HTMV/ATEX

Roof mounted axial fans with vertical air outlet, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor

Notified authority: LOM
Identification no.: LOM 03ATEX0157
Motor marking:
Ⓔx II 2G Ex db IIB T4 Gb
Ⓔx II 2G Ex eb IIB T3 Gb
Ⓔx II 2D Ex tb IIIC T135 ºC Db

Roof mounted axial fans with vertical air outlet and ATEX 2G or 2D certification with flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb motor to work in explosive gas or dust atmospheres.

Fan:
- Support base in galvanised steel sheet and anti-corrosive treatment.
- Adjustable cast aluminum impeller.
- Protection grid against contacts according to UNE-EN ISO 12499.
- Non-return damper in aluminum sheet to prevent the entry of water when the fan is not running.
- Airflow direction from motor to impeller.
- Standard marking with flameproof motor (Ex db): II 2G Ex h IIB T4 Gb.
- Standard marking with increased safety motor (Ex eb): II 2G Ex h IIB T3 Gb.
- Standard marking with motor for dust ignition proof (Ex tb): II 2D Ex h IIIC T135 ºC Db.

Motor:
- Class F motors with ball bearings and ATEX certification flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -20 ºC +40 ºC.

Finish:
- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 ºC, after degreasing with phosphate-free nanotechnological treatment.

On request:
- Total stainless steel construction.
- Hot dip galvanised steel construction.
- Motors with built-in PTC.
- Special windings for different voltages and frequencies.
- ATEX construction for flammable dust.
- ATEX fan with greater protection than the standard marking.
- Fans with 2 speed motor.
- Ex db flameproof single-phase motors.

Order code

From size 40 to size 100

HTMV/ATEX — 56 — 4T — 2 / 2G Ex eb

- HTMV/ATEX: Roof mounted axial fans with vertical air outlet, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor
- 56: Impeller diameter in cm
- 4T: Number of motor poles 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz; T = Three-phase
- 2: Motor power (HP)
- 2G Ex eb: 2G Ex eb: for zone 1 and 2; 2G Ex db: for zone 1 and 2; 2D Ex tb: for zone 21 and 22

Size 125

HTMV/ATEX — 125 — 4T / 9 — 25 / 2G Ex eb

- HTMV/ATEX: Roof mounted axial fans with vertical air outlet, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor
- 125: Impeller diameter in cm
- 4T: Number of motor poles 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz; T = Three-phase
- 9: Number of blades: 6 blades 9 blades
- 25: Motor power (HP)
- 2G Ex eb: 2G Ex eb: for zone 1 and 2; 2G Ex db: for zone 1 and 2; 2D Ex tb: for zone 21 and 22

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)
HTMV/ATEX-40-4T-0.75	1410	2.87	1.65		0.55	32	4800	45	44	36
HTMV/ATEX-40-6T-0.75	930	3.46	2.00		0.55	32	3150	36	35	43
HTMV/ATEX-45-4T-0.75	1410	2.87	1.65		0.55	36	7450	48	47	39
HTMV/ATEX-45-6T-0.75	930	3.46	2.00		0.55	30	4450	38	37	46
HTMV/ATEX-50-4T-1	1410	3.81	2.20		0.75	28	9730	50	49	49
HTMV/ATEX-50-6T-0.75	930	3.46	2.00		0.55	32	7000	42	41	53
HTMV/ATEX-56-4T-1	1410	3.81	2.20		0.75	22	11250	53	52	56
HTMV/ATEX-56-4T-1.5	1410	4.54	2.61		1.10	30	13600	53	52	52
HTMV/ATEX-56-4T-2	1400	6.93	4.00		1.50	36	15030	54	53	56
HTMV/ATEX-56-6T-0.75	930	3.46	2.00		0.55	38	10140	44	43	56
HTMV/ATEX-63-4T-1.5	1410	4.54	2.61		1.10	20	17800	56	55	61
HTMV/ATEX-63-4T-2	1400	6.93	4.00		1.50	24	19280	56	55	66
HTMV/ATEX-63-4T-3	1410	8.30	4.77		2.20	32	22150	58	57	72
HTMV/ATEX-63-4T-4	1440	11.27	6.48		3.00	38	24240	59	58	80
HTMV/ATEX-63-6T-0.75	930	3.46	2.00		0.55	28	13590	47	46	66
HTMV/ATEX-63-6T-1	930	4.16	2.40		0.75	38	15890	48	47	62
HTMV/ATEX-71-4T-2	1400	6.93	4.00		1.50	14	20900	60	59	73
HTMV/ATEX-71-4T-3	1410	8.30	4.77		2.20	22	25100	60	59	79
HTMV/ATEX-71-4T-4	1440	11.27	6.48		3.00	28	27480	60	59	87
HTMV/ATEX-71-6T-0.75	930	3.46	2.00		0.55	20	16100	50	49	73
HTMV/ATEX-71-6T-1	930	4.16	2.40		0.75	26	17300	50	49	69
HTMV/ATEX-71-6T-1.5	910	5.89	3.40		1.10	34	19930	51	50	77
HTMV/ATEX-80-4T-4	1440	11.27	6.48		3.00	16	30250	64	63	109
HTMV/ATEX-80-4T-5.5	1450	15.29	8.79		4.00	18	32750	63	62	112
HTMV/ATEX-80-6T-1.5	910	5.89	3.40		1.10	18	21450	53	52	99
HTMV/ATEX-80-6T-2	940	7.62	4.40		1.50	26	25950	54	53	107
HTMV/ATEX-80-6T-3	940	9.35	5.40		2.20	32	29930	55	54	105
HTMV/ATEX-90-4T-5.5	1450	15.29	8.79		4.00	12	38890	68	67	125
HTMV/ATEX-90-4T-7.5	1440		10.64	18.50	5.50	18	46140	67	66	151
HTMV/ATEX-90-4T-10	1450		14.39	25.03	7.50	22	50140	66	65	110
HTMV/ATEX-90-6T-2	940	7.62	4.40		1.50	16	28780	56	55	120
HTMV/ATEX-90-6T-3	940	9.35	5.40		2.20	24	34000	56	55	119
HTMV/ATEX-90-6T-4	945	14.72	8.50		3.00	30	38900	59	58	147
HTMV/ATEX-100-4T-7.5	1440		10.64	18.50	5.50	10	46850	72	71	162
HTMV/ATEX-100-4T-10	1450		14.39	25.03	7.50	16	57400	69	68	121
HTMV/ATEX-100-4T-15	1460		20.76	36.10	11.00	22	66300	69	68	217
HTMV/ATEX-100-4T-20	1450		28.19	49.03	15.00	28	76150	70	69	234
HTMV/ATEX-100-6T-3	940	9.35	5.40		2.20	16	37600	60	59	131
HTMV/ATEX-100-6T-4	945	14.72	8.50		3.00	20	41150	59	58	159
HTMV/ATEX-100-6T-5.5	950	18.88	10.90		4.00	26	47780	60	59	156
HTMV/ATEX-125-4T/6-25	1475		35.70	20.60	18.50	14	92550	70	69	555
HTMV/ATEX-125-4T/6-30	1465		42.00	24.00	22.00	16	98830	69	68	433
HTMV/ATEX-125-4T/6-40	1470		55.00	31.80	30.00	22	117450	69	68	587
HTMV/ATEX-125-4T/6-50	1480		69.00	39.90	37.00	26	131050	69	68	643
HTMV/ATEX-125-4T/9-25	1475		35.70	20.60	18.50	10	79650	77	76	564
HTMV/ATEX-125-4T/9-30	1465		42.00	24.00	22.00	12	88290	76	75	442
HTMV/ATEX-125-4T/9-40	1470		55.00	31.80	30.00	16	104040	75	74	596
HTMV/ATEX-125-4T/9-50	1480		69.00	39.90	37.00	20	118400	75	74	652
HTMV/ATEX-125-6T/6-5.5	950	18.88	10.90		4.00	10	51500	62	61	261
HTMV/ATEX-125-6T/6-7.5	950		14.00	8.08	5.50	14	60640	60	59	242
HTMV/ATEX-125-6T/6-10	965		16.40	9.47	7.50	20	72650	59	58	245
HTMV/ATEX-125-6T/6-15	965		23.30	13.45	11.00	26	85850	60	59	329
HTMV/ATEX-125-6T/6-20	970		29.70	17.10	15.00	30	92850	61	60	559
HTMV/ATEX-125-6T/9-10	965		16.40	9.47	7.50	14	63490	67	66	254
HTMV/ATEX-125-6T/9-15	965		23.30	13.45	11.00	20	77550	65	64	338
HTMV/ATEX-125-6T/9-20	970		29.70	17.10	15.00	26	92950	65	64	568

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

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

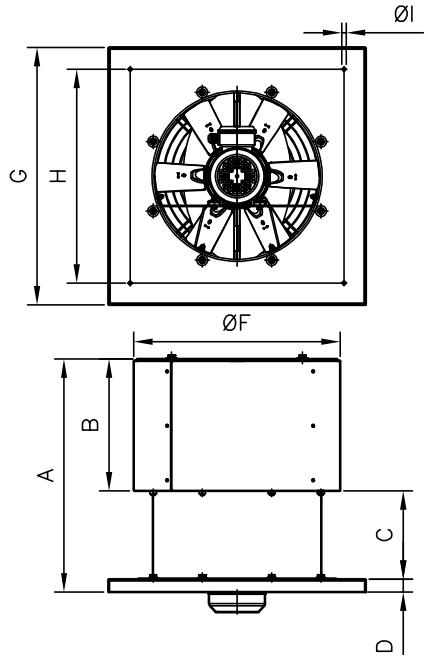
Values measured at inlet with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
40-4-0.75	37	53	63	70	71	68	67	68
40-6-0.75	28	44	54	61	62	59	58	59
45-4-0.75	47	59	67	73	73	73	68	60
45-6-0.75	37	49	57	63	63	63	58	50
50-4-1	49	61	69	75	75	75	70	62
50-6-0.75	41	53	61	67	67	67	62	54
56-4-1	51	63	72	78	78	78	72	64
56-4-1.5	51	63	72	78	78	78	72	64
56-4-2	52	64	73	79	79	79	73	65
56-6-0.75	45	55	65	69	70	68	61	53
63-4-1.5	47	63	75	81	83	80	73	65
63-4-2	54	66	75	81	81	81	75	67
63-4-3	56	68	77	83	83	83	77	69
63-4-4	57	69	78	84	84	84	78	70
63-6-0.75	48	58	68	72	73	71	64	56
63-6-1	49	59	69	73	74	72	65	57
71-4-2	56	72	79	85	85	85	81	73
71-4-3	56	72	79	85	85	85	81	73
71-4-4	63	75	79	85	85	86	83	75
71-6-0.75	46	53	73	76	76	71	63	55
71-6-1	46	64	73	76	76	71	64	55
71-6-1.5	47	65	74	77	77	72	65	56
80-4-4	54	70	83	90	90	87	81	73
80-4-5.5	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
80-6-3	60	70	76	80	81	79	74	66
90-4-5.5	60	76	87	93	94	92	87	79
90-4-7.5	59	75	86	92	93	91	86	78
90-4-10	58	74	85	91	92	90	85	77
90-6-2	52	67	78	82	82	78	71	63
90-6-3	52	67	78	82	82	78	71	63
90-6-4	60	70	80	85	85	82	76	68
100-4-7.5	67	83	90	97	98	96	92	84
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
100-6-3	57	72	82	85	86	83	75	67
100-6-4	56	71	81	84	85	82	74	66
100-6-5.5	57	72	82	85	86	83	75	67
125-4/6-25	65	81	88	95	96	94	90	82
125-4/6-30	64	80	87	94	95	93	89	81
125-4/6-40	71	83	87	93	94	94	91	83
125-4/6-50	71	83	87	93	94	94	91	83
125-4/9-25	67	81	94	102	104	101	96	88
125-4/9-30	66	80	93	101	103	100	95	87
125-4/9-40	65	79	92	100	102	99	94	86
125-4/9-50	65	79	92	100	102	99	94	86
125-6/6-5.5	59	74	84	87	88	85	77	69
125-6/6-7.5	57	72	82	85	86	83	75	67
125-6/6-10	56	71	81	84	85	82	74	66
125-6/6-15	57	72	82	85	86	83	75	67
125-6/6-20	58	73	83	86	87	84	76	68
125-6/9-10	61	76	87	93	94	88	84	77
125-6/9-15	59	74	85	91	92	86	82	75
125-6/9-20	59	74	85	91	92	86	82	75

Values measured at exhaust with maximum flow rate

	63	125	250	500	1000	2000	4000	8000
40-4-0.75	36	52	62	69	70	67	66	67
40-6-0.75	27	43	53	60	61	58	57	58
45-4-0.75	46	58	66	72	72	72	67	59
45-6-0.75	36	48	56	62	62	62	57	49
50-4-1	48	60	68	74	74	74	69	61
50-6-0.75	40	52	60	66	66	66	61	53
56-4-1	50	62	71	77	77	77	71	63
56-4-1.5	50	62	71	77	77	77	71	63
56-4-2	51	63	72	78	78	78	72	64
56-6-0.75	44	54	64	68	69	67	60	52
63-4-1.5	46	62	74	80	82	79	72	64
63-4-2	53	65	74	80	80	80	74	66
63-4-3	55	67	76	82	82	82	76	68
63-4-4	56	68	77	83	83	83	77	69
63-6-0.75	47	57	67	71	72	70	63	55
63-6-1	48	58	68	72	73	71	64	56
71-4-2	55	71	78	84	84	84	80	72
71-4-3	55	71	78	84	84	84	80	72
71-4-4	62	74	78	84	84	85	82	74
71-6-0.75	45	52	72	75	75	70	62	54
71-6-1	45	63	72	75	75	70	63	54
71-6-1.5	46	64	73	76	76	71	64	55
80-4-4	53	69	82	89	89	86	80	72
80-4-5.5	52	68	81	88	88	85	79	71
80-6-1.5	52	67	74	77	78	75	69	61
80-6-2	58	68	74	78	79	77	72	64
80-6-3	59	69	75	79	80	78	73	65
90-4-5.5	59	75	86	92	93	91	86	78
90-4-7.5	58	74	85	91	92	90	85	77
90-4-10	57	73	84	90	91	89	84	76
90-6-2	51	66	77	81	81	77	70	62
90-6-3	51	66	77	81	81	77	70	62
90-6-4	59	69	79	84	84	81	75	67
100-4-7.5	66	82	89	96	97	95	91	83
100-4-10	63	79	86	93	94	92	88	80
100-4-15	70	82	86	92	93	93	90	82
100-4-20	71	83	87	93	94	94	91	83
100-6-3	56	71	81	84	85	82	74	66
100-6-4	55	70	80	83	84	81	73	65
100-6-5.5	56	71	81	84	85	82	74	66
125-4/6-25	64	80	87	94	95	93	89	81
125-4/6-30	63	79	86	93	94	92	88	80
125-4/6-40	70	82	86	92	93	93	90	82
125-4/6-50	70	82	86	92	93	93	90	82
125-4/9-25	66	80	93	101	103	100	95	87
125-4/9-30	65	79	92	100	102	99	94	86
125-4/9-40	64	78	91	99	101	98	93	85
125-4/9-50	64	78	91	99	101	98	93	85
125-6/6-5.5	58	73	83	86	87	84	76	68
125-6/6-7.5	56	71	81	84	85	82	74	66
125-6/6-10	55	70	80	83	84	81	73	65
125-6/6-15	56	71	81	84	85	82	74	66
125-6/6-20	57	72	82	85	86	83	75	67
125-6/9-10	60	75	86	92	93	87	83	76
125-6/9-15	58	73	84	90	91	85	81	74
125-6/9-20	58	73	84	90	91	85	81	74

Dimensions mm



	A	B	C	D	ØF	G	H	ØI
HTMV/ATEX-40	628	349	244	35	519	630	530	12
HTMV/ATEX-45	642	363	244	35	569	710	590	12
HTMV/ATEX-50	679	400	244	35	626	900	750	12
HTMV/ATEX-56	710	426	244	40	686	900	750	14
HTMV/ATEX-63	747	463	244	40	753	1000	850	14
HTMV/ATEX-71	830	498	292	40	833	1000	850	14
HTMV/ATEX-80	887	545	292	50	923	1150	1000	14
HTMV/ATEX-90	989	601	338	50	1031	1150	1000	14
HTMV/ATEX-100	1136	648	438	50	1128	1250	1100	14
HTMV/ATEX-125	1313	775	488	50	1386	1425	1275	17

Accessories

INT/ATEX

R

PV

BTUB

MS

PA

BS

BSS

PT

OP

S

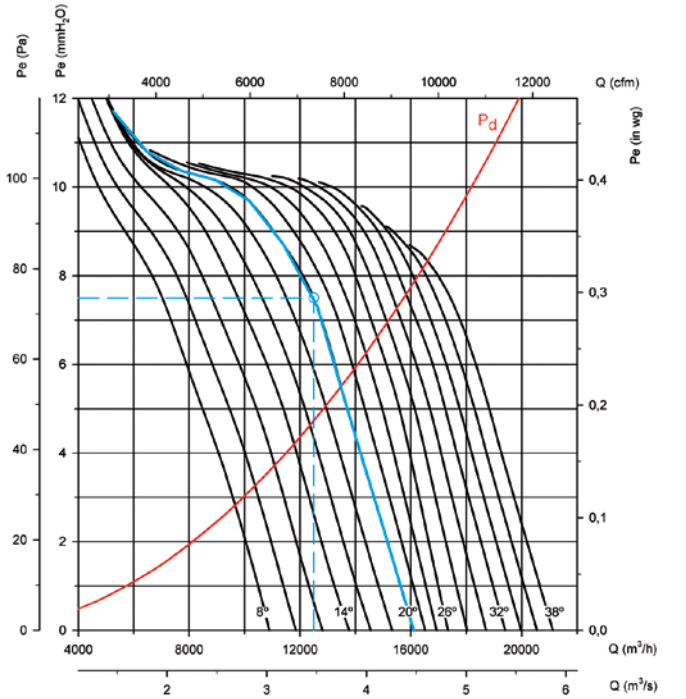
EXAMPLE OF SELECTION

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H_2O, Pa and inwg

Impeller diameter in cm: 71 **Number of motor poles: 6** **Number of blades: 6**



Initial data
Working point:
- Flow rate: 12.500 m³/h
- Loss of load: 7,5 mmH_2O

Steps for the selection of equipment
On the pressure graph:
- Mark the working point, defined by the airflow (12,500 m³/h) and the loss of load (7.5 mmH_2O).
- Select the curve of the equipment which is closest above the working point. In our case, a curve with a blade angle of 20º is obtained.

