

# HATCH/HP/IE5



**Dynamic smoke exhaust roof fans with motorized opening, high thermal efficiency enclosure, and IE5 F400 ultra-high efficiency motor**



Dynamic smoke exhaust fans with high thermal performance, completely airtight and hermetic, with thermal break and motorized opening. Equipped with a roof extractor for smoke evacuation in case of fire, 400 °C/2h, and ultra-high efficiency IE5 motor.

#### 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.
- Adapter socket (or skirting) for correct and easy installation on the roof.
- Air permeability CLASS 4 (UNE-EN 12207).
- Impermeability against driving rain CLASS E 1350 (UNE-EN 12208).
- Resistance to high wind load.
- Thermal resistance of the assembly less than 0.39 W/m<sup>2</sup>·K.
- Airborne acoustic insulation value according to UNE-EN ISO 10140-2: Rw = 32 (-2;-4) dB.

#### 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.
- Certified according to EN 12101-3, F400 classification.
- 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.
- IE5 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 air temperature: Service S1 -25 °C to +40 °C continuously, also suitable for hot climates up to 50 °C. Service S2 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/IE5 – 63 – 4T – 3 – F400**

HATCH/HP/IE5: Dynamic smoke exhaust roof fans with motorized opening, high thermal efficiency enclosure, and IE5 F400 ultra-high efficiency motor

Impeller diameter in cm

Number of motor poles  
2=3000 r/min 50 Hz  
4=1500 r/min 50 Hz

T = Three-phase

Motor power (HP)

F400: 400 °C/2h approved

## Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Blade tilt angle (°)	Maximum flow rate (m³/h)	Sound pressure level <sup>1</sup> dB (A)		Approx. weight (Kg)
		230V	400V	690V				Inlet	Exhaust	
HATCH/HP/IE5-40-2T-1.5	2985	3.79	2.18		1.10	20	7030	61	61	190
HATCH/HP/IE5-45-2T-2	2990	4.99	2.87		1.50	16	9395	61	61	195
HATCH/HP/IE5-45-2T-3	2990	7.11	4.09		2.20	22	11325	61	61	197
HATCH/HP/IE5-63-4T-3	1495	7.65	4.40		2.20	32	22165	58	58	266
HATCH/HP/IE5-63-4T-4	1495	10.23	5.88		3.00	38	24240	59	59	284
HATCH/HP/IE5-80-4T-3	1495	7.65	4.40		2.20	12	25450	65	65	284
HATCH/HP/IE5-80-4T-4	1495	10.23	5.88		3.00	16	30270	64	64	302
HATCH/HP/IE5-80-4T-5.5	1495		7.78	4.51	4.00	18	32765	63	63	298
HATCH/HP/IE5-80-4T-7.5	1495		10.60	6.14	5.50	26	39635	63	63	324
HATCH/HP/IE5-90-4T-7.5	1495		10.60	6.14	5.50	18	46135	67	67	404
HATCH/HP/IE5-90-4T-10	1495		14.20	8.23	7.50	22	50140	66	66	423
HATCH/HP/IE5-90-4T-15	1495		20.20	11.70	11.00	30	59390	68	68	500
HATCH/HP/IE5-100-4T-10	1495		14.20	8.23	7.50	16	57415	69	69	433
HATCH/HP/IE5-100-4T-15	1495		20.20	11.70	11.00	22	66300	69	69	510
HATCH/HP/IE5-100-4T-20	1495		27.10	15.70	15.00	28	76155	70	70	535
HATCH/HP/IE5-100-4T/9-25	1495		33.00	19.10	18.50	26	70620	70	70	555
HATCH/HP/IE5-100-4T/9-30	1495		39.10	22.70	22.00	30	74840	72	72	583

<sup>1</sup> 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 standard EN 12101-3

Model	Approval	Opening time	Wind load	Snow load
	(°C)		(Pa)	(Pa)
HATCH/HP/IE5	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

The values given are obtained under laboratory conditions according to ISO 3744.  
Sound power spectrum Lw(A) in dB(A) per Hz frequency band

