

Motorized shut-off damper

DTBCU



Description

Shut-off damper with spring return motor

Consists of a DTU damper with a 24 or 230 V electric motor added.

The motor is controlled by a single-pole breaking contact. The motor has overload protection and stops automatically when the blade has reached its end stop. Although the current is connected, the motor is not damaged if blocked.

When system voltage is connected, the motor starts and tensions the return spring at the same time. The motor stops at its end position and is not damaged by blockage, although system voltage remains.

When the power is cut, the damper closes when the drive motor freewheels and the return spring pulls the blade back to its original position.

If you want the damper to open instead of close, you can undo the two nuts on the spindle clamp, turn the spindle 90° and tighten the nuts again.

In outdoor installation, the motor should be protected from direct UV radiation.

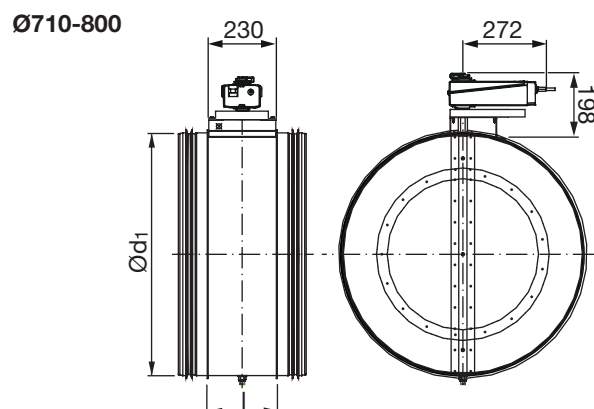
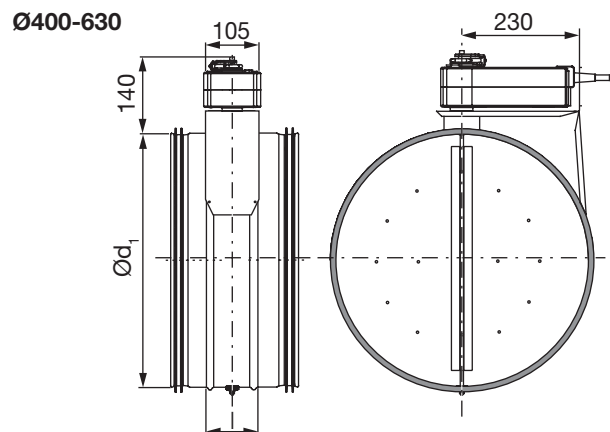
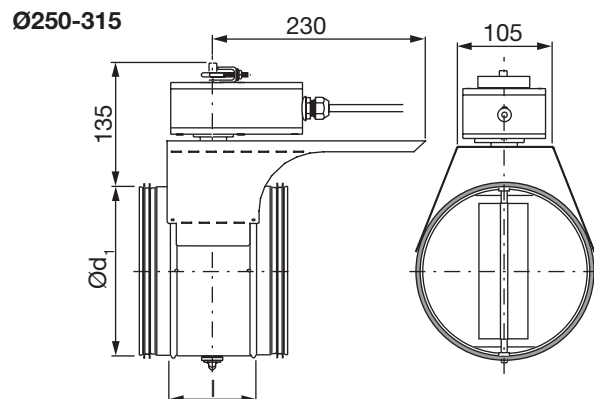
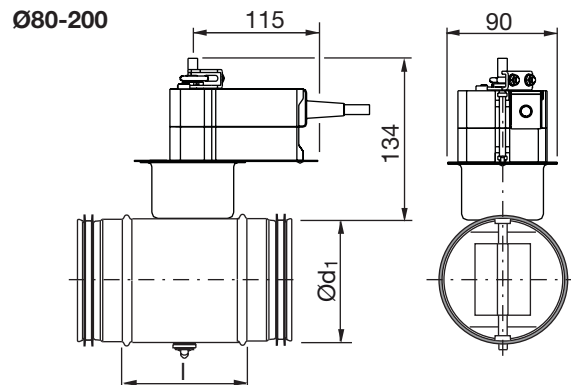
The motor is installed at a distance from the damper, which makes it easy to insulate the ventilation duct.

There is a separate assembly, measuring balancing and maintenance instruction for this product.

Ordering example

Product	DTBCU	200	24	TF
Dimension $\varnothing d_1$				
Voltage				
Motor type				

Dimensions



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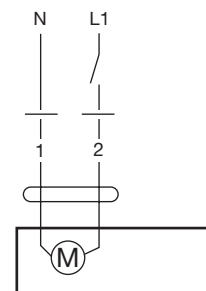
DTBCU

Dimensions

Ød ₁ nom	l mm	m kg	Motor type	Sealing class past closed blade	Pressure class in closed posi- tion
80	100	1,06	TF	4	C
80	100	1,06	TF	4	C
100	100	1,14	TF	4	C
100	100	1,14	TF	4	C
125	100	1,29	TF	4	C
125	100	1,29	TF	4	C
160	100	1,50	TF	4	C
160	100	1,50	TF	4	C
200	100	1,90	TF	4	C
200	100	1,90	TF	4	C
250	100	3,29	LF	4	C
315	100	3,91	LF	4	C
400	100	6,32	SFA	4	B
500	115	8,74	SFA	4	B
630	115	10,5	SFA	4	B
710	230	25,2	EF	4	A
800	230	27,7	EF	4	A