On the power graph:
- Mark the working point, defined by the airflow (12,500 m³/h) and the selected blade angle (20º).
- Read the absorbed power on the power axis on the left. Pa= 510 W at the working point.
- Look for the straight red line which is closest to the working point above. On the right-hand side of the graph, the value of the installed motor power is obtained. In our case, this is 0.55 kW or 0.75 HP.

EXAMPLE OF ORDER CODE

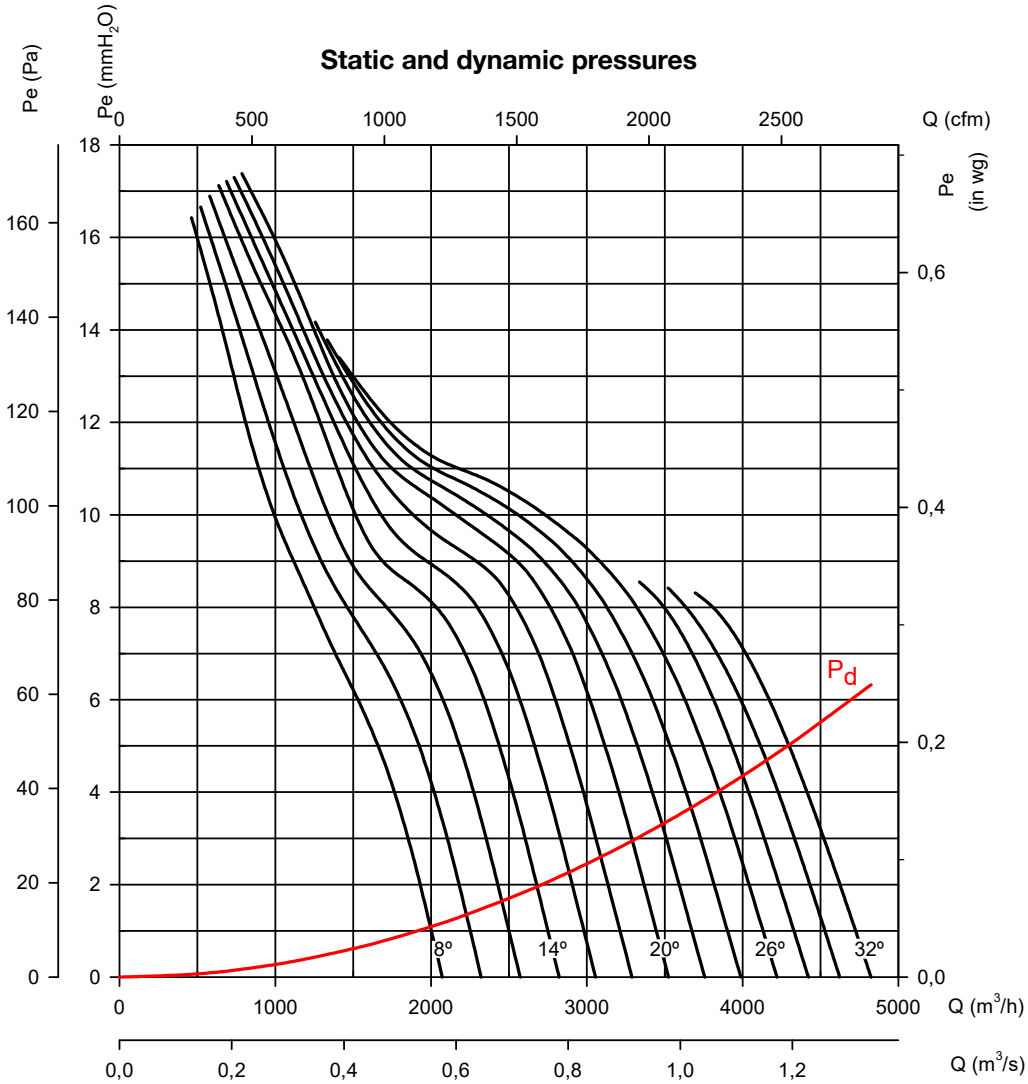
HTMV/ATEX – 71 – 6T – 0.75 / 2G Ex eb

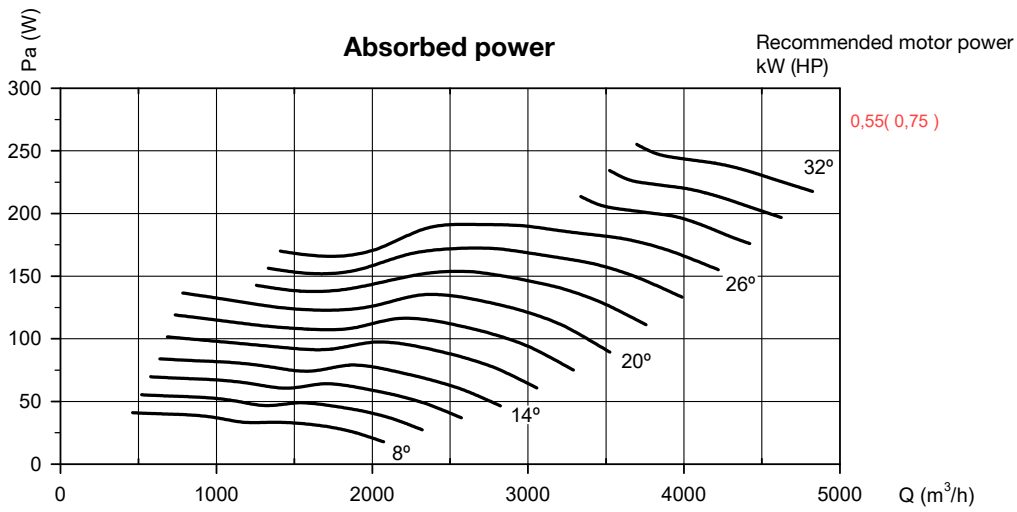
- HTMV/ATEX: Roof mounted axial fans with vertical air outlet, ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor
- Impeller diameter in cm
- Number of motor poles 4=1500 r/min 50 Hz 6=1000 r/min 50 Hz
- T = Three-phase
- Motor power (HP)
- 2G Ex eb: for zone 1 and 2 2G Ex db: for zone 1 and 2 2D Ex tb: for zone 21 and 22

