IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx ITS 16.0002U**

Page 1 of 5

Certificate history:
Issue 1 (2021-03-24)
Issue 0 (2016-03-02)

Status: **Current**

Issue No: 2

Date of Issue: 2024-02-22

Applicant: **ROSE Systemtechnik GmbH**
Erbeweg 13 - 15
32457 Porta Westfalica
Germany

Ex Component: Control Accessories - CA Series

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof and Dust Protection by Enclosure**

Marking: Ex db IIC Gb

Ex tb IIIC Db IP66

IECEx ITS 16.0002U

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

Position: **Certification Officer**

Signature:
(for printed version)

Date:
(for printed version)

Date:
2024.02.22
15:14:55 Z

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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 www.iecex.com or use of this QR Code.

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road
Leatherhead
Surrey, KT22 7SA
United Kingdom

IECEx Certificate of Conformity

Certificate No.: **IECEx ITS 16.0002U**

Date of issue: 2024-02-22

Issue No: 2

Manufacturer: **ROSE Systemtechnik GmbH**
Erbeweg 13 - 15
32457 Porta Westfalica
Germany

Manufacturing locations:

ROSE Systemtechnik GmbH
Erbeweg 13 - 15
32457 Porta Westfalica
Germany

Phoenix Mecano Kecskemét
Szent István krt. 24
Kecskemét 6000
Hungary

Phoenix Mecano B.V.
Havenstraat 100
7005 AG Doetinchem
Netherlands

See following pages for more locations

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 component 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/ITS/ExTR16.0002/00 GB/ITS/ExTR16.0002/01 GB/ITS/ExTR16.0002/02

Quality Assessment Report:

DE/EPS/QAR17.0003/60

IECEx Certificate of Conformity

Ex Component(s) covered by this certificate is described below:

The components are a series of Control Accessories - CA Series. Push Button Actuators - CA.PB.00000 Series, Rotary Actuators - CA.RA.00000 Series, LED Indicating lamp - CA.IL.00000 and Thermostat connector - CA.TH.01 and CA.TH.02.

The Control Accessories can be varied in accordance with the requirements of Standards with respect to Group IIC, EPL Gb & Group IIIC, EPL Db for service temperature of “-60°C to +100°C”.

See Annex

SCHEDULE OF LIMITATIONS:

1. The end use of control accessories shall be in accordance with the manufacturer’s ratings and instructions.
2. The control accessories are suitable for service temperature range of “-60°C to +100°C”.
3. The actuators and indicating lamps are suitable for fixing in certified metallic enclosure with threaded holes of required size and adequate thickness to ensure at least 5 full thread engagement and minimum 8mm depth of engagement.
4. The control accessories are suitable for fixing in certified metallic enclosure of Ex db IIA, IIB, IIB+H_2 or IIC of any volume whose routine tests are required to be performed at ≤ 30bar. They are also suitable for fixing in certified metallic enclosure of Ex tb IIIA, IIIB or IIIC of any size.
5. Control Accessories shall be used with moulded gasket of Silicone to ensure ingress protection of IP66.
6. The LED Indicating lamps are suitable for low risk of mechanical danger i.e. 2 Joules.
7. User shall perform earth continuity check between exposed metal part of control accessory and enclosure on which it is fixed.
8. Control Accessories i.e. Indicating lamps, Push button and Rotary actuators may pose risk of electrostatic discharge for Group III applications, hence clean with damp cloth only.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 2

This variation comprises the following changes to the component:

1. Update of the Standard to IEC 60079-31 Ed. 3
2. Addition of new control accessory - M16 MCB operator Type No CA.RA.61000.
3. Addition of 380 - 480VAC rating to indicating lamp module.
4. Modified schedule of limitation as under:

- Hole size M22x1.5 6H substituted by required size due to addition of M16 control accessory.
- Routine pressure test value increased from 20 Bar to 30 Bar in Sr 4 as Control Accessories were tested at overpressures of 30 Bar.

5. Update of the description, drawings and installation manual to reflect the above changes.

Issue 1

This variation comprises the following changes to the component:

1. Revision as per IEC 60079-0:2017 Ed. 7.
2. Changes in Type designation (Suffix “0” has been added).
3. Minimum service temperature updated to “-60°C” instead of “-20°C”.
4. Indicating lamp polycarbonate lens thickness increased.
5. Addition of new control accessory - Thermostat connector CA.TH.01 and CA.TH.02.
6. Push button type Mushroom Stayput pull to release, MCCB operator knob replaced by two new types of knobs, Power switch and HRC MCB operator with new knob added as variation.
7. Update of the drawings to reflect above changes and previously certified sheet 3 deleted as manufacturing (Related) details were in schedule drawing.
8. Added the following in the Schedule of Limitations:

   - User shall perform earth continuity check between exposed metal part of control accessory and enclosure on which it is fixed.
   - Control Accessories i.e. Indicating lamps, Push button and Rotary actuators may pose risk of electrostatic discharge for Group III applications, hence clean with damp cloth only.

