

Actuators for ventilation dampers

Rotary actuators in ventilation are mainly used in air dampers, including fire dampers. In the case of fire protection solutions, the actuator is tested together with the damper for compliance with the harmonized standard and is a part of the damper. This means that another model cannot be used, replaced on site or retrofitted.

In the case of regulating dampers, the choice of actuator is less restricted, of course it must have the proper torque, site-specific voltage (230V or 24V) and / or project-required control (e.g., modbus protocol).

Selection of an actuator for ventilation dampers:

Torque	Max damper size		Alnor	Belimo	Siemens	
	m ²	∅				
Rotary actuators, with return spring:						
4 Nm	0,8		500	DM-FL-05-24 DM-FL-05-230	LF24 LF230	GPC1xx.1A GPC3xx.1A
5 Nm	1,0		560	DM-FL-05-24 DM-FL-05-230		
10 Nm	2,0		710		NF24A NF230A	GMA1xx.1E GMA3xx.1E
20 Nm	4,0				SF24A SF230A	GCA1xx.1E GCA3xx.1E
Rotary actuators, without return springj:						
2 Nm	0,4		355		CM24 CM230	GSD1xx.1A GSD3xx.1A
5 Nm	1,0		560		LM24A LM230A LMC24A LMC230A	GDB1xx.1E GDB3xx.1E
6 Nm	1,2		560	DM-ML-06-24 DM-ML-06-230		
8 Nm	1,5		630	DM-ML-08-24 DM-ML-08-230		
10 Nm	2,0		710		NM24A NM230A	GLB1xx.1E GLB3xx.1E
20 Nm	4,0				SM24A SM230A	GBB1xx.1E GBB3xx.1E
Additional options:						
				S - auxiliary output	S - auxiliary output	
				SR - modulating control	SR - modulating control	
				L / R - direction of rotation (for CM series)	L / R - direction of rotation (for CM series)	
				C = fast (np. LMC)	C = fast (np. LMC)	

Auxiliary output (S) - means an auxiliary contact that can e.g. indicate the damper position after connecting it to the building's BMS control panel.

ON / OFF or 3-point - depending on the electrical connection, available positions are closed, open or 50% open (3-point connection). Standard option for DM-ML-08-24.

Modulating control – control system using an external 0..10V (or 0..20mA) signal, which enables a modulating (percentage) damper setting, e.g. a 2V signal means 20% open. This is the principle of operation of actuators in VAV regulators, i.e. variable flow. Examples = DM-ML-06-230-RS or LM24A-SR.

Ventilation damper actuators

DM-ML-08



Description

The DM-ML-08 actuator enables remote operation of a ventilation damper.

The DM-ML-08 actuators with a torque of 8 Nm are intended for multi-blade square dampers with a cross-sectional surface area up to 1.5m² and round ventilation dampers up to 630 mm in diameter.

These actuators are designed for high air pressure ventilation systems.

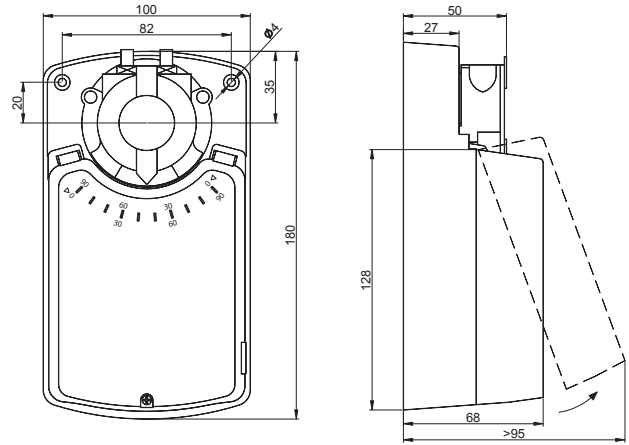
The DM-ML-08 actuators can be installed on standard DATML and DATM round ventilation dampers rated at air tightness class 4 and DASM / DASML round regulating dampers, which as a result of the integrated gaskets are fit for ventilation systems in air tightness class D as per EN 12237:2005.

Product code example

Product code: **DM-ML-08 - 230**

type _____
voltage _____

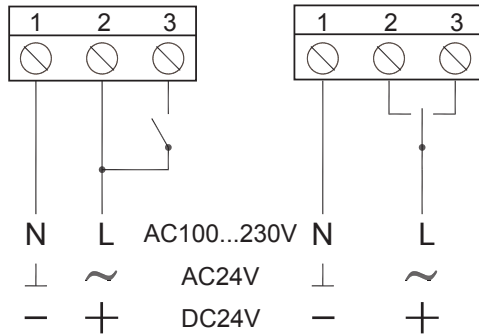
Dimensions



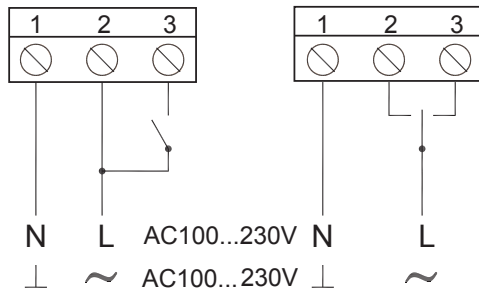
DM-ML-08

Technical specifications

DM-ML-08-24



DM-ML-08-230



	DM-ML-08-24	DM-ML-08-230
Power supply	AC 24 V 50/60 Hz DC 24 V	AC 230 V 50/60 Hz
Power input	3.5 W	4.5 W
Wiring size selection	7 VA	9 VA
Core size	max. 2.0 mm ²	max. 2.0 mm ²
Torque	8 Nm	8 Nm
Sense of rotation	selectable	selectable
Angle of rotation	0 to 90° (max. 95°)	0 to 90° (max. 95°)
Turning time	30 s	30 s
Sound level	45 dB (A)	45 dB (A)
Position indicator	mechanical	mechanical
Protection rating	IP44	IP44
Ambient temperature	-20 to +50°C	-20 to +50°C
Max. humidity	95% RH, w/o condensation, as per EN 60730-1	95% RH, w/o condensation, as per EN 60730-1
Overload protection	automatic reset	automatic reset