5-year warranty

LISTED 94 D5 TEMP. IND. & REG. EQUIP. c UL us

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	15 VA
	Power consumption in rest position	2.5 W, 3.5 VA, End stop 25 VA, 1 A slow blow fuse *
	Power consumption for wire sizing	24 VA
	Auxiliary switch	2x SPST, , 1x 10° / 1x 85°
	Connection supply	2 Leads 0.9 m, 18 AWG with 1/2" NPT conduit connector
	Connection auxiliary switch	Cable 0.9 m, 4x 18 AWG appliance cable with 1/2" NPT conduit connector
	Electrical connection	7838]
	Overload Protection	electronic throughout 0...95° rotation
	Electrical Protection	actuators are double insulated
Functional data	Torque motor	3.5 Nm @ 177°C for 30 min
	Direction of motion motor	selectable by ccw/cw mounting
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Angle of rotation	95°
	Running time motor	15 s / 90°
	Running time motor note	at rated voltage and torque 0...50°C
	Running time fail-safe	<15 s
	Sound power level, motor	45 dB(A)
	Sound power level, fail-safe	62 dB(A)
	Position indication	Mechanical
Safety data	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP30
	Degree of protection NEMA/UL	NEMA 1
	Housing	UL Enclosure Type 1
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, Listed to UL 2043 - suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC. NYC Department of Buildings MEA 197-07-M.California State Fire Marshal Listing 3210-1593:101.
	Quality Standard	ISO 9001

Technical data

Safety data	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	0...50°C [32...122°F]
	Storage temperature	-40...80°C [-40...176°F]
	Servicing	maintenance-free
Weight	Weight	1.6 kg
Materials	Housing material	Galvanized steel

Safety notes

- * Neither UL nor Belimo require individual fusing of FSLF actuators.
- The FSLF draws higher peak current when driving against its end stop or any other type of stop. Given the technology of fuses & breakers, this requires the value of fuse or breaker to be increased to avoid nuisance opening or tripping. A 1 A slow blow should be used for AC 24 V. A 0.25 A slow blow should be used for AC 120 V. A 0.125 A slow blow should be used for 230 V.
- SAFETY NOTES
- Wiring and installation must comply with all local electrical and mechanical codes.
- The actuator contains no components which the user can replace or repair.
- Cables are not plenum rated and require flex conduit.
- 1/2" Threaded Connector: Screw a conduit fitting into the actuator's metal bushing. Jacket the actuator's input wiring with suitable flexible conduit. Properly terminate the conduit in a suitable junction box.
- 3/8" Flex Connector (-FC models): Mount the flexible conduit into the actuator's metal bushing by means of the provided screw with a torque of 1.2 Nm. Jacket the actuator's input wiring with suitable flexible conduit. Properly terminate the conduit in a suitable junction box.

Accessories

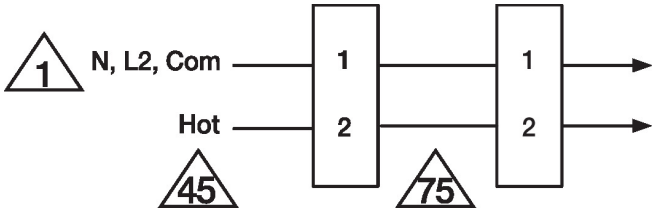
	Description	Type
Electrical accessories	Thermoelectric tripping device, Duct inside temperature 165°F	BAE165 US
	Auxiliary switch 2x SPDT	S2A-F US
Mechanical accessories	**Description**	**Type**
	Weather shield 330x203x152 mm [13x8x6"] (LxWxH)	ZS-100
	Weather shield 406x213x102 mm [16x8-3/8x4"] (LxWxH)	ZS-150

