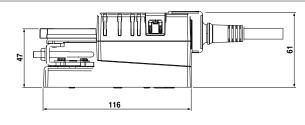


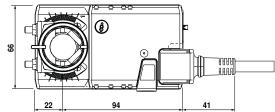
- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point



Reception Section Se	Technical data				
Power In operation consumption At rest 0.2W For wire sizing 1.5VA Connection Cable 1m, 3 x 0.75mm² Torque (nominal torque) Min. 5Nm @ nominal voltage Direction of rotation Reversible with switch 0	Electrical data	3 3 3 3		,	
Consumption At rest For wire sizing 1.5VA Connection Cable 1m, 3 x 0.75mm² Torque (nominal torque) Min. 5Nm @ nominal voltage Direction of rotation Reversible with switch 0 ✓ or 1 ✓ Manual override Gearing latch disengaged with pushbutton, self-resetting Angle of rotation Max. 95° <, limited on both sides by means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Safety Protection class III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range —30+50°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Nominal voltage	range	AC/DC 19.228.8V	
For wire sizing 1.5VA Connection Cable 1m, 3 x 0.75mm² Torque (nominal torque) Min. 5Nm @ nominal voltage Direction of rotation Reversible with switch 0 ror 1 rowns and protection of rotation Reversible with switch 0 ror 1 rowns and protection of rotation Reversible with switch 0 ror 1 rowns and protection of rotation Reversible with switch 0 ror 1 rowns and protection of rotation Reversible with switch 0 ror 1 rowns and protection and protection of Reversible with switch 0 ror 1 rowns and protection of Reversible with switch 0 roll of rotation of Reversible with switch 0 roll of r		Power	In operation	1W @ nominal torque	
Functional data Torque (nominal torque) Direction of rotation Manual override Angle of rotation Sound power level Position indication Safety Safety Safety Connection Cable 1m, 3 x 0.75mm² Min. 5Nm @ nominal voltage Direction of rotation Reversible with switch 0 ★ or 1 ★ Gearing latch disengaged with pushbutton, self-resetting Max. 95°록, limited on both sides by means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection EMC CE according to 2004/108/EC Mode of operation Ambient temperature range Non-operating temperature Anbient temperature Anbient humidity range Maintenance Maintenance-free Dimensions / Weight Torque (nominal torque) Min. 5Nm @ nominal voltage Gearing latch disengaged with pushbutton, self-resetting Man. 5Nm @ nominal voltage Man. 5Nm @ nominal voltage Maintenance Mintenance Mintenance Mintenance-free Dimensions / Weight		consumption	At rest	0.2W	
Functional data Torque (nominal torque) Direction of rotation Manual override Gearing latch disengaged with pushbutton, self-resetting Angle of rotation Max. 95°◁, limited on both sides by means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Ill Safety extra-low voltage Degree of protection EMC CE according to 2004/108/EC Mode of operation Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Dimensions / Weight Min. 5Nm @ nominal voltage Gearing latch disengaged with pushbutton, self-resetting Max. 95°◁, limited on both sides by means of adjustable, mechanical end stops Max. 35dB(A) Because of adjustable, mechanical end stops Ill Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Ambient humidity range Maintenance-free Dimensions / See «Dimensions»			For wire sizing		
Direction of rotation Manual override Gearing latch disengaged with pushbutton, self-resetting Angle of rotation Max. 95°⊲, limited on both sides by means of adjustable, mechanical end stops Running time Sound power level Position indication Max. 35dB(A) Protection class Ill Safety extra-low voltage Degree of protection EMC CE according to 2004/108/EC Mode of operation Ambient temperature range Non-operating temperature Ambient humidity range Max. 35dB(A) Protection indication Mechanical, pluggable Ill Safety extra-low voltage Degree of protection Typ4 in any mounting position CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature ange -30+50°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Connection		Cable 1m, 3 x 0.75mm ²	
