HATCH/HP

Dynamic smoke exhaust ventilators with high thermal efficiency enclosure

Dynamic ventilators with high thermal performance enclosure, completely airtight and hermetic, with thermal break and motorised opening. Equipped with roof extractor for smoke evacuation in case of fire 400 °C/2h and 300 °C/2h.

Enclosure:
- Construction completely free of thermal bridges.
- 60 mm thick refrigerated sandwich panel sides made of two pre-coated steel sheets on the outside and inside with a high-density polyurethane (PUR) core.
- 60 mm thick cover filled with high-density polyurethane (PUR), made of galvanised sheet metal and coated on the outside.
- Adaptable skirting for correct, easy installation on the roof.
- Air permeability CLASS 4 (UNE-EN 12207).
- Impermeability against driving rain.
- Resistance to high wind load.
- Thermal resistance of the assembly less than 0.39 W/m2·K.

Opening system:
- Motorised opening arm, with encapsulated IP65 mechanism.
- Supply voltage at 230 V AC 50/60 Hz.
- System reinforced and guaranteed with more than 20,000 cycles.
- Limit switches in both positions (open and closed).
- Snow load SL 1000.
- Automatic opening by external signal from the control system (fire panel, smoke detector ...). Control systems not included in the equipment.

Fan:
- An extremely robust structure that is able to withstand severe weather changes.
- Maintenance switches for actuator and fan disconnection with auxiliary contacts.
- Approved as a whole in accordance with standard EN 12101-3.
- Tubular casing in sheet steel with polyester resin anti-corrosive treatment.
- Adjustable cast aluminum impeller.
- Shielded power cable with EMC protection.

Motor:
- Class H motors for S1 continuous operation and S2 emergency use. With ball bearings and IP55 protection.
- IE3 efficiency motors.
- Three-phase 230/400 V 50 Hz (up to 3 kW) and 400/690 V 50 Hz (powers greater than 3 kW).
- Maximum temperature of air to be carried: S1 -25 °C +40 °C continuous service, also suitable for warm climates with temperatures up to 50 °C. S2 operation, 300 °C/2h, 400 °C/2h.
- Motors can be regulated by frequency inverter, even in an emergency.

Finish:
- Anti-corrosion cover made of galvanised sheet steel coated in RAL 7015.
- Aluminium profiles RAL 7015.
- Side panels RAL 7015.

On request:
- Motorised opening arm with supply voltage of 24 V DC.
- Exterior coated in any colour from the RAL chart.
- Customised finishes.

Order code

HATCH/HP	—	63	—	4T	—	3	—	F400
HATCH/HP: Dynamic smoke exhaust ventilators with high thermal efficiency enclosure		Impeller diameter in cm		Number of motor poles 2=3000 r/min 50 Hz 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz	T = Three-phase	Motor power (HP)		F300: 300 °C/2h approved F400: 400 °C/2h approved

