

- For operation of air control dampers in HVAC system
- Torque: 5Nm
- Nominal voltage: AC/DC 24V
- Control: Open/Close or 3-point

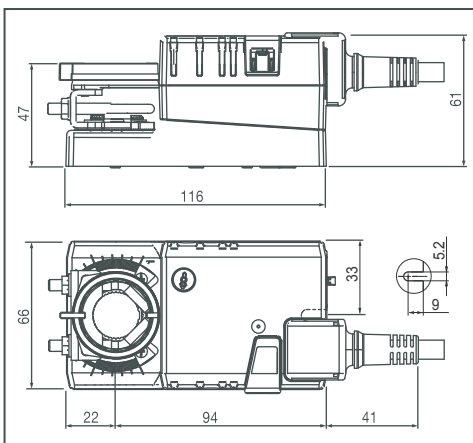


Technical data

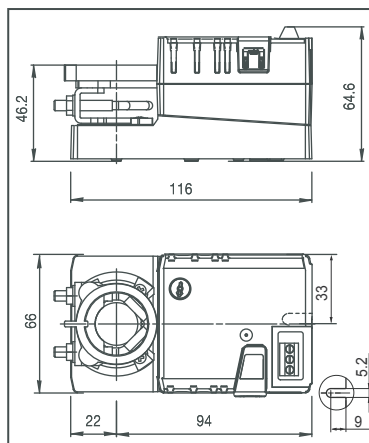
Electrical data	Nominal voltage	AC 24V 50/60Hz, DC 24V	
	Nominal voltage range	AC/DC 19.2...28.8V	
	Power consumption	1W @ nominal torque / 0.2W @ holding	
	For transformer sizing	1.5VA	
	Auxiliary switch (-S)	1 SPDT, 1mA...3(0.5)A, AC 250V, adjustable	
	Connection	-motor -auxiliary switch (-S) -terminals (-T)	Cable 1m, 3x0.75mm ² Cable 1m, 3x0.75mm ² Max. 3x1.5mm ²
Functional data	Torque	5Nm @ nominal voltage	
	Direction of rotation	Selectable by switch	
	Manual override	Gearing latch disengaged by push button, self-resetting	
	Angle of rotation	Max. 95°, adjustable by mechanical stops	
	Running time	150s	
	Sound power level	Max. 35dB(A)	
	Position indicator	Mechanical, remote visible	
Working conditions	Protection class	III (safety extra-low voltage)	
	Degree of protection	LMU24(-S/-F) IP54 LMU24-T IP20	
	EMC	CE according to 89/336/EEC	
	Mode of operation	Type 1 (EN 60730-1)	
	Ambient temp.	-30...+50°C	
	Non-operation temp.	-40...+80°C	
	Humidity	5...95% RH, non-condensing	
	Maintenance	Maintenance-free	
	Dimensions / weight	Dimensions (LxWxH)	See "Dimensions"
		Shaft length	Min. 37mm
Shaft		LMU24(-S/-T) $\varnothing 6 \dots 20\text{mm}$ LMU24-F 8x8mm	
Weight		0.5kg	

Dimensions [mm]

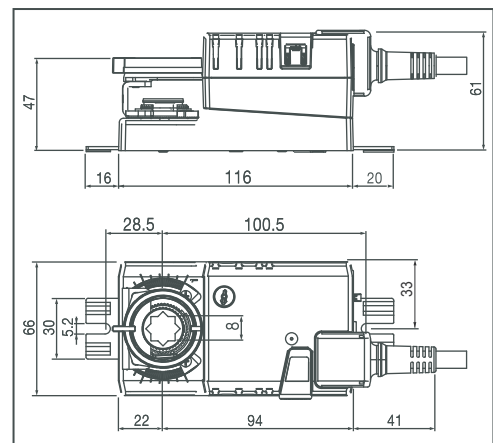
LMU24(-S)



LMU24-T



LMU24-F



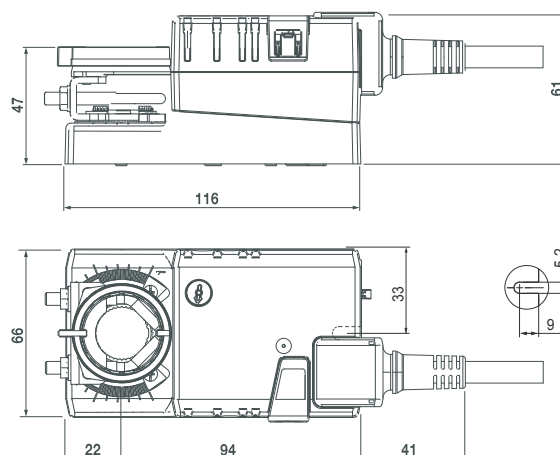
- For operation of air control dampers in HVAC system
- Torque: 5Nm
- Nominal voltage: AC/DC 24V
- Control signal: DC (0)2...10V
- Position feedback: DC 2...10V