Characteristic curves

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

Impeller diameter in cm: 40 **Number of motor poles: 4** **Number of blades: 6**

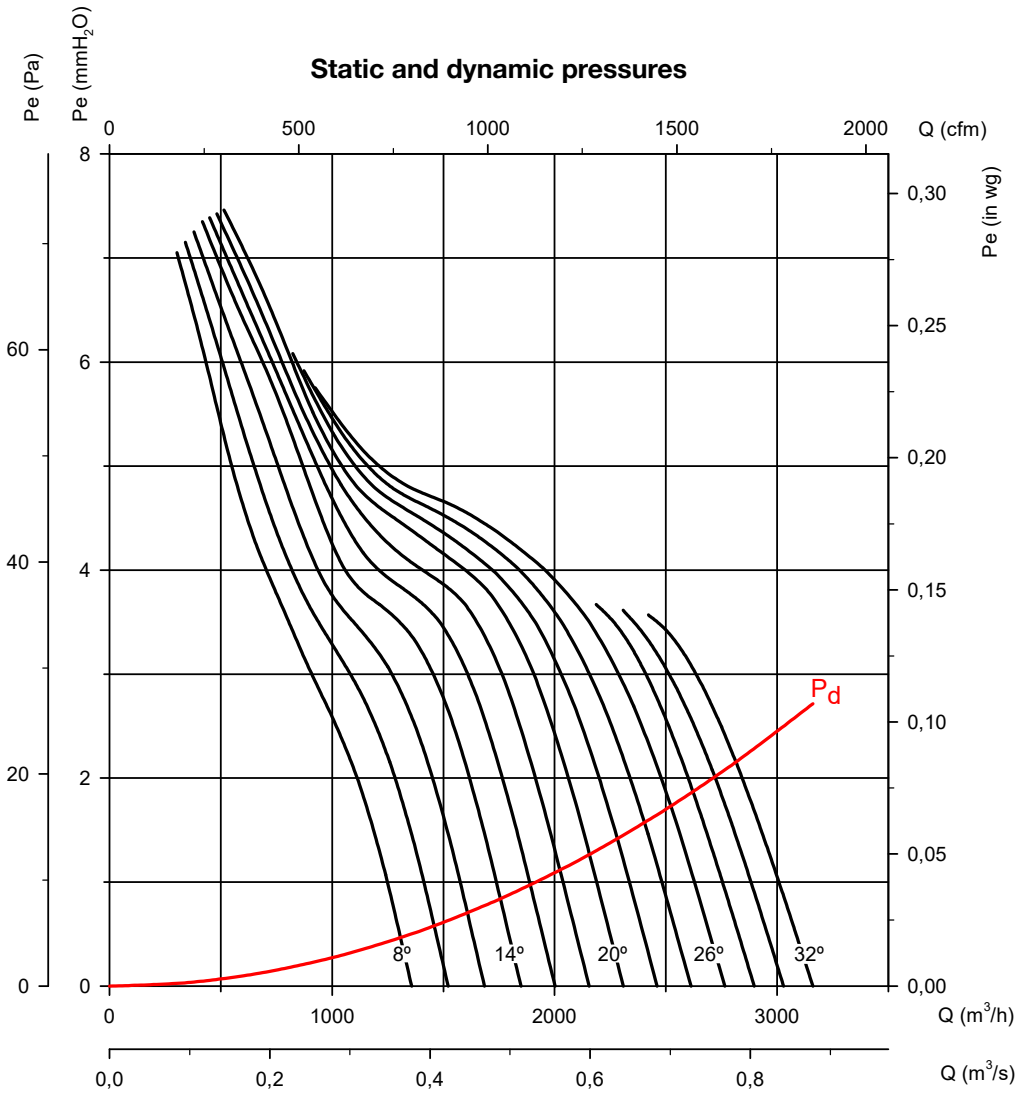


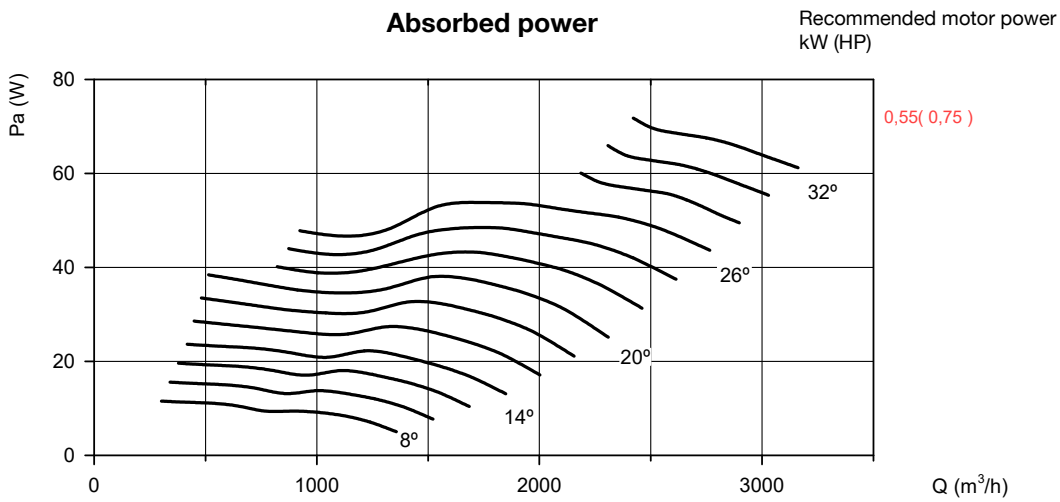


Characteristic curves

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

Impeller diameter in cm: 40 **Number of motor poles: 6** **Number of blades: 6**

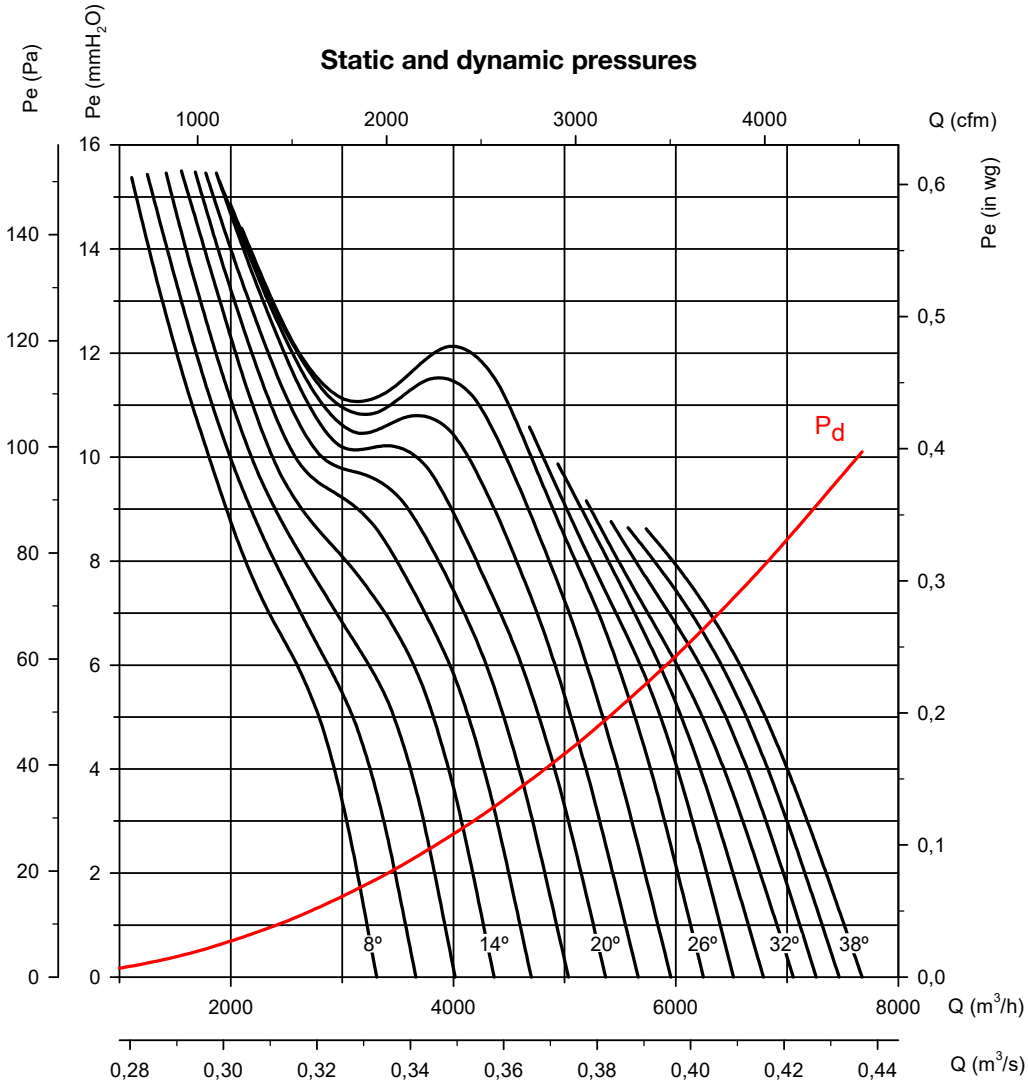


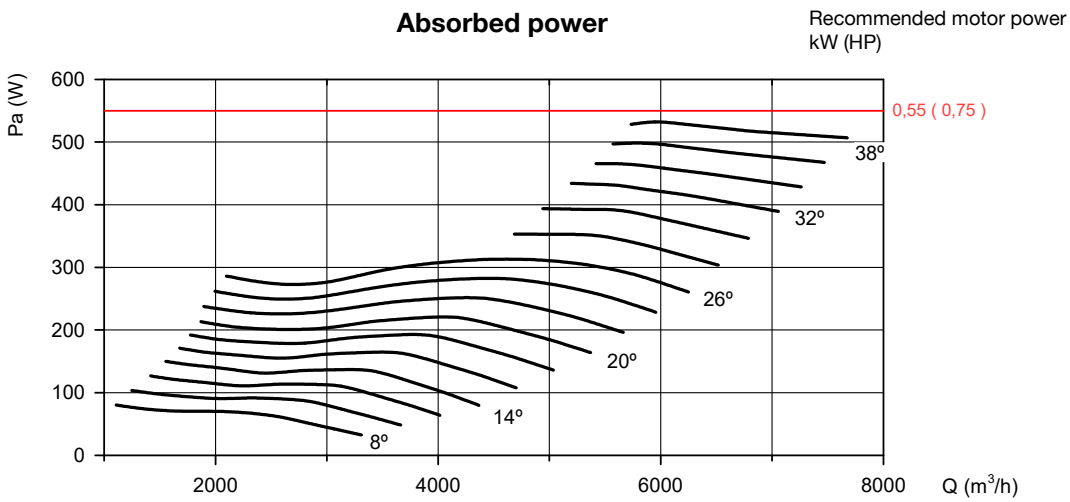


Characteristic curves

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

Impeller diameter in cm: 45 **Number of motor poles: 4** **Number of blades: 6**

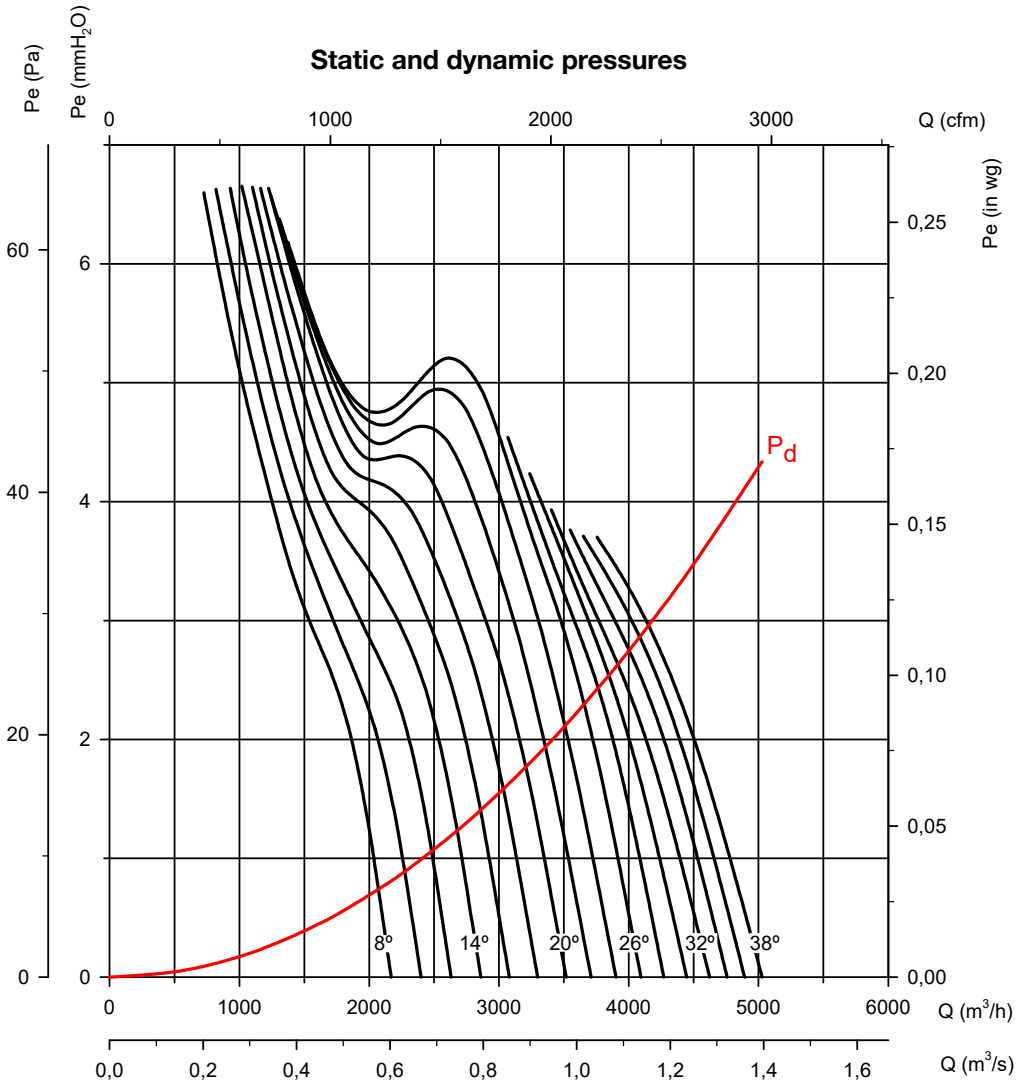


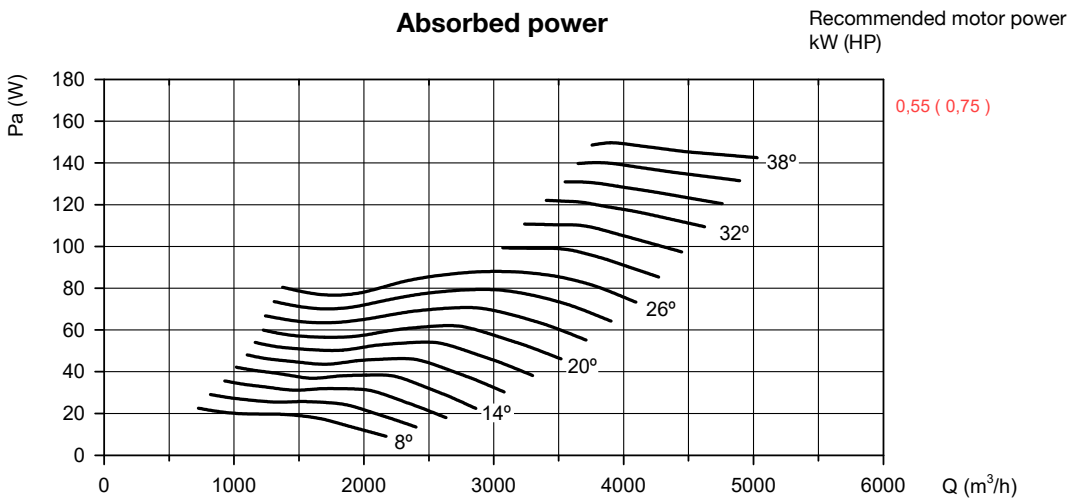


Characteristic curves

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

Impeller diameter in cm: 45 **Number of motor poles: 6** **Number of blades: 6**

