

Axial Flow Fans



A09

Wolter GmbH+Co KG certifies that the series AXV 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 311 and comply with the requirements of the AMCA Certified Ratings Program.

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Subject to change without prior notice.

Axial Flow Fans

Technical information

AXV

Fan type code

AXV-AL 450-7 /26° LH100-2 SU 400°C/2Std

Smoke extract fan
400°C/120min, 300°C/120min
Air flow and form of running
S, D, SU, SO, DU, DO
number of poles
Casing version
SH = Short-cased
LH1 = Long-cased
Pitch angle
AXV: impeller- \varnothing and number of blades 315...1800 - 7, 9, 10, 12, 14
Axial impeller blade type, material



Design features

Types and duty range

Wolter Axial flow fans can be used for various applications in ventilation and process air technology. Standard diameters range from 315 to 1800mm, with airflow rates of up to 304.000 m³/h at static pressure increases of up to 1.300 Pa. Higher pressures can be achieved by using contra-rotating multi-stage fans.

Smoke spill operation

The AXV range of axial fans is designed and tested to operate at standard temperatures as well as at elevated temperatures of 300°C for 60 (F300) and 120 minutes and 400°C for at least 120 minutes (F400), according to DIN EN ISO 12101, part 3. The following fan curves are valid for standard temperatures and 300%/60(120) minutes operation. To select a fan for 400°C/120 minutes operation, please contact our technical support.

Casing

Fan casings are hot-dip galvanised. Flanges are rolled, the pitch circles of holes are in accordance with DIN 24 154, R2.

- > LH - Long-cased axial fan, with external terminal box
- > SH - Short-cased axial fan

If motors require additional lubrication, tubes and grease-nipples are fitted to the outside of the fan casing. An inspection hole, closed by a rubber plug, allows to control the direction of rotation.

Impellers

AXV impellers, hubs and blades are made off pressure-cast aluminium alloy, the aerodynamical profile guarantees high efficiency and low noise levels. The pitch angle is adjustable during standstill. The variable number of blades the expands the performance range.

Motor

Wolter uses closed squirrel cage motors according to IEC 34, if required also in accordance with EPACT. Standard motors are class F with IP 55

protection class. Multi speed versions with 2 or 3 speeds (Dahlander circuit or separate windings) are also available, as well as explosion-proof versions or specific industrial executions such as marine-type fans. The motor bearings have a L 10 life.

Forms of running

Wolter AXV axial flow fans are available for all forms of running. The above chart shows all standard forms of running. Please indicate the required configuration when ordering. Without specific instructions, fans will be delivered in configuration S. Arrows outside the fan casing indicates the correct direction of rotation and airflow.

Fan performance curves

The performance curves for these fan types have been established in mounting position D (according to AMCA 210, installed on the pressure side and suction side) and represent the total pressure increase Δp , as a function of the volume flow. The dynamic pressure p_{d2} refers to the flange cross-sectional area at the of the fan.

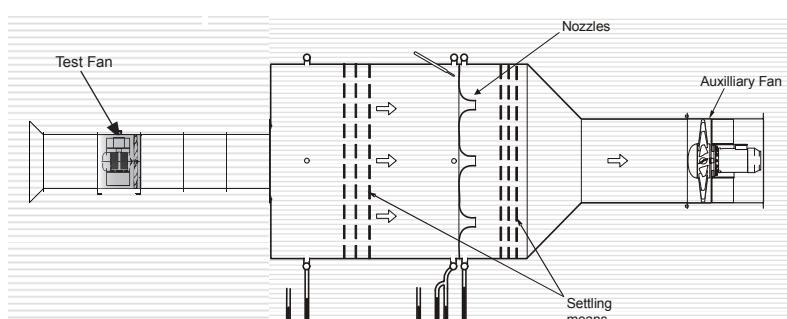
Sound levels

The ascertaining of sound level follows the Recerberant Room Method according to AMCA 300. The A-weighted sound power levels is shown on the performace curves.

Ordering designations

When ordering, please provide the following information:

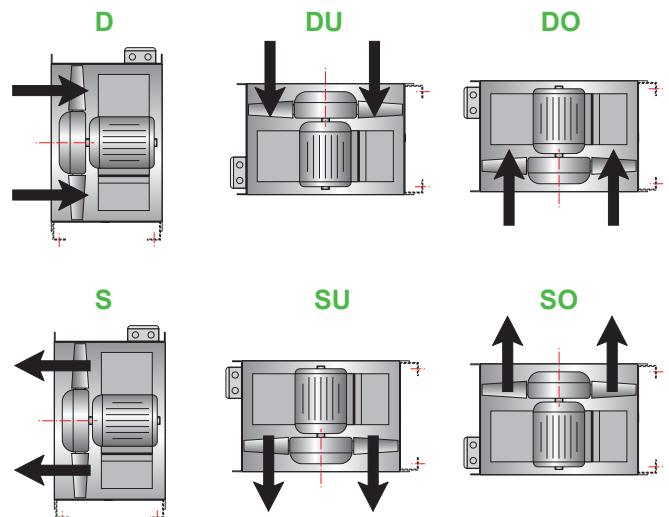
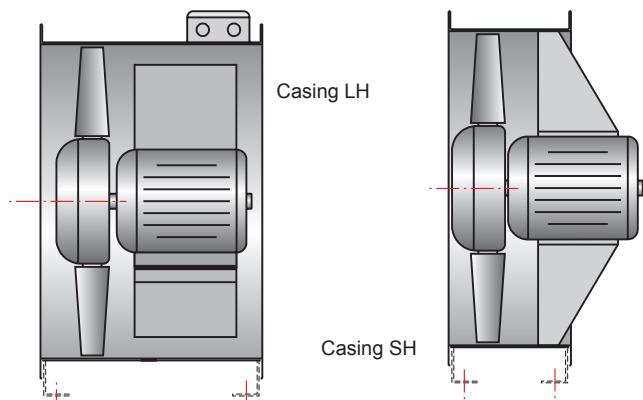
- > fan type code (see opposite page), casing version and form of running
- > duty required at standard air temperature (air volume in m³/h at static pressure in Pa)
- > motor power rating in kW
- > electrical supply
- > required ancillary equipment



AMCA 210 Figure 12
ISO 5801 Figure 73b



AXV



Fan selection and installation

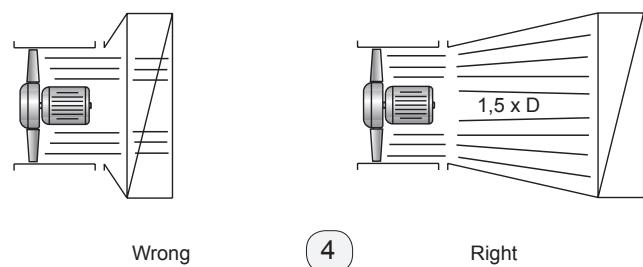
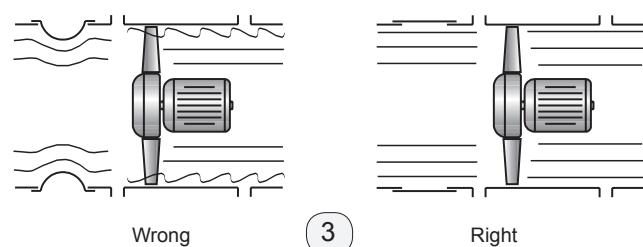
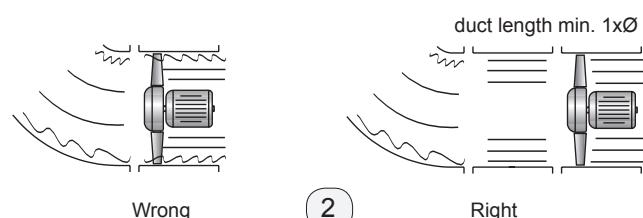
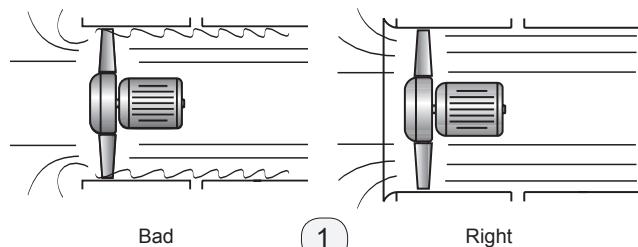
Fan selection

Please select fans according to the nearest performance curve above the required duty point. The middle range of each fan curve is the area of highest efficiency. Do not select fans at the upper end of the fan curve, as this might cause the fan to work in stall. In order to avoid motor overloading, please select motors according to the peak power of the respective performance curve. Please refer to the selection example on the following page.

Fan installation

When installing the fan, please consider the following instructions:

- Fans with free inlet and outlet should be installed with an unobstructed distance of at least $1,5 \times$ fan diameter on suction and pressure sides. Fans should have a bellmouth on the inlet side in order to assure optimal incoming flow. A diffusor mounted on the pressure side will increase efficiency.
- When installing fans in a ducted system, adequate distance to other structural parts such as bends, filters and silencers should be provided for. A sharp bend radius of the duct near the suction or pressure side of the fan is to be avoided. Flexible connections are to be installed in a way that does not obstruct the outlet cross section of the fan (see following page).



Axial Flow Fans

Technical information

AXV

Selection example

Required duty point

- > Volume flow : 5.000 m³/h
- > Static pressure: 110 Pa

In order to calculate the total pressure, please add velocity pressure to static pressure (30 Pa dynamic pressure + 110 Pa static pressure = 140 Pa total pressure)

- > Fan speed: 1.440 1/min (4-pole)

Using the fan curve

Having chosen a fan with adequate performance range for the required duty point, plot volume flow and pressure.

