

**HOT ENCLOSURES CATALOGUE** 

**RELEASE: 1.6 AUG 2016** 



## Hot Enclosures Catalogue

Hot Damper Actuator Enclosure (HDAE) and Hot Damper Interface Enclosure (HDIE)

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## **Hot Enclosures**

The Hot Enclosure range has been specifically designed and tested to accept Actionair damper actuators (HDAE) and damper interfaces (HDIE) providing robust fire protection to the outside of the enclosure while maintaining low internal temperatures allowing the devices to continue to operate in the event of a fire situation for 120 minutes at 300°C. 400°C and 600°C for 30 minutes available as options, see page 5 'Ordering Information'.

The Hot Enclosure range utilises layers of advanced cooling thermal control materials, high insulation barriers and unique intumescent materials providing exceptional fire resistance and keeping the internal devices below the critical failure temperatures. In a fire situation, the external coating expands creating a dense char up to 50 times its volume while the thermal properties of the unique fabric insulation keep the device below its operating failure temperature. Also, the cable entry points intumesce and close during a fire leaving no gaps for the fire to penetrate. Therefore, the rigidity and stability of the enclosure are retained during the period of the fire

The enclosure lid is securely fastened with six wing nuts for ease of assembly. The internal mounting plinth is specially designed to accept a range of Belimo damper actuators (see features) and Safegard damper interfaces.

### **ADVANTAGES**

- Robust fire protective materials
- · High thermal cooling insulation design
- Unique fire rated cable entry
- Internal mounting plinth with predrilled assembly holes
- Environmentally friendly
- Moisture resistant
- · Lightweight
- Finished with hardwearing top seal

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## Hot Damper Actuator Enclosure (HDAE)

The Hot Damper Actuator Enclosure is used when damper actuators are required for operation up to 300°C for two hours or 400°C for ½ hour.

Note: Image shown with prefitted actuator

## **Typical Installation**

Only trained and qualified personnel should be allowed to install, replace or service this equipment. Installation should be in accordance with the relevant local safety standards.

- **1.** Ensure electrical source is isolated or turned off prior to commencing any electrical installation.
- 2. Fix hot damper actuator enclosure via snap in facility to the Actionair/Safegard damper. If using an alternative actuator, as listed under features, fixed to an alternative damper please contact Safegard technical sales.
- 3. Do not drill the HDAE otherwise warranty will be void.

## Specification

Total Weight: (including actuator) 8Kg (approx).

Size: 370 x 180 x 146 mm

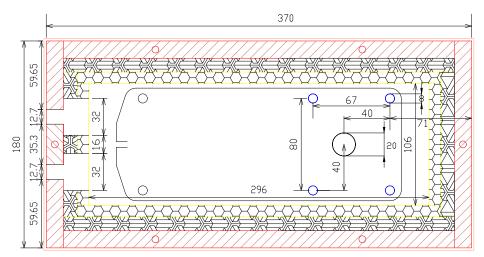
Storage: Clean dry environment above 5° C Compliance: BSEN

ISO 9001: 2008 and ISO 14001: 2004 Colour: Light grey

Humidity: 25% RH to 90% RH at 40° C

### **Features**

- 300°C operation for 2 hours or 400°C for ½ hour.
- Safegard have developed a unique thermal enclosure to protect the Actionair/Safegard (Belimo based) range of Damper Actuators currently available. Also designed to protect Belimo BE, BF, BFG, BR, FSAF & FSNF range of actuators as standard. If you want to protect a different actuator please contact Safegard technical sales.
- The HDAE has been designed with layers of advanced cooling thermal control materials, high insulation fabric barriers and unique intumescent materials providing exceptional fire resistance and keeping the damper actuator electronics below the critical failure temperature.
- The maximum temperature is 300°C for up to two hours or 400°C for ½ hour. This has been tested by BM Trada (BMTFEIF4089C RevA AR1) and (BMTFEIF4088C RevA AR1) and independently witnessed by BRE.
- Not harmful to the environment.



Installation of the HDAE on to a damper other than an Actionair/Safegard damper requires the actuator to be secured to the damper through the 4No fixing holes, highlighted in blue, which will match up with the 4No fixing holes in the base of the HDAE.

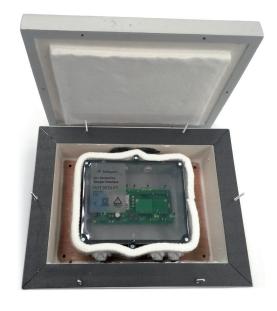
The damper shaft must be located through the 20mm Diameter hole.

Do not drill additional holes in the HDAE.

**Note:** HDAE lid may need to be removed again during testing/commissioning so access must be provided. Hand tighten wing nuts (do not overtighten).

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# Hot Damper Interface Enclosure (HDIE)

The Hot Damper Interface Enclosure is used when Safegard damper interfaces are required for operation up to 300°C for two hours. 400°C and 600°C for 30 minutes available as options, see page 5 'Ordering Information'.

Note: Image shown with prefitted Safegard HOT SFDI. HDIE for use with Safegard product only

### **Typical Installation**

Only trained and qualified personnel should be allowed to install, replace or service this equipment. Installation should be in accordance with the relevant local safety standards.

- Ensure electrical source is isolated or turned off prior to commencing any electrical installation.
- 2. Open HDIE by removing 6 x wing nut fixings.
- The HDIE can be attached by M6 bolts and washers to a frame on the wall or directly to the wall using suitable masonry screws or stud wall fixings.

**NB:** 4 x corner mounting holes are pre-drilled, do not drill the HDIE otherwise warranty will be void.

- 4. The HDIE is supplied without the damper interface electronics which will be fitted at commissioning stage.
- The cables entering the HDIE must be guided through the layers of intumescent and insulating fabric and finally through the glands. Do not drill the HDIE otherwise warranty will be void.
- 6. Only use Safegard recommended fire rated cables.
- Once the damper interface is fitted and terminated the lid can be secured.

#### **Please Note:**

HDIE lid may need to be removed again during testing/commissioning so access must be provided.

150mm clearance required for lid removal and at cable entry points.

Hand tighten wing nuts (do not overtighten).

### **Features**

- Safegard have developed a unique thermal enclosure to protect the Safegard range of Damper Interfaces currently available.
- The HDIE has been designed with layers of advanced cooling thermal control materials, high insulation fabric barriers and unique intumescent materials providing exceptional fire resistance and keeping the damper interface electronics below the critical failure temperature.
- The maximum temperature is 300°C for up to two hours. 400°C and 600°C for 30 minutes available as options, see page 5 'Ordering Information'. This has been independently tested by BM Trada.
- · Not harmful to the environment.

## Specification

Total Weight: (including internal DIs) 9kg (approx).

Size: 390 x 300 x 146 mm

Cable entry (intumescent lining): 6 - 12mm (for other sizes please contact Safegard technical sales)

Storage: Clean dry environment above 5° C

Colour: Light grey

Compliance: BSEN ISO 9001: 2008 and ISO 14001: 2004

Humidity: 25% RH to 90% RH at 40° C

### **Ordering Information**

Please specify the following:

Product Type: HDAE or HDIE

#### **Optional Temperature Time Requirements**

(Subject to quotation)

HDAE - 400 (400°C for 30 minutes)

HDAE - 600 (600°C for 30 minutes)

HDIE - 400 (400°C for 30 minutes)

HDIE - 600 (600°C for 30 minutes)

WARNING: The responsible body shall be made aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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