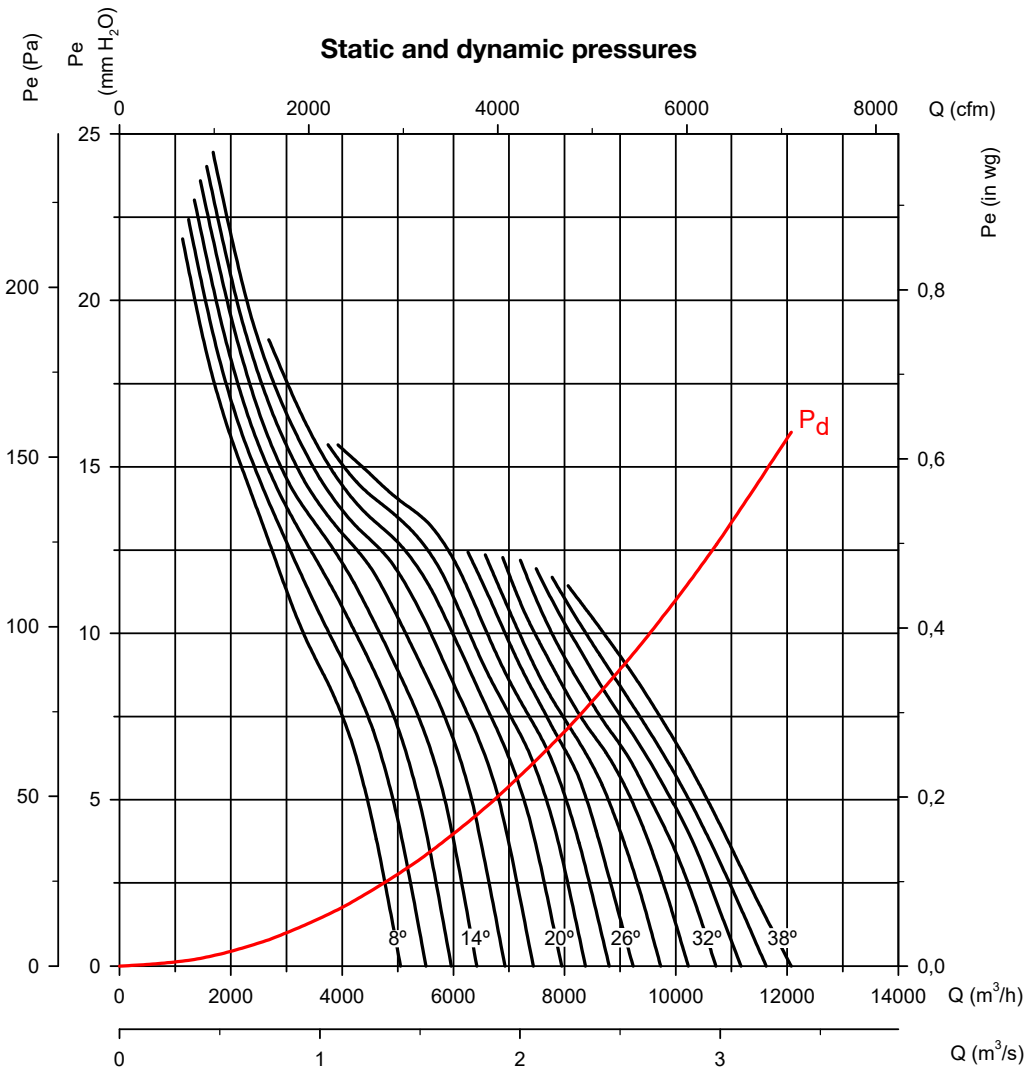


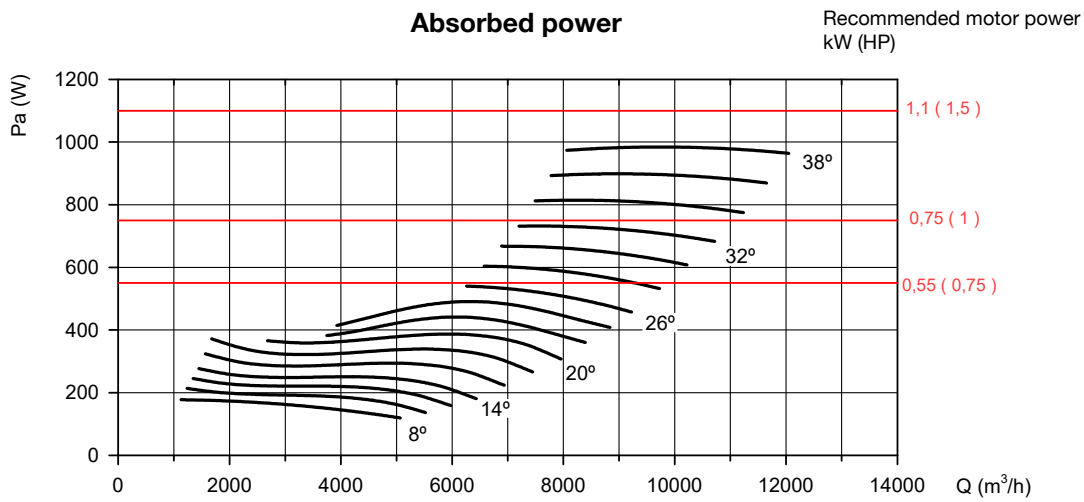


Characteristic curves

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

Impeller diameter in cm: 50 **Number of motor poles: 4** **Number of blades: 6**

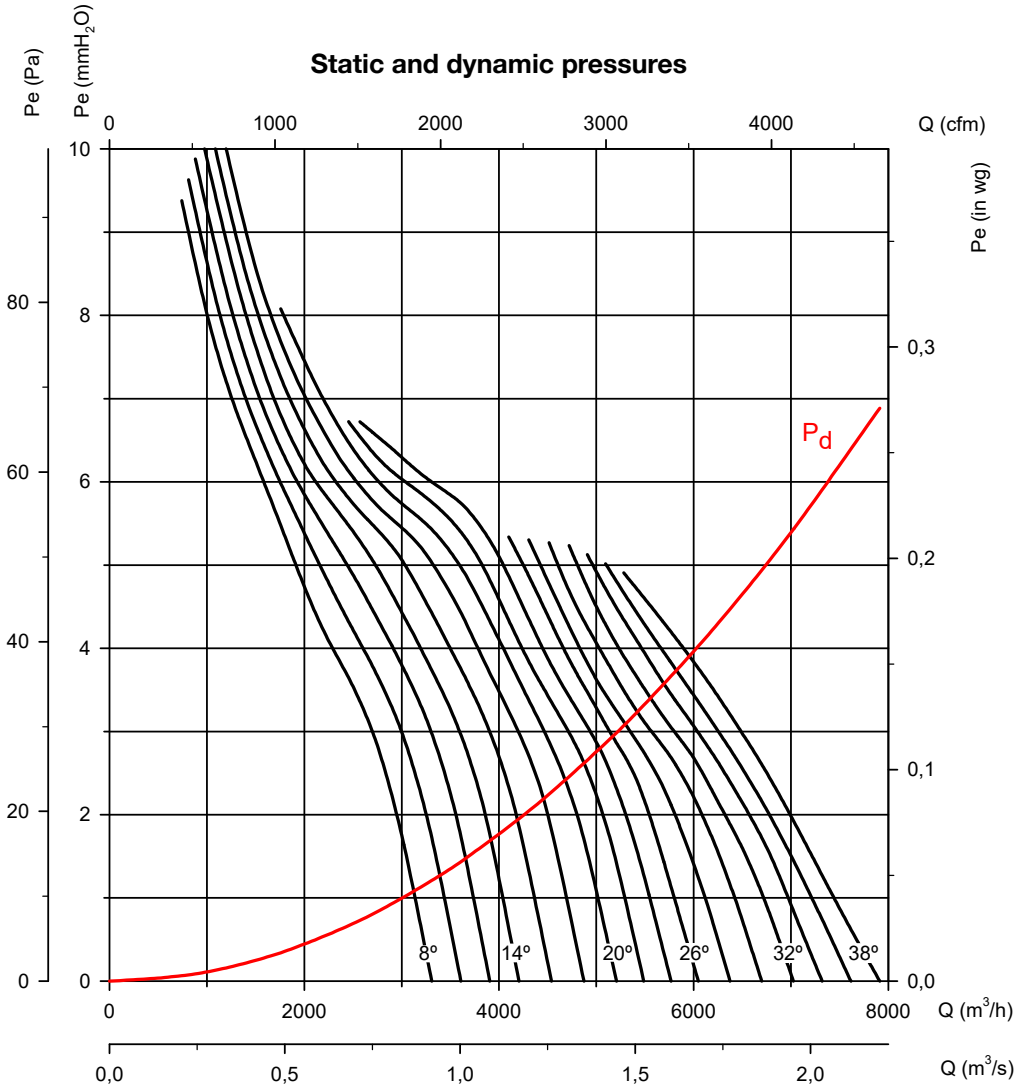


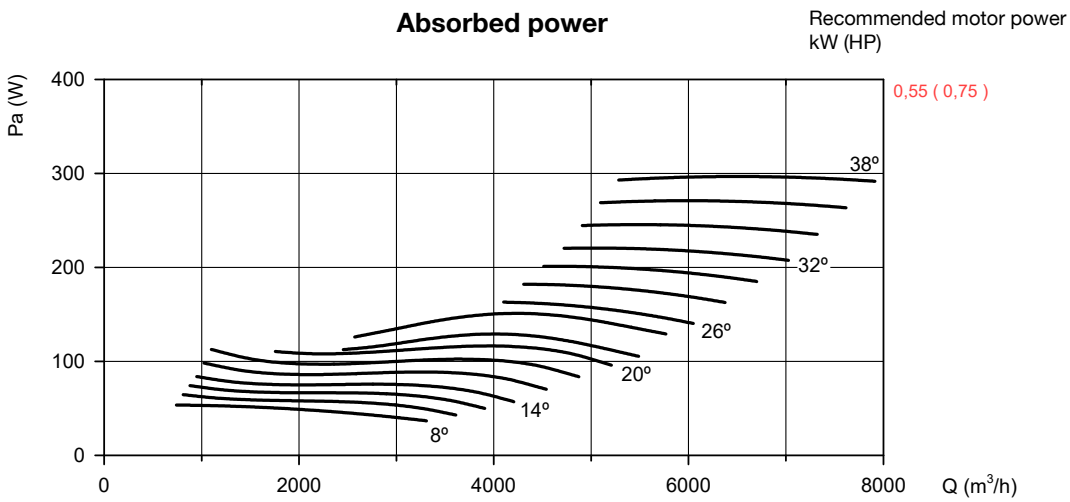


Characteristic curves

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

Impeller diameter in cm: 50 **Number of motor poles: 6** **Number of blades: 6**

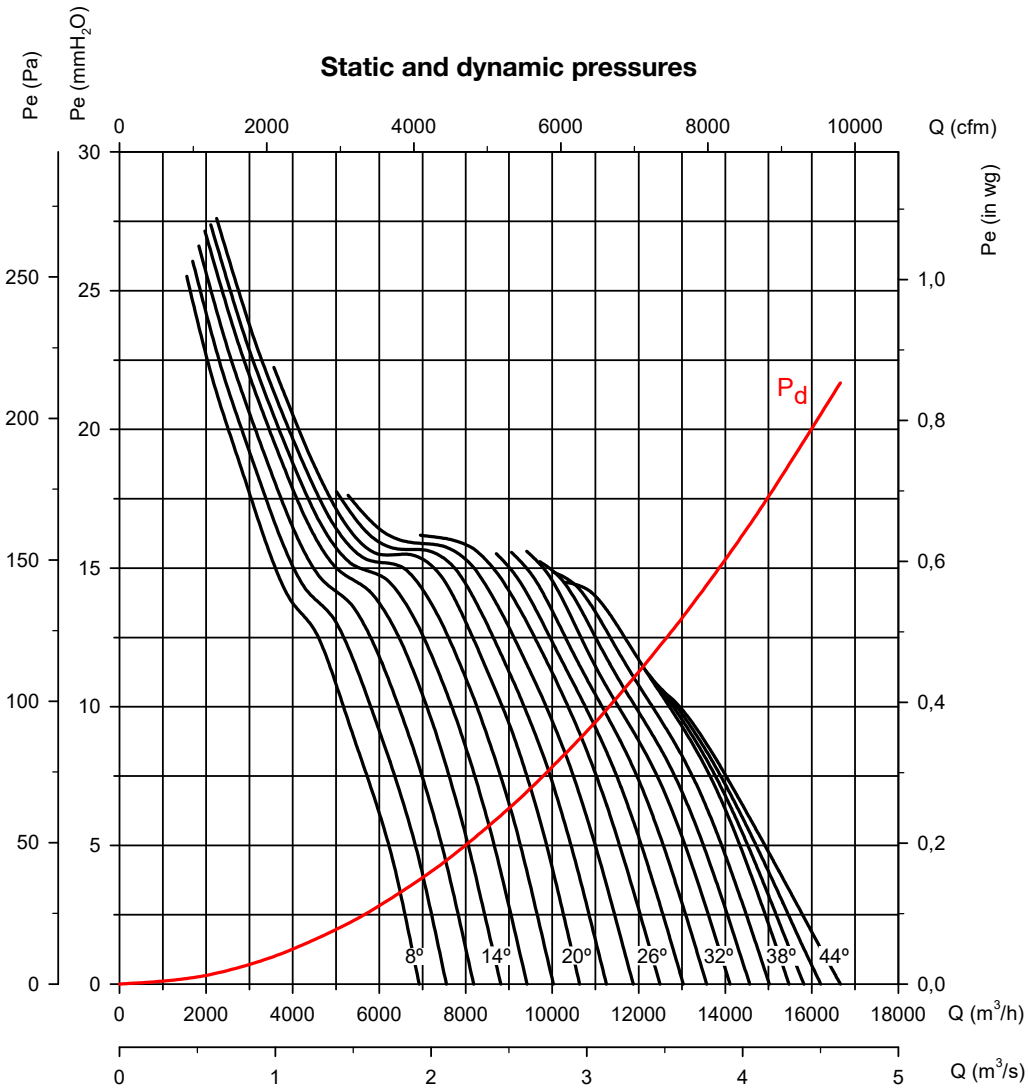


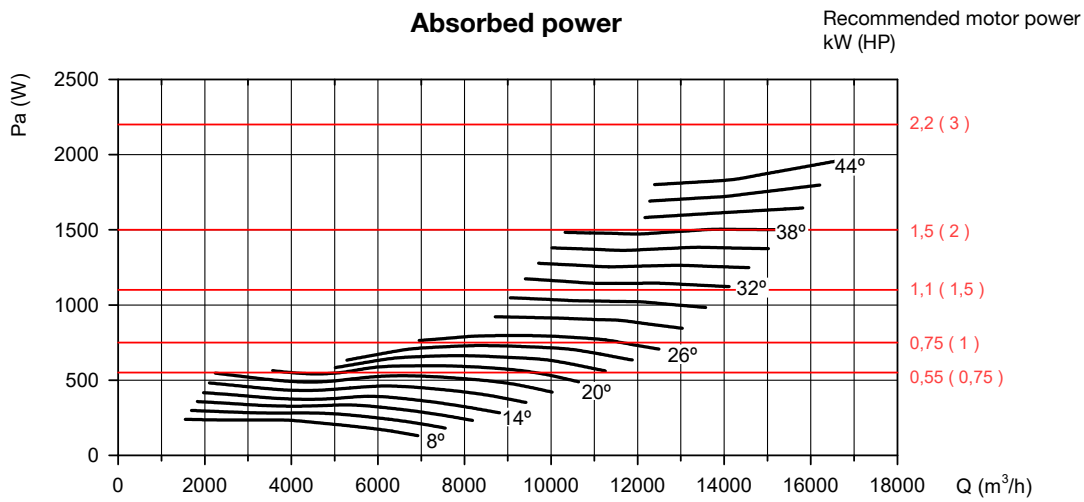


Characteristic curves

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

Impeller diameter in cm: 56 **Number of motor poles: 4** **Number of blades: 6**

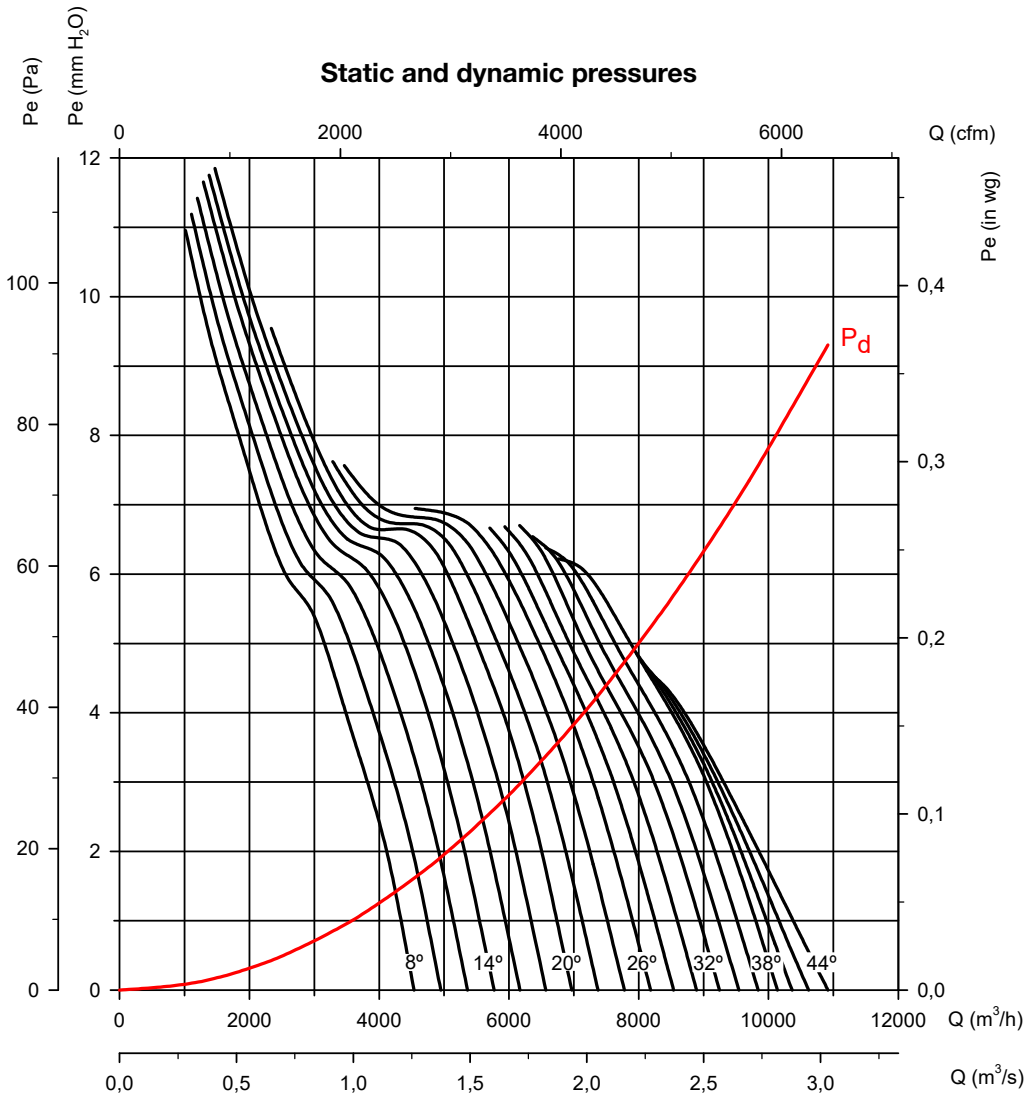


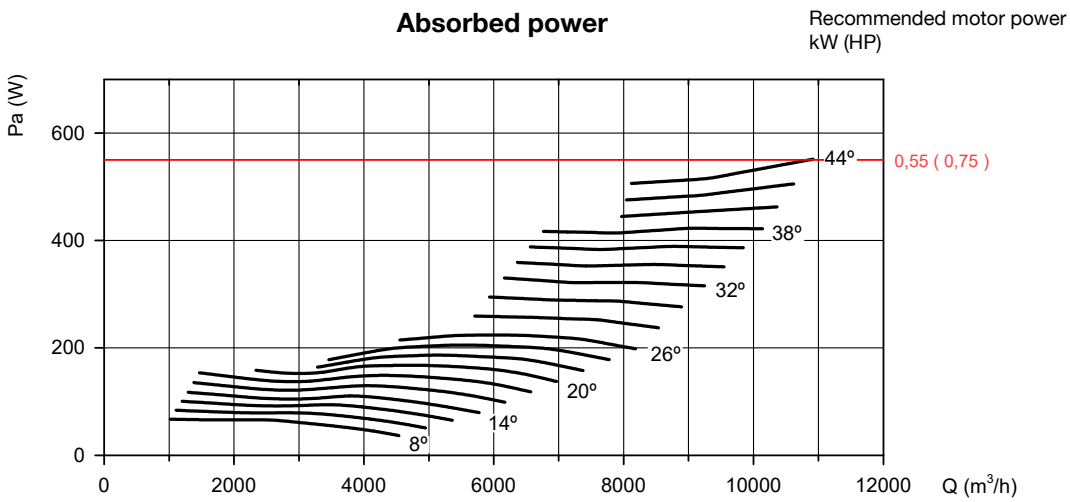


Characteristic curves

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

