THT/HATCH

400ºC/2h and 300ºC/2h-rated dynamic discharge systems with motorised opening function, fitted with roof-mounted extract fan, for smoke extraction in the event of fire

Dynamic exhaust systems with roof-mounted extract fans and motorised opening function. Specially designed for the fast, effective extraction of harmful smoke and gases in the event of fire. Suitable for installation in industrial or commercial buildings. Approved in accordance with standard EN 12101-3, with F-400 and F-300 certificate.

The rapid smoke extraction permits the efficient intervention of fire fighters, fast evacuation of people and prevents new sources of fire and greater structural damage to the building. Can also be used for environmental ventilation in the buildings in which they are installed.

Fan:
- An extremely robust structure that is able to withstand severe weather changes.
- Equipment structure made of corrosion-proof galvanised sheet steel.
- Water-tight design to prevent the entry of water.
- Heat insulation of 60 mm to prevent hot air loss in the winter.
- Adaptable skirting for correct, easy installation on the roof.
- Maintenance switch fitted with NA/NC auxiliary contact to control equipment disconnection.
- Roof-mounted extract fans with F-400 No. 0370-CPR-1827 and F-300 No. 0370-CPR-0973 certification.
- Tubular casing in sheet steel with polyester resin anti-corrosive treatment.
- Cast aluminium orientable impellers.

Opening system:
- Motorised opening arms, with encapsulated IP-65 mechanism.
- 230V AC 50Hz power supply.
- Reinforced, guaranteed system with more than 10,000 operations at maximum load.
- Maximum load 1000 Nw.
- Automatic opening via external control system signal (fire station, smoke detector...). Control systems not included in the supply.
- Limit switch to signal the hatch position.

Motor:
- Class H motors, S1 continuous operation and S2 emergency use, with ball bearings and IP55 protection.
- IE3 efficiency motors for powers equal to or higher than 0.75kW except single-phase, 2-speed and 8-pole.
- Three-phase 230/400V-50Hz (up to 3kW) and 400/690V-50Hz (powers higher than 3kW).
- Maximum temperature of air to be carried: S1 -25ºC +40ºC continuous service, also suitable for warm climates with temperatures up to 50ºC. S2 operation, 300ºC/2h, 400ºC/2h.

Finish:
- Anti-corrosive finish on galvanised sheet steel.

On request:
- Polyester resin corrosion-proof paint finish.
- Motorised opening arms with supply voltage of 24V. DC

Order code

THT/HATCH	—	40	—	2T	—	1	—	N	—	1	—	G
THT/HATCH: 400ºC/2h and 300ºC/2h rated dynamic exhaust system with motorised opening function, fitted with roof-mounted extract fan, for smoke extraction in the event of fire.		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)		Electric accessories N= no accessories Y= Limit switch		Opening system supply voltage 1=230 V.AC 2=24 V.DC		Finish G=galvanised P=painted in special colour

Erp. (Energy Related Products)

