GRUNER
Schalten und Bewegen

Technical data sheet

363-024-20

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **20 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Valve size** **up to approx. 4 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	3,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	4,5 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>20 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	clamp ◊ 9-18 mm/ Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

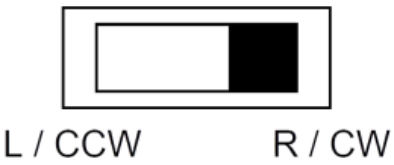
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

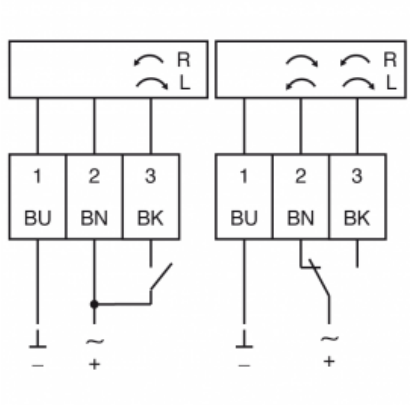
Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch

R/CW= clockwise
L/ CCW= counter clockwise



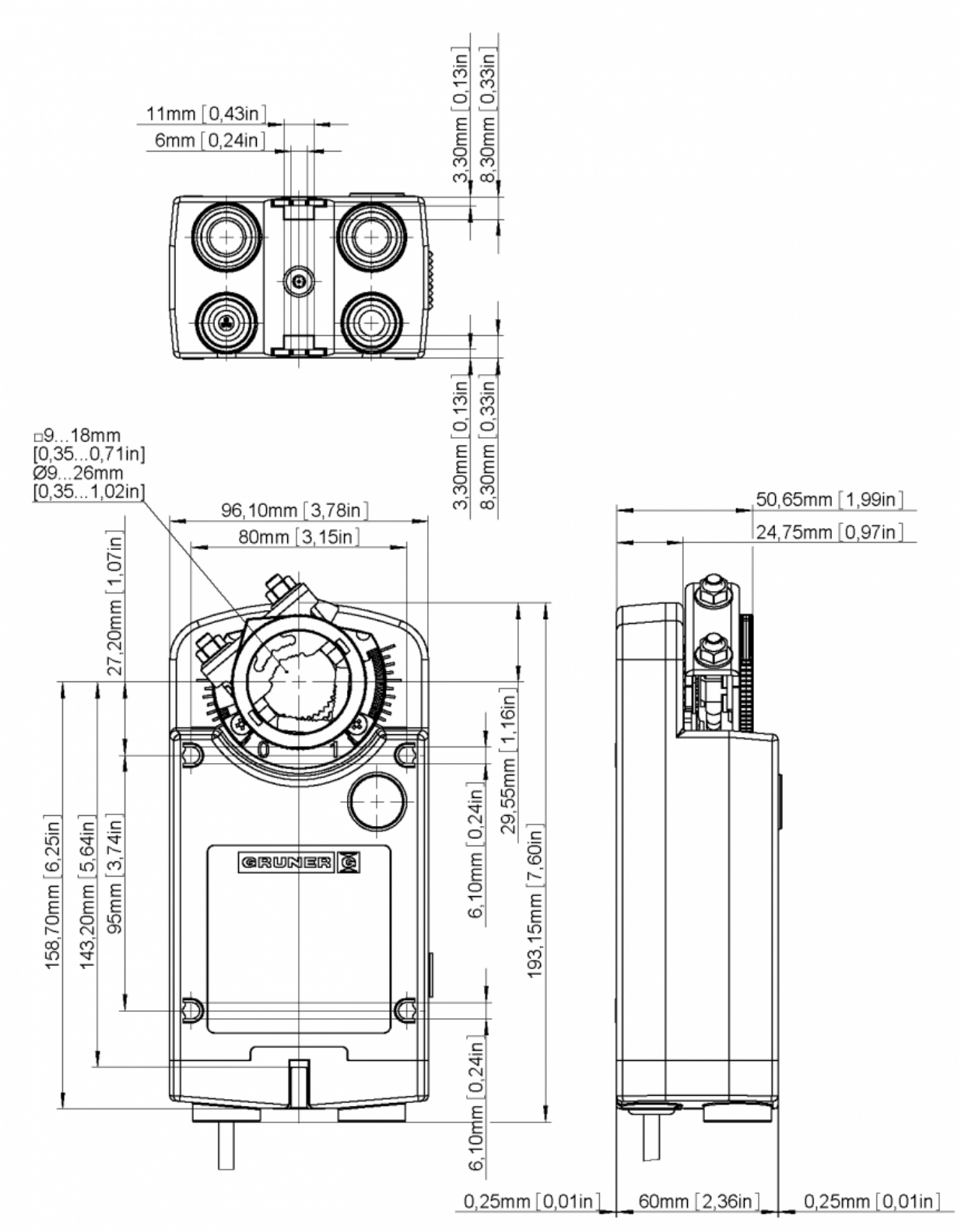
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-230-20

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **20 Nm**
- **Nominal Voltage** **230 VAC/DC**
- **Control** **2/3 Point**
- **Damper size** **up to approx. 4 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	230 VAC (50/60 Hz), 230 VDC
	Nominal voltage range	85...265 VAC/DC
	Power consuption Motor (Motion)	3,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>20 Nm
	Synchronised speed	±5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer

Technical data

Functional data	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)
	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1'700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

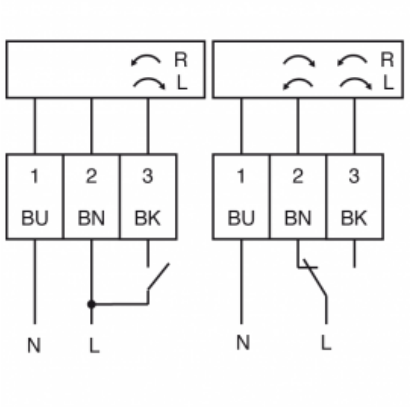
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise

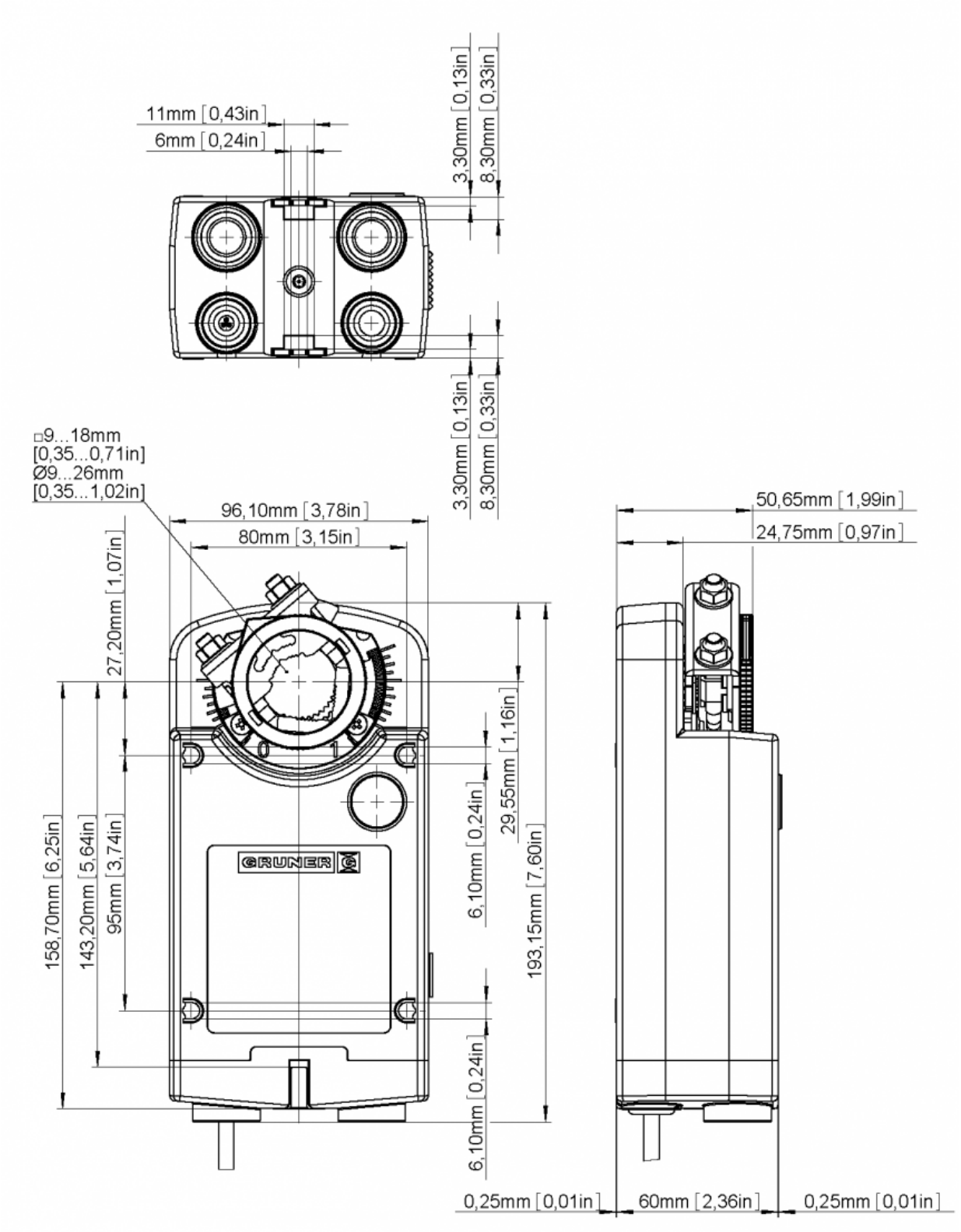
Connection / Safety remarks



Safety remarks

-Attention mains voltage
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-024-20-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **20 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Connection Auxiliary switch** **2x freely adjustable**
- **Valve size** **up to approx. 4 m²**
- **Damper coupling** **Clamp ◊ 9-18 mm / Ø 9-26 mm**

