

Brand: DREHMO®

Range: DREHMO-Matic C EX-Zone I (II 2 G EEx ed IIC T4, ATEX)

Duty: Modulating-Actuators

Types: DMCR30 Ex ... DMCR1000 Ex, DMCR...Ex + MSG-R

Mechanical Design

- TÜV-Certificate of Conformity as proof of characteristics i.e.:
 - Protection Class IP67
 - Durability
 - Salt-Mist- and - SO₂-Test
 - Operability in ambient temperature range
- Type of duty S4
- Constructive safety EEx 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
- Pick off gear for adaption to valve stroke
- Stroke-proportional mechanical position indicator
- 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 squirrel cage motor with EEx d PTC-elements, voltage 400 V / 50 Hz, Isolation class F
- Limit- and torque measurement by Limit and torque switches
- Modular compact control MC013 EEx d with:
 - Mechanically interlocked motor starters
 - Control transformer
 - Integrated heating to avoid condensation
 - Electrical restarting locking
 - Automatic phase correction
 - Local control station with selector switch S1 for LOCAL/0/REMOTE and control switch S2 for OPEN/STOP/CLOSE

- Programming by DIL-Switches of:
 - Switch of (Torque or limit)
 - Torque override to drive valve from seat
 - Control by holding or inching contact
- Digital inputs by optical relays (24 VDC) OPEN/STOP/CLOSE
- Digital outputs, potential free by relays (24 V -230 V):
 - Limit position OPEN/CLOSE
 - Failure
 - Running indication
 - REMOTE/LOCAL-indication
 - Torque- (Failure)
 - Indication of end position and failure via LED on control unit
 - Analogue position feedback (4-20 mA)
- Electrical connection on terminal strip in EEx e terminal box, cable entry 4xM32x1,5; 2xM20x1,5 with blind plug
- Wiring diagram: MC013-XX10-AAAA-AAA

Options

- ESD – emergency shut down
- Integrated fieldbus-interface
- Corrosion protection K4 for aggressive atmospheres
- Corrosion protection K5 for extremely aggressive atmospheres
- Protection class IP68