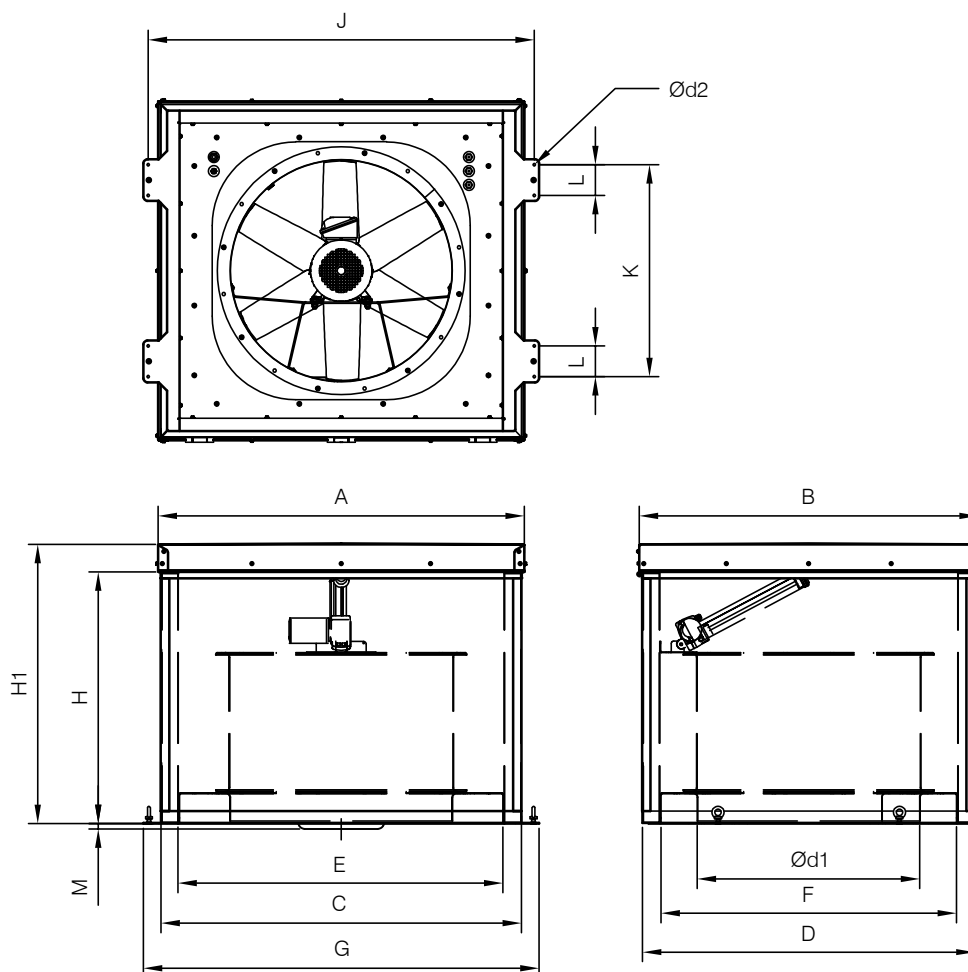
Values measured at inlet with maximum flow rate

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
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70
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
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
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	72	84	88	94	95	95	92	84
100-4/9-30	74	86	90	96	97	97	94	86

Values measured at exhaust with maximum flow rate

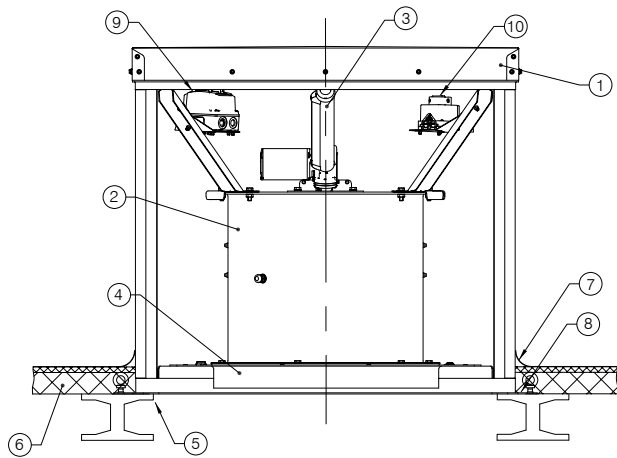
40-2-1.5	47	63	75	83	88	86	82	75
45-2-2	47	60	74	86	87	86	82	74
45-2-3	47	64	74	81	88	86	83	75
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70
80-4-3	55	71	84	91	91	88	82	74
80-4-4	54	70	83	90	90	87	81	73
80-4-5.5	53	69	82	89	89	86	80	72
80-4-7.5	53	69	82	89	89	86	80	72
90-4-7.5	59	75	86	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
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	72	84	88	94	95	95	92	84
100-4/9-30	74	86	90	96	97	97	94	86