Technical characteristics

Model	Speed	Maximum admissible current (A)			Installed power	Blade tilt angle	Maximum flow rate	Sound pressure level[1] dB (A)		Approx. weight
	(r/min)	230V	400V	690V	(kW)	(º)	(m^3/h)	Inlet	Exhaust	(Kg)
HATCH/HP-40-2T-1 IE3	2850	2.76	1.59		0.75	16	6100	62	62	184
HATCH/HP-40-2T-1.5 IE3	2880	3.93	2.26		1.10	20	7040	61	61	188
HATCH/HP-45-2T-2 IE3	2880	4.91	2.84		1.50	16	9400	61	61	193
HATCH/HP-45-2T-3 IE3	2840	7.14	4.13		2.20	22	11325	61	61	194
HATCH/HP-50-2T-4 IE3	2880	9.61	5.52		3.00	16	13860	66	66	206
HATCH/HP-56-2T-5.5 IE3	2870		7.20	4.17	4.00	16	18820	68	68	226
HATCH/HP-56-2T-7.5 IE3	2910		10.10	5.80	5.50	22	22510	68	68	237
HATCH/HP-63-4T-3 IE3	1425	7.86	4.52		2.20	32	22170	58	58	262
HATCH/HP-63-4T-4 IE3	1430	11.01	6.33		3.00	38	24240	59	59	271
HATCH/HP-63-6T-1 IE3	940	3.36	1.93		0.75	38	15890	48	48	252
HATCH/HP-80-4T-3 IE3	1425	7.86	4.52		2.20	12	25460	65	65	280
HATCH/HP-80-4T-4 IE3	1430	11.01	6.33		3.00	16	30270	64	64	289
HATCH/HP-80-4T-5.5 IE3	1440		7.95	4.61	4.00	18	32770	63	63	295
HATCH/HP-80-4T-7.5 IE3	1460		10.40	6.04	5.50	26	39640	63	63	311
HATCH/HP-80-6T-1.5 IE3	945	4.73	2.72		1.10	18	21470	53	53	279
HATCH/HP-80-6T-2 IE3	945	6.25	3.62		1.50	26	25970	54	54	288
HATCH/HP-90-4T-7.5 IE3	1460		10.40	6.04	5.50	18	46140	67	67	392
HATCH/HP-90-4T-10 IE3	1460		14.20	8.17	7.50	22	50140	66	66	403
HATCH/HP-90-4T-15 IE3	1460		20.70	11.99	11.00	30	59390	68	68	456
HATCH/HP-90-6T-3 IE3	950	9.78	5.62		2.20	24	34000	56	56	365
HATCH/HP-90-6T-4 IE3	970	12.80	6.36		3.00	30	38910	59	59	391
HATCH/HP-100-4T-10 IE3	1460		14.20	8.17	7.50	16	57420	69	69	413
HATCH/HP-100-4T-15 IE3	1460		20.70	11.99	11.00	22	66300	69	69	466
HATCH/HP-100-4T-20 IE3	1460		27.80	16.03	15.00	28	76160	70	70	481
HATCH/HP-100-4T/9-25 IE3	1475		35.40	20.39	18.50	26	70620	69	69	535
HATCH/HP-100-4T/9-30 IE3	1475		42.20	24.44	22.00	30	74840	71	71	552
HATCH/HP-100-6T-5.5 IE3	970		8.37	4.82	4.00	26	47780	60	60	413
HATCH/HP-100-6T-7.5 IE3	970		12.30	7.07	5.50	32	53520	62	62	420

1 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	Opening time	Wind load	Snow load
	(ºC)		(Pa)	(Pa)
HATCH/HP	F300/2h and F400/2h	<30 s	WL 200	SL 1000

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

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
56-2-5.5	53	66	84	92	94	93	88	81
56-2-7.5	53	66	84	92	94	93	88	81
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70

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
56-2-5.5	53	66	84	92	94	93	88	81
56-2-7.5	53	66	84	92	94	93	88	81
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70