At the point of intersection, the following data can be read:

- > Motor speed or number of poles 1.440 1/min - 4-pole
- > Pitch angle: 18 degrees
- > FEG Rating: FEG71 (see page5)
- > Inlet sound power level: 80 dB(A)

Calculation of motor power:

There are two possibilities to calculate the motor power:

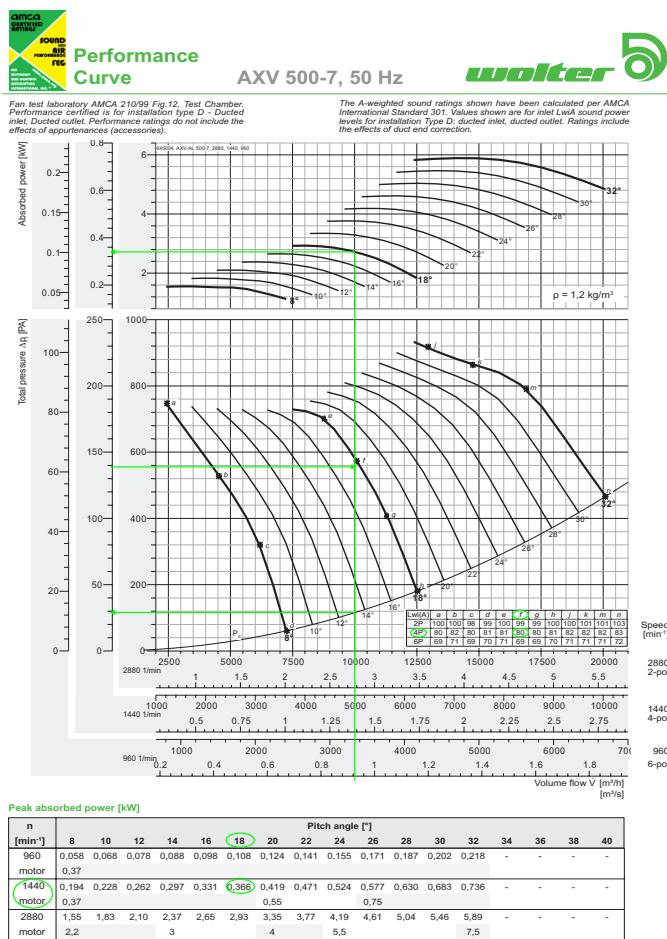
- 1) Calculation of absorbed power by using the fan curve in duty point: 0,338 kW

Motor power: 0,37 kW

- 2) Calculation according to peak absorbed power, see table below the fan curve: 0,366 kW

Motor power: 0,37 kW

The given peak absorbed power is the maximum shaft absorbed power over the whole pitch angle curve in.

