

# KIT BOXPDS

**Evacuation route pressurisation systems with test certificate according to the European standard EN 12101-6:2022**



System with test certification according to the requirements of the European standard EN 12101-6:2022, and additional tests for electromagnetic compatibility, environmental resistance and IP protection rating.

The KIT BOXPDS automatically regulates the airflow and is able to maintain the 50 Pa of overpressure (or required pressure according to design calculations) even in the presence of leaks in the installation. The system is able to maintain the overpressure (Pressure criteria) and reach the 90% of the required flow rate within 3 seconds after opening or closing a door (Airflow criteria).

Utility model: ES 1 226 660 U.

## KIT BOXPDS

- Consists of the BOXPDS control panel, external control panel, a CJHCH ventilation unit and a DAMPER BOX with built-in optical smoke detector.

## BOXPDS

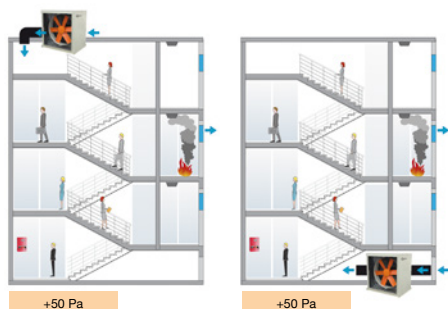
- Variable frequency drive.
- High precision differential pressure probe.
- Electrical panel with magneto thermal protections and general power supply failure indication.
- Electronic control for alarm management, maintenance, ModBUS RTU and TCP port for connection to BMS (Building Management Systems) and control by DAMPER BOX.
- Certified power supply with batteries to ensure power supply to control equipment in the event of a power failure.

## Control panel:

- External control panel with touch screen for real time pressure display, system configuration and calibration, status lights and manual system activation.
- Auto-Manual-Off selector.
- Fire alarm reset selector.
- Test selector.

## On request:

- Time programming to activate daily ventilation.
- Automatic switching system for backup fan (see KIT BOXPDS II series).



- Easy to install.
- A compact, autonomous solution.
- Easy start-up.
- Safe, functional installation.

## Order code

**KIT BOXPDS — 800 — 4T — 5.5**

KIT BOXPDS: Evacuation route pressurisation systems with test certificate according to the European standard EN 12101-6:2022  
KIT BOXPDS II: Evacuation route pressurisation systems with standby fan and test certificate according to the European standard EN 12101-6:2022

Impeller diameter in cm

Number of motor poles  
4=1400 r/min 50 Hz

T = Three-phase

Motor power (HP)

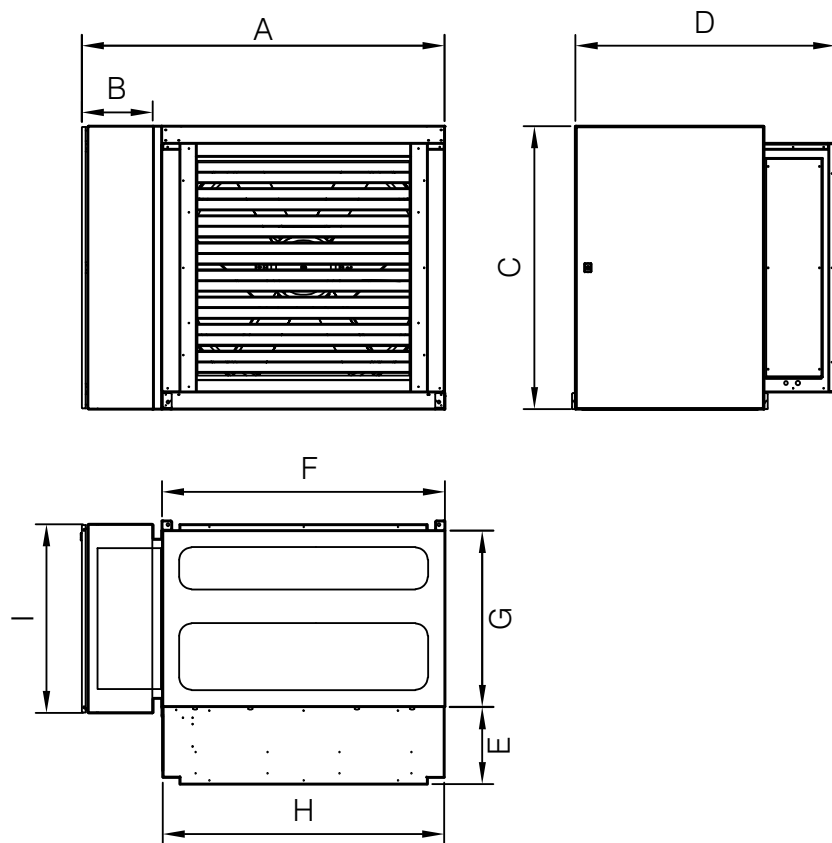
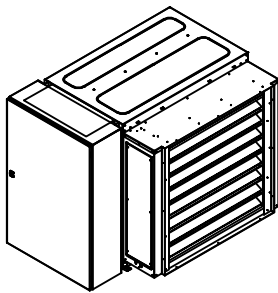
## Technical characteristics

