

## PRESSURISATION CONTROL SYSTEMS

FOR STAIRWELLS, LOBBIES AND ESCAPE ROUTES











## OUR COMMITMENT TO THE ENVIRONMENT

Sodeca has begun a new stage in the study and design of new trends in ventilation which will help to preserve the environment and to make the energy savings that are such a major concern for today's society.



SODECA is pleased to present its new efficient, high performance "Efficient Work" fans, equipped with high-tech motors for greater energy savings. These new products exceed the requirements of the Ecodesign ErP Directive of 2009/125/CE and the (EU) regulation 327/2011 governing fans and adhere to the KYOTO goals adopted by the EU for cutting greenhouse gas emissions.

**SODECA** has focussed its business on manufacturing industrial fans, ventilation systems and smoke extractors for use in case of fire, since it was founded in 1983.

**SODECA**'s fans and extractors are used in all European countries and in many parts of the world, thanks to the quality of the product and the methods of research and development used.

Our quality procedures, used and certified by BUREAU VERITAS, in accordance with ISO 9001:2008, are another reason why **SODECA** is one of the best and most respected fan manufacturers in Europe.

Without a doubt, the most important factor in achieving our objectives is the human factor, the great professionals who work at your service, offering not only ventilation equipment but also solutions to any ventilation requirement our customers may have.

We offer you the option of visiting our facilities in Sant Quirze de Besora, with over 16,000<sup>2</sup> square metres of built area, where you will be able to see our fans being manufactured to the highest quality standards, complying with the ISO and AMCA standards.

This catalogue is only a small part of our product and services offering. Do not hesitate to contact us. We will put all our experience and human resources at your disposal.

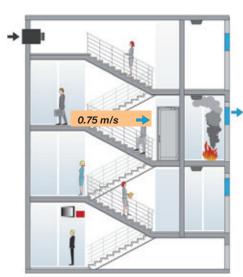


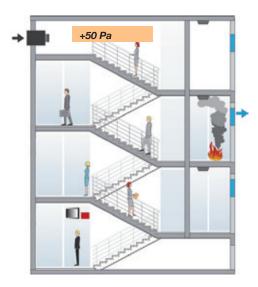
SODECA S.L.U. has its main facilities in E-08580 SANT QUIRZE DE BESORA





## PRESSURISATION CONTROL SYSTEMS





SODECA's pressurisation control systems have been designed to comply with European standards and specifically with European Standard EN 12101-6 Smoke and heat control systems:

#### Specifications for pressure differential systems.

The overpressure smoke control method consists of pressurisation by means of injecting air into spaces that are used as escape routes for people in case of fire, such as stairwells, passageways, corridors, elevators, etc.

This method is based on smoke control by means of the speed of the air and the artificial barrier created by excess air pressure.

SODECA equipment incorporates cutting-edge controls to meet the most demanding requirements and operate reliably in the changing situations that arise during a fire, such as "chaotic" evacuation scenarios in which doors are randomly opened and closed between fire-affected areas and the pressurised smoke-free areas. Our systems can react quickly and precisely to these changes, always ensuring an overpressure (pressure differential) of 50Pa when the doors are closed and maintaining the required air speed for each situation when doors are open.

SODECA systems include different types of equipment to meet all installation requirements specific to the building in which the Pressurisation Control System is being installed.



## KIT BOXPDS

#### Pressurisation equipment for stairwells, escape routes and lobbies, compliant with European Standard EN

Pressurisation equipment for fire escape routes, compliant with European Standard EN 12101-6. The BOXPDS KIT regulates airflow automatically, and can maintain an overpressure (pressure differential) of 50 Pa even when there are leaks in the facility. The system can maintain the pressure differential (Pressure criteria) and a flow of 0.75 m/s in the event of an open door (Airflow criteria) almost immediately.

#### **KIT BOXPDS**

This consists of the BOXPDS control panel, a CJHCH ventilation unit and a Damper kit with built-in optical smoke detector.





- Easy to install
- Compact and self-sufficient solution
- Preventive maintenance
  Easy start-up
- Safe and functional installation



#### **BOXPDS**

- Frequency inverter.
- High precision differential pressure probe.
- Electrical switchboard with magneto-thermal circuit-breakers and mains power cut indicator.
- Electronic control for managing alarms, maintenance, ModBUS RTU port for connection to BMS (Building management systems) and DAMPERbased control.
- Certified battery-powered power source to guarantee supply to the control equipment if there is a mains power failure.