Manual override Gearing latch disengaged with pushbutton, self-resetting Angle of rotation Max. 95°≼, limited on both sides by means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection EMC CE according to 2004/108/EC Mode of operation Ambient temperature range Non-operating temperature Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Dimensions / Weight Dimensions Max. 95°≼, limited on both sides by means of adjustable, mechanical end stops Max. 35dB(A) Position indication Mechanical, pluggable III Safety extra-low voltage Degree of protection IP54 in any mounting position CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature 40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions	Functional data	Torque (nominal	torque)	Min. 5Nm @ nominal voltage	
Safety Safety Protection class Degree of protection EMC Mode of operation EMC Mode of operation Anbient temperature range Non-operating temperature Anbient humidity range Dimensions / Weight Nax. 95°⊲, limited on both sides by means of adjustable, mechanical end stops Max. 35dB(A) Mechanical, pluggable Mechanical, pluggable III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Direction of rota	tion	Reversible with switch 0 \checkmark 0 or 1 \frown 9	
Angle of rotation Max. 95°⊲, limited on both sides by means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range Non-operating temperature Ambient humidity range Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions Max. 95°⊲, limited on both sides by means of adjustable, mechanical end stops Has 150s Type 2 (to EN 60730-1) And 10 EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Manual override		Gearing latch disengaged with pushbutton,	
By means of adjustable, mechanical end stops Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»				self-resetting	
Running time 150s Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Angle of rotation	Ì	Max. 95°	
Sound power level Max. 35dB(A) Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight				by means of adjustable, mechanical end stops	
Position indication Mechanical, pluggable Protection class III Safety extra-low voltage Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Running time		150s	
Safety Protection class Degree of protection EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Dimensions / Weight Protection class III Safety extra-low voltage CE according to 2004/108/EC Type 1 (to EN 60730-1) -30+50°C -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / See «Dimensions»		Sound power lev	vel	Max. 35dB(A)	
Degree of protection IP54 in any mounting position EMC CE according to 2004/108/EC Mode of operation Type 1 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight		Position indication	on	Mechanical, pluggable	
EMC Mode of operation Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Dimensions / Weight EMC CE according to 2004/108/EC Type 1 (to EN 60730-1) —30+50°C —40+80°C —40+80°C Maintenance Maintenance-free Dimensions / Weight	Safety	Protection class		III Safety extra-low voltage	
Mode of operation Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Dimensions / Weight Type 1 (to EN 60730-1) -30+50°C -40+80°C 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free See «Dimensions»	•	Degree of prote	ction	IP54 in any mounting position	
Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		EMC		CE according to 2004/108/EC	
Non-operating temperature —40+80°C Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Mode of operation	on	Type 1 (to EN 60730-1)	
Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Ambient temperature range		–30+50°C	
Ambient humidity range 95% r.H., non-condensating (EN 60730-1) Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Non-operating temperature		–40+80°C	
Dimensions / Weight Dimensions See «Dimensions»				95% r.H., non-condensating (EN 60730-1)	
		Maintenance		Maintenance-free	
Weight Approx. 0.48kg	Dimensions / Weight	Dimensions		See «Dimensions»	
	· ·	Weight		Approx. 0.48kg	

