

- For operation of air control dampers in HVAC system
- Torque: 2Nm
- Nominal voltage: AC/DC 24V
- Control: Open/Close or 3-point

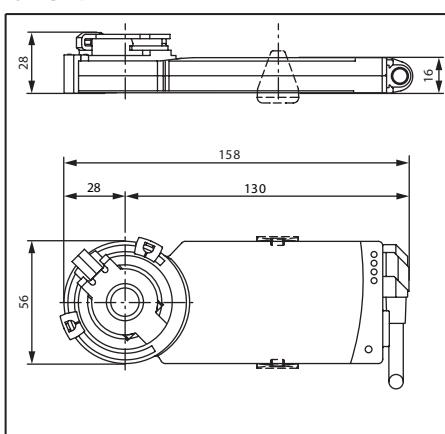


Technical data

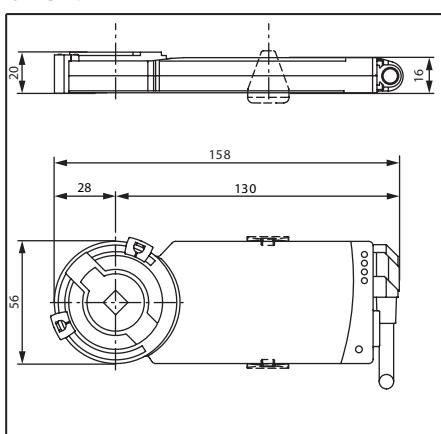
Electrical data	Nominal voltage	AC 24V 50/60Hz, DC 24V
	Nominal voltage range	AC/DC 19.2...28.8V
	Power consumption	0.5W @ nominal torque / 0.2 W @ holding
	Wire/transformer sizing	1VA
Functional data	Connection: -T Cable	Terminals for 3x1.5mm ² CU wire or 3x1.5mm ² CU litz wires 1m, 3x0.75mm ²
	Torque	2Nm
	Direction of rotation	Dependent on electrical installation
	Manual override	Gear disengagement by magnet
Working conditions	Angle of rotation: Without limiters With limiters	Endless Fixed 315° or 0...287.5° with mechanical end stops, can be adjusted in 2.5° increments
	Running time	75s/90°
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable with integrated magnet for gear disengagement
Dimensions / weight	Protection class	III (safety extra-low voltage)
	Degree of protection: Terminal(-T) Cable	IP20 IP54 in any directions
	EMC	CE according to 89/336/EEC
	Mode of operation	Type 1 to EN 60730-1
Dimensions / weight	Ambient temperature	-30...+50°C
	Non-operation temperature	-40...+80°C
	Humidity test	95%RH, non condensing (EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / weight	Dimensions (L x W x H)	See "Dimensions"
	Shaft	Ø 12.7mm
	Form fit (-F8) (-F10)	8x8mm 10x10mm
	Weight	Approximately 130...220g

Dimensions [mm]

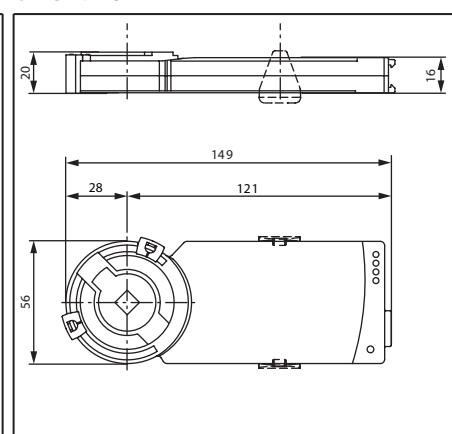
CMU24



CMU24-T



CMU24-F8-T



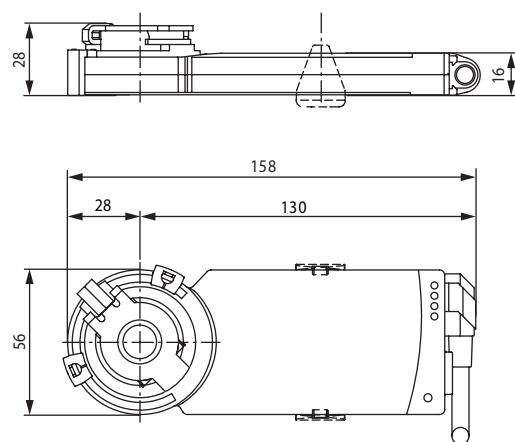
- For operation of air control dampers in HVAC system
- Torque: 2Nm
- Nominal voltage: AC/DC 24V
- Control signal: DC 2 (0)...10V
- Position feedback: DC 2...10V



