

DUCT-M

Ducted axial fan - "IEC" Motor

APPLICATIONS

DUCT- M line is suitable when large air capacities with relatively low pressures are required in duct mounted applications. For instance: ventilation and conditioning in naval and mining applications, evaporative towers, heat exchangers, cooling of electric and refrigerating equipments, etc. With this line is possible to attain higher pressures using the multistage version consisting of two single stages fans mounted in series, with contra-rotating impellers. This solution allows the recovery of the air rotative component turning it in pressure, developing up to 2.7 times the pressure of a single fan having the same geometry and speed.

RANGE

This line consists of 15 sizes with impeller diameter from 310 up to 1600 mm.

ADVANTAGES

DUCT- M line is characterised by the extreme sturdiness of construction, thanks to the flanges directly bended on the casing, and the thickness of the materials. The variety of versions and models allows the solution of most of the problems of ventilation. Impeller consists of a strong hub, in die-cast aluminum alloy for the fixing of the blades. Available in different materials suitable for heavy duties.

CONSTRUCTION

- Casing in steel sheet protected with epoxy painting. Fixing flanges according to UNI EN ISO 13351/Tab.1 standards.
- Impeller with high efficiency airfoil blades in plastic material or in die-cast aluminum alloy. Hub in die-cast aluminum alloy. Balancing according to UNI ISO 21940-11. Variable pitch angle in still position.
- Asynchronous electric motor, protection IP 55, class F insulated, form B3, service S1 construction according to the IEC/EEC (UNEL-MEC) standard.
- Arrangement 4 (impeller directly coupled to motor shaft).

TECHNICAL SPECIFICATIONS

DUCT- M standard

- Conveyed air: clean, not abrasive.
- Temperature of conveyed air: -20°C/+50°C.
- Voltage: three phase version (T) 400V-3Ph. Single phase version (M) 230V-1Ph.
- Frequency: 50Hz.
- Air flow from motor to impeller, position A (FMG).

VERSIONS

DUCT-Mm: medium lenght casing: motor/impeller assembly almost completely enclosed within the lenght of the casing.

DUCT-Ml: long casing.

Impeller and motor are completely enclosed within the overall length of the casing.

DUCT-Ms: short casing.

Motor partially protrudes beyond the rear mounting flange.

ACCESSORIES

- Inlet nozzle (IN).
- Silencers (SIL-DU).
- Flat protection grid (FPG-DU) and conic (CPG-DU) (Necessary for use in free air)
- Ispection door.
- Flexible connection (FC-DU).
- Antivibration mounts (AV).
- Counter flange (CF-DU).
- Outer terminal box (OTB).
- Fixing feet (FF-DU).
- Service switch (SW).

ON REQUEST

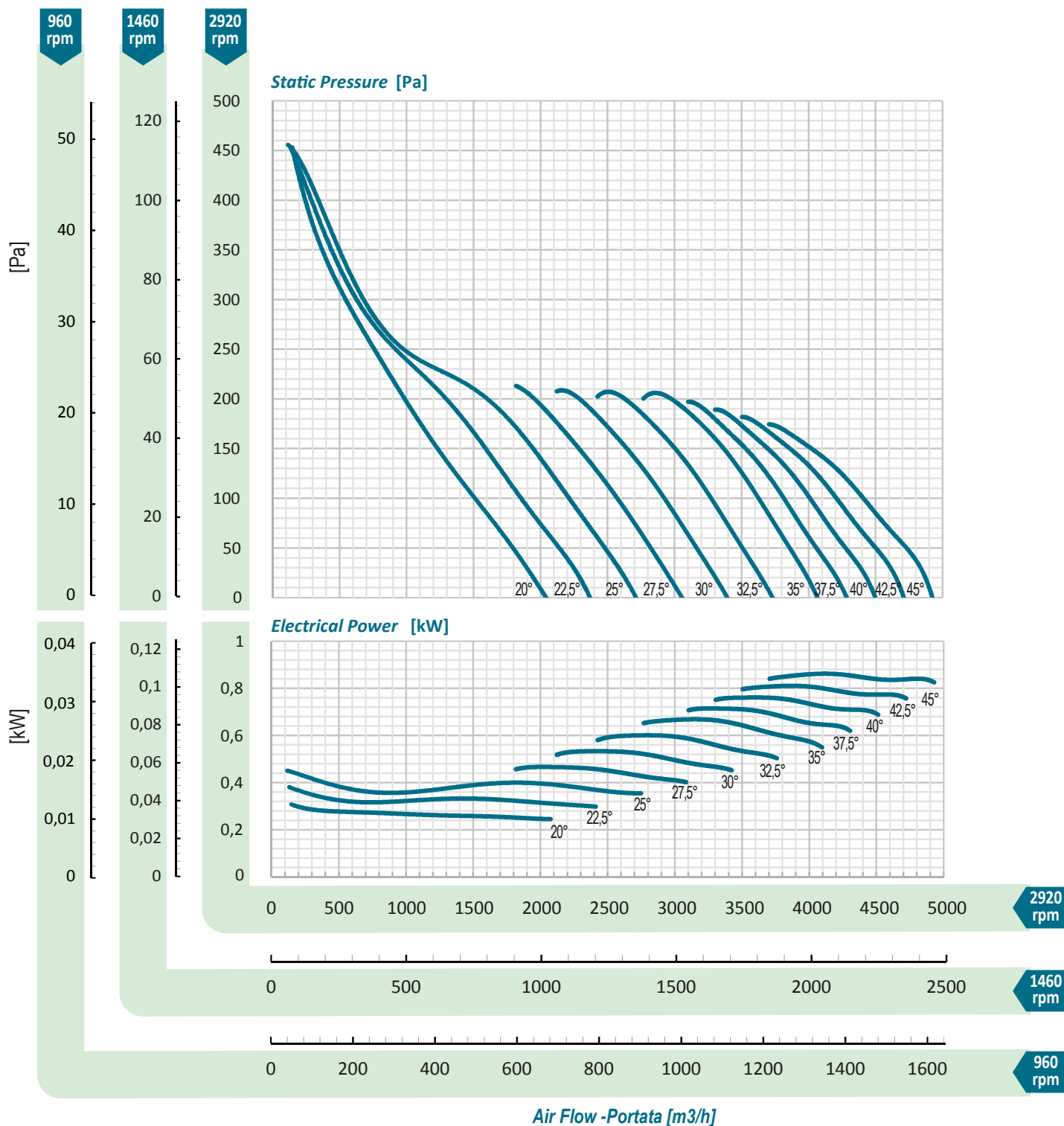
- Performances differing from standard
- Versions with impeller with in die-cast aluminum blades
- Versions with true reversible airflow (DUCT-REV).
- Explosion proof versions (DUCT ATEX).
- Multistage system versions (DUCT-CT).
- Smoke exhaust version (DUCT HT)
- Versions with casing in stainless steel, aluminum, or hot dip galvanised steel.
- Versions with air flow from impeller to motor, position B (FGM).



Elektrovent srl certifies that the Elektrovent model Duct-M from 310 to 1400 shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 301 and comply with the requirements of the AMCA Certified Ratings Program.
'April 2026'
Catalog N° 001 Rev. 2

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

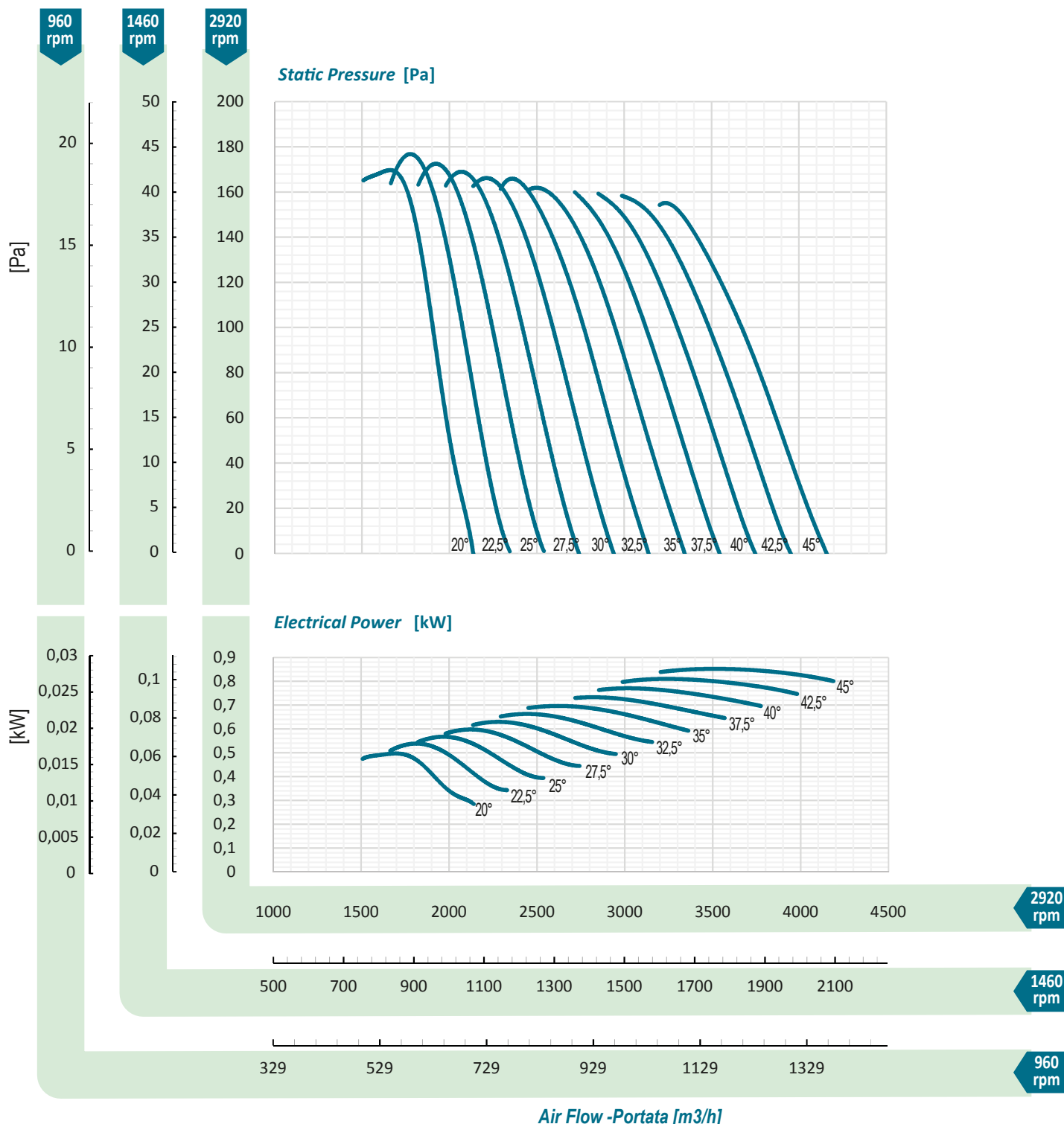


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,01	0,01	0,02	0,02	0,02	0,02	0,03	0,03	0,03	0,04	0,04
1460	0,05	0,06	0,07	0,08	0,10	0,11	0,12	0,13	0,15	0,16	0,17
2920	0,31	0,37	0,43	0,49	0,55	0,61	0,67	0,72	0,77	0,81	0,86

