

HATCH PDS



Equipment for pressurizing evacuation routes in the event of fire, designed according to the European standard EN 12101-6



+50 Pa

HATCH PDS

- Consists of a HATCH ventilation unit with motorized damper opening and a BOXPDS control panel.
- An extremely robust structure that is able to withstand severe weather changes.
- Equipment structure made of anti-corrosive galvanized sheet steel.
- Designed to ensure watertightness.
- Thermal insulation to avoid losses of hot air in winter.
- Adaptable skirting for correct, easy installation on the roof.
- Built-in analog smoke detector.
- Utility model: ES 1 226 660 U.

Opening system:

- Motorised opening arm, with encapsulated IP65 mechanism.
- System reinforced and guaranteed with more than 11,000 cycles.
- Snow load SL 1000.

Fan:

- HCT series extract fans.
- Tubular casing in sheet steel with polyester resin anti-corrosive treatment.
- Cast aluminium impellers.

Motor:

- Motors with IE3 efficiency for powers equal to or greater than 0.75 kW, except single-phase, 2-speed and 8-pole.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -25 °C +50 °C.

Finish:

- Anti-corrosive in galvanized steel sheet.

On request:

- Fitted with F300 and F400 rated fans.
- Reversible pressurisation equipment for smoke exhaust in case of need.
- Polyester resin anti-corrosive paint finish.

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 port for connection to BMS (Building Management Systems).
- Certified power supply with batteries to ensure power supply to control equipment in the event of a power failure.
- Includes time programming to activate daily ventilation.

Control panel:

- External control panel for real time pressure display, alarm pilots and manual activation of the system.



Order code

HATCH PDS	—	80	—	4T	—	5.5	—	G
↓		↓		↓		↓		↓
HATCH PDS: Equipment for pressurizing evacuation routes in the event of fire, designed according to the European standard EN 12101-6		Size		Number of motor poles 2=2900 r/min 50 Hz 4=1400 r/min 50 Hz 6=900 r/min 50 Hz	T = Three-phase	Motor power (HP)		Finish G=galvanized P=painted in special colour

Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Blade tilt angle (°)	Maximum flow rate (m³/h)	Sound pressure level dB (A)		Approx. weight (Kg)
		230V	400V	690V				Inlet	Exhaust	
HATCH PDS-40-2T-1 IE3	2850	2.80	1.62		0.75	16	6100	62	62	184
HATCH PDS-40-2T-1.5 IE3	2880	4.03	2.34		1.10	20	7040	61	61	188
HATCH PDS-45-2T-2 IE3	2880	5.34	3.07		1.50	16	9400	61	61	193
HATCH PDS-45-2T-3 IE3	2840	7.32	4.21		2.20	22	11325	61	61	194
HATCH PDS-50-2T-4 IE3	2880	10.00	5.77		3.00	16	13860	66	66	206
HATCH PDS-50-2T-5.5 IE3	2900	13.00	7.50		4.00	20	15918	66	66	222
HATCH PDS-56-2T-5.5 IE3	2870	13.00	7.50		4.00	16	18820	68	68	226
HATCH PDS-56-2T-7.5 IE3	2910		10.10	5.86	5.50	22	22510	68	68	237
HATCH PDS-56-4T-2 IE3	1440	5.41	3.11		1.50	36	15025	54	54	205
HATCH PDS-63-4T-3 IE3	1425	7.93	4.56		2.20	32	22170	58	58	262
HATCH PDS-63-4T-4 IE3	1430	10.70	6.15		3.00	38	24240	59	59	271
HATCH PDS-63-6T-1 IE3	940	3.36	1.93		0.75	38	15890	48	48	252
HATCH PDS-80-4T-3 IE3	1425	7.93	4.56		2.20	12	25460	65	65	280
HATCH PDS-80-4T-4 IE3	1430	10.70	6.15		3.00	16	30270	64	64	289
HATCH PDS-80-4T-5.5 IE3	1440	13.90	8.00		4.00	18	32770	63	63	295
HATCH PDS-80-4T-7.5 IE3	1460		10.30	5.97	5.50	26	39640	63	63	311
HATCH PDS-80-6T-1.5 IE3	945	4.68	2.69		1.10	18	21470	53	53	279
HATCH PDS-80-6T-2 IE3	945	6.43	3.70		1.50	26	25970	54	54	288
HATCH PDS-90-4T-7.5 IE3	1460		10.30	5.97	5.50	18	46140	67	67	392
HATCH PDS-90-4T-10 IE3	1460		13.90	8.06	7.50	22	50140	66	66	403
HATCH PDS-90-4T-15 IE3	1460		20.90	12.10	11.00	30	59390	68	68	456
HATCH PDS-90-6T-3 IE3	950	9.08	5.22		2.20	24	34000	56	56	365
HATCH PDS-90-6T-4 IE3	970	12.00	6.91		3.00	30	38910	59	59	391
HATCH PDS-100-4T-10 IE3	1460		13.90	8.06	7.50	16	57420	69	69	413
HATCH PDS-100-4T-15 IE3	1460		20.90	12.10	11.00	22	66300	69	69	466
HATCH PDS-100-6T-5.5 IE3	970	15.60	8.99		4.00	26	47780	60	60	413
HATCH PDS-100-6T-7.5 IE3	970		11.20	6.49	5.50	32	53520	62	62	420

