

A44 W0...W2: Motorised actuator

How energy efficiency is improved

Electric cut-off in end position to save energy

Features

- Actuation of control units such as air dampers, gates, butterfly valves, etc. for controllers with a switching output (3-point)
- Synchronous motor with limit switch
- Maintenance-free gear unit
- Positions the control unit to any intermediate position
- Cable gland M20 × 1.5
- Crank for manual adjustment



A44W*F0**



Technical data

Power supply		
Power supply 230 V~		±15%, 50...60 Hz
Power supply 24 V~		±20%, 50...60 Hz
Parameters		
Angle of rotation ¹⁾		90°
Ambient conditions		
Admissible ambient temperature ²⁾		-20...60 °C
Admissible ambient humidity		5...95% rh
Storage and transport temperature		-30...70 °C
Construction		
Screw terminals		For wire of up to 1.5 mm ²
Housing material		Light-metal alloy, cover made of fire-retardant plastic
Standards and directives		
Type of protection ³⁾		IP 43 (EN 60529)
CE conformity according to		
EMC directive		for 230 V
EMC directive 2004/108/EC		EN 61000-6-1, EN 61000-6-2 EN 61000-6-3, EN 61000-6-4

Overview of types

i Admissible damper surface area: the recommended admissible damper area applies to equal-sized, smooth-running air dampers

Type	A44W0F001	A44W0F020	A44W1F001	A44W1F020	A44W2F001	A44W2F020
Torque (Nm)	25	25	30	30	30	30
Holding torque (Nm)	22	22	30	30	30	30
Running time for 90° (s)	30	30	60	60	120	120
Admissible damper surface area (m ²)	8	8	10	10	10	10
Power consumption with 60 Hz	10.4 W	10.4 W	10.4 W	10.4 W	4.8 W	4.8 W
Leistungsaufnahme bei 50Hz_M	9.2 W	9.2 W	9.2 W	9.2 W	3.8 W	3.8 W

¹⁾ Angle of rotation of end shaft is adjustable from min. 30° to max. 320° by means of a switching cam (starting point is freely selectable). If a potentiometer is fitted: Observe angle of rotation of potentiometer

²⁾ At temperatures under 0 °C, use heating resistor (accessory)

³⁾ Type of protection IP 43 only in conjunction with M20 × 1.5 cable gland. Type of protection IP 55 with steel or aluminium cover (accessory) and M20 × 1.5 cable gland


Type	A44W0F001	A44W0F020	A44W1F001	A44W1F020	A44W2F001	A44W2F020
Voltage	230 V~	24 V~	230 V~	24 V~	230 V~	24 V~
Weight (kg)	2.5	2.5	2.5	2.5	2.2	2.2


Accessories


i Potentiometer with rigid coupling: obligatory for certain TÜV-approved burner control systems

i Pluggable auxiliary change-over contacts: switching cam 180° ON or 180° OFF can be positioned at any point over the entire angle of rotation (360°)

Type	Description
0188614000	Fixing bracket for wall mounting
0274605000	Angled ball joint for clamping lever with M10 nut
0294967000	Pivot pin for clamping lever
UNG_0370205001	Heating resistor 5 W, 230 V~
0370205002	Heating resistor 5 W, 24 V~
0370396000	3 insertable auxiliary change-over contacts, 10(2) A 250 V~
0370479000	Steel hood + manual adjuster, hammer enamel finish RAL 1020
0370486000	Clamping lever, complete (including square hub)
0370493000	2 auxiliary contacts Min. load: 100 mA, 24 V~
0370628000	Adaptor plate including 4 M6 countersunk screws for replacing A33 W. with A44 W.
0370638000	Straight ball joint for clamping lever with nut (M10)
0370715001	Cover made of die-cast aluminium with rubber seal, type of protection IP 55
0371290001	Cover, black, made of die-cast aluminium with display window, rubber seal, position indicator and scale, type of protection IP 55
0372460001	Cable screw fitting (plastic M20 × 1,5) incl. locking nut and seal
0370640001	Potentiometer 2000 Ω, 1.0 W with friction coupling
0370640002	Potentiometer 130 Ω, 1.0 W with friction coupling
0370640006	Potentiometer 1000 Ω, 1.0 W with friction coupling
0370641001	Dual-operation potentiometer 130/2000 Ω, 1.0 W with friction coupling
0370641002	Dual-operation potentiometer 2000/2000 Ω, 1.0 W with friction coupling
0370641006	Dual-operation potentiometer 130/140 Ω, 1.0 W with friction coupling
0370644001	Rotation-angle cog set 90° or 180°, with coupling
0370644002	Rotation-angle cog set 120° or 150°, with coupling
0370645006	Potentiometer 1000 Ω, 1.0 W with rigid coupling
0370645007	Potentiometer 5000 Ω, 1.0 W with rigid coupling
0370646001	Rotation-angle cog set 90°, without coupling
0370646002	Rotation-angle cog set 120°, without coupling

 0370396000: (3 auxiliary contacts) Min. load: 100 mA, 24 V~

 0370479000: (steel hood + manual adjuster) olive yellow, hammer enamel finish RAL 1020

 0370493000: (2 auxiliary contacts) Min. load: 100 mA, 24 V~

Description of operation

The control unit to be activated can be moved to any chosen intermediate position by closing the electrical circuit using terminals 1-2 or 1-3. The end shaft rotates in the anti-clockwise direction (viewing the end shaft from the actuator) when the power is applied to terminal 2. The reversible synchronous motor is switched off in the end positions by the limit switches, and the self-locking is then ensured by an integrated magnetic brake. When the crank handle is used, the neutral wire of the motor is interrupted by means of a switch.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of operation" section.

