	-	-	120	-	72	-	-	-	120	72
IJB 03	145	-	76	-	-	145	-	76	-	-	-	145	76
IJB 04	198	150	95	280	220	198	160	95	480	430	360	198	95
IJB 05	300	200	136	408	309	300	241	136	659	586	491	300	136
IJB 06	332	218	155	473	400	332	282	155	894	818	636	332	155

* : values have been determined without a dust layer

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR19.0096/00

(17) **Specific conditions of use**

1. For enclosures provided with a powder coating, liquid painting or provided with a non-metallic nameplate and/or tagplate and intended for use in Group III applications, the user shall minimize the risk from electrostatic discharge by suitable selection and installation.
2. The flanged flame path of the cover differs from the values stated in EN 60079-1. Contact the manufacturer for information on the dimensions of the flameproof joints.
3. The M8 or M10 fasteners are of grade A2-70 with a yield stress of at least 450 MPa and shall be applied with a minimum torque value of 28 Nm (M8) or 58 Nm (M10).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR19.0096/00

(20) **Certificate history**

Issue 0 - 222966700 initial certificate