* The noise level values are pressures in dB(A) measured at a distance of 10 metres in a free field.

Technical characteristics of the dynamic exhaust system based on standards EN-12101-3

Model	Approval	Motor insulation class	Durability	Temperature room temperature	Wind load	Snow load
	(°C)				(Pa)	(Pa)
HATCH PDS	-	Class F	RE 11000	-25	WL 200	SL 1000

Acoustic characteristics

Sound power spectrum Lw(A) in dB(A) per Hz frequency band

Values measured at inlet with maximum flow rate

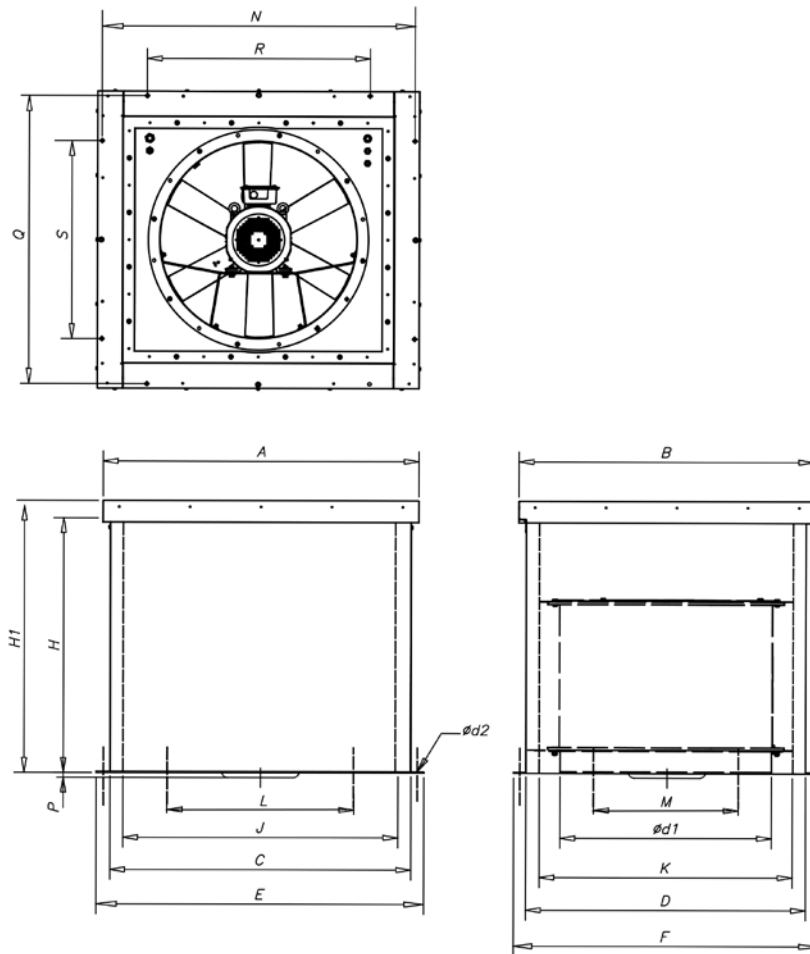
	63	125	250	500	1000	2000	4000	8000
40-2-1	48	64	76	84	89	87	83	76
40-2-1.5	47	63	75	83	88	86	82	75
45-2-2	47	60	74	86	87	86	82	74
45-2-3	47	64	74	81	88	86	83	75
50-2-4	58	74	84	91	92	89	88	89
50-2-5.5	58	74	84	91	92	89	88	89
56-2-5.5	53	66	84	92	94	93	88	81
56-2-7.5	53	66	84	92	94	93	88	81
56-4-2	52	64	73	79	79	79	73	65
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70
63-6-1	49	59	69	73	74	72	65	57
80-4-3	55	71	84	91	91	88	82	74
80-4-4	54	70	83	90	90	87	81	73
80-4-5.5	53	69	82	89	89	86	80	72
80-4-7.5	53	69	82	89	89	86	80	72
80-6-1.5	53	68	75	78	79	76	70	62
80-6-2	59	69	75	79	80	78	73	65
90-4-7.5	59	75	86	92	93	91	86	78
90-4-10	58	74	85	91	92	90	85	77
90-4-15	60	76	87	93	94	92	87	79
90-6-3	52	67	78	82	82	78	71	63
90-6-4	60	70	80	85	85	82	76	68
100-4-10	64	80	87	94	95	93	89	81
100-4-15	71	83	87	93	94	94	91	83
100-6-5.5	57	72	82	85	86	83	75	67
100-6-7.5	59	74	84	87	88	85	77	69