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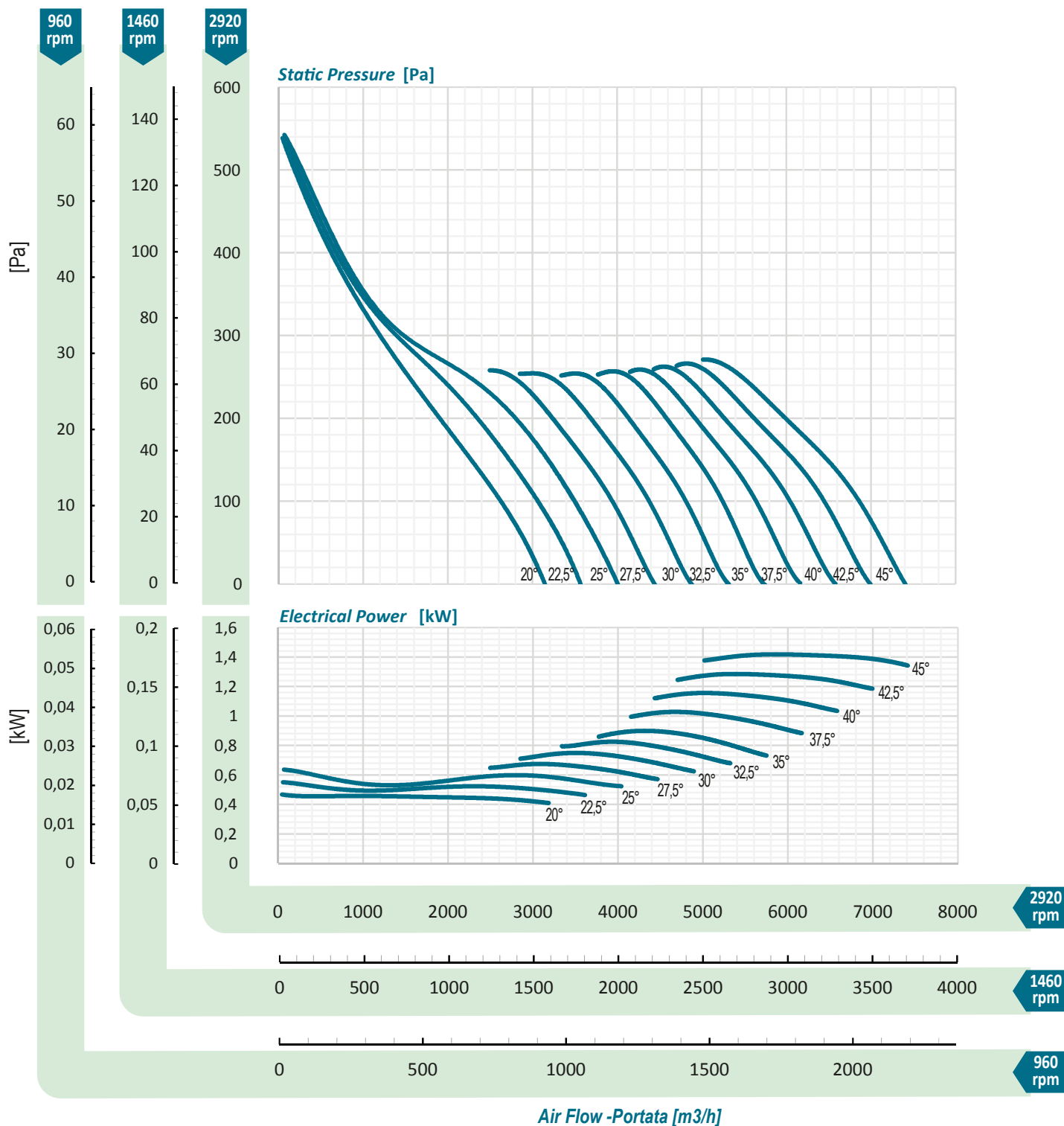


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,02	0,02	0,02	0,02	0,02	0,03	0,03	0,03	0,03	0,04	0,04
1460	0,08	0,09	0,09	0,10	0,11	0,11	0,12	0,12	0,15	0,14	0,14
2920	0,60	0,61	0,62	0,64	0,65	0,66	0,67	0,71	0,77	0,80	0,84

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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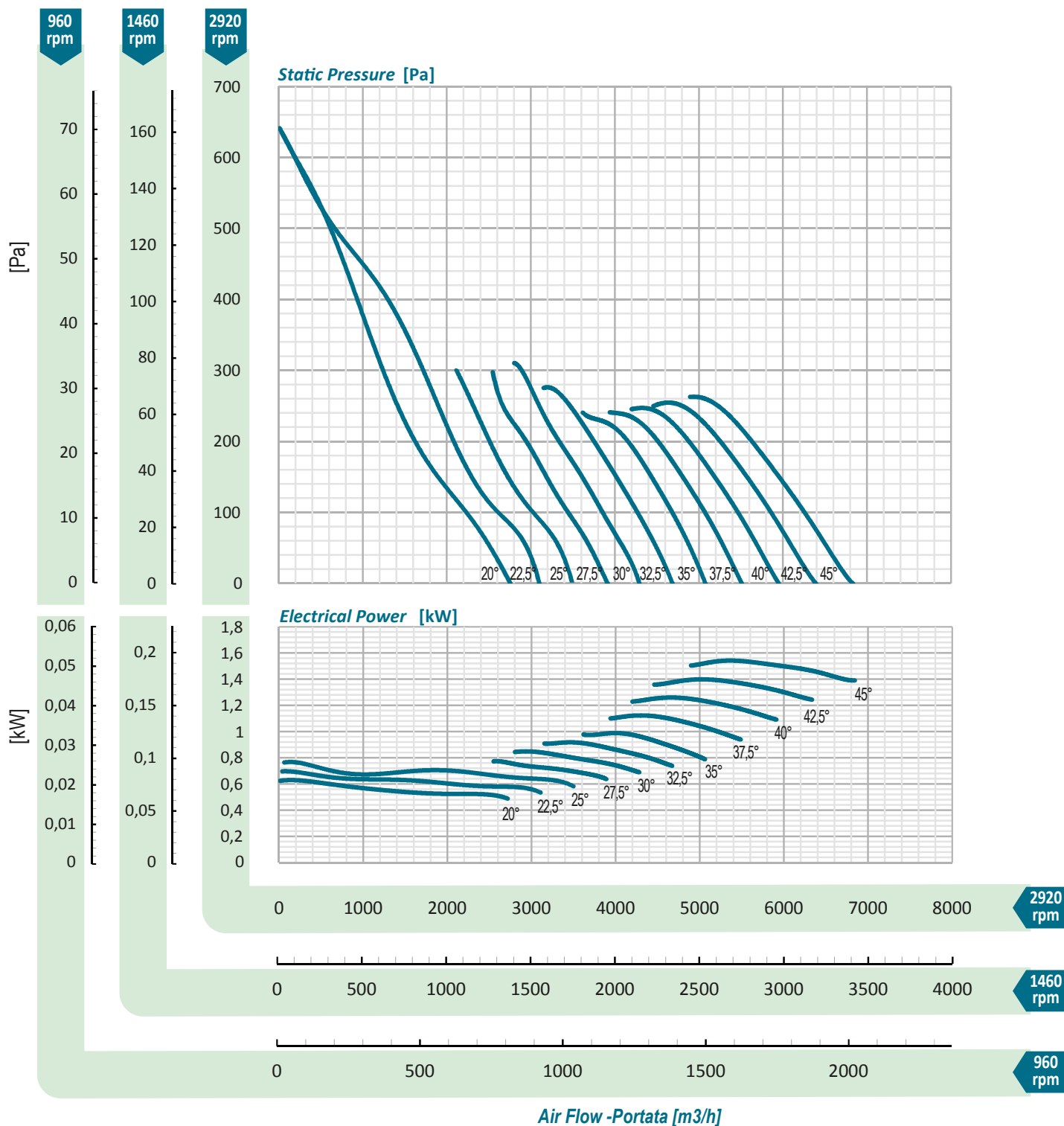


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,02	0,02	0,03	0,03	0,03	0,04	0,04	0,05	0,05	0,06	0,07
1460	0,09	0,10	0,11	0,12	0,13	0,14	0,15	0,18	0,20	0,23	0,25
2920	0,48	0,55	0,62	0,70	0,77	0,84	0,91	1,04	1,17	1,30	1,43

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

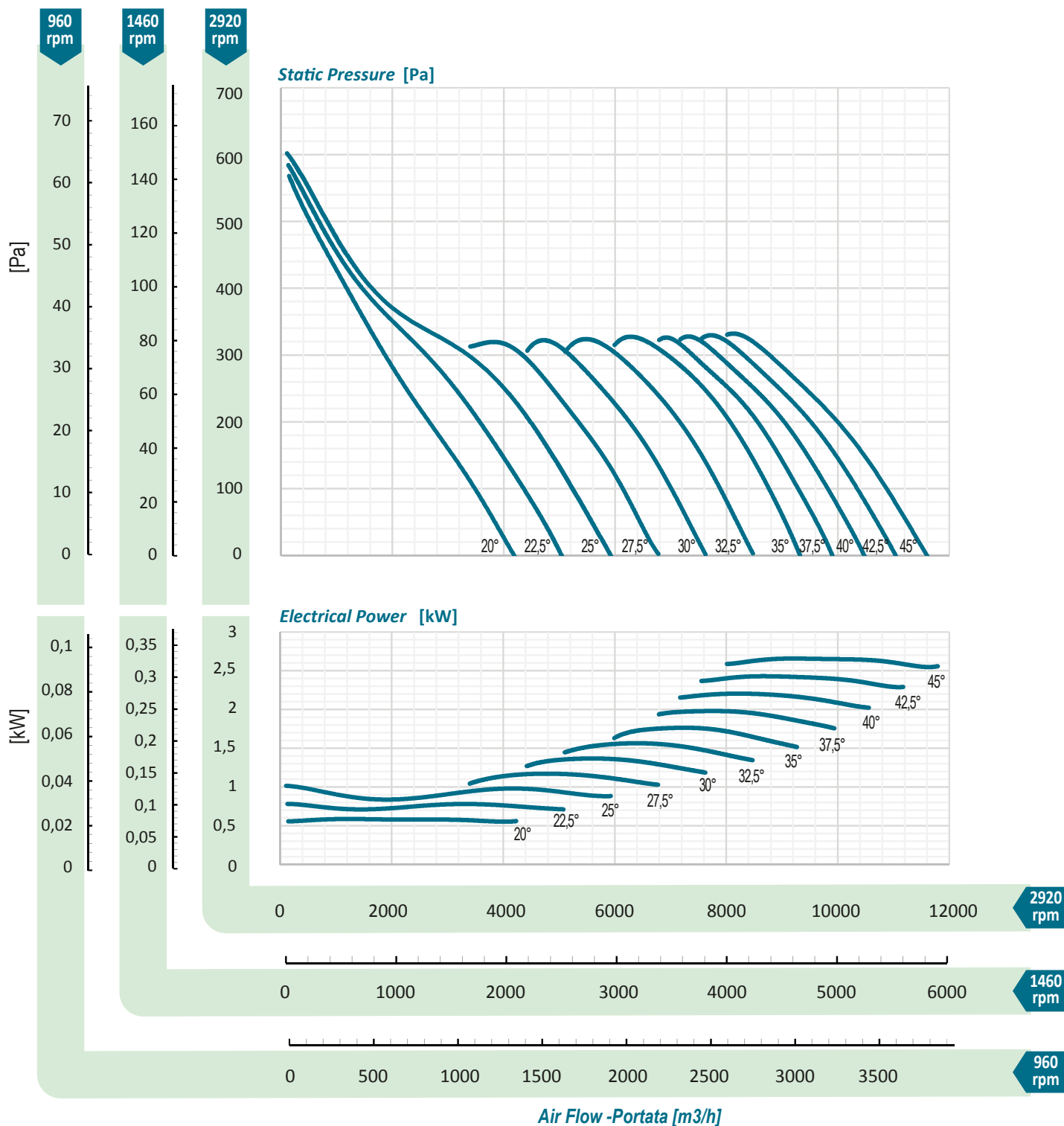


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,03	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,06	0,07	0,07
1460	0,11	0,13	0,14	0,16	0,17	0,19	0,20	0,22	0,24	0,25	0,27
2920	0,64	0,73	0,83	0,92	1,01	1,11	1,20	1,29	1,38	1,46	1,55