Technical data

Electrical data	Nominal voltage	AC 24V 50/60Hz, DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	1W @ nominal torque / 0.4W @ holding
	For transformer sizing	2VA
Functional data	Connecting cable	Cable 1m, 4x0.75mm ²
	Torque	5Nm @ nominal voltage
	Control signal Y	DC (0)2...10V @ input impedance 100kΩ
	Position feedback signal U	DC 2...10V @ max. 1mA
	Position accuracy	±5%
	Direction of rotation	Selectable by switch
	Manual override	Gearing latch disengaged by push button, self-resetting
	Angle of rotation	Max. 95°, adjustable by mechanical stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indicator	Mechanical, remote visible
Working conditions	Protection class	III (safety extra-low voltage)
	Degree of protection	IP54
	EMC	CE according to 89/336/EEC
	Mode of operation	Type 1 (EN 60730-1)
	Ambient temp.	-30...+50°C
	Non-operation temp.	-40...+80°C
	Humidity	5...95% RH, non-condensing
Dimensions / weight	Maintenance	Maintenance-free
	Dimensions (LxWxH)	See "Dimensions"
	Shaft	⌀ 6...20mm
	Weight	0.5kg

Dimensions [mm]



- For operation of air control dampers in HVAC system
- Torque: 5Nm
- Nominal voltage: AC 100...240V
- Control: Open/Close or 3-point

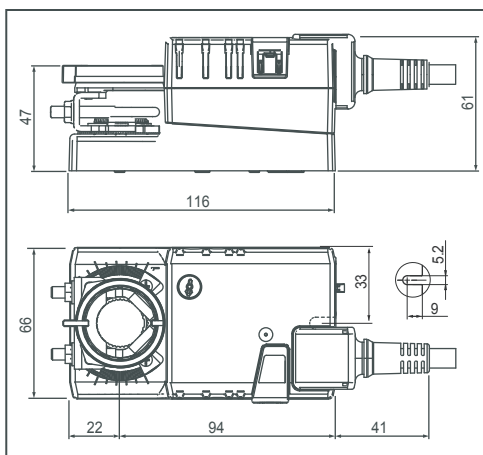


Technical data

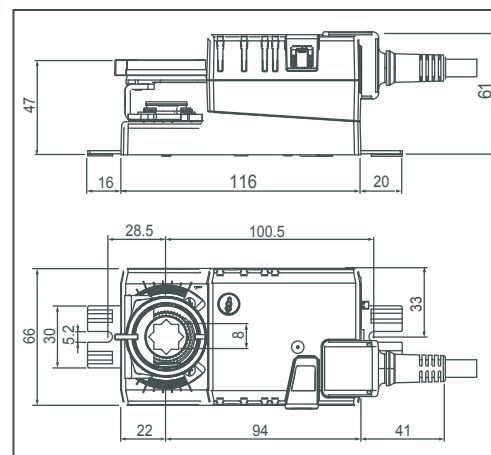
Electrical data	Nominal voltage	AC 100...240V 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	1.5W @ nominal torque / 0.5W @ holding
	For transformer sizing	3.5VA
	Auxiliary switch (-S)	1 SPDT, 1mA...3(0.5)A, AC 250V, adjustable
	Connection	-motor Cable 1m, 3x0.75mm ² -auxiliary switch (-S) Cable 1m, 3x0.75mm ²
Functional data	Torque	5Nm @ nominal voltage
	Direction of rotation	Selectable by switch
	Manual override	Gearing latch disengaged by push button, self-resetting
	Angle of rotation	Max. 95°, adjustable by mechanical stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indicator	Mechanical, remote visible
	Working conditions	Protection class
Degree of protection		IP54
EMC		CE according to 89/336/EEC
Low voltage directive		CE according to 73/23/EEC
Mode of operation		Type 1 (EN 60730-1)
Ambient temp.		-30...+50°C
Non-operation temp.		-40...+80°C
Humidity		5...95% RH, non-condensing
Maintenance		Maintenance-free
Dimensions / weight		Dimensions (LxWxH)
	Shaft length	Min. 37mm
	Shaft	LMU230(-S) $\varnothing 6 \dots 20\text{mm}$ LMU230-F 8x8mm
	Weight	0.55kg

Dimensions [mm]

LMU230(-S)



