

SC Series Smoke Control Damper

Installation, Maintenance and Operating Instructions

Installation:

1. Before installation, the damper should be inspected to ensure that it has not been damaged and is in good condition following transportation.
2. Ensure that all packing materials are removed, as failure to complete could result in permanent damage to the product.
3. Ensure that the ductwork and damper spigots are carefully matched, with the specified sealing material used during installation.
4. Ensure that the ductwork is adequately supported. This is particularly important where large dampers are concerned.
5. Ensure that the damper is free of any foreign matter, the assembly is not distorted and is square with no surface damage that could restrict blade movement.
6. If stored before installation, ensure the product is stacked and stored in clean, dry conditions to prevent the ingress of dust, as well as avoiding excessive temperatures or humidity.
7. Care should always be taken when handling dampers on site to avoid subjecting them to excessive stresses for which they are not designed.
8. Whenever possible, operate the damper blades by disconnecting the motor connection. Particular attention must be given when re-tightening the motor ensuring correct relationship between the motor and the spindle. It is advised to mark a position before loosening the clamp.
9. It is important to ensure that all dampers are installed with airflows and pressures conforming to the test data as detailed in the manufacturers technical product manual. Excessive airflows and/or pressures could result in permanent damage and/or malfunction of the damper.
10. Always ensure that the correct voltage is supplied, and that the motor and/or other electrical components conform to that voltage and current.

Maintenance:

1. Keep the damper clean and free from any contamination or foreign items.
2. Where possible, operate the blades against airflow to ensure easy, free movement.
3. Periodic inspection should be made of the damper, to ensure efficient operation of all ancillary components.
4. It is recommended within normal preventative maintenance procedures for the blades and inner casings to be cleaned annually, as well as inspection of linkages, actuators and the thermal device.
5. Use of heavy oils is not recommended, due to the possible build-up of dust.
6. It is recommended to check regularly the operation actuators, to ensure correct operation.
7. The time period can best be ascertained by experience or local regulations, but should not exceed a twelve month interval. Inspection should be carried out more frequently where excessive dust or dirty conditions prevail.

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Operation:

1. These dampers are primarily designed for use in Fire Rated Ventilation Ducts where the control of smoke at elevated temperatures is required at low to medium velocities.

The SC Series damper has been subject to an elevated temperature test, where the damper was subject to a graduated rise in temperature before the temperature levelled out and was held steady at 800°C for a period of 30 minutes. The damper was removed from the furnace and operated freely whilst at this furnace temperature.

2. Where the damper is supplied with an extended spindle for the fitting of an actuator by others, consideration must be given to the torque requirements, taking into account any air loading. Where the SC Series damper is required to operate during and post any fire condition, the fitting of a thermal housing to the damper actuator will be required to ensure that any external heat source to the ductwork and in the immediate vicinity of the actuator does not affect the actuator functionality.
3. The SC Series damper has been tested for integrity and stability by Expert Heat Treatments. Test report 27438 refers.
4. It is assumed that the airflow through the damper is filtered and environmentally controlled, with regard to humidification and corrosive atmospheres to National and International Specifications.

National and International Specifications:

1. The SC Series Smoke Control Damper is designed and manufactured for use as described in the HVCA Ductwork Specification DW 144, and as Eurovent 2/2.
2. This product does conform to other National and International Specifications not mentioned above. B.S.B.'s sales office can confirm detail as required.

Recommended Spares:

1. None for this product.

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