

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 EPS 15.0069

Issue No: 0

Certificate history:

Issue No. 0 (2015-11-02)

Status:

Current

Page 1 of 3

Date of Issue:

2015-11-02

Applicant:

RIBCO S.r.I.

Via dei Mille, 12 20061 Carugate (MI)

Italy

Electrical Apparatus:

Series LC... Switch, commutators, deviation switches and circuit closing

switches, Local control stations

Optional accessory:

Type of Protection:

"d", "tb"

Marking:

Ex d IIC T6...T5 Gb, Ex d I Mb

Ex tb IIIC T85°C...T100°C Db IP66/67

Approved for issue on behalf of the IECEx

Certification Body:

Dieter Zitzmann

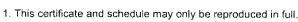
Position:

Signature:

(for printed version)

Date:

Certification Manager



- 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

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany







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Page 2 of 3

Manufacturer:

RIBCO S.r.l. Via dei Mille, 12 20061 Carugate (MI)

Italy

Additional 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: 2011

Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2014-06

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-31 : 2013

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

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:

DE/EPS/ExTR15.0067/00

Quality Assessment Report:

HT/CES/QAR11.0001/04



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Certificate No:

IECEx EPS 15.0069

Issue No: 0

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2015-11-02

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

LC... Series enclosure can be used in combination with different certified command and signaling units IECEx INE 14.0055U.

For details see Annex.

CONDITIONS OF CERTIFICATION: NO

Annex:

IECEx EPS 15.0069 - Annex.pdf



Annex to Certificate IECEx EPS 15.0069 Issue No.: 0



Description:

Series LC... are available as switches, commutators, deviation switches, circuit closing switches and as local control stations for command and signaling units. The series includes enclosures of two different dimensions: size 1 and size 3 (extended cover). Up to 4 command and/or signaling units covered by component certificate IECEx INE 14.0055U (or of other control and signaling units with equivalent certification) shall be installed on cover of enclosures series LC... The enclosure of series LCS is made of Stainless Steel AISI 316L with external screws, identification plates and fixing bracket also made of Stainless Steel AISI 316L. In addition, versions in Brass CW608N CuZn38Pb2 (OT58) (series "LCB") or Cast Iron (series "LCC") are available. External paint is available on customer request. The thickness of the paint (if any) must be < 0.2 mm.

Electrical characteristics:

Con interruttori, commutatori, deviatori e inseritori:

With switches, commutators, deviation and circuit closing switches:

		LC 1	LC3 LC3A			
Tensione massima		690 V c.aV ac 660 V c.cV dc		Maximum voltage		
Frequenza nomi	Frequenza nominale		50/60 Hz		Standard frequency	
Corrente nominale Fino a	AC-21A AC-1	20	40	AC-21A AC-1	Standard current Up to	
	DC1	20	25	DC1		
	DC23A	12	16	DC23A		

Con unità di comando e/o segnalazione:

With command and/or signaling units.

	Tensione Massima		Corrente Nominale	Potenza Massima	Frequenza Nominale	
	V.c.a.	V c.c.	Ą	W	Hz	**
Segnalatori con attacco E10, E14, BA9s, BA15s, BA15d	380	380	10	5	50/60	Signaling with socket E10, E14, BA9s, BA15s, BA15d
Manipolatori	690	440	10	0.5	50/60	Manipulators
	V ac	V dc	A	W	Hz	
		imum tage	Standard Current	Maximum Power	Standard Frequency	



Annex to Certificate IECEx EPS 15.0069 Issue No.: 0



Temperature class:

Custod Enclosures with sw	ie con interr	uttori, commutato mutators, deviatio	ri, deviatori ed inseritori n switches, circuit closing switches
Dimensione Size	Classe di	temperatura rature class	Max temp. ambiente Max ambient temp.
	GAS	DUST	(A.T _{-max})
Lc 1 Lc 3	T6	T85°C	Fino a / Up to +60°C
LC 3A	T 5	T100°C	+60°C < A.T . _{max} ≤ +80°C

Tipologia lampada installata/ Max Potenza		emperatura ture class	Max temp. ambiente Max ambient temp.
Installed bulb type/ Max power	GAS	DUST	(A.T. _{max})
CON LAMPADE ALOGENE	T6	T85°C	Fino a / Up to +60°C
WITH HALOGEN LAMPS	T5	T100°C	+60°C < A.T. _{max} ≤ +80°C
CON LAMPADE LED	T6	T85°C	Fino a / Up to +60°C
WITH LED LAMPS	T5	T100°C	+60°C < A.T. _{max} s +80°C
CON SOLO UNITÀ DI COMANDO COMMAND UNITS ONLY	T6	T85°C	Fino a / Up to +80°C

Special conditions for manufacturing and installation:

Manufacturer must assure that the various of internal and external components do not exceed the maximum power dissipation and temperature class limit of the enclosure.

All openings must be equipped with certified cable glands or blind plugs in accordance with installation requirements of IEC 60079-14.

LCB and LCC enclosures must be subjected to routine overpressure test according to IEC 60079-1 with 16 bar.

For use in presence of combustible dusts user must regularly clean external surface of enclosure to avoid any accumulation of dust on the surface (the maximum allowed thickness of dust is equal to 5 mm).

All damaged parts must be changed or repaired exclusively by manufacturer (where not differently specified).

Cable entries must have at least degree of protection IP66 and number of engaged threads must be higher than 5, with a minimum length of 8 mm.