### Dimensions mm

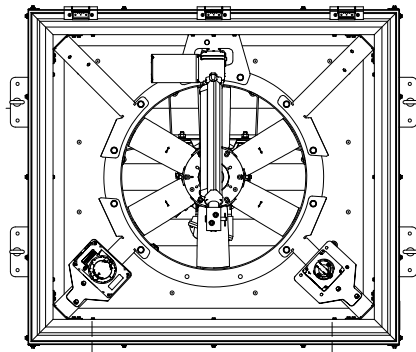


	A	B	C	D	Ød1	Ød2	E	F	G	H	H1	J	K	L	M
HATCH/HP/IE5-40	1120	1010	1100	990	400	10	960	850	1225	900	1000	1180	560	110	-
HATCH/HP/IE5-45	1120	1010	1100	990	450	10	960	850	1225	900	1000	1180	560	110	-
HATCH/HP/IE5-63	1315	1215	1295	1195	630	10	1155	1055	1420	900	1000	1385	760	110	-
HATCH/HP/IE5-80	1315	1215	1295	1195	800	10	1155	1055	1420	900	1000	1385	760	110	-
HATCH/HP/IE5-90	1520	1420	1500	1400	900	10	1360	1260	1625	900	1000	1560	760	110	-
HATCH/HP/IE5-90-4T-10	1520	1420	1500	1400	900	10	1360	1260	1625	900	1000	1560	760	110	5
HATCH/HP/IE5-90-4T-15	1520	1420	1500	1400	900	10	1360	1260	1625	900	1000	1560	760	110	85
HATCH/HP/IE5-100-4T-10	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	5
HATCH/HP/IE5-100-4T-15	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	85
HATCH/HP/IE5-100-4T-20	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	155
HATCH/HP/IE5-100-4T/9-25	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	140
HATCH/HP/IE5-100-4T/9-30	1520	1420	1500	1400	1000	10	1360	1260	1625	900	1000	1560	760	110	140

