

March 2008

Fire/FB
SERIES

*Includes
Microswitch
Updates*

Fire/FB SERIES

Galvanised Bladed Curtain Fire Dampers

Features

- CONFORMS TO DW144.
- BS 476 Part 20: 1987 Fire Test Standards, (4HOURS).
- Corrosion tested.
- Self-Latching Removable Cassette, easy Single Handed Reset.
- Choice of 230 Volt A.C. or 24 Volt A.C. and D.C. remote electro magnet fail-safe releases on cassette type options only.



The Range

The Actionair Fire/FB range of quality engineered dampers are suitable for air conditioning and ventilation systems requiring up to 4 hour fire protection.

These Galvanised bladed Actionair Fire/FB Dampers fail-safe closed and are supplied with the new innovative, even easier Single-Handed Reset Self Latching Removable Release Mechanism Cassette, which permits single handed reset.

Ordinary steel curtain fire dampers involve a complex pull and lift curtain opening operation, further complicated by having to hold the curtain in the fully open position against the constant tension of closure springs whilst attempting to reset or replace the fusible link unsighted.

Specification

Fire/FB

The Actionair Fire FB curtain fire dampers comprising of a galvanized steel folding curtain having unbroken movable joints, stainless steel constant tension closure springs for positive closure and stainless steel peripheral gasketing.

The Self Resettable, Latching Removable Release Mechanism Cassette, shall ensure the closure of the Galvanised curtain under full fire conditions. All housed in a galvanised steel fully welded spigotted type casing suitable for square, rectangular, circular or flat oval connections.

Fire/FB as supplied by Actionair.

(Alternative rated release temperatures to 72 °C are catered for by a chain type link, please refer to Actionair Sales Office for details.)

A Fire Rated Damper in accordance with British Standard 5588: Part 9: 1999 should be held in the Open Position by means of a Thermally Actuated Device set to operate at approximately 74 °C. All Fire/FB Galvanized Steel Curtain Fire Dampers are Fire Rated Dampers as they are held in the Open Position by a Thermally Actuated link operating at a temperature of approximately 72 °C ± 4 °C.

The fitting of a Thermally Actuated Link operating at a higher temperature requires approval by the local relevant Local Authority.

Blade Features

Stainless Steel Closure Springs

Stainless Steel constant tension springs are fitted and positioned out of the airstream to close and latch the damper, regardless of vertical or horizontal operation.

Casing Features

Spigotted Casing

The spigotted casing with continuously welded corners and spigot connections, makes these dampers suitable for inclusion into air distribution systems to the test methods of Eurovent Class A, B & C and HVCA Ductwork specification DW144.

These galvanised casings are manufactured with either Square, Rectangular, Circular or Flat Oval duct connections.

As an option, casings can be manufactured in Type 1.4016 (430) Ferritic or Type 1.4401 (316) Austenitic Stainless Steel.

Ordinary steel curtain fire dampers for low or medium velocity operation and having the blades and/or part of the casing frame in the airstream may not have casings of continuous welded airtight construction.

Cassette Details

- Patented design.
- Made of Polyphenylenesulphide (PPS) resin reinforced with 40% glass (GF-PPS).
- Technically advanced engineering polymer.
- PPS is stable at temperatures up to 200 °C.
- Cassette construction is of very high strength and has excellent creep and fatigue resistance.
- Low smoke and toxic emissions in fire conditions.
- Halogen free.
- PPS has a very low moisture absorption.
- PPS is corrosion resistant.
- The Cassette construction is environmentally friendly (recyclable material).
- The new Cassette is retrofittable to existing Fire/FB Dampers (by use of a simple optional adaption bracket). Part Number: CNNN01981
- One Cassette to suit all damper material options.



Features

Self Latching Removable Release Mechanism Cassette

The cassette mechanism is completely removable from the Fire/FB Damper by manually releasing the retaining clip 1. This allows replacement of the cassette without the use of tools 2.

Simple hand operation enables the damper curtain to be reset and latched in the fully Open Position. This increases the ease and speed with which the Fire/FB Damper can be reset following periodic functional testing in accordance with British Standard BS 5588: Part 9 Code of Practice for Ventilation and Air Conditioning Ductwork.

The thermal actuator in the form of a helical memory metal compression spring is produced from a special Cu-Zn-Al brass alloy.

On temperature rise this expands and at 72 °C, causes the Fire/FB damper blades to release.