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	3,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	4,5 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>20 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton,self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non-condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

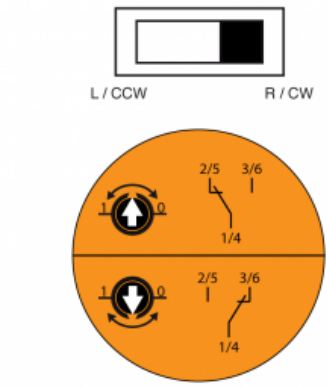
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

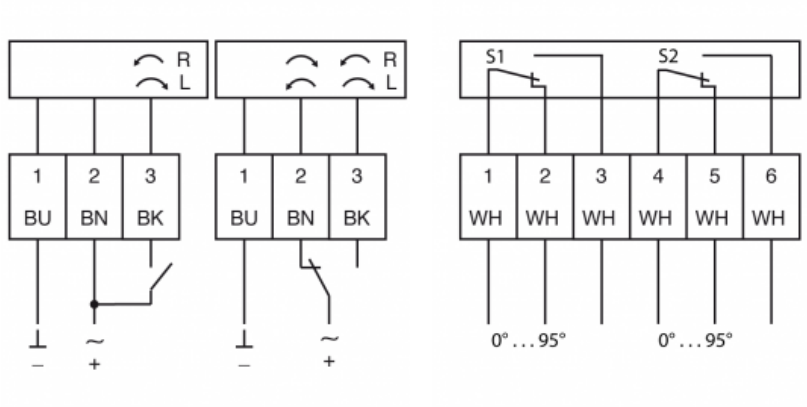
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



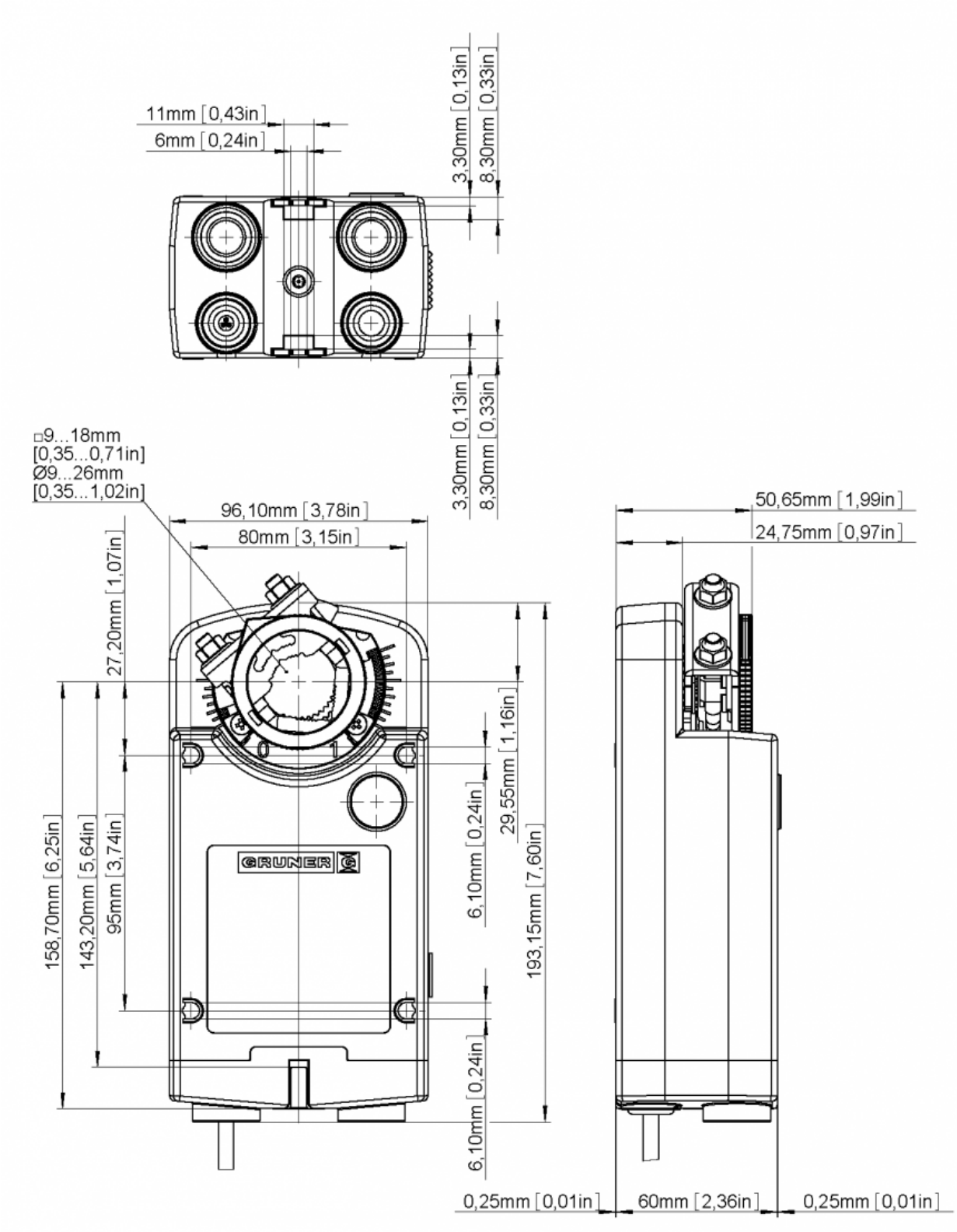
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-230-20-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **20 Nm**
- **Nominal Voltage** **230 VAC/DC**
- **Control** **2/3 Point**
- **Connection Auxiliary switch** **2x freely adjustable**
- **Valve size** **up to approx. 4 m²**
- **Damper coupling** **Clamp ◊ 9-18 mm / Ø 9-26 mm**

Technical data

Nominal voltage	Nominal voltage	230 VAC (50/60Hz), 230 VDC
	Nominal voltage range	85...265 VAC/DC
	Power consuption Motor (Motion)	3,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>20 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton,self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non-condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1'700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

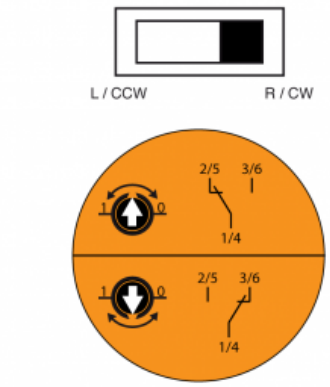
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

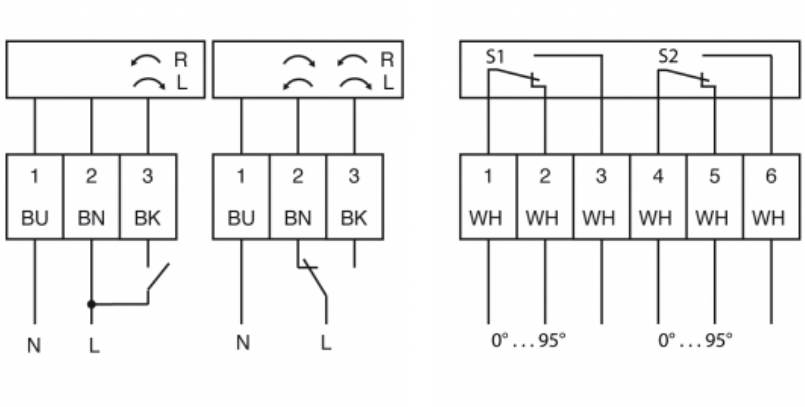
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