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 / 0.5W @ holding
	Wire/transformer sizing	2VA
	Connection	Cable 1m, 4 x 0.75mm ²
Functional data	Torque	2Nm
	Control signal	DC 2(0)...10V
	Feedback signal	DC 2...10V
	Position accuracy	±5%
	Direction of rotation	Y= 0V right end stop position
	Manual override	Gear disengagement by magnet
	Angle of rotation	Max. 95°, adjustable by mechanical steps
	Running time	75s
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable with integrated magnet for gear disengagement
Working conditions	Protection class	III (safety extra-low voltage)
	Degree of protection: Cable	IP54 in any directions
	EMC	CE according to 89/336/EEC
	Mode of operation	Type 1 to EN 60730-1
	Ambient temperature	-30...+50°C
	Non-operation temperature	-40...+80°C
	Humidity test	95%RH, non condensing (EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / weight	Dimensions (L x W x H)	158x56x28mm
	Shaft diameter	Ø 12.7mm
	Weight	Approximately 220g

Dimensions [mm]



- For operation of air control dampers in HVAC system
- Torque: 2Nm
- Nominal voltage: AC 100...240V
- Control: Open/Close or 3-point

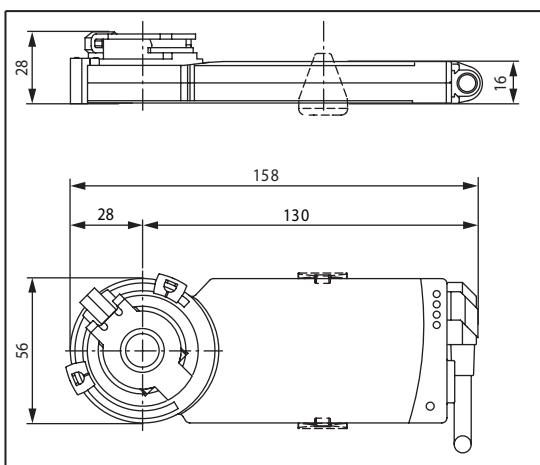


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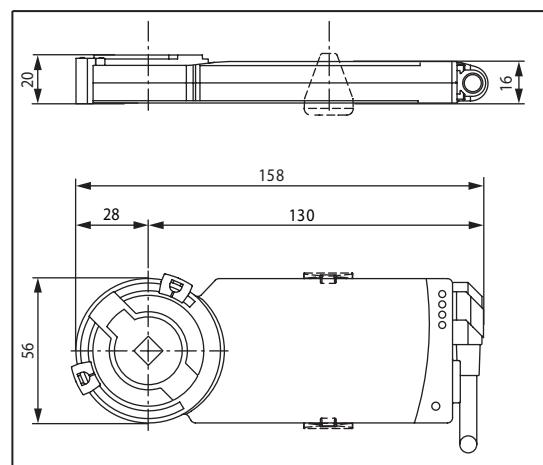
Electrical data	Nominal voltage	AC 100...240V 50/60Hz
	Nominal voltage range	AC 85...265V
	Power consumption	1.5W running / 1W @ holding
	Wire/transformer sizing	3VA
Functional data	Connection	Cable 1m, 3x0.75mm ²
	Torque	2Nm
	Direction of rotation	Dependent on electrical installation
	Manual override	Gear disengagement by magnet
Working conditions	Angle of rotation: Without limiters	Endless
	With limiters	Fixed 315° ↗ or 0... 287.5° ↗ with mechanical end stops, can be adjusted in 2.5° ↗ increments
	Running time	75s/90° ↗
	Sound power level	Max. 35dB(A)
Dimensions / weight	Position indication	Mechanical, pluggable with integrated magnet for gear disengagement
	Protection class	II (Totally insulated) □
	Degree of protection	IP54 in any directions
	EMC	CE according to 89/336/EEC
Dimensions / weight	Low voltage directive	CE according to 2006/95/EC
	Mode of operation	Type 1 to EN 60730-1
	Ambient temperature	-30...+50°C
	Non-operation temperature	-40...+80°C
Dimensions / weight	Humidity test	95%RH, non condensing (EN 60730-1)
	Maintenance	Maintenance-free
	Dimensions (L x W x H)	See "Dimensions"
	Shaft	Ø 12.7mm
Dimensions / weight	Form fit (-F8)	8x8mm
	(-F10)	10x10mm
Dimensions / weight	Weight	Approximately 220g

