

# CESI

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iscrizione CCIAA 00793580150

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

Schema di certificazione

# CESI-ATEX

Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfera potenzialmente esplosiva con D.M. 1/3/1983, D.M. 19/6/1990, D.M. 20/7/1998, D.M. 27/9/2000 e D.M. 02/02/2006

# CERTIFICATE



- [1] **EC-TYPE EXAMINATION CERTIFICATE**
- [2] **Component intended for use on/in equipment or protective system intended for use in potentially explosive atmospheres**  
**Directive 94/9/EC**

- [3] EC-Type Examination Certificate number:  
**CESI 09 ATEX 016 U**

- [4] Component: **Contact blocks type M-0530 and M-0531**

- [5] Manufacturer: **COR.TEM S.p.A.**

- [6] Address: **Via Aquileia 10, I-34070 Villesse (Gorizia), Italy**

- [7] This component 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 component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components 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-A9010049.

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

**EN 60079-0:2006 EN 60079-1:2007 EN 60079-7 :2007**

- [10] The sign "U" placed after the certificate number indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

- [11] This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

- [12] The marking of the component shall include the following:



**II 2G Ex de IIC**

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

Date 03.04.2009 - Translation issued the 3th.04.2009

Prepared  
Giorgio Chinnici

Verified  
Mirko Balaz

Approved  
Fiorenzo Bregani

*Giorgio Chinnici* *Mirko Balaz*

**CESI** S.p.A.  
Divisione Energia  
"Area Tecnica Certificazione"  
Il Responsabile

[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 09 ATEX 016 U**

[15] **Description of component**

The contact blocks type M-0530 and M-0531 are a flameproof switching element. These built-in switch components are used to connect and disconnect load, control and signal circuits. The screw terminals are used for connection.

Contact block type M-0530 with I NO contact arrangement.

Contact block type M-0531 with I NC contact arrangement.

### Electrical characteristics

Rated insulation voltage: up to 690V

Maximum current: 10 A

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

Ambient temperature: -40°C to +70°C.

The contact block is designed for service temperature range from -40°C to + 80°C and suitable for use in temperature class T6.

[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 09 ATEX 016 U**

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[16] **Report n. EX-A9010049**

### Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0 (2006).

### Descriptive documents (prot. EX-A9010053)

- Technical Note n. A4-4342 (5pg.)	Rev.1	dated	22/02/2008
- Drawing n. A1-4340	Rev.1	dated	22/02/2008
- Drawing n. A1-4341	Rev.1	dated	22/02/2008
- Drawing n. A2-5411	Rev.0	dated	22/02/2008
- Safety Instruction mod- F-321 (5 pg.)	Rev.0	dated	22/02/2008
- Attestation of Conformity for components no. 0066		dated	22/02/2008
- Data sheets of materials (20 pg.)		dated	22/02/2008

One copy of all documents is kept in CESI files.

[17] **Schedule of limitations**

- The maximum service temperature is + 80 °C.
- The contact blocks must be protected by means of an enclosure certified according to one of the types of protection foreseen by the Standard EN 60079-0, section 1.
- When installing the contacts blocks in an enclosure designed to type of protection Increased Safety "e" as specified in IEC 60079-7, the clearance and creepage distances shown in clause 4.3, clause 4.4 and in table I shall be duly considered.
- 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.
- The safety instruction provided by Manufacturer shall be strictly respected.

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

Assured by the conformity to the standards..

ISMES

IPH  
BENTON

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**EXTENSION n. 01/12**

to EC-Type Examination Certificate CESI 09 ATEX 016U

**Component:** Contact blocks type M-0530 and M-0531**Manufacturer:** COR.TEM S.p.A.**Address:** Via Aquileia, 10 – 34070 Villesse (GO) – Italy.**Admitted variation**

- Update to new edition of the harmonized European standard.

**Conformity to new edition of the harmonized European standard**

The component subject of the certificate CESI 09 ATEX 016U and annexed extension are conform to the standards:

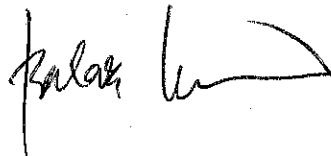
EN 60079-0: 2012 EN 60079-1: 2007 EN 60079-7: 2007

The component shall be marked as follows:


 II2G Ex de IIC Gb

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 09 ATEX 016U.

This document may only be reproduced in its entirety and without any change.

**Date** 2<sup>nd</sup> October 2012 - translation issued the 2<sup>nd</sup> October 2012**Prepared**  
Mirko Balaz**Approved**  
Fiorenzo Bregani**CESI S.p.A.**  
Testing & Certification Division  
Business Area Certification  
*Il Responsabile*

Fiorenzo Bregani



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PRD N. 018B  
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N. R.E.A. 429222

## EXTENSION n. 01/12

to EC-Type Examination Certificate CESI 09 ATEX 016U

### Description of component

The contact blocks type M-0530 and M-0531 are flameproof switching elements. These built-in switch components are used to connect and disconnect loads, control and signal circuits.

There are two available configurations:

- Contact block type M-0530 with one N.O. contact arrangement.
- Contact block type M-0531 with one N.C. contact arrangement.

### Electrical characteristics

Unchanged.

**Ambient temperature:** - 40 + + 70°C.

The contact block is designed for service temperature range from -40°C to + 80°C and suitable for use in temperature class T6.

### Schedule of limitations

- The maximum service temperature is + 80 °C.
- The contact blocks must be protected by means of an enclosure certified according to one of the types of protection foreseen by the Standard EN 60079-0, section 1.
- When installing the contacts blocks in an enclosure designed to type of protection Increased Safety "e" as specified in IEC 60079-7, the clearance and creepage distances shown in clause 4.3, clause 4.4 and in table 1 shall be duly considered.
- 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.
- The safety instruction provided by Manufacturer shall be strictly respected.

**Report n.** EX- B2030281

### Routine tests

The manufacturer shall carry out the routine tests prescribed at par. 27 of the EN 60079-0.

### Descriptive documents (prot. EX- B2030291)

- |   |       |       |            |
|---|-------|-------|------------|
| - Technical note A4-5699 (pg. 2)                              | rev.0 | dated | 06.06.2012 |
| - Safety, maintenance and mounting instructions F-321 (pg. 5) | rev.1 | dated | 06.06.2012 |
| - Attestation of Conformity no. 0066 (pg. 1)                  | rev.0 | dated | 06.06.2012 |

One copy of all documents is kept in CESI files.

### Special conditions for safe use (X)

None.

### Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- |                  |   |
|------------------|---|
| EN 60079-0: 2012 | Explosive atmospheres – Part 0: Equipment - General requirements;                 |
| EN 60079-1: 2007 | Explosive atmospheres – Part 1: Equipment protection by flameproof enclosure "d"; |
| EN 60079-7: 2007 | Explosive atmospheres – Part 7: Equipment protection by increased safety "e".     |

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