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

Technical characteristics

Model	Speed	Maximum admissible current (A)			Installed power	Maximum flow rate	Sound pressure level	Approx. weight	According to ErP
	(r/min)	230 V	400 V	690 V	(kW)	(m^3/h)	dB(A)	(kg)	
THT/HATCH-40-2T-1 IE3	2850	3.15	1.80		0.75	6115	72	184	2015
THT/HATCH-40-2T-1.5 IE3	2880	4.70	2.70		1.10	7050	73	188	2015
THT/HATCH-45-2T-2 IE3	2880	5.90	3.40		1.50	9405	75	193	2015
THT/HATCH-45-2T-3 IE3	2840	8.70	5.00		2.20	11325	77	194	2015
THT/HATCH-50-2T-4 IE3	2880	11.20	6.50		3.00	13860	79	206	2015
THT/HATCH-56-2T-5.5 IE3	2870		9.50	5.50	4.00	18840	85	226	2015
THT/HATCH-56-2T-7.5 IE3	2910		10.60	6.14	5.50	22510	86	237	2015
THT/HATCH-63-4T-3 IE3	1425	9.00	5.20		2.20	22460	73	262	2015
THT/HATCH-63-4T-4 IE3	1430	11.40	6.60		3.00	24460	74	271	2015
THT/HATCH-63-6T-1 IE3	940	4.70	2.70		0.75	16025	63	252	2015
THT/HATCH-80-4T-3 IE3	1425	9.00	5.20		2.20	25545	79	280	2015
THT/HATCH-80-4T-4 IE3	1430	11.40	6.60		3.00	30410	80	289	2015
THT/HATCH-80-4T-5.5 IE3	1440		8.40	4.80	4.00	32940	81	295	2015
THT/HATCH-80-4T-7.5 IE3	1460		12.60	7.30	5.50	39820	82	311	2015
THT/HATCH-80-6T-1.5 IE3	945	5.50	3.20		1.10	21580	69	279	2015
THT/HATCH-80-6T-2 IE3	945	7.40	4.30		1.50	26090	70	288	2015
THT/HATCH-90-4T-7.5 IE3	1460		12.60	7.30	5.50	46325	88	392	2015
THT/HATCH-90-4T-10 IE3	1460		17.70	10.20	7.50	50315	89	403	2015
THT/HATCH-90-4T-15 IE3	1460		22.00	12.70	11.00	59610	90	456	2015
THT/HATCH-90-6T-3 IE3	950	9.50	5.50		2.20	34055	75	365	2015
THT/HATCH-90-6T-4 IE3	970	13.50	7.80		3.00	39055	76	391	2015
THT/HATCH-100-4T-10 IE3	1460		17.70	10.20	7.50	57650	90	413	2015
THT/HATCH-100-4T-15 IE3	1460		22.00	12.70	11.00	66505	91	466	2015
THT/HATCH-100-4T-20 IE3	1460		29.00	16.70	15.00	76445	92	481	2015
THT/HATCH-100-6T-5.5 IE3	970		11.00	6.40	4.00	47955	81	413	2015
THT/HATCH-100-6T-7.5 IE3	970		12.40	7.20	5.50	53545	82	420	2015
THT/HATCH-125-4T/6-25 IE3	1465		37.00	21.36	18.50	92550	87	746	2015
THT/HATCH-125-4T/6-30 IE3	1470		42.00	24.25	22.00	98850	87	760	2015
THT/HATCH-125-4T/6-40 IE3	1475		58.00	33.49	30.00	117450	89	841	2015
THT/HATCH-125-4T/6-50 IE3	1480		73.00	42.15	37.00	131050	90	889	2015
THT/HATCH-125-4T/9-25 IE3	1465		37.00	21.36	18.50	79650	85	755	2015
THT/HATCH-125-4T/9-30 IE3	1470		42.00	24.25	22.00	88300	86	769	2015
THT/HATCH-125-4T/9-40 IE3	1475		58.00	33.49	30.00	104050	88	850	2015
THT/HATCH-125-4T/9-50 IE3	1480		73.00	42.15	37.00	118400	90	898	2015
THT/HATCH-125-6T/6-5.5 IE3	970		11.00	6.35	4.00	51500	75	611	2015
THT/HATCH-125-6T/6-7.5 IE3	970		14.00	8.08	5.50	60650	75	618	2015
THT/HATCH-125-6T/6-10 IE3	960		18.60	10.74	7.50	72650	77	643	2015
THT/HATCH-125-6T/6-15 IE3	955		26.00	15.01	11.00	85850	79	673	2015
THT/HATCH-125-6T/6-20 IE3	950		35.50	20.50	15.00	92850	80	746	2015
THT/HATCH-125-6T/9-10 IE3	960		18.60	10.74	7.50	63500	76	652	2015
THT/HATCH-125-6T/9-15 IE3	955		26.00	15.01	11.00	77550	79	682	2015
THT/HATCH-125-6T/9-20 IE3	950		35.50	20.50	15.00	92950	82	755	2015

Technical characteristics of the dynamic exhaust system based on standards EN-12101-3 and EN-12101-2.

Model	Approval ºC	Motor insulation class	Durability	Temperature room temperature	Wind load (Pa)	Snow load (Pa)
THT/HATCH	F-400	Class H	RE 10000	T (-25)	WL 200	SL 800
THT/HATCH 125	F-400	Class H	RE 1000	T (0)	WL 200	SL 1000

Acoustic characteristics

The indicated values are determined by measuring the sound pressure level and sound power in dB(A) obtained in a free field at a distance equivalent to twice the size of the fan plus the impeller diameter, with a minimum of 1.5 m.