Acoustic characteristics

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

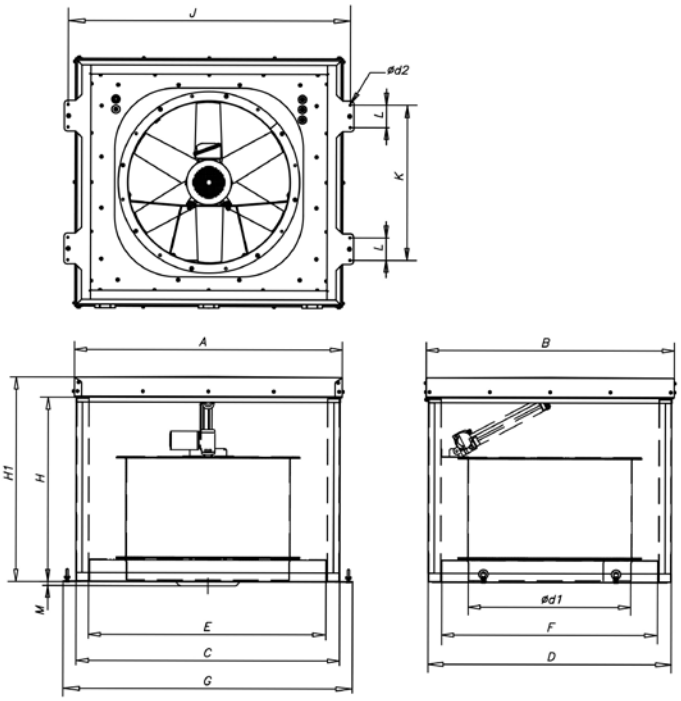
Values measured at inlet with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
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
100-4-20	72	84	88	94	95	95	92	84
100-4/9-25	71	83	87	93	94	94	91	83
100-4/9-30	73	85	89	95	96	96	93	85
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

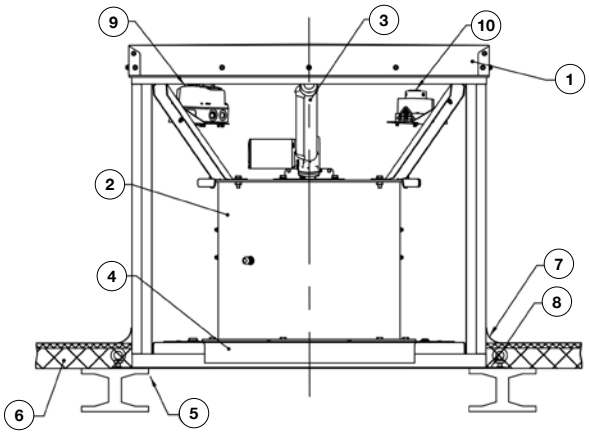
	63	125	250	500	1000	2000	4000	8000
63-6-1	49	59	69	73	74	72	65	57
80-4-3	55	71	84	91	91	88	82	74
80-4-4	54	70	83	90	90	87	81	73
80-4-5.5	53	69	82	89	89	86	80	72
80-4-7.5	53	69	82	89	89	86	80	72
80-6-1.5	53	68	75	78	79	76	70	62
80-6-2	59	69	75	79	80	78	73	65
90-4-7.5	59	75	86	92	93	91	86	78
90-4-10	58	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
100-4-20	72	84	88	94	95	95	92	84
100-4/9-25	71	83	87	93	94	94	91	83
100-4/9-30	73	85	89	95	96	96	93	85
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

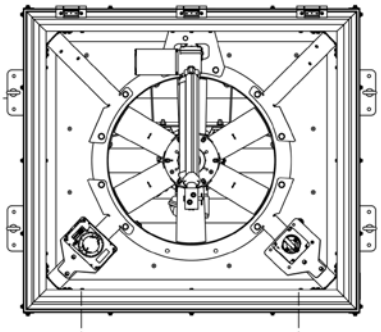


	A	B	C	D	ød1	ød2	E	F	G	H	H1	J	K	L	M
THT/HATCH-40	1120	1010	1100	990	400	10	960	850	1225	900	1000	1180	560	110	
THT/HATCH-45	1120	1010	1100	990	450	10	960	850	1225	900	1000	1180	560	110	
THT/HATCH-50	1120	1010	1100	990	500	10	960	850	1225	900	1000	1180	560	110	
THT/HATCH-56	1120	1010	1100	990	560	10	960	850	1225	900	1000	1180	560	110	
THT/HATCH-63	1315	1215	1295	1195	630	10	1155	1055	1420	900	1000	1385	760	110	
THT/HATCH-80	1315	1215	1295	1195	800	10	1155	1055	1420	900	1000	1385	760	110	
THT/HATCH-90	1520	1420	1500	1400	900	10	1360	1260	1625	900	1000	1560	760	110	
THT/HATCH-90-4T-15	1520	1420	1500	1400	900	10	1360	1260	1625	900	1000	1560	760	110	40
THT/HATCH-100	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	
THT/HATCH-100-4T-15	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	80
THT/HATCH-100-4T-20	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	80
THT/HATCH-100-4T/9-25	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	125
THT/HATCH-100-4T/9-30	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	125

