Large stroke actuator for 2-way and 3-way large globe valves DN 200 / DN 250

- Actuating force 12 kN
- Nominal voltage AC 230 V
- Control: 3-point


Type listing

|  | Type | Suitable for <br> Belimo large globe valve |  |
| :---: | :---: | :---: | :---: |
|  | GV12-230-3-T | $\begin{aligned} & \text { H6.W.-.S7 } \\ & \text { H7..W..-S7 } \end{aligned}$ |  |
| Technical data |  |  |  |
| Electrical data | Nominal voltage |  | AC $230 \mathrm{~V}, 50 \mathrm{~Hz}$ |
|  | Nominal voltage ras |  | AC 207 ... 253 V |
|  | Power consumptio | (Dimensioning) | 109 VA |
|  | Connection |  | Terminals, $1.5 \mathrm{~mm}^{2}$ |
| Functional data | Actuating force (C | sing force) | 12 kN |
|  | Control |  | 3-point |
|  | Minimum pulse du | ation | $>0.5 \mathrm{~s}$ |
|  | Manual override |  | Handwheel, temporary |
|  | Nominal stroke |  | 65 mm |
|  | Actuating time |  | $0.79 \mathrm{~mm} / \mathrm{s}$ |
|  | Sound power leve |  | $67 \mathrm{~dB}(\mathrm{~A})$ |
|  | Position indication |  | mechanical ( 30 ...) 65 mm stroke |
|  | Operating mode |  | EN60034-1/A11 S3-50\% ED 1200 c/h |
|  | Lubricant for gear |  | Molyduval Valenzia H2 |
|  | Auxiliary switch |  | 2 (switching capacity $16 \mathrm{~A}, \mathrm{AC} 250 \mathrm{~V}$ ) |
| Safety | Protection class |  | II |
|  | Protection mode |  | IP65 |
|  | EMC |  | CE according to 2004/108/EC |
|  | Low-voltage direct |  | CE according to 2006/95/EC |
|  | Mode of operation |  | Type 1 (EN 60730-1) |
|  | Rated impulse vol |  | 2 kV (EN 60730-1) |
|  | Control pollution d | gree | 3 (EN 60730-1) |
|  | Ambient temperat |  | $-20 \ldots+70^{\circ} \mathrm{C}$ |
|  | Ambient humidity |  | 95\% r.h., non-condensating (EN 60730-1) |
|  | Maintenance |  | Maintenance-free |
| Dimensions / weight | Dimensions |  | See «Dimensions» on page 3 |
|  | Weight |  | Approx. 10.5 kg |



- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by government agency authorities must be observed during assembly.
- The device does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.


## Product features

| Mode of operation | The actuator is activated with a 3-point signal. If the actuator reaches the end position, then the <br> motor will be switched off via (two) load-dependent switches. These switches protect the motor <br> when there are foreign objects between the fitting seat and the cone. |
| :--- | :--- |
| Installation actuator - valve | The actuator is mounted ex-works to the corresponding valve. The power connection is <br> accomplished with form closure. The power transmission is accomplished by means of the <br> coupling that is secured against torsion. |
| Actuator replacement |  |
| If an actuator must be replaced in an emergency situation, then the installation instructions for |  |
| replacement actuators must be followed. |  | accomplished when the handwheel is pressed in.



## Caution <br> - Manual operation may be initiated only <br> 

when the motor is shut off. Switching while the motor is running can cause damage to the stroke actuator!

- When in manual operation, do not fail to note that, when in end position, the handwheel is rotated only to the point that the torque switches are actuated (audible clicking), because otherwise the stroke actuator will be damaged.

High operational reliability
To accomplish this, proceed as follows:

- Unfold rotary handle from the handwheel (A)
- Press in the engagement button for manual operation while rotating the handwheel slightly
(B) $\rightarrow$ Button engages
- Rotate handwheel in clockwise direction $\rightarrow$ Stem moves outward $\downarrow$
- Rotate handwheel anticlockwise $\rightarrow$ Stem moves inward 4

The motor is no longer coupled when the handwheel is pressed in. The handwheel is pushed out automatically when the motor starts and the motor is once again coupled.

The actuator is protected against short circuits, polarity reversal and overloading.
Function indication The stroke is indicated mechanically on the bracket. The indicator adjusts itself automatically.

## Electrical installation

Wiring diagram


## Caution

Electronic relays such as Solid State Relay
 and Triacs must be shielded in conjunction with inductive loads ( 800 V , surges $100 \mathrm{~A} @ 16.7 \mathrm{~ms}$ ).

## Dimensions [mm]




## BELIMO

GV12-24-SR-T
GV12-230-3-T