Dimensions [mm]





Damper spindle	Length	<u>01</u> \$
	min 37	6 20

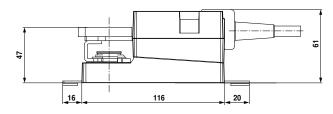


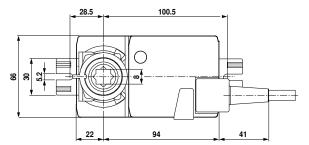
- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point
- Damper rotation: Form-fit 8mm



Place	Technical data				
Power consumption	Electrical data	Nominal voltage		AC 24V, 50/60Hz / DC 24V	
Toncetion At rest For wire sizing 1.5VA Connection Connection Connection Connection Torque (nominal torque) Direction of rotation Manual override Angle of rotation Reversible with switch 0 ♣ resp. 1 ♣ Angle of rotation Max. 95 ♣, can be limited at both ends with adjustable mechanical end stops Running time Sound power level Max. 35dB(A) Damper rotation Position indication Mechanical, pluggable Protection class Ill Safety extra-low voltage / UL Class 2 Supply Degree of protection NEMA 2, UL Enclosure Type 2 EMC Certification Certification Certification Dimensions / Weight Control pollution degree Ambient temperature range Ambient temperature range Ambient humidity range Maintenance Dimensions / Weight Dimensions / Weight Dimensions / Weight Dimensions Min. 5Nm @ nominal voltage Max. 95 ♣, can be limited at both ends with adjustable mechanical plushbutton, can be looked mechanical towich of resp. 1 ♣ Reversible with switch 0 ♣ resp. 1 ♣ Torque (nominal torque) Min. 5Nm @ nominal voltage Able 1m, 3 x 0.75mm² Min. 5Nm @ nominal voltage Can be limited at both ends with adjustable mechanical plushbutton, can be looked mechanical temperature ange -30.24 -40.24807		Nominal voltage r	ange	AC 19.228.8V / DC 21.628.8V	
For wire sizing 1.5VA Connection Cable 1m, 3 x 0.75mm² Cable 1m, 3 x 0.75mm² Torque (nominal torque) Min. 5Nm @ nominal voltage Direction of rotation Reversible with switch 0 resp. 1 rown and protection of rotation Reversible with switch 0 resp. 1 rown blocked Angle of rotation Max. 95°≺, can be limited at both ends with adjustable mechanical end stops Running time 150s / 90°≺ Sound power level Max. 35dB(A) Damper rotation Form-fit 8mm Position indication Mechanical, pluggable Safety Protection class III Safety extra-low voltage / UL Class 2 Supply Degree of protection IP54 in any mounting position NEMA_2 UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification IV2 IV2 IV2 IV2 IV3		Power	In operation	1W @ nominal torque	
Functional data Torque (nominal torque) Direction of rotation Manual override Angle of rotation Running time Sound power level Diamper rotation Position indication Degree of protection Degree of protection EMC Cetification Cetification Degree of operation Recersible with switch 0 1 → resp. 1 → Running time Sound power level Max. 95°¬4, can be limited at both ends with adjustable mechanical end stops Running time Sound power level Max. 35dB(A) Damper rotation Position indication Mechanical, pluggable Safety Protection class III Safety extra-low voltage / UL Class 2 Supply Degree of protection NEMA 2, UL Enclosure Type 2 EMC Cet according to 2004/108/EC Certification Cullus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Rated impulse voltage OnskV Control pollution degree Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Minn-SNM © nominal voltage Minn. 5NM @ nominal voltage Maintenance Minn. 5NM @ nominal voltage Minn.		consumption			
Functional data Torque (nominal torque) Direction of rotation Manual override Angle of rotation Running time Sound power level Damper rotation Position indication Mechanical, pluggable Safety Protection class Degree of protection Degree of protection Certification Certification Certification Mode of operation Rated impulse voltage Control pollution degree Ambient humidity range Maintenance Maintenance Min. 5Nm @ nominal voltage Reversible with switch 0		<u> </u>	For wire sizing		
Direction of rotation Reversible with switch 0 € resp. 1 1 1 1 1 1 1 1 1 1					
Manual override Gearing latch disengaged with pushbutton, can be locked	Functional data				
Angle of rotation		-	on		
Running time 150s / 90° □		Manual override		J J J ,	
Sound power level Max. 35dB(A) Damper rotation Form-fit 8mm Position indication Mechanical, pluggable Safety Protection class III Safety extra-low voltage / UL Class 2 Supply Degree of protection IP54 in any mounting position NEMA 2, UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification cluss according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Angle of rotation		•	
Damper rotation Form-fit 8mm Position indication Mechanical, pluggable Protection class III Safety extra-low voltage / UL Class 2 Supply Degree of protection IP54 in any mounting position NEMA 2, UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification CULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Running time		150s / 90°⊄	
Position indication Mechanical, pluggable Protection class III Safety extra-low voltage / UL Class 2 Supply Degree of protection NEMA 2, UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range —30+50°C Non-operating temperature —40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Sound power level		Max. 35dB(A)	
Safety Protection class Degree of protection Protection class Degree of protection Prote		Damper rotation		Form-fit 8mm	
Degree of protection IP54 in any mounting position NEMA 2, UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification CULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Rated impulse voltage Control pollution degree 3 (to EN 60730-1) Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Position indication	1	Mechanical, pluggable	
NEMA 2, UL Enclosure Type 2 EMC CE according to 2004/108/EC Certification cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»	Safety	Protection class		III Safety extra-low voltage / UL Class 2 Supply	
EMC Certification CULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Cutus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Type 1 And IEC/EN 60730-2-14 Type 1 And IEC/EN 60730-2-14 Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -40+80°C Ambient humidity range Maintenance-free		Degree of protect	ion		
Certification CULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions CULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-2-14 Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -40+50°C Ambient humidity range 95% r.H., non-condensating Maintenance-free					
and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»				· ·	
Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Certification			
Mode of operation Rated impulse voltage Control pollution degree 3 (to EN 60730-1) Ambient temperature range Non-operating temperature Ambient humidity range Maintenance Dimensions / Weight Type 1 Rated impulse voltage 0.8kV -30+50°C -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance-free Dimensions See «Dimensions»					
Rated impulse voltage 0.8kV Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»		Mode of operation	n		
Control pollution degree 3 (to EN 60730-1) Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»				71	
Ambient temperature range -30+50°C Non-operating temperature -40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»					
Non-operating temperature —40+80°C Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»					
Ambient humidity range 95% r.H., non-condensating Maintenance Maintenance-free Dimensions / Weight Dimensions See «Dimensions»				-40+80°C	
Dimensions / Weight Dimensions See «Dimensions»				95% r.H., non-condensating	
		Maintenance		Maintenance-free	
	Dimensions / Weight	Dimensions		See «Dimensions»	
	_	Weight		Approx. 0.47kg	