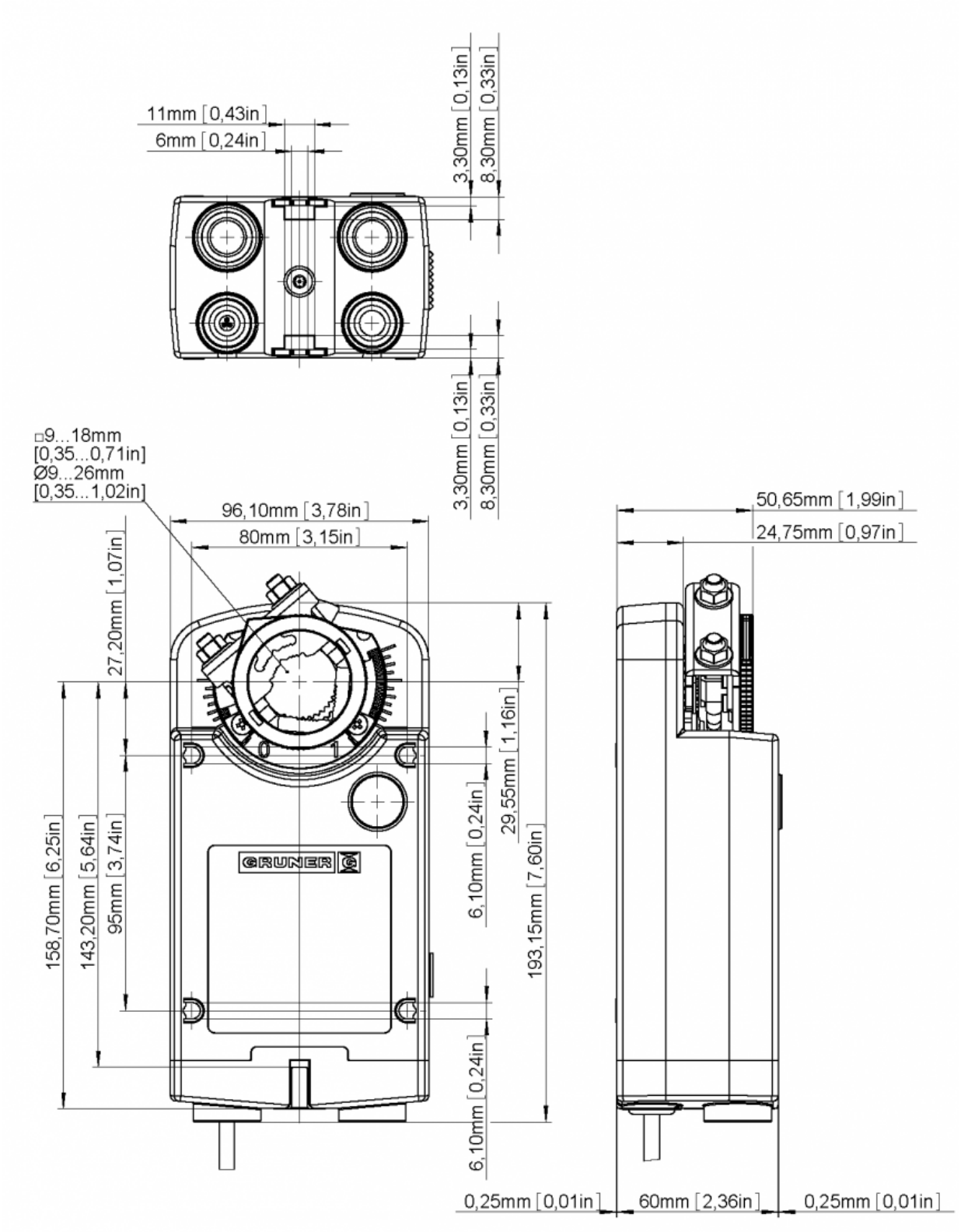
Connection / Safety remarks



Safety remarks

-Attention mains voltage
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363C-024-20

Continuous control rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **20 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **Continuous DC 0(2)...10 V**
- **Valve size** **up to approx. 4 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	3,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	4,5 VA
	Control	Continuous 0(2)...10 VDC / Ri > 100 kΩ 0(4)...20 mA / Rext. = 500 Ω
	Position feedback	0(2)...10 VDC, max 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 4 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>20 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop Adaption of operating range to match the mechanical angle of rotation.
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm

Technical data

Functional data	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
		>1'000'000 partial cycles (max. ±5°)
Safety	Protection class	III (low voltage safety current)
	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F.,
		non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)…10VDC, moves the actuator to its specified position. The actual damper position 0…100% is a feedback signal U for example to share the signal with other actuators.

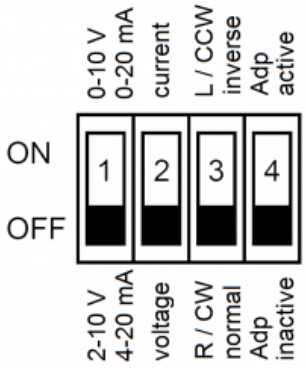
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

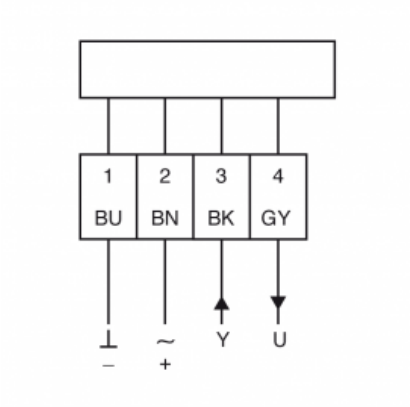
Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Mode- switch
DIP-Switch under the case cover

Adaption drive
-Adaption on angle of rotation < 90°
-Actuator power-off
-Setting the mechanical end stops
-Actuater power-on
-Adaption to enable
-Actuator adaption on angular range
-Adaption to disable
-“Y” refers to the measured angular range



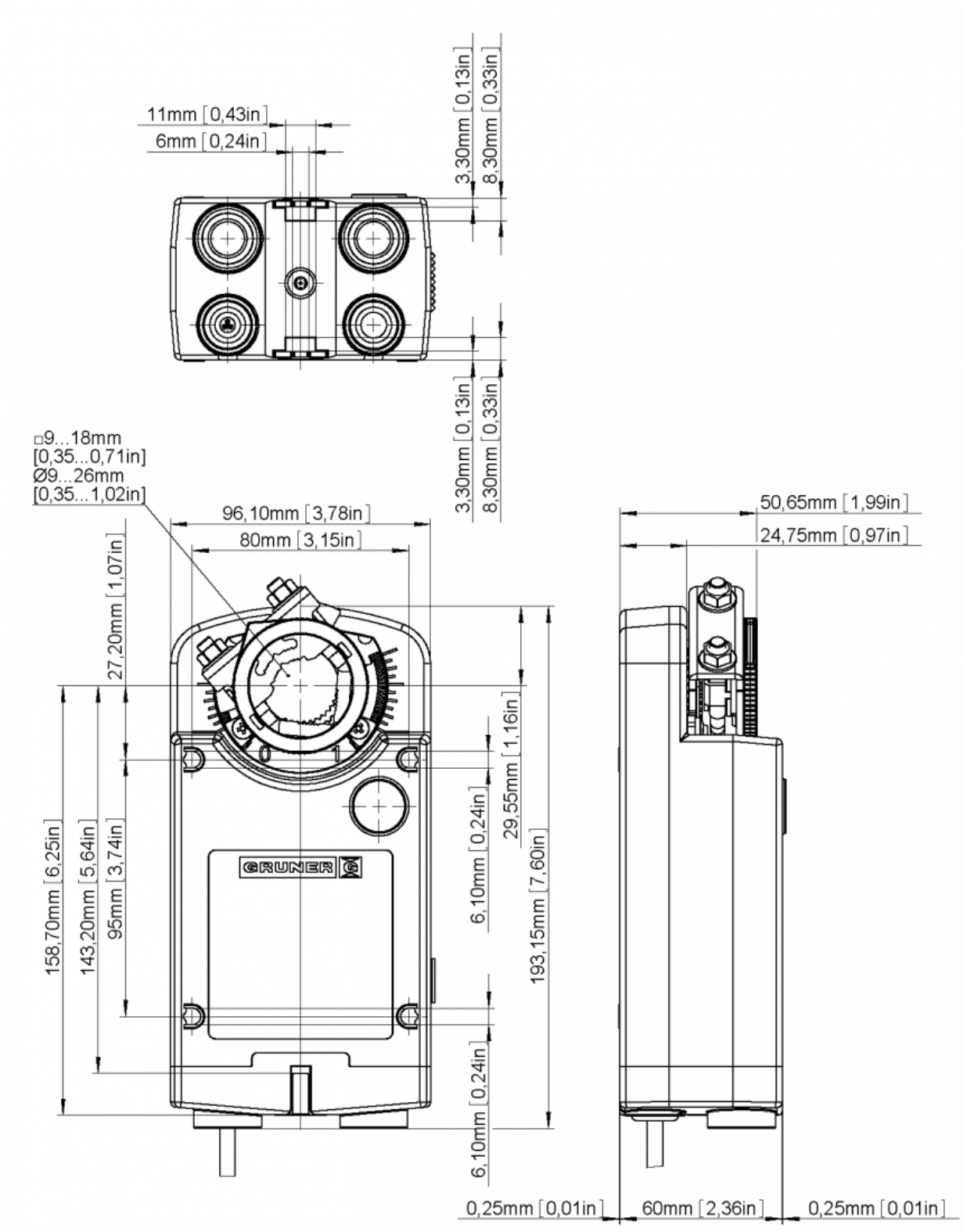
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-024-30

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	4,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	6,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

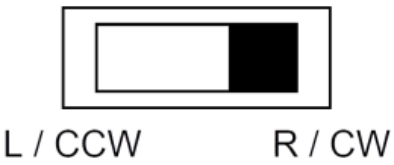
3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

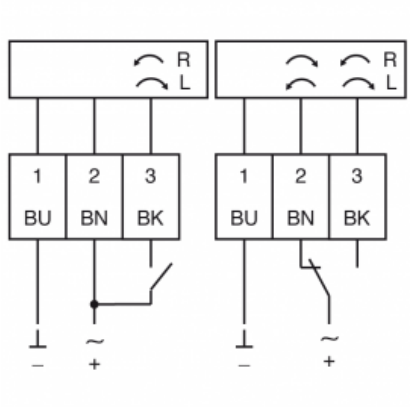
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



