



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx CES 11.0031U Issue No.:0 Certificate history:

Status: Current

Date of Issue: 2011-12-05 Page 1 of 4

Applicant: **CORTEM S.p.A.**
Via Aquileia 10
I - 34070 Villesse (GO)
Italy

Electrical Apparatus: **Contact blocks type M-0530 and M-0531**
Optional accessory:

Type of Protection: **Flameproof enclosures 'd'; increased safety "e"**

Marking: **Ex de IIC Gb**


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

Mirko Balaz

Position:

Head of IECEx CB

*Signature:
(for printed version)*


05-12-2011

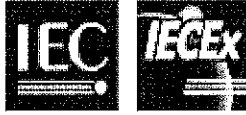
Date:

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 the Official IECEx Website.

Certificate issued by:

CESI
Centro Elettrotecnico
Sperimentale Italiano S.p.A.
Via Rubattino 54
20134 Milano
Italy

CESI

IECEX Certificate of Conformity

Certificate No.: IECEx CES 11.0031U

Date of Issue: 2011-12-05

Issue No.: 0

Page 2 of 4

Manufacturer: **CORTEM S.p.A.**
Via Aquileia 10
I - 34070 Villesse (GO)
Italy

Manufacturing location(s):

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 electrical apparatus 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 : 2007-10
Edition: 5 | Explosive atmospheres - Part 0: Equipment - General requirements |
| IEC 60079-1 : 2007-04
Edition: 6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| IEC 60079-7 : 2006-07
Edition: 4 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e" |

*This Certificate **does not** indicate compliance with electrical 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 Report:
IT/CES/ExTR11.0032/00

Quality Assessment Report:
IT/CES/QAR06.0002/05



IECEx Certificate of Conformity

Certificate No.: IECEx CES 11.0031U

Date of Issue: 2011-12-05

Issue No.: 0

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Contact blocks series M-0530 and M-0531 for Ex e housing are used as internal devices for push buttons or rotary switches.

The contact blocks series M-0530 and M-0531 are assembled on one Ex d housing with internal circular shape. The cover of this housing is provided of a flameproof serrated joint locked by 4 screws sealed with resin.

The contact blocks are equipped with two pins located on top and bottom of the housing. The pin located on the top is connected with an handle (bush button or rotary switch) installed on the cover of the IP66 Ex e housing. This pin provides to open or close the internal contacts. The pin located on the bottom is used to forward the command to additional contact block that can be clipped in series on the first unit.

The contact blocks can be fixed on the housing cover, directly fixed to push button or rotary handle using a mounting latch (clipped or fixed by screws), or on the bottom of enclosure fixed by a mounting latch (clipped or fixed by screws). Electrical connection is made with two Ex e screw terminals for wire max. 2,5mm².

Model Identification:

M-0530 : contact NO - green

M-0531 : contact NC - red

The contact block is designed for service temperature range from -40°C to + 80°C. With the max. Ambient temperature of +70°C is suitable for use in temperature class T 6.

CONDITIONS OF CERTIFICATION: NO

Empty box for conditions of certification.



IECEx Certificate of Conformity

Certificate No.: IECEx CES 11.0031U

Date of Issue: 2011-12-05

Issue No.: 0

Page 4 of 4

EQUIPMENT(continued):

Electrical characteristics:

Contact block type M-0530 and M-0531	Category of utilisation	
	AC 15	DC 13
<i>Parameter</i>		
Rated operating voltage U_e .. up to Rated current I_e max.	400 V 10 A	48 V 10 A
Rated operating voltage U_e .. up to Rated current I_e max.	500 V 4 A	
Rated operating voltage U_e .. up to Rated current I_e max.	690 V 2 A	
Conductors section	Max. 2,5 mm ²	Max. 2,5 mm ²

Schedule of limitations for components:

- Rated service temperature range: from -40°C to +80 °C.
- When the contact blocks are installed in an Ex e enclosure the clearances and creepage distances according to clause 4.3 and 4.4 of the IEC 60079-7 standard have to be fulfilled.
- The maximum admitted voltage up to 690 V is guaranteed for single assembly contact block. For double assembly contact blocks the maximum admitted voltage is up to 320 V. In the case of quadruple assembly contact blocks the maximum admitted voltage is 190 V. For the quadruple assembly contact blocks, it is necessary to separate different contact blocks by interposing a partition, having a thickness of 2.0 mm, to guarantee the maximum admitted voltage up to 690 V.
- When the component are installed on the electrical apparatus, care must be taken that the temperatures at the mounting place are within the service temperature range.
- The safety instruction provided by Manufacturer shall be strictly respected.