

Specification for electromechanical valve actuators

Manufacturer: DREHMO®

Range: DREHMO-*i-matic*

Duty: Modulating-Actuators (S4 max 35% ED)

Types: DiMR30 ... DiMR1000, DMiR ... + MSG R...

Mechanical Design

- TÜV-Certificate of Conformity as proof of characteristics i.e.:
 - o Protection Class IP67
 - o Durability
 - o Salt-Mist- and - SO₂-Test
 - o Operability in ambient temperature range
- Duty: S4 max 35% ED
- 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 +60 °C
- Output drive for valve connection acc. to DIN/ISO 5210 respectively DIN/ISO 5211
- Corrosion protection K3 color RAL 5015 (sky blue)
- Electrical connection on compact plug
- 3-Phase enclosed motor by PTC-elements, voltage 380-420 V / 50Hz, Insulation class F
- electrical connection via compact plug, cable entry 2xM32x1,5 und 1xM20x1,5 with blind plug

Electronic control unit (imatic Version iM003)

- contactless and continuous measuring of limit and torque by means of DREHMO®-combined sensor as absolute value encoder
- Motor starter: solid state relay (ELR)
- Integral heater 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 (IR)-Interface for data up- and download and parametrisation via Laptop and *i-matic* Explorer Software
- Digital commands: OPEN STOP CLOSE
- Indications:
 - Limit position OPEN/CLOSE AUF/ZU
 - Failure
 - Running indication
 - REMOTE-Indication
 - Torque- (Failure) OPEN/CLOSE

Wiring

- iM003-XX-AA-AAA

Options

- Integral 3step positioner: iM005-XX-AA-AAA