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

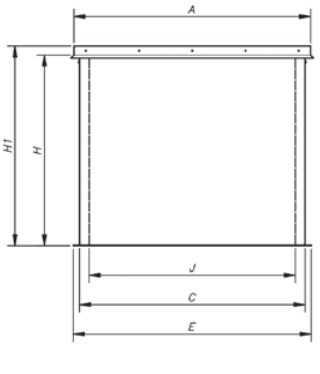
Model	63	125	250	500	1000	2000	4000	8000
40-2-1	44	65	72	77	80	76	69	58
40-2-1.5	45	66	73	78	81	77	70	59
45-2-2	47	68	75	80	83	79	72	61
45-2-3	49	70	77	82	85	81	74	63
50-2-4	54	74	82	87	89	86	79	68
56-2-5.5	60	80	88	93	95	92	85	74
56-2-7.5	61	81	89	94	96	93	86	75
63-4-3	50	68	76	81	83	80	75	64
63-4-4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

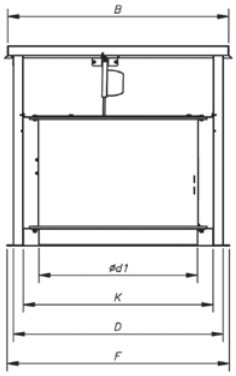
Model	63	125	250	500	1000	2000	4000	8000
100-4-10	60	80	88	93	95	92	85	74
100-4-15	59	79	87	92	94	91	84	73
100-4-20	61	81	89	94	96	93	86	75
100-6-5.5	62	71	79	84	86	83	76	65
100-6-7.5	63	72	80	85	87	84	77	66
125-4T/6-25	65	73	89	96	98	93	87	83
125-4T/6-30	65	73	89	96	98	93	87	83
125-4T/6-40	67	75	91	98	100	95	89	85
125-4T/6-50	68	76	92	99	101	96	90	86
125-4T/9-25	63	71	88	94	95	90	85	81
125-4T/9-30	64	72	89	95	96	91	86	82
125-4T/9-40	66	74	91	97	98	93	88	84
125-4T/9-50	68	76	93	99	100	95	90	86
125-6T/6-5.5	58	67	80	83	84	81	70	66
125-6T/6-7.5	58	67	80	83	84	81	70	66
125-6T/6-10	60	69	82	85	86	83	72	68
125-6T/6-15	62	71	84	87	88	85	74	70
125-6T/6-20	63	72	85	88	89	86	75	71
125-6T/9-10	56	66	81	85	84	83	72	68
125-6T/9-15	59	69	84	88	87	86	75	71
125-6T/9-20	62	72	87	91	90	89	78	74

Dimensions mm

THT/HATCH-40...100

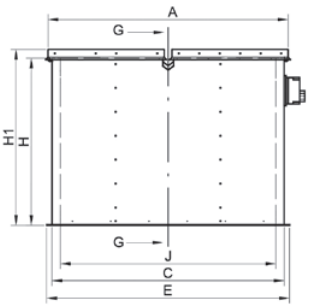
Model	A	B	C	D	ød1	E	F	H	H1	J	K
THT/HATCH-40	1100	990	1022	920	400	1100	1000	940	1000	900	800
THT/HATCH-45	1100	990	1022	920	450	1100	1000	940	1000	900	800
THT/HATCH-50	1100	990	1022	920	500	1100	1000	940	1000	900	800
THT/HATCH-56	1100	990	1022	920	560	1100	1000	940	1000	900	800
THT/HATCH-63	1295	1195	1222	1122	630	1300	1200	940	1000	1100	1000
THT/HATCH-80	1295	1195	1222	1122	800	1300	1200	940	1000	1100	1000
THT/HATCH-90	1492	1392	1420	1320	900	1500	1400	940	1000	1300	1200
THT/HATCH-100	1492	1392	1420	1320	1000	1500	1400	940	1000	1300	1200

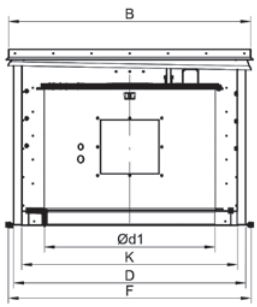




THT/HATCH-125

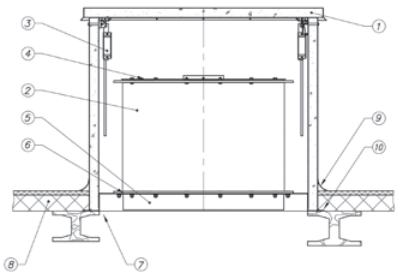
Model	A	B	C	D	ød1	E	F	H	H1	J	K
THT/HATCH-125	1750	1775	1700	1700	1245	1780	1780	1230	1290	1580	1580