Dimensions [mm]





Damper spindle	Length	<u> </u>
	≥20	8

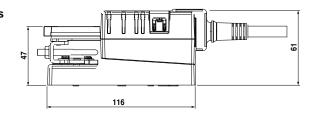


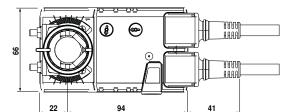
- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point
- Integrated auxiliary switch



Technical data			
Electrical data	Nominal voltage		AC 24V, 50/60Hz DC 24V
	Nominal voltage i	range	AC/DC 19.228.8V
	Power	In operation	1W @ nominal torque
	consumption	At rest	0.2W
		For wire sizing	1.5VA
	Auxiliary switch		1 x SPDT, 1mA3 (0.5) A, AC 250V □ (0100% adjustable)
	Connection	Motor	Cable 1m, 3 x 0.75mm ²
		Auxiliary switch	Cable 1m, 3 x 0.75mm²
Functional data	Torque (nominal t	torque)	Min. 5Nm @ nominal voltage
	Direction of rotati	on	Reversible with switch 0 🗸 or 1 🔿
	Manual override Angle of rotation		Gearing latch disengaged with pushbutton, self-resetting
			Max. 95°록, limited on both sides by means of adjustable, mechanical end stops
	Running time		150s
	Sound power leve	el	Max. 35dB(A)
	Position indication	n	Mechanical, pluggable
Safety	Protection class		III Safety extra-low voltage
·	Degree of protect	tion	IP54 in any mounting position
	EMC		CE according to 2004/108/EC
	Mode of operation	n	Type 1 (to EN 60730-1)
	Ambient temperature range		−30+50°C
	Non-operating temperature		–40+80°C
	Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
	Maintenance		Maintenance-free
Dimensions / Weight			Maintenance-free See «Dimensions»

Dimensions [mm]





Damper spindle	Length	010
	min. 37	620

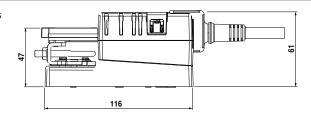


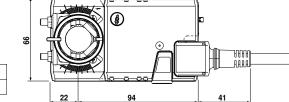
- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: modulating DC (0)2...10V, position feedback DC 2...10V