IECEx Certificate of Conformity

Additional manufacturing locations:

ADDITIONAL MANUFACTURING LOCATION : SEE ANNEX

Phoenix Mecano Saudi Arabia LLC
Building no 3267
King Abdul Aziz Road Unit No 1
Dharan
Dammam 3451
Saudi Arabia

Phoenix Mecano S.E. Asia Pte. Ltd.
53 Ubi Ave 3#04-01
Colourscan Building
Singapore 408863
Singapore

PHOENIX MECANO (INDIA) PRIVATE LIMITED
Pirangut Industrial Area, Post Ghotawade
Plot 388, Village Bhare, Taluka Mulshi
Pune 412115
India

Phoenix Mecano India Pvt. Ltd
Plant III, Gat No 408, 410 & 412
Village - Urse, Taluka-Maval
Talegaon Urse, Road
Pune 410506
India

Phoenix Mecano Inc.
7330 Executive Way
Frederick MD 21704
United States of America

Rose Systemtechnik Middle East
B.o. Box 8993
Sharjah
United Arab Emirates

Mecano Components Co., Ltd/012
No. 1001, Jiaqian Road, Nanxiang, Jiading District
Shanghai P.R.C. 201802
China

Phoenix Mecano nv
Karrewegstraat 124
Deinze 9800
Belgium

Annex:

SFT-IECEx-OP-19f - Annex 1 for IECEx Certificate of Conformity_1.pdf

Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ITS 16.0002U	Issue No. 2
Annex No. 1		

DESCRIPTION OF COMPONENT

The components are a series of Control Accessories - CA Series. Push Button Actuators - CA.PB.00000 Series, Rotary Actuators - CA.RA.00000 Series, LED Indicating lamp - CA.IL.00000 and Thermostat connector CA.TH.01 and CA.TH.02.

The Indicating lamp lenses are made of polycarbonate. Barrel of actuators and indicating lamp are made of aluminium and alternate material stainless steel. The pins of actuators are made of stainless steel. The actuators (except M16 MCB operators) and indicating lamps are having M22x1.5 6g male threads and M16 MCB operator is having M16x1.5 6g male threads for fixing. The Thermostat connectors made of stainless steel or brass and are having M20x1.5 6g or M25x1.5 6g threads for fixing.

Moulded gasket of Silicone provided for Ingress Protection of IPX6 as per IEC 60529 and IP6X as per IEC 60079-31.

The Control Accessories can be varied in accordance with the requirements of Standards with respect to Group IIC, EPL Gb & Group IIIC, EPL Db for service temperature of “-60°C to +100°C”.

Pushbutton Actuator CA.PB.00000 Series:

CA	PB	00	0	0	0
		10- Shrouded Momentary	0-Standard	0-Green	0-Panel Mount
		20- Mushroom Momentary	1-Medium	1-Red	1-Base Mount
		21- Mushroom Stayput turn to release	2-Big	2-Yellow	
		22- Mushroom Stayput key to release		3-Blue	
		23- Mushroom Stayput pull to release		4-Black	
		80- 2 Position Selector		5-White	
		81- 2 Position Key Selector			
		82- 3 Position Selector			
		83- 3 Position Key Selector			
		XX-Any other variation			

Rotary Actuator CA.RA.00000 Series:

CA	RA	00	0	0	0
		00- MPCB operator	0-Standard	0-By Default	0-Panel Mount
		30- HRC MCB operator	1-Big		1-Base Mount
		40- Power Switch operator	2-Custom built		
		60- MCB operator			
		61- M16 MCB operator			
		70- Switch operator			
		90- MCCB operator			
		XX- Any other variation			

Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ITS 16.0002U	Issue No. 2
Annex No. 1		

LED Indicating lamp CA.IL.00000 series:

CA	IL	00	0	0	0
		50- 24V AC/DC	0-Standard	0-Green	0-Panel Mount
		51- 110 - 240VAC	1-Medium	1-Red	1-Base Mount
		52- 230VAC/DC	2-Big	2-Yellow	
		53- 380 - 480VAC		3-Blue	
		XX- Any other variation		5-White	
				6-Amber	

Thermostat Connector

Type: CA.TH.01

Type: CA.TH.02

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
*Control Accessories - CA Series Sheet 1 of 5 to 5 of 5	Ex.PMI.CA.201	2	31.07.2023
*Instruction Manual for Control Accessories - CA Series	IM.CA.09.2023	-	09.2023

Required Manufacturer Routine Testing		
Test	Title/Description of Test	Standard and Clause
1	None	IEC 60079-1:2014 Clause 16