Impeller diameter in cm: 56 **Number of motor poles: 6** **Number of blades: 6**

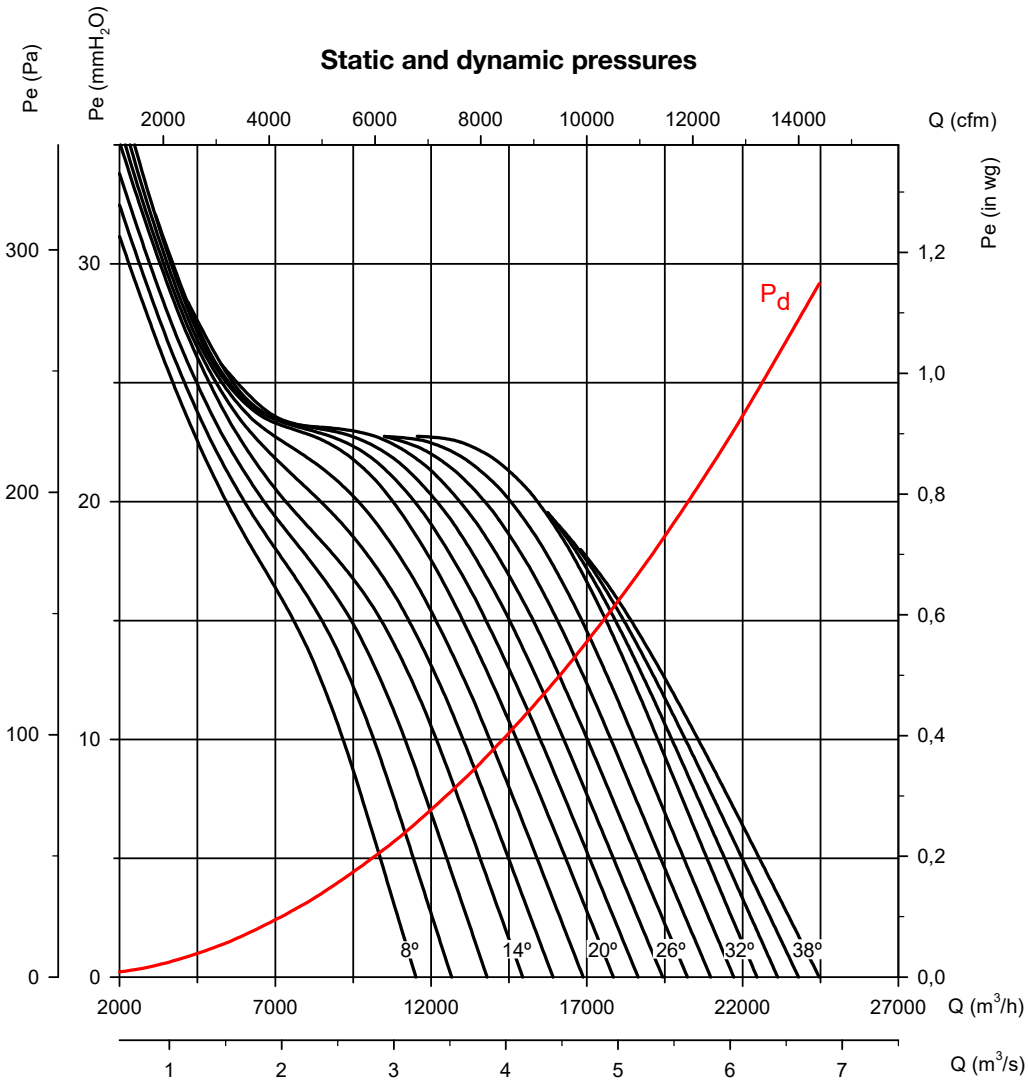


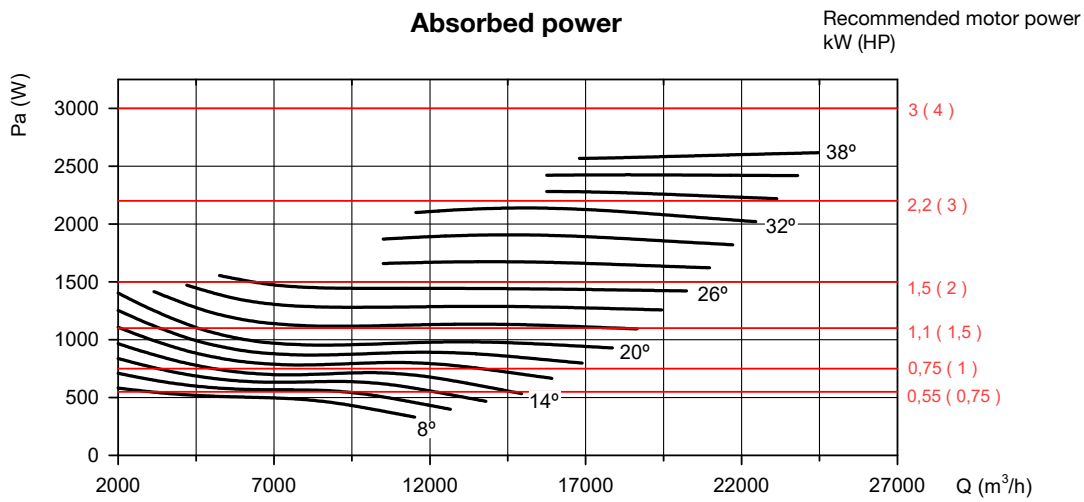


Characteristic curves

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

Impeller diameter in cm: 63 **Number of motor poles: 4** **Number of blades: 6**

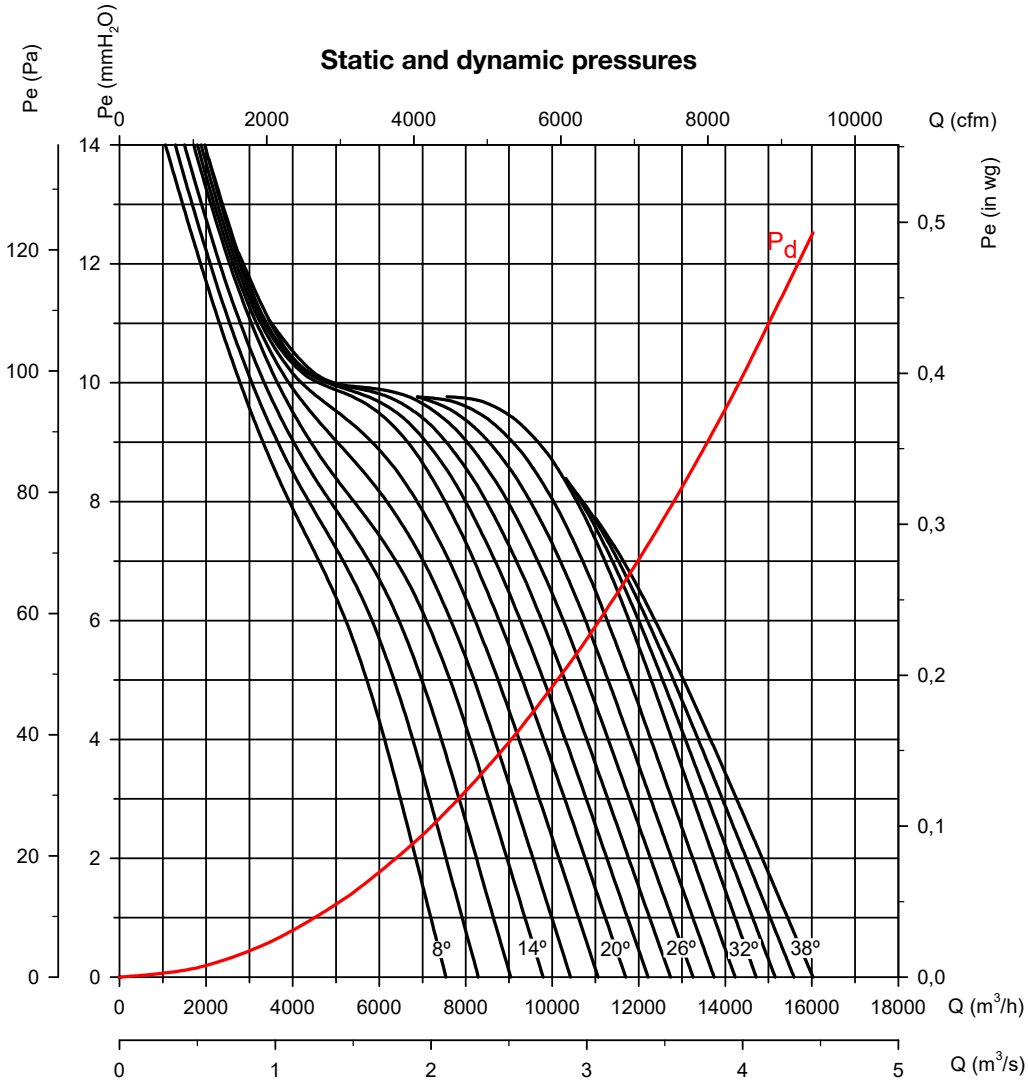


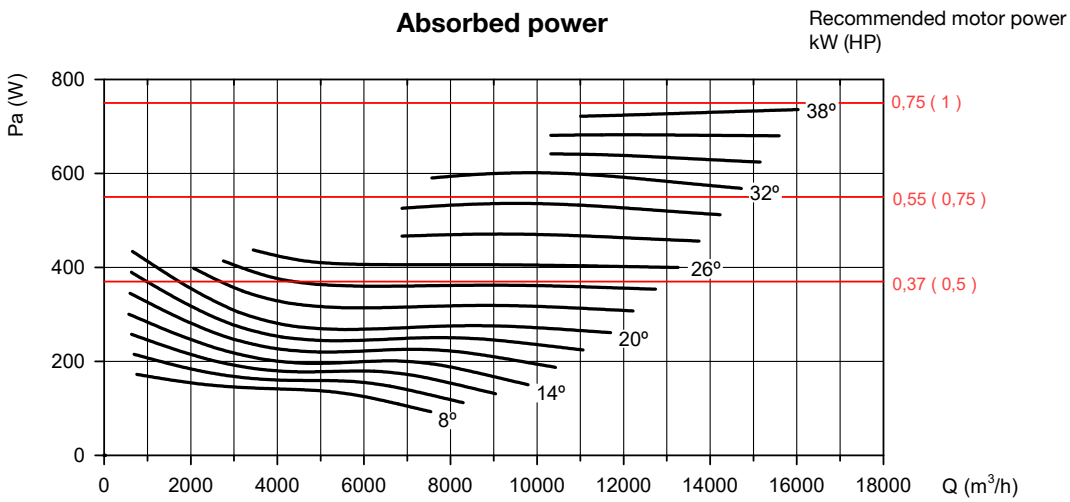


Characteristic curves

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

Impeller diameter in cm: 63 **Number of motor poles: 6** **Number of blades: 6**

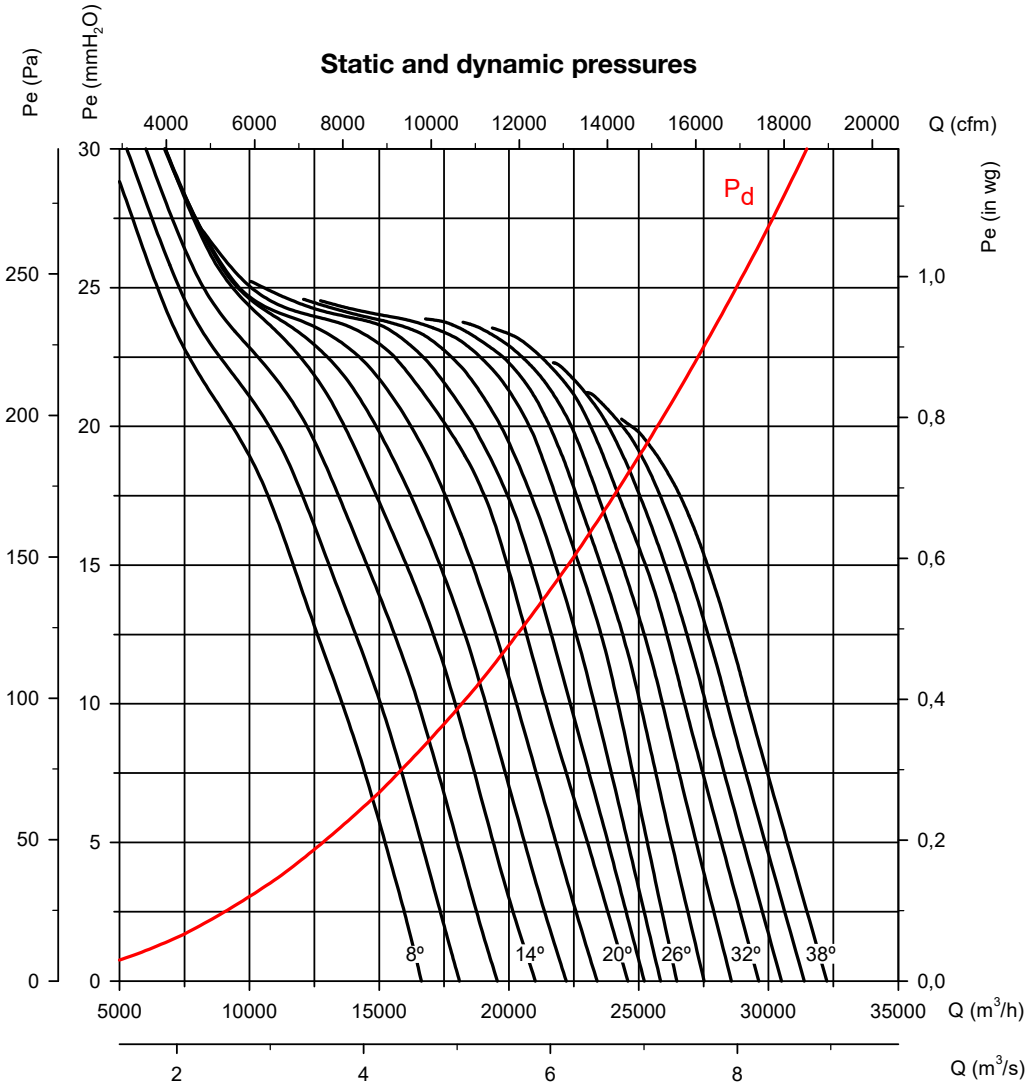


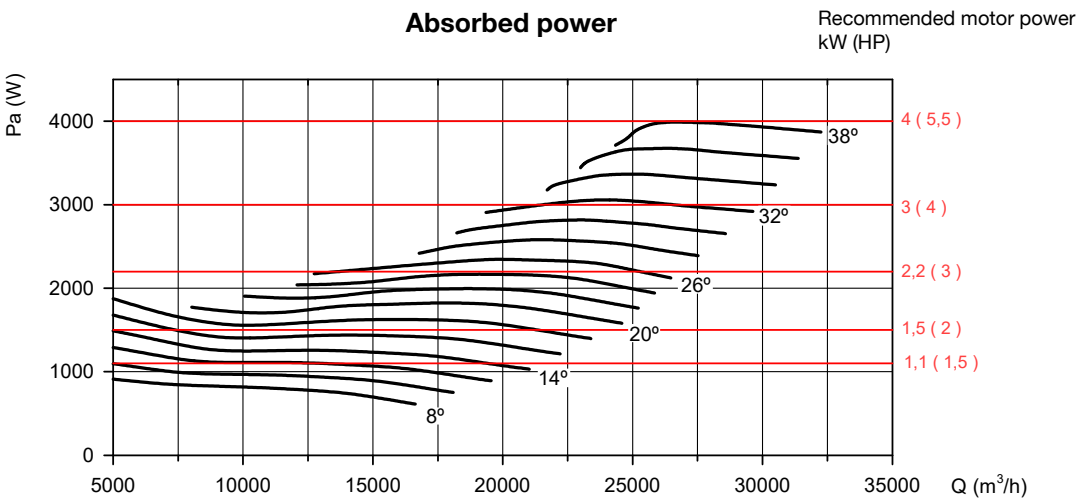


Characteristic curves

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

Impeller diameter in cm: 71 **Number of motor poles: 4** **Number of blades: 6**

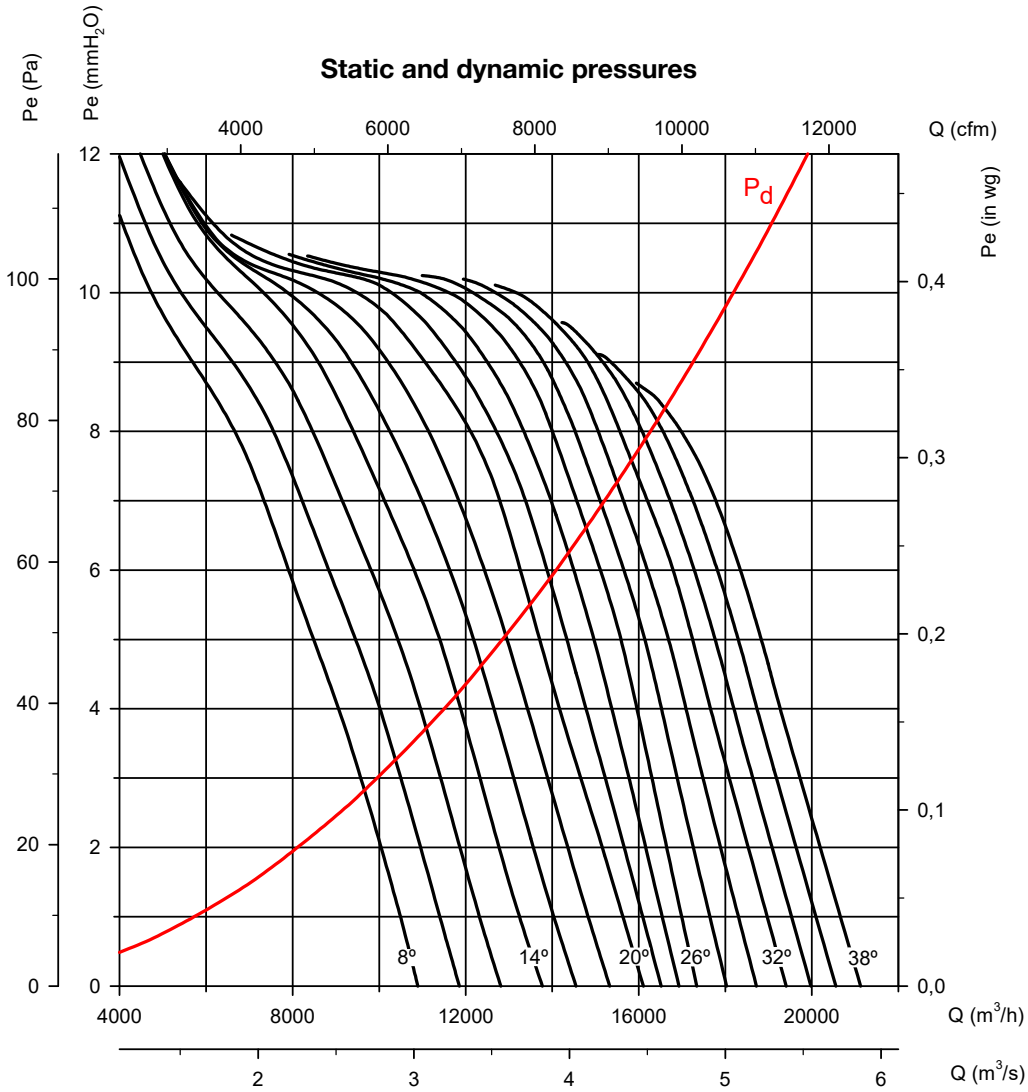


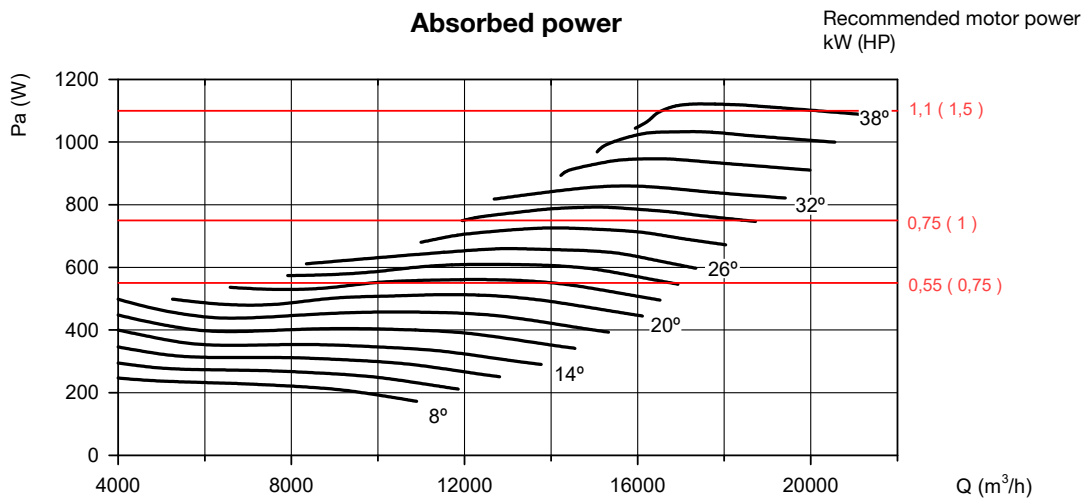


Characteristic curves