#### Control panel:

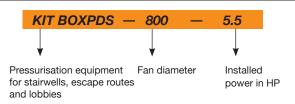
External Control panel for displaying pressure in real time, alarm pilot lights and manual system activation







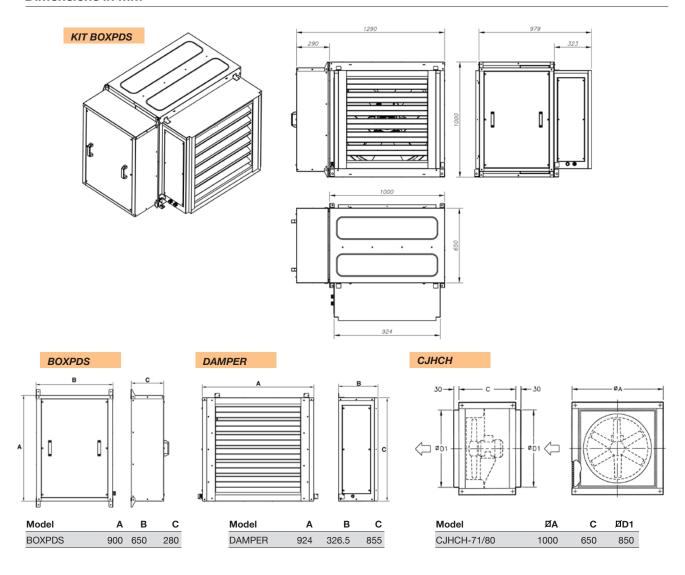
#### Order code



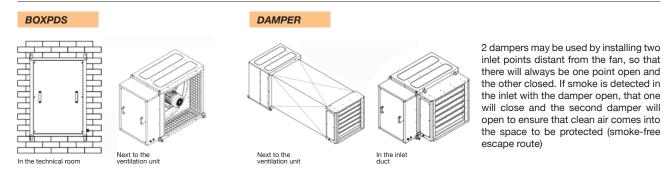
#### Technical characteristics

Model	Speed (r/min)	Max. admissible current 400V (A)	Installed Power (kW)	Maximum airflow (m³/h)	Irradiated NPS dB(A)	Approx. weight (Kg)
KIT BOXPDS-710-1.5	1450	3.00	1.1	19900	75	77.3
KIT BOXPDS-710-2	1450	3.70	1.5	21000	75	79.8
KIT BOXPDS-710-3	1450	4.90	2.2	24000	78	89.3
KIT BOXPDS-800-3	1450	4.90	2.2	29500	79	97.3
KIT BOXPDS-800-4	1450	6.80	3.0	37000	80	99.3
KIT BOXPDS-800-5.5	1450	8.80	4.0	40500	81	104.2

#### Dimensions in mm



#### Examples of use





## HATCH PDS







+50 Pa

## Pressurisation equipment for stairwells, escape routes and lobbies, compliant with European Standard EN 12101-6

Pressurisation equipment for fire escape routes, compliant with European Standard EN 12101-6. The HATCH PDS regulates airflow automatically, and can maintain an overpressure (pressure differential) of 50 Pa even when there are leaks in the facility. The system can maintain the pressure differential (Pressure criteria) and a flow of 0.75 m/s in the event of an open door (Airflow criteria) almost immediately.

#### HATCH PDS

This consists of a HATCH-S ventilation unit with motorised hatch opening and a BOXPDS control panel

- · Extremely robust structure which can withstand severe climate changes.
- Equipment's structure made of anticorrosive galvanised sheet metal.
- · Designed to ensure airtightness at the water supply inlet.
- · Thermal insulation to prevent heat loss in winter.
- · Base/plinth system to ensure easy and correct installation on the roof.

#### Opening system:

- · Motorised opening arms, with IP-65 canned drive.
- Power supply voltage of 230 V AC 50Hz or 24V DC.
- · Reinforced system, guaranteed for over 10,000 maximum load operations.
- Maximum load 1000 Nw.
- Automatic opening via external control input (fire control panel, smoke detector, manual switch, etc)
- · Control system not included.
- · Manual opening for regulating environmental ventilation via a switch.
- Limit switch in place to indicate position of hatch.

#### Fan:

- HCT series fans.
- Sheet steel tubular casing with anticorrosive finish in polyester resin.
- Impellers made from cast aluminium.

#### Motor:

- IE2 efficiency motors for capacities equal to or over 0.75kW and below 7.5kW.
- IE3 efficiency motors for capacities equal to or over 7.5kW.
- · Class F motors, with ball bearings, IP55 protection.
- Three-phase 230/400V-50Hz (up to 5.5 HP) and 400/690V -50Hz (power over 5.5 HP)
- Fan working temperature: -25°C +50°C

#### Finish:

· Anticorrosive galvanized sheet steel

#### On request

- Equipped with F-300 and F-400 certified fans
- Reversible Pressurisation equipment for smoke extraction when necessary.
- · Finish in anticorrosive paint with polyester resin.