Installation diagram



1. Box HATCH/HP
2. THT fan
3. Motorised arm (230 V AC or 24 V DC)
4. Connection flange in inlet conduit
5. Roof opening
6. Roof
7. Protection against water entry
8. Direct assembly using the adjustable baseboard
9. Motor safety switch
10. Actuator safety switch



Motor power supply
3x400 V 50 Hz

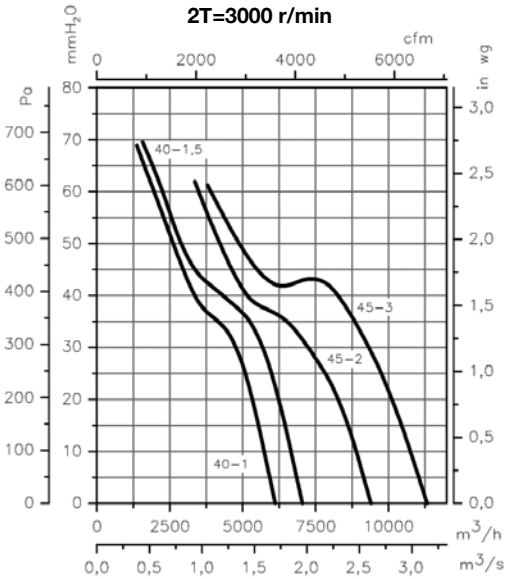
Actuator power supply 1x230 V
50/60 Hz or 24 V DC

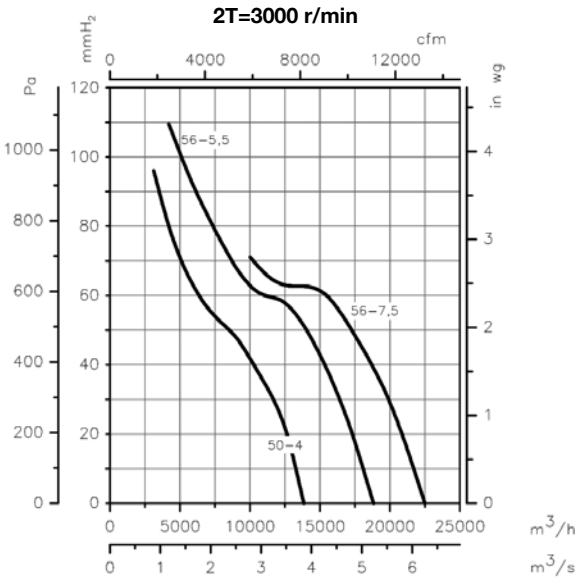
— — — Pre-installed by the manufacturer

Note: For motors with powers greater than 5.5 kW it is advisable to use an electronic starter.

