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iscrizione CCIAA 00793580150

Registro Imprese di Milano
Sezione Ordinaria
N. R.E.A. 429222
P.I. IT00793580150

[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:
CESI 04 ATEX 096

[4] Equipment: Signal converter series DAT 4235 IS

[5] Manufacturer: **DATEXEL S.r.l.**

[6] Address: Via Oslavia, 21 – 21049 TRADATE (VA) - Italy

[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.

[8] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 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 n. EX-A4510740.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014: 1997 + A1..A2 EN 50020: 2002 EN 50284: 1999

[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 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 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:

Ex II (1) GD [EEx ia] IIC

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

Date 31 August 2004 – Translation issued the 31st August 2004

Prepared
Enrico Radaelli

Verified
Damiano Cavanna

Approved
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CESI
CENTRO ELETTROTECNICO SPERIMENTALE ITALIA
Business Unit Certificazione
Responsabile



Schedule

[13]

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 04 ATEX 096

[15] **Description of equipment**

Signal converter type DAT 4235 IS /A, DAT 4235 IS /B, and DAT 4235 IS /C.

The equipments in subject are associated apparatus with function of signal converter; they achieve the galvanic insulation between input and output and are suitable to be installed on DIN bar.

The functions of the various models are the followings:

- DAT 4235 IS / A: it converts the analogical signal in output;
- DAT 4235 IS / B: it commands two thresholds of alarm with output relay;
- DAT 4235 IS / C: it converts the analogical signal in output and it commands two thresholds of alarm with output relay.

The converter configuration/programming is performed through the following devices connected to a PC:

- PRODAT-IS when the converter is installed and connected to the sensors located in hazardous area;
- PRODAT + CVPR-03 cable when the converter isn't connected to the sensors located in hazardous area..

Electrical characteristics

• **DAT 4235 IS /A:**

Supply: (terminals K-L); Output signal: (terminals A-B-C-D)

Um: 250 V

Sensors supply: (terminals 1-2-3-4-5-6-7)

Uo: 7.8 V

Io: 32 mA

Po: 140 mW

Lo: 20 mH

Co: 2 µF

Input signal: (terminals 5-6-7)

Ui: 30 V

Ii: 100 mA

Pi: 0.75 W

Li: ~0 mH

Ci: 24 nF

Ambient temperature: -20 ÷ + 60°C

• **DAT 4235 IS /B:**

Supply: (terminals K-L); Output relay (terminals E-F-G-H-I-J):

Um: 250 V

Sensors supply: (terminals 1-2-3-4-5-6-7)

Uo: 7.8 V

Io: 32 mA

Po: 140 mW

Lo: 20 mH

Co: 2 µF

Input signal: (terminals 5-6-7)

Ui: 30 V

Ii: 100 mA

Pi: 0.75 W

Li: ~0 mH

Ci: 24 nF

Ambient temperature: -20 ÷ + 60°C

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[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE n. CESI 04 ATEX 096

[15] **Description of equipment** (*follows*)

Electrical characteristics (*follows*)

• **DAT 4235 IS /C:**

Supply: (terminals K-L); Output signal (terminals A-B-C-D); Output relay (terminals E-F-G-H-I-J):

Um: 250 V

Sensors supply: (terminals 1-2-3-4-5-6-7)

Uo: 7,8 V

Io: 32 mA

Po: 140 mW

Lo: 20 mH

Co: 2 μ F

Input signal: (terminals 5-6-7)

Ui: 30 V

Ii: 100 mA

Pi: 0,75 W

Li: ~0 mH

Ci: 24 nF

Ambient temperature: $-20 \div + 60^{\circ}\text{C}$

Warning label

“For the converter configuration see the safety instructions”.

[16] **Report n.** CESI EX-A4510740

Routine tests

The manufacturer shall carry out the routine tests prescribed at paragraph 24 of EN 50014 standard and the test on transformers prescribed at paragraph 8.2 of EN 50020 standard.

Descriptive documents (prot. EX-A4510744)

| | | | |
|------------------------------------|----------|-------|----------|
| - n. NT 04002 Rev. 3 | (28 pg.) | dated | 24.08.04 |
| - n. NT 04003 Rev. 3 | (14 pg.) | dated | 24.08.04 |
| - n. NT 04007 | (2 pg.) | dated | 28.06.04 |
| - n. NT 04008 | (2 pg.) | dated | 28.06.04 |
| - n. NT 04009 | (2 pg.) | dated | 28.06.04 |
| - n. STP 84 Rev. 3 | (3 pg.) | dated | 24.08.04 |
| - ISTRUZIONI DAT4235/IS ATEX Rev.1 | (3 pg.) | dated | 08.04 |

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

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

Assured by compliance to the Standards.

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