Electrical installation

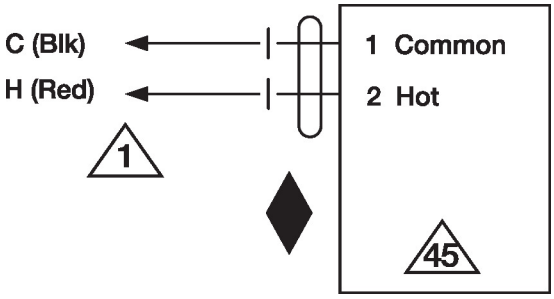
APPLICATION NOTES

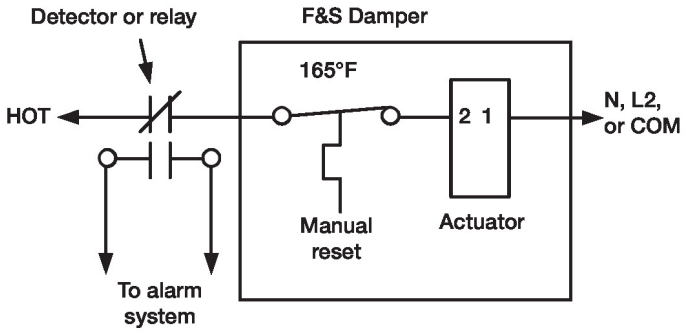
1 Provide overload protection and disconnect as required.
45 Actuators may be powered in parallel. Power consumption must be observed.
72 S4 makes to S6 when actuator is powered open.
73 Auxiliary switches are for end position indication or interlock control.
74 Double insulated.
75 Ground present on some models.

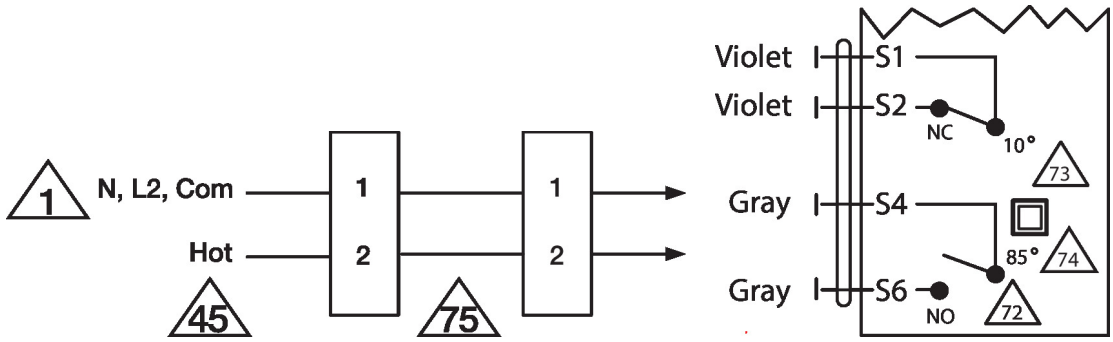
Electrical installation



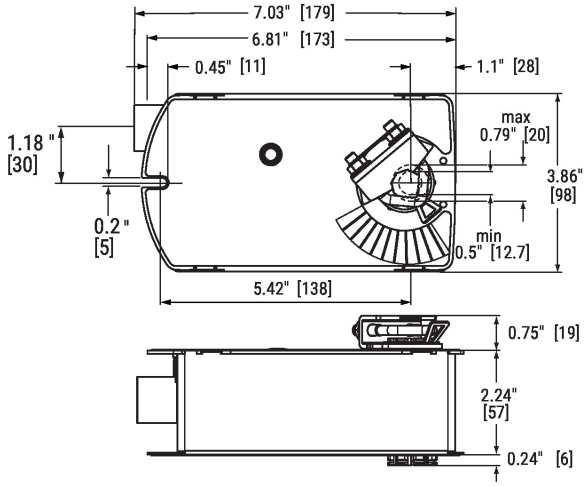
Wiring diagrams







Dimensions


7.03" [179]
6.81" [173]
0.45" [11]
1.1" [28]
max
0.79" [20]
1.18 "
[30]
3.86"
[98]
0.2 "
[5]
min
0.5" [12.7]
5.42" [138]
0.75" [19]
2.24"
[57]
0.24" [6]