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

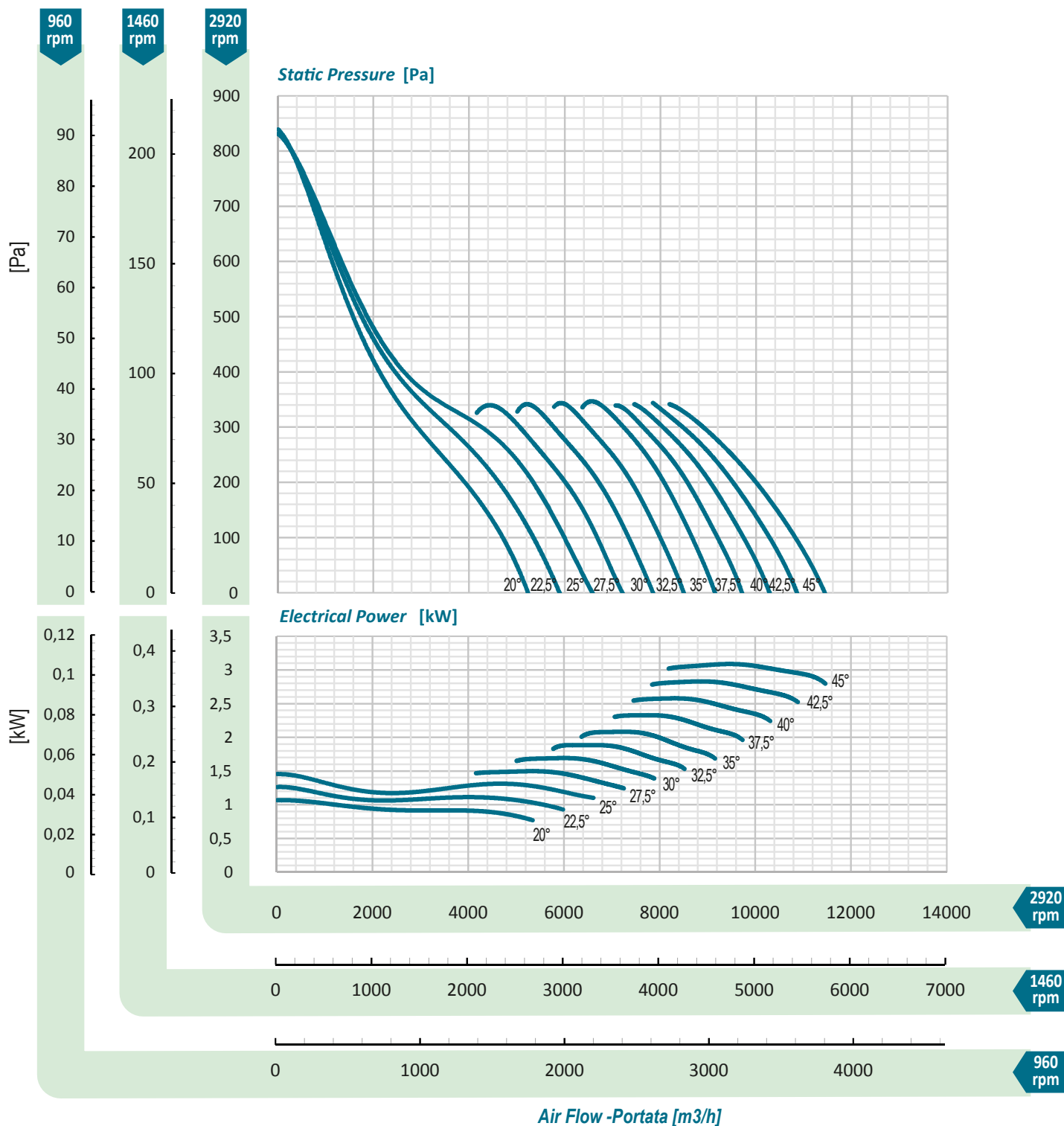


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,02	0,03	0,04	0,05	0,06	0,07	0,08	0,09	0,10	0,11	0,12
1460	0,11	0,14	0,17	0,20	0,22	0,25	0,28	0,31	0,34	0,37	0,40
2920	0,60	0,77	0,93	1,10	1,27	1,43	1,60	1,81	2,01	2,22	2,42

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

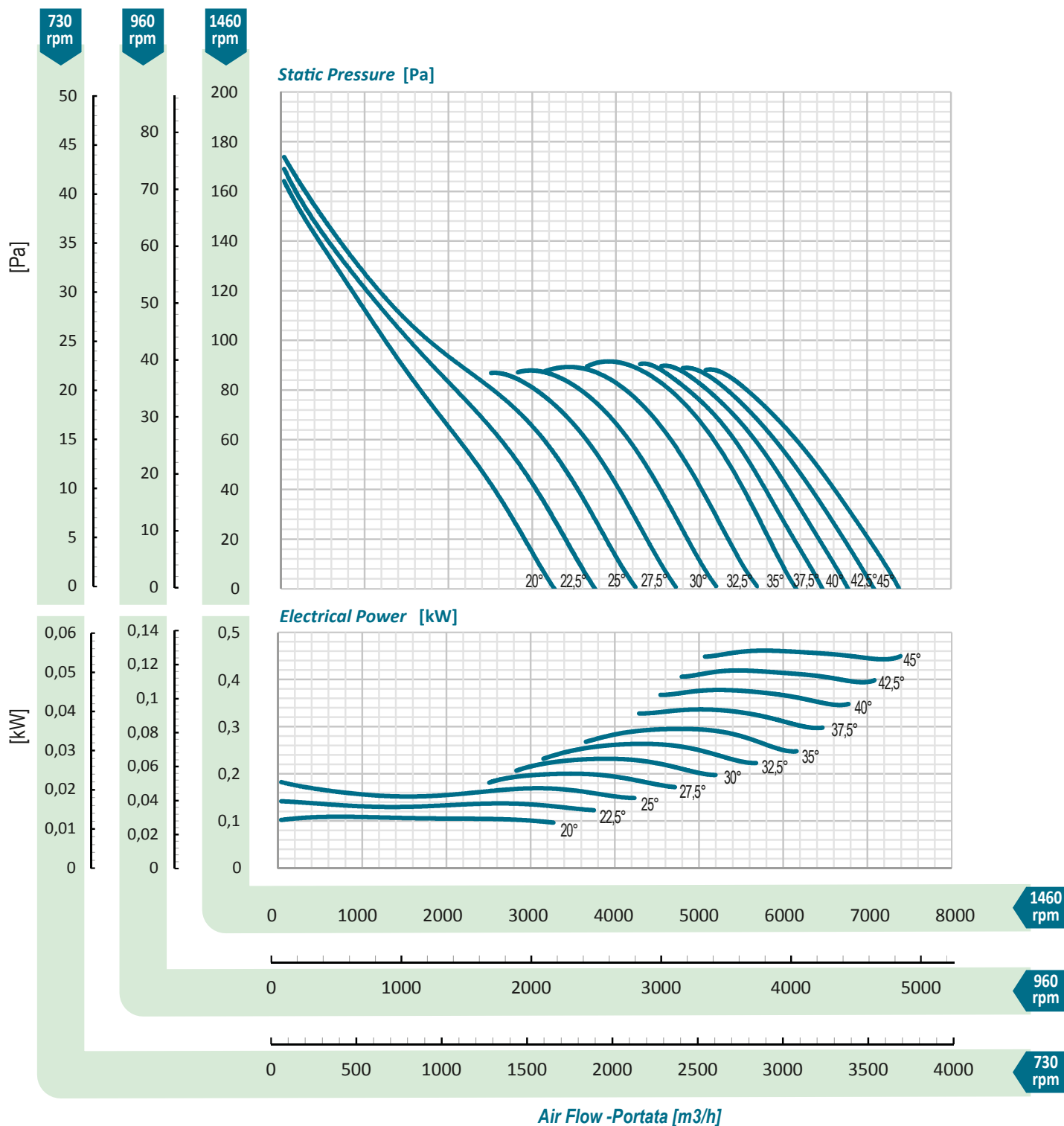


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
960	0,05	0,06	0,07	0,08	0,09	0,10	0,10	0,12	0,13	0,14	0,16
1460	0,18	0,21	0,24	0,27	0,29	0,32	0,35	0,39	0,44	0,48	0,52
2920	1,08	1,25	1,42	1,60	1,77	1,94	2,11	2,36	2,61	2,85	3,10