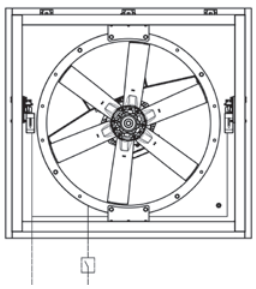




Installation diagram

1. *THT/HATCH box*
2. *THT fan*
3. *Motorised arms (230V AC or 24V DC x2)*
4. *Protective grille impulsion*
5. *Connection flange in inlet conduit*
6. *Inlet protective grille (optional)*
7. *Roof opening*
8. *Roof*
9. *Protection against water entry.*
10. *Direct assembly using the adjustable baseboard.*





Actuator power supply 1x230V 50Hz or 24 VDC

Motor power supply 3x400V 50Hz

Pre-installed by the manufacturer

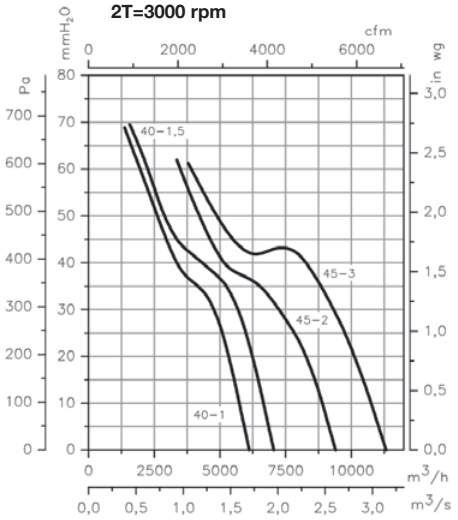
To be performed by the installer.

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

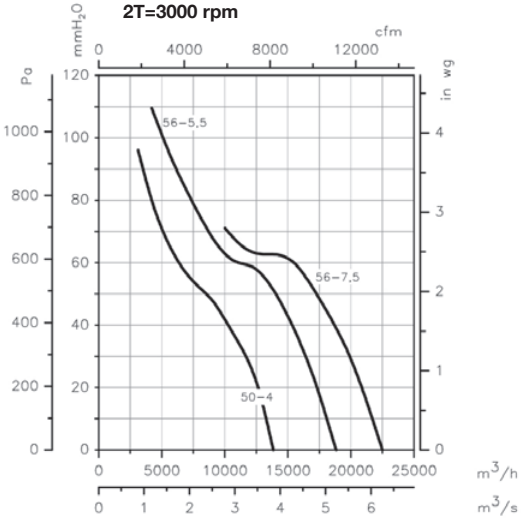
Characteristic curves

Q= Flow rate in m^3/h, m^3/s and cfm. Pe= Static pressure in mmH_2O, Pa and inwg.