All related product documents must also be adhered to. Changing or converting the product is not admissible.

Engineering and fitting notes

The max. internal equipment for the actuator is: 2 change-over limit switches (standard), 5 auxiliary change-over contacts and 1 dual-operation potentiometer or 1 heating resistor.

The angle of rotation of the end shaft is continuously adjustable between min. 30° and max. 320° by means of a switching cam. When a potentiometer is installed, the related angle of rotation of the end shaft depends on the selected rotation-angle cog set and must be considered when adjusting the limit switch. The end contacts and auxiliary change-over contacts are adjusted centrally on the switch tower, which has a direct mechanical connection to the end shaft.

The connection terminals for the auxiliary functions are located directly on the corresponding limit switches and auxiliary switches, or on the potentiometer (max. 1.5 mm²), and the earthing terminal is on the steel coverplate. The actuator is fixed via 4 M6 holes on the end shaft side. The motorised actuator can be fitted in any position.

Additional technical information

0370640*** **Single-operation potentiometer 1.0 W**

0370641*** **Dual-operation potentiometer 1.0 W**

0370644*** **Rotation-angle cog set**

0370640*** and 0370641***

	Single Ω	Dual Ω
037064*001	2000	130/2000
037064*002	130	2000/2000
037064*003	100	100/100
037064*004	200	1000/1000
037064*005	500	200/200
037064*006	1000	130/140
037064*007	-	130/200
037064*008	-	130/130
037064*009	-	130/500
037064*010	-	130/1000
037064*011	-	130/5000
037064*012	-	130/10000
037064*013	-	1000/2000

0370644***

	Angle
0370644001	90/180
0370644002	120/150
0370644003	135
0370644004	270
0370644005	320

Outdoor installation

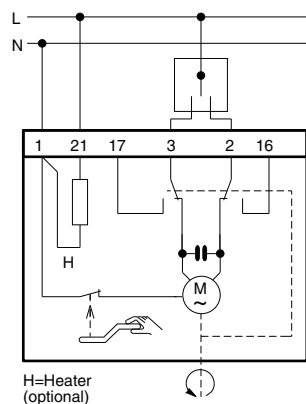
The devices must also be protected from the weather if they are installed outside the building.

Disposal

When disposing of the product, observe the currently applicable local laws.

More information on materials can be found in the Declaration on materials and the environment for this product.

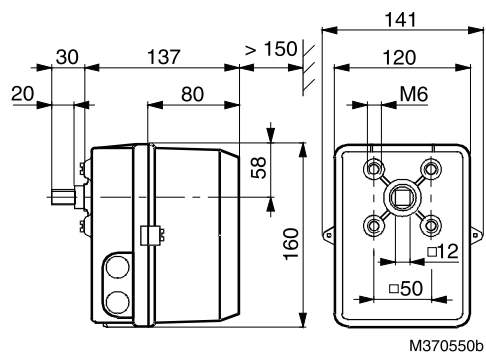
Connection diagram



Accessories

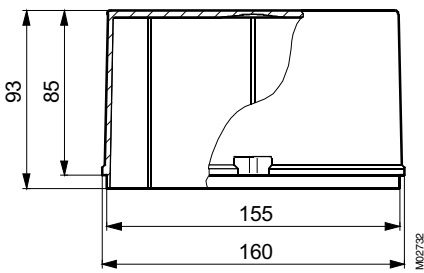
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Dimension drawing

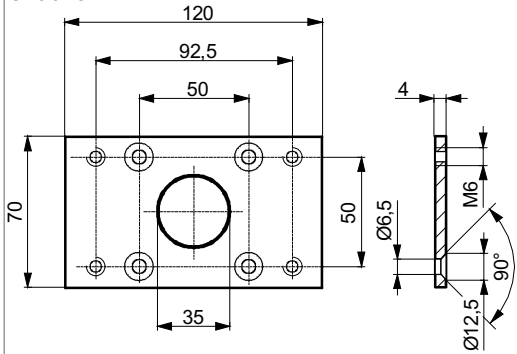


Accessories

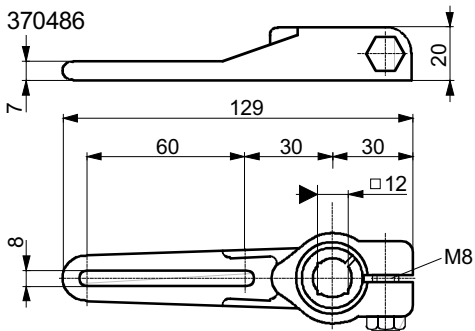
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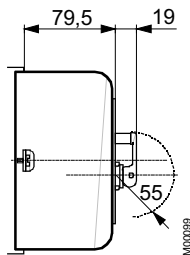
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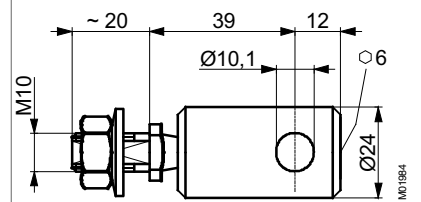
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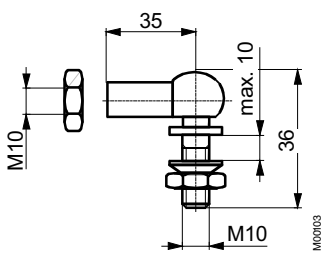
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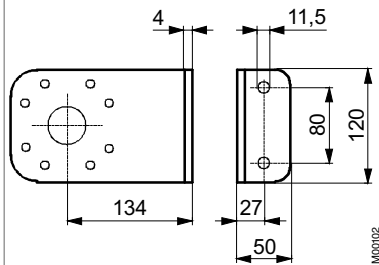
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