Technical data			
Electrical data	Nominal voltage		AC 24V, 50/60Hz DC 24V
	Nominal voltage ran	ge	AC/DC 19.228.8V
	Power consumption	In operation	1W @ nominal torque
		At rest	0.4W
		For wire sizing	2VA
	Connection		Cable 1m, 4 x 0.75mm ²
Functional data	Torque (nominal toro	que)	Min. 5Nm @ nominal voltage
	Control	Control signal Y Working range	DC (0)210V, typical input impedance $100k\Omega$ DC 210V
	Position feedback (N	Measuring voltage)	DC 210V, max. 1mA
	Position accuracy		±5%
	Direction of rotation		Reversible with switch 0 / 1
	Direction of rotation	at Y = 0V	at switch position 0 🖍 resp. 1 🤼
	Manual override		Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation		Max. 95°록, limited on both sides by means of adjustable, mechanical end stops
	Running time		150s
	Sound power level		Max. 35dB(A)
	Position indication		Mechanical, pluggable
Safety	Protection class		III Safety extra-low voltage
•	Degree of protection		IP54 in any mounting position
	EMC		CE according to 2004/108/EC
	Mode of operation		Type 1 (to EN 60730-1)
	Ambient temperature range		-30+50°C
	Non-operating temperature		–40+80°C
	Ambient humidity ra	nge	95% r.H., non-condensating (EN 60730-1)
	Maintenance		Maintenance-free
Dimensions / Weight	Dimensions		See «Dimensions»
	Weight		Approx. 0.51kg

Dimensions [mm]





Damper spindle	Length	<u>O</u> <u></u>
	min. 37	620

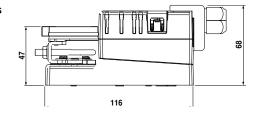


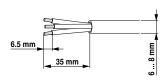
- Torque 5Nm
- Nominal voltage AC/DC 24V
- Control: Open-close or 3-point



Technical data			
Electrical data	a Nominal voltage		AC 24V, 50/60Hz DC 24V
	Nominal voltage i	range	AC/DC 19.228.8V
	Power	In operation	1W @ nominal torque
	consumption	At rest	0.2W
		For wire sizing	1.5VA
	Connection		Terminals 4mm ² (Cable Ø 68mm, three-core)
Functional data	Torque (nominal t	torque)	Min. 5Nm @ nominal voltage
	Direction of rotati	on	Reversible with switch 0 🗸 or 1 🥕
	Manual override		Gearing latch disengaged with pushbutton, detentable
	Angle of rotation		Max. 95°
			by means of adjustable, mechanical end stops
	Running time		150s / 90°⊄
	Sound power leve	el	Max. 35dB(A)
	Position indication	n	Mechanical, pluggable
Safety	Protection class		III Safety extra-low voltage
•	Degree of protect	tion	IP54 in any mounting position
	EMC		CE according to 2004/108/EC
	Mode of operation	n	Type 1 (to EN 60730-1)
	Rated impulse vo	ltage	0.8kV (to EN 60730-1)
	Control Pollution	Degree	3 (to EN 60730-1)
	Ambient temperature range		–30+50°C
	Non-operating temperature		–40+80°C
	Ambient humidity range		95% r.H., non-condensating (to EN 60730-1)
	Maintenance		Maintenance-free
Dimensions / Weight	Dimensions		See «Dimensions»
_	Weight		Approx. 0.46kg

Dimensions [mm]







Damper spindle	Length	O Ī		♦ 1
	>37	620	>6	<20

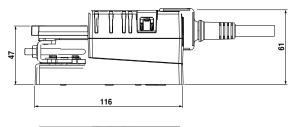


- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point



Technical data				
Electrical data	Nominal voltage		AC 100240V, 50/60Hz	
	Nominal voltage ra	ange	AC 85265V	
	Power	In operation	1.5W @ nominal torque	
	consumption	At rest	0.4W	
		For wire sizing	3.5VA	
	Connection		Cable 1m, 3 x 0.75mm ²	
Functional data	Torque (nominal to	orque)	Min. 5Nm @ nominal voltage	
	Direction of rotatio	n	Reversible with switch 0 🕶 or 1 🔿	
	Manual override		Gearing latch disengaged with pushbutton,	
			self-resetting	
	Angle of rotation		Max. 95°	
			by means of adjustable, mechanical end stops	
	Running time		150s	
	Sound power leve	l	Max. 35dB(A)	
	Position indication		Mechanical, pluggable	
Safety	Protection class		II Totally insulated □	
	Degree of protection		IP54 in any mounting position	
	EMC		CE according to 2004/108/EC	
	Low voltage direct	ive	CE according to 2006/95/EC	
	Mode of operation		Type 1 (to EN 60730-1)	
	Ambient temperati	ure range	-30+50°C	
	Non-operating temperature		–40+80°C	
	Ambient humidity	range	95% r.H., non-condensating (EN 60730-1)	
	Maintenance		Maintenance-free	
Dimensions / Weight	Dimensions		See «Dimensions»	
_	Weight		Approx. 0.5kg	