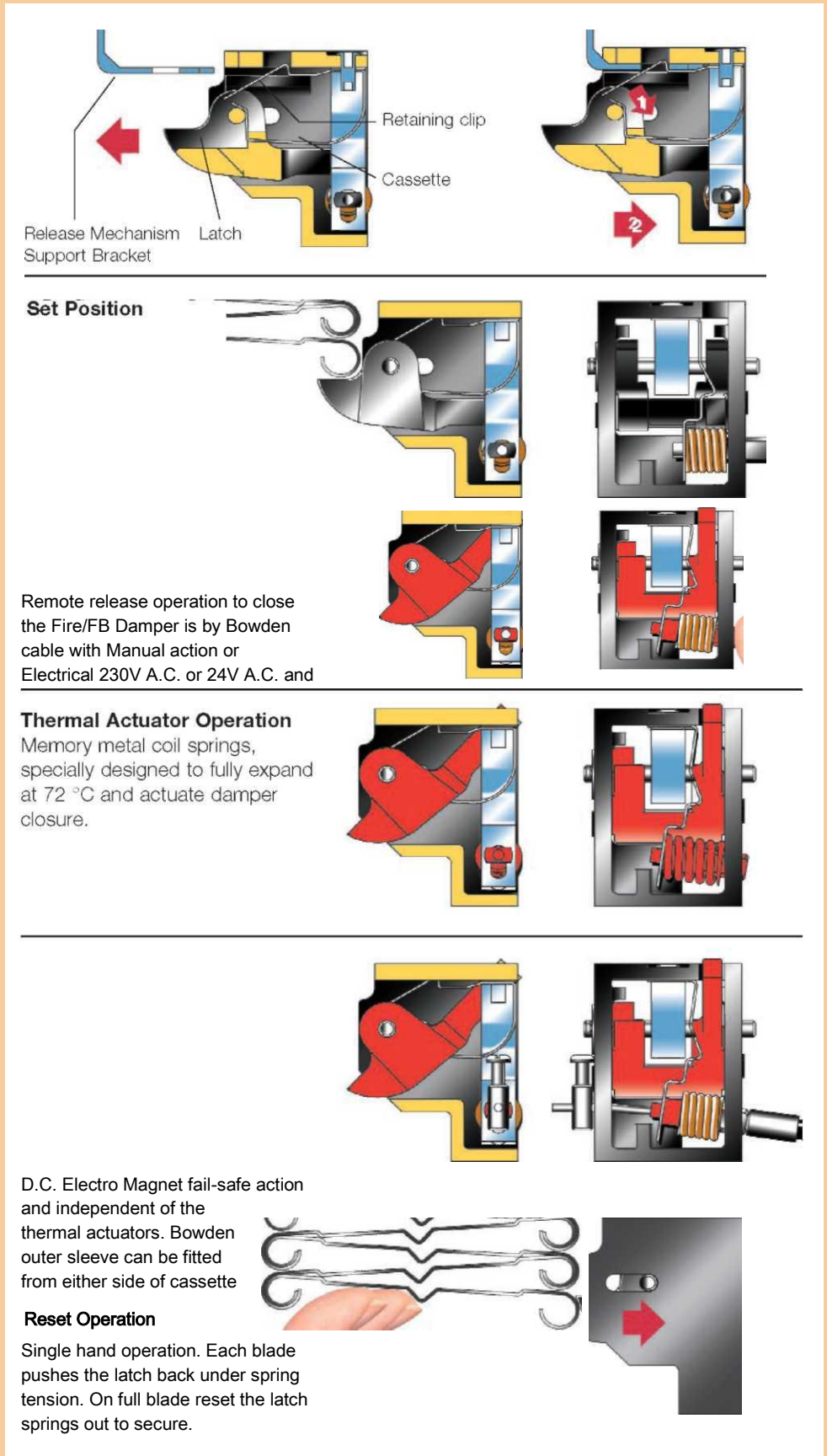
On cooling, the spring reverts to the close-coiled state offering the significant advantage of repeated operation, unless it has reached temperatures in excess of 170 °C, where it will remain extended, preventing reset.

Cassettes are only available for 72 °C. For Dampers where alternative thermal link temperatures are required a chain-link can be offered in place of a cassette. Electrical release is only available with a cassette i.e. 72 °C. Please refer to Actionair Sales Office.

