



Instruction Manual for Control Accessories - CA Series

1.0 Checking upon receipt

- 1.1 Check that control accessories have been supplied with technical documentation consisting of Instruction Manual.
- 1.2 Check physical condition of Ex components. There should be no damage due to transportation.
- 1.3 Due to constrain of space marking on Component is restricted to

 II 2 G 	Ex db IIC Gb
II 2 D ROSE Systemtechnik GmbH 32457	Ex tb IIIC Db IP66
2004 ITS16ATEX18397U CA.XX.00000	IECEX ITS 16.0002U

2.0 Type No Identification is as per certificate and is reproduced hereunder:

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			
		70- Switch operator			
		90- MCCB operator			
		XX- Any other variation			

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	
		XX- Any other variation		3-Blue	
				5-White	
				6-Amber	

Thermostat connector CA.TH.01 and CA.TH.02

Note -

1. Both the types are same except end nut is different in HT.CC.02, which shall accommodate flexible conduit in end nut.
2. Silicone sealant Loctite 5910 shall be used for cementing during assembly.
- 3.. The connectors are available in entry size of M20 and M25.
4. They are used for assembly on certified enclosure to bring out capillary of thermostat housed in the enclosure keeping Ex protection intact.

2.0 Selection & Installation:

- 2.1 These accessories are Ex Components and not apparatus. These shall be used by manufacturers/ assemblers for installation in enclosure subject to schedule of limitation. These can be used by end users for replacement of equivalent components on their existing equipment subject to schedule of limitation.
- 2.2 Indicating lamps and actuators are suitable for installation in M22x1.5 metric threaded holes with minimum 8mm threaded length. If threaded holes are with chamfer, the chamfer length needs to be excluded.
- 2.3 The standard sizes of PB & LED Indicating lamp accessories are suitable for wall thickness of 8 to 16mm. 8mm thickness may not be enough in view of 2.2. In case of higher wall thickness use Medium or big size accessories, which are custom made for higher wall thickness suitably notified on packing.
- 2.4 The standard sizes of Rotary Actuators are suitable for wall thickness of 8mm to 22 mm. 8mm thickness may not be enough in view of 2.2. In case of higher wall thickness use big size or custom-built accessories, which are custom made for higher wall thickness suitably notified on packing.
- 2.5 The Thermostat connector shall be installed as under
 - a. Keep thermostat inside enclosure.
 - b. Pass the sleeve over capillary and locate at proper location.
 - c. Fix sealing washer on head of sleeve using sealant.
 - d. After one hour, inject sealant Loctite 5910 inside sleeve and fill it fully. Keep sleeve in upright position with sealing washer on bottom. Allow to cure for 24 hours.
 - e. Bring capillary outside enclosure with sealed sleeve remaining inside.
 - f. Pass the nipple, IP gasket and end nut over capillary from outside enclosure.
 - g. Tighten the nipple in enclosure.
 - h. Pull sleeve through nipple and tighten end nut on it with IP gasket in between.
 - i. In case of M20 or M25 nipple additional IP seal is required for IP66.

3.0 **Commissioning:** Please ensure proper fitment & functional check before commissioning as part of Ex equipment.

4.0 **Inspection, maintenance & Replacement:** These accessories are not serviceable and hence in case of these being non-functional, they need to be replaced with equivalent OEM components.

5.0 Standards conformity:

IEC 60079-0:2017 & EN IEC 60079-0:2018
IEC 60079-1:2014 & EN 60079-1:2014
IEC 60079-31:2013 & EN 60079-31:2014
IEC 60529:2013 & EN 60529:1992/A2:2013
ATEX Directive 2014/34/EU.

6.0 Schedule of limitation for Ex-Components:

- 6.1 The end use of control accessories shall be in accordance with the manufacturer's ratings and instructions.
- 6.2 The control accessories are suitable for service temperature range of "-60°C to +100°C".
- 6.3 The actuators and indicating lamps are suitable for fixing in certified metallic enclosure with M22x1.5 6H threaded holes of adequate thickness to ensure at least 5 full thread engagement and minimum 8mm depth of engagement.
- 6.4 The control accessories are suitable for fixing in certified metallic enclosure of Ex db IIA, IIB, IIB+H2 or IIC of any volume whose routine tests are required to be performed at ≤ 20 bar. They are also suitable for fixing in certified metallic enclosure of Ex tb IIIA, IIIB or IIIC of any size.
- 6.5 Control Accessories shall be used with moulded gasket of Silicon to ensure ingress protection of IP 66.
- 6.6 The LED Indicating lamps are suitable for low risk of mechanical danger i.e. 2 Joules.
- 6.7 User shall perform earth continuity check between exposed metal part of control accessory and enclosure on which it is fixed.
- 6.8 Control accessories i.e. Indicating lamps, Push button and Rotary actuators may pose risk of electrostatic discharge for group III application and hence clean with Damp Cloth only.

7.0 Contact Address:

ROSE Systemtechnik GmbH
Erbeweg 13-15, D-32457 Porta Westfalica,
GERMANY