Dimensions [mm]





Damper spindle	Length	OI\$
	min. 37	620

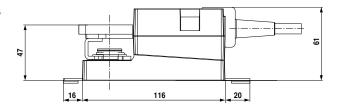


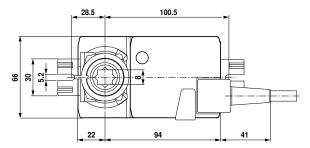
- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point
- Damper rotation: Form-fit 8mm



Technical data					
Electrical data	Nominal voltage		AC 100240V, 50/60Hz		
	Nominal voltage range		AC 85265V		
	Power	In operation	1.5W @ nominal torque		
	consumption	At rest	0.4W		
		For wire sizing	3.5VA		
	Connection		Cable 1m, 3 x 0.75mm ²		
Functional data	Torque (nominal	torque)	Min. 5Nm @ nominal voltage		
	Direction of rotat	tion	Reversible with switch 0 🖍 resp. 1 🥕		
	Manual override		Gearing latch disengaged with pushbutton, can be locked		
	Angle of rotation		Max. 95°		
	Running time		150s / 90°⊲		
	Sound power lev	/el	Max. 35dB(A)		
	Damper rotation		Form-fit 8mm		
	Position indication		Mechanical, pluggable		
Safety	Protection class		II Totally insulated □		
	Degree of protection		IP54 in any mounting position		
			NEMA 2, UL Enclosure Type 2		
	EMC		CE according to 2004/108 EC		
	Low voltage directive		CE according to 2006/95/EC		
	Certification		cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02		
			Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14		
	Mode of operation	n .	Type 1		
	Mode of operation Rated impulse voltage		2.5kV		
	Control pollution		3 (to EN 60730-1)		
	Ambient tempera	•	-30+50°C		
	Non-operating te		-40+80°C		
	Ambient humidity range		95% r.H., non-condensating		
	Maintenance	, J-	Maintenance-free		
Dimensions / Weight	Dimensions		See «Dimensions»		
	Weight		Approx. 0.48kg		

Dimensions [mm]





Damper spindle	Length	Ī
	≥20	8

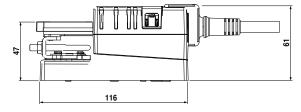


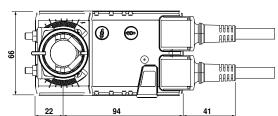
- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point
- Integrated auxiliary switch



Technical data					
Electrical data	Electrical data Nominal voltage		AC 100240V, 50/60Hz		
	Nominal voltage ra	ange	AC 85265V		
	Power	In operation	1.5W @ nominal torque		
	consumption	At rest	0.4W		
		For wire sizing	3.5VA		
	Auxiliary switch		1 x SPDT, 1mA3 (0.5) A, AC 250V □ (0100% adjustable)		
	Connection Motor	r	Cable 1m, 3 x 0.75mm²		
	Auxili	ary switch	Cable 1m, 3 x 0.75mm ²		
Functional data	Torque (nominal to	orque)	Min. 5Nm @ nominal voltage		
	Direction of rotation	n	Reversible with switch 0 🗸 or 1 🔿		
	Manual override Angle of rotation Running time Sound power level Position indication		Gearing latch disengaged with pushbutton, self-resetting		
			Max. 95°록, limited on both sides		
			by means of adjustable, mechanical end stops		
			150s		
			Max. 35dB(A)		
			Mechanical, pluggable		
Safety	Protection class		II Totally insulated □		
	Degree of protecti	on	IP54 in any mounting position		
	EMC		CE according to 2004/108/EC		
	Low voltage directive		CE according to 2006/95/EC		
	Mode of operation		Type 1 (to EN 60730-1)		
	Ambient temperature range		-30+50°C		
	Non-operating ten	nperature	–40+80°C		
	Ambient humidity range		95% r.H., non-condensating (EN 60730-1)		
	Maintenance		Maintenance-free		
Dimensions / Weight	Dimensions		See «Dimensions»		
	Weight		Approx. 0.58kg		

Dimensions [mm]