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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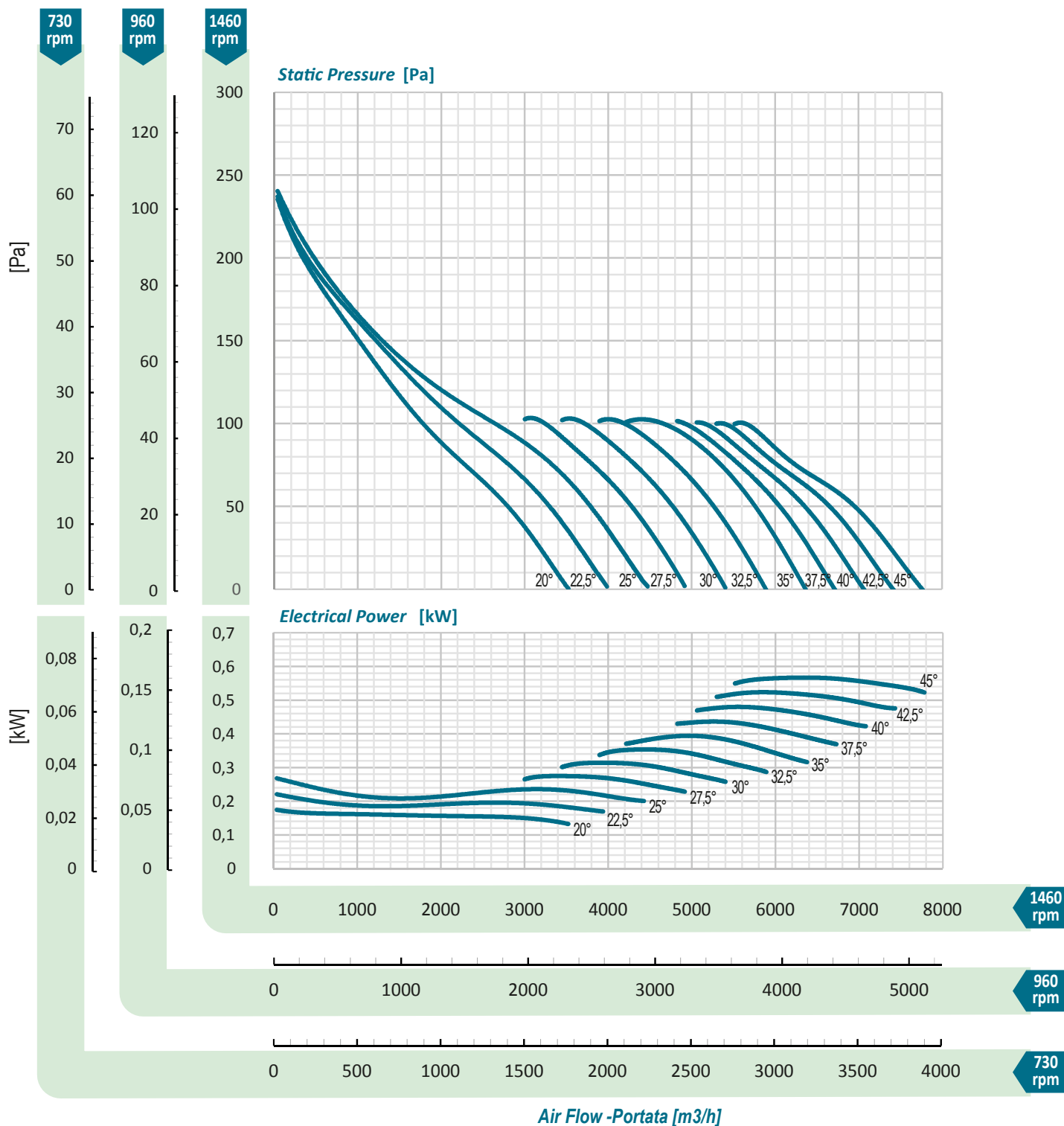


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,01	0,02	0,02	0,03	0,03	0,04	0,04	0,05	0,06	0,06	0,07
960	0,03	0,04	0,05	0,06	0,07	0,08	0,09	0,10	0,12	0,13	0,14
1460	0,11	0,14	0,17	0,21	0,24	0,27	0,30	0,34	0,39	0,43	0,47

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

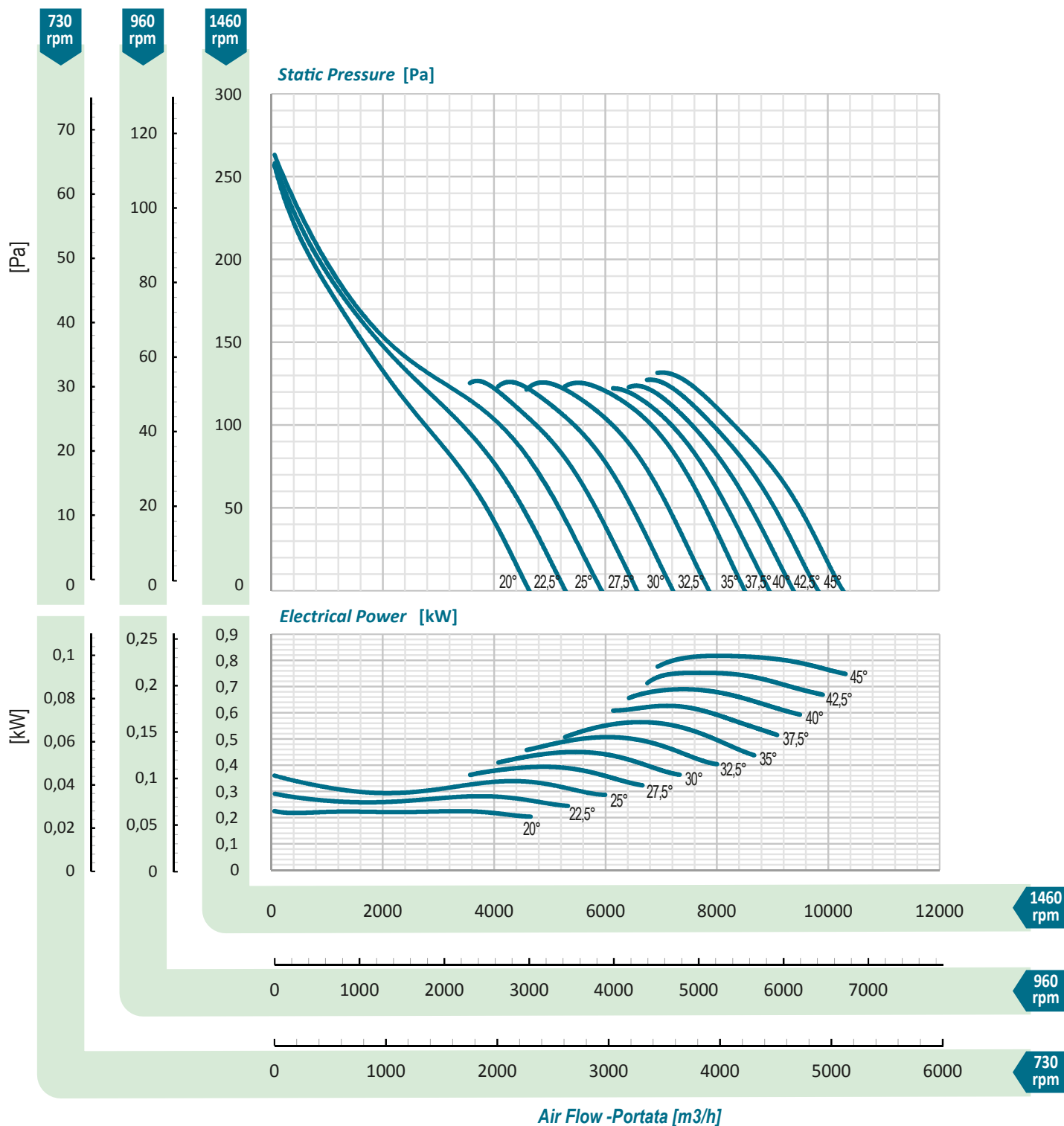


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,02	0,03	0,03	0,04	0,05	0,05	0,06	0,06	0,07	0,08	0,09
960	0,05	0,06	0,07	0,08	0,09	0,11	0,12	0,13	0,15	0,16	0,18
1460	0,17	0,21	0,25	0,29	0,32	0,36	0,40	0,45	0,49	0,54	0,58

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

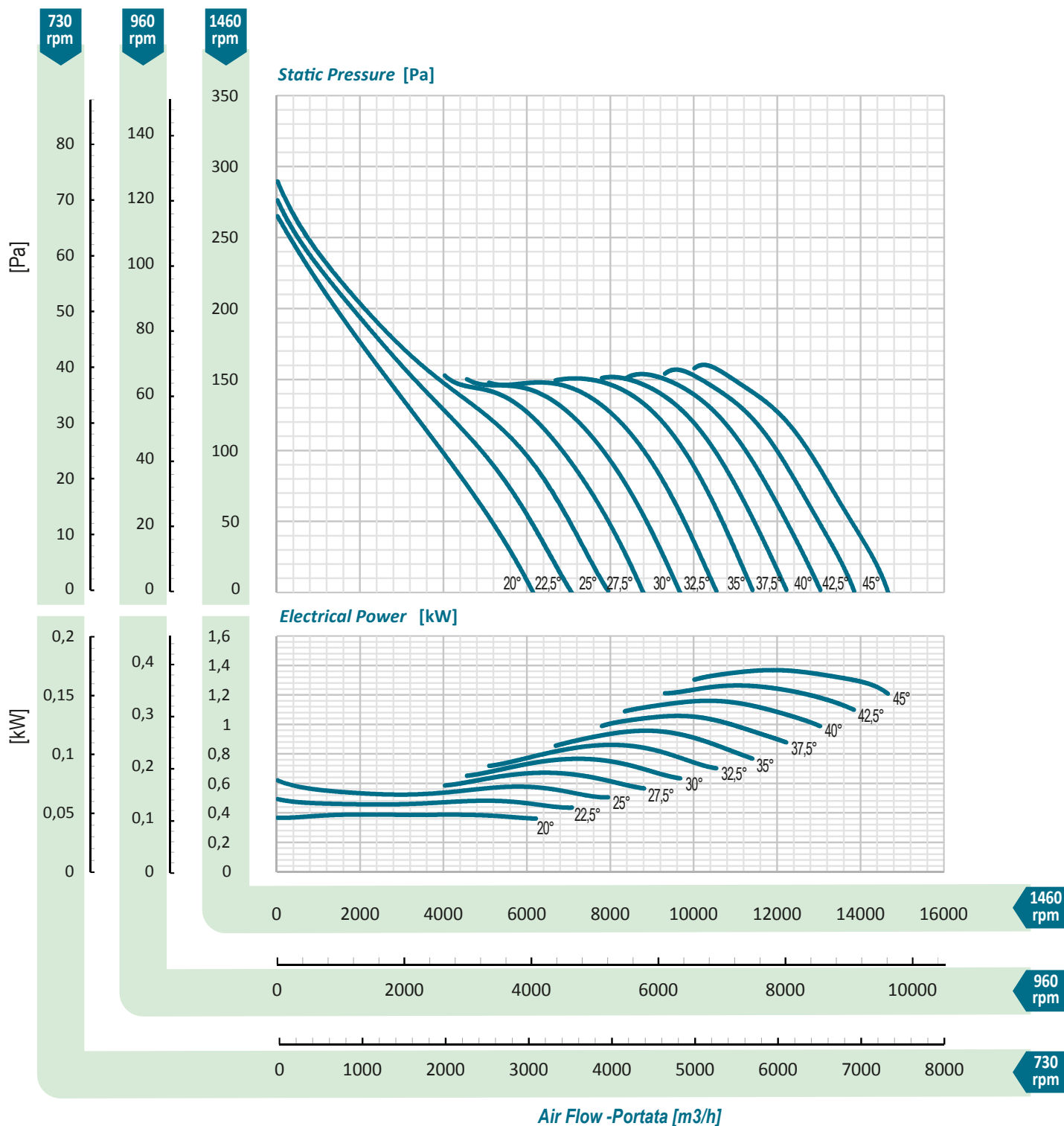


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,03	0,04	0,05	0,06	0,07	0,07	0,08	0,09	0,10	0,11	0,12
960	0,06	0,08	0,10	0,12	0,13	0,15	0,17	0,19	0,21	0,23	0,25
1460	0,23	0,29	0,34	0,40	0,46	0,51	0,57	0,63	0,70	0,76	0,82

