IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx CML 23.0038X**

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Certificate history:
Issue 0 (2023-06-21)

Status: **Current**

Issue No: 1

Date of Issue: 2024-01-24

Applicant: **DEWEI ELECTRIC JIANGSU CO., LTD.**
NO. 999, WEST NANHUAN ROAD, JIANGYAN TOWN, TAIZHOU CITY, 225500, P. R. CHINA
China

Equipment: **EJB & EJBC Series Control Station Range**

Optional accessory:

Type of Protection: **Flameproof Ex "db", Dust Protection by Enclosure Ex "tb"**

Marking: **EJB**

Ex db IIB T6 to T4 Gb
Ex tb IIIC T80°C / T95°C / T130°C Db

Ex db IIB+H2 T6 to T4 Gb
Ex tb IIIC T80°C / T95°C / T130°C Db

EJBC

Ex db IIC T6 to T4 Gb
Ex tb IIIC T80°C / T95°C / T130°C Db

T_{amb} = -60°C to +40°C/+50°C/+60°C

Approved for issue on behalf of the IECEx Certification Body: **L A Brisk**

Position: **Assistant Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

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Manufacturer: **DEWEI ELECTRIC JIANGSU CO., LTD.**
NO. 999, WEST NANHUAN ROAD, JIANGYAN TOWN, TAIZHOU CITY, 225500, P. R. CHINA
China

Manufacturing locations: **DEWEI ELECTRIC JIANGSU CO., LTD.**
NO. 999, WEST NANHUAN ROAD,
JIANGYAN TOWN, TAIZHOU CITY,
225500, P. R. CHINA
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/CML/ExTR23.0042/00 GB/CML/ExTR23.0296/00

Quality Assessment Report:

NO/NEM/QAR14.0007/05

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Type EJB control station comprises a main enclosure and a cover. The cover is fixed to the main enclosure by socket head screws

Refer to Certificate Annex for the equipment full description.

SPECIFIC CONDITIONS OF USE: YES as shown below:
See Annex for Specific Conditions of Use.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1
This issue introduces the following changes:

1. Clarification of model names
2. To assess and permit the introduction of IIB+H2 and IIC options.
3. To assess and permit a change to the ambient temperature range.
4. To assess and permit a change to the IP Rating.
5. Addition of aluminium alloy enclosure option

Annex:

Certificate Annex IECEx CML 23.0038X Iss 1.pdf

Annexe to: IECEx CML 23.0038X Issue 1

Applicant: DEWEI ELECTRIC JIANGSU CO., LTD.

Apparatus: EJB Series Control Station

Description

Type EJB and EJBC control stations comprise of a main enclosure and a cover. The cover is fixed to the main enclosure by hexagon screws.

The material for both the main enclosure and the cover is stainless steel, carbon steel or aluminium alloy.

The control station is designed to incorporate manufacturer's standard or other manufacturers' certified control, monitoring, measuring and operating electrical components on, etc the control panel of the cover. The number of components incorporated depends on the control station size and the space required to fit each component. There is optional observation window made of tempered glass located on the cover. The enclosure of the control station can house variable electrical components, i.e., terminals, transformers, relays, fuses, reactors, control units, breakers, starters, meters, pilot lights, rotary switches, circuit breakers or other similar certified components. etc. within permissible limits.

The equipment has different options for gas groups. The equipment can either be marked IIB, IIB+H2 or IIC.

Nomenclature:

EJB/EJBC-BBBBBBCD
Where:

EJB/EJBC - Power distribution, switchgear and control assembly

BBBBBBBB - Length x Width x Depth

CC - Enclosure material
- S - Stainless Steel
- C - Carbon Steel
- A - Aluminium alloy

D - Observation window
- Y - Yes
- N – No

Enclosure size

Size	Dimension in mm			Volume in cm^3
	A	B	C	
EJB/EJBC - 182313	230	180	130	2200
EJB/EJBC - 273217	320	270	170	7300
EJB/EJBC - 444925	490	440	250	33000
EJB/EJBC - 536331	630	530	310	90800
EJB/EJBC - 587844	780	580	440	127000
EJB/EJBC - 689847	980	680	470	214000
EJB - 9012850	1280	900	500	430000
EJB -10015060	1500	1000	600	700000

Table 1: Type EJB/EJBC enclosure sizes with dimension ranges

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Determination of temperature class

TYPE	T Class	T6			T5			T4		
EJB/EJBC	Dust Temp Marking	T80ºC			T95ºC			T130ºC		
	Upper ambient temp	+40ºC	+50ºC	+60ºC	+40ºC	+50ºC	+60ºC	+40ºC	+50ºC	+60°C
182313	Max Watt Dissipation	20	15	10	27	22	17	34	39	44
273217		41	30	20	56	47	36	92	82	70
444925		98	74	50	135	111	87	222	197	172
536331		152	114	76	210	172	133	344	305	267
587844		235	176	117	322	264	205	528	469	410
689847		321	241	160	440	360	282	723	642	562
9012850		561	421	280	771	630	490	1263	1122	982
10015060		752	563	375	1033	845	657	2050	1574	1377

Table 2: Max Dissipated Power (Watt)

The enclosure dimensions in Table 1 are the largest and smallest dimensions available in each size range. Other sizes that have dimensions within the range of each size in Table 1 are permitted, assuming that any given dimension is not larger than the corresponding dimension of the largest enclosure or smaller than the corresponding dimension of the smallest enclosure. For example, an enclosure may have dimensions in the range of 170 to 270 mm length, 220 to 320 mm width, and 130 to 170 mm height.

Within an enclosure size, the length and width dimension of the enclosure may also extend beyond the range of dimensions in the size range in Table 1, but the length/width dimension ratio shall not exceed 4:3.

Table 2 provides specific maximum power dissipation figures for defined enclosure models. Where the enclosure volume differs from those in the table, the maximum power dissipation of the next smaller volume enclosure in the table is used.

Equipment may be formed consisting of one or more enclosures of this EJB/EJBC series and other certified enclosures.

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Each enclosure shall be subjected to a routine static overpressure test in accordance with EN 60079-1:2014, clause 16.1. The test shall be carried out at the following pressures for at least 10 seconds. There shall be no evidence of permanent damage or deformation, nor shall there be any leakage through the enclosure walls.

TYPE	Reference pressure (kPa)
EJB/EJBC - 182313	1000
EJB/EJBC - 273217	1000
EJB/EJBC - 444925	1400
EJB/EJBC - 536331	1400
EJB/EJBC - 587844	1400
EJB/EJBC - 689847	1400
EJB - 9012850	2600
EJB - 10015060	2600

ii. The temperature class of the equipment is determined according to the size of the enclosure and the maximum dissipated power permitted.

Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

i. The dimensions of the flameproof joints are not to be altered. Contact the manufacturer for flamepath information in the event of any damage or corrosion to the paths.

ii. The property class of the enclosure fasteners is A2-70. If a replacement fastener is required then any replacement shall be at least of this class or greater.