#### **BOXPDS**

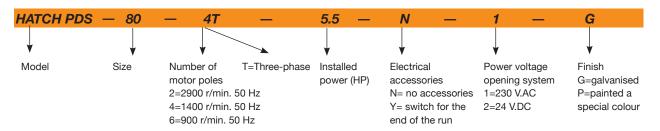
- · Frequency inverter.
- · Highly precise differential pressure probe.
- Electrical switchboard with magneto-thermal circuit-breakers and mains power cut indicator.
- Electronic control for managing alarms, maintenance, ModBUS RTU port for connection to BMS (Building management systems) and DAMPER-based control.
- Certified battery-powered power source to guarantee supply to the control equipment if there is a mains power failure.

#### Control panel:

 External Control panel for displaying the pressure in real time, alarm pilot lights and manual system activation.



#### Order code



#### Technical characteristics

Model	Speed	Maximu	m admissib	ole current	Installed	Maximum	Sound pressure	Weight
	(r/min)	230V	(A) 400V	690V	power (kW)	airflow (m³/h)	level dB(A)	approx. (Kg)
HATCH PDS-40-2T-1	2850	3.15	1.80		0.75	6115	72	184
HATCH PDS-40-2T-1.5	2880	4.70	2.70		1.10	7050	73	188
HATCH PDS-45-2T-2	2880	5.90	3.40		1.50	9405	75	193
HATCH PDS-45-2T-3	2840	8.70	5.00		2.20	11325	77	194
HATCH PDS-50-2T-2	2880	5.90	3.40		1.50	10100	77	197
HATCH PDS-50-2T-3	2840	8.70	5.00		2.20	11925	78	199
HATCH PDS-50-2T-4	2880	11.20	6.50		3.00	13860	79	206
HATCH PDS-50-2T-5.5	2870		9.30	5.40	4.00	15900	80	222
HATCH PDS-56-2T-5.5	2870		9.50	5.50	4.00	18840	85	226
HATCH PDS-56-2T-7.5	2910		10.60	6.14	5.50	22510	86	237
HATCH PDS-56-4T-2	1440	6.20	3.60		1.50	15020	72	205
HATCH PDS-63-4T-3	1425	9.00	5.20		2.20	22460	73	262
HATCH PDS-63-4T-4	1430	11.40	6.60		3.00	24460	74	271
HATCH PDS-63-6T-1	940	4.70	2.70		0.75	16025	63	252
HATCH PDS-80-4T-3	1425	9.00	5.20		2.20	25545	79	280
HATCH PDS-80-4T-4	1430	11.40	6.60		3.00	30410	80	289
HATCH PDS-80-4T-5.5	1440		8.40	4.80	4.00	32940	81	295
HATCH PDS-80-4T-7.5	1460		12.60	7.30	5.50	39820	82	311
HATCH PDS-80-6T-1.5	945	5.50	3.20		1.10	21580	69	279
HATCH PDS-80-6T-2	945	7.40	4.30		1.50	26090	70	288
HATCH PDS-90-4T-7.5	1460		12.60	7.30	5.50	46325	88	392
HATCH PDS-90-4T-10	1460		17.70	10.20	7.50	50315	89	403
HATCH PDS-90-4T-15	1460		22.00	12.70	11.00	59610	90	456
HATCH PDS-90-6T-3	950	9.50	5.50		2.20	34055	75	365
HATCH PDS-90-6T-4	970	13.50	7.80		3.00	39055	76	391
HATCH PDS-100-4T-10	1460		17.70	10.20	7.50	57650	90	413
HATCH PDS-100-4T-15	1460		22.00	12.70	11.00	66505	91	466
HATCH PDS-100-6T-5.5	970		11.00	6.40	4.00	47955	81	413
HATCH PDS-100-6T-7.5	970		12.40	7.20	5.50	53545	82	420

#### Technical characteristics of high-powered ventilators in accordance with standard EN 12101-3:2002/AC:2006

Model	Officially approved °C	Motor insulation class	Durability	Output temperature	Wind load (Pa)	Snow load (Pa)
HATCH PDS	-	Clase F	RE 10000	T(-15)	WL 1500	SL 500





#### **Erp**. BEP (best efficiency point) characteristics

<(°) PN MC EC Impeller blade angle in degrees Nominal motor power in kW Measurement category Efficiency category

