

KM-QSLAVE PLC MICRO KM-QSLAVE SF

PRESSURIZATION SYSTEMS FOR SMOKE PROOF FILTER AREAS



DESCRIPTION

KM-QSLAVE PLC KM-QSLAVE PLCMICRO/KM-QSLAVE SF produce an over pressure to preserve the smoke proof filter areas. The system is made up of 4 units:

- A. Control and management unit
- B. Buffer battery board
- C. Pressurizer (electric fan) with Brushless motor
- D. Differential pressure gauge

USE

The system is used to save the safe areas in case of fire. It creates an overpressure in the smoke proof filter area, so that the fire and the smoke can't spread from fire-risk zones to safe areas, when a fire proof door is opened.

FITTING

The control and management unit A is connected to the buffer battery board B. They are installed in the safe area. The differential pressure gauge is to be installed in the safe area at 6 ml of cable from the A unit. The C unit (pressurizer-electric fan) must be installed on the wall or on the ceiling with the impeller towards the safe area. An air-duct is to be connected to the C unit. Then duct, with D class joint, has to be protected against the fire and the air-intake has to be open-pit. The fire proofing of duct is guaranteed by KM-FC120COVER, certified fire resistant according to UNI EN 1366-1. By aeraulic computation the dimension of duct is calculated according to DM of 13/11/1983 and European Standard UNI EN 12101-6:2005.

CERTIFICATIONS

PRESSURIZATION SYSTEM :

- Test certificate of the Giordano Institute about pressurization systems for smoke proof filter areas according to DM of 30/11/1983 (mod. SF and PLC) and the European Standard UNI EN 12101-6:2005 (mod. PLC).

AIR DUCT :

- Fire resistant lagging KM-FC120COVER under APPLUS Certificate according to European Standard UNI EN 1366-1.

TYPES

KM-QSLAVE PLC MICRO 2(single/double pressurizer);

KM-QSLAVE PLC MICRO 6 (to 6 pressurizers)

KM-QSLAVE PL/PL2 (management unit of the QSLAVE PLC MICRO)

KM-QSLAVE SF (single pressurizer)

KM-SLAVE SF opt (with timer)

KM-QSLAVE SF2 opt (with timer)

TECHNICAL DATA

UNIT A

- Power supply 220V-50Hz/24V dc
- Emergency power supply by 2 buffer batteries FIAMM FGC24204
- Management of the stand-by or continuous (24h) working
- Activation manual push button
- Led pilot lights
- Board protection
- Keylock of the board
- Board dimensions 400x400x250 mm; cover with left hinge
- IP20 protection
- 16kg weight

STANDARD TYPE KM-QSLAVE SF

- Regulation potentiometer of overpressure
- Double pressurizer control
- Timer (on demand) for filter areas and with opened normally doors

TYPE KM-QSLAVE PLC

- On-board software control
- Overpressure self-regulation
- Programmable period self-test
- Self-management of the overpressure
- Regulation of the maximum overpressure
- Self-regulation maximum increment of the overpressure
- Management by PLC of the stand-by or continuous working
- Configuration and management of the system by 3 check digits psw
- Inside expansion modules of the board (on demand)
- Integrated timer
- PLC with programming and control display
- Right installation and system activation report
- Self test with periodic planning
- Overpressure test
- Alarms report

The stand-by working of the system activates itself by fire/smoke detector system or by alarm hand push buttons.

UNIT B

- Buffer batteries board
- 2 buffer batteries FIAMM FGC24204, 12V dc, 42Ah (annual replacement)
- Dimensions: 250x400x250 mm
- IP20 protection
- 34kg weight
- Rear wall-type fasteners (on issue)

UNIT C

- Pressurizer (electric fan) with housing, nominal flow 3000 m³/h
- Brushless axial electric fan 24V dc, 48000 h (5 years ca.) at continuous working
- Duct fitting d. 315 mm (male connector)
- Protection grille, RAL9005 painted
- Frontal air outlet
- Dimensions 400x400x80 mm

UNIT D

- Differential pressure gauge (MDP)
- Supply from control unit, 24V dc
- Digital display in Pascal
- PVC spout (differential measure outside filter area/safe area)
- Plastic tube, 2m long