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

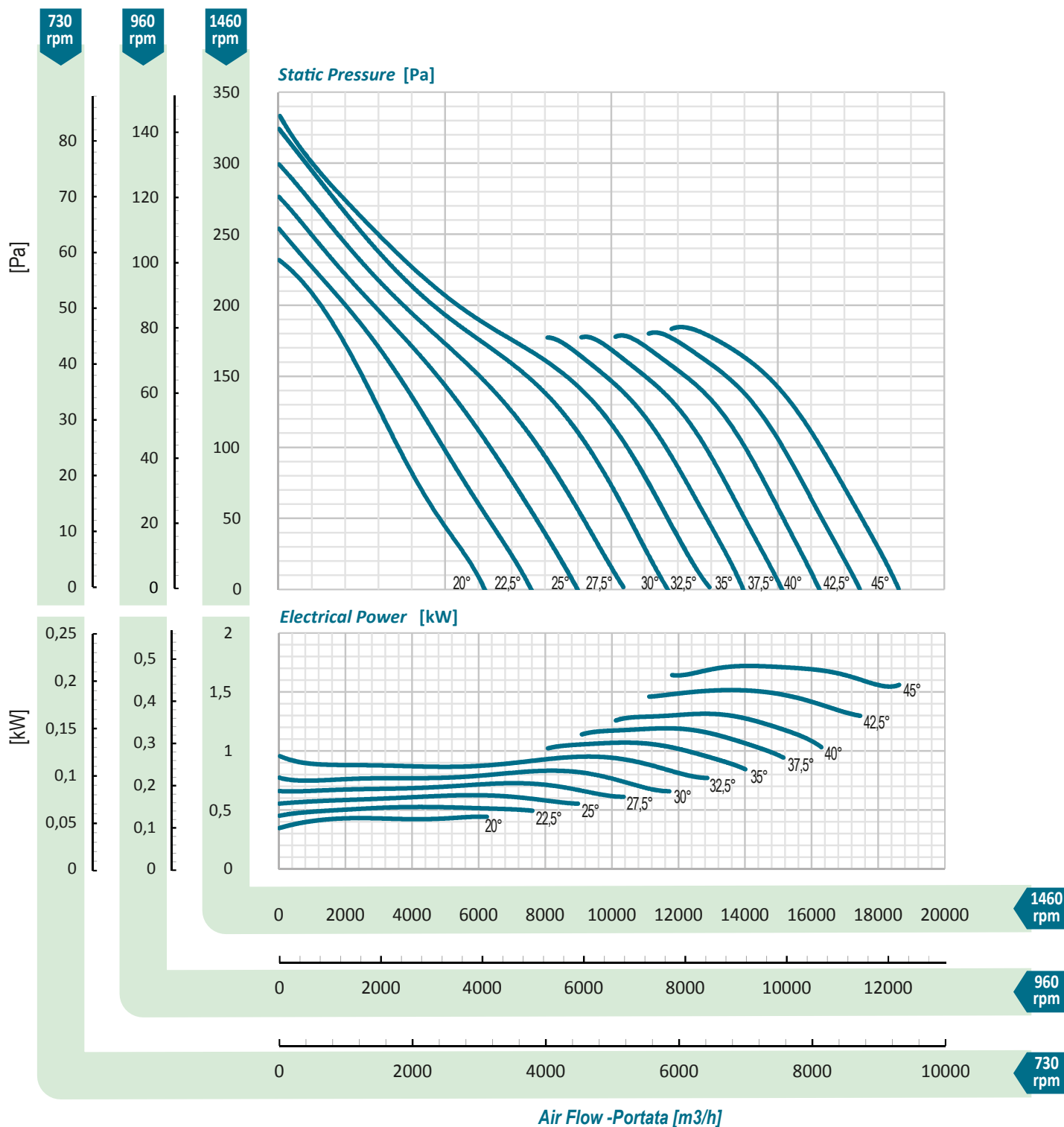


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,06	0,07	0,08	0,10	0,11	0,13	0,14	0,17	0,20	0,23	0,26
960	0,12	0,15	0,17	0,20	0,23	0,26	0,29	0,35	0,41	0,47	0,53
1460	0,39	0,48	0,58	0,67	0,76	0,86	0,95	1,06	1,16	1,27	1,37

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

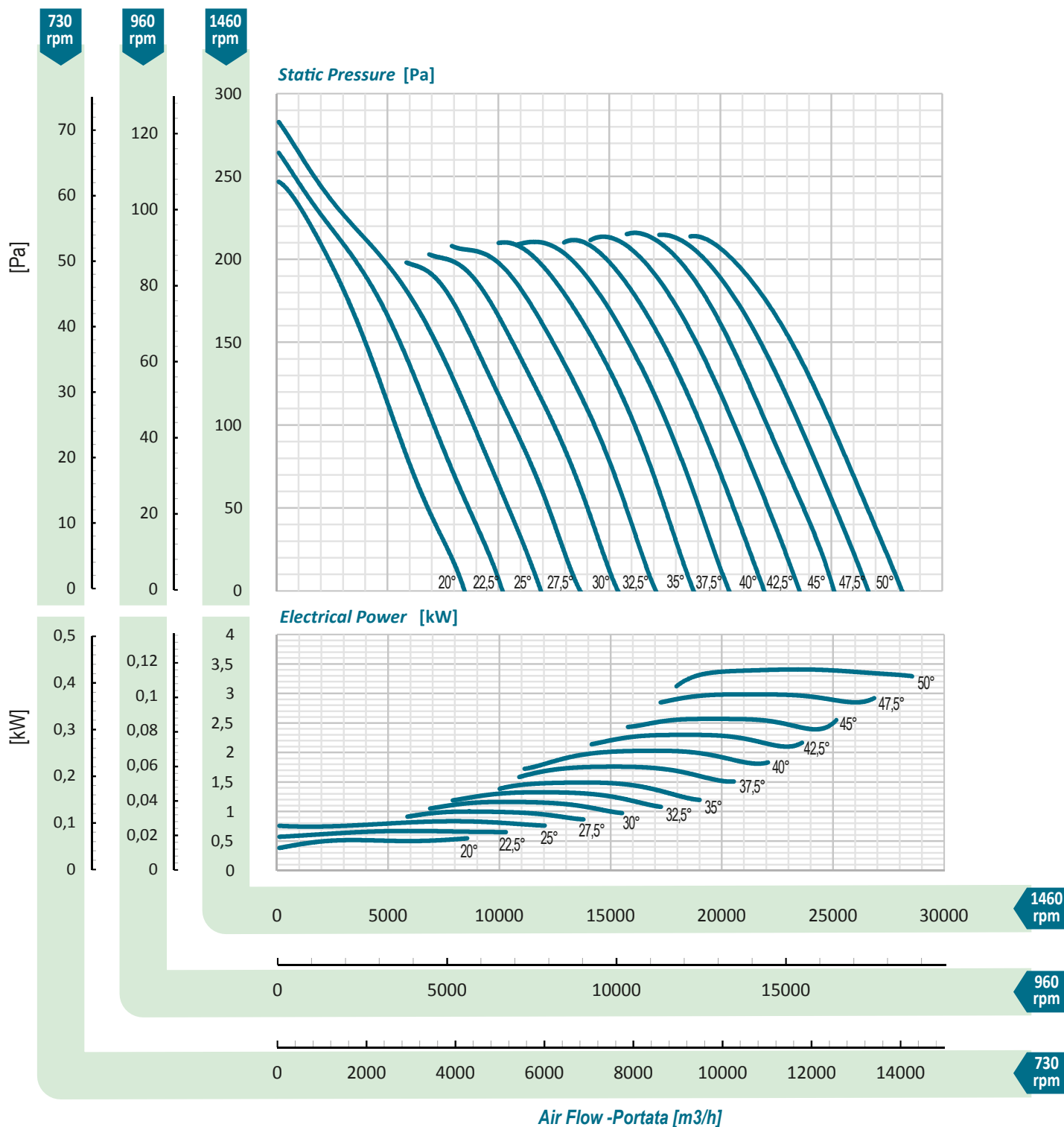


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,07	0,08	0,10	0,11	0,12	0,15	0,19	0,22	0,25	0,29	0,33
960	0,14	0,17	0,20	0,23	0,25	0,32	0,38	0,45	0,51	0,59	0,67
1460	0,46	0,56	0,65	0,75	0,84	0,96	1,08	1,20	1,32	1,53	1,73

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

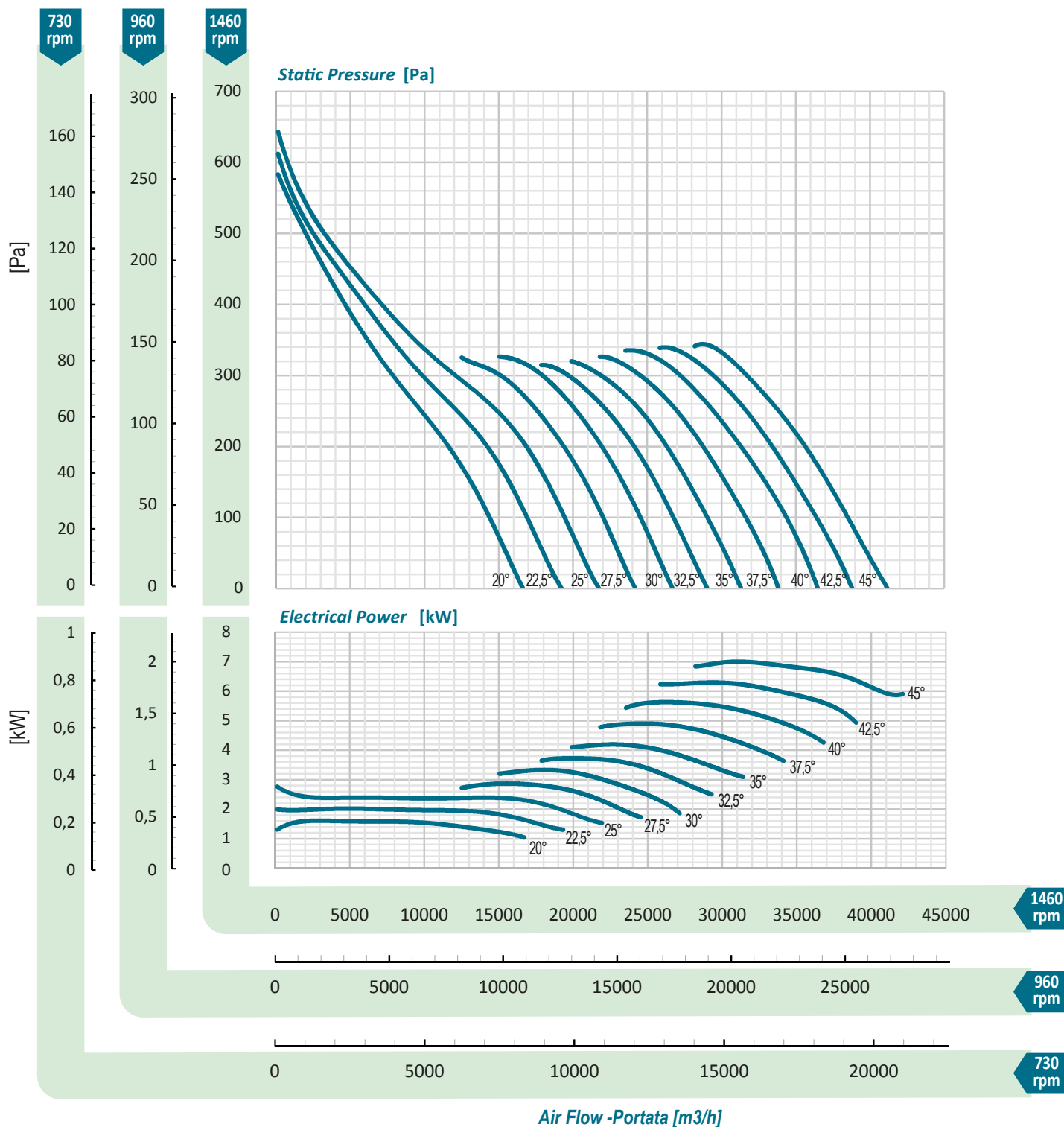


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]												
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45	47,5	50
730	0,10	0,13	0,16	0,19	0,22	0,25	0,28	0,32	0,36	0,39	0,43	0,50	0,57
960	0,21	0,26	0,32	0,37	0,43	0,48	0,54	0,60	0,67	0,74	0,80	0,93	1,05
1460	0,55	0,71	0,87	1,03	1,18	1,34	1,50	1,78	2,05	2,33	2,60	3,02	3,43

