MCR EXI-F - HYBRID SMOKE PREVENTION SYSTEM FOR EVACUATION ROUTES

ITB Technical Approval AT-15-9674/2016

ITB Certificate of Conformity CZ-ITB-2469/W

Domestic declaration of performance HW/02/2017

Protection from smoking of vertical evacuation routes is an important element of the entire fire safety system of the building. Mcr EXi-F overpressure smoking prevention system installed in staircases contributes to the safety of building users. The system comprises appropriately designed air supply units working with intelligent automatics (mcr Omega units, pressure transducers, inverters) that prevent penetration of smoke to the protected zone by generating increased pressure.

mcr EXi-F system includes:

mcr Omega power and control unit
air supply units with ventilation equipment
differential pressure transducers (digital and analogue)
additional elements (manual control panel, air supply switching system, in-duct smoke sensors, bleed dampers)
Configuration and quantity of individual system components is dependent on the requirements of fire scenario, specifics of the building, and the design of its staircase, elevator shaft, or other protected space.

Features

- combined electronic and mechanical system features
- integrated internal mechanism for system action adaptation speeds up its activation in the building
- digital or analogue communication in the system
- intuitive operation - ease of designing the system and choosing devices
- various mounting methods

Technical data

- series of types available: 100-1M, 90-1M, 80-1M, 71-1M, 63-1M, 63-2M, 56-1M, 50-1M
- air supply units making: rounded or box housing
- units installation type: vertical or horizontal
- units installation location: outdoor or indoor
- units capacity up to 63 000 m^3/h
- compression up to 600 Pa
- rotation speeds n = 750; 1000; 1500; 3000 RPM

Detailed technical data concerning devices for constructing overpressure systems are available in the technical catalogue.

Additional description

Choosing mcr EXi-F system allows the investor to obtain significant reductions of requirements contained in the "Technical conditions for buildings and their location", including:

- lowering of fire resistance class of building
- extension of permissible fire zones
- extension of evacuation routes