S Static T Total

VSD Variable-speed drive

Specific ratio Efficiency Degree of efficiency SR ηε[%] Ν [kW] Input power

Airflow

[m³/h] [mmH²O] [RPM] Static or total pressure (According to EC) Speed

Model	<(°)	PN	мс	EC	VSD	SR	ηe[%]	N	(kW)	(m³/h)	(mm H <sup>2</sup> O)	(RPM)
HATCH PDS-40-2T-1	16	0.75	А	S	NO	1.00	41.5%	48.1	0.933	4420	32.19	2850
HATCH PDS-40-2T-1.5	20	1.1	Α	S	NO	1.00	33.6%	38.9	1.445	5180	34.43	2884
HATCH PDS-45-2T-2	16	1.5	А	S	NO	1.00	35.9%	40.8	1.688	6802	32.70	2896
HATCH PDS-45-2T-3	22	2.2	Α	S	NO	1.01	37.7%	41.6	2.405	8144	40.86	2854
HATCH PDS-50-2T-2	8	1.5	А	S	NO	1.00	35.9%	40.3	2.014	6731	39.48	2876
HATCH PDS-50-2T-3	12	2.2	А	S	NO	1.01	36.8%	40.5	2.586	7884	44.29	2843
HATCH PDS-50-2T-4	16	3	А	S	NO	1.01	34.3%	37.3	3.381	8962	47.55	2885
HATCH PDS-50-2T-5.5	20	4	А	S	NO	1.01	32.6%	35.1	4.131	9537	51.91	2885
HATCH PDS-56-2T-5.5	16	4	Α	S	NO	1.01	45.4%	47.8	4.202	12896	54.34	2883
HATCH PDS-56-2T-7.5	22	5.5	А	S	NO	1.01	41.2%	42.6	6.055	15917	57.53	2913
HATCH PDS-56-4T-2	36	1.5	В	T	NO	1.00	45.7%	50.7	1.665	13581	20.60	1445
HATCH PDS-63-4T-3	32	2.2	В	Т	NO	1.00	62.0%	65.9	2.443	20324	27.38	1430
HATCH PDS-63-4T-4	38	3	В	Т	NO	1.00	57.8%	60.9	3.270	24239	28.64	1440
HATCH PDS-63-6T-1	38	0.75	В	Т	NO	1.00	48.4%	54.4	1.099	15880	12.29	942
HATCH PDS-80-4T-3	12	2.2	С	S	NO	1.00	47.1%	51.0	2.413	16923	24.69	1430
HATCH PDS-80-4T-4	16	3	С	S	NO	1.00	41.1%	43.8	3.686	20444	27.19	1432
HATCH PDS-80-4T-5.5	18	4	С	S	NO	1.00	41.2%	43.5	4.246	22304	28.78	1448
HATCH PDS-80-4T-7.5	26	5.5	В	Т	NO	1.00	63.0%	64.5	5.914	35186	38.92	1465
HATCH PDS-80-6T-1.5	18	1.1	С	S	NO	1.00	35.4%	40.8	1.389	14613	12.35	951
HATCH PDS-80-6T-2	26	1.5	В	Т	NO	1.00	57.5%	62.1	1.825	23053	16.71	950
HATCH PDS-90-4T-7.5	18	5.5	С	S	NO	1.00	44.1%	45.2	6.749	31521	34.72	1460
HATCH PDS-90-4T-10	22	7.5	С	S	NO	1.01	38.9%	39.2	9.154	35009	37.36	1463
HATCH PDS-90-4T-15	30	11	В	T	NO	1.01	67.1%	67.1	11.526	52205	54.45	1463
HATCH PDS-90-6T-3	24	2.2	С	S	NO	1.00	38.0%	41.5	2.832	23831	16.58	950
HATCH PDS-90-6T-4	30	3	В	Т	NO	1.00	58.8%	61.6	3.698	34203	23.37	971
HATCH PDS-100-4T-10	16	7.5	С	S	NO	1.00	41.3%	41.4	9.606	37591	38.73	1461
HATCH PDS-100-4T-15	22	11	С	S	NO	1.01	43.6%	43.5	12.145	44571	43.65	1461
HATCH PDS-100-4T-20	28	15	В	T	NO	1.01	64.1%	63.8	16.091	66559	56.95	1462
HATCH PDS100-6T-5.5	26	4	В	T	NO	1.00	57.6%	59.7	4.671	42042	23.50	973
HATCH PDS-100-6T-7.5	32	5.5	В	T	NO	1.00	56.3%	57.9	5.690	53520	22.00	975

#### Acoustic features

The specified values are determined according to free field measurements of sound levels in dB(A) at an equivalent distance of twice the fan's span plus the impeller's diameter, with a minimum of 1.5 m.

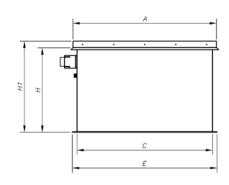
#### Sound power Lw(A) spectrum in dB(A) via frequency band in Hz.