Dimensions [mm]

CMU230



CMU230-F8



- For operation of air control dampers in HVAC system
- Torque: 2Nm
- Nominal voltage: AC 230V
- Control: Open/Close

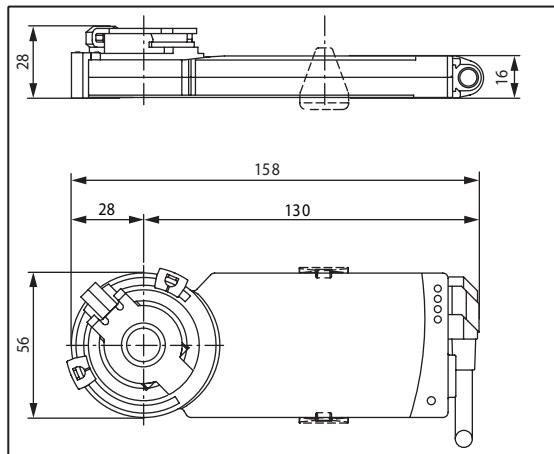


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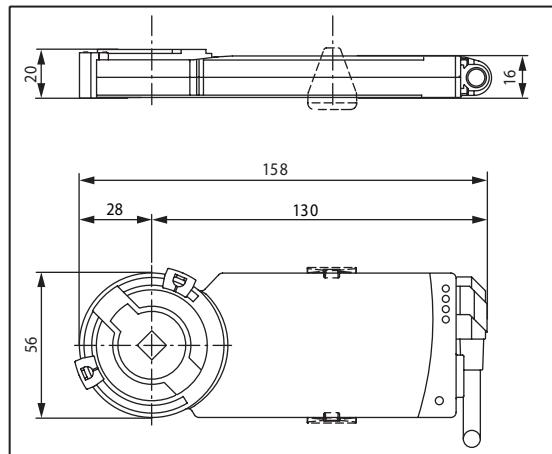
Electrical data	Nominal voltage	AC 230V 50Hz
	Nominal voltage range	AC 207...253V
	Power consumption in operation	1.5W @ nominal torque / 1.5W @ holding
	Wire/transformer sizing	8.5VA
Functional data	Connection	Cable 1m, 3x0.75mm ²
	Torque	2Nm
	Direction of rotation	Dependent on electrical installation
	Manual override	Gear disengagement by magnet
	Angle of rotation: Without limiters	Endless
	With limiters	Fixed 315° ↗ or 0...287.5° ↗ with mechanical end stops, can be adjusted in 2.5° ↗ increments
	Running time	75s/90° ↗
	Sound power level	Max. 35dB(A)
	Position indication	Mechanical, pluggable with integrated magnet for gear disengagement
	Protection class	II (totally insulated) □
Working conditions	Degree of protection	IP 54 in any directions
	EMC	CE according to 89/336/EEC
	Low voltage directive	CE according 2006/95/EC
	Mode of operation	Type 1 to EN 60730-1
	Ambient temperature	-30...+50°C
Dimensions / weight	Non-operation temperature	-40...+80°C
	Humidity test	95%RH, non condensing (EN 60730-1)
	Maintenance	Maintenance-free
	Dimensions (L x W x H)	See "Dimensions"
	Shaft	∅ 16...12.7mm
	Form fit (- F8)	8x8mm
	(- F10)	10x10mm
Weight		Approximately 220g

