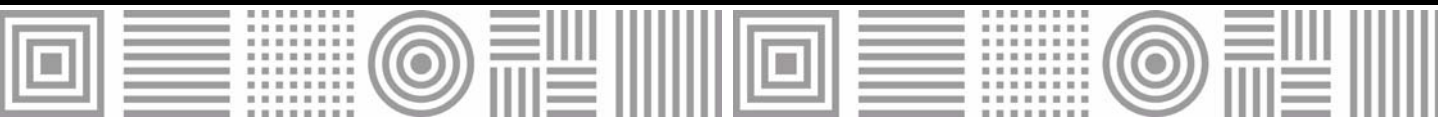




Patented

FOK-EIS-180 EN-1366-2 fire dampers

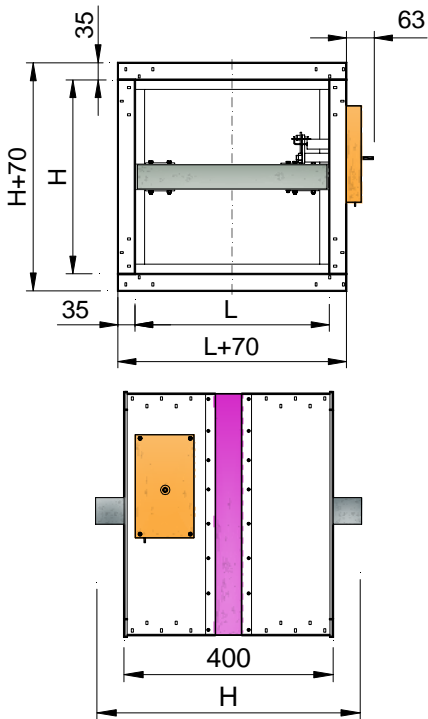


MADEL®

Fire dampers for rectangular duct mounting. Dampers designed to maintain the fire resistance of the wall or the floor, in which a passage for ventilation, heating or air conditioning ducts has been made. They have been tested in accordance with the standards EN-1366-2 achieving the fire resistance EIS 180 (Integrity, Insulation and smoke leakage during 180 minutes), to comply with building regulations for fire safety.

In case of fire, the damper stops the air passage at 72°C by means of a fusible link that closes a blade valve. An expanding joint and another one of air tightness, as much prevent the propagation of smoke to high as to low temperature. These dampers full fill the required conditions for the (S) symbol, air-tightness to cold smoke. In case of fire, poisoning by smoke is the main cause of death.

Dampers with the displaced mechanism that facilitates a good installation.

FOK-EIS-180-H-MA

CLASSIFICATION

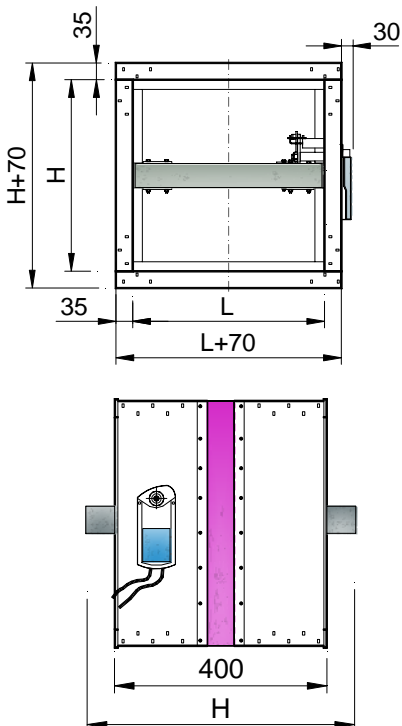
FOK-EIS-180-H Damper with angled flange connection. Blade parallel to the large side.

FOK-EIS-180-V Damper with angled flange connection. Blade parallel to the short side.

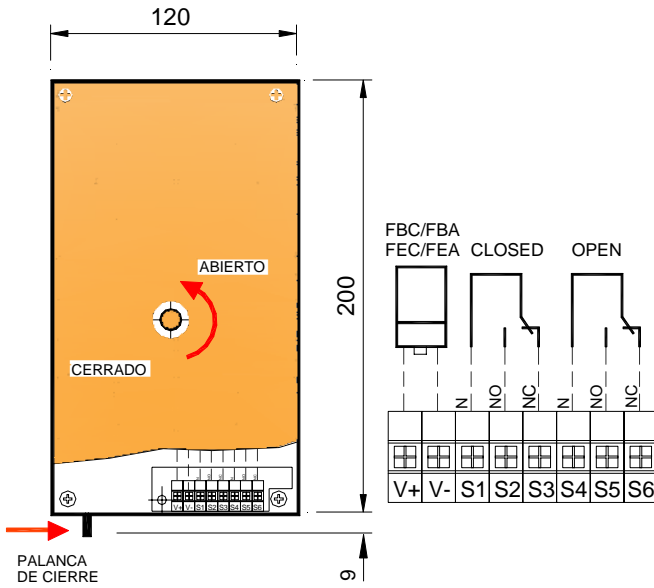
...-MA Manual resetting damper. Is not necessary to open the box device.

...-M7F Damper operated by an actuator with switch off device at 24 or 230v.

...-M16F Damper operated by an actuator with switch off device at 24 or 230v.

FOK-EIS-180-H-M7F


/PIF/ /FBC/ /FBA/ /FEC/ /FEA/



MATERIAL

Dampers made from galvanised steel and non-combustible board.

ADDITIONAL ACCESSORIES

/CR/ Flat connection flange.

/PIF/ Open / closed switches device.