Damper spindle	Length	<u>0</u> 1\$
	min. 37	620

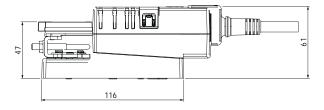


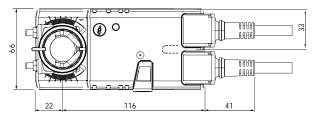
- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: modulating DC 0...10V, position feedback DC 2...10V



Technical data				
Electrical data	Nominal voltage		AC 100240V, 50/60Hz	
			AC 85265V	
			2W @ nominal torque	
	consumption	At rest	1W	
		For wire sizing	4VA	
	Connection	Power supply	Cable 1m, 2 x 0.75mm ²	
		Signals	Cable 1m, 4 x 0.75mm ²	
Functional data	Torque (nominal t	orque)	Min. 5Nm @ nominal voltage	
	Control	Control signal Y	DC 010V, typical input impedance $100k\Omega$	
		Working range	DC 210V	
	Position feedback	(Measuring voltage)	DC 210V, max. 1mA	
	Position accuracy		±5%	
	Direction of rotation		Reversible with switch 0 / 1	
	Direction of rotation at Y = 0V		at switch position 0 ₹ resp. 1 ₹	
	Manual override		Gearing latch disengaged with pushbutton,	
	Analy of safeties		self-resetting	
	Angle of rotation		Max. 95°⊲, limited on both sides	
			by means of adjustable, mechanical end stops	
	Running time		150s	
	Sound power level Position indication		Max. 35dB(A)	
			Mechanical, pluggable	
Safety	Protection class		II Totally insulated □	
	Degree of protect	ion	IP54 in any mounting position	
	EMC		CE according to 2004/108/EC	
	Low voltage directive		CE according to 2006/95/EC	
	Mode of operation		Type 1 (to EN 60730-1)	
	Ambient temperature range Non-operating temperature Ambient humidity range Maintenance		–30+50°C	
			–40+80°C	
			95% r.H., non-condensating (EN 60730-1)	
			Maintenance-free	
Dimensions / Weight	Dimensions		See «Dimensions»	
Weight			Approx. 0.62kg	

Dimensions [mm]







Damper spindle	Length	010
	min 37	6 20

LM230A-TP



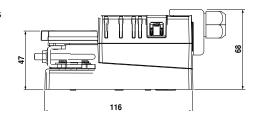
Damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

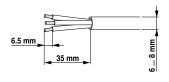
- Torque 5Nm
- Nominal voltage AC 100...240V
- Control: Open-close or 3-point



Tashnisal data					
Technical data					
Electrical data	Nominal voltage		AC 100240V, 50/60Hz		
	Nominal voltage range		AC 85265V		
	Power	In operation	1.5W @ nominal torque		
	consumption	At rest	0.4W		
		For wire sizing	3.5VA		
	Connection		Terminals 4mm ² (Cable Ø 68mm, three-core)		
Functional data	Torque (nominal t	torque)	Min. 5Nm @ nominal voltage		
	Direction of rotati	on	Reversible with switch 0 or 1		
	Manual override		Gearing latch disengaged with pushbutton,		
	-		detentable		
	Angle of rotation		Max. 95°		
			by means of adjustable, mechanical end stops		
	Running time		150s / 90°⊄		
	Sound power level		Max. 35dB(A)		
	Position indication	n	Mechanical, pluggable		
Safety	Protection class Degree of protection		II Totally insulated □		
			IP54 in any mounting position		
	EMC		CE according to 2004/108/EC		
	Low voltage direct	ctive	CE according to 2006/95/EC		
	Mode of operation	n	Type 1 (to EN 60730-1)		
	Rated impulse vo	ltage	4kV (to EN 60730-1)		
	Control Pollution Degree		3 (to EN 60730-1)		
	Ambient tempera	ture range	−30+50°C		
	Non-operating ter	mperature	–40+80°C		
	Ambient humidity	range	95% r.H., non-condensating (to EN 60730-1)		
	Maintenance		Maintenance-free		
Dimensions / Weight	Dimensions		See «Dimensions»		
_	Weight		Approx. 0.47kg		
	· · · · · · · · · · · · · · · · · · ·				

Dimensions [mm]





Damper spindle	Length	<u>OI</u>	□ I	♦ Ţ
	>37	620	>6	<20

98	
22	94