Dimensions [mm]

CMU230-RES



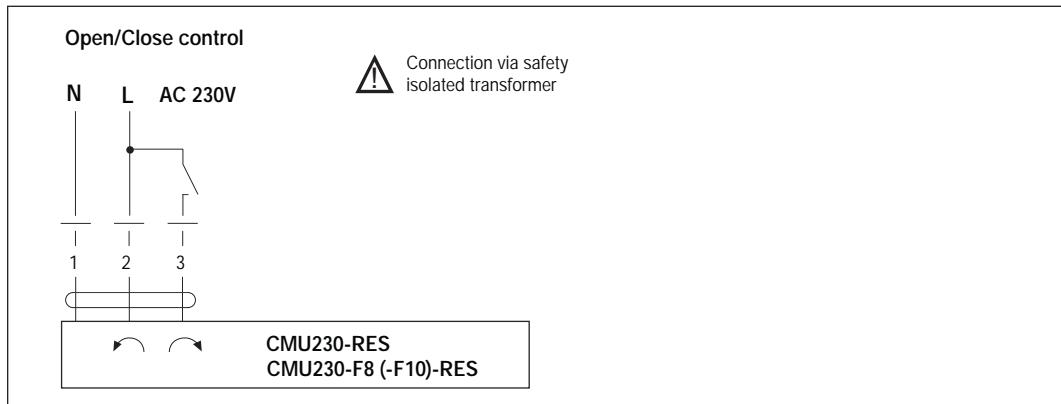
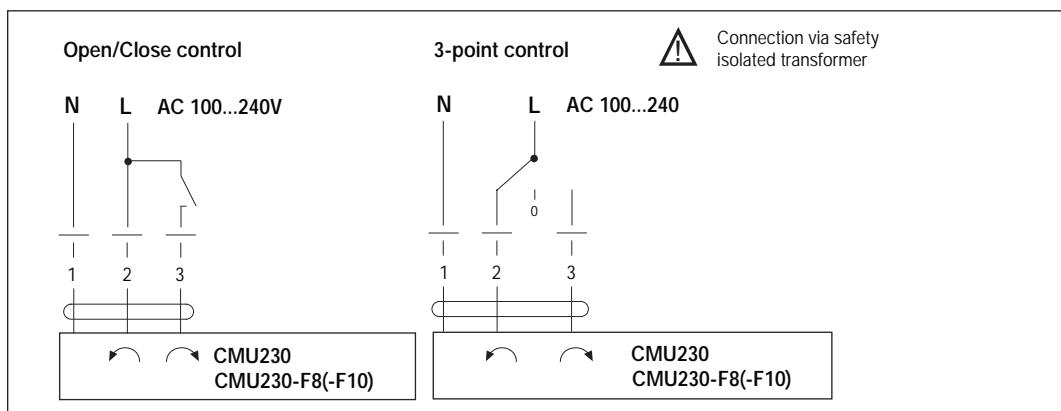
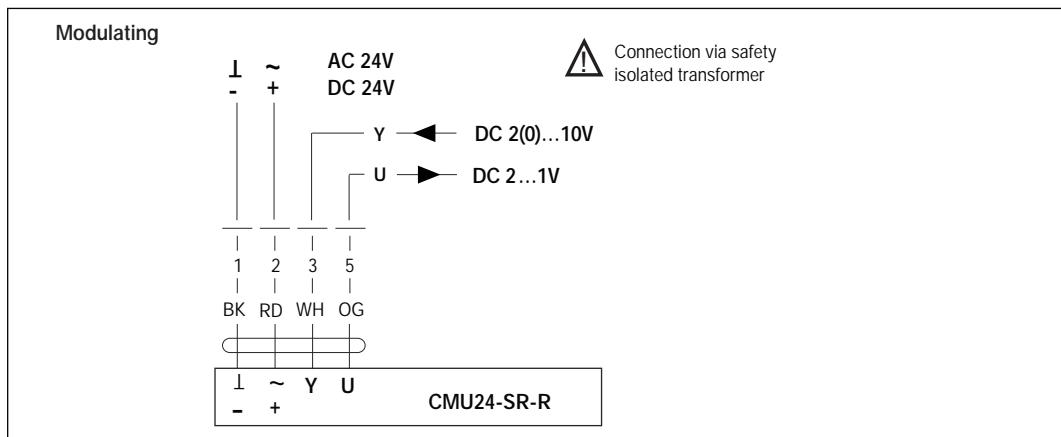
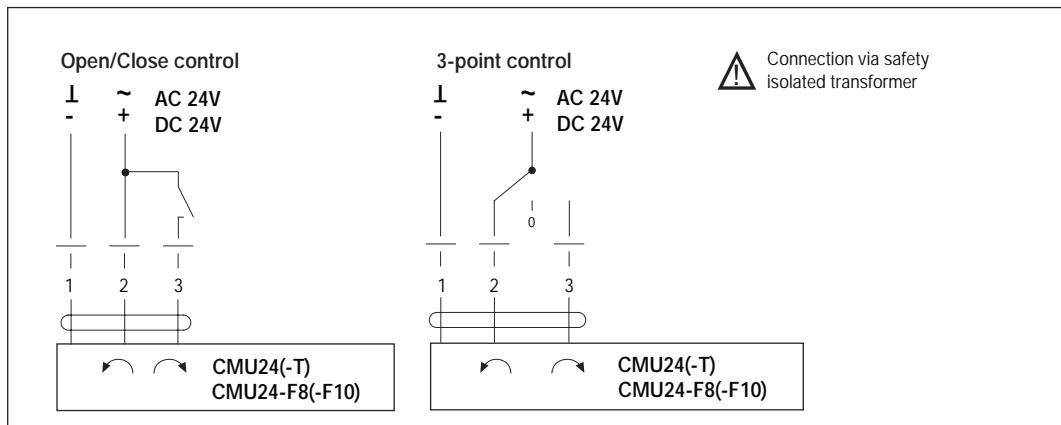
CMU230-F8-RES