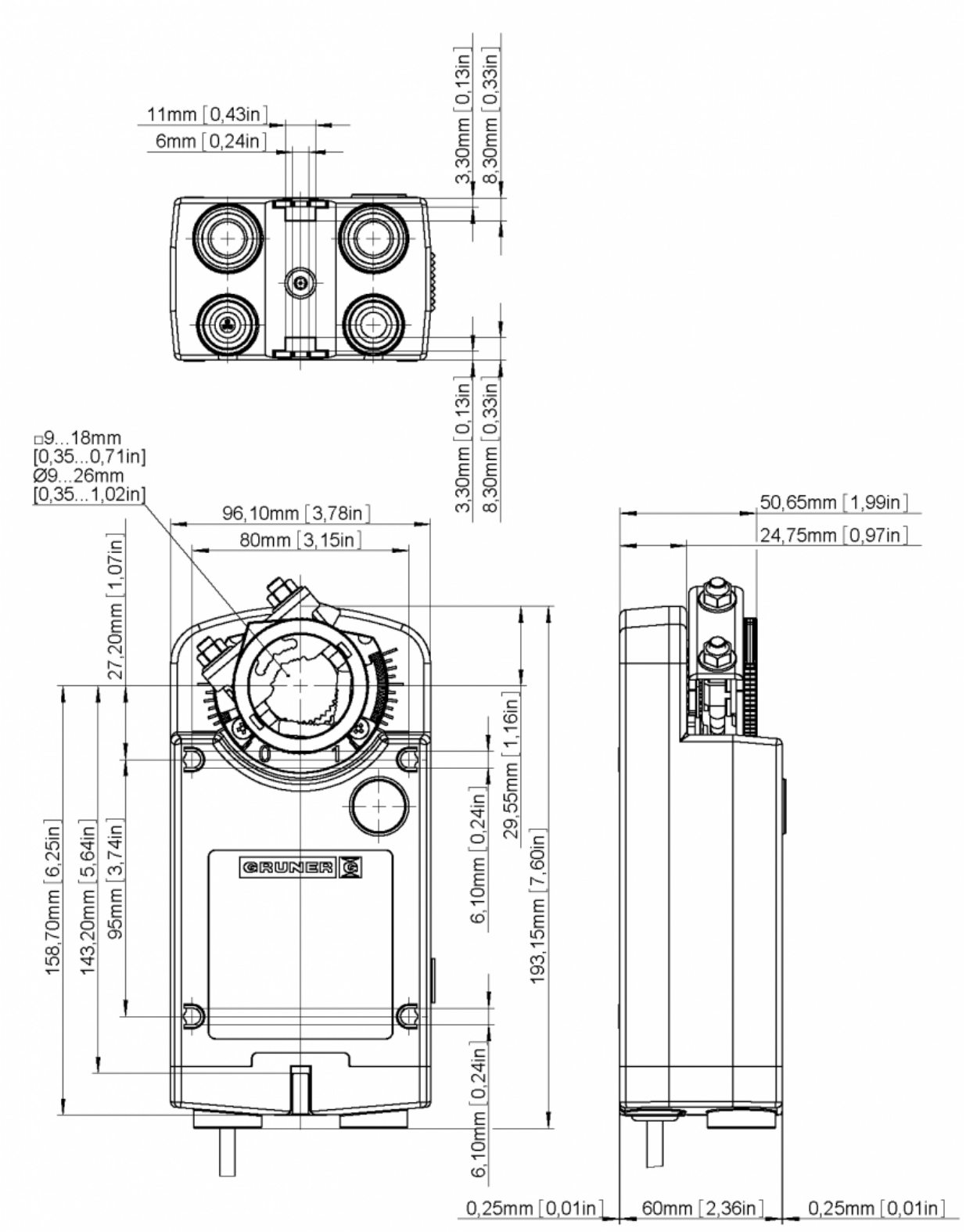
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-230-30

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **230 VAC/DC**
- **Control** **2/3 Point**
- **Valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	230 VAC (50/60 Hz), 230 VDC
	Nominal voltage range	85...265 VAC/DC
	Power consuption Motor (Motion)	4,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,5 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

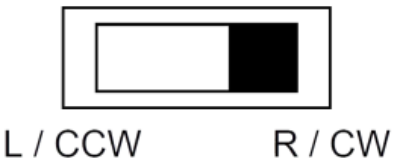
3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

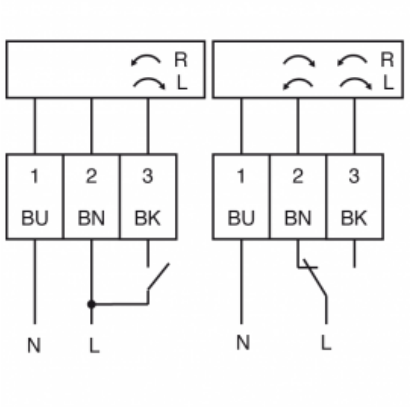
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating**.**

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



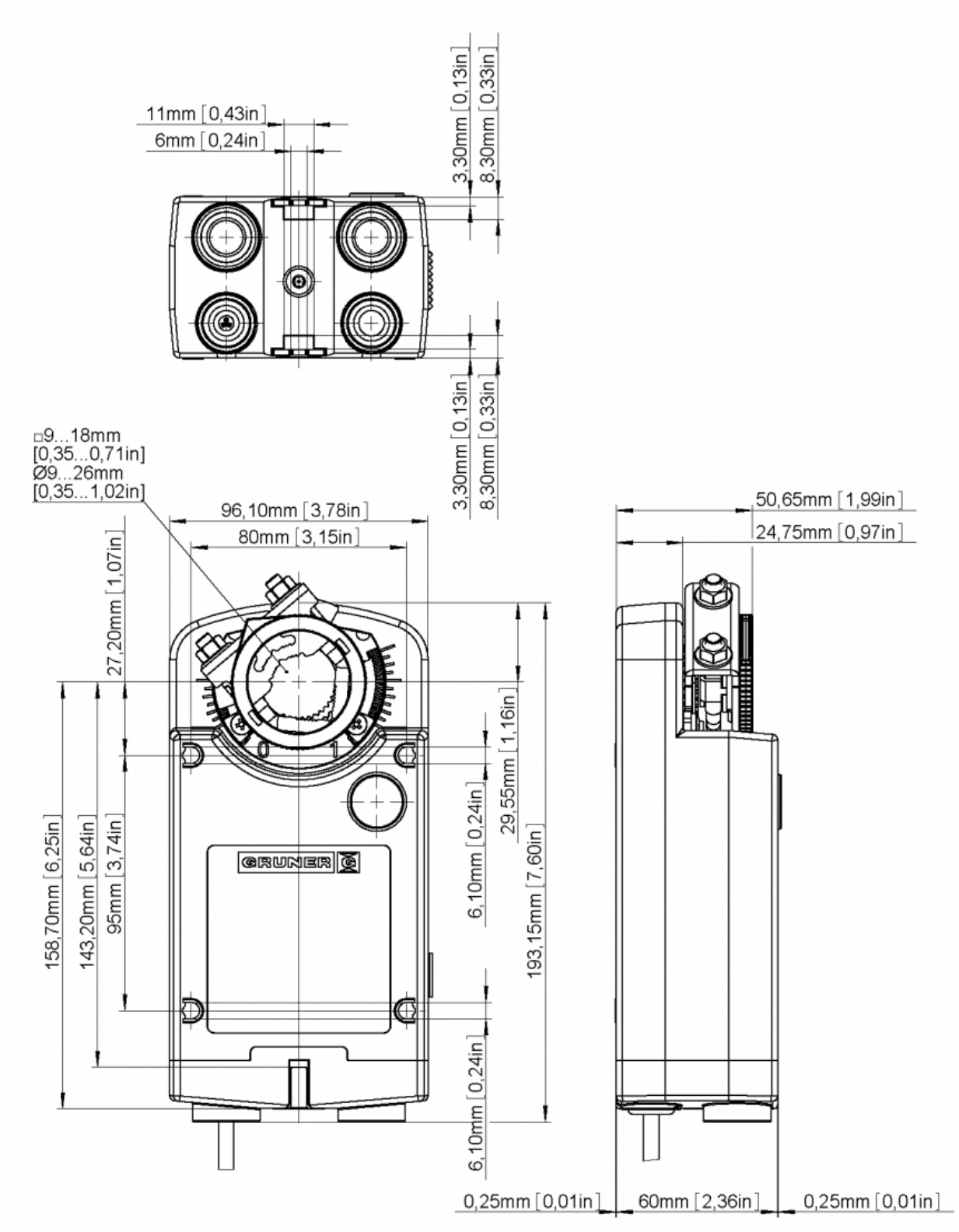
Connection / Safety remarks



Safety remarks

-Attention mains voltage
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-024-30-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Connection Auxiliary switch** **2x freely adjustable**
- **valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp ◊ 9-18 mm / Ø 9-26 mm**

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	4,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	6,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton,self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 90° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non-condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

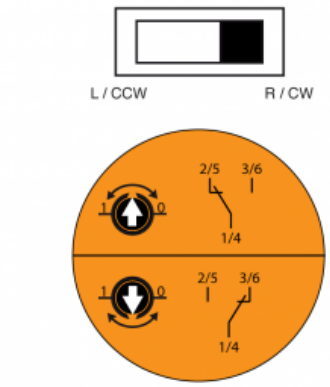
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

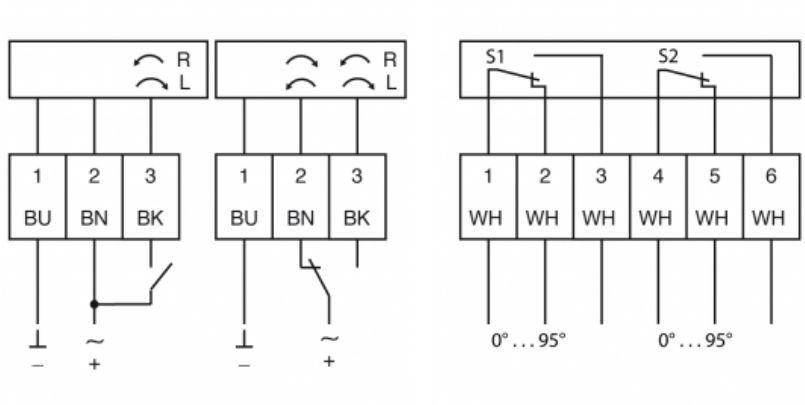
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