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

Impeller diameter in cm: 71 **Number of motor poles: 6** **Number of blades: 6**

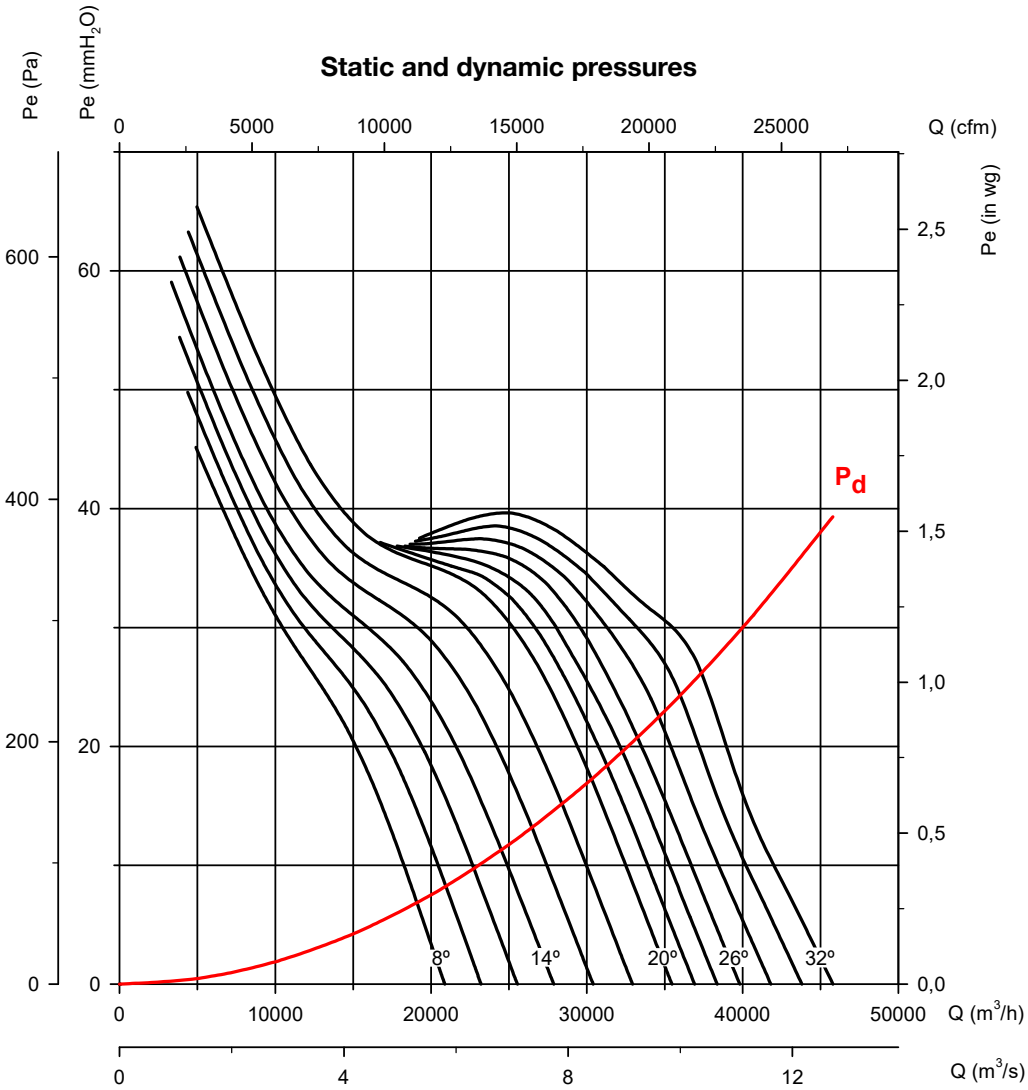


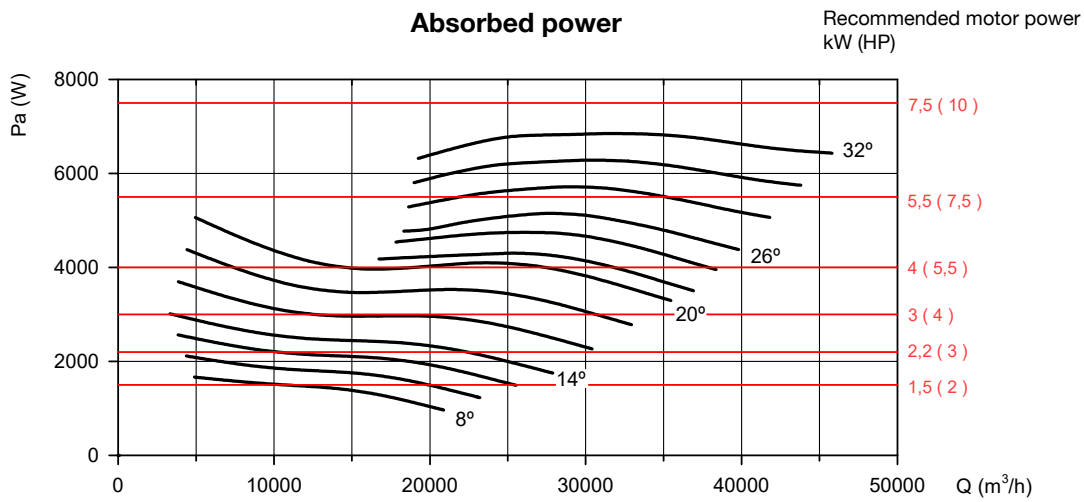


Characteristic curves

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

Impeller diameter in cm: 80 **Number of motor poles: 4** **Number of blades: 6**

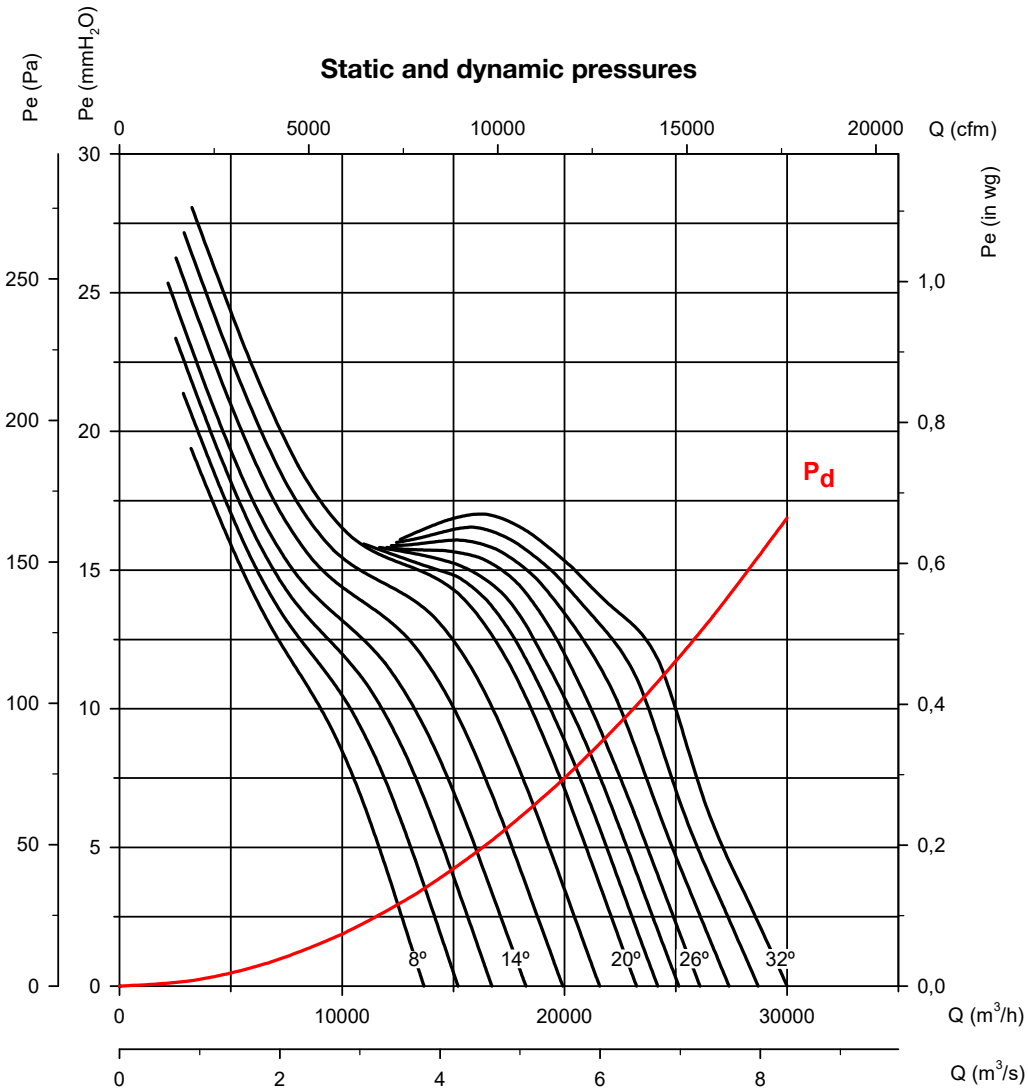


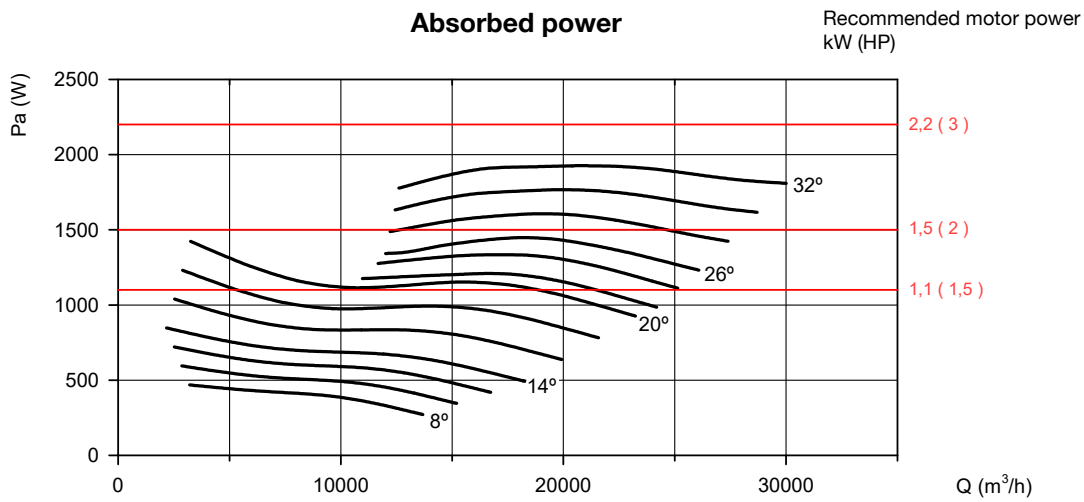


Characteristic curves

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

Impeller diameter in cm: 80 **Number of motor poles: 6** **Number of blades: 6**

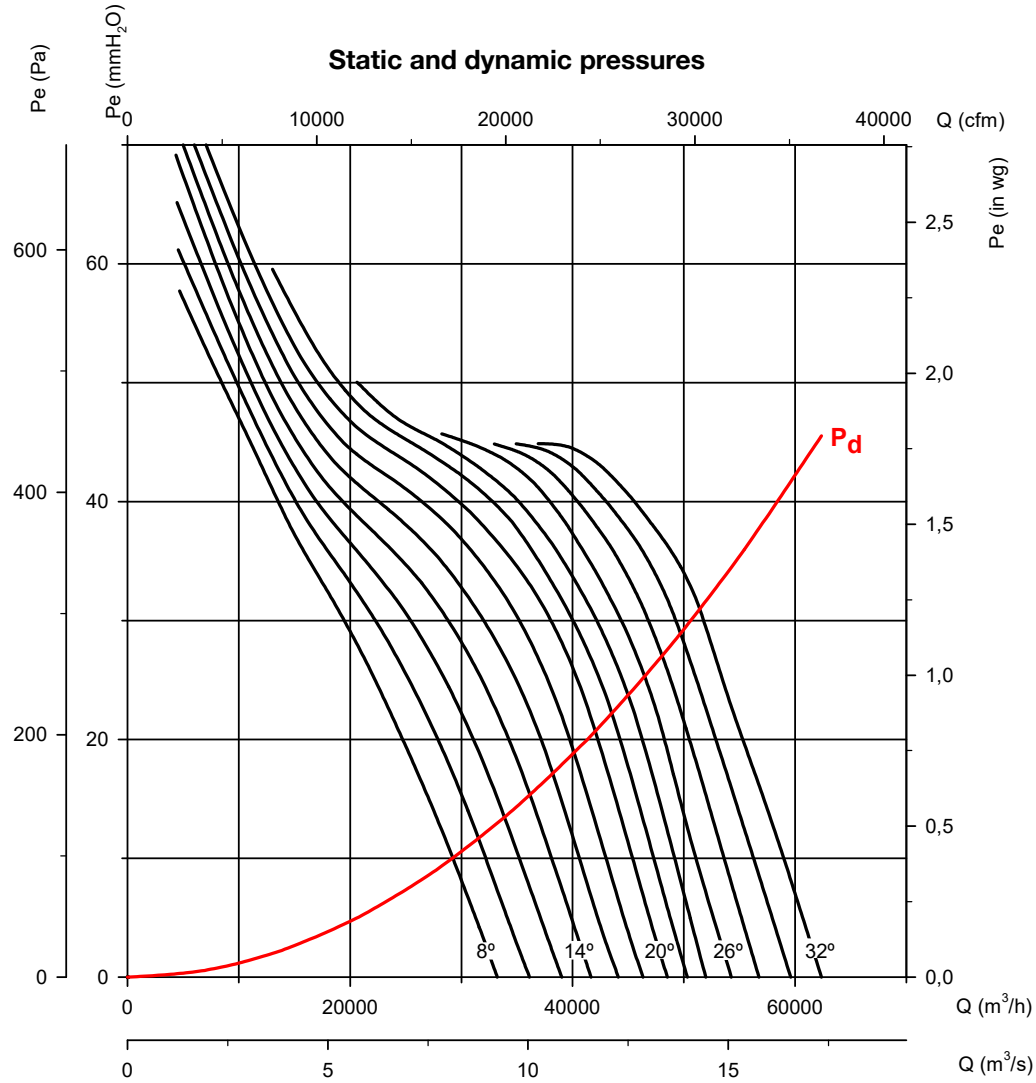


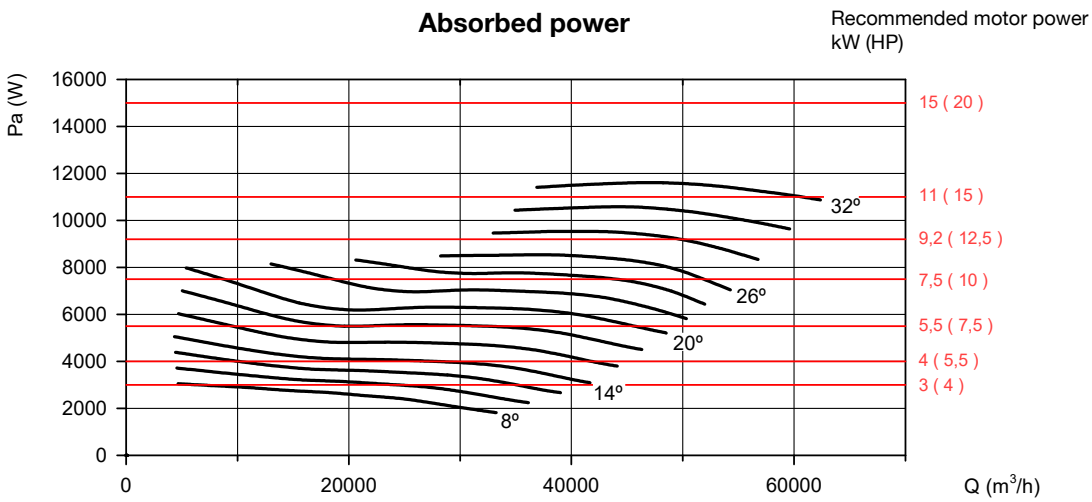


Characteristic curves

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

Impeller diameter in cm: 90 **Number of motor poles: 4** **Number of blades: 6**

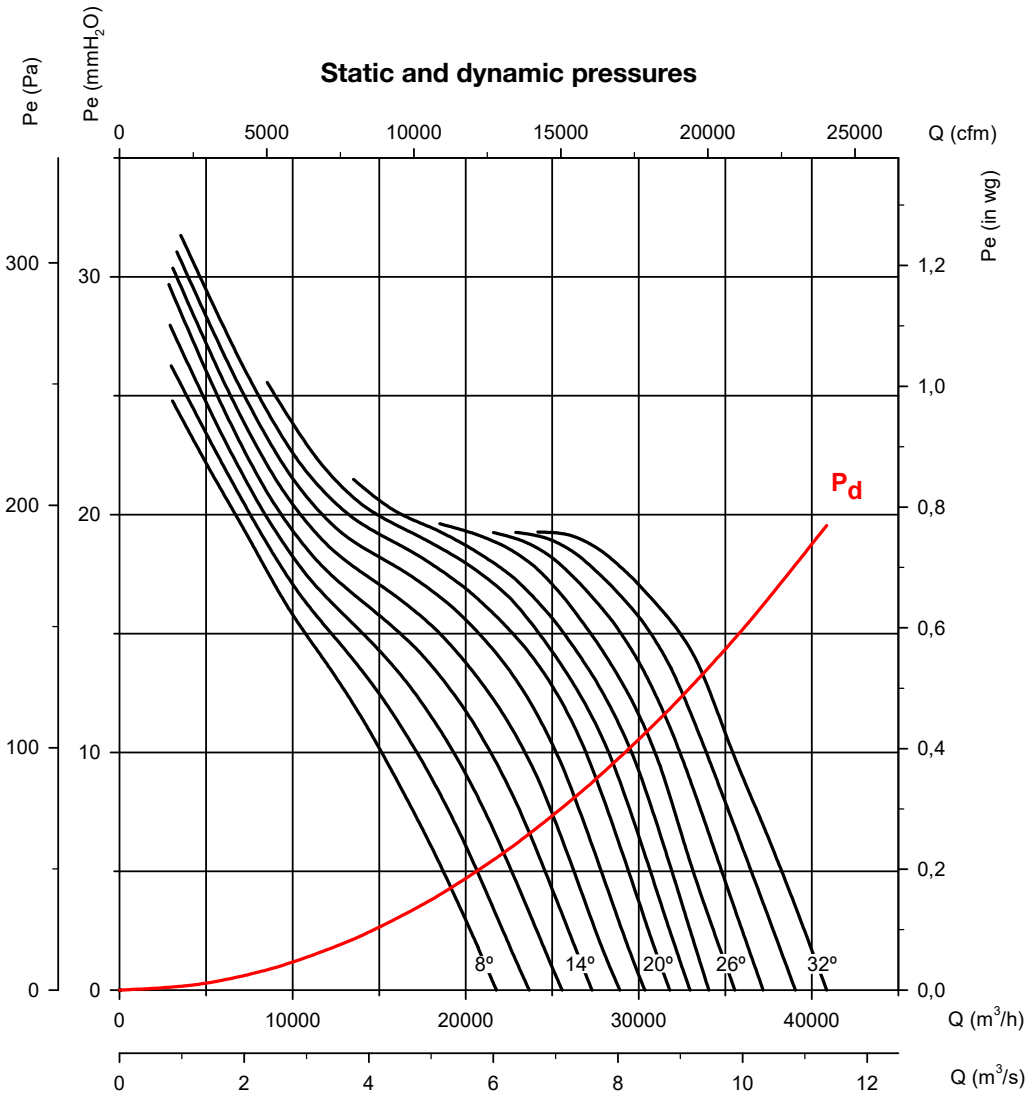


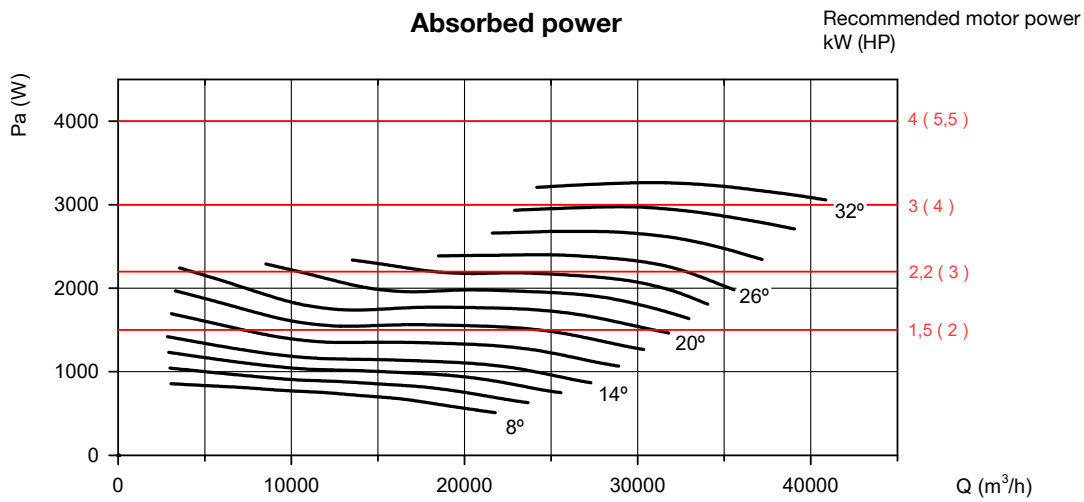