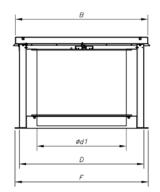
Modelo	63	125	250	500	1000	2000	4000	8000
40-2-1	44	65	72	77	80	76	69	58
40-2-1.5	45	66	73	78	81	77	70	59
45-2-2	47	68	75	80	83	79	72	61
45-2-3	49	70	77	82	85	81	74	63
50-2-2	52	72	80	85	87	84	77	66
50-2-3	53	73	81	86	88	85	78	67
50-2-4	54	74	82	87	89	86	79	68
50-2-5.5	55	75	83	88	90	87	80	69
56-2-5.5	60	80	88	93	95	92	85	74
56-2-7.5	61	81	89	94	96	93	86	75
56-4-2	47	67	75	80	82	79	72	61
63-4-3	50	68	76	81	83	80	75	64
63-4-4	51	69	77	82	84	81	76	65
63-6-1	41	60	68	73	75	72	65	55
80-4-3	56	75	83	89	90	87	81	70

Modelo	63	125	250	500	1000	2000	4000	8000
80-4-4	54	74	82	87	89	86	79	71
80-4-5.5	54	74	82	87	89	86	79	72
80-4-7.5	55	75	83	88	90	87	80	73
80-6-1.5	47	64	72	77	79	76	69	58
80-6-2	48	65	73	78	80	77	70	59
90-4-7.5	57	78	85	90	93	89	82	71
90-4-10	56	77	84	89	92	88	81	70
90-4-15	58	79	86	91	94	90	83	72
90-6-3	54	68	75	80	83	79	72	61
90-6-4	55	70	77	82	85	81	74	63
100-4-10	60	80	88	93	95	92	85	74
100-4-15	59	79	87	92	94	91	84	73
100-4-20	61	81	89	94	96	93	86	75
100-6-5.5	62	71	79	84	86	83	76	65
100-6-7.5	63	72	80	85	87	84	77	66

#### Dimensions in mm

#### HATCH PDS

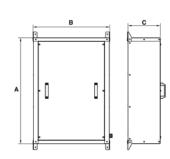




Model	Α	В	С	D	ød1	Е	F	н	H1
HATCH PDS-40-2T-1	1100	990	1022	920	400	1100	1000	760	820
HATCH PDS-40-2T-1'5	1100	990	1022	920	400	1100	1000	760	820
HATCH PDS-45-2T-2	1100	990	1022	920	450	1100	1000	760	820
HATCH PDS-45-2T-3	1100	990	1022	920	450	1100	1000	760	820
HATCH PDS-50-2T-2	1100	990	1022	920	500	1100	1000	760	820
HATCH PDS-50-2T-3	1100	990	1022	920	500	1100	1000	760	820
HATCH PDS-50-2T-4	1100	990	1022	920	500	1100	1000	760	820
HATCH PDS-50-2T-5'5	1100	990	1022	920	500	1100	1000	760	820
HATCH PDS-56-2T-5'5	1100	990	1022	920	560	1100	1000	760	820
HATCH PDS-56-2T-7'5	1100	990	1022	920	560	1100	1000	760	820
HATCH PDS-56-4T-2	1100	990	1022	920	560	1100	1000	760	820
HATCH PDS-63-4T-3	1295	1195	1222	1122	630	1300	1200	760	820
HATCH PDS-63-4T-4	1295	1195	1222	1122	630	1300	1200	760	820
HATCH PDS-63-6T-1	1295	1195	1222	1122	630	1300	1200	760	820
HATCH PDS-80-4T-3	1295	1195	1222	1122	800	1300	1200	760	820

Model	Α	В	С	D	ød1	E	F	Н	H1
HATCH PDS-80-4T-4	1295	1195	1222	1122	800	1300	1200	760	820
HATCH PDS-80-4T-5'5	1295	1195	1222	1122	800	1300	1200	760	820
HATCH PDS-80-4T-7'5	1295	1195	1222	1122	800	1300	1200	760	820
HATCH PDS-80-6T-1'5	1295	1195	1222	1122	800	1300	1200	760	820
HATCH PDS-80-6T-2	1295	1195	1222	1122	800	1300	1200	760	820
HATCH PDS-90-4T-7'5	1492	1392	1420	1320	900	1500	1400	860	920
HATCH PDS-90-4T-10	1492	1392	1420	1320	900	1500	1400	860	920
HATCH PDS-90-4T-15	1492	1392	1420	1320	900	1500	1400	860	920
HATCH PDS-90-6T-3	1492	1392	1420	1320	900	1500	1400	860	920
HATCH PDS-90-6T-4	1492	1392	1420	1320	900	1500	1400	860	920
HATCH PDS-100-4T-10	1492	1392	1420	1320	1000	1500	1400	860	920
HATCH PDS-100-4T-15	1492	1392	1420	1320	1000	1500	1400	860	920
HATCH PDS-100-4T-20	1492	1392	1420	1320	1000	1500	1400	860	920
HATCH PDS-100-6T-5'5	1492	1392	1420	1320	1000	1500	1400	860	920
HATCH PDS-100-6T-7'5	1492	1392	1420	1320	1000	1500	1400	860	920

#### BOXPDS



Model	Α	В	С
BOXPDS	900	650	280



## **PRESSKIT**



Certified: NR331151



### Pressurisation equipment for lobbies, compliant with DM 30/11/1983 and the European Standard EN 12101-6

PRESSKIT systems have one or more fans. In the event of fire, they are activated to exert an overpressure (pressure differential) of 50Pa in the safe areas and to prevent smoke entering the escape routes to be used for evacuating people.