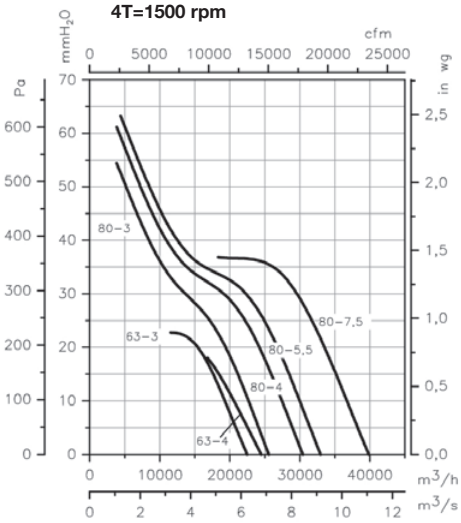
2T=3000 rpm



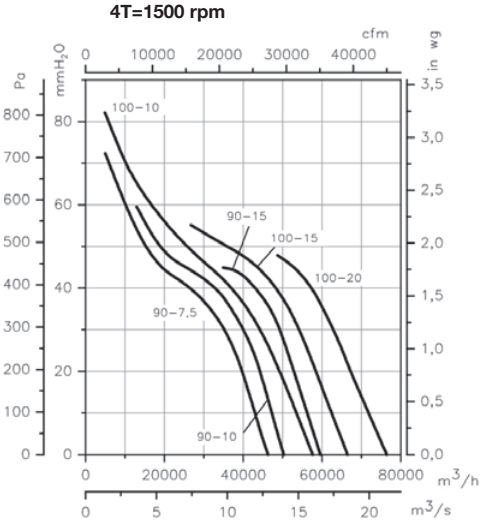
2T=3000 rpm



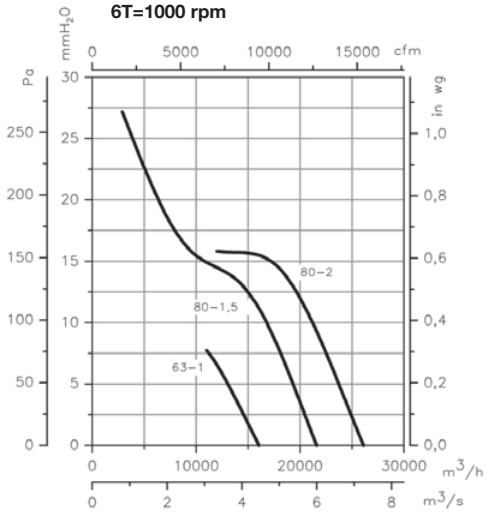
4T=1500 rpm



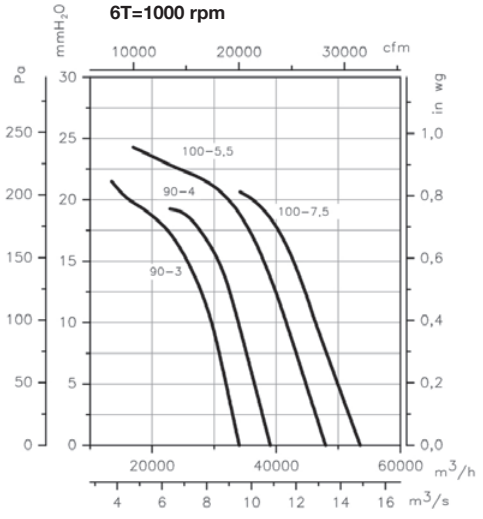
4T=1500 rpm



6T=1000 rpm



6T=1000 rpm

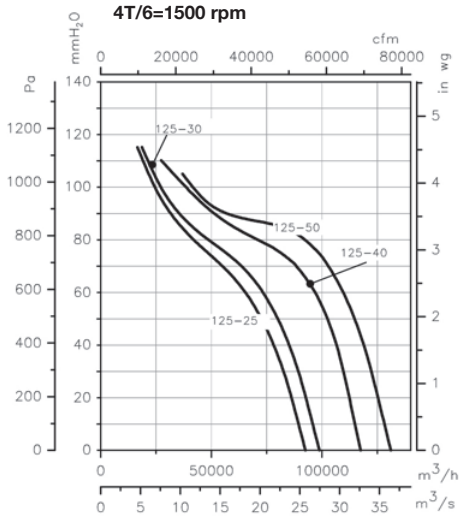


Characteristic curves

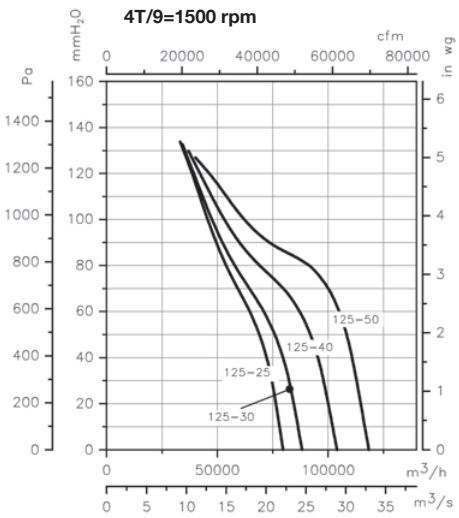
Q= Flow rate in m^3/h, m^3/s and cfm.

Pe= Static pressure in mmH_2O, Pa and inwg.

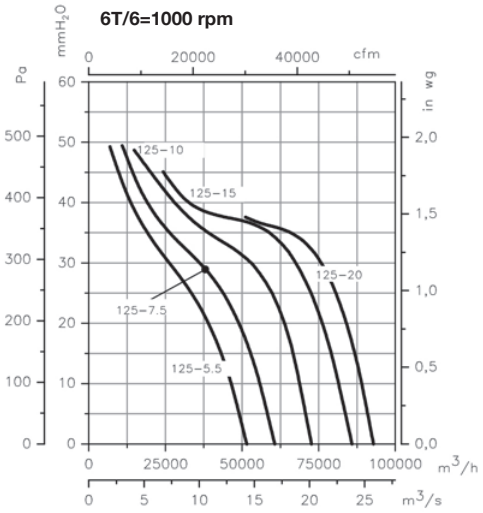
4T/6=1500 rpm



4T/9=1500 rpm



6T/6=1000 rpm



6T/9=1000 rpm