Characteristic curves

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

Impeller diameter in cm: 90 **Number of motor poles: 6** **Number of blades: 6**

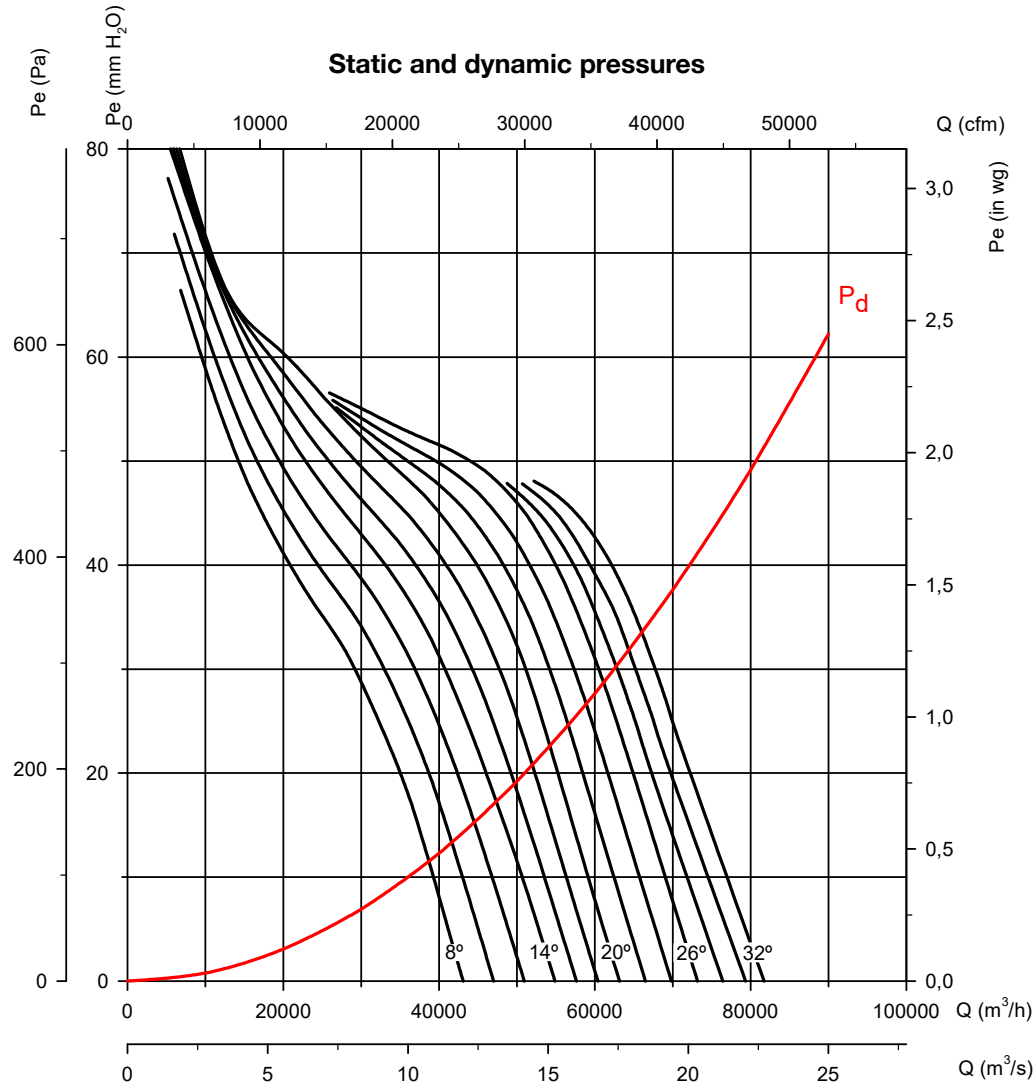


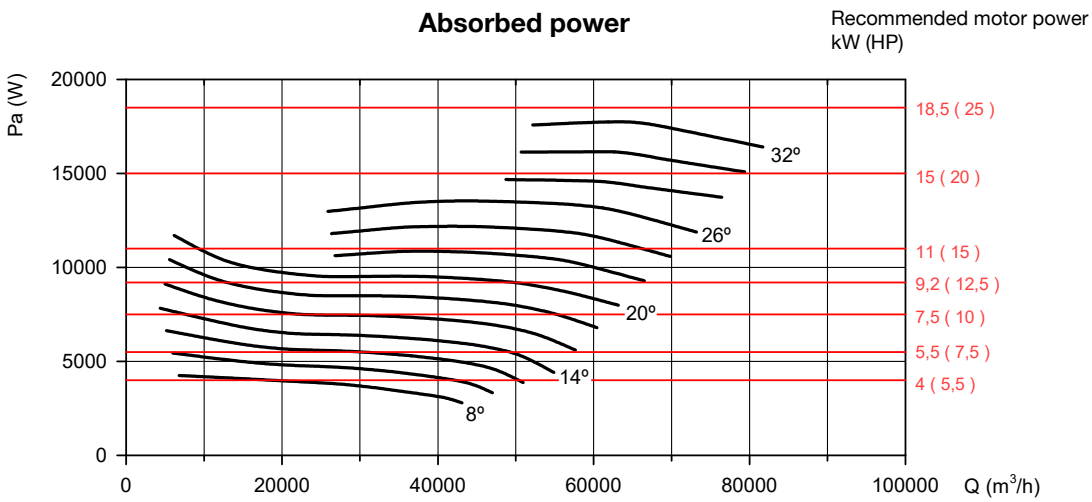


Characteristic curves

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

Impeller diameter in cm: 100 **Number of motor poles: 4** **Number of blades: 6**

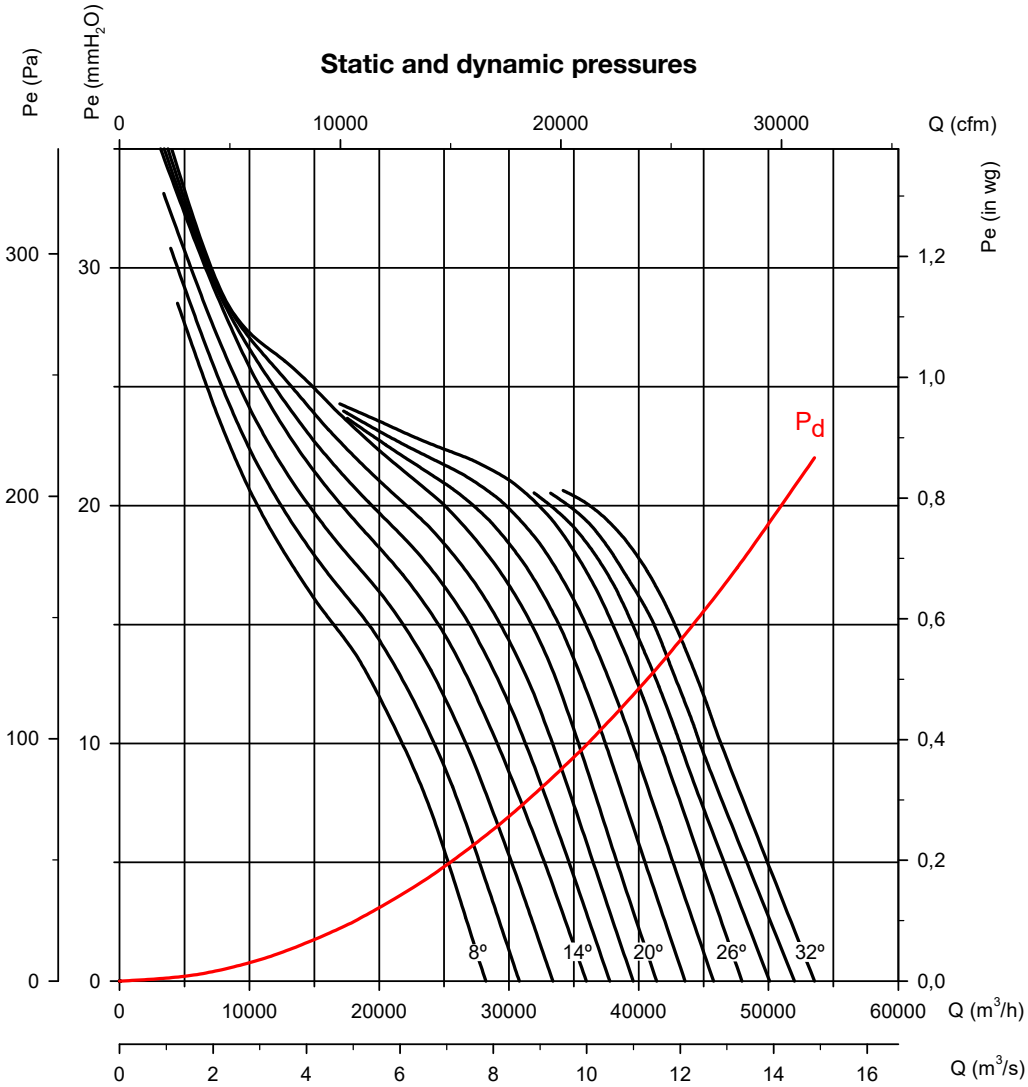


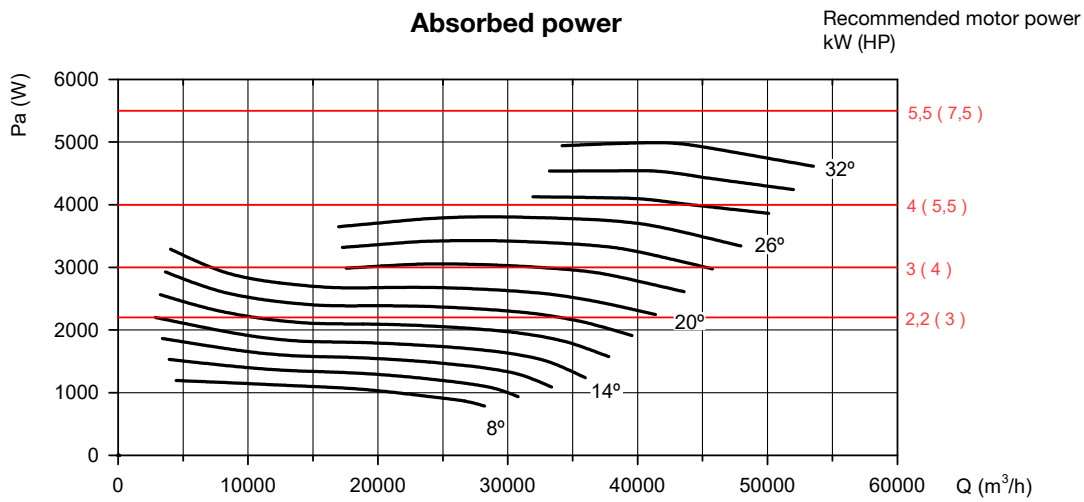


Characteristic curves

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

Impeller diameter in cm: 100 **Number of motor poles: 6** **Number of blades: 6**

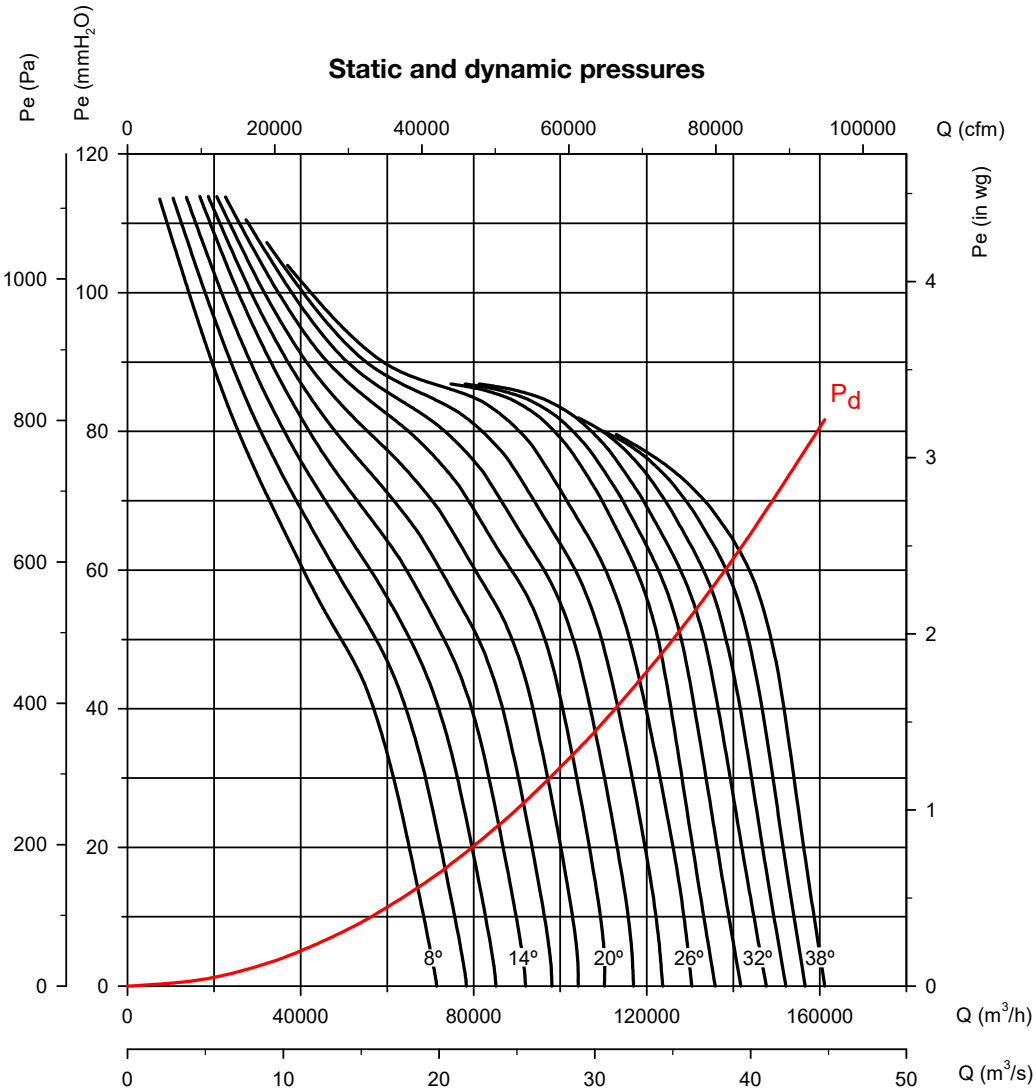


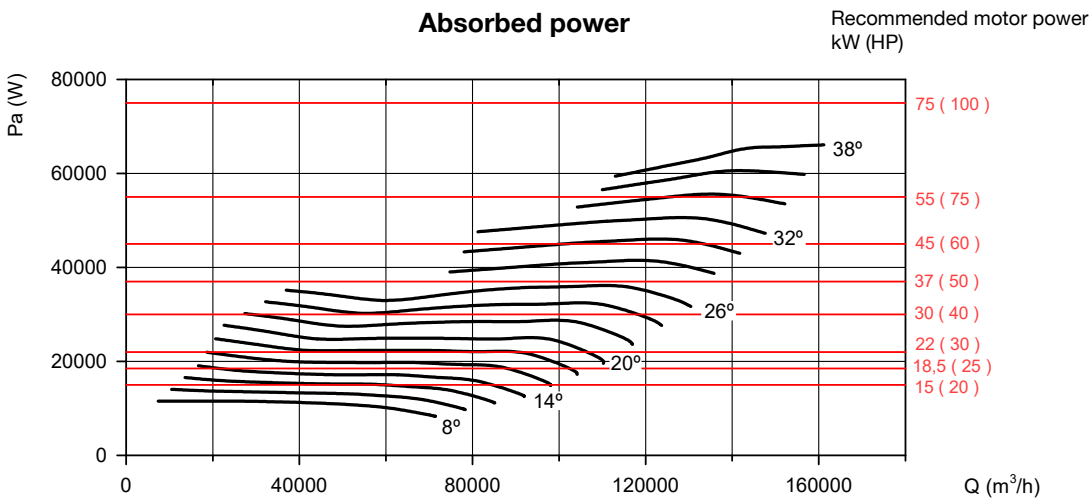


Characteristic curves

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

Impeller diameter in cm: 125 **Number of motor poles: 4** **Number of blades: 6**

