# ISSSEP Institut scientifique de service public Métrologie environnementale Recherche - Analyses Essais - Expertises

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(1)EC TYPE EXAMINATION CERTIFICATE (2)Equipment or protective system intended for use in potentially explosive atmospheres Directive 94/9/EC (3) EC type examination certificate number: ISSeP05ATEX077X (4)Equipment : Control and instrument housing - series EJBC\*\* (5) Applicant : Manufacturer : JCE (Europe) Ltd JCE Group East Way, Lee Mill Industrial Estate (6) Address: (applicant) Ivybridge, Devon PL21 9LL England (7)This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to. ISSeP, notified body n<sup>r</sup> 492 in accordance with article 9 of the Council Directive 94/9/EC of 23 (8) March 1994, 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 nr 05107 Compliance with the Essential Health and Safety Requirements has been assured by compliance (9) with: CEI/EN 60079-0: 2004 CEI 60079-1:2003 (10) If the symbol "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 EC TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may 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 indications: (Ex) II 2 G Ex d IIB+H2 T6 or Ex d IIB+H2 T5 Colfontaine, the 22.12.2005 INSTITUT SCIENTIFIQUE DE SERVICE Lambert Marcel PUBLIC Manager Zoning A. Schweitzer, rue de la Platinerie B-7340 COLFONTAINE (Wasmes) Tél: ++ 32 65 610811 - Fax: ++ 32 65 610808

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# (13)

## SCHEDULE

(14)

## EC TYPE EXAMINATION CERTIFICATE N<sup>R</sup> ISSeP05ATEX077X

(15) Description of the equipment : Rectangular control and instrument housing composed of a body and a lid. The lid may be provided with one or several circular or rectangular window(s). This housing contains the equipment listed in the drawings A3C-2969. The housings bear the designations: EJBSC1\* and EJBSC2 \* series EJBC2 \* & EJBC3 \* & EJBC4 \* & EJBC5 \* series

Electrical characteristics Voltage: max. 11 kV Current: max. 1500 A

Maximum power dissipated inside the box and temperature classes

Max. power dissipated inside the housing (W)			
T6	T5		
35	50		
20	50		
35	50		
50	100		
50	100		
90	350 / 150 (**)		
	T6 35 20 35 50 50		

(\*\*) 350W housing without window / 150 W housing with glass window

Eventual prescriptions

The housings shall be equipped with EExdIIC - ATEX certified cable entries screwed in accordance with the prescriptions of the relevant standards.

Ambient temperature ranges :  $-40^{\circ}C \le Tamb \le +75^{\circ}C$  (T6)

 $-40^{\circ}C \le Tamb \le +90^{\circ}C (T5)$ 

for the housings EJBSC1 & EJBS(H)C2 & EJB(WH)C4

Routine tests

The manufacturer shall perform the routine verifications and tests necessary to ensure that the apparatus complies with the specification submitted to the testing station with the prototype.

- (16) Report no 05107of 21.12.2005 composed of 16 pages in total. The instruction note from the manufacturer "Installation and maintenance Information" (2 sheets). The drawings A3C-2969 issue 3 of 16.12.2005 (4 sheets) A3C-2970 issue 2 of 24.11.2005
- (17) Special conditions for safe use: Symbol X The fastener screws shall present a yield stress of at least 280N/mm<sup>2</sup>.
- (18) Essential Health and Safety Requirements: covered by the standards listed at (9) and the indications of the manufacturer in the descriptive documents.

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## VARIATION

#### EC TYPE EXAMINATION CERTIFICATE Nº ISSeP05ATEX077X/1

(14) Apparatus: Control and instrument housing - series EJBC\*\*

#### (15) Subject to the variation :

The series EJBC3\* & EJBC4\* & EJBC5\* & EJBWC5\* housings are used in the temperature ranges  $-20^{\circ}C < Ta < +50^{\circ}C$  ou  $-20^{\circ}C < Ta < +60^{\circ}C$ . The powers dissipated inside these housings are reduced in order to fulfil the temperature classes T6 and T5 – to see table

Type of housing	Maximum power dissipated inside the housing (W)			
	Max ambient temp.: 50°C		Max. ambient temp.: 60°C	
	T6	T5	T6	T5
EJBC3*	30	70	10	40
EJBC4*	35	85	15	50
EJBC5*	85	250	30	180
EJBWC5*	85	140	30	70

Marking: Unchanged except the ambient temperature ranges.

Routine tests: unchanged with regards to the initial certificate

(16) Report nº 09081 of 13.08.2009 (8 pages)

The graphs 09EJB3-TR1 and TR2 & 09EJB4-TR1 and TR2 & 09EJB5-TR1 and TR2 The instruction notice of installation and maintenance from the manufacturer (2 pages). The drawings A3C-2969 Issue 5 of 12.08.2009 (5 sheets)

(17) Special conditions for safe use: unchanged

(18) Essential Health and Safety Requirements: covered by the standards listed at point 9 of the initial certificate and by the descriptive documents from the manufacturer

Colfontaine, 17.08.2009.

Lambert Marcel, Directeur

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC Zoning A. Schweitzer - B 7340 Colfontaine (Wasmes) Tél: ++ 32 65 610811 – Fax: ++ 32 65 610808

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#### VARIATION

#### EC TYPE EXAMINATION CERTIFICATE Nº ISSeP05ATEX077X/2

(14) Apparatus: Control and instrument housing - series EJBC\*\*

(15) Subject to the variation :

- To allow the use of the series EJBS(H)C1 & EJBS(H)C2 housings in the temperature ranges
  -20°C< Ta < + 50°C or -20°C< Ta < + 60°C. Consequently the powers dissipated inside these housings are reduced in order to fulfil the temperature classes T6 and T5 to see table</li>
- To allow the maximum power dissipated of 70W inside the EJBS(H)C2 housing under the maximum ambient temperature of +40°C for the temperature class T5

Electrical characteristics Maximum voltage: 5 kV Maximum current: 1500 A Maximum power: to see table

Type of housing	Maximum power dissipated inside the housing (W)			
	Max ambient temp.: 50°C		Max. ambient temp.: 60°C	
·	T6	T5	T6	T5
EJBSC1 EJBSC2	8 12	34 44		18 20

Marking: Unchanged except the ambient temperature ranges.

Routine tests: unchanged with regards to the initial certificate

(16) Report nº 09130 of 26.11.2009 (8 pages)

The graphs 09EJBS1-TR1 / TR2 and TR3 & 09EJBS2-TR1 / TR2 and TR3 (6 sheets) The instruction notice of installation and maintenance (2 sheets). The drawings A3C-2969 Issue 6 of 9.11.2009 (5 sheets)

(17) Special conditions for safe use: unchanged

(18) Essential Health and Safety Requirements: covered by the standards listed at point 9 of the initial certificate and by the descriptive documents from the manufacturer

Colfontaine, 03.12.2009.

Lambert Marcel, Directeur

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