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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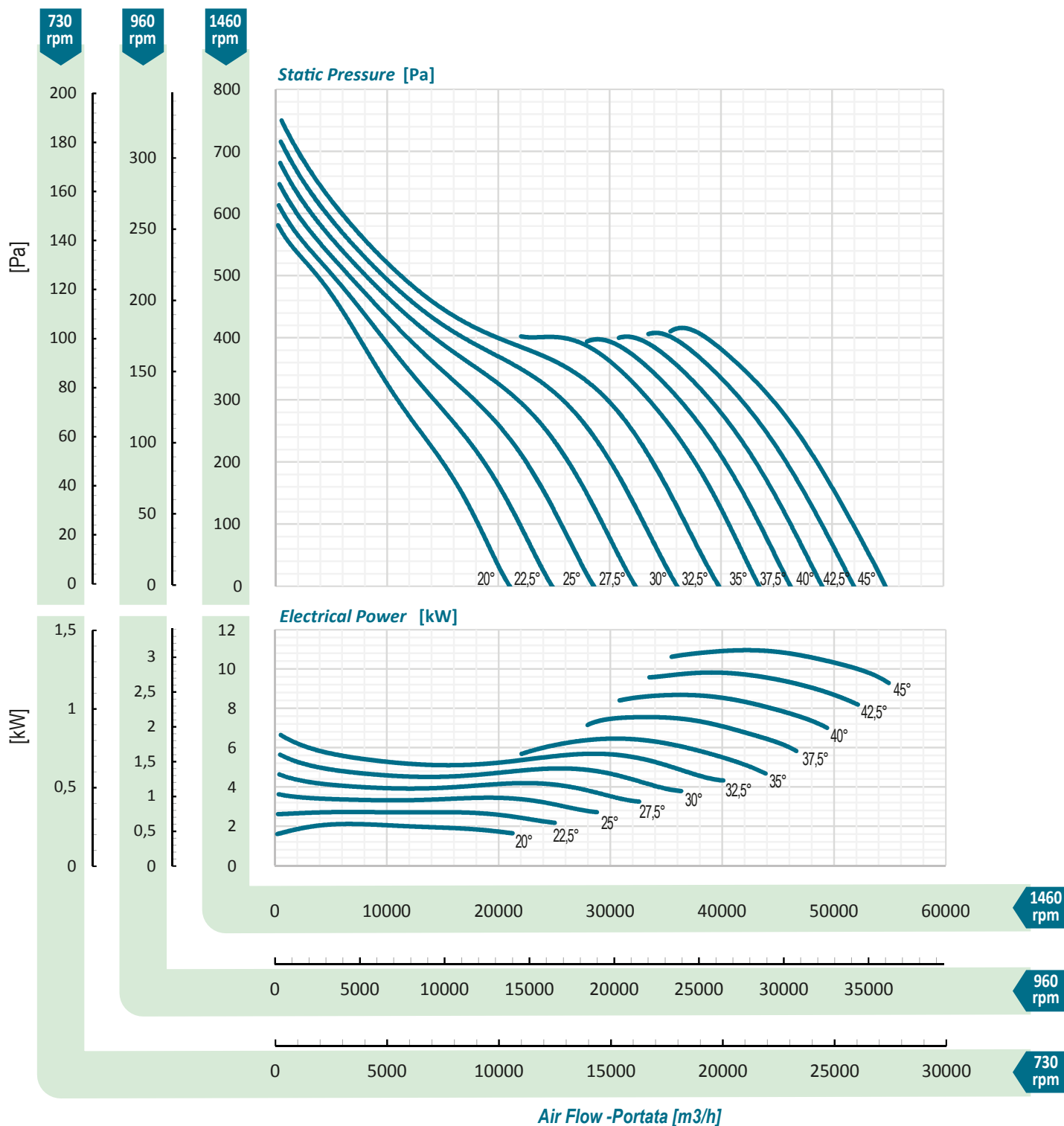


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,38	0,43	0,49	0,54	0,59	0,66	0,72	0,84	0,96	1,04	1,11
960	0,72	0,81	0,91	1,00	1,10	1,22	1,34	1,54	1,74	1,94	2,15
1460	1,94	2,36	2,77	3,19	3,60	3,93	4,25	4,95	5,65	6,34	7,03

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

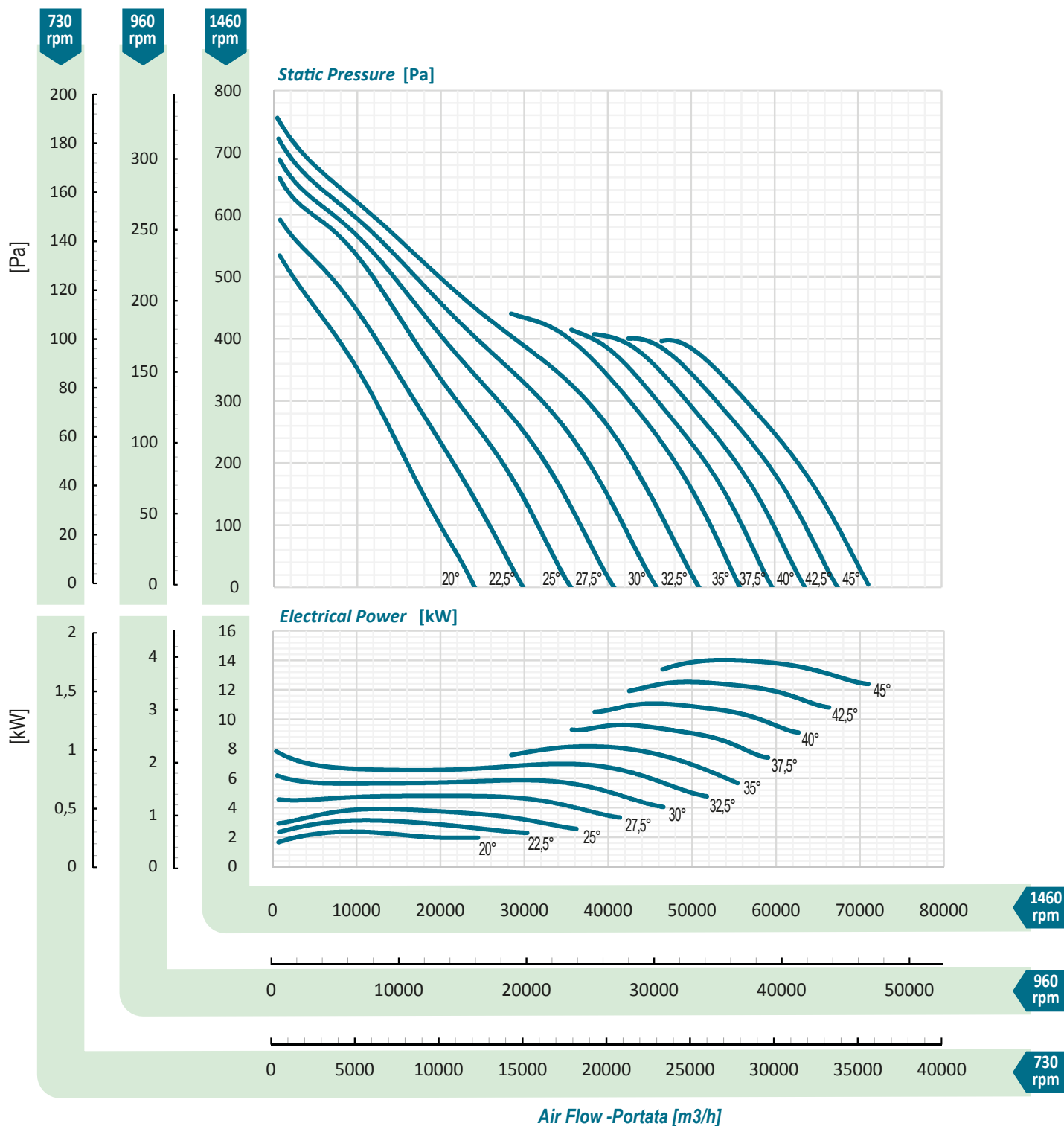


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,42	0,52	0,62	0,72	0,82	0,92	1,02	1,19	1,36	1,53	1,70
960	0,66	0,88	1,10	1,32	1,54	1,76	1,98	2,32	2,65	2,99	3,32
1460	2,15	2,87	3,60	4,32	5,04	5,77	6,49	7,64	8,78	9,93	11,07

