

CESI

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CESI S.p.A.
Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

Schema di certificazione

CESI-ATEX

CERTIFICATE



[1] SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE

[2] **Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 2014/34/EU**

[3] Supplementary EU-Type Examination Certificate number:
CESI 03 ATEX 344 /02

[4] Product: **Coils for electro-valves type FPJB size I/II/III/IV**

[5] Manufacturer: **ROTEX AUTOMATION LIMITED**

[6] Address: **987/11,12 & 13, Gidc, Makarpura, Vadodara – 390010, Gujarat, India**

[7] This supplementary certificate extends EC-Type Examination Certificate **CESI 03 ATEX 344 /01** to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

[8] CESI, notified body n. 0722 in accordance with Article 17 of the Directive 2014/34/EU of the Parliament and Council of 26 February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report n. **EX-B9019607**.

[9] In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:



II 2G Ex db IIC T6 or T5 or T4 Gb

II 2D Ex tb IIC T85°C or T100°C or T135°C Db IP66

T_{amb} -40°C ÷ +35°C or +50°C or +60°C

This certificate may only be reproduced in its entirety and without any change, schedule included.

Date 11/10/2019 - Translation issued the 11/10/2019

Prepared
Adrián Lucas Vagni

Verified
Alessandro Fedato

Approved
Roberto Piccin

Adrián Lucas Vagni
Page 1/3

Alessandro Fedato

CESI S.p.A.
Testing & Certification Division
Business Area Certification
II Gruppo
Roberto Piccin

ACCREDIA
ENTE ITALIANO DI ACCREDITAMENTO

PRD N. 018B
Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

[13]

Schedule

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 344 /02**

[15] **Description of the variation to the product**

Variation 2.1: The equipment, previously assessed in compliance to Directive 94/9/EC and to standards EN 60079-0:2009, EN 60079-1:2007 and EN 60079-31:2009, has been re-assessed on the basis of Directive 2014/34/EU and harmonized standards referred to in clause [18], with consequent updating of its marking.

Description of equipment

Coils type **FPJB** are electric flameproof equipment, built using an enclosure made of aluminum cast or stainless steel cast which contains the terminal connections to the external power supply. These equipment drive the rods which open/close electro-valves and are available in four different sizes, from **I** to **IV**. According to the thread of the cable entry the following types are foreseen:

- 37-01 with cable entry ½"NPT
- 39-01 with cable entry M20x1.5

The code 01 written as last number into the type code identifies the ATEX certificated version of the coils.

Electrical characteristics

Rated voltage:	6 ÷ 240 Vac/Vdc (voltage variation ±20%)
Rated frequency:	50 or 60 Hz (±5%)
Maximum dissipable power:	13W or 14 VA
Degree of Protection:	IP66 (EN 60529)
Ambient temperature:	-40°C ÷ +60°C for temperature class T4 or T135°C) -40°C ÷ +50°C for temperature class T4 or T100°C) -40°C ÷ +35°C for temperature class T4 or T85°C)

Cable entries

The accessories used for cable entries into enclosures shall be subject of separate certification, suitable for type of protection Ex-db and Ex-tb and guarantee a minimum degree of protection IP66 in compliance with standard IEC 60529 and shall be suitable for the operating temperature of the coil.

Warning label

- For ambient temperature up to 35°C:
"Supply cables shall be suitable at least for operating temperature ≥85°C".
- For ambient temperature up to 50°C:
"Supply cables shall be suitable at least for operating temperature ≥100°C".
- For ambient temperature up to 60°C:
"Supply cables shall be suitable at least for operating temperature ≥135°C".

[16] **Report n. EX-B9019607**

Routine tests

The manufacturer shall carry out the overpressure routine test of the enclosures using the static method (par. 15.2.3 of the standard EN 60079-1:2014) at the pressure of 15.3 bar, equal to 1.5 times the reference pressure increased taking into account the minimum ambient temperature of -40°C.

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[13] **Schedule**

[14] **SUPPLEMENTARY EU-TYPE EXAMINATION CERTIFICATE n. CESI 03 ATEX 344 /02**

[17] **Special conditions for safe use**
None.

[18] **Essential Health and Safety Requirements**

Essential health and safety requirements are guaranteed by compliance with the following standard and by the respect of design conditions and safety instructions.

- EN IEC 60079-0:2018 Explosive atmospheres – Part 0: Equipment - General requirements
- EN 60079-1:2014 Part 1: Equipment protection by flameproof enclosures "d"
- EN 60079-31:2014 Part 31: Equipment dust ignition protection by enclosure "t"

[19] **Descriptive documents (Prot. EX-B9019615)**

- ROTEX/11.11/CESI/10.19 Sub: Technical Notes – TF/C/0001	rev.0	dated	10/10/2019
- IM/C/0001 Safety Instruction (pag. 2)	rev.5	dated	09/10/2019
- WN-1434-ATEX-CESI Plate FBJB	rev.5	dated	09/10/2019
- Drawing 090-01-10-12 ATEX	rev.3	dated	07/03/2012
- Plate FJBND 090-01-10-12-ATEX	rev.0	dated	01/04/2004
- Drawing 11-ATEX 1101	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1102	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1103	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1104	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1105	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1201	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1202	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1203	rev.0	dated	23/01/2004
- Drawing 11-ATEX 1204	rev.0	dated	23/01/2004
- Drawing 11-ATEX 2102	rev.0	dated	23/01/2004
- Drawing 11-ATEX 3102	rev.0	dated	23/01/2004

One copy of all the documents above is kept in CESI files.

Certificate history

Issue N°	Issue Date	Summary description of variation
02	11/10/2019	Standards update
01	15/03/2012	Standards update
00	22/12/2003	First Issue of the Certificate