

## Encoder type 01-09 Instructions for safe installation

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Safety approvals:	IECEX TUN 09.0017 X & TÜV 09 ATEX 555513 X
Approval type:	Ex db IIB T6 Gb and II 2 G Ex db IIB T6 Gb
W&M approval:	PTB 5.552-92.14
EMC approval	EN61000-6-4 & EN61000-6-2
Manufacturer:	Eltomatic A/S Fabriksvej 6 DK-9490 Pandrup Denmark Tel. + 45 9824 6166 - eltomatic@eltomatic.com

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1. This encoder is Ex approved for installation in hazardous area zones 1 and 2 only.
2. Installation must only be carried out with power OFF! Care must be taken to ensure that the electrical potential balance is maintained when installing the shaft encoder.
3. The encoder cable must be routed and fixed in such a way that it is protected from mechanical damage and splashing. The encoder shaft must be driven via a coupling arrangement that allows some radial and axial movement; otherwise damage to the shaft bearings may occur that would compromise the ATEX/IECEX certification. Shaft rotation maximum 1000 RPM. Do not expose the encoder to splashing fuel or cleaning fluids.
4. The X marking refers to:
  - a. The ambient temperature range for this encoder: -30 °C to +60 °C. Operation of the encoder outside these limits contravenes the IECEX & ATEX certification.
  - b. The power supply (see main label for voltage rating) must be connected in a safe area or suitable certified junction box. The type 01 - 09 encoder is available with fixed or variable voltage range between 4.5 and 32VDC – I max 60mA.
  - c. It is a condition of certification that the flame paths have to comply with the manufacturers drawings and can only be repaired by the manufacturer.
  - d. The M4 screws have the property class 8.8.
5. To ensure safe connection in potentially explosive areas where the shaft encoder is connected to the power supply via a terminal or terminal screws of “ignition protection category e”, the conductive area of the cable ends should be increased by using suitable crimp sleeves or crimp shoes. Recommended cable connection sequence is Shield – Channel outputs – 0VDC - +VDC.
6. Refer to the wiring label or the individual product specification for wire colour coding.
7. There are no maintenance requirements (lifetime lubricated bearings). Repairs can only be carried out by Eltomatic. **DO NOT** open the encoder or attempt to remove the main label; otherwise ATEX & IECEX certification and Warranty will immediately become void.
8. See ATEX & IECEX certificates for further information.

**Do not hesitate to contact Eltomatic in case of any question**