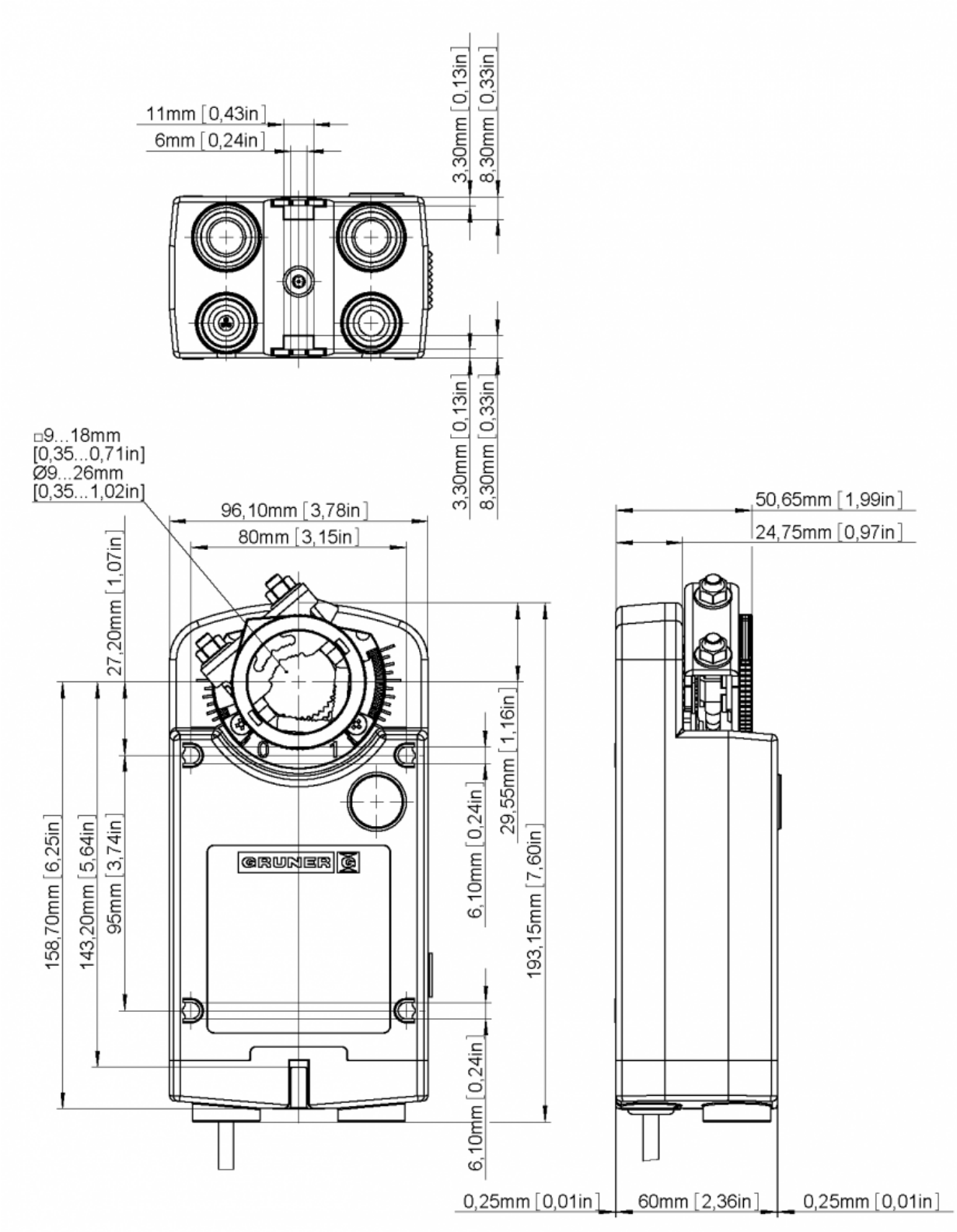
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-230-30-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **230 VAC/DC**
- **Control** **2/3 Point**
- **Connection Auxiliary switch** **2x freely adjustable**
- **Valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp ◊ 9-18 mm / Ø 9-26 mm**

Technical data

Nominal voltage	Nominal voltage	230 VAC (50/60Hz), 230 VDC
	Nominal voltage range	85...265 VAC/DC
	Power consuption Motor (Motion)	4,0 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,5 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton,self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non-condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

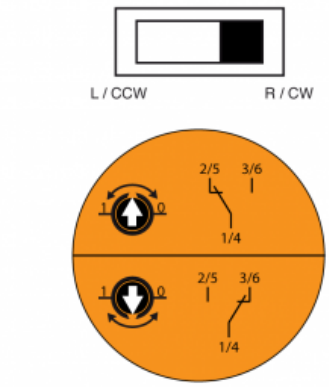
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

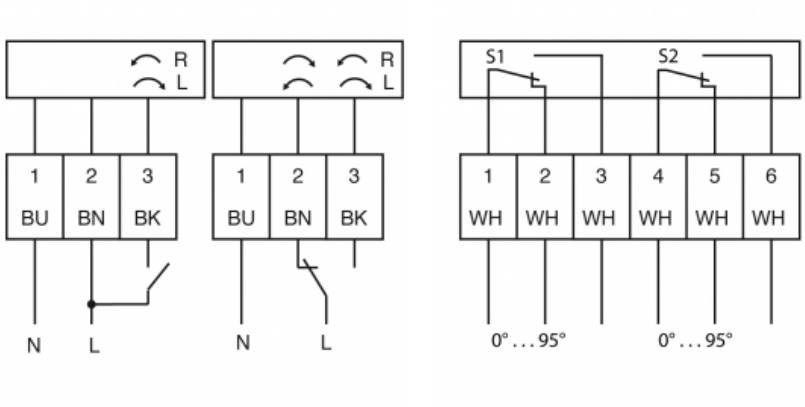
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



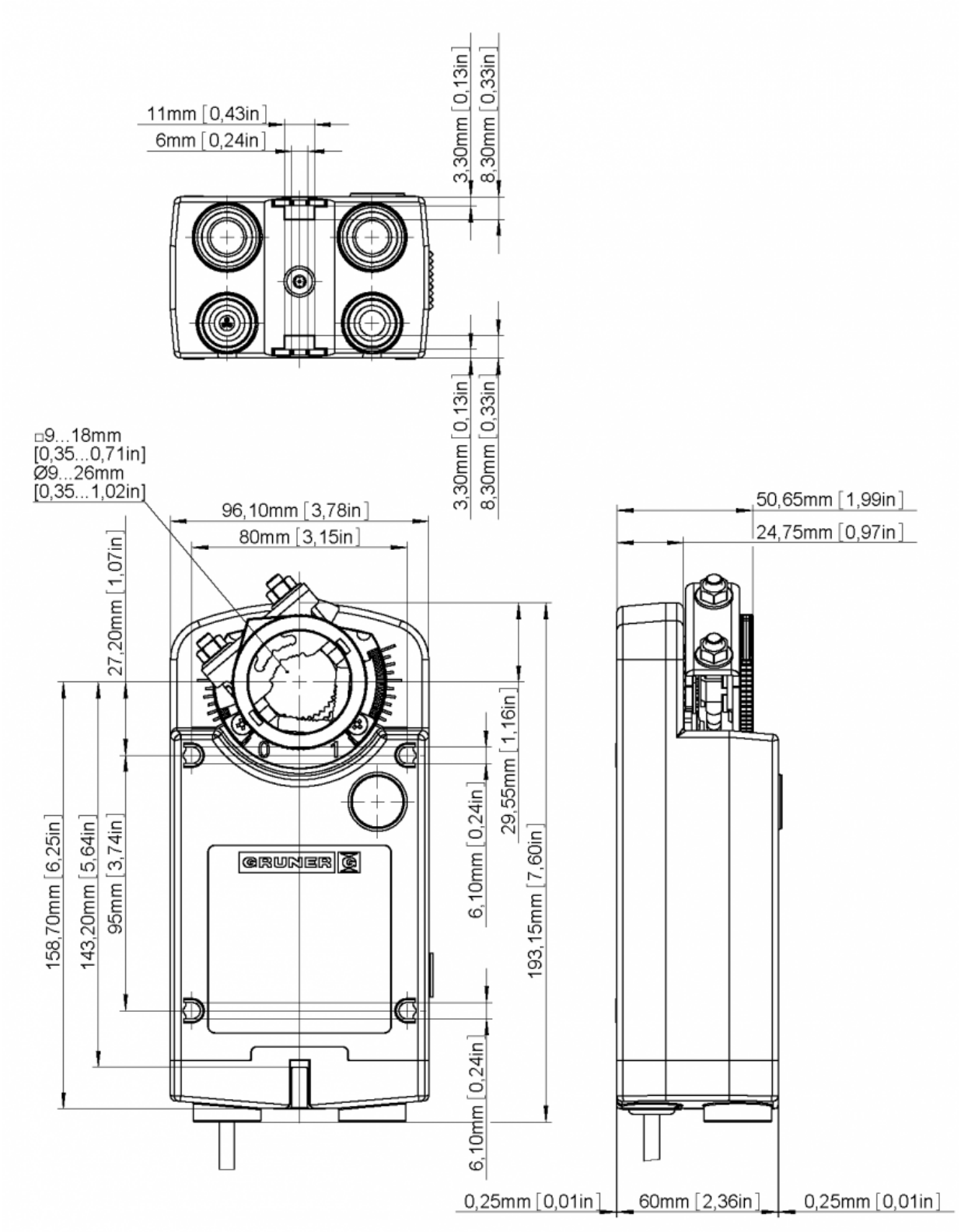
Connection / Safety remarks



Safety remarks

-Attention mains voltage
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363C-024-30

Continuous control of rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **Continuous DC 0(2)...10 V**
- **Valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	4,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	6,0 VA
	Control	Continuous 0(2)...10 VDC / Ri > 100 kΩ 0(4)...20 mA / Rext. = 500 Ω
	Position feedback	0(2)...10 VDC, max 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 4 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop Adaption of operating range to match the mechanical angle of rotation.
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm

Technical data

Functional data	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
		>1'000'000 partial cycles (max. ±5°)
Safety	Protection class	III (low voltage safety current)
	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F.,
		non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)…10VDC, moves the actuator to its specified position. The actual damper position 0…100% is a feedback signal U for example to share the signal with other actuators.