## Installation diagram



1. HATCH/HP/IE5 box
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



--- Pre-installed by the manufacturer

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

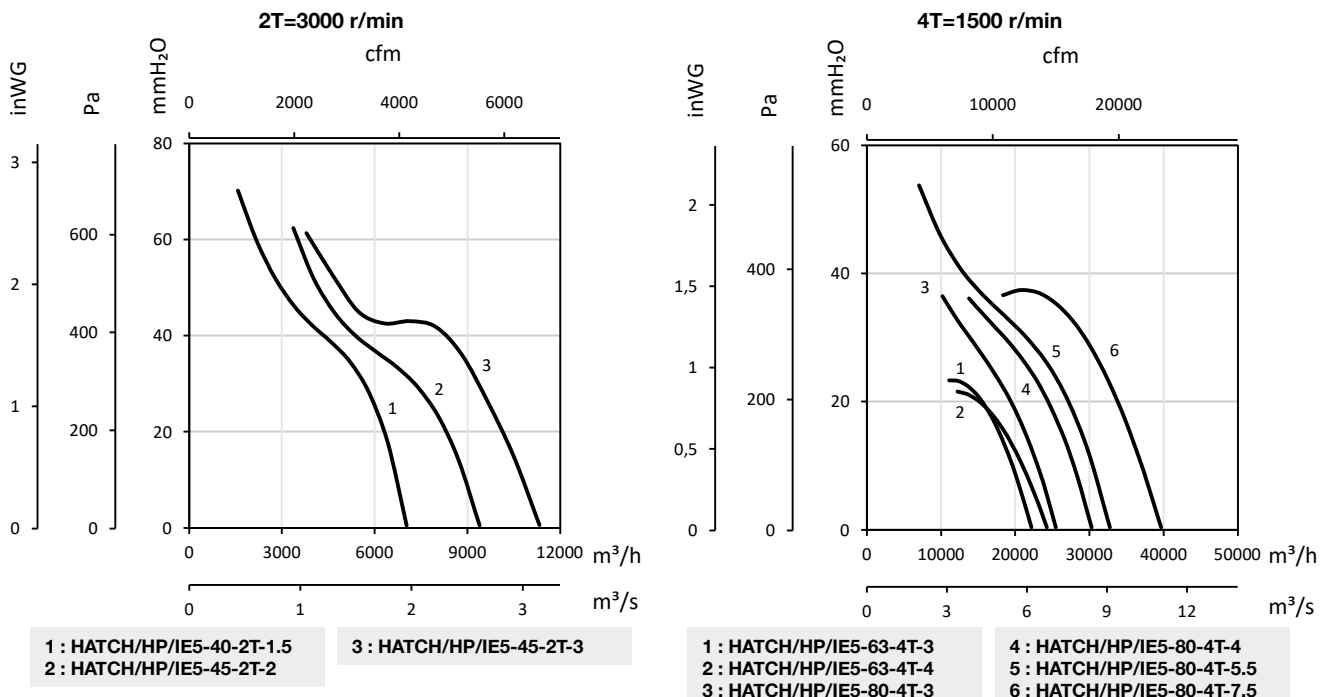
Motor power supply  
3x400 V 50 Hz

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

## Characteristic curves

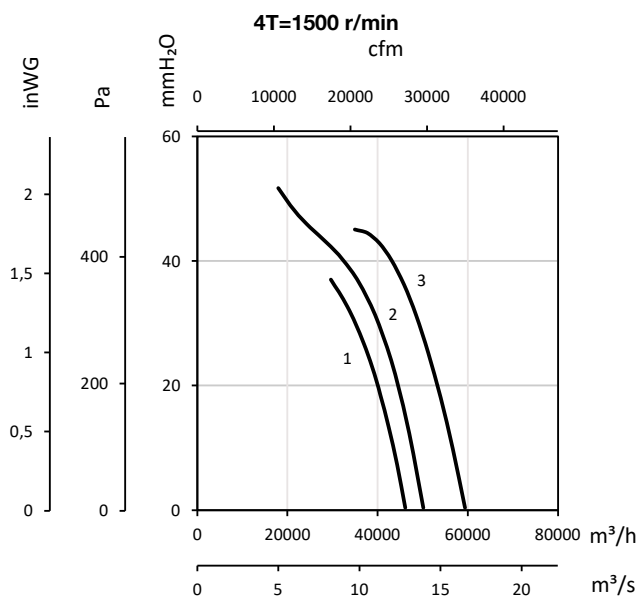
Q= Flow rate in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm

Pe= Static pressure in mm H<sub>2</sub>O, Pa and inWG



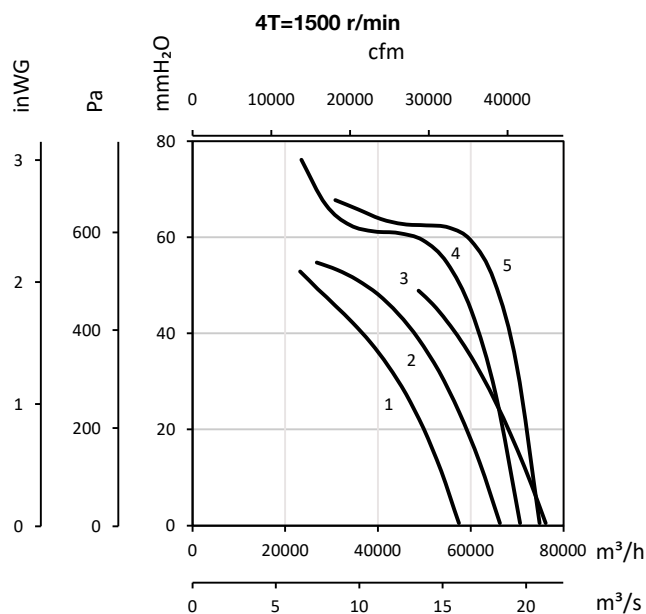
### Characteristic curves

Q= Flow rate in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm Pe= Static pressure in mm H<sub>2</sub>O, Pa and inwg



1 : HATCH/HP/IE5-90-4T-7.5  
2 : HATCH/HP/IE5-90-4T-10

3 : HATCH/HP/IE5-90-4T-15



1 : HATCH/HP/IE5-100-4T-10  
2 : HATCH/HP/IE5-100-4T-15  
3 : HATCH/HP/IE5-100-4T-20

4 : HATCH/HP/IE5-100-4T/9-25  
5 : HATCH/HP/IE5-100-4T/9-30

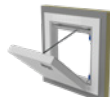
### Accessories



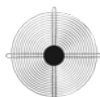
CABLE BOX



VSD3/A-RFT  
- VSD1/A-RFM



FRIDGE/FLAP



RT



PV



BAC



ACE ACE/400