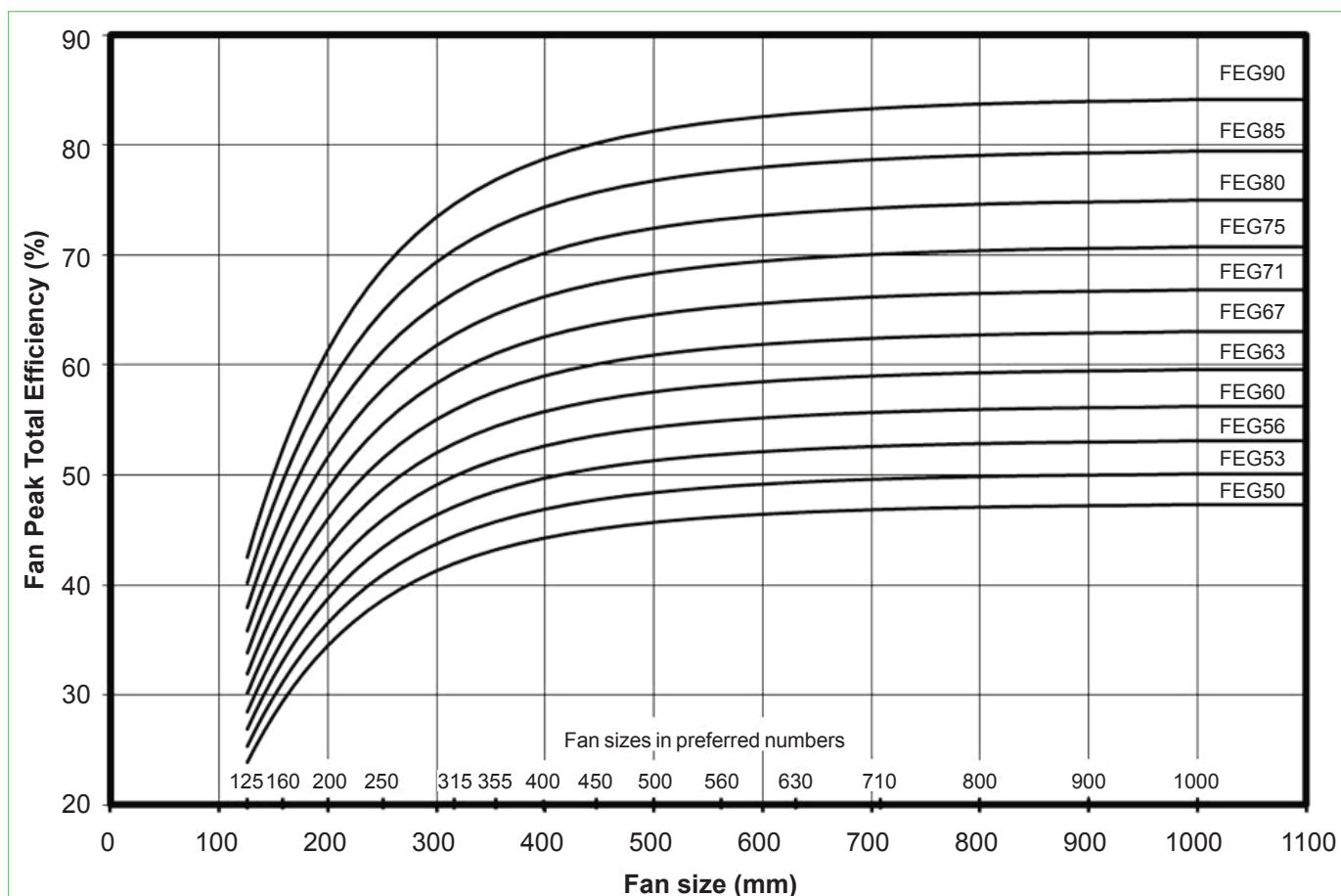




Certified FEGs are determined in accordance with AMCA 205-10 Energy Efficiency Classification for fans. In conjunction with AMCA 211-05 (Rev. 3/11) Certified Ratings Program, Product Rating Manual for Fan Air Performance. This classification is based on fan peak (optimum) total efficiency for a given fan speed, fan size and application category. For the purpose of energy classification, the peak efficiency can be determined at a speed not higher than the maximum design speed of the fan.

The AMCA Certified Ratings Seal applies to the Fan Efficiency Grade (FEG) for AXV series Axial Fan model AXV 315 to AXV 1800 as shown in the table below.

Fan Model No.	Fan Speed (rpm)	Fan Outlet Area (m ²)	Fan Efficiency Grades (FEG)	Fan Model No.	Fan Speed (rpm)	Fan Outlet Area (m ²)	Fan Efficiency Grade(FEG)
AXV 315-7	2880/1440/960	0,0804	FEG50	AXV 800-9	1440/960/720	0,5001	FEG67
AXV 355-7	2880/1440/960	0,1012	FEG63	AXV 900-10	1440/960/720	0,6333	FEG63
AXV 400-7	2880/1440/960	0,1269	FEG67	AXV 1000-10	1440/960/720	0,7980	FEG71
AXV 450-7	2880/1440/960	0,1590	FEG63	AXV 1120-12	1440/960/720	0,9940	FEG63
AXV 500-7	2880/1440/960	0,2003	FEG71	AXV 1250-12	1440/960/720	1,2272	FEG63
AXV 560-9	2880/1440/960	0,2516	FEG67	AXV 1400-12	960/720/576	1,5394	FEG56
AXV 630-9	2880/1440/960	0,3167	FEG63	AXV 1600-12	960/720/576	2,0283	FEG56
AXV 710-9	1440/960/720	0,3982	FEG67	AXV 1800-14	960/720/576	2,5447	FEG56



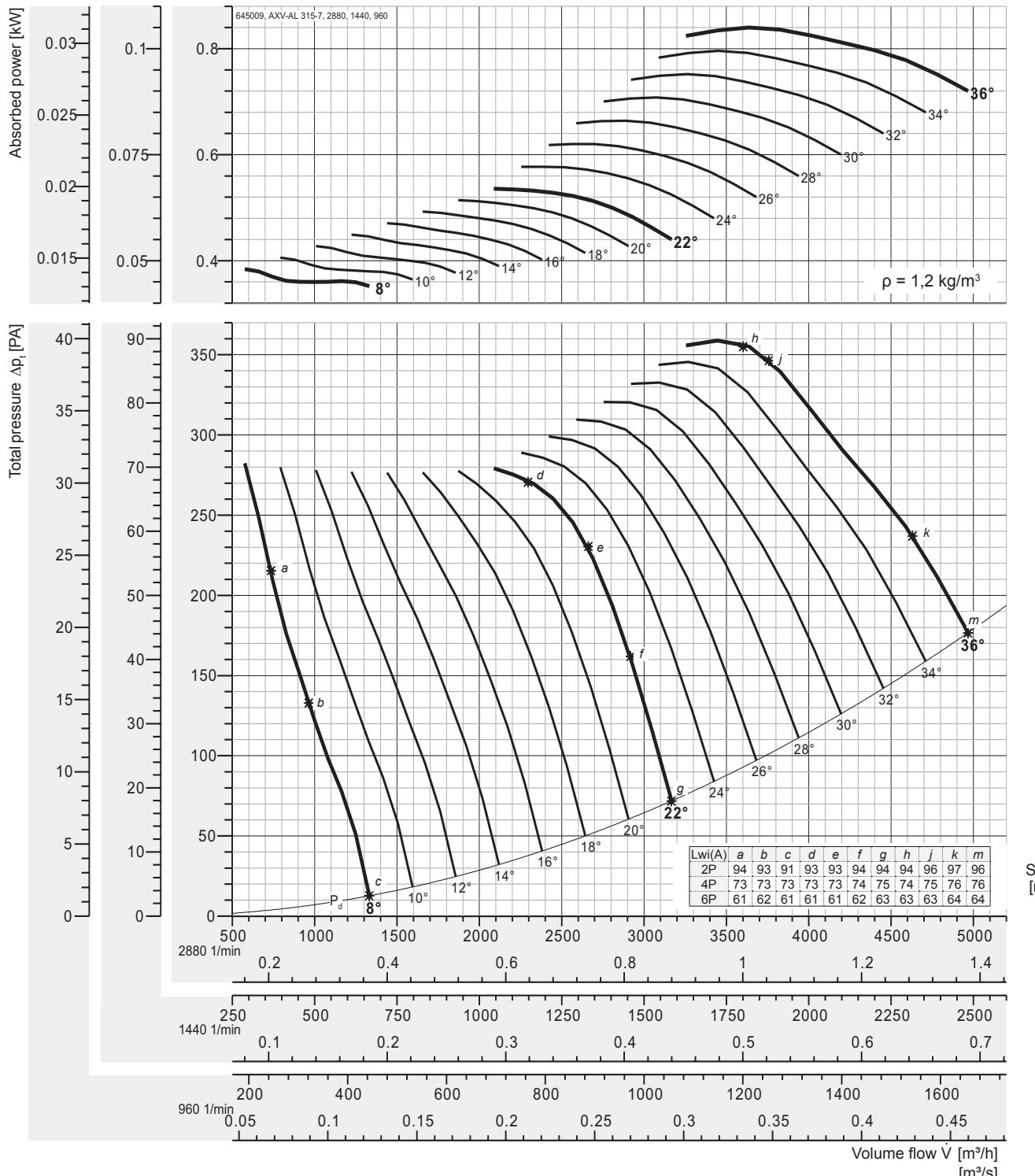
Performance Curve

AXV 315-7, 50 Hz

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Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwiA sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

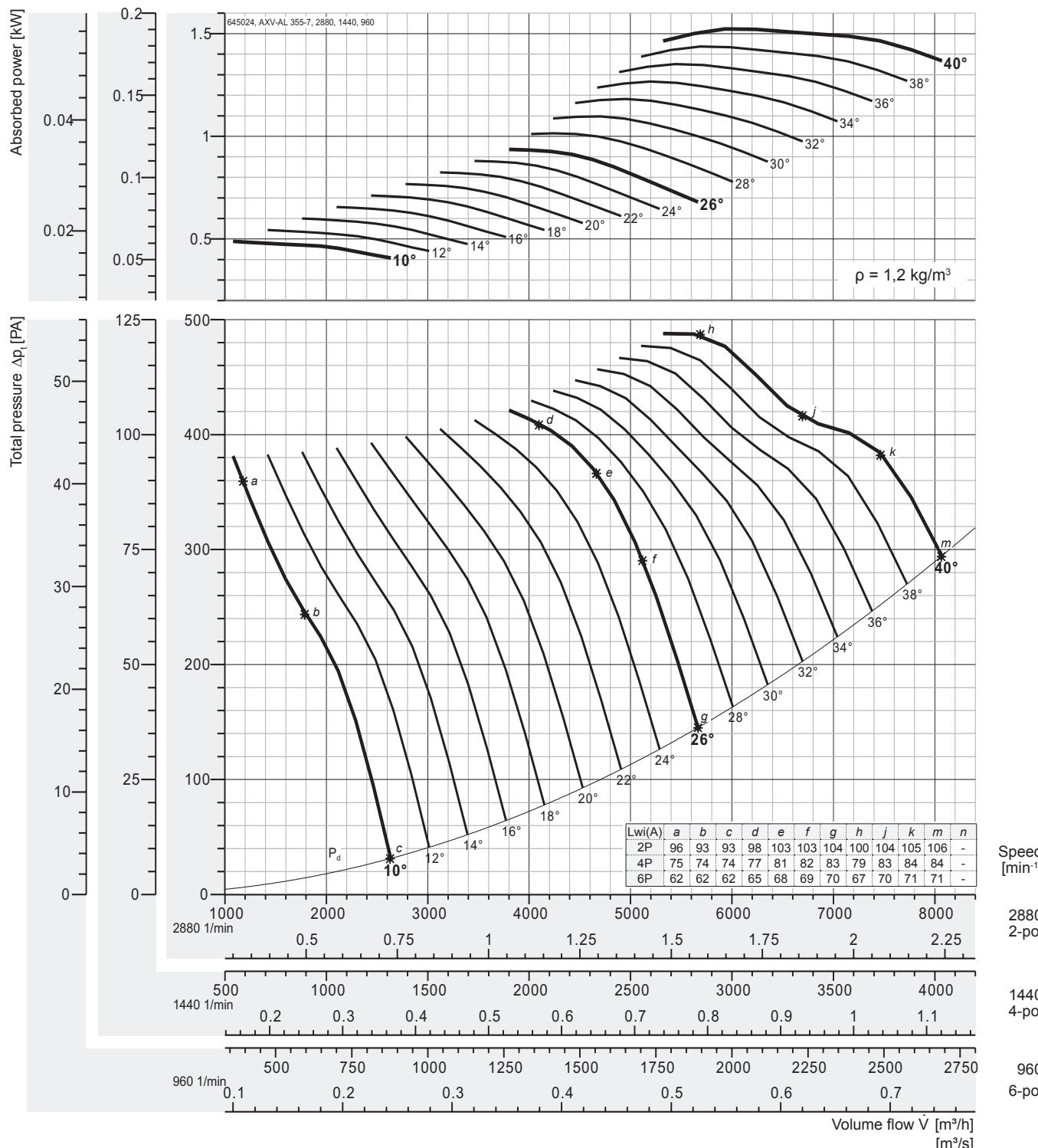


Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
960 motor	0,014	0,015	0,016	0,017	0,017	0,018	0,019	0,020	0,021	0,023	0,025	0,026	0,028	0,029	0,031	-	-
1440 motor	0,048	0,051	0,053	0,056	0,059	0,062	0,064	0,067	0,072	0,078	0,083	0,089	0,094	0,100	0,105	-	-
2880 motor	0,384	0,406	0,427	0,449	0,471	0,493	0,514	0,536	0,577	0,620	0,664	0,708	0,752	0,796	0,840	-	-
										0,75			1,1				

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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Peak absorbed power [kW]

n [min ⁻¹]	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
960 motor	-	0,018	0,020	0,022	0,024	0,026	0,028	0,031	0,033	0,035	0,038	0,041	0,044	0,047	0,050	0,053	0,056
			0,37														
1440 motor	-	0,061	0,068	0,075	0,082	0,089	0,096	0,103	0,110	0,117	0,127	0,137	0,148	0,158	0,169	0,180	0,190
			0,37														
2880 motor	-	0,488	0,544	0,600	0,656	0,712	0,768	0,824	0,880	0,936	1,01	1,10	1,18	1,267	1,352	1,44	1,52
			0,55					1,1						1,5			2,2

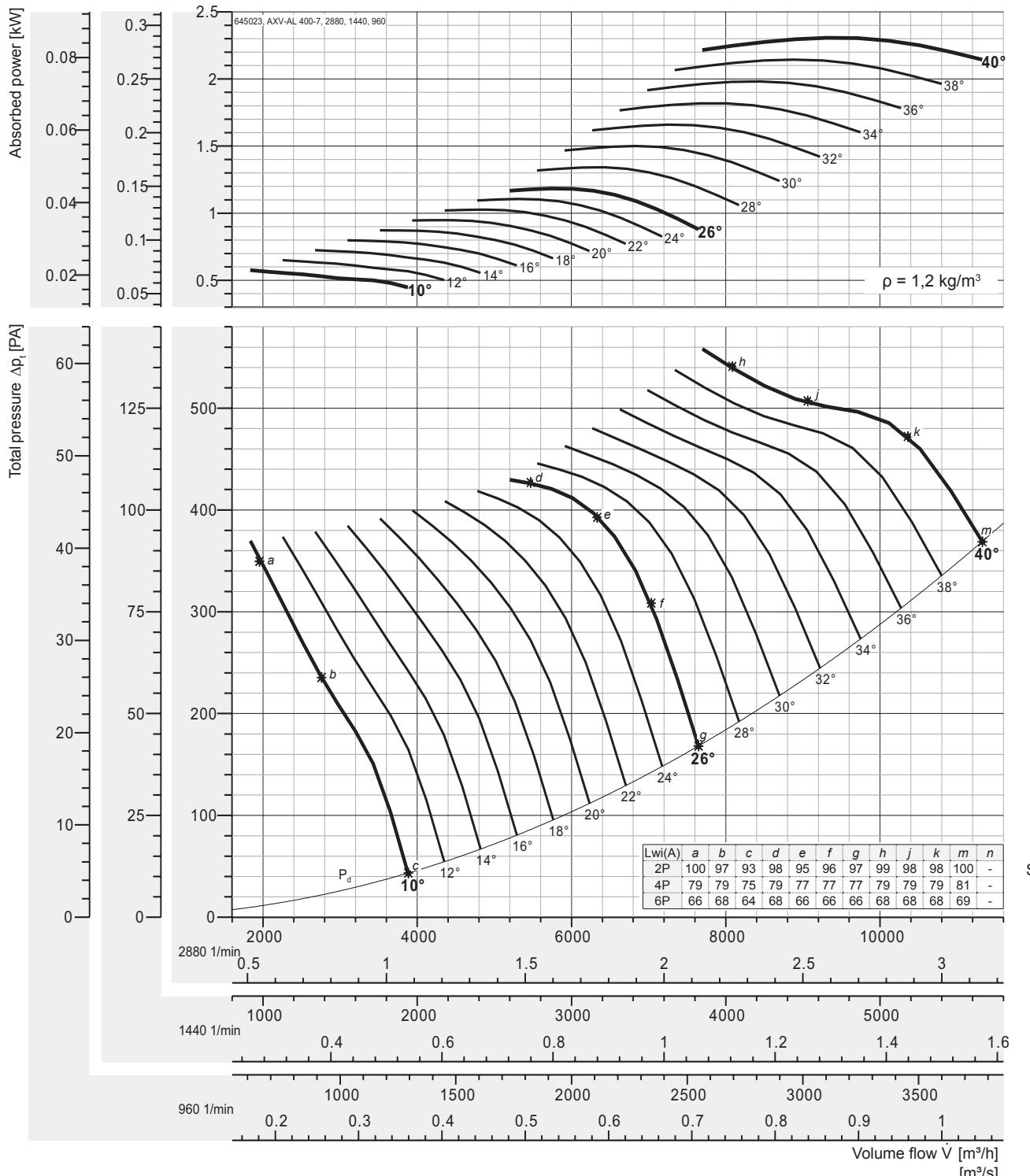
Performance Curve

AXV 400-7, 50 Hz

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Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																	
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
960 motor	-	0,021	0,024	0,027	0,030	0,032	0,035	0,038	0,041	0,044	0,048	0,050	0,056	0,061	0,067	0,073	0,079	0,085
1440 motor	-	0,072	0,081	0,091	0,100	0,109	0,119	0,128	0,138	0,148	0,168	0,188	0,207	0,227	0,248	0,268	0,288	
2880 motor	-	0,576	0,650	0,724	0,798	0,872	0,948	1,03	1,11	1,18	1,34	1,50	1,66	1,82	1,98	2,14	2,31	
		0,75			1,1			1,5			2,2			3				

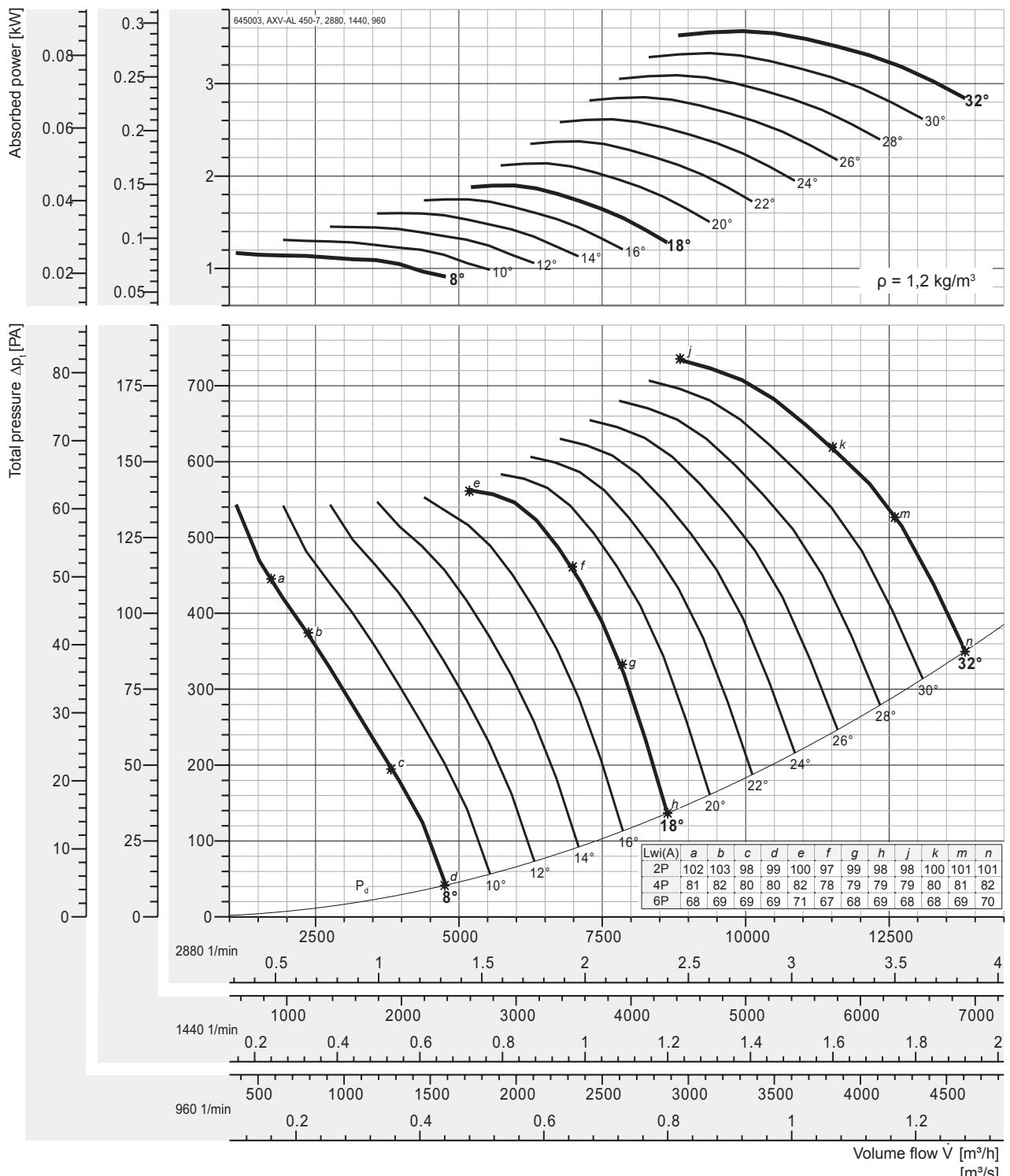
Performance Curve

AXV 450-7, 50 Hz

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Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwiA sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.



Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
960 motor	0,043	0,049	0,054	0,059	0,065	0,070	0,079	0,088	0,097	0,106	0,114	0,123	0,132	-	-	-	-
1440 motor	0,146	0,164	0,182	0,200	0,218	0,237	0,267	0,297	0,327	0,356	0,386	0,416	0,446	-	-	-	-
2880 motor	1,17	1,31	1,45	1,60	1,75	1,90	2,14	2,38	2,61	2,852	3,09	3,33	3,567	-	-	-	-
											3		4				

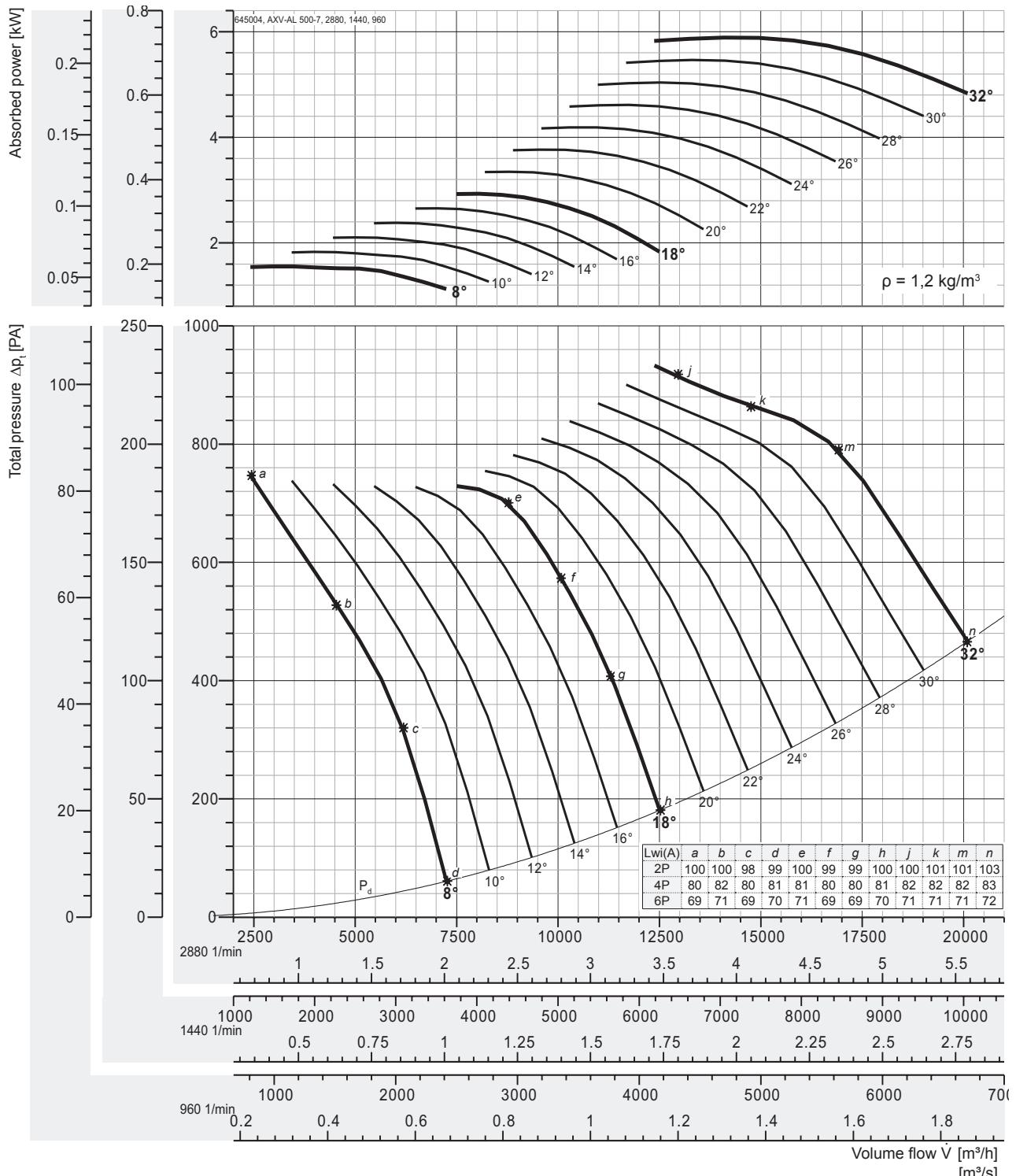
Performance Curve

AXV 500-7, 50 Hz

wolter

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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