Technical data for the motors

	TF 24	TF 230
Power supply.....	2AC 19,2–28,8 V, 50/60 Hz DC 21,6–28,8 V	AC 85–265 V, 50/60 Hz
Power consumption		
– during opening	2,5 W	2,5 W
– stand-by	1,5 W	1,5 W
For wire sizing	5 VA	5 VA
Connection	Cable 1 m, 2x0,75 mm ²	Cable 1 m, 2x0,75 mm ²
Operating angle, adjustable	Mech. limited to 95°	Mech. limited to 95°
Torque at rated voltage		
– motor	Min. 2 Nm	Min. 2 Nm
– return spring	Min. 2 Nm	Min. 2 Nm
Direction of rotation	Optional through right or left-hand installation L/R	Optional through right or left-hand installation L/R
Position indication	Mechanical	Mechanical
Running time		
– motor	< 75 s (0–2 Nm)	< 75 s (0–2 Nm)
– return spring	< 25 s	< 25 s
Degree of protection.....	IP 42	IP 42
Ambient temperature range	-30 to +50°C	-30 to +50°C

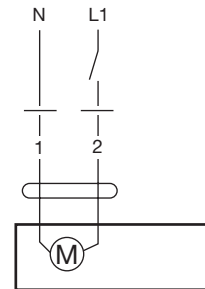


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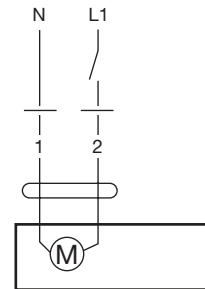
DTBCU

Technical data for the motors

	LF 24	LF 230
Power supply.....	2AC 19,2–28,8 V, 50/60 Hz DC 21,6–28,8 V	AC 198–264 V, 50/60 Hz
Power consumption		
– during opening	5 W	5 W
– stand-by	2,5 W	3 W
For wire sizing	7 VA	7 VA
Connection	Cable 1 m, 2x0,75 mm ²	Cable 1 m, 2x0,75 mm ²
Operating angle, adjustable	Mech. limited to 95°	Mech. limited to 95°
Torque at rated voltage		
– motor	Min. 4 Nm	Min. 4 Nm
– return spring	Min. 4 Nm	Min. 4 Nm
Direction of rotation	Optional through right or left-hand installation L/R	Optional through right or left-hand installation L/R
Position indication	Mechanical	Mechanical
Running time		
– motor	40–75 s (0–4 Nm)	40–75 s (0–4 Nm)
– return spring	app. 20 s	app. 20 s
Sound power level		
– motor	max 50 dB (A)	max 50 dB (A)
– return spring	app. 62 dB (A)	app. 62 dB (A)
Degree of protection.....	IP 54	IP 54
Ambient temperature range	-30 to +50°C	-30 to +50°C



	SFA (both 24 V and 230 V power supply)
Power supply.....	AC 19,2–28,8 V, 50/60 Hz DC 21,6–137,5 V
Power consumption	
– during operation	7 W
– stand-by	3,5 W
For wire sizing	18 VA (I _{max} 20 A @ 5 ms)
Connection	Cable 1 m, 2x0,75 mm ²
Operating angle, adjustable	Mech. limited to 95°
Torque at rated voltage	
– motor	Min. 20 Nm
– spring bias	Min. 20 Nm
Direction of rotation	Optional through right or left-hand installation L/R
Position indication	Mechanical
Running time	
– motor	≤ 75 s (0 ... 20 Nm)
– return spring	≤ 20 s @ -20 ... 50°C / max. 60 s @ -30°C
Sound power level	
– motor	≤ 45 dB (A)
– return spring	≤ 62 dB (A)
Degree of protection.....	IP 54
Ambient temperature range	-30 to +50 °C



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Technical data for the motors

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	EF 24A	EF 230A
Power supply.....	AC 19,2–28,8 V, 50/60 Hz DC 21,6–28,8 V	AC 90–264 V, 50/60 Hz
Power consumption		
– during operation	9,5 W	9 W
– stand-by	4,5 W	4,5 W
For wire sizing	16 VA	21 VA
Connection	Cable 1 m, 2x0,75 mm ²	Cable 1 m, 2x0,75 mm ²
Operating angle, adjustable	Mech. limited to 95°	Mech. limited to 95°
Torque at rated voltage		
– motor	Min. 30 Nm	Min. 30 Nm
– spring bias	Min. 30 Nm	Min. 30 Nm
Direction of rotation	Optional through right or left-hand installation L/R	Optional through right or left-hand installation L/R
	Mechanical	Mechanical
Position indication	Mechanical	Mechanical
Running time		
– motor	≤ 75 s (0–30 Nm)	≤ 75 s (0–30 Nm)
– return spring	≤ 20 s	≤ 20 s
Sound power level		
– motor	≤ 55 dB (A)	≤ 55 dB (A)
– return spring	≤ 71dB (A)	≤ 71dB (A)
Degree of protection.....	IP 54	IP 54
Ambient temperature range	-30 to +50 °C	-30 to +50 °C