Values measured at exhaust with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
40-2-1	48	64	76	84	89	87	83	76
40-2-1.5	47	63	75	83	88	86	82	75
45-2-2	47	60	74	86	87	86	82	74
45-2-3	47	64	74	81	88	86	83	75
50-2-4	58	74	84	91	92	89	88	89
50-2-5.5	58	74	84	91	92	89	88	89
56-2-5.5	53	66	84	92	94	93	88	81
56-2-7.5	53	66	84	92	94	93	88	81
56-4-2	52	64	73	79	79	79	73	65
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70
63-6-1	49	59	69	73	74	72	65	57
80-4-3	55	71	84	91	91	88	82	74
80-4-4	54	70	83	90	90	87	81	73
80-4-5.5	53	69	82	89	89	86	80	72
80-4-7.5	53	69	82	89	89	86	80	72
80-6-1.5	53	68	75	78	79	76	70	62
80-6-2	59	69	75	79	80	78	73	65
90-4-7.5	59	75	86	92	93	91	86	78
90-4-10	58	74	85	91	92	90	85	77
90-4-15	60	76	87	93	94	92	87	79
90-6-3	52	67	78	82	82	78	71	63
90-6-4	60	70	80	85	85	82	76	68
100-4-10	64	80	87	94	95	93	89	81
100-4-15	71	83	87	93	94	94	91	83
100-6-5.5	57	72	82	85	86	83	75	67
100-6-7.5	59	74	84	87	88	85	77	69

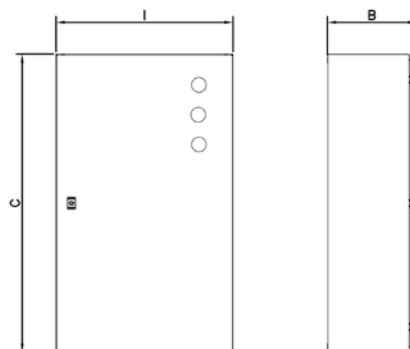
Dimensions mm

HATCH PDS



	A	B	C	D	$\varnothing d1$	E	F	H	H1	J	K	L	M	N	P	Q	R	S	$\varnothing d2$
HATCH/PDS-40	1100	1000	1020	920	400	1100	1000	900	1000	900	800	700	600	1065	-	965	700	600	13
HATCH/PDS-45	1100	1000	1020	920	450	1100	1000	900	1000	900	800	700	600	1065	-	965	700	600	13
HATCH/PDS-50	1100	1000	1020	920	500	1100	1000	900	1000	900	800	700	600	1065	-	965	700	600	13
HATCH/PDS-56	1100	1000	1020	920	560	1100	1000	900	1000	900	800	700	600	1065	-	965	700	600	13
HATCH/PDS-63	1300	1200	1220	1120	630	1300	1200	900	1000	1100	1000	900	800	1265	-	1165	900	800	13
HATCH/PDS-80	1300	1200	1220	1120	800	1300	1200	900	1000	1100	1000	900	800	1265	-	1165	900	800	13
HATCH/PDS-90	1500	1400	1420	1320	900	1500	1400	900	1000	1300	1200	1100	1000	1465	-	1365	1100	1000	13
HATCH/PDS-90-4T-15	1500	1400	1420	1320	900	1500	1400	900	1000	1300	1200	1100	1000	1465	38	1365	1100	1000	13
HATCH/PDS-100	1500	1400	1420	1320	1000	1500	1400	900	1000	1300	1200	1100	1000	1465	-	1365	1100	1000	13
HATCH/PDS-100-4T-15	1500	1400	1420	1320	1000	1500	1400	900	1000	1300	1200	1100	1000	1465	80	1365	1100	1000	13

BOXPDS



	I	B	C	Size
BOXPDS (0.75kW...4kW)	600	300	1000	1
BOXPDS (5.5kW...15kW)	800	300	1200	2