Wiring diagrams : CMU.. series actuators

Notes:

- Parallel connection of several actuators is possible.
- Power consumption must be observed.



		Actuators									
		CMU	LMU	NMU	SMU	GMU	TF	LF	NF	AF	AFR
S.A..		Auxiliary switch, add-on									
 S1A.. 1 SPDT 3A (0.5A), AC 250V S2A.. 2 SPDT 3A (0.5A), AC 250V		.	.	.	.	.
P.A..		Feedback potentiometer, add-on									
 P140A.. 140Ω P500A.. 500Ω P1000A.. 1000Ω P2800A.. 2800Ω P5000A.. 5000Ω P10000A.. 10000Ω		.	.	.	.	.
SGA24		Positioner for surface mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V									
 Positioner for surface mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V		1)	1)	1)	1)	1)	1)	1)	1)	1)	
SGR24		Positioner for surface mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V									
 Positioner for surface mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V		1)	1)	1)	1)	1)	1)	1)	1)	1)	
SGE24		Positioner for rack mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V									
 Positioner for rack mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V		1)	1)	1)	1)	1)	1)	1)	1)	1)	
SGF24		Positioner for front-panel mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V									
 Positioner for front-panel mounting 0...100% Reversible operating range DC 0...10V or DC 2...10V		1)	1)	1)	1)	1)	1)	1)	1)	1)	
ZAD24		Digital position indicator for front-panel mounting 0...99% Front size 72x72mm Operating range DC 2...10V									
 Digital position indicator for front-panel mounting 0...99% Front size 72x72mm Operating range DC 2...10V		1)	2)	2)	2)	2)	1)	1)	1)	1)	

1) For...-SR

2) For...24-SR