Please note: For dampers with dimensions of 150mm and below ensure that there is adequate access to enable re-setting.

Manual Operation

Manual Operation for periodic functional testing in accordance with British Standard BS 5588: Part 9 Code of Practice for Ventilation and Air Conditioning Ductwork.



Indication Multiple Assemblies

An external indicator is factory fitted optional to the access (cassette) side of the damper casing giving visual indication of damper blade position.

A spring steel actuator ensures automatic resetting of the external indicator in either horizontal or vertical applications.

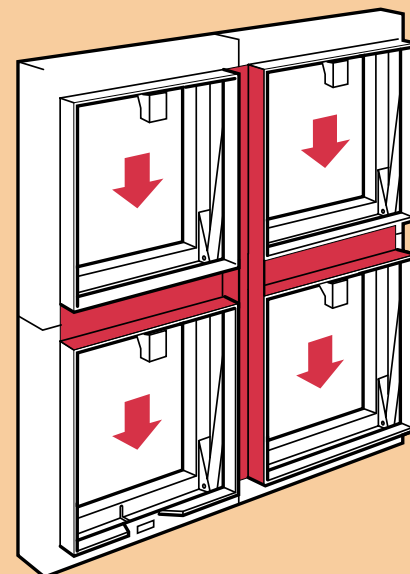
The external indicator is especially beneficial at the system balancing and commissioning stage eliminating the necessity of internal duct inspection to determine the fire damper open or closed position.

Square and rectangular casings are available in multiple module arrangements, supplied complete with connecting channels for site fixing by others.

Multiple Vertical Arrangement

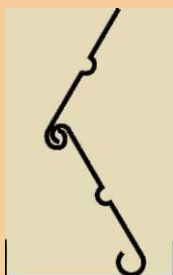
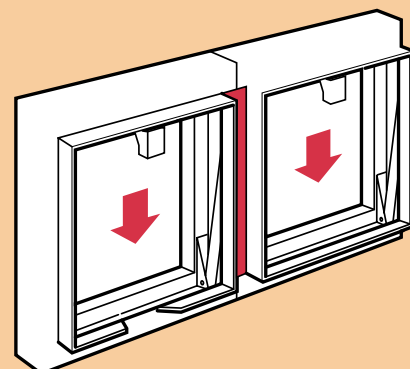
Series FB as required mounted on Series also be arranged 3 off dampers high to give maximum duct height of 3100mm. Duct width as required. Bottom dampers only provided with external visual indication of blade position.

Note: Should more than 3 off dampers high be required, adequate damper supports are necessary and must be provided. Please refer to Actionair Sales Office.



Multiple Vertical Arrangement

Series FB shown. Series can be mounted similarly. Maximum duct height 1000mm. Maximum duct width as required. Horizontal arrangement similar. External visual indication of blade position provided with all dampers.



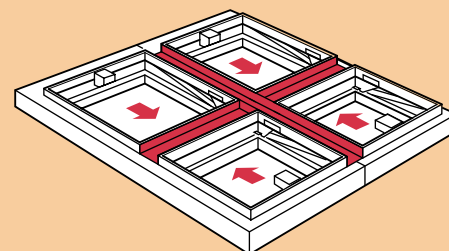
Fluorescent Red Display

Indicating damper blades in closed position.

Note: External visual blade position indication is not available with special finished casings, certain multiple assemblies, miscellaneous Damper configurations and due to physical size limitations is not available below 125mm dia. on Series FBC Dampers.

Multiple Horizontal Arrangement

Series FB mounted similarly, four or more sections. Maximum duct height 2000mm. External visual indication of damper blade position not relevant to this application.

