

EU-TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive
2014/34/EU

1. EU-Type Examination Certificate Number: ETL22ATEX0111X Issue 00
2. Product: Power Distribution, Switchgear and Control Assembly - EJS series (EJS 01 to EJS 04)
3. Manufacture ROSE Systemtechnik GmbH
4. Address: Erbeweg 13-15, 32457 Porta Westfalica, Germany
5. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
6. Intertek Testing Services NA Ltd., Notified Body number 2903 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council dated 26 February 2014, certifies that the 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 of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek India Report No. CE-JOB-NDA-21-001786-008 (Intertek UK Certification Report Reference No. G104860376).
7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN 60079-1:2014 and EN 60079-31:2014 except in respect of those requirements referred to within item 14 of the Schedule.
8. If the sign "X" is placed after the certificate number, it indicates that the product is subject to the special conditions of use specified in the Schedule to this certificate.
9. 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.
10. The marking of the product shall include the following:

II 2 G D



Ex db IIC T6...T4 Gb and/or

Ex tb IIIC T135°C...T85°C Db IP66

-20°C or -60°C ≤ Ta ≤ +40°C...110°C

Certification
Officer:

M Newman

Date:

25th July 2022

SCHEDULE:

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11. Description of Equipment or Protective System

Power Distribution, Switchgear and Control Assembly - EJS series (EJS 01, EJS 02, EJS 03 and EJS 04) are assembled utilising empty enclosures certified under certificate number ETL21ATEX0071U. The assembly provides a degree of ingress protection of IP66.

Enclosures are made in aluminium alloy alternatively they can be of cast stainless steel or cast iron as flameproof only and not for dust atmosphere and cannot have display window.

They can be used as control panel or terminal box for power, control, instrumentation, heat trace, battery charger and UPS etc. containing all type of electrical/electronic power components (e.g., Switch, MCB, MPCB, MCCB, contactors, transformers, rectifiers, invertors, relays, transducers, isolators, barriers, power supply, PLC, IO's, PCB etc.) busbars and/or terminals in numbers and combination as required.

Electrical/ electronic components may be placed inside enclosures in any arrangement provided that an area of at least 40% of each cross-sectional area remains free. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5mm.

The rating of components busbars and terminals will generally be up to 1.1kV AC/DC subject to max permissible watt dissipation as shown hereunder. Declared voltage rating is nominal and items having higher voltage rating as required may be populated inside enclosure subject to required creepage and clearance and within permitted watt dissipation.

Max Watt Dissipation (W)						
T Class	Dust temp Marking	Max ambient temp	EJS 01	EJS 02	EJS 03	EJS 04
T6	T85°C	+40°C	87	140	200	295
		+50°C	63	104	148	218
		+60°C	39	63	93	140
T5	T100°C	+40°C	123	200	284	415
		+50°C	100	160	228	327
		+55°C	87	140	200	295
		+60°C	76	121	175	259
		+65°C	63	104	148	218
		+75°C	39	63	93	140
T4	T135°C	+40°C	209	331	470	684
		+50°C	185	293	417	606
		+60°C	161	257	364	530
		+75°C	123	200	284	415
		+85°C	100	160	228	327
		+90°C	87	140	200	295
		+95°C	76	121	175	259
		+100°C	63	104	148	218
		+110°C	39	63	93	140

Note: * Without dust layer

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Lid may be populated with ITS16ATEX18397U certified control accessories (e.g., various type of PB actuators, rotary actuator for switching devices and LED Indicating lamp etc.) in required numbers & combination as shown. These control accessories can be populated on sides of base of enclosure also if required. Lid may also be populated with display window, for Indicating or control instruments with display, number and size as shown hereunder.

Type	Dimensions WxHxD (mm)	Max Rated Current (A)	Max Conductor Size (mm ²)	Max. no. of control accessories	Display window (mm)			
					44x44	92x92	140x140	186x186
EJS 01	270x320x166	232	95	9	1	1	X	X
EJS 02	330x430x291	269	120	20	1	1	1	X
EJS 03	400x550x277	415	240	35	1	2	1	1
EJS 04	530x630x311	850	500	56	1	2	1	1#
<p>#Note 1. All windows as above allowed in all the enclosures for both "-20°C" and "-60°C" except 186x186 window allowed in EJS 04 for "-20°C" only.</p> <p>Note 2: Smaller size display window can be provided e.g., 60x90 instead of 92x92 without reducing the glass thickness.</p>								

The rated service temperature of LED indicating lamps is "-60°C to +100°C" and hence they shall be provided on equipment having T Class as T6 & T5 and or dust temperature rating as +85°C or +100°C.

Power distribution, switchgear and control assembly may be formed consisting of one or more enclosures of this EJS series and other certified enclosures using suitably rated and certified bushing and or conduit accessories referring to the enclosure marking.

These enclosures contain one internal and one external earthing. The enclosures are provided with threaded holes in the wall of the enclosure for cable glands, breather, bushings, conduit fittings, adapters and stopping plugs etc.

12. Report Number

Intertek India Report No. CE-JOB-NDA-21-001786-008 (Intertek UK Certification Report Reference No. G104860376) dated 1st June 2022.

13. Special Conditions of Certification

(a). Special Conditions of Use

- LED Indicating lamps if assembled are suitable for low risk of mechanical danger i.e., 2J.
- Equipment provided with Control Accessories i.e., Indicating lamps, Push button and Rotary actuators; and or powder coating or liquid painting and intended for use in Group III applications, may pose risk of electrostatic discharge, hence clean with damp cloth only.
- Equipment must be installed in vertical position only.
- Yield strength of lid fixing fasteners shall be $\geq 450\text{MPa}$.
- All unused threaded entries shall be fitted with suitably certified blanking element. Each entry shall have no more than one thread adapter when an adapter is used. A blanking element shall not be used with thread adapter.
- Use cables suitable for operating temperature referring to marking as per recommendation of EN 60079-14.

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7. No modifications must be made to the flamepaths of the unit without consultation of the drawings listed on the Ex-certificate.

(b). Conditions of Manufacture - Routine Tests

A routine overpressure test in accordance with IEC 60079-1:2014 Clause 16 was carried out by the manufacturer on EJS series (EJS 01, EJS 02, EJS 03 and EJS 04) empty enclosures certified under certificate number ETL21ATEX0071U.

14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek India Report No. CE-JOB-NDA-21-001786-005 to 008 (Intertek UK Certification Report Reference No. G104860376) dated 1st June 2022.

15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Power Distribution, Switchgear and Control Assembly - EJS Series (3 Sheets)	Ex.PMI.EJS.201-2	0	10.05.2022
Instruction Manual for Power Distribution, Switchgear and Control Assembly – EJS Series	IM.EJS.X	0	10.05.2022