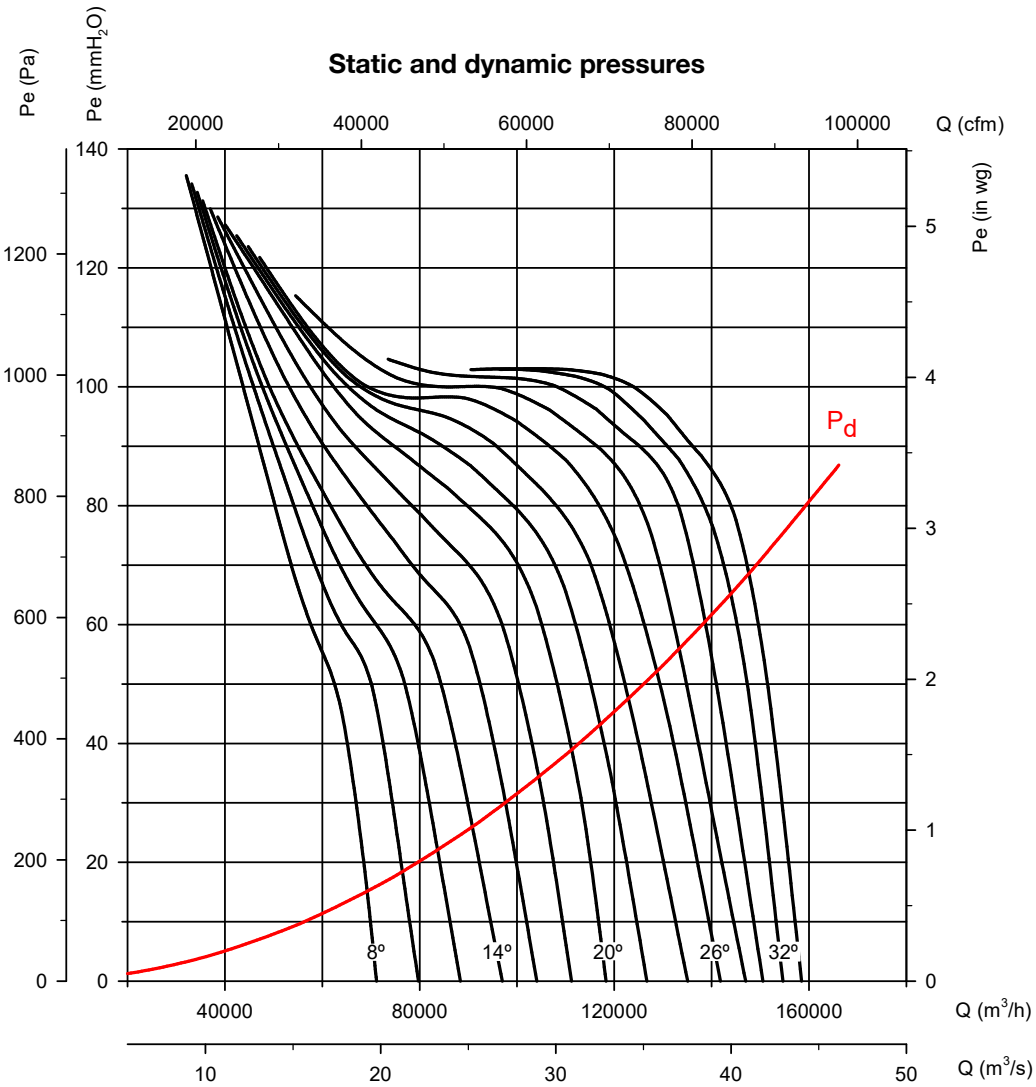


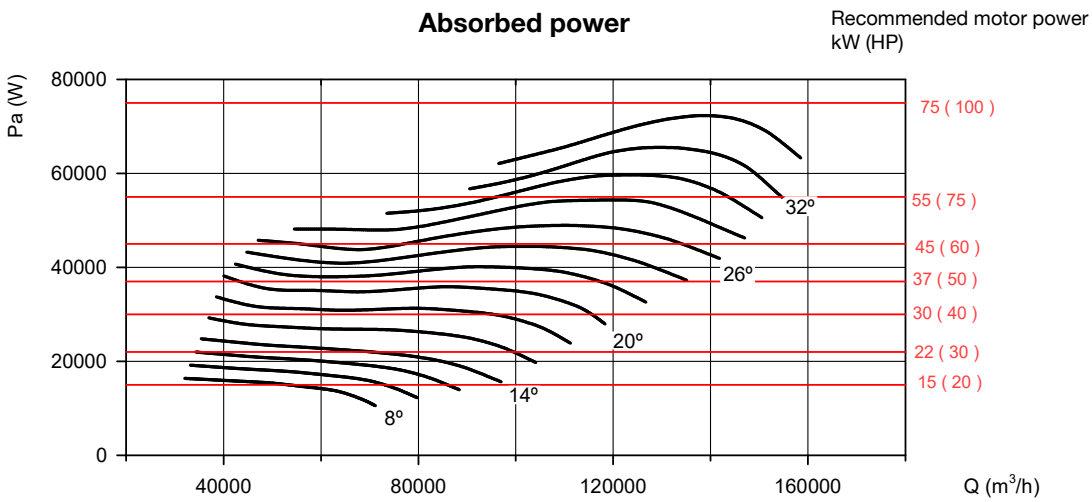


Characteristic curves

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

Impeller diameter in cm: 125 **Number of motor poles: 4** **Number of blades: 9**

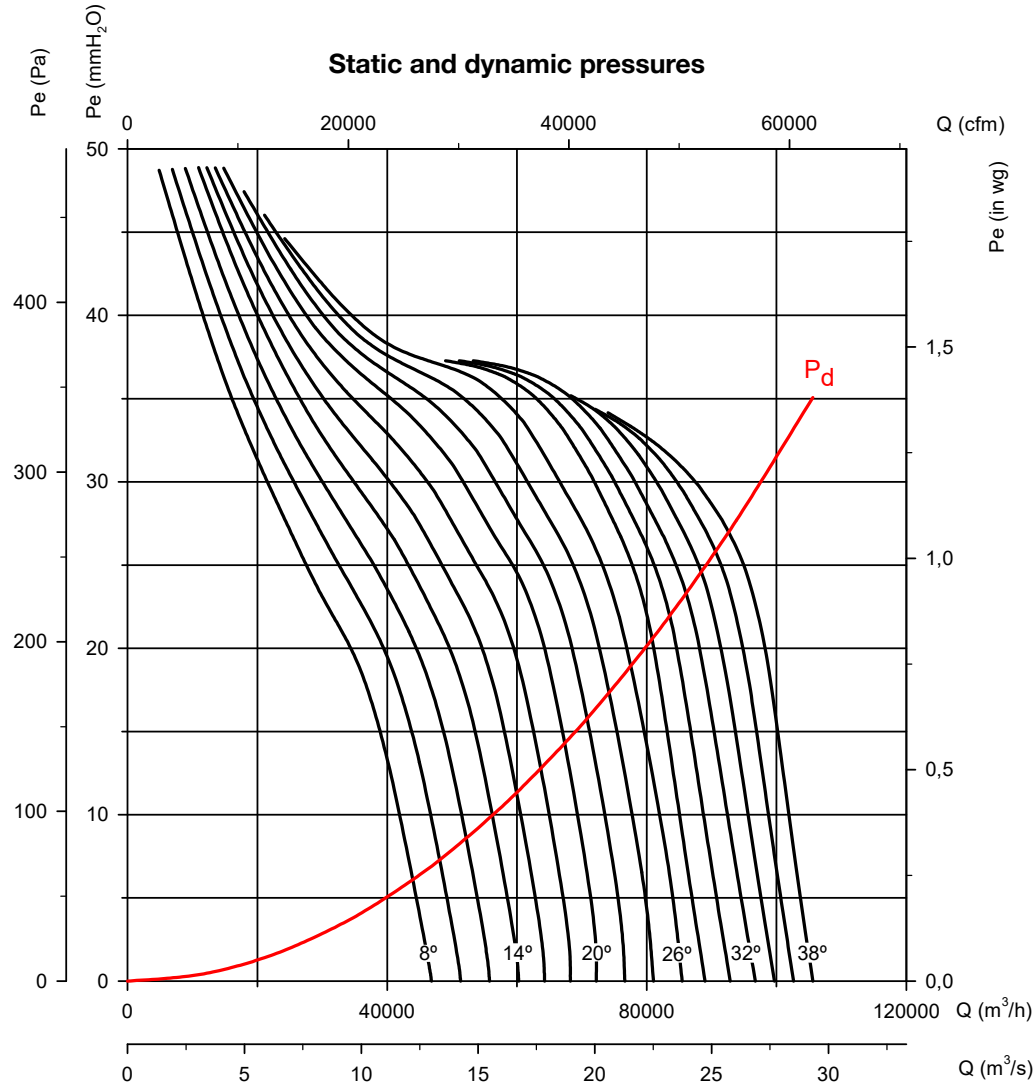


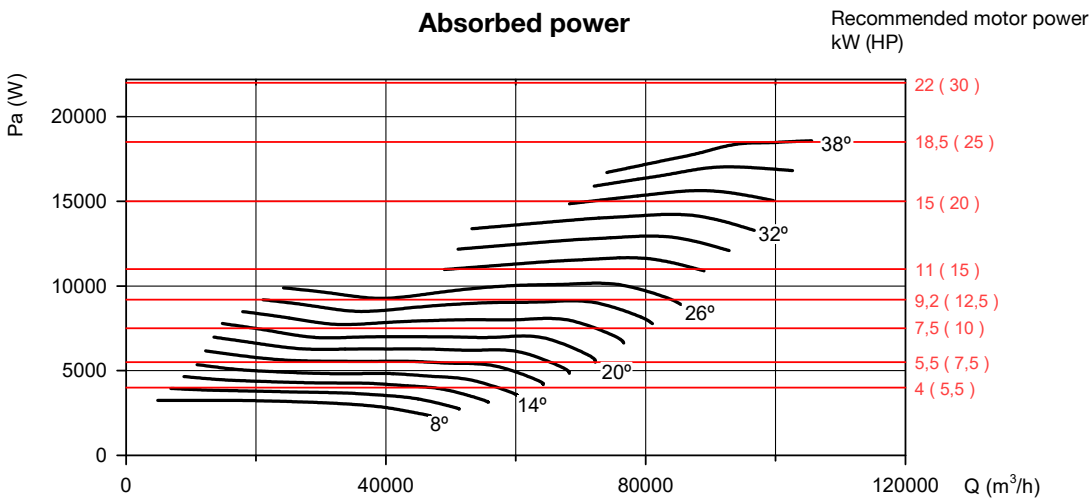


Characteristic curves

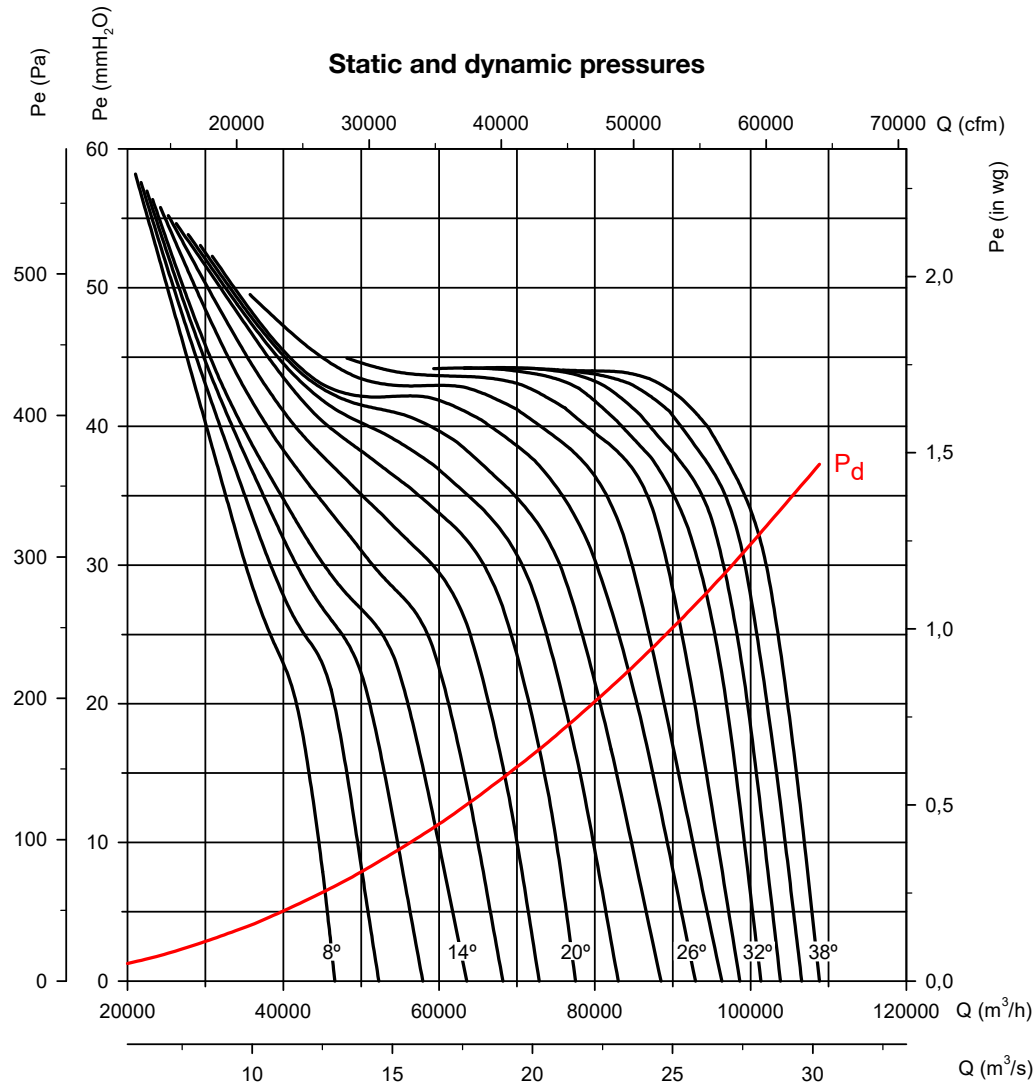
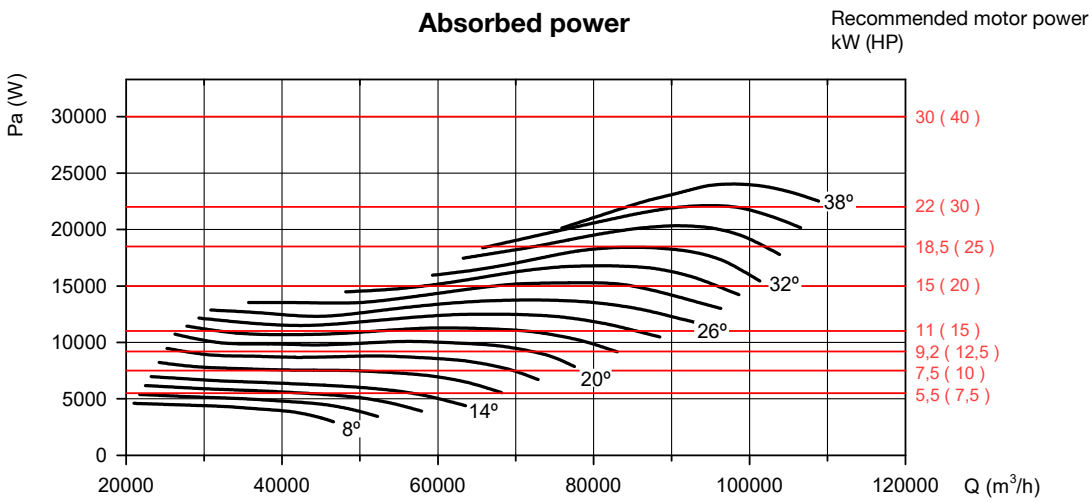
Q= Flow rate in m³/h, m³/s and cfm Pe= Static pressure in mm H_2O, Pa and inwg

Impeller diameter in cm: 125 **Number of motor poles: 6** **Number of blades: 6**





Characteristic curves

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

Impeller diameter in cm: 125 **Number of motor poles: 6** **Number of blades: 9**