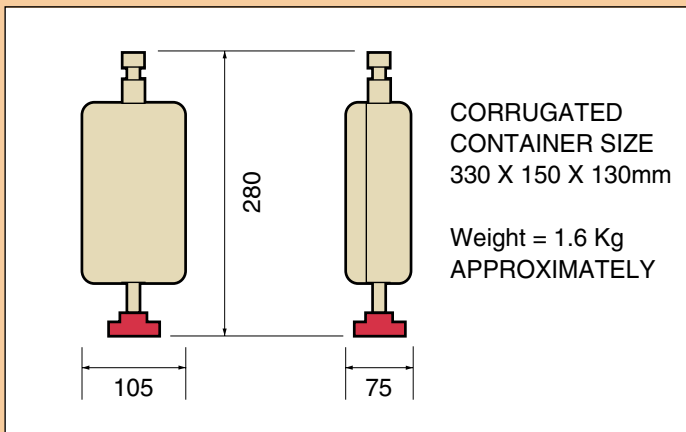


Remote Electrical Fail-Safe Releases

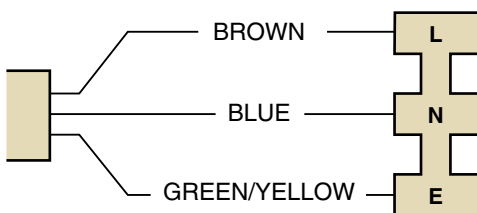
Electro Magnet Releases

230 Volt A.C. and 24 Volt A.C. and D.C. Electro magnet releases are available, for use with cassette mechanisms only.

All Series Fire/FB Dampers are available with factory fitted single or double pole micro switches as optional extras to provide remote electrical indication of damper status and/or controls interface.

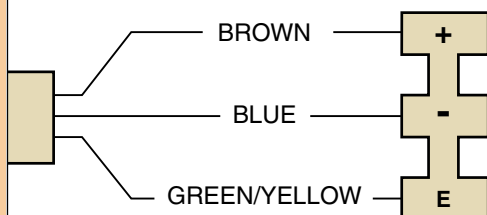


230V A.C.



SUPPLY
230V
1PH 50Hz
10mA
CONTINUOUS
LOADS

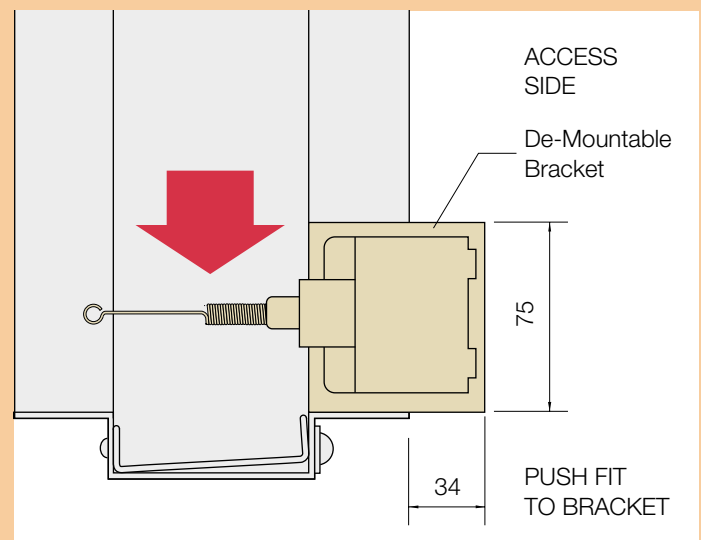
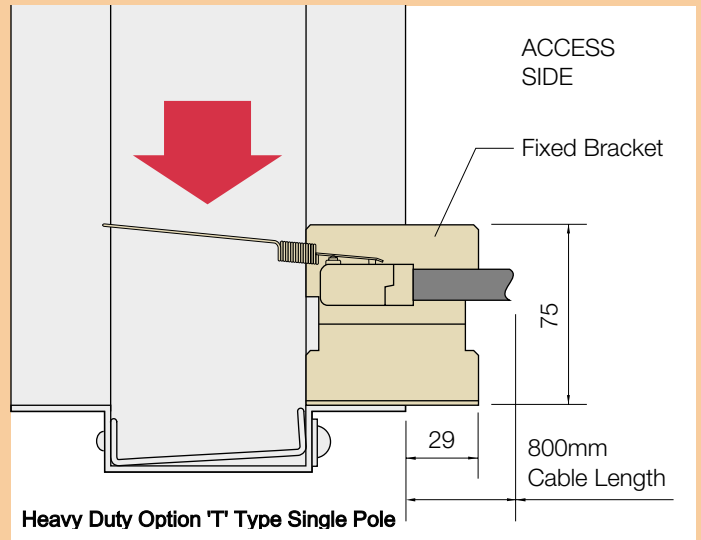
24V A.C. and D.C.



SUPPLY
24V
1PH 50Hz
120mA
CONTINUOUS
LOADS

Micro Switches

Standard Fitment Option 'M' Type Single Pole



Note: For Dampers below 200 x 200mm or 200mm diameter micro switches will be factory fitted on the non access side.

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Dampers Controls Fancoils