50/60 Hz KIT-PE

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> STAIRCASE OVERPRESSUREKIT < > TECHNICAL DATA <</pre>

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> DIMENSIONS < > A P P L I C A T I O N E X A M P L E S <

> S T A I R C A S E OV E R P R E S S U R E K I T <





Staircase or scape routes overpressure systems purpose:

Automatic control of differential pressure and maintain it at 50Pa in a single stage according to the UNE-EN 12101-6 standard.

• It consists of a control panel (KIT PE) and an air supply unit (any fan for air supply) that will provide the stairs or the escape route with enough pressure.

KIT.

• It is available for three-phase and single-phase equipment.

• The KIT PE has everything necessary to operate autonomously, so the work of the installer will be much easier and it is only necessary connecting the kit to the fan and the fire detection control panel.

KIT PE is composed of the following elements:

- Frequency inverter programmed at 50 Pa
- Output frequency: 50Hz

• High precision DPT differential pressure probe. Steel frame fitted with a 3mm double bar lock to limit external access. IP66 protection. Complies with IEC

- 62208, UL, CUL, BV, DNV and GL standards.
- Magneto-thermal protector
- Line and error LED
- Test pushbutton
- Operation mode selector

The selection of the overpressure kits must be made based on the maximum absorbed intensity of the fan to be regulated.

- > Easy installation
- > Compact solution
- > Preventive maintenance
- > Easy start-up (plug & play)
- > Secure installation

TECHNICAL DATA



Code	Model	l max (A)	Input voltage	Output voltage	Weight kg
KPEI01V2	KIT PE I 2,5A (0,4kW) in: 230Vac II, out: 230Vac III	2,5A	230Vac II	230Vac III	10
KPEI03V2	KIT PE I 4,2A (0,75kW) in: 230Vac II, out: 230Vac III	4,2A	230Vac II	230Vac III	10
KPEI04V2	KIT PE I 7A (1,5kW) in: 230Vac II, out: 230Vac III	7A	230Vac II	230Vac III	10
KPEI05V2	KIT PE I 10A (2,2kW) in: 230Vac II, out: 230Vac III	10A	230Vac II	230Vac III	10
KPEIII01V2	KIT PE III 2,2A (0,75kW) in: 400Vac III, out: 400Vac III	2,2A	400Vac III	400Vac III	10
KPEIII02V2	KIT PE III 3,6A (1,5kW) in: 400Vac III, out: 400Vac III	3,6A	400Vac III	400Vac III	10
KPEIII03V2	KIT PE III 5A (2,2kW) in: 400Vac III, out: 400Vac III	5A	400Vac III	400Vac III	15
KPEIII04V2	KIT PE III 8A (4kW) in: 400Vac III, out: 400Vac III	8A	400Vac III	400Vac III	15
KPEIII05V2	KIT PE III 12A (5,5kW) in: 400Vac III, out: 400Vac III	12A	400Vac III	400Vac III	15
KPEIII06V2	KIT PE III 16A (7,5kW) in: 400Vac III, out: 400Vac III	16A	400Vac III	400Vac III	20
KPEIII07V2	KIT PE III 23A (11,0kW) in: 400Vac III, out: 400Vac III	23A	400Vac III	400Vac III	20
KPEIII08V2	KIT PE III 29,5A (15,0kW) in: 400Vac III, out: 400Vac III	29,5A	400Vac III	400Vac III	27
KPEIII09V2	KIT PE III 41A (18,5kW) in: 400Vac III, out: 400Vac III	41A	400Vac III	400Vac III	27

> D I M E N S I O N S <





Model		В	С
KIT PE I 2,5A (0,4kW) in: 230Vac II, out: 230Vac III		400	210
KIT PE I 4,2A (0,75kW) in: 230Vac II, out: 230Vac III	300	400	210
KIT PE I 7A (1,5kW) in: 230Vac II, out: 230Vac III	300	400	210
KIT PE I 10A (2,2kW) in: 230Vac II, out: 230Vac III	300	400	210
KIT PE III 2,2A (0,75kW) in: 400Vac III, out: 400Vac III	300	400	210
KIT PE III 3,6A (1,5kW) in: 400Vac III, out: 400Vac III	300	400	210
KIT PE III 5A (2,2kW) in: 400Vac III, out: 400Vac III	300	400	210
KIT PE III 8A (4kW) in: 400Vac III, out: 400Vac III	300	400	210

Model		В	С
KIT PE III 12A (5,5kW) in: 400Vac III, out: 400Vac III	500	500	210
KIT PE III 16A (7,5kW) in: 400Vac III, out: 400Vac III	500	500	210
KIT PE III 23A (11,0kW) in: 400Vac III, out: 400Vac III	500	500	210
KIT PE III 29,5A (15,0kW) in: 400Vac III, out: 400Vac III	500	500	210
KIT PE III 41A (18,5kW) in: 400Vac III, out: 400Vac III	500	500	210

> A P P L I C A T I O N E X A M P L E S <



UNE-EN 12101-6 describes the differential pressure systems that are applied in escape routes, especially protected stairways.

These systems are based on the mechanical supply of external air into the stairwell, which generates a positive pressure that prevents the entry of combustion products into the exhaust routes.

Its installation helps to evacuate the occupants in case of a fire as it prevents or reduces its vertical spread.

The required flow rate will vary depending on the design conditions of the building. Broadly speaking, a passing speed of 0.75m/s will be imposed when

the ladder is used as a means of escape for occupants and 2m/s when they are used by the extinguishing services.

The pressurization system must be able to maintain a pressure differential of 50Pa, in addition to overcoming the pressure drops of the installation.

Proposal: the installation of an automatic system consisting of a differential pressure probe (KIT-PE) and a fan suitable to theneeds.



Air speed criterium.



Differential pressure criterium (with all doors closed).





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