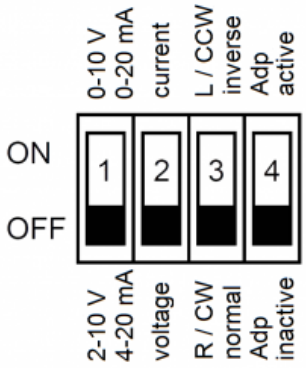
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

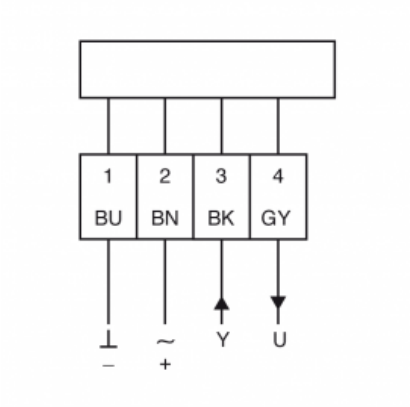
Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Mode- switch
DIP-Switch under the case cover

Adaption drive
-Adaption on angle of rotation < 90°
-Actuator power-off
-Setting the mechanical end stops
-Actuater power-on
-Adaption to enable
-Actuator adaption on angular range
-Adaption to disable
-“Y” refers to the measured angular range



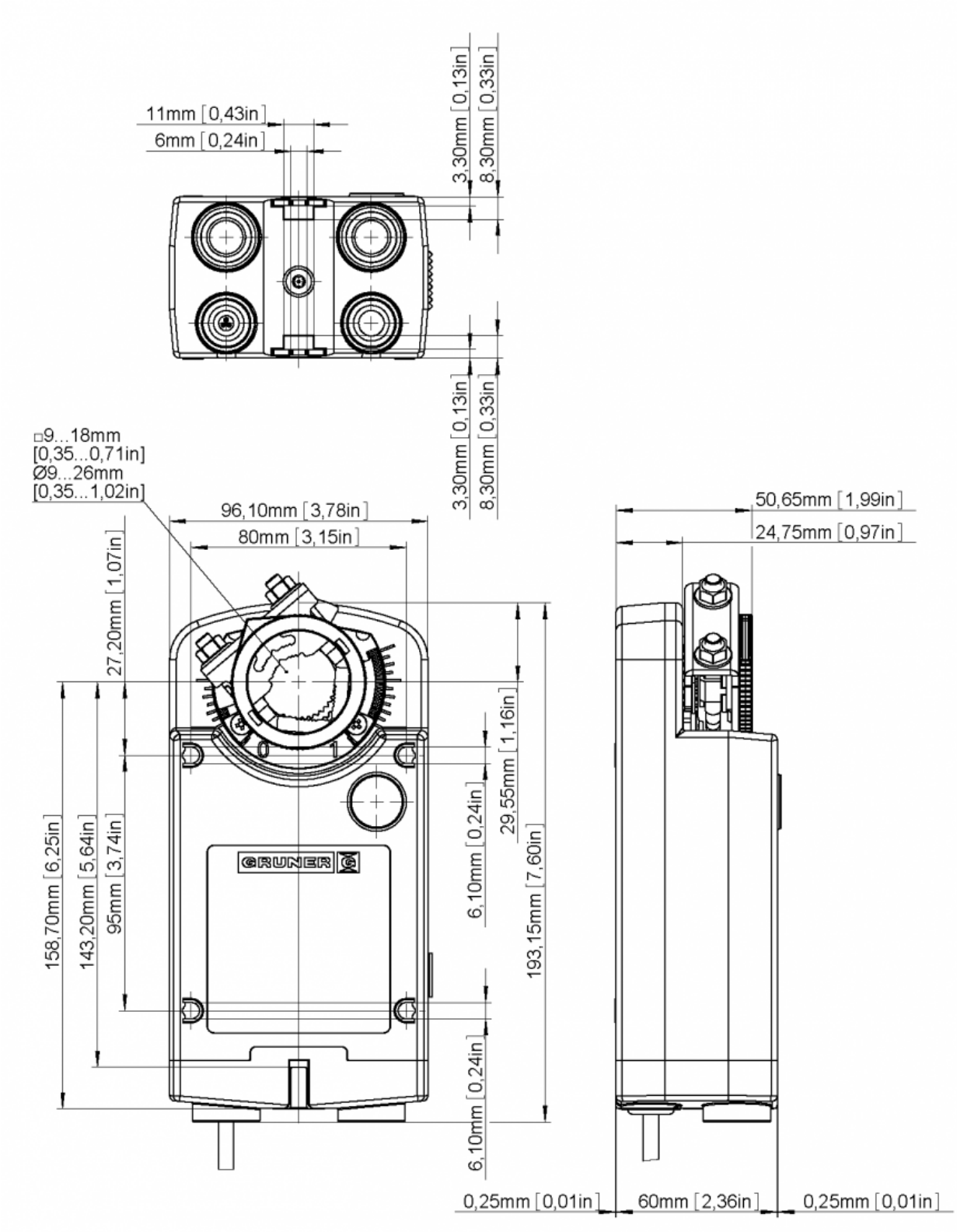
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363C-024-30-S2

Continuous control rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **30 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **Continuous DC 0(2)...10 V**
- **Auxiliary switch** **2x freely adjustable**
- **Valve size** **up to approx. 6 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	4,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	6,0 VA
	Control	Continuous 0(2)...10 VDC / Ri > 100 kΩ 0(4)...20 mA / Rext. = 500 Ω
	Position feedback	0(2)...10 VDC, max 5 mA
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 4 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>30 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop Adaption of operating range to match the mechanical angle of rotation.
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm

Technical data

Functional data	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
		>1'000'000 partial cycles (max. ±5°)
Safety	Protection class	III (low voltage safety current)
	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F.,
		non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)…10VDC, moves the actuator to its specified position. The actual damper position 0…100% is a feedback signal U for example to share the signal with other actuators.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

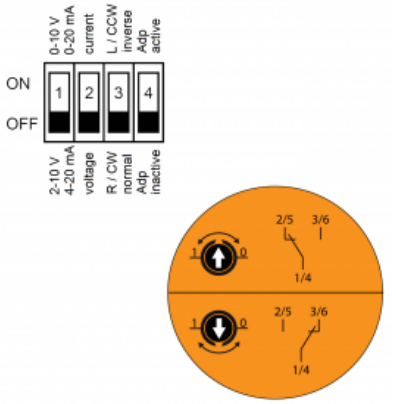
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

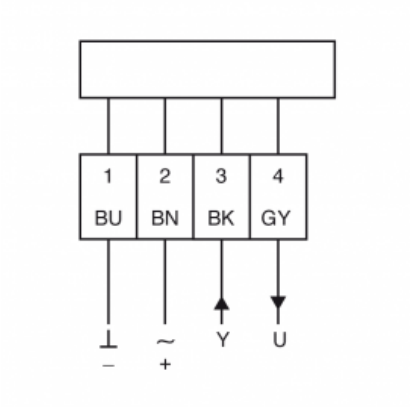
Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

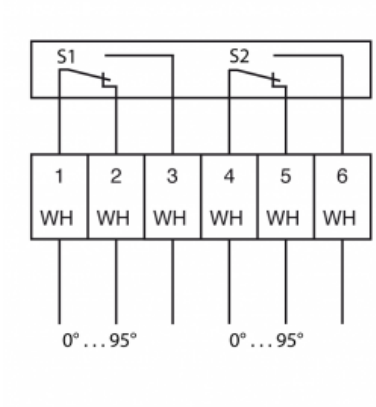
Mode- switch
DIP-Switch under the case cover

Adaption drive
-Adaption on angle of rotation < 90°
-Actuator power-off
-Setting the mechanical end stops
-Actuater power-on
-Adaption to enable
-Actuator adaption on angular range
-Adaption to disable
-“Y” refers to the measured angular range



Connection / Safety remarks

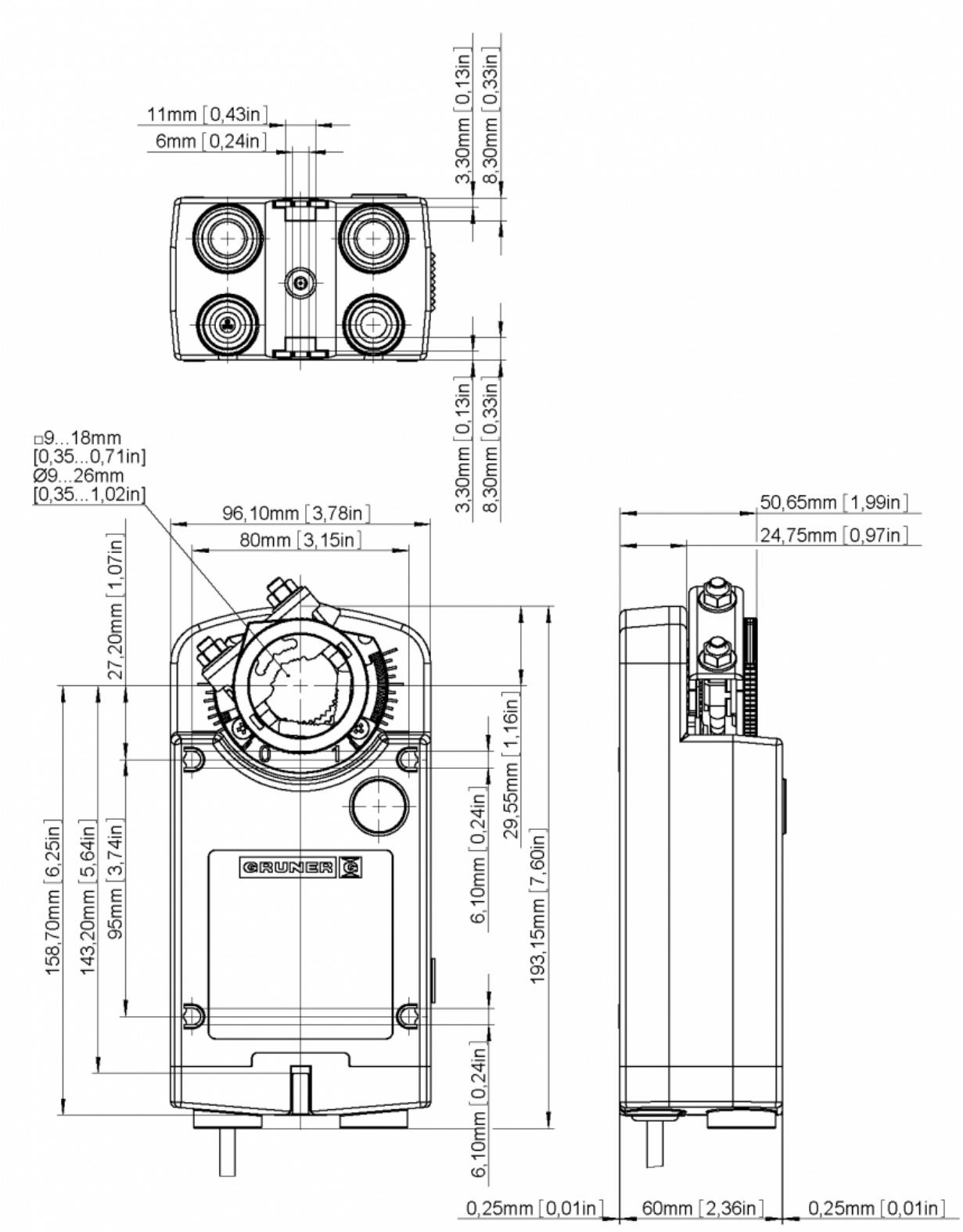




Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-024-40

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **40 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Valve size** **up to approx. 8 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	5,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>40 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

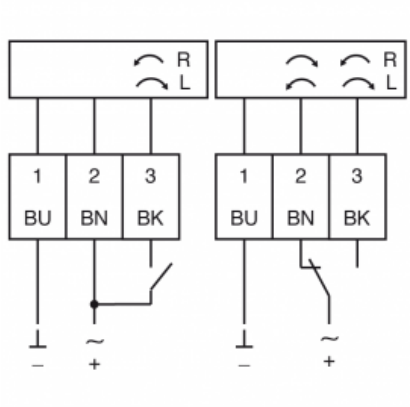
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise

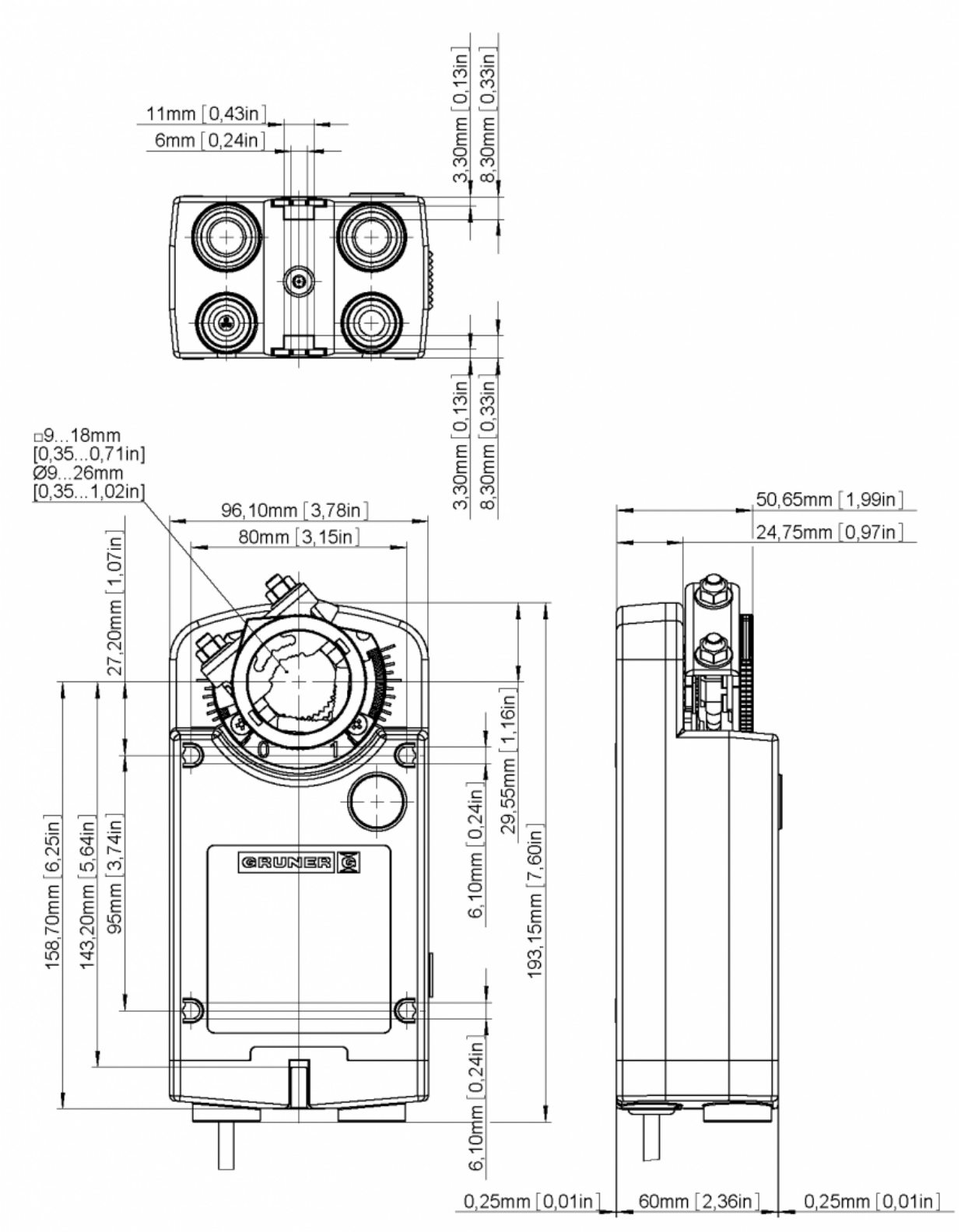
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-230-40

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **40 Nm**
- **Nominal Voltage** **230 VAC/DC**
- **Control** **2/3 Point**
- **Valve size** **up to approx. 8 m²**
- **Damper coupling** **Clamp**
  ◊ 9-18 mm/ Ø 9-26 mm

Technical data

Nominal voltage	Nominal voltage	230 VAC (50/60 Hz), 230 VDC
	Nominal voltage range	85...265 VAC/DC
	Power consuption Motor (Motion)	5,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	10,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>40 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	II (double insulation)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	4 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non- condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

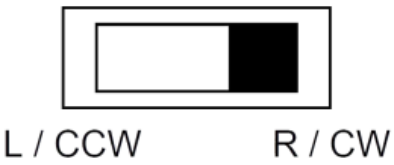
3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

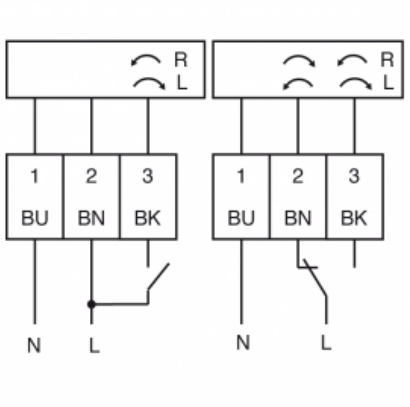
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



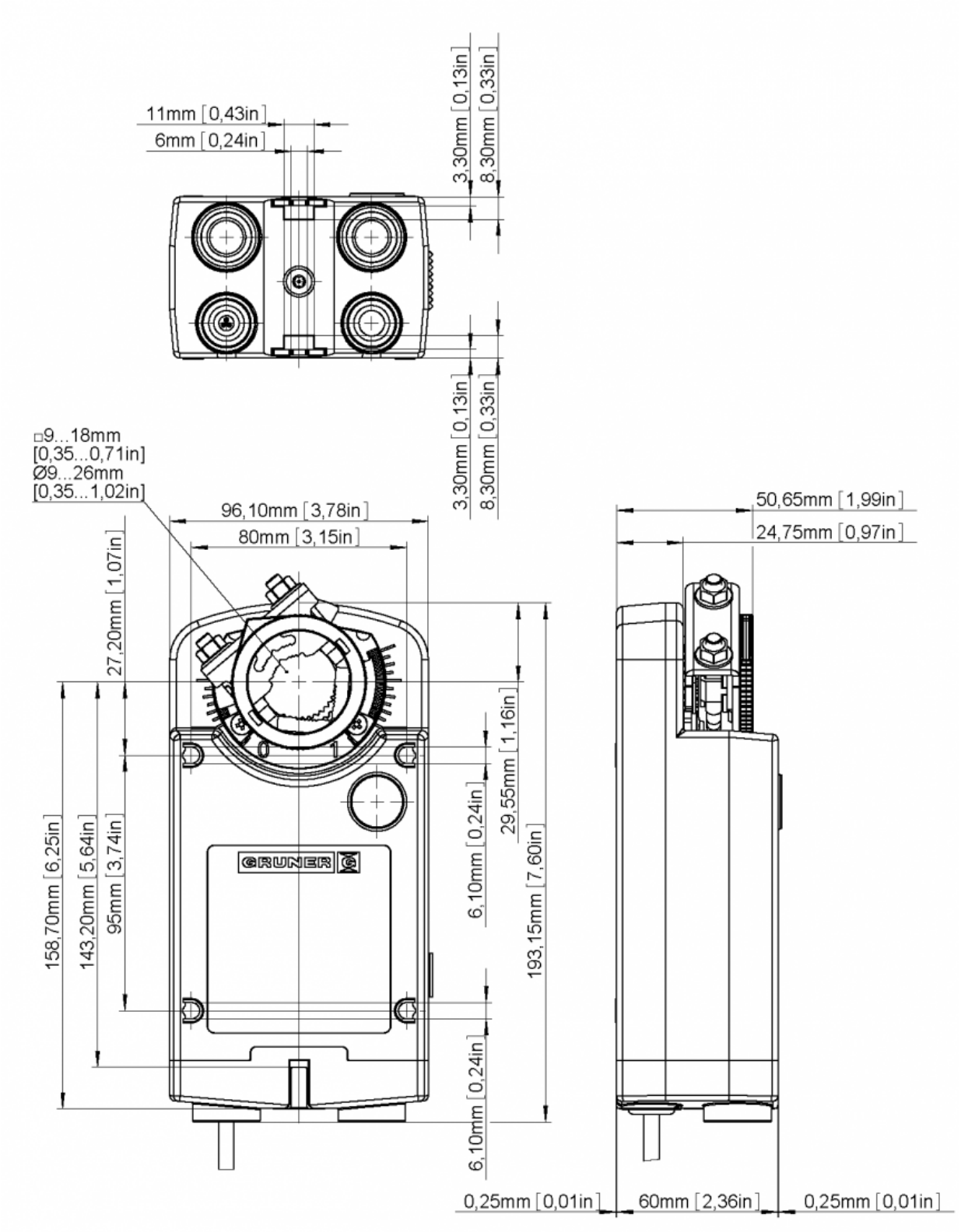
Connection / Safety remarks



Safety remarks

-Attention mains voltage
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



Gruner AG

post office box (P.O.Box) 1149 • D-78564 Wehingen
Tel. +49 7426 948-0 • Fax +49 7426 948-200 • www.gruner.de • info@gruner.de

GRUNER
Schalten und Bewegen

Technical data sheet

363-024-40-S2

Rotary drive without spring return

Description

Actuator for adjusting air dampers of 90° angle of rotation to be used in ventilation and air conditioning systems in buildings.

- **Torque Motor** **40 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **2/3 Point**
- **Connection Auxiliary switch** **2x freely adjustable**
- **Valve size** **up to approx. 8 m²**
- **Damper coupling** **Clamp ◊ 9-18 mm / Ø 9-26 mm**

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	5,5 W
	Power consuption Standby (end position)	1,5 W
	Wire sizing	7,0 VA
	Control	2/3-point
	Position feedback	-
	Auxiliary switch	2 x SPDT (Ag)
	Contact load	5 (2,5) A, 250 VAC
	Switching point	0...95°
	Connection Motor	Cable 1000 mm, 3 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	Cable 1000 mm, 6 x 0,75 mm² (halogen free)
	Connection Position feedback	-
	Connection GUAC	-
Functional data	Torque Motor	>40 Nm
	Synchronised speed	± 5%
	Direction of rotation	selected by switch
	Manual override	Gearing latch disengaged with pushbutton,self-resetting
	Angle of rotation	0°... max. 95°, can be limited with adjustable mechanical end stop
	Running time Motor	<150 s / 90°
	Sound power level Motor	< 45 dB(A)
	Damper coupling	Clamp ◊ 9-18 mm / Ø 9-26 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°)
Safety	Protection class	III (low voltage safety current)

Technical data

Safety	Degree of protection	IP54 in any mounting position
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1 (EN 60730-1)
	Rated impulse voltage	0,8 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	–30 ... +50°C
	Storage temperature	–30 ... +80°C
	Ambient humidity	5...95% r.F., non-condensating (EN 60730-1)
	Maintenance	maintenance free
Dimensions/ Weight	Dimensions	193 x 96 x 60 mm
	Weight	ca. 1700 g

Operating mode / Properties

Operating mode
2- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

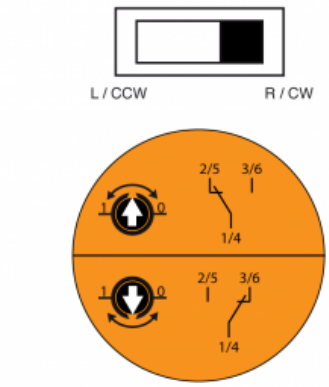
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Signaling
The two integrated auxiliary switches are freely adjustable in the angle of 0 – 95°. These are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

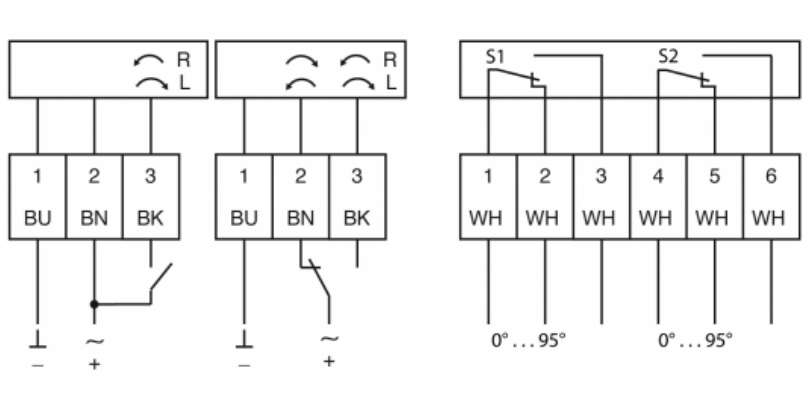
Direct mounting
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual override
Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch
R/CW= clockwise
L/ CCW= counter clockwise



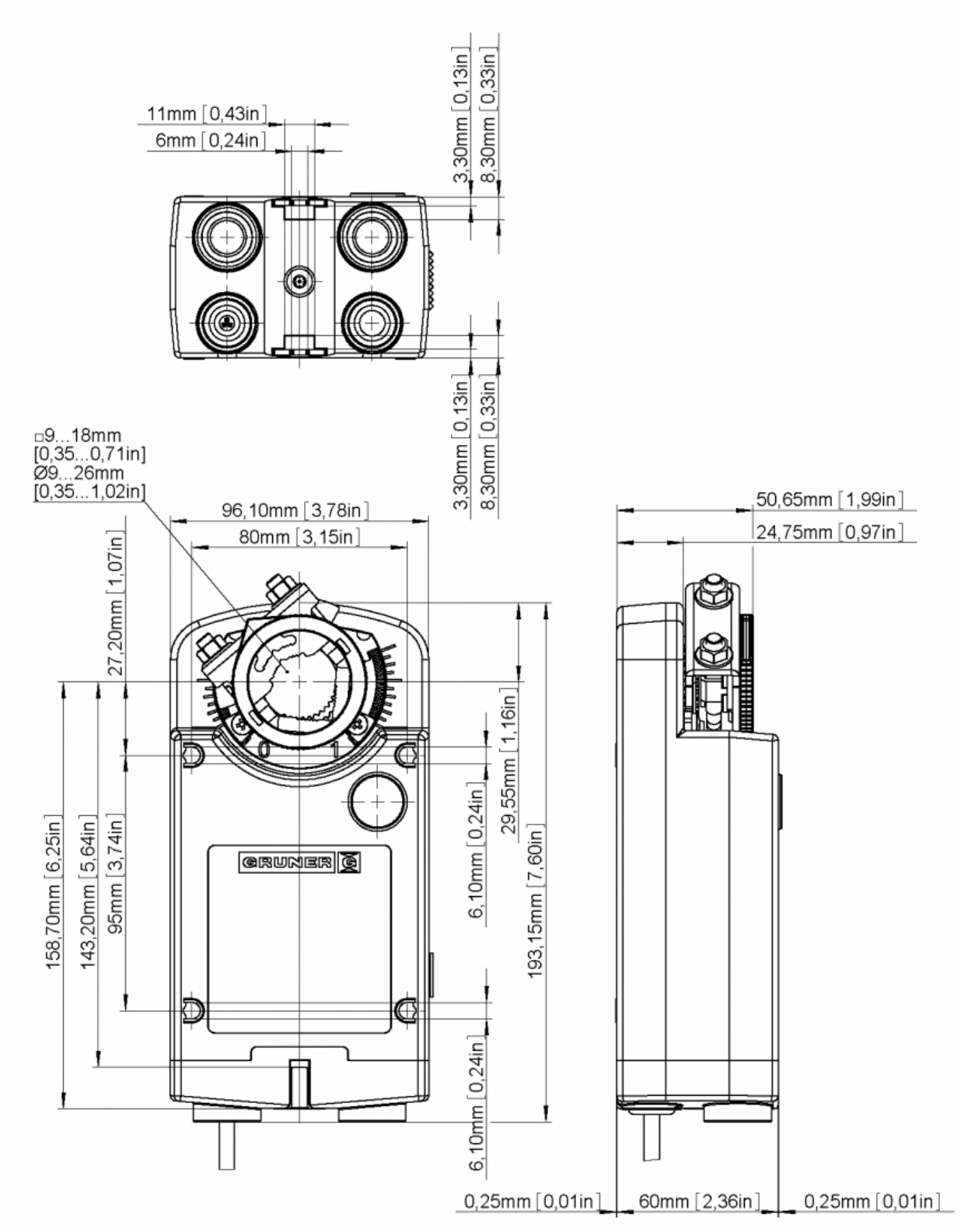
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
-The device may only be opened at the manufacturer´s site.
-When calculating the required torque, the specifications supplied by the damper manufacturers (cross- section, design, installation site), and the air flow conditions must be observed.
-The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Technical drawing



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post office box (P.O.Box) 1149 • D-78564 Wehingen
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