| Model                     | Speed   | Power supply       | Maximum admissible current (A) | Installed power | Maximum flow rate | Sound pressure level | Approx. weight |
|---------------------------|---------|--------------------|--------------------------------|-----------------|-------------------|----------------------|----------------|
|                           | (r/min) |                    |                                |                 |                   |                      |                |
|                           |         | (V) (Hz)           | 400V                           | (kW)            | (m³/h)            | dB(A)                | (Kg)           |
| KIT BOXPDS-710-4T-1.5 IE3 | 1400    | 380-480 V 50/60 Hz | 4.75                           | 1.1             | 19770             | 75                   | 188            |
| KIT BOXPDS-710-4T-2 IE3   | 1430    | 380-480 V 50/60 Hz | 6.25                           | 1.5             | 21090             | 75                   | 191            |
| KIT BOXPDS-710-4T-3 IE3   | 1445    | 380-480 V 50/60 Hz | 8.20                           | 2.2             | 23970             | 78                   | 200            |
| KIT BOXPDS-800-4T-3 IE3   | 1445    | 380-480 V 50/60 Hz | 8.20                           | 2.2             | 27940             | 79                   | 208            |
| KIT BOXPDS-800-4T-4 IE3   | 1445    | 380-480 V 50/60 Hz | 10.05                          | 3.0             | 32720             | 80                   | 210            |
| KIT BOXPDS-800-4T-5.5 IE3 | 1440    | 380-480 V 50/60 Hz | 12.65                          | 4.0             | 37440             | 81                   | 215            |
| KIT BOXPDS-900-4T-7.5 IE3 | 1440    | 380-480 V 50/60 Hz | 15.20                          | 5.5             | 47550             | 88                   | 309            |
| KIT BOXPDS-900-4T-10 IE3  | 1455    | 380-480 V 50/60 Hz | 20.30                          | 7.5             | 53120             | 89                   | 326            |
| KIT BOXPDS-1000-4T-10 IE3 | 1455    | 380-480 V 50/60 Hz | 20.30                          | 7.5             | 58560             | 90                   | 334            |
| KIT BOXPDS-1000-4T-15 IE3 | 1460    | 380-480 V 50/60 Hz | 28.30                          | 11.0            | 68000             | 91                   | 366            |
| KIT BOXPDS-1000-4T-20 IE3 | 1460    | 380-480 V 50/60 Hz | 36.60                          | 15.0            | 71850             | 92                   | 377            |

May be supplied with the KIT BOXPDS II for standby fan (a second impulsion unit is added to the KIT BOXPDS).

## Dimensions mm

### KIT BOXPDS



|                     | A    | B   | C    | D     | E     | F    | G   | H    | I   | J    | K   | L    | O    |
|---------------------|------|-----|------|-------|-------|------|-----|------|-----|------|-----|------|------|
| KIT BOXPDS-710/800  | 1314 | 300 | 1000 | 976.5 | 326.5 | 1000 | 650 | 995  | 600 | 850  | 650 | 850  | 1000 |
| KIT BOXPDS-900/1000 | 1540 | 300 | 1200 | 1102  | 326.5 | 1200 | 750 | 1195 | 800 | 1050 | 750 | 1050 | 1200 |

## Dimensions mm

BOXPDS

Technical drawing of the BOXPDS unit. The front view shows a rectangular unit with height C and width I. A small square is located on the left side, and three circles are on the right side. The side view shows a rectangular unit with depth B.

|                 | C    | B   | I   |
|-----------------|------|-----|-----|
| BOXPDS-710/800  | 1000 | 300 | 600 |
| BOXPDS-900/1000 | 1200 | 300 | 800 |

DAMPER BOX

Technical drawing of the DAMPER BOX unit. The front view shows a rectangular unit with height H and width E. The side view shows a rectangular unit with depth J.

|                   | E     | J    | H    |
|-------------------|-------|------|------|
| DAMPER BOX 71/80  | 326.5 | 850  | 995  |
| DAMPER BOX 90/100 | 326.5 | 1050 | 1195 |

CJHCH

Technical drawing of the CJHCH unit. The front view shows a rectangular unit with height L and width K. The top view shows a circular unit with diameter O. Arrows indicate the direction of flow.

|              | O    | K   | L    |
|--------------|------|-----|------|
| CJHCH-71/80  | 1000 | 650 | 850  |
| CJHCH-90/100 | 1200 | 750 | 1050 |

## Application example

| BOXPDS            |  | DAMPER BOX               |                   |                               |
|-------------------|--|--------------------------|-------------------|-------------------------------|
|                   |  |                          |                   |                               |
| In technical room |  | Next to ventilation unit | In intake conduit | Next to ventilation unit      |
|                   |  |                          |                   | BOXPDS with additional damper |

2 DAMPERS can be used by installing two inlets away from the fan, so that if smoke is detected at one inlet it will close and the second damper will be kept open to ensure the entry of clean air into the space to be protected (smoke-free evacuation route).

| KIT BXPDS II                                                                                    |                                                                                                                                                 |           |                                  |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------------|
|                                                                                                 |                                                                                                                                                 |           |                                  |
| In parallel. Non-return shutter required for each fan (P-400 accessory not included in the KIT) | In parallel with additional damper and plenum configuration. Non-return shutter required for each fan (P-400 accessory not included in the KIT) | In series | In series with additional damper |

## Accessories



PDS LOBBY CONTROL

DAMPER BOX

P-400