

# KIT BOXPDS SMART



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



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EN 12101-6:2022

KIT BOXPDS SMART II: Evacuation route pressurisation systems with advanced control, standby fan and test certificate according to the European standard

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 degree.

The KIT BOXPDS SMART 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 SMART

· Device with advanced control, consisting of a BOXPDS SMART control panel, an external control panel, a CJHCH ventilation unit and a DAMPER BOX SMART with integrated optical smoke detector.

### BOXPDS SMART

- 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 SMART.

- · Certified power supply with batteries to ensure power supply to control equipment in the event of a power failure.
- Quick set up for intuitive configuration. · Possibility of controlling 3 motorised air intakes of the DAMPER BOX SMART, HATCH or WALL type.
- · Smoke detector with automatic reset. · Pressurisation or despressurisation/
- extraction mode. Possibility of connecting several pressure sensors for large stairwells and
- choosing the control mode: Maximum, minimum or average. External sensors connection: Humidity,
- temperature and wind.
- Includes time programming to activate daily ventilation.

#### Control panel:

- External control panel with touch screen for real time pressure display, system configuration and calibration, status lights and manual system activation.
- Possibility of connecting up to 3 KIT BOXPDS SMART.
- Auto-Manual-Off selector.
- · Fire alarm reset selector.
- Test selector.

#### On request:

· Automatic switching system for backup fan (see KIT BOXPDS SMART II series).

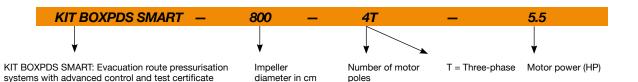


- · A compact, autonomous solution.



- · Easy start-up.
- Safe, functional installation.

4=1400 r/min 50 Hz



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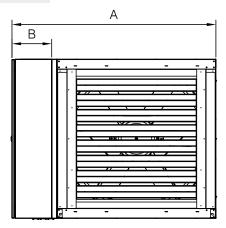
# **Technical characteristics**

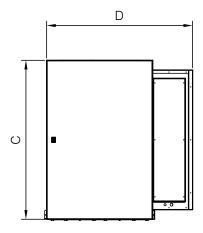
Model	Speed Power sup		Maximum admissible current (A)	Installed power	Maximum flow rate	Sound pressure level	Approx. weight	
	(r/min)	(V) (Hz)	400V	(kW)	(m³/h)	dB (A)	(Kg)	
KIT BOXPDS SMART-710-4T-1.5 IE3	1400	380-480 V 50/60 Hz	4.75	1.1	19770	75	188	
KIT BOXPDS SMART-710-4T-2 IE3	1430	380-480 V 50/60 Hz	6.25	1.5	21090	75	196	
KIT BOXPDS SMART-710-4T-3 IE3	1445	380-480 V 50/60 Hz	8.20	2.2	23970	78	205	
KIT BOXPDS SMART-800-4T-3 IE3	1445	380-480 V 50/60 Hz	8.20	2.2	27940	79	213	
KIT BOXPDS SMART-800-4T-4 IE3	1445	380-480 V 50/60 Hz	10.05	3.0	32720	80	215	
KIT BOXPDS SMART-800-4T-5.5 IE3	1440	380-480 V 50/60 Hz	12.65	4.0	37440	81	220	
KIT BOXPDS SMART-900-4T-7.5 IE3	1440	380-480 V 50/60 Hz	15.20	5.5	47550	88	314	
KIT BOXPDS SMART-900-4T-10 IE3	1455	380-480 V 50/60 Hz	20.30	7.5	53120	89	331	
KIT BOXPDS SMART-1000-4T-10 IE3	1455	380-480 V 50/60 Hz	20.30	7.5	58560	90	339	
KIT BOXPDS SMART-1000-4T-15 IE3	1460	380-480 V 50/60 Hz	28.30	11.0	68000	91	371	
KIT BOXPDS SMART-1000-4T-20 IE3	1460	380-480 V 50/60 Hz	36.60	15.0	71850	92	382	

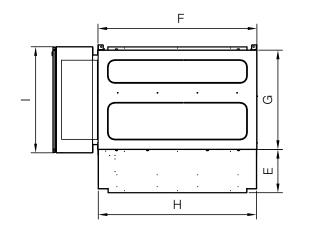
May be supplied with the KIT BOXPDS SMART II for standby fan (a second impulsion unit is added to the KIT BOXPDS SMART).

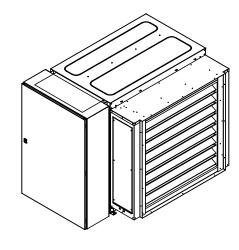
## **Dimensions mm**

# KIT BOXPDS SMART





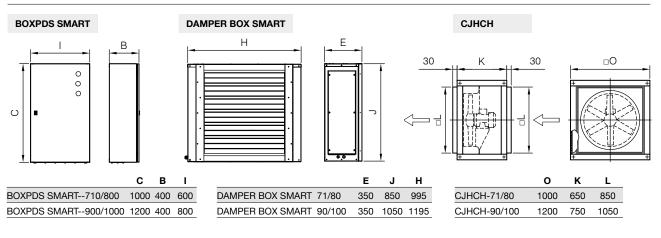




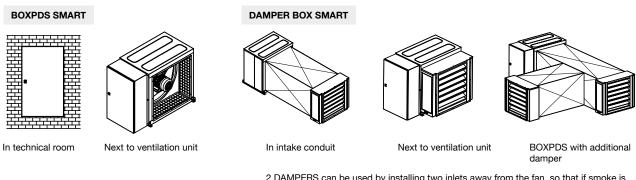
	Α	в	С	D	Е	F	G	н	I	J	к	L	0
KIT BOXPDS SMART-710/800	1400	400	1000	1000	350	1000	650	995	600	850	650	850	1000
KIT BOXPDS SMART-900/1000	1600	400	1200	1125	350	1200	750	1195	800	1050	750	1050	1200



## Dimensions mm



## Application example

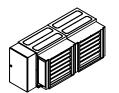


2 DAMPERS can be used by installing two inlets away from the fan, so that if smoke is detected at one inlet it will close and the second damper will be kept open to ensure the entry of clean air into the space to be protected (smoke-free evacuation route).

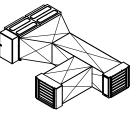
#### KIT BOXPDS SMART II



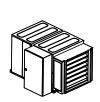
In parallel. Non-return shutter required for each fan (P-400 accessory not included in the KIT)



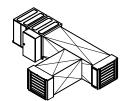
In parallel with additional damper and fan configuration



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



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DAMPER BOX SMART

PDS LOBBY CONTROL

P-400