LMU230-F



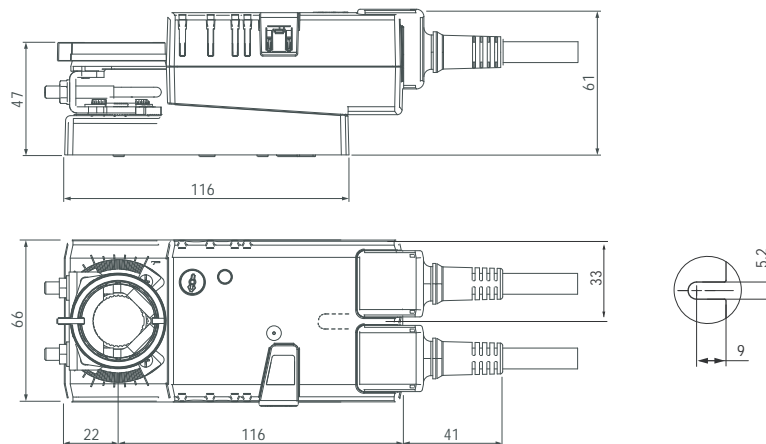
- For operation of air control dampers in HVAC system
- Torque: 5Nm
- Nominal voltage: AC 100...240V
- Control signal: DC (0)2...10V
- Position feedback: DC 2...10V



Technical data

Electrical data	Nominal voltage	AC 100...240V 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	2W @ nominal torque / 1W @ holding
	For transformer sizing	4VA
	Connecting cable	-power supply -signal
Functional data	Torque	5Nm @ nominal voltage
	Control signal Y	DC (0)2...10V @ input impedance 100kΩ
	Position feedback signal U	DC 2...10V @ max. 1mA
	Position accuracy	±5%
	Direction of rotation	Selectable by switch
	Manual override	Gearing latch disengaged by push button, self-resetting
	Angle of rotation	Max. 95°, adjustable by mechanical stops
	Running time	150s
	Sound power level	Max. 35dB(A)
	Position indicator	Mechanical, remote visible
Working conditions	Protection class	II (Totally insulated)
	Degree of protection	IP54
	EMC	CE according to 89/336/EEC
	Low voltage directive	CE according to 73/23/EEC
	Mode of operation	Type 1 (EN 60730-1)
	Ambient temp.	-30...+50°C
	Non-operation temp.	-40...+80°C
Dimensions / weight	Humidity	5...95% RH, non-condensing
	Maintenance	Maintenance-free
	Dimensions (LxWxH)	See "Dimensions"
	Shaft	⌀ 6...20mm
	Weight	0.7kg

Dimensions [mm]



Wiring diagrams: Open/Close actuators—parallel connection possible, please note the performance data.

1-wire control

Connection via safety isolated transformer

Direction of rotation (while direction of rotation reverses)

1 2 3 S1 S2 S3

LMU24-S, NMU24-S, SMU24-S
0...100%

LMU24(-T/-F), NMU24(-T), SMU24, GMU24, LMQU24, NMQU24, SMQU24

N L AC 100...240V

1 2 3 S1 S2 S3

LMU230-S, NMU230-S, SMU230-S
0...100%

LMU230(-F), NMU230, SMU230(-F), SMDU230, GMU230

2-wire control

Connection via safety isolated transformer

Direction of rotation (while direction of rotation reverses)

1 2 3 S1 S2 S3

LMU24-S, NMU24-S, SMU24-S
0...100%

LMU24(-T/-F), NMU24(-T), SMU24, GMU24*

N L AC 100...240V

1 2 3 S1 S2 S3

LMU230-S, NMU230-S, SMU230-S
0...100%

LMU230(-F), NMU230(-F), SMU230(-F), SMDU230, GMU230*

*GMU.. only for Open/Close application.

Wiring diagram: Modulating actuators—parallel connection possible, please note the performance data.

Connection via safety isolated transformer

1 2 3 5 Y U

LM(Q)U24-SR, NM(Q)U24-SR, SM(Q)U24-SR, GMU24-SR

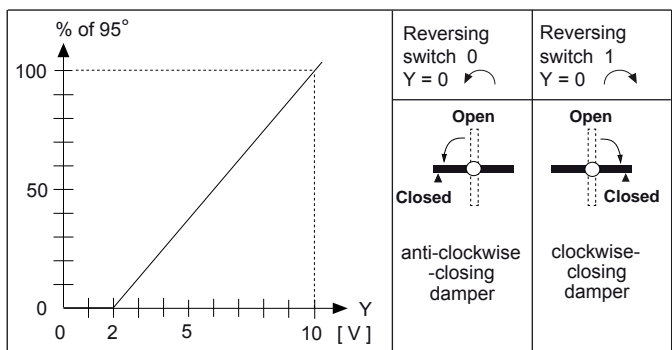
N L AC 100...240V

AC 24V power output

1 2 3 5 Y U

LMU230SR, NMU230SR, SMU230SR

Position - signal voltage



Direction of rotation