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

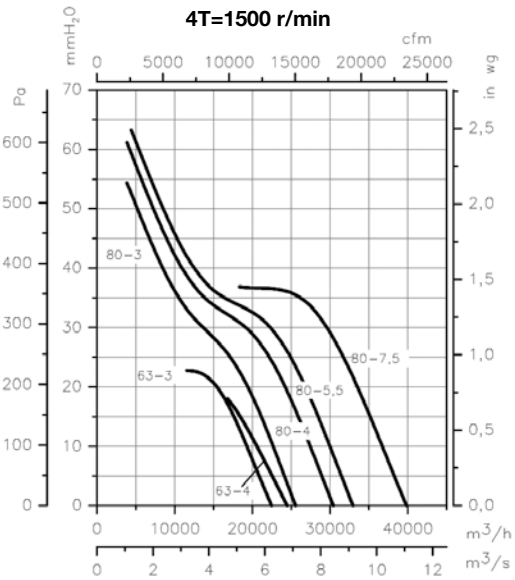




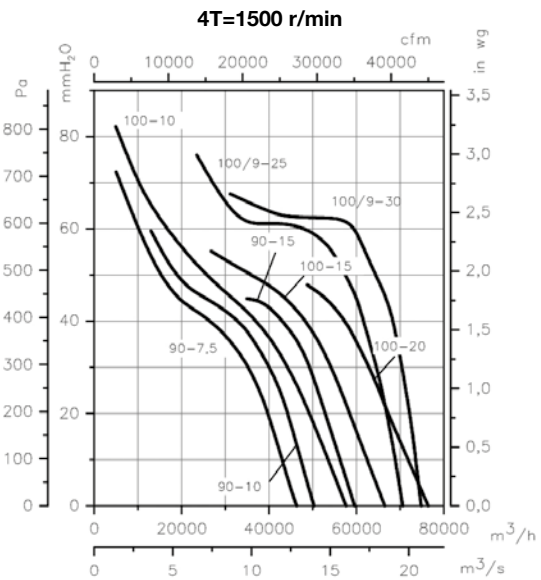
Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

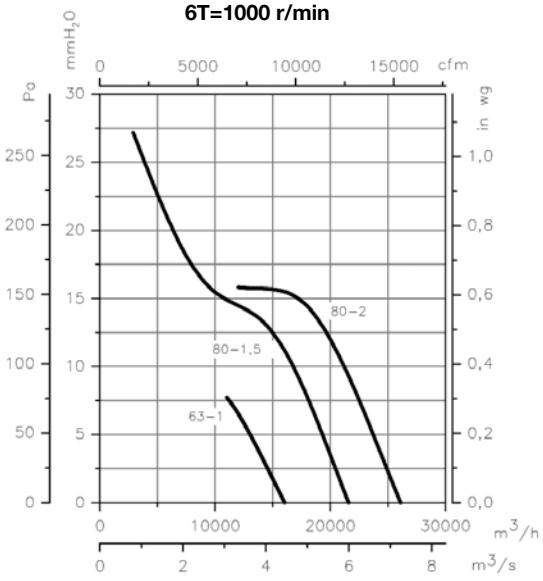
4T=1500 r/min



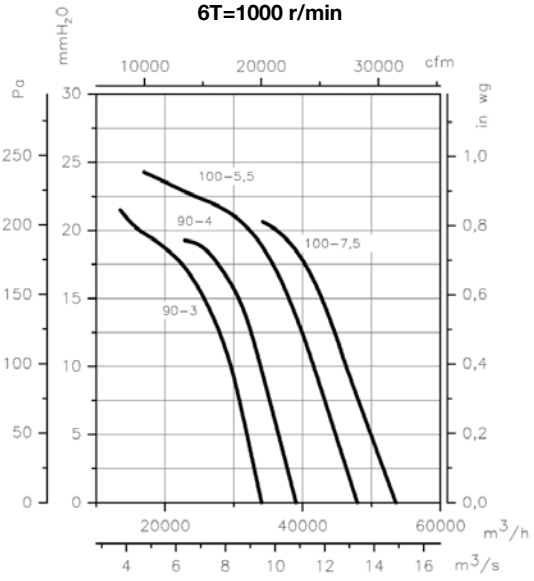
4T=1500 r/min



6T=1000 r/min



6T=1000 r/min

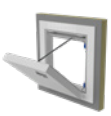


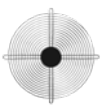
Accessories


IAT


CABLE BOX


VSD3/A-RFT - VSD1/A-RFM


FRIDGE/FLAP


RT


PV


B


BTUB