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

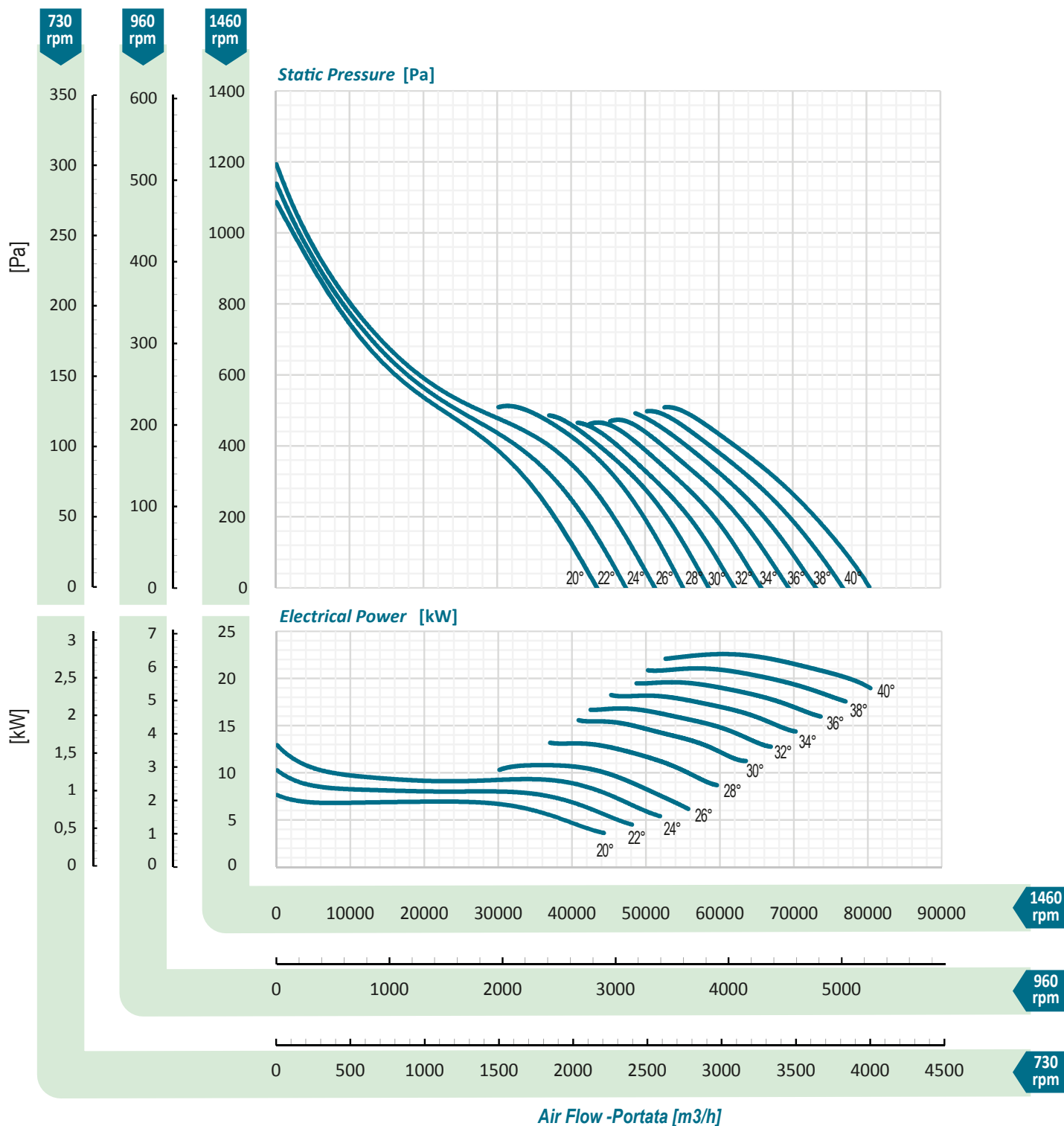


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22,5	25	27,5	30	32,5	35	37,5	40	42,5	45
730	0,42	0,54	0,66	0,82	0,97	1,13	1,28	1,57	1,85	2,13	2,42
960	0,75	0,99	1,23	1,54	1,86	2,17	2,49	3,03	3,58	4,12	4,67
1460	2,40	3,19	3,98	5,02	6,06	7,09	8,13	10,04	11,96	13,87	15,78

Performances shown in the diagrams refer to air density 1.2 kg/m³.

Performance certified is for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.

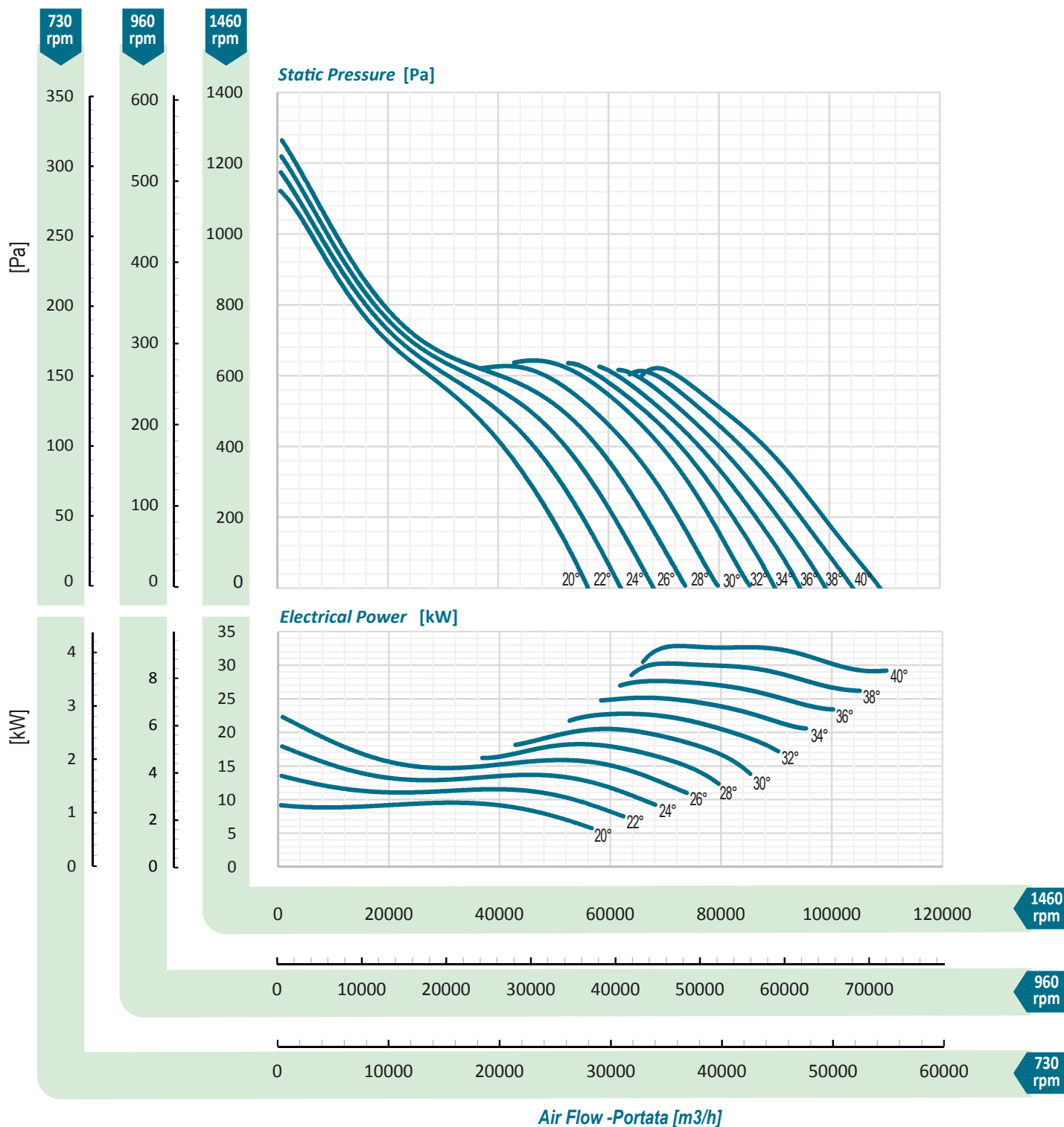


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22	24	26	28	30	32	34	36	38	40
730	1,15	1,31	1,48	1,65	2,02	2,39	2,60	2,81	3,02	3,23	3,44
960	2,48	2,74	3,00	3,27	3,94	4,61	5,04	5,47	5,90	6,32	6,75
1460	7,78	8,81	9,84	10,87	13,23	15,58	17,01	18,43	19,86	21,28	22,71

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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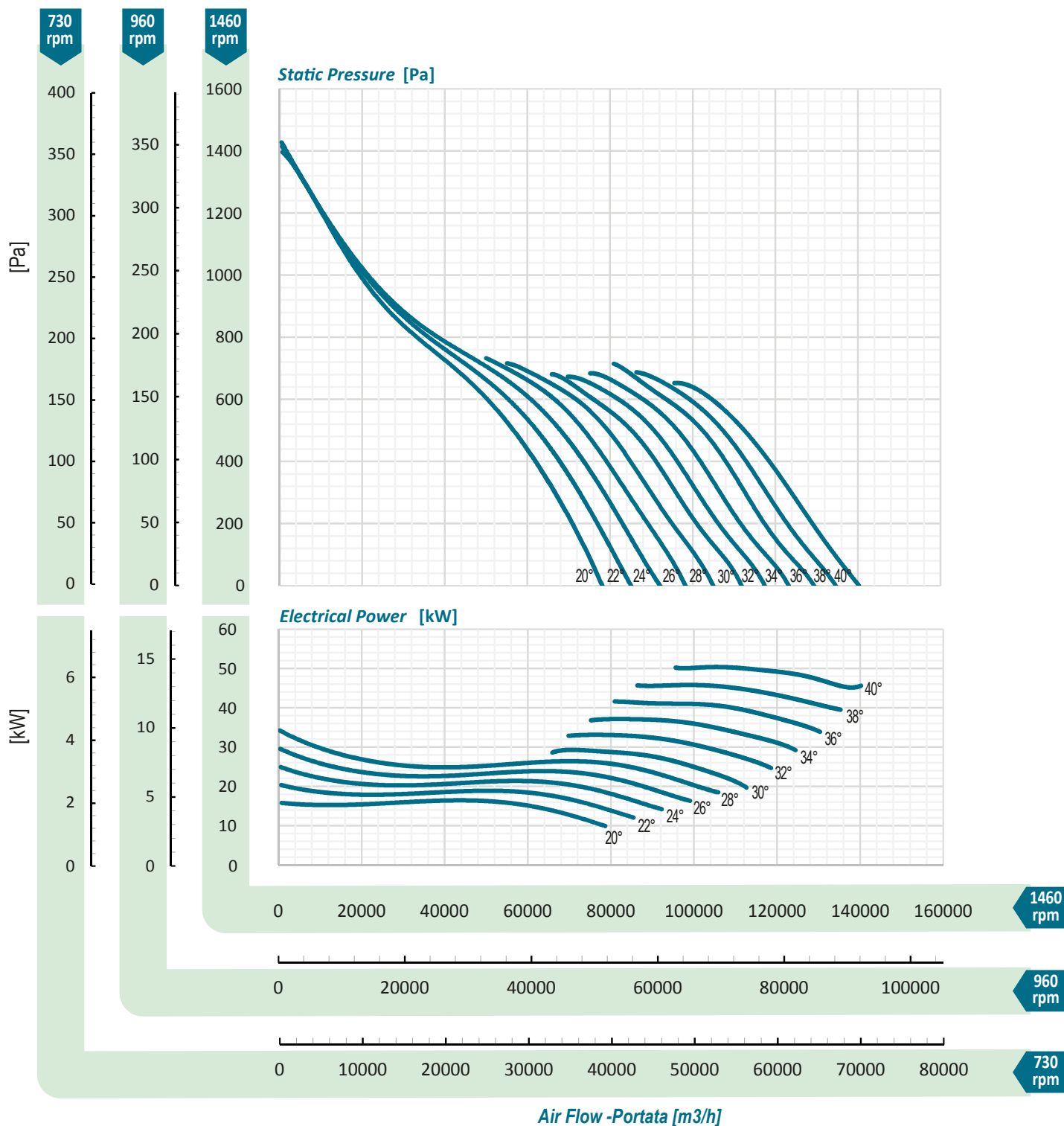


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22	24	26	28	30	32	34	36	38	40
730	1,50	1,81	2,13	2,44	2,75	3,07	3,36	3,65	4,22	4,49	4,77
960	2,93	3,56	4,19	4,82	5,45	6,08	6,63	7,18	8,42	9,10	9,78
1460	9,66	11,84	14,02	16,20	18,38	20,56	22,37	24,19	28,34	30,69	33,03

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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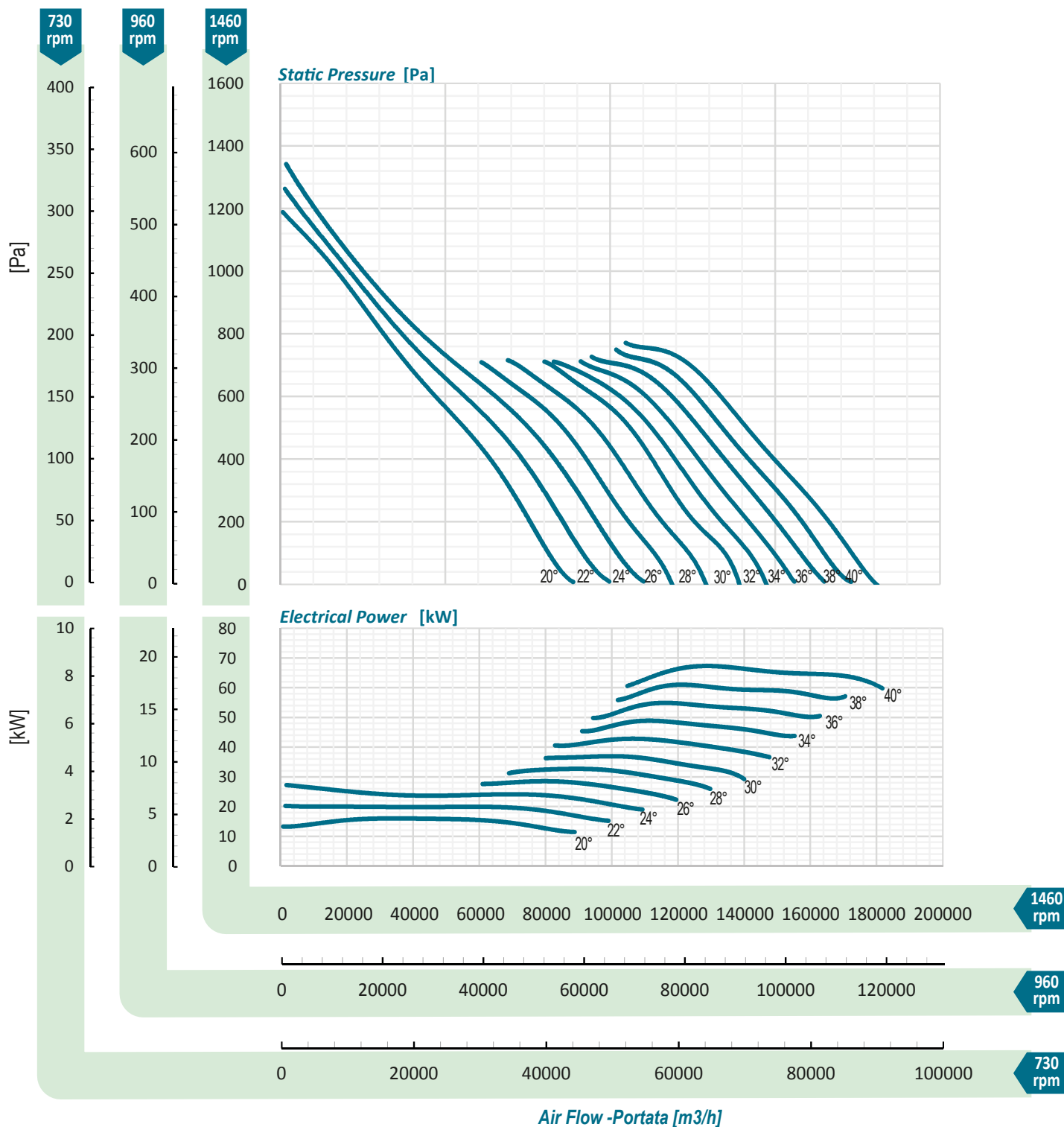


Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]										
	20	22	24	26	28	30	32	34	36	38	40
730	2,09	2,51	2,94	3,36	3,78	4,20	4,81	5,41	6,01	6,48	6,95
960	4,74	5,52	6,29	7,07	7,84	8,62	9,90	11,18	12,47	13,66	14,85
1460	16,69	19,23	21,78	24,32	26,87	29,41	33,82	38,23	42,64	46,72	50,79

Performances shown in the diagrams refer to air density 1.2 kg/m³.

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Peak absorbed power [kW]

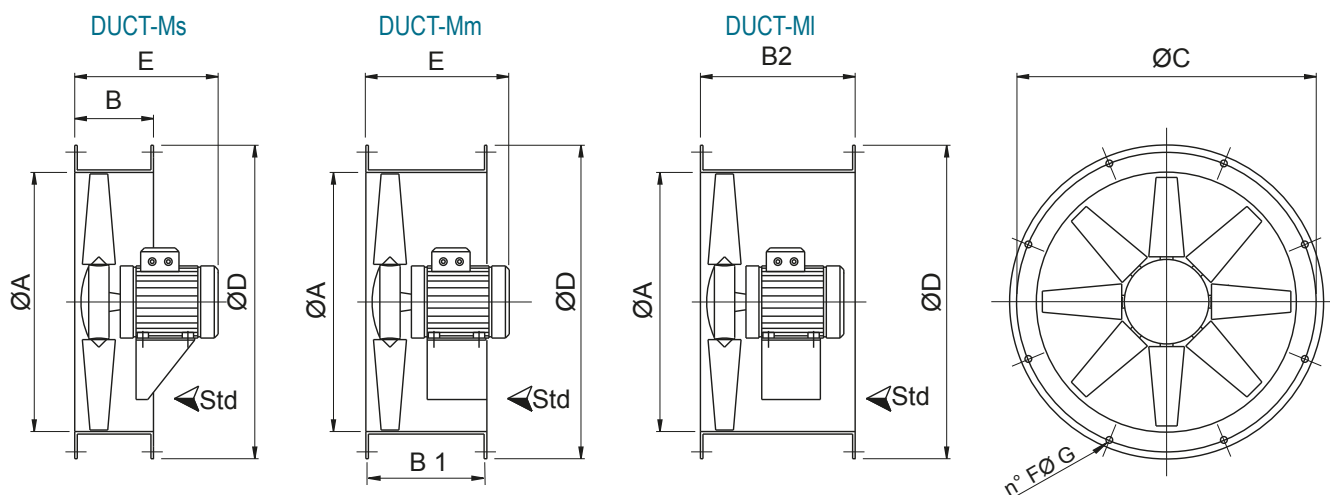
N [rpm]	Blade pitch angle [°]										
	20	22	24	26	28	30	32	34	36	38	40
730	2,50	3,05	3,59	4,14	4,68	5,23	6,04	6,84	7,65	8,46	9,26
960	4,83	6,10	7,37	8,64	9,91	11,18	12,95	14,72	16,48	18,25	20,02
1460	16,18	20,57	24,96	29,34	33,73	38,12	44,24	50,35	56,47	62,58	68,70

Values shown are for (inlet L_{wi} or inlet L_{wiA}) sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. For octave band and L_{wA} ratings, round off the number to the nearest integer. A-Weighted sound Pressure levels and dBA Ratings are calculated per AMCA standard 301, dBA levels are not licensed by AMCA International.

Peak sound power [L_w(A)]

Duct-M	Pitch angle[°]	Values @730 rpm			Values @960 rpm		
		Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]	Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]
310 6 blades	45	-	-	-	1571	10	67
310 8 blades	45	-	-	-	1362	5	69
350 6 blades	45	-	-	-	2263	13	71
350 8 blades	45	-	-	-	1962	7	73
400 6 blades	20	-	-	-	1335	11	71
400 8 blades	45	-	-	-	586	49	72
450 6 blades	20	1431	8	69	1882	14	75
450 8 blades	45	628	36	69	826	62	75
500	45	860	44	73	1131	76	79
560	45	1206	55	76	1586	96	82
630	45	1706	70	80	2243	121	86
710	50	2747	61	80	3613	106	86
800	45	11359	61	84	14938	106	90
900	45	16167	77	88	21260	134	94
1000 EK	45	22436	96	91	29505	166	97
1000 EN	50	2240	202	95	2946	349	101
1120	50	3142	253	98	4132	437	104
1250	50	4362	315	101	5737	544	107
1400	50	5876	384	104	7727	664	110

Duct-M	Pitch angle[°]	Values @1460 rpm			Values @2920 rpm		
		Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]	Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]
310 6 blades	45	2389	24	76	4777	94	91
310 8 blades	45	2071	12	78	4143	48	93
350 6 blades	45	3441	30	80	6883	120	95
350 8 blades	45	2984	15	82	5969	61	97
400 6 blades	20	2030	26	80	4061	103	96
400 8 blades	45	891	114	81	1782	456	96
450 6 blades	20	2862	32	84	-	-	-
450 8 blades	45	1256	143	85	-	-	-
500	45	1720	177	88	-	-	-
560	45	2411	221	91	-	-	-
630	45	3411	279	95	-	-	-
710	50	5495	245	95	-	-	-
800	45	22718	244	99	-	-	-
900	45	32334	309	103	-	-	-
1000 EK	45	44872	385	106	-	-	-
1000 EN	50	4480	807	110	-	-	-
1120	50	6284	1012	113	-	-	-
1250	50	8725	1259	117	-	-	-
1400	50	11752	1535	119	-	-	-



Model	A	Mot.(H)	B (Ms)	B1 (Mm)	B2 (MI)	C	D	*E	F	G	*Kg(Ms)	*Kg(Mm)	*Kg(MI)
31	310	56-63	260	260	400	355	390	250/320	8	10	13/17	13/17	13/19
35	360	56-71	260	260	400	395	430	250/320	8	10	14/19	14/19	14/22
40	410	63-80	260	260	400	450	490	300/380	8	12	16/24	16/24	19/27
45	460	71-80	260	260	450	500	540	350/390	8	12	21/30	21/30	23/33
50	510	71-80	260	260	450	560	595	350/390	12	12	24/35	24/35	27/38
56	570	71-90	260	260	450	620	655	350/390	12	12	28/37	28/37	34/43
63	640	90-100	260	350	500	690	725	400/490	12	12	34/51	37/54	44/61
71	710	90-112	260	350	600	770	805	400/490	16	12	41/62	44/67	53/77
80	810	90-132	350	450	600	860	900	450/610	16	12	50/105	54/110	60/115
90	910	100-132	350	450	700	970	1010	450/690	16	16	80/162	87/169	105/187
100	1010	100-160	-	560	800	1070	1110	700/830	16	16	-	107/330	123/346
		180		800	900								
112	1130	132	-	560	800	1190	1230	700/880	20	16	-	136/355	157/455
		160-200		800	900								
		225		800	1000								
		250		900	1150								
125	1260	132	-	560	800	1320	1360	700/1000	20	16	-	169/451	192/545
		160-200		800	900								
		225		800	1000								
		250-280		900	1150								
140	1400	160-225	-	800	1000	1470	1520	900/1000	20	16	-	381/895	411/935
		250-280		900	1150								
160	1610	160-255	-	800	1000	1680	1730	900/1100	24	20	-	489/963	519/1013
		250-280		900	1150								

Dimensioni in mm / Dimensions in mm

(*) Indicativo/Indicative