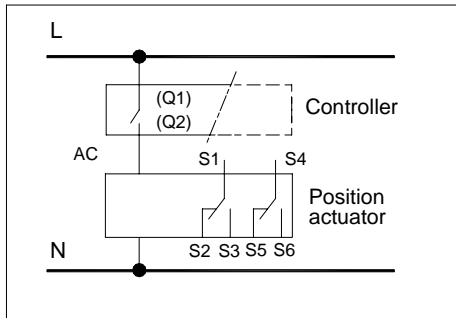
/FBC/ Electromagnet at 24/48v. Closes by electric current.

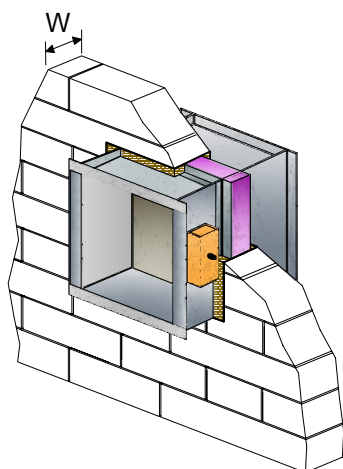
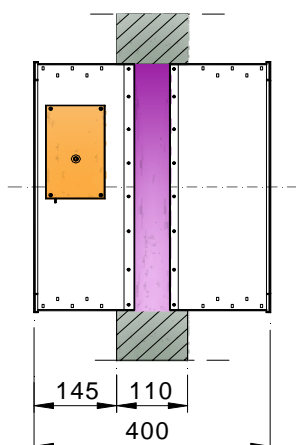
/FBA/ Electromagnet at 230v. Closes by electric current.

/FEC/ Electromagnet at 24/48v. Closes when current stops.

/FEA/ Electromagnet at 230v. Closes when current stops.

M7F





FIXING SYSTEMS

The damper is fixed in accordance with the figure.

The damper has the displaced mechanism that facilitates a good installation.

The dampers must be installed in a way that they can be operated manually.

Precautions will have to be taken in order to ensure that the air flow reaches the fire damper uniformly. The damper cannot be fixed in place when vibrations are occurring.

SPECIFICATION TEXT

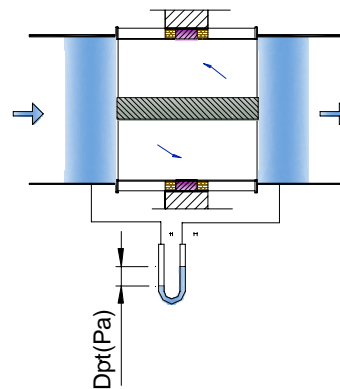
Supply and mounting of fire damper classed EIS-180 in accordance to the European standard EN-1366-2 series **FOK-EIS-180-H-M7F24 LxH**. Operated by means of a servomotor at 24v **M7F24**, start and end of course switches. Dampers made from galvanised steel and non-combustible board. Thermal fusible link at 72°C. An expanding joint together an air-tightness joint, as much prevent the propagation of smoke to high as to low temperature. Manufacturer **MADEL**.

FOK

FREE FACE AREA (m²), CORRECTION FACTOR FOR DPt and LWA1.

| L H | | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
|--------|-------|--------|--------|-------|-------|-------|--------|--------|-------|-------|-------|
| | | 200 | Afree | 0,007 | 0,019 | 0,03 | 0,042 | 0,053 | 0,065 | 0,077 | 0,088 |
| Kr | 1,070 | | 1,075 | 0,930 | 0,920 | 0,895 | 0,875 | 0,865 | 0,855 | 0,845 | 0,830 |
| Kf | -24 | | -21,75 | -17,5 | -15,5 | -14 | -11,75 | -10,25 | -9,5 | -8,75 | -8 |
| 300 | Afree | 0,013 | 0,035 | 0,056 | 0,078 | 0,099 | 0,121 | 0,143 | 0,164 | 0,186 | 0,207 |
| | Kr | 0,805 | 0,790 | 0,740 | 0,685 | 0,645 | 0,625 | 0,615 | 0,6 | 0,59 | 0,58 |
| | Kf | -18 | -17,25 | -13 | -10,5 | -8,75 | -7,25 | -6 | -5 | -3,75 | -3 |
| 400 | Afree | 0,019 | 0,051 | 0,082 | 0,114 | 0,145 | 0,177 | 0,209 | 0,240 | 0,270 | 0,303 |
| | Kr | 0,735 | 0,715 | 0,655 | 0,595 | 0,550 | 0,530 | 0,525 | 0,490 | 0,480 | 0,470 |
| | Kf | -18 | -14,5 | -10,5 | -9 | -6,25 | -4 | -3,25 | -2,25 | -1 | -0,5 |
| 500 | Afree | 0,025 | 0,067 | 0,108 | 0,150 | 0,191 | 0,233 | 0,275 | 0,316 | 0,358 | 0,399 |
| | Kr | 0,675 | 0,670 | 0,585 | 0,520 | 0,485 | 0,450 | 0,440 | 0,415 | 0,410 | 0,4 |
| | Kf | -16 | -11,75 | -8,5 | -6 | -3,5 | -2 | -0,75 | -0,25 | 0,75 | 2,5 |
| 600 | Afree | 0,031 | 0,083 | 0,134 | 0,186 | 0,237 | 0,289 | 0,341 | 0,392 | 0,444 | 0,495 |
| | Kr | 0,655 | 0,630 | 0,535 | 0,470 | 0,425 | 0,4 | 0,375 | 0,365 | 0,360 | 0,345 |
| | Kf | -14,75 | -10,25 | -6,5 | -3,5 | -2,25 | -0,25 | 1 | 2 | 3 | 4 |

$$Lwa = Lwa1 + Kf$$





FOK

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.

