
5-year warranty

LISTED
94 D5
TEMP. IND. & REG. EQUIP.

## Technical data

| | | |
|---|---|---|
| **Electrical data** | Nominal voltage | AC 120 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 96...132 V |
| | Power consumption in operation | 18 VA |
| | Power consumption in rest position | 4 W, 5.5 VA (50 Hz 8 VA), End stop 27 VA, 0.25 A slow blow fuse * |
| | Connection supply | 3 Leads 0.9 m, 18 AWG with 1/2" NPT conduit connector |
| | Electrical connection | 7838] |
| | Overload Protection | electronic throughout 0...95° rotation |
| | Electrical Protection | grounded housing, 120 V |
| **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 | Max. 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** | 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 |
| | 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] |

## Technical data

| | | |
|---|---|---|
| **Safety data** | Storage temperature | -40...80°C [-40...176°F] |
| | Servicing | maintenance-free |
| **Weight** | Weight | 2.6 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

| Electrical accessories | Description | Type |
|---|---|---|
| | 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 |

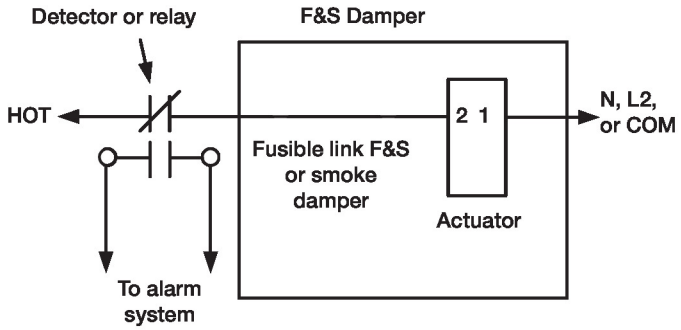
## Electrical installation

**APPLICATION NOTES**

1 Provide overload protection and disconnect as required.

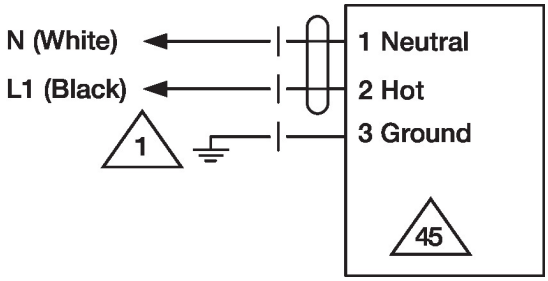
45 Actuators may be powered in parallel. Power consumption must be observed.

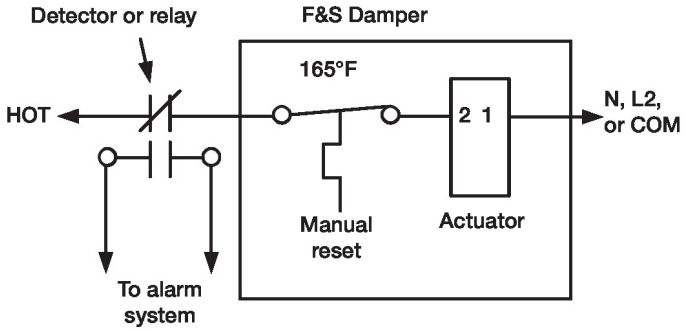
75 Ground present on some models.

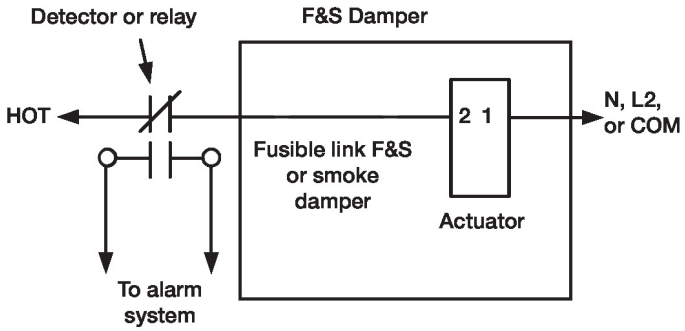


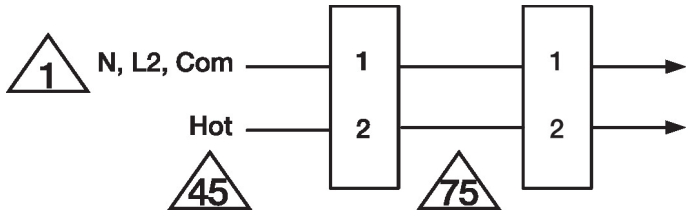
## Electrical installation

### Wiring diagrams

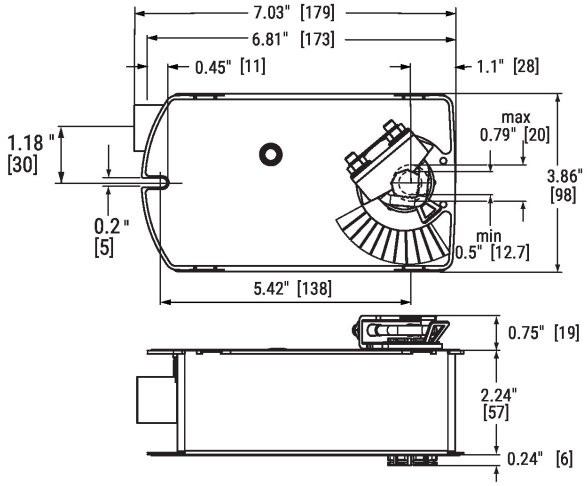


## Dimensions


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]