

RFID Rotation Direction Detector

Designated use:

The device is used to determine the direction of rotation, employing RFID (radio access control) technology. The technology guarantees maximum security, reliability and failure-free operation, unlike magnet-based or inductive devices.

Structure and operation:

The device is composed of three transponders placed on the circuit of a rotating element and an RFID reader mounted to a fixed element in close proximity to the transponders.

When rotation occurs, the RFID reader identifies the incoming transponders using a 128-bit code. The device determines the direction of rotation by comparing the order in which the transponders are identified to the order in which the transponders are stored in the device. The determined direction is presented as output voltage.





Unlike magnetic or capacitive rotation direction meters, the device cannot be deceived with magnets, coils or other elements. The reader works only with programmed transponders, applying other transponders does not affect its operation.

Technical Specification:

Power 16 ÷ 32V DC, max 35V

Current draw 45mA

Working temperature -25...+80°C

Rotation speed 0...15 rpm

Voltage range:

Left 0V Idle 12V Right 24V

Advantages:

- easy to mount
- reliable technology
- resistant to magnets and other elements
- resistant to other transponders