

DUCT-M HT F400/F300/2h

Smoke exhaust ducted axial fan

APPLICATIONS

The fans of the DUCT-M HT line have been designed to be employed in all the plants where it is prescribed the necessity to guarantee the smoke extraction in environments as car parks, commercial centers, hospitals, theatres, museums, buildings etc.

DUCT-M HT fans have been designed and manufactured according to the European Directive EN 12101-3 obtaining the certification from an authorized autonomous certification body. This line is suitable to work in continuous at the temperature of 50°C and in case of emergency (fire) at the temperature of:

200°C for 120 minutes (F200)

300°C for 60 minutes (F300) - for 120 minutes (F300/120)

400°C for 120 minutes (F400)

This concept of double operation is exactly translated by the term "dual purpose" introduced in the specific by the EN 12101-3 norm.



TECHNICAL SPECIFICATIONS

DUCT-M HT

- Conveyed Fluid: clean or slightly dusty, not abrasive.
- Voltage: three phase (T) 400V – 3ph – 50Hz
- Fluid direction: from impeller to motor (B) FGM

VERSIONS

- DUCT-ML: long casing. Motor/ impeller assembly completely "included" in the length of the casing.
- DUCT-Mm: medium casing. Motor slightly protruding from the casing, free access for electrical connection.

ACCESSORIES

- Inlet nozzle (IN).
- Silencers (SIL-DU).
- Flat protection grid (FPG-DU) and conic (CPG-DU) (Necessary for use in free air).
- AV mounts (AV).
- Counter-flange (CF-DU).
- External terminal box (OTB-HT).
- Fixing feet (FF-DU).
- Overpressure circular dumper 'GSC'

ON REQUEST

- Performances different from the catalogue.
- Versions with air flow from motor to impeller, position A (FMG).
- Hot dipped galvanized casing.



Elektrovent srl certifies that the Elektrovent model Duct-M HT F400/F300/2h from 310 to 1400 shown here in 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.

'July 2026'
Catalog N° 002 Rev. 2

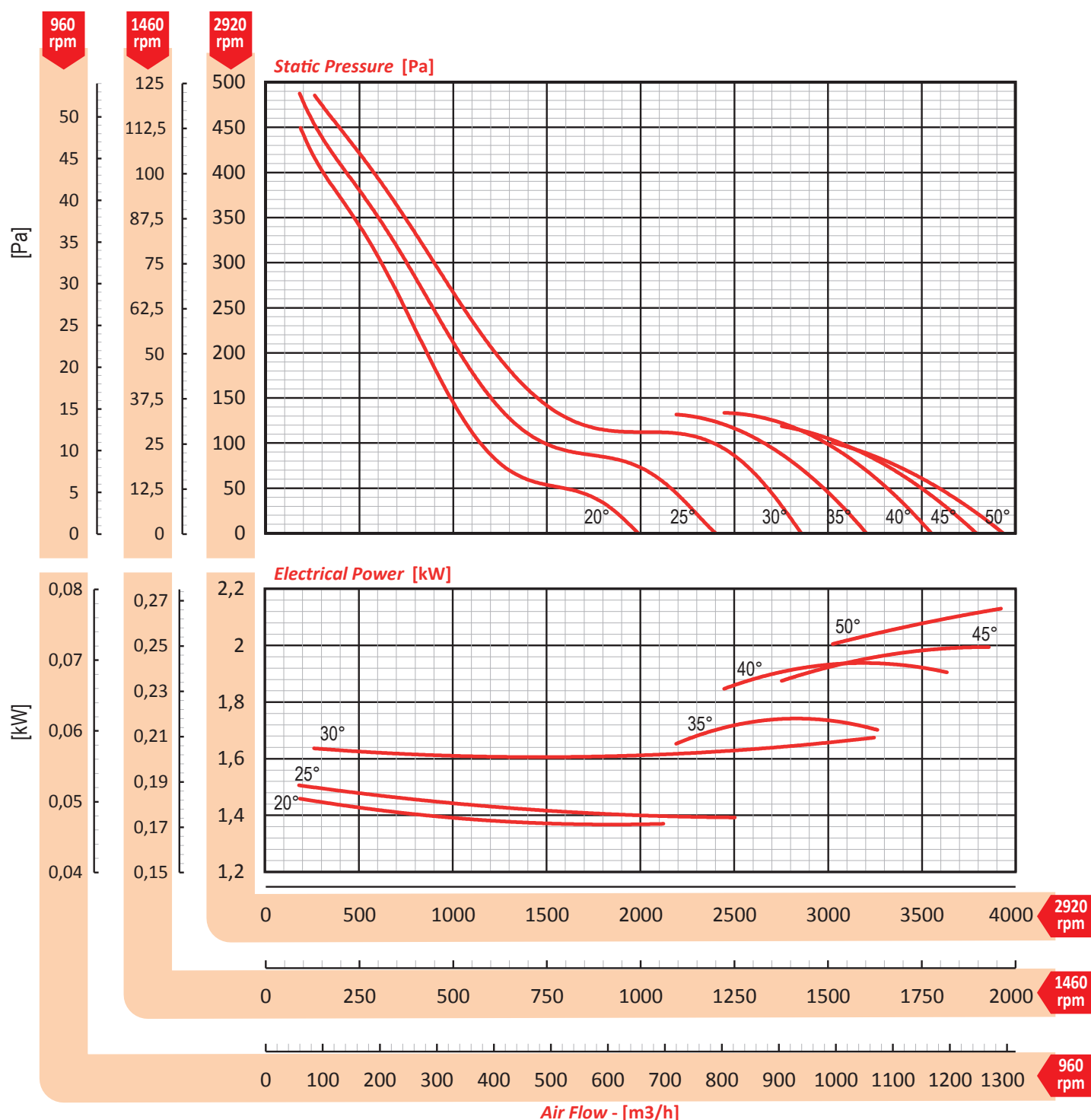
DUCT-M 310 HT

F400/F300/2h 50Hz

Performances

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]

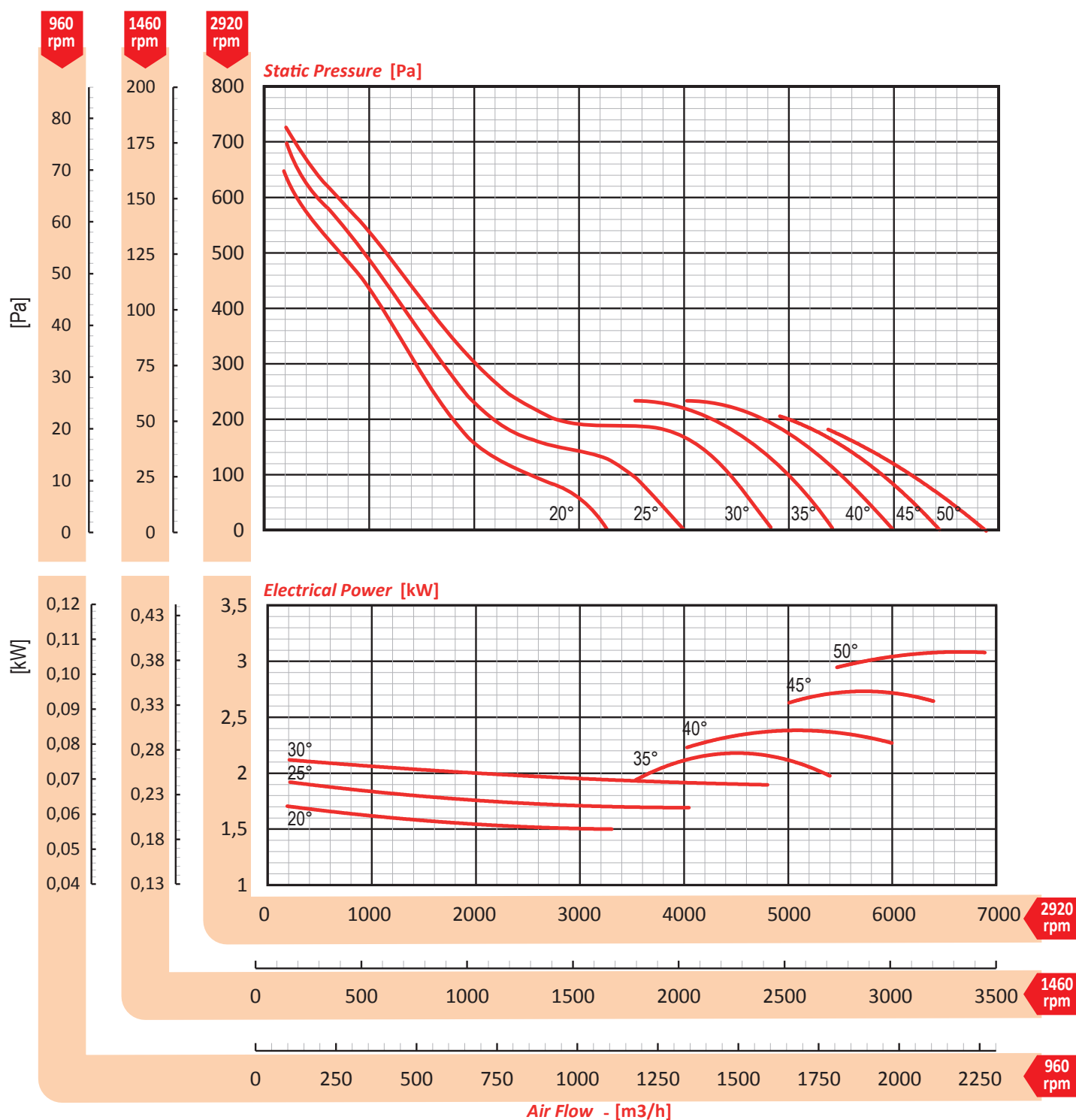
N [rpm]	Blade pitch angle [°]						
	50	45	40	35	30	25	20
960	0,076	0,072	0,070	0,063	0,060	0,055	0,053
1460	0,268	0,252	0,246	0,220	0,211	0,193	0,187
2920	2,146	2,012	1,965	1,762	1,688	1,544	1,493

DUCT-M 350 HT

F400/F300/2h 50Hz

Performances

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]

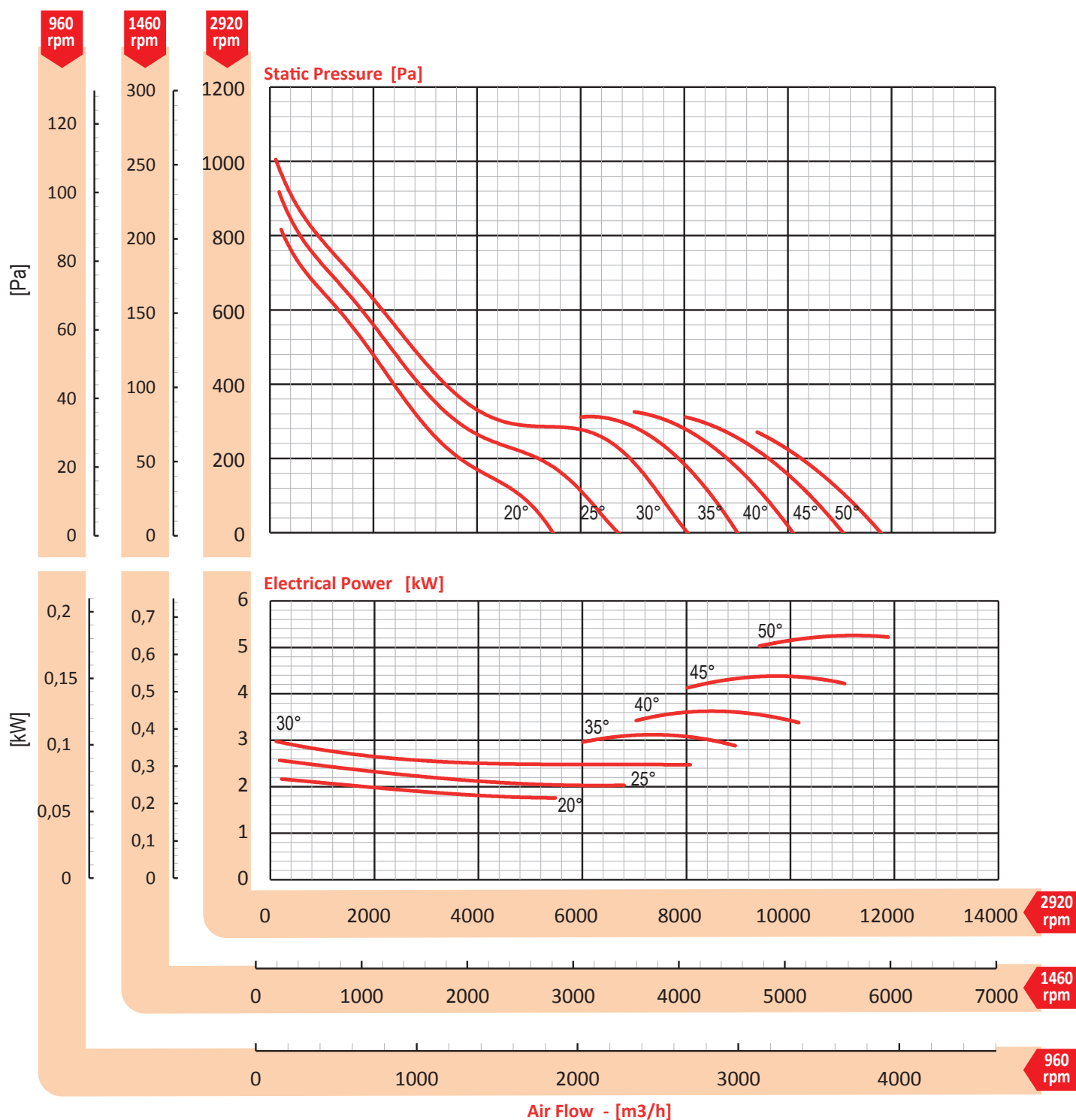
N [rpm]	Blade pitch angle [°]						
	50	45	40	35	30	25	20
960	0,077	0,072	0,070	0,063	0,061	0,055	0,053
1460	0,270	0,252	0,246	0,220	0,213	0,193	0,187
2920	2,156	2,012	1,965	1,762	1,703	1,544	1,493

DUCT-M 400 HT

F400/F300/2h 50Hz

Performances

Performances shown in the diagrams refer to air density 1.2 kg/m³.
Performance certified for installation type D – Ducted inlet, Ducted outlet with bell and no grid nor accessories.



Peak absorbed power [kW]

N [rpm]	Blade pitch angle [°]						
	50	45	40	35	30	25	20
960	0,024	0,020	0,016	0,014	0,013	0,012	0,010
1460	0,083	0,069	0,057	0,050	0,047	0,041	0,035
2920	0,665	0,553	0,457	0,396	0,375	0,327	0,280

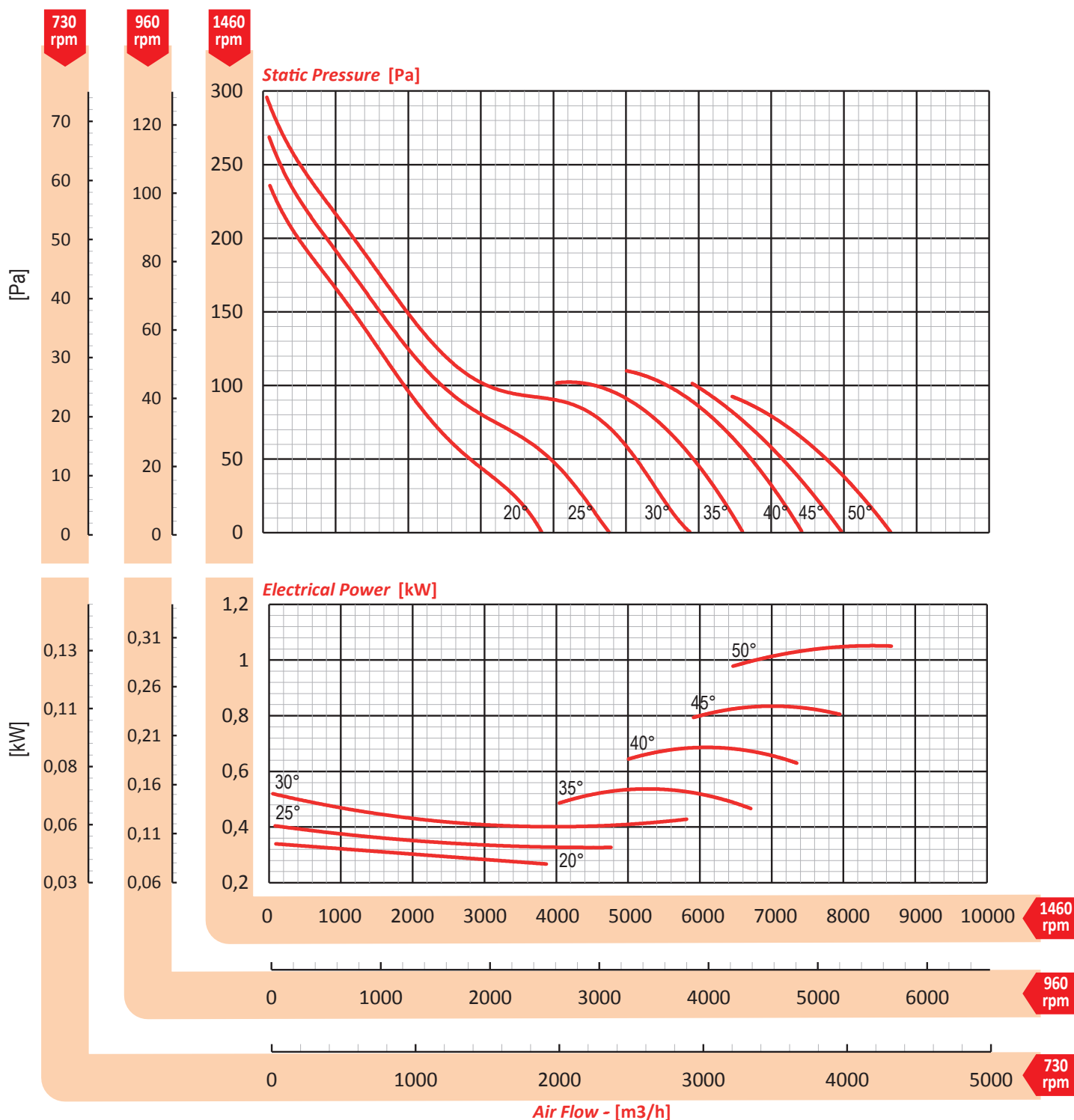
DUCT-M 450 HT

F400/F300/2h 50Hz

Performances

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]

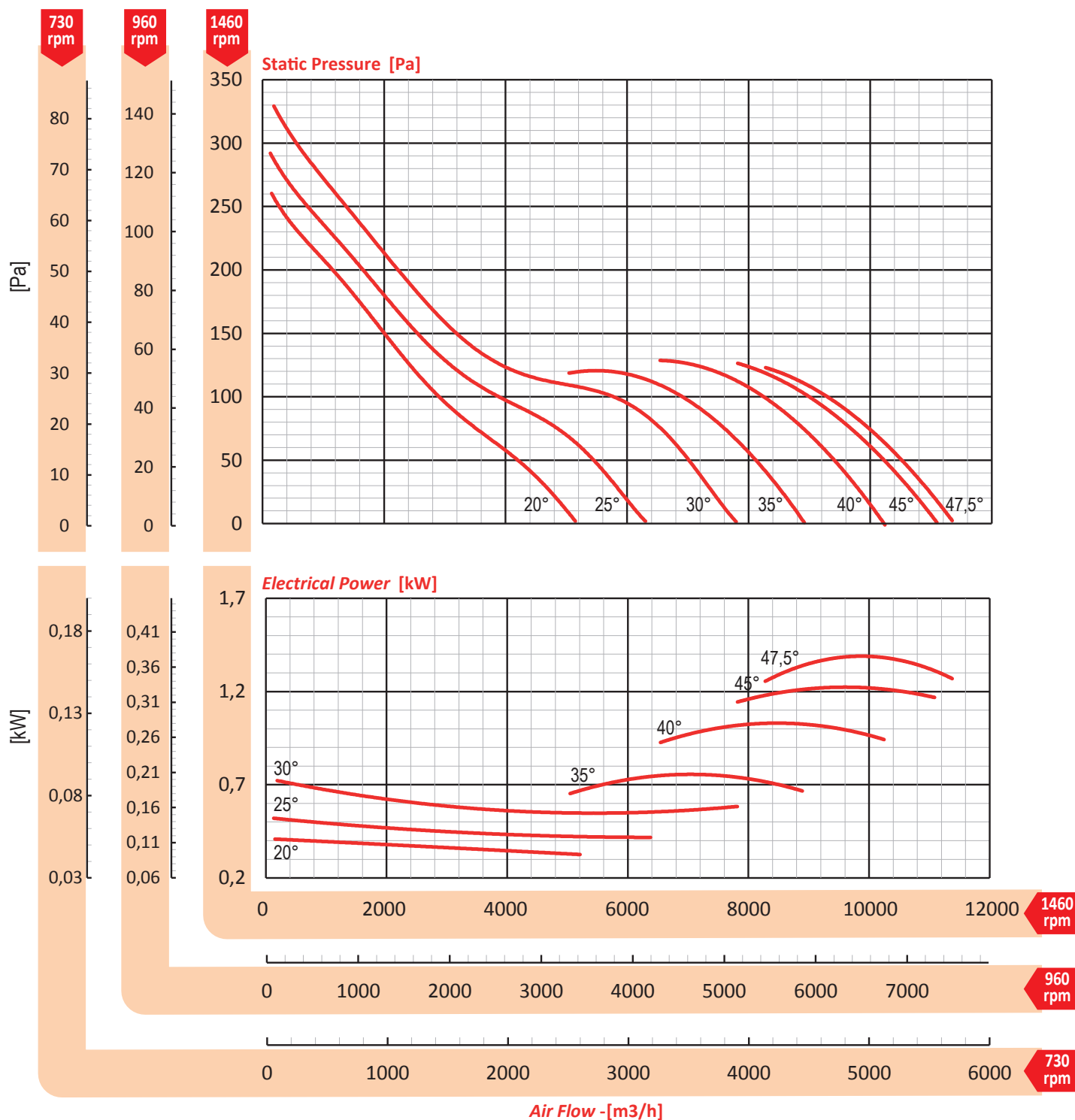
N [rpm]	Blade pitch angle [°]						
	50	45	40	35	30	25	20
730	0,133	0,105	0,087	0,068	0,066	0,052	0,043
960	0,302	0,239	0,197	0,155	0,151	0,117	0,098
1460	1,063	0,841	0,693	0,545	0,532	0,413	0,343

DUCT-M 500 HT

F400/F300/2h 50Hz

Performances

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 [°]						
	47,5	45	40	35	30	25	20
730	0,174	0,156	0,130	0,095	0,093	0,066	0,052
960	0,395	0,354	0,296	0,217	0,210	0,150	0,117
1460	1,390	1,244	1,041	0,762	0,740	0,529	0,412

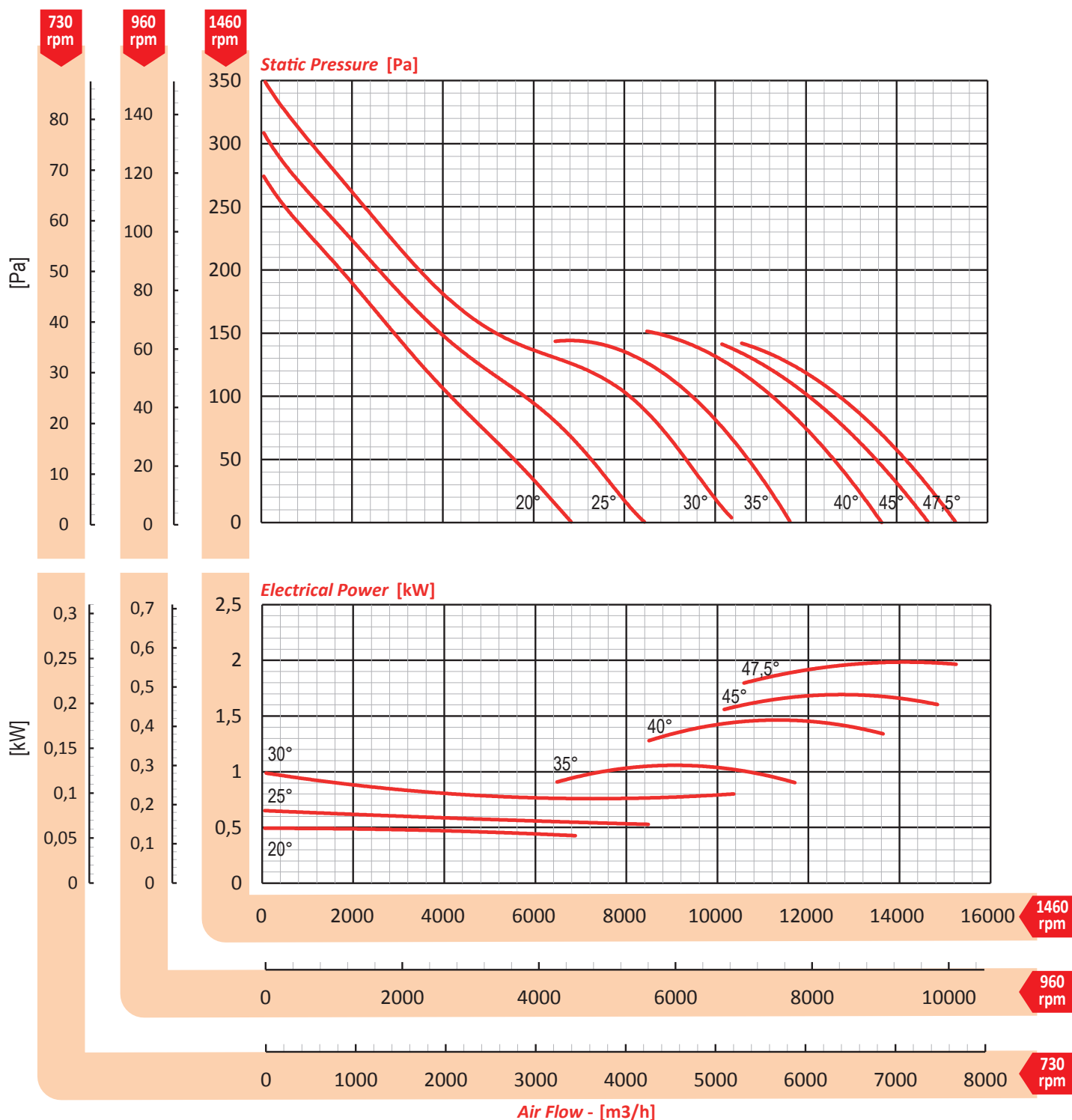
DUCT-M 560 HT

F400/F300/2h 50Hz

Performances

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]

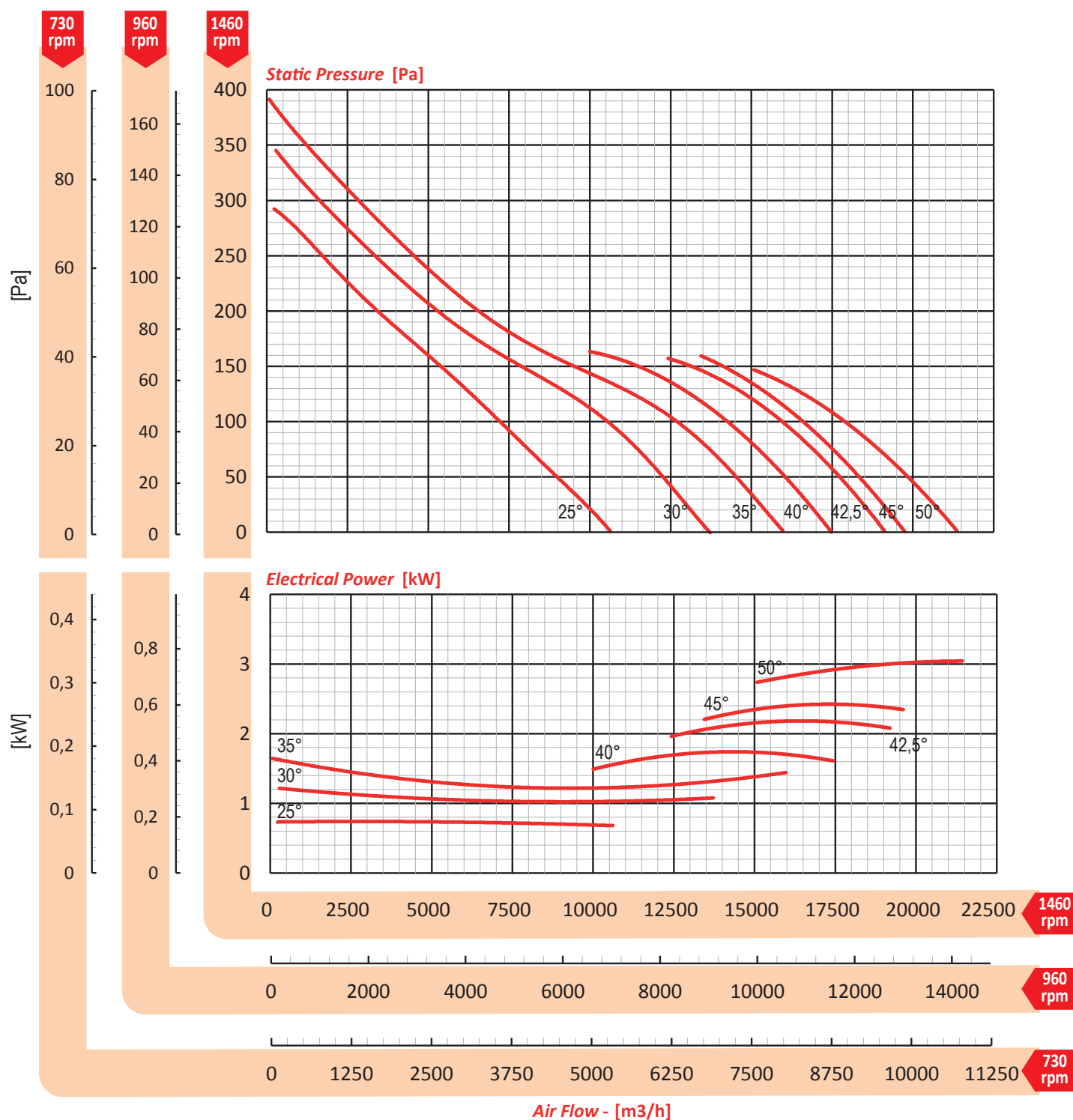
N [rpm]	Blade pitch angle [°]						
	47,5	45	40	35	30	25	20
730	0,259	0,214	0,186	0,133	0,133	0,083	0,063
960	0,588	0,487	0,423	0,302	0,301	0,188	0,144
1460	2,070	1,715	1,488	1,063	1,060	0,660	0,506

DUCT-M 630 HT

F400/F300/2h 50Hz

Performances

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]

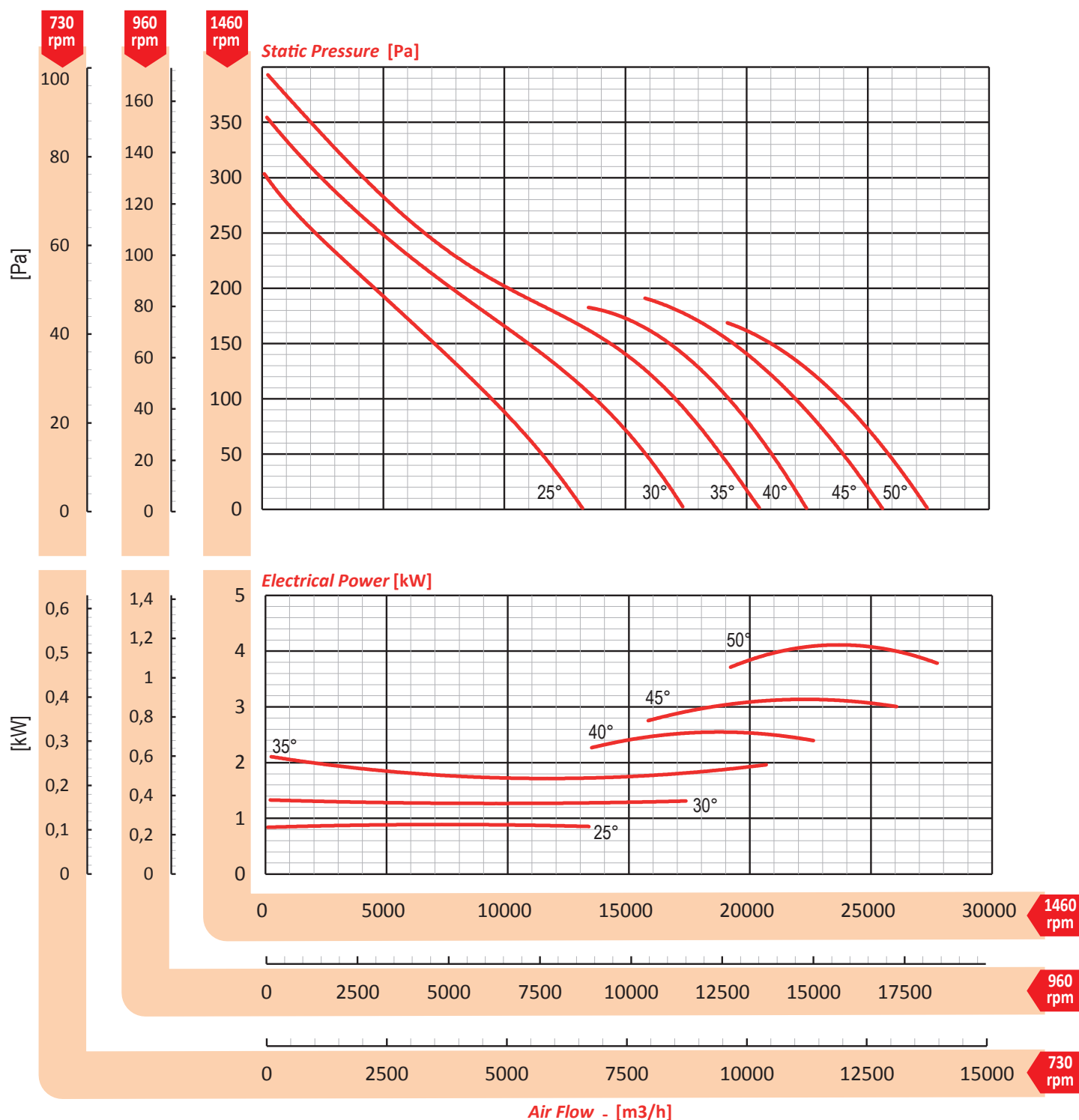
N [rpm]	Blade pitch angle [°]						
	50	45	42,5	40	35	30	25
730	0,410	0,306	0,276	0,222	0,214	0,162	0,100
960	0,932	0,697	0,627	0,504	0,486	0,368	0,227
1460	3,280	2,450	2,204	1,774	1,708	1,294	0,798

DUCT-M 710 HT

F400/F300/2h 50Hz

Performances

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 [°]					
	50	45	40	35	30	25
730	0,528	0,395	0,326	0,275	0,178	0,114
960	1,200	0,898	0,741	0,625	0,406	0,260
1460	4,220	3,159	2,608	2,199	1,428	0,915

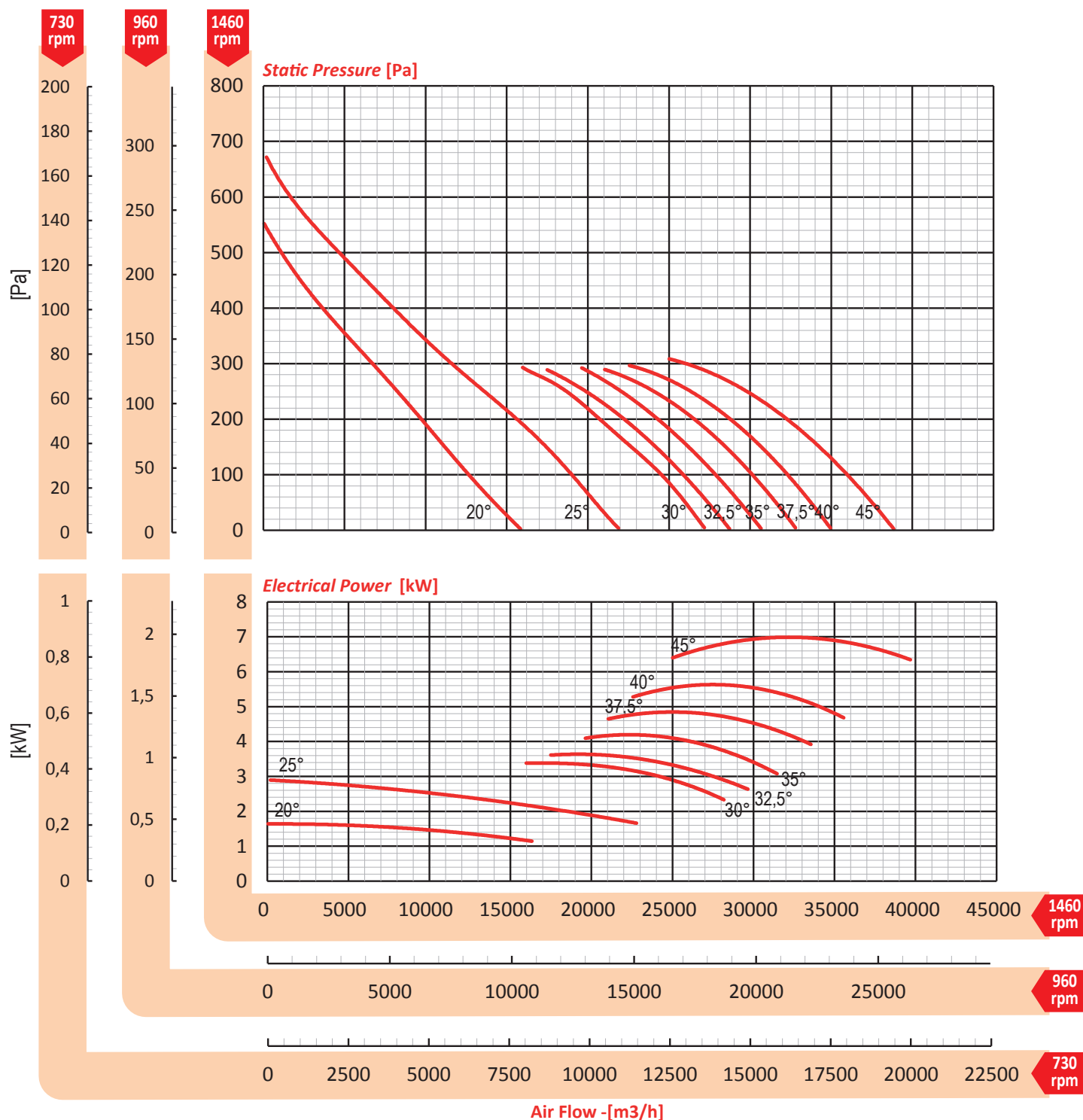
DUCT-M 800 HT

F400/F300/2h 50Hz

Performances

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]

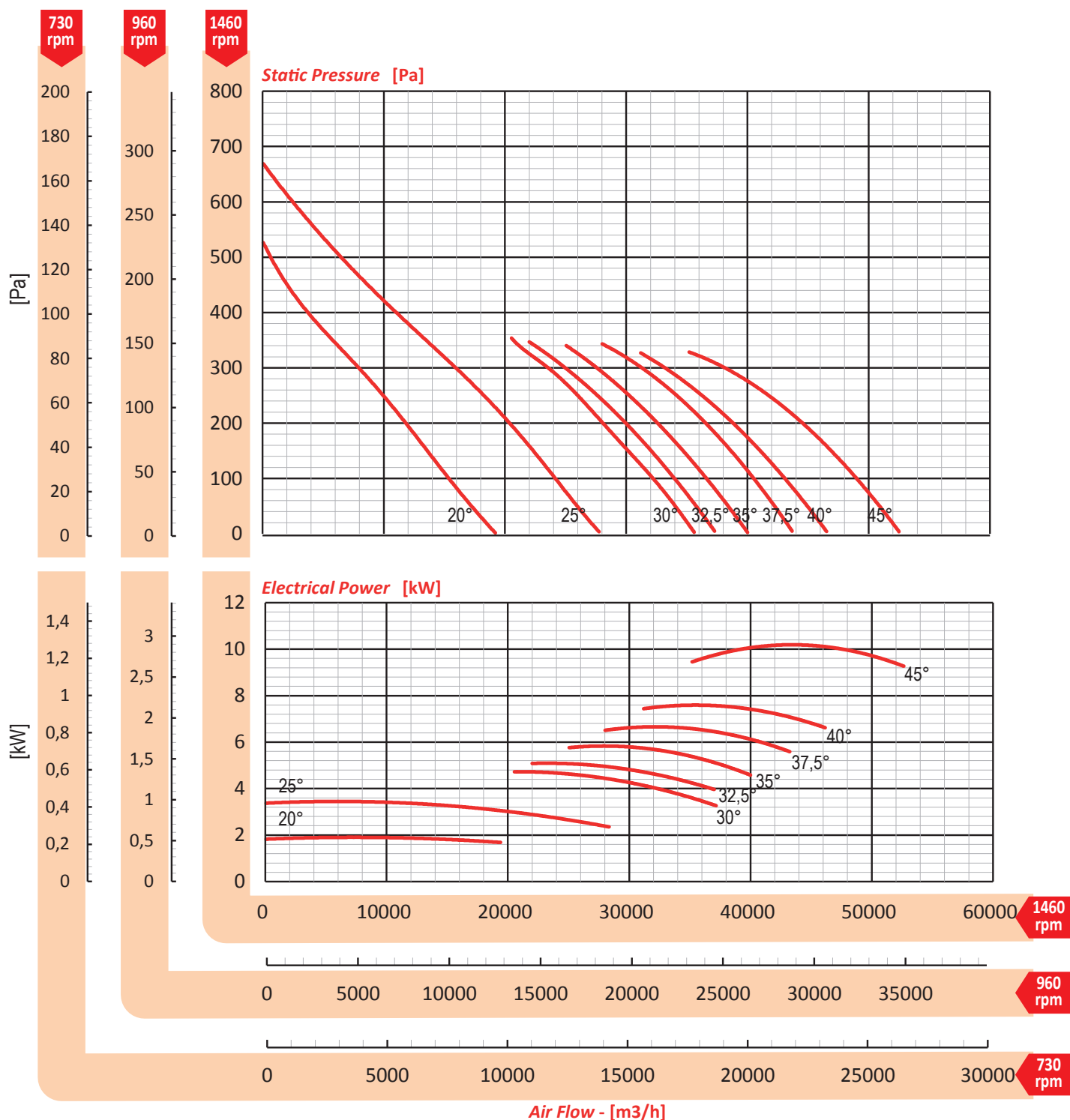
N [rpm]	Blade pitch angle [°]							
	45	40	37,5	35	32,5	30	25	20
730	0,890	0,707	0,616	0,527	0,459	0,428	0,378	0,209
960	2,024	1,608	1,400	1,200	1,045	0,972	0,859	0,476
1460	7,120	5,655	4,926	4,220	3,676	3,420	3,021	1,674

DUCT-M 900 HT

F400/F300/2h 50Hz

Performances

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 [°]							
	45	40	37,5	35	32,5	30	25	20
730	0,890	0,707	0,616	0,527	0,459	0,428	0,378	0,209
960	2,024	1,608	1,400	1,200	1,045	0,972	0,859	0,476
1460	7,120	5,655	4,926	4,220	3,676	3,420	3,021	1,674

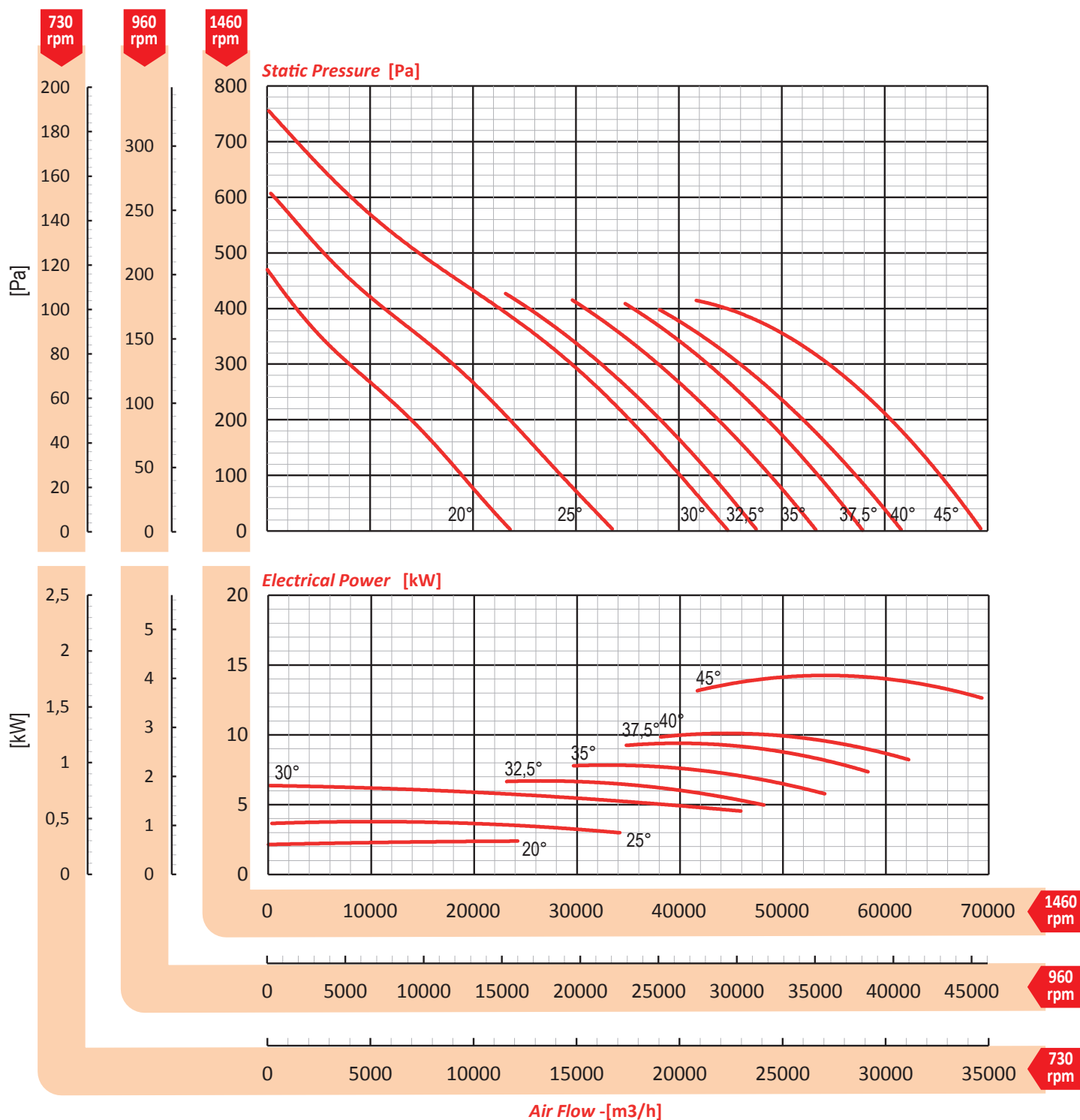
DUCT-M 1000 EK HT

F400/F300/2h 50Hz

Performances

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 [°]							
	45	40	37,5	35	32,5	30	25	20
730	1,799	1,266	1,183	0,986	0,847	0,858	0,481	0,308
960	4,093	2,880	2,691	2,243	1,927	1,951	1,094	0,701
1460	14,396	10,131	9,466	7,891	6,779	6,861	3,850	2,466

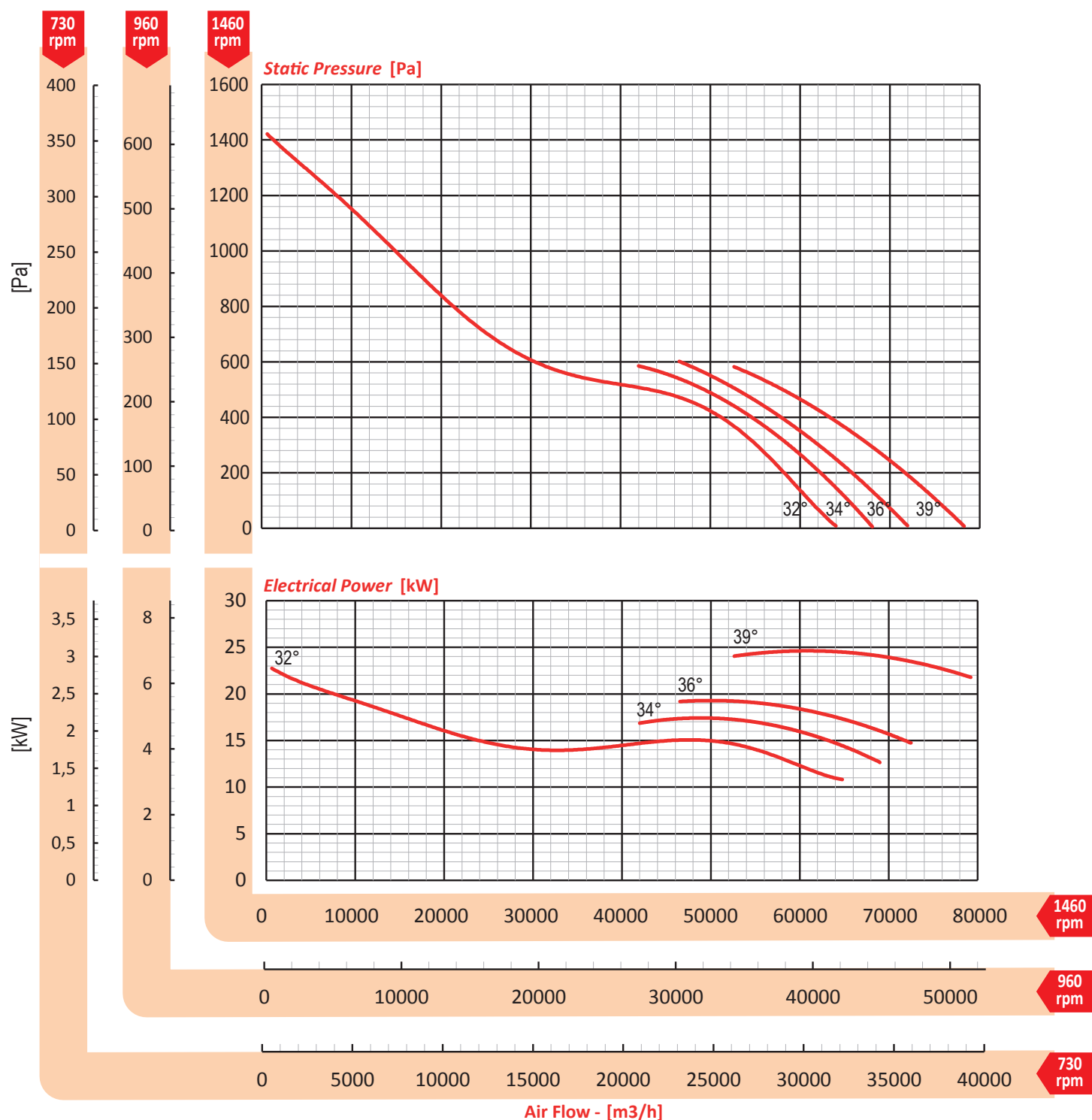
DUCT-M 1000 EN HT

F400/F300/2h 50Hz

Performances

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 [°]			
	39	36	34	32
730	3,112	2,432	2,212	2,748
960	7,078	5,530	5,030	6,251
1460	24,897	19,452	17,693	21,987

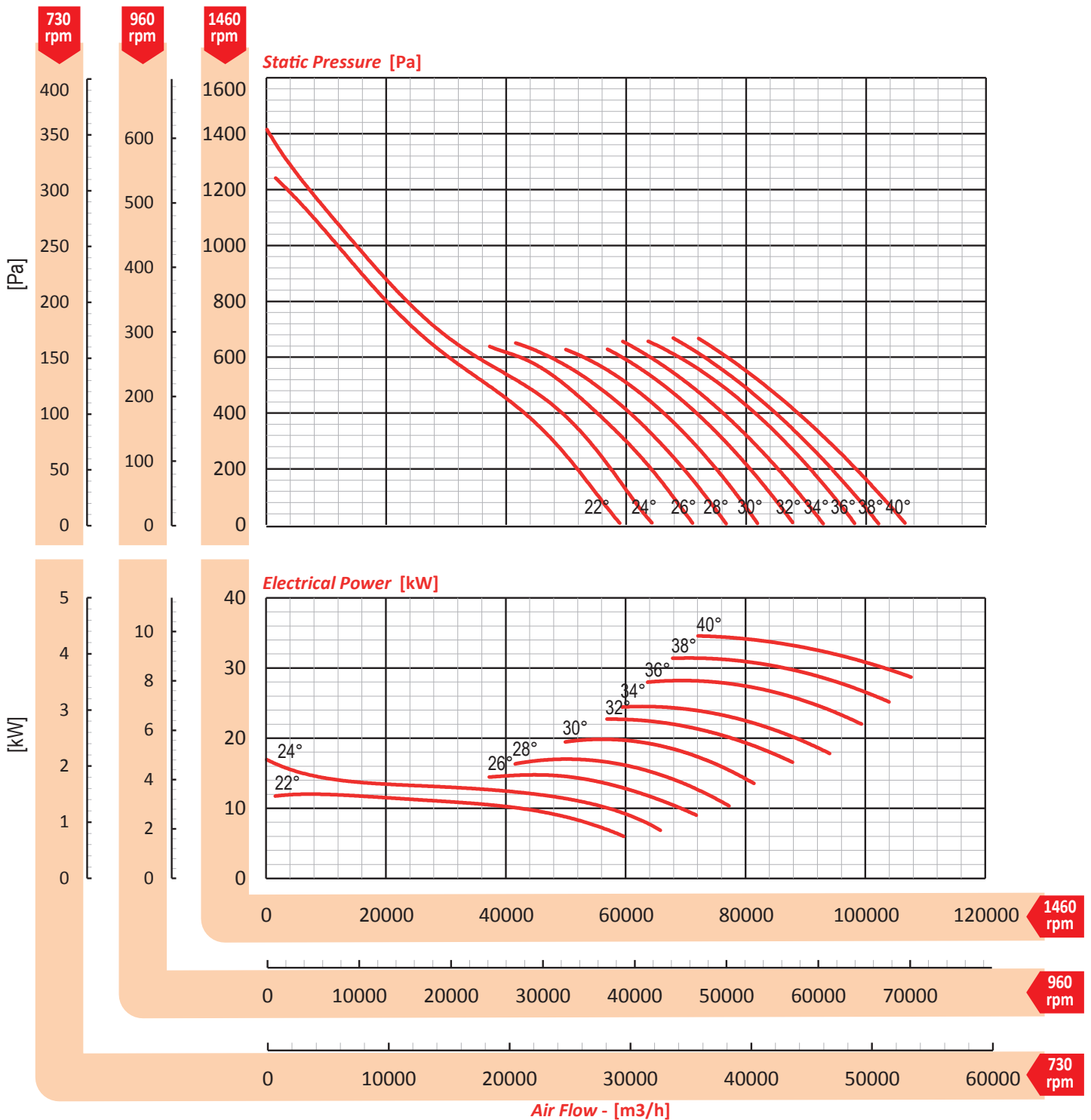
DUCT-M 1120 HT

F400/F300/2h 50Hz

Performances

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 [°]									
	40	38	36	34	32	30	28	26	24	22
730	4,361	4,027	3,603	3,108	2,846	2,523	2,135	1,859	2,198	1,547
960	9,918	9,158	8,195	7,067	6,473	5,737	4,855	4,229	4,998	3,517
1460	34,888	32,213	28,828	24,860	22,769	20,180	17,077	14,875	17,582	12,372

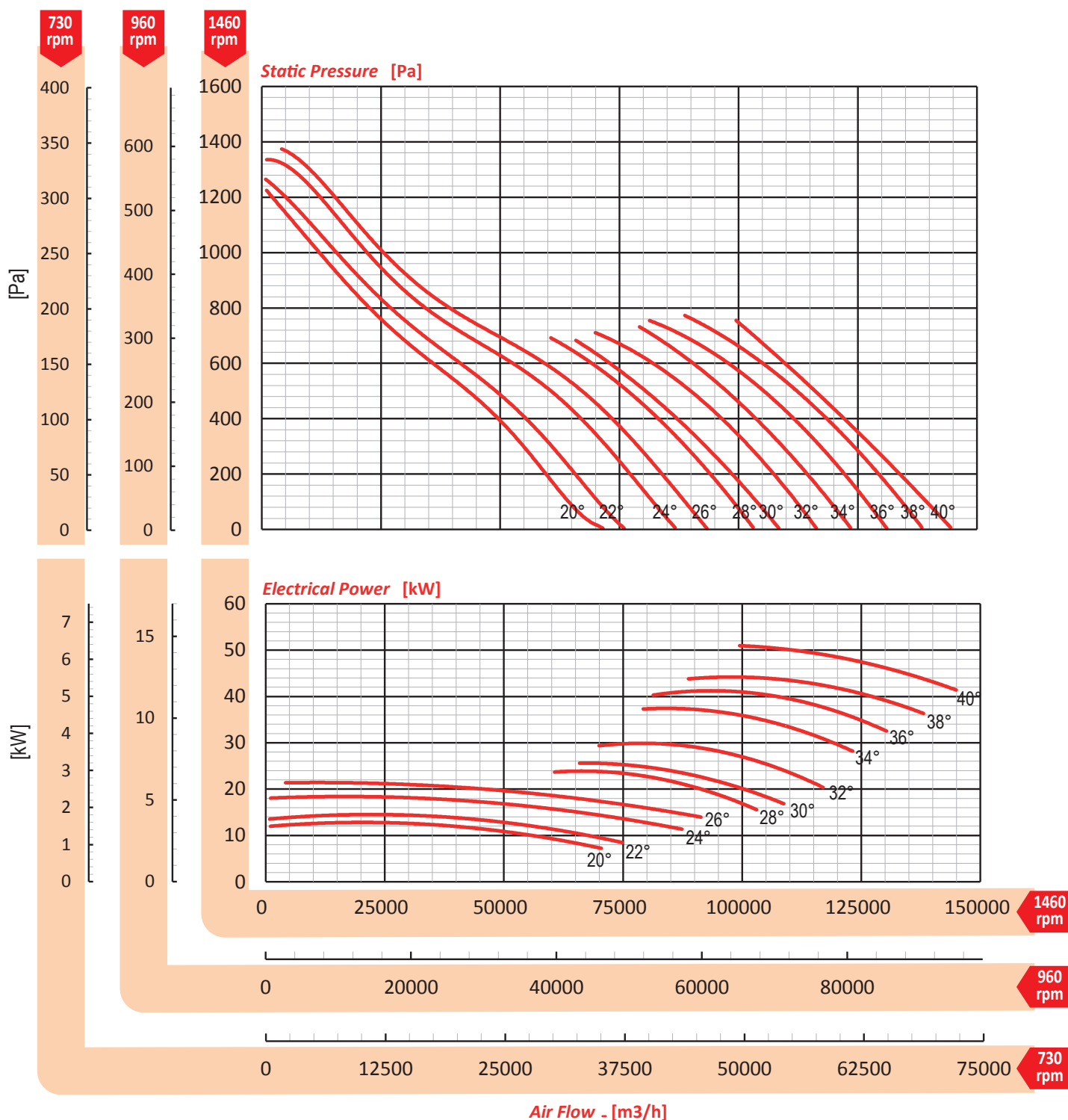
DUCT-M 1250 EN HT

F400/F300/2h 50Hz

Performances

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 [°]										
	40	38	36	34	32	30	28	26	24	22	20
730	6,409	5,674	5,222	4,797	3,778	3,221	3,036	2,843	2,419	1,837	1,631
960	14,577	12,905	11,877	10,909	8,592	7,325	6,904	6,465	5,502	4,177	3,710
1460	51,274	45,393	41,779	38,374	30,222	25,768	24,285	22,741	19,355	14,694	13,050

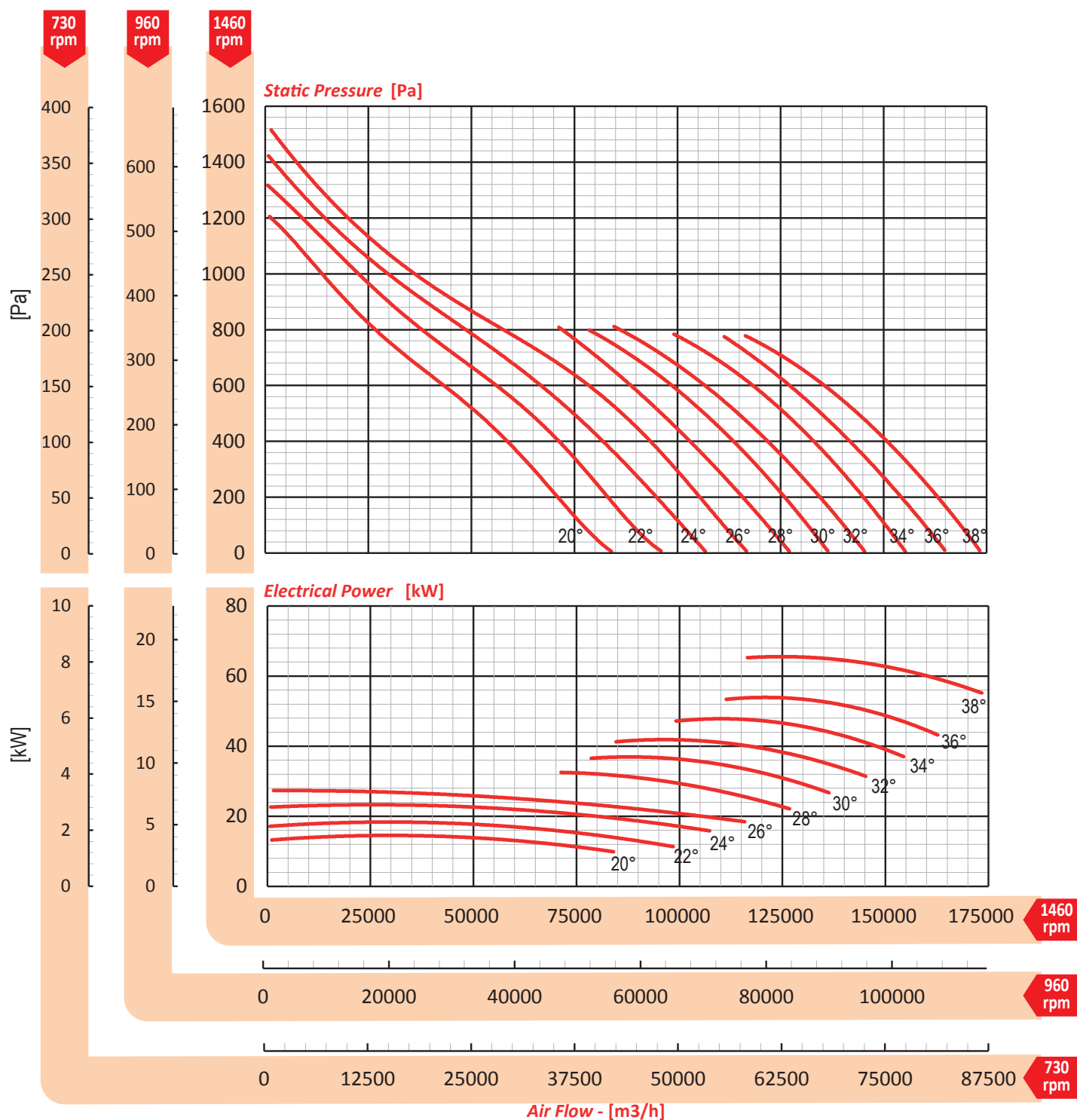
DUCT-M 1400 HT

F400/F300/2h 50Hz

Performances

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 [°]									
	38	36	34	32	30	28	26	24	22	20
730	8,362	6,844	6,140	5,302	4,692	4,145	3,999	3,205	2,315	1,858
960	19,019	15,565	13,963	12,059	10,670	9,427	9,094	7,288	5,265	4,224
1460	66,900	54,751	49,116	42,419	37,534	33,161	31,989	25,637	18,521	14,860

DUCT-M HT

F400/F300/2h 50Hz

Performances

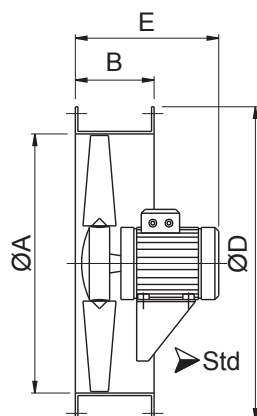
Values shown are for (inlet Lwi or inlet LwiA) sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. For octave band and LwA ratings, round 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 [Lw(A)]

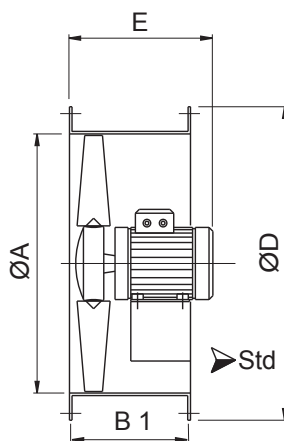
Duct-M	Pitch angle[°]	Values @730 rpm			Values @960 rpm		
		Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]	Q [m3/h]	Ps [Pa]	L _w (A) [dB(A)]
310 6 blades	45	-	-	-	1571	10	67
310 8 blades	45	-	-	-	1362	5	69
350 6 blades	45	-	-	-	2263	13	71
350 8 blades	45	-	-	-	1962	7	73
400 6 blades	20	-	-	-	1335	11	71
400 8 blades	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	-	-	-

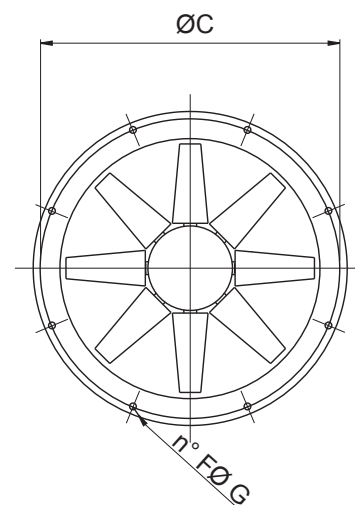
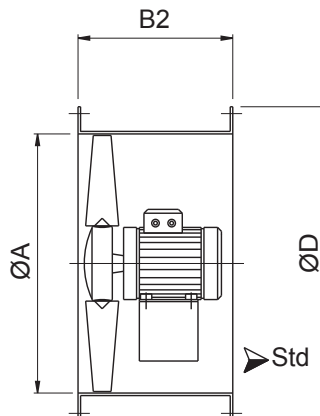
DUCT-Ms ht



DUCT-Mm ht



DUCT-MI ht



Model	A	Mot.(H)	B (Ms)	B1 (Mm)	B2 (MI)	C	D	*E	F	G
31	310	56-63	260	260	400	355	390	250/320	8	10
35	360	56-71	260	260	400	395	430	250/320	8	10
40	410	63-80	260	260	400	450	490	300/380	8	12
45	460	71-80	260	260	450	500	540	350/390	8	12
50	510	71-80	260	260	450	560	595	350/390	12	12
56	570	71-90	260	260	450	620	655	350/390	12	12
63	640	90-100	260	350	500	690	725	400/490	12	12
71	710	90-112	260	350	600	770	805	400/490	16	12
80	810	90-132	350	450	600	860	900	450/610	16	12
90	910	100-132	350	450	700	970	1010	450/690	16	16
100	1010	100-160	-	560	800	1070	1110	700/830	16	16
		180		800	900					
112	1130	132	-	560	800	1190	1230	700/880	20	16
		160-200		800	900					
		225		800	1000					
		250		900	1000					
125	1260	132	-	560	800	1320	1360	700/1000	20	16
		160-200		800	900					
		225-250		800	1000					
		280		900	1150					
140	1400	160-250	-	800	1000	1470	1520	900/1000	20	16
		280		900	1150					

Dimensions in mm

(*) Indicative

