

**Brand: DREHMO®**

**Range: DREHMO i-matic Ex-Zone I (II 2 G/D Ex ed II C T4, ATEX)**

**Duty: ON/OFF-Actuators**

**Types: DiM30 ... DiM1000 Ex, DPiM30...DPiM1599 Ex**

## Mechanical Design

- TÜV-Certificate of Conformity as proof of characteristics i.e.:
  - Protection Class IP67
  - Durability of 10.000 switching cycles
  - Salt-Mist- and - SO<sub>2</sub>-Test
  - Operability in ambient temperature range
- Type of duty S2
- Constructive safety Ex c
- Actuator self locking
- Handwheel not moving on motor operation
- Changing from motor to manual operation without declutch mechanism
- max. allowable handwheel forces acc. to DIN 3250, Page 2
- Protection class IP67 acc. to DIN 40050/IEC 144
- Ambient temperature -25 °C to +40 °C
- Output drive for valve connection acc. to DIN EN ISO 5210 respectively DIN EN ISO 5211
- Corrosion protection K3
- Final coating color RAL 5015 (sky blue)

## Electronic equipment

- 3-Phase enclosed motor protected by PTC-elements, voltage 380-420 V / 50 Hz, Insulation class F
- Contactless and continuous measuring of position and torque by means of DREHMO®-combined sensor as absolute value encoder
- Motor starter: mechanically and electrically interlock motor starters
- Integrated heating to avoid condensation
- Automatic phase sequence correction
- Local control station consisting of:
  - Grafical LC Display for local indication of operating mode, valve position (0..100 %) and actuator status indications, actuator data like electronic name plate, parameters, actuator setting, user access, extended diagnosis
  - 3 LEDs as status indications for OPEN (green), CLOSED (yellow), FAILURE (red)
  - 4 multifunctional Pushbuttons for local operation, commissioning, parameter setting and menu navigation
  - Infrared-Interface for data up- and download and parametrisation via Laptop and i-matic Explorer Software

- Digital commands: OPEN/STOP/CLOSE (free parameterisable)
- Indications (free parameterisable):
  - Limit position OPEN/CLOSE
  - Failure
  - Running indication
  - REMOTE/LOCAL-Indication
  - Torque- (Failure) OPEN/CLOSE
  - Analogue position feedback (4-20 mA)
- Electrical connection on terminal strip in Ex e terminal box, cable entry 4xM32x1,5; 2xM20x1,5 with blind plug
- Wiring diagram: iM013-XX-AA-XAA

### Options

- Integrated fieldbus interface Profibus DP
  - Integrated fieldbus interface Profibus DPV2
  - Solid state relays for motors up to 4,5 kW
  - Modbus RTU
  - Fieldbus redundancy
  - LWL-Interface
  - Corrosion protection K4 for aggressive atmospheres
  - Corrosion protection K5 for extremely aggressive atmospheres
  - Protection class IP68
  - Blue tooth – Interface
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