#### Common characteristics:

- · Pressure is self-regulated throughout the lobby.
- Brushless E.C. 24VDC fans with maximum airflow of 2100m³/H.
- · Maintain overpressure (pressure differential) of 50Pa in lobbies.

#### Equipment control:

- S Models: Simplified adjustment of the ventilation unit by pressure probe with built-in PID signal regulator.
- P Models: PLC control with multiple inputs, outputs, alarms and fan adjustment by PID signal
- · Delay in turning on the equipment based on the status of the fire doors.
- Power supply panel with 18Ah batteries to provide operating power for over two hours.
- · Equipment is easily connected.
- All parameters can quickly be adjusted and configured using the keyboard and LCD screen.
- · MANUAL system activation button.
- · Real time display of pressure in the safe area and status of equipment.

#### PRESSURISATION FAN

- Brushless 24V DC fan, analogue control input 0-10V.
- Maximum airflow 2100 m³/h.
- · Wall-mounted fan for 310 mm diameter ducts.
- · Airflow direction IMPELLER TO MOTOR.
- · Useful life in continuous operation of over 20,000 hours.
- · Painted sheet steel impeller.
- · Protection guard to prevent contact.

#### **CONTROL PANEL**

- Small, easily-installed PLC system control panel. Power supply 230V AC.
- · Digital door open input
- Digital outputs indicating fire alarm activated, with intermittent visual and sound alarm, with configurable timing.
- Configurable delay times for turning on when fire alarm detected and fire doors open.
- · All parameters of PID outputs are configurable.
- · Manual system activation button.
- Real time display of pressure in Pa, indication of equipment status -STANDBY/ PRESSURISING.

- 2 fans can be controlled with a single panel and power supply. (PRESSKIT TWIN).
- 1 or 2 ventilation units can be adjusted using a single control panel.
- · Lockable latch.

#### Control panel Characteristics

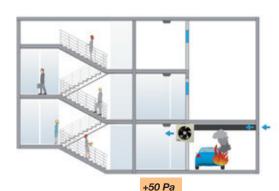
Total voltage (V): 1x230 Output Voltage 1 (V): 19.7-28 V DC Max. current Output 1 (A): 6 Protection (IP): 44 Weight (kg): 30.5 Total current (A): 0.3 Output Voltage 2 (V): 19.7-28 V DC Max. current Output 2 (A): 7 Working temperature (°C): -25 to +60

#### PRESSURE SENSOR WITH SCREEN

(BUILT INTO THE CONTROL PANEL)

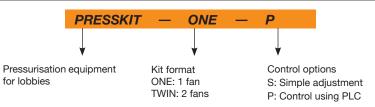
- · Preconfigured differential pressure sensor 0-100 Pa.
- Analogue output 0 10 volts.
- LCD display.
- High precision calibrated analogue sensor.





For facilities that require more than 2 fans, a PRESSKIT ONE/TWIN P can be installed as the master and a PRESSKIT ONE/TWIN S as the slave; up to 4 ventilation units may be installed with just 2 control panels with built-in batteries.

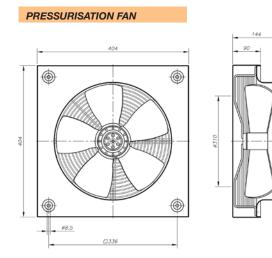
#### Order code



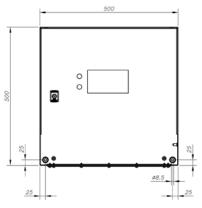
#### Technical characteristics

Model	Maximum airflow	Maximum pressure	Speed	LpA irradiated 3m	Total voltage	Total current	Total power	Weight	Protection	Working temperature	Nominal duct diameter
	(m3/h)	(Pa)	(rpm)	dB(A)	(V)	(A)	(W)	(kg)	(IP)	(°C)	(mm)
PRESSKIT ONE	2100	180	1800	65	24VDC	4.8	115	6.8	42	-25 to +60	310
PRESSKIT TWIN	4100	180	1800	68	24VDC	9.6	230	13.6	42	-25 to +60	310

#### Dimensions in mm



### **CONTROL PANEL**





#### Kit characteristics

Component	PRESSKI ONE	T PRESSKIT TWIN
Adjustment by pressure probe	YES	YES
Adjustment of several fans	-	YES*
Relay outputs to indicate that the equipment has been activated	YES	YES
Door detector inputs	YES	YES

<sup>\*</sup> PRESSKIT TWIN regulates two fans simultaneously with a single pressure probe for large pressurised areas/lobbies. The fans are not regulated independently, they use the same PID setting based on the signal received from the pressure probe.

#### **Configurations**

Component	PRESSKIT ONE	PRESSKIT TWIN
E.C. FAN BRUSHLESS 24 V DC	1 unit	2 unit
CONTROL PANEL	1 unit	1 unit
PRESSURE SENSOR (BUILT INTO THE CONTROL PANEL)	1 unit	1 unit

#### Accessories





Voltage tester for output from power supply and batteries using RJ45 connector.



## **OVERPRESSURE KIT**

The system of pressurising staircases, escape routes and refuges makes it possible to control the airflow automatically and to maintain a differential pressure of 50 Pa in a single stage, in compliance with standard UNE EN 12101-6-2006.

STAIRWELL OVERPRESSURE KIT



STAIRWELL OVERPRESSURE KIT



OVERPRESSURE KIT WITH RESERVE FAN



#### STAIRWELL OVERPRESSURE KIT

 Stairwell overpressure kit made up of control panel (BOXPRES KIT) and outlet units (CJHCH or CJBD), for the pressurisation of the stairwells and escape routes. Also available for single-phase NEOLINEO and CJBC equipment.

#### **OVERPRESSURE KIT WITH RESERVE FAN**

Overpressure kit with reserve fan, made up of control panel (BOXPRES KIT II), which incorporates
a system of automatic switching to maintain the overpressure if the main fan fails, and TWIN or
CJHCH/DUPLEX air outlet units with reserve fan.

#### **BOXPRES**



- · Easy to install
- · Compact and self-sufficient solution
- · Preventive maintenance
- · Easy start-up
- · Safe and functional installation



- The proper operation of the pressurisation systems depends not only on correct design but also on proper regulation performed by the system. It is therefore of vital importance to have calibrated and highly-precise regulating components that make it possible to manage the two situations when there is a fire, in a rapid and stable manner.
- The BOXPRES control panel not only satisfies the most demanding requirements, it also simplifies the work of the installer to the greatest possible extent.

#### Includes:

- Frequency inverter programmed to 50 Pa.
- · Differential pressure probe.
- Magneto thermal.
- Line and fault LED.
- · Check button.

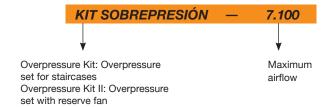
#### BOXPRES:

- · Equipment with all its interconnections made and tested.
- Ready to work and control the pressure of the installation.
- Possibility of checking the installation so as to prevent faults.
- Only the power cable, the impulsion fan and the fire signal need to be connected.

The panels for single-phase equipment include:

- Voltage regulator programmed to 50 Pa
- Differential pressure probe external to the equipment.

#### Order code

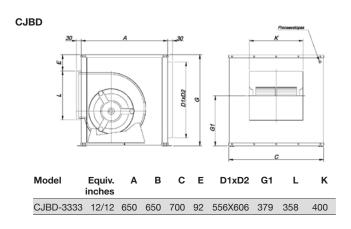


#### Technical characteristics

Model	Power supply	Output	Outlet unit	Maximum (m³/h)	Irradiated sound level* dB(A)
KIT SOBREPRESION-1060-LED	230 Vac II	230 Vac II	NEOLINEO-200	1060	38
KIT SOBREPRESION-2300-LED	230 Vac II	230 Vac II	NEOLINEO-315	2300	47
KIT SOBREPRESION-2880-LED	230 Vac II	230 Vac II	CJBC-2828-6M 1/3	2880	61
KIT SOBREPRESION-7100-LED	230 Vac II	230 Vac III	CJHCH-45-4T-0.5	7100	55
KIT SOBREPRESION-7800-LED	230 Vac II	230 Vac III	CJBD-3333-6T-1.5	7800	55
KIT SOBREPRESION-12900-LED	230 Vac II	230 Vac III	CJHCH-56-4T-1	12900	60
KIT SOBREPRESION-17000-LED	230 Vac II	230 Vac III	CJHCH-63-4T-1.5	17000	61
KIT SOBREPRESION-7100-BOX	400 Vac III	400 Vac III	CJHCH-45-4T-0.5	7100	55
KIT SOBREPRESION-7800-BOX	400 Vac III	400 Vac III	CJBD-3333-6T-1.5	7800	55
KIT SOBREPRESION-12900-BOX	400 Vac III	400 Vac III	CJHCH-56-4T-1	12900	60
KIT SOBREPRESION-17000-BOX	400 Vac III	400 Vac III	CJHCH-63-4T-1.5	17000	61
KIT SOBREPRESION II-6240-BOX	400 Vac III	400 Vac III	TWIN-12/12-6T-1.5	6240	55
KIT SOBREPRESION II-9520-BOX	400 Vac III	400 Vac III	TWIN-15/15-6T-3	9520	54
KIT SOBREPRESION II-12900-BOX	400 Vac III	400 Vac III	CJHCH/DUPLEX-56-4T-1-H	12900	60
KIT SOBREPRESION II-17000-BOX	400 Vac III	400 Vac III	CJHCH/DUPLEX-63-4T-1.5-H	17000	61
SI-PRESIÓN TPDA					
SI-PRESSURE TPDA w/DISPLAY					
BOXPRES KIT-3A 230V AC	230 V AC II	230 V AC II			
BOXPRES KIT-10A 230V AC	230 V AC II	230 V AC II			
BOXPRES KIT-0.75KW 230V AC	230 V AC II	230 V AC III			
BOXPRES KIT-1.5KW 230V AC	230 V AC II	230 V AC III			
BOXPRES KIT-0.75KW 400V AC	400 V AC III	400 V AC III			
BOXPRES KIT-1.5KW 400V AC	400 V AC III	400 V AC III			
BOXPRES KIT-2.2KW 400V AC	400 V AC III	400 V AC III			
BOXPRES KIT II - 1.5KW 400V AC	400 V AC III	400 V AC III			
BOXPRES KIT II - 2.2KW 400V AC	400 V AC III	400 V AC III			

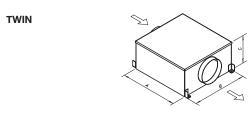
#### Dimensions in mm

# CJHCH 30 C Model Model MA C MD1 CJHCH-40/45/50 700 550 565 CJHCH-56/63 825 550 690





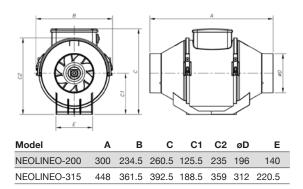
#### Dimensions in mm

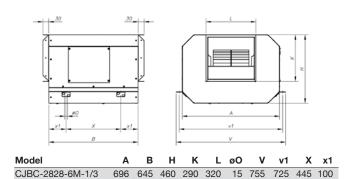


Model	Α	В	С
TWIN-12/12	1103	1139	610
TWIN 15/15	1279	1639	698

#### 

#### **NEOLINEO**





#### **BOXPRESS KIT SOBREPRESIÓN**

#### Technical characteristics and measurements

Model	Installed kW	Power supply (V/Hz)	Output (V/Hz)	Output current (A)	Size	Measurements (L x W x D)
BOXPRES KIT-3A 230V AC		230 V AC II	230 V AC II	3	-	255 x 170 x 140 mm
BOXPRES KIT-10A 230V AC		230 V AC II	230 V AC II	10	-	255 x 170 x 140 mm
BOXPRES KIT-0.75kW 230V AC	0.75	230 V II / 50Hz	230 V III / 50Hz	4.3	1	270 x 270 x 170 mm
BOXPRES KIT-1.5kW 230V AC	1.5	230 V II / 50Hz	230 V III / 50Hz	7	1	270 x 270 x 170 mm
BOXPRES KIT-0.75KW 400 V AC	0.75	400 V III / 50Hz	230 V III / 50Hz	2.2	1	270 x 270 x 170 mm
BOXPRES KIT-1.5KW 400 V AC	1.5	400 V III / 50Hz	230 V III / 50Hz	4.1	1	270 x 270 x 170 mm
BOXPRES KIT-2.2KW 400 V AC	2.2	400 V III / 50Hz	230 V III / 50Hz	5.8	2	360 x 360 x 205 mm

CJBC

Stuffing-box for cable input to equipment



# M 20 x 1.5mm Connection of power and motor M 12 x 1.5mm Fire signal connection Pressure connection BOXPRES

BOXPRES KIT sizes 1 and 2

#### **BOXPRESS KIT SOBREPRESIÓN II**

For equipment with reserve fan.

#### Technical characteristics and measurements

Model	Installed kW	Power supply (V/Hz)	Output (V/Hz)	Output current (A)	Size	Measurements (L x W x D)
BOXPRES KIT- 1.5kW 400 V AC	1.5	400 V III / 50Hz	230 V III / 50Hz	4.1	1	270 x 270 x 170 mm
BOXPRES KIT- 2.2kW 400 V AC	2.2	400 V III / 50Hz	230 V III / 50Hz	5.4	2	360 x 360 x 205 mm

<sup>\*</sup> Both motors never operate simultaneously

#### Stuffing-box for cable input to equipment

#### **BOXPRES KIT sizes 1 and 2**



#### Example of use

Overpressure smoke control method; this system consists of pressurisation by means of injecting air into spaces which are used as escape routes for people in case of fire, such as stairwells, passageways, corridors, elevators, etc, above all in densely occupied tall buildings. This method is based on smoke control by means of the speed of air and the artificial barrier which is created by excess air pressure over smoke, so that it cannot enter escape routes.



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