

Customizable Fail-Safe actuator for controlling dampers in typical commercial HVAC applications.

- Torque motor 270 in-lb [30 Nm]
- Nominal voltage AC/DC 24 V
- Control On/Off
- 2x SPDT
- NEMA 4



5-year warranty



Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	9.5 W
	Power consumption in rest position	4.5 W
	Transformer sizing	16 VA
	Auxiliary switch	2x SPDT, 1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V, one set at 10°, one set at 85°
	Switching capacity auxiliary switch	1 mA...3 A (0.5 A inductive), DC 5 V...AC 250 V
	Electrical Connection	Terminal block(s) inside junction box with knockouts
	Overload Protection	electronic throughout 0...95° rotation
Electrical Protection	actuators are double insulated	
Functional data	Torque motor	270 in-lb [30 Nm]
	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Manual override	5 mm hex crank (3/16" Allen), supplied
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable with mechanical end stop, 35...95°
	Running Time (Motor)	75 s / 90°
	Running time fail-safe	10 s @ -4...122°F [-20...50°C], <15 s @ -22...-4°F [-30...-20°C]
Noise level, motor	56 dB(A)	
Noise level, fail-safe	71 dB(A)	
Position indication	Mechanical	
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP66
	Degree of protection NEMA/UL	NEMA 4
	Enclosure	UL Enclosure Type 4
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
	Quality Standard	ISO 9001
	Ambient humidity	Max. 100% RH
	Ambient temperature	-22...122°F [-30...50°C]
	Ambient temperature note	-40...50°C for actuator with integrated heating
	Storage temperature	-40...176°F [-40...80°C]
Servicing	maintenance-free	
Weight	Weight	10 lb [4.7 kg]

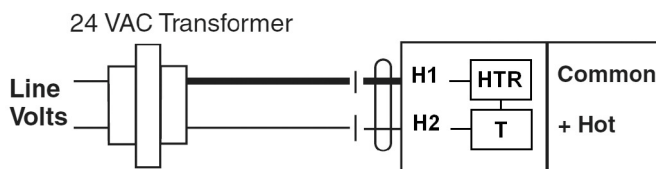
Mechanical accessories	Description	Type
	Shaft extension 240 mm \varnothing 20 mm for damper shaft \varnothing 8...22.7 mm	AV8-25
	Anti-rotation bracket EFB(X)/GKB(X)/GMB(X).	EF-P
	End stop indicator	IND-EFB
	Shaft clamp reversible, clamping range \varnothing 12...26.7 mm	K9-2
	Ball joint suitable for damper crank arm KH8 / KH10	KG10A
	Damper crank arm Slot width 8.2 mm, clamping range \varnothing 14...25 mm	KH10
	Actuator arm Slot width 8.2 mm	KH-EFB
	Push rod for KG10A ball joint 36" L, 3/8" diameter	SH10
	Wrench 0.512 in. [13 mm]	TOOL-07
	Mounting bracket for AF..	ZG-100
	Jackshaft mounting bracket.	ZG-120
	Damper clip for damper blade, 3.5" width.	ZG-DC1
	Damper clip for damper blade, 6" width.	ZG-DC2
	Mounting kit for linkage operation for flat and side installation	ZG-EFB
	1.05" diameter jackshaft adaptor (12" L).	ZG-JSA-3

Electrical installation

⚠ Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

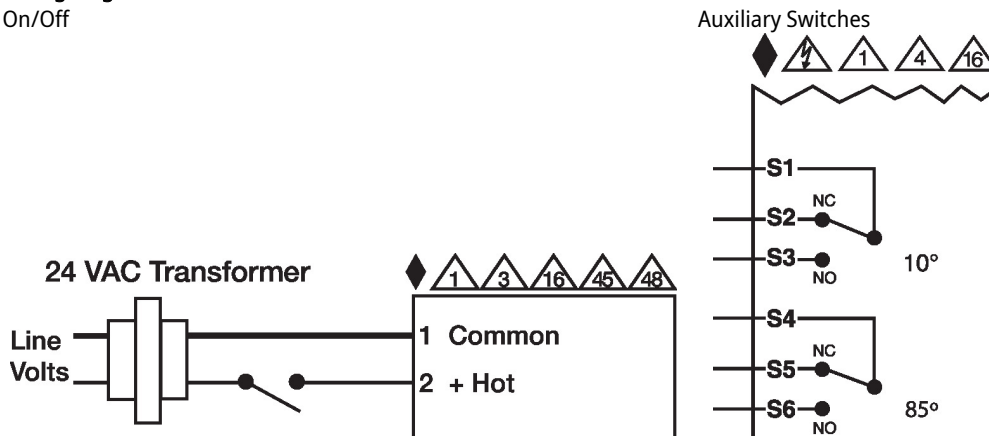
- ◆ Meets cULus requirements without the need of an electrical ground connection.
- ⚠ Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.
- 1 Provide overload protection and disconnect as required.
- 3 Actuators may also be powered by DC 24 V.
- 4 Two built-in auxiliary switches (2x SPDT), for end position indication, interlock control, fan startup, etc.
- 16 Actuators are provided with a numbered screw terminal strip instead of a cable.
- 45 Actuators may be powered in parallel. Power consumption must be observed.
- 48 Parallel wiring required for piggy-back applications.



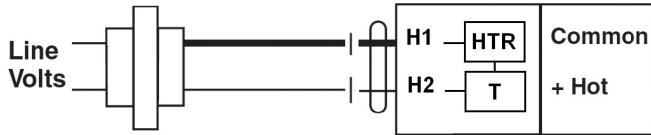
NEMA 4 Heater Option

Wiring diagrams

On/Off



NEMA 4 Heater Option
24 VAC Transformer



Dimensions

