



PROFACTOR[®]
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL



PRODUCT
CODE

PF EA 651.AVC05

ROTARY ELECTRIC DRIVE

1. PURPOSE AND SCOPE

The servo-driver PROFACITOR® PF EA 651.AVC05 is intended for automatic control of mixing and separating three-way and four-way rotary valves on command from a controller or thermostat.

2. TECHNICAL SPECIFICATIONS

Torque: 5 Hm

Angle of rotation: 90°

Time of 90° turning: 120 sec

Control: pulsed 3 points (230 V~, 50 Hz)

Acceptable valve body temperature: 0°C...+150°C

Ambient temperature: 0°C...+50°C

Storage temperature: -20°C... +80°C

Power consumption: 2,5 W

Degree of protection: IP42 according to EN 60529

Electrical protection: II according to EN 60730-1

Length of cable: 2 m

Compatible with valve manufacturers:

PROFACITOR — RVM 389, RVM 390

ESBE — VRG (adapter ASCAVMSG), 3MG, 4MG, G, 3F, 4F, BIV, T, TM, H, HG

Sauter — M3R, M4R, MH32F, MH42F

Meibes — ELOMIX EM3, EM4

Barberi — 41D, Progress 460, 461, 450, 451, 475, 476, W28

MUT — VDM3, VM4, VMX

Seltron; Somatherm; Afriso, Acaso, IVAR, WIP, PAW, BRV, Hora, Olymp, Hoval.

3. MOUNTING DIAGRAM

a – Mixing valve

b – Adapter

c – Clamps

d – Actuator housing

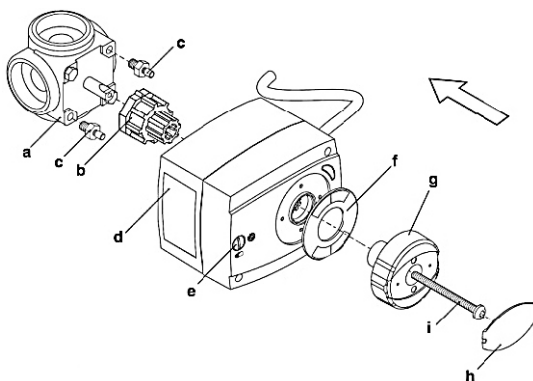
e – Manual control switch

f – Scale

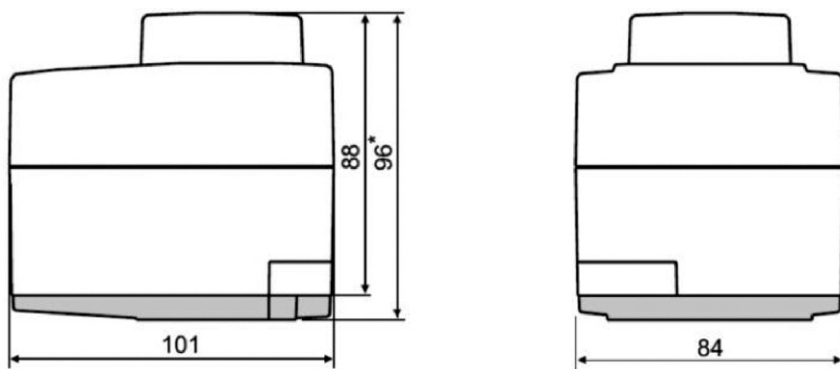
g – Handle

h – Handle cover

i – Fastening to the valve screw

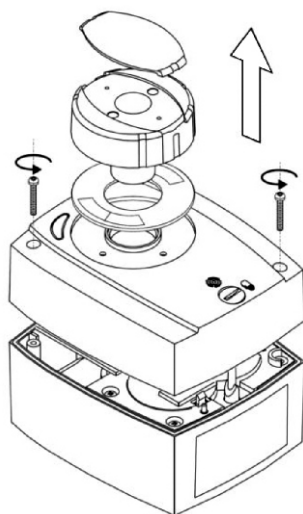


4. DIMENSIONS



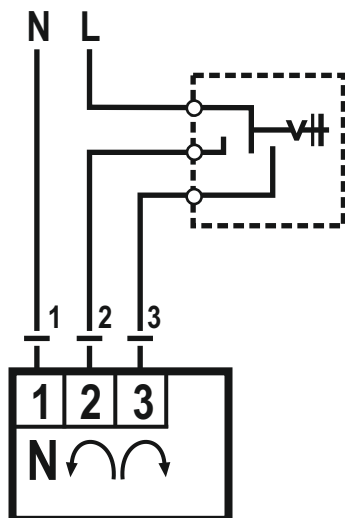
5. ACTUATOR MOUNTING INSTRUCTIONS

5.1. Set the «e» switch with a screwdriver to the manual control position (hand symbol), turn the shaft handle to the middle position on the «f» scale. Having turned off two screws of fastening, remove the shaft handle and a case cover.

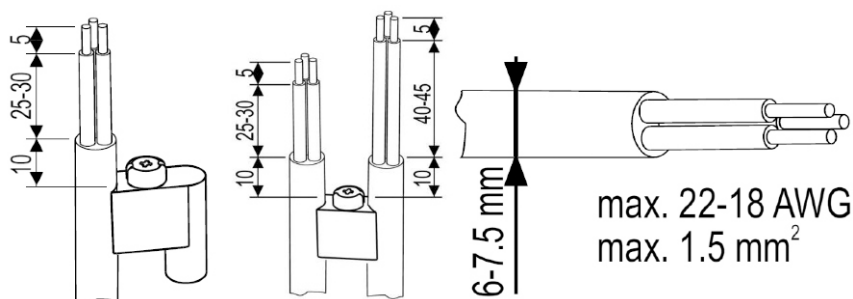


5.2. Check the wiring diagram in accordance with the selected control circuit (1 – blue; 2 – black; 3 – brown).

CONNECTION DIAGRAM

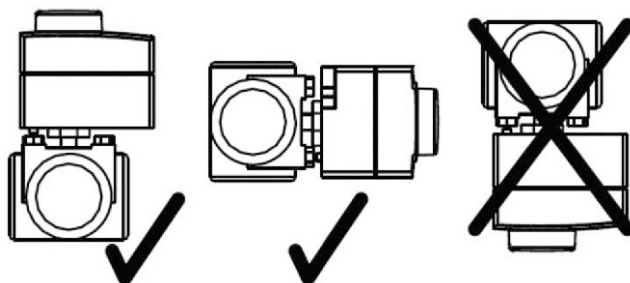


5.3. It is recommended to use the diagrams shown in the pictures when stripping wires.



5.4. Close the actuator housing cover and secure it with screws.

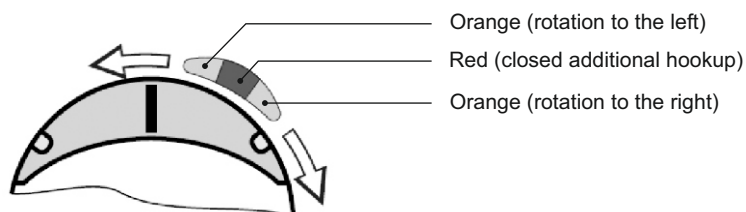
5.5. Place the adapter «b» on the mixing valve shaft «a». Turn the valve shaft so that the actuator arrow is in the middle position of the valve scale. The valve must be positioned in the way that the actuator is not turned upside down.



5.6. Install one of the «c» clamps attached to the actuator to the valve. Attach the actuator to the valve with the adapter. Install the shaft handle «g» (the handle position indicator should coincide with the center of the scale «f»). Secure the actuator to the valve with the screw «i» and install the cover «h».

5.7. The «f» scale can be set to any convenient position in 90° increments. Accordingly, the position of the shaft handle should also be changed.

5.8. During the drive operation, the direction of rotation can be further traced by the LED indicator on the housing. The rotation of the shaft is indicated in orange. In case of operating from a three-position thermostat, the closure of the middle (idle) contact is indicated by a red LED.



6. INSTRUCTIONS OF THE OPERATION AND MAINTENANCE

6.1. The servo drive must be operated in conditions outlined in the technical specifications.

- 6.2. It is not allowed to operate the actuator with a loose fastening screw to the mixing valve.
- 6.3. The drive must be positioned in a such way that moisture cannot get on it from the pipelines.
- 6.4. Contraversion of the drive operation mode reduces its life time.

7. WARRANTY OBLIGATIONS

The warranty period is 24 months from the date of sale to the end consumer. Throughout the entire warranty period, the manufacturer guarantees the proper functioning of the product and its compliance with safety requirements, provided that the consumer follows the rules for storage, transportation, installation, operation, and maintenance of the product. The warranty covers all defects arising through the manufacturer's fault.

The warranty does not cover defects resulting from:

- Violation of storage, transportation, installation, operation, or maintenance conditions;
- Exposure to substances aggressive to the materials of the product;
- Signs of mechanical damage;
- Damage caused by fire, natural disasters, or other force majeure circumstances;
- Damage caused by improper actions of the user;
- Evidence of unauthorized interference with the product design.

The product described in this technical manual is a technically complex device that must be installed by a qualified specialist with appropriate experience working with this type of equipment.

Installation and commissioning must be carried out by an authorized and certified company.

Profactor Armaturen GmbH reserves the right to make changes to the product design that do not affect its technical characteristics or functional features.



INTERNATIONAL WARRANTY CARD

NAME OF THE PRODUCT

PRODUCT CODE, SIZE

QUANTITY

SELLER NAME AND ADDRESS

DATE OF PURCHASE

SELLER STAMP

SELLER SIGNATURE

For the warranty term refer to the Warranty obligation clause in the technical manual

FOLD LINE

FOLD LINE

In case of any claims to the product quality the following documents should be submitted:

1. Application with customer and product details:

- Name of the customer, actual address and phone number
- Article of the product
- Reason for the claim and photo
- Plumbing system where installed (name, address, phone number)

2. Invoice copy and receipt

3. Warranty card

RETURN/EXCHANGE COMMENTS

DATE

SIGNATURE



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