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INSTRUCTION MANUAL

CONTROL AND/OR TEST BOX FOR MOTOR-DRIVEN VALVE

TYPE: LEF 1.. / LEF 3.. - PROTECTION "n"

Document ref.:
DQ.82.C

1 – REFERENCES:
European Directive 2014/34/UE
NF EN IEC 60079-0
NF EN 60079-15
NF EN 60079-31

2 – MARKING:
According to European Directive 2014/34/UE.

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LEF --- *

Serial number - Year of manufacture

	II3G	Ex nA II T6 Gc IP*
or	II3GD	Ex nA IIC T6 Gc Ex tc IIIC T85°C Dc IP*

*: Marking is performed according to the equipment and component including in the LEF 1.. and the LE F3..

3 – USER INSTRUCTIONS:
Our equipment is designed to be used in explosive atmospheres, in the presence of gases and/or dust:
group II, category 3, G (zone 2) or GD (zone 22),

In the range of ambient temperatures included

between **-20 °C and +40°C.**

Ensure compatibility between the indications given on the nameplate, the explosive atmosphere to be confronted, the area of use and the ambient and surface temperatures, according to the equipment and component including in the LEF 1.. and the LE F3..

3.1 - Commissioning and Installation:

Installation must be carried out by qualified, competent and skilled personnel.
- Check the condition of the equipment (after storage)
- Any additional drilling or modifications are prohibited.

3.2 - Use:

The equipment is designed for position testing and remote control of manual or motor-driven valves.

3.3 – Assembly and disassembly:

✓ ***Assembly on actuator***:
- Attach the pneumatic couplings to the actuator (Accessories Kit)
- Attach the box to the actuator:

- Flanged box LC3:
- Place the Ring (Accessories Kit) in the spot facing provided under the box
- Place the flat nylon seals on the screws M5 x12 (Accessories Kit) and attach the box to the actuator. Check the cleanliness and condition of the actuator before installing the box (absence of chips, filings, impacts, etc.).
- Place the cam hold on the shaft of the actuator and attach them together (M6x40 screws – Accessories Kit).

- Box on VDI/VDE support:
- Attach the box support to the actuator (4 CHC M5x10 screws – Accessory Kit)

- Wire up accordingly

✓ ***Connection***:
- Connection of terminals according to the indicated wiring drawing
- Pneumatic connection according to the indicated wiring drawing
- Grounding (if option)

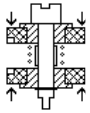
✓ ***Opening / Closing the box***:
- Unscrew / Screw in the 4 screws retaining the cover.
- **LC box**: Before closing the box, check the positioning of the cover shaft in the socket shaft by turning the index: there should be some clearance in rotation
- Check the cleanliness and condition of the sealing plane before closing the box (absence of chips, filings, impacts, etc.).

✓ ***Cable inputs***:
- If one of the tapped ports for installing a cable input is not used, it must be sealed off.
- The protection index of the cable inputs must be at least equal to the protection index of the box.
- Cable inputs or plugs must be of a certified type.

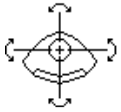
3.4 – Adjustment:
Detection cam adjustment is carried out as follows:

1- Disengage the camera by pushing it as shown in the diagram 1
2- Adjust the detection by turning the cam (diagram 2)
3- Engage the cam on the cam-holder.

1.



2.



3.5 – Maintenance:

Prevent dust deposits from forming by regular cleaning.

This check must be performed at least once each year:
- External components (cable inputs, etc) and seals must not be damaged
- Attaching screws must be tightened properly

3.6 – Repair:

Repairs must only be made by the manufacturer and by personnel authorised by the manufacturer himself.

4 – CHARACTERISTICS:

Pressure: 6 bars Max.

Voltage / Current: According to characteristics of solenoid valve and/or detectors

Protection index: IP65, or IP66, ou IP66/IP67

Maximum compressed air temperature: 40°C

Ambient operating temperature: -20°C ≤ T amb ≤ +40°C

5 – SPECIAL CONDITIONS AND OPERATING LIMITS:

The electrical characteristics of the installed components must be complied with.
Instruction manuals for the components used are available on request.

Subject to installing, maintaining and use in conformity with the intended purpose, regulation, current installation standards (EN 60079-14), instructions defined in this manual and professional practice rules.

Drafted on: 23/6/2020	By : L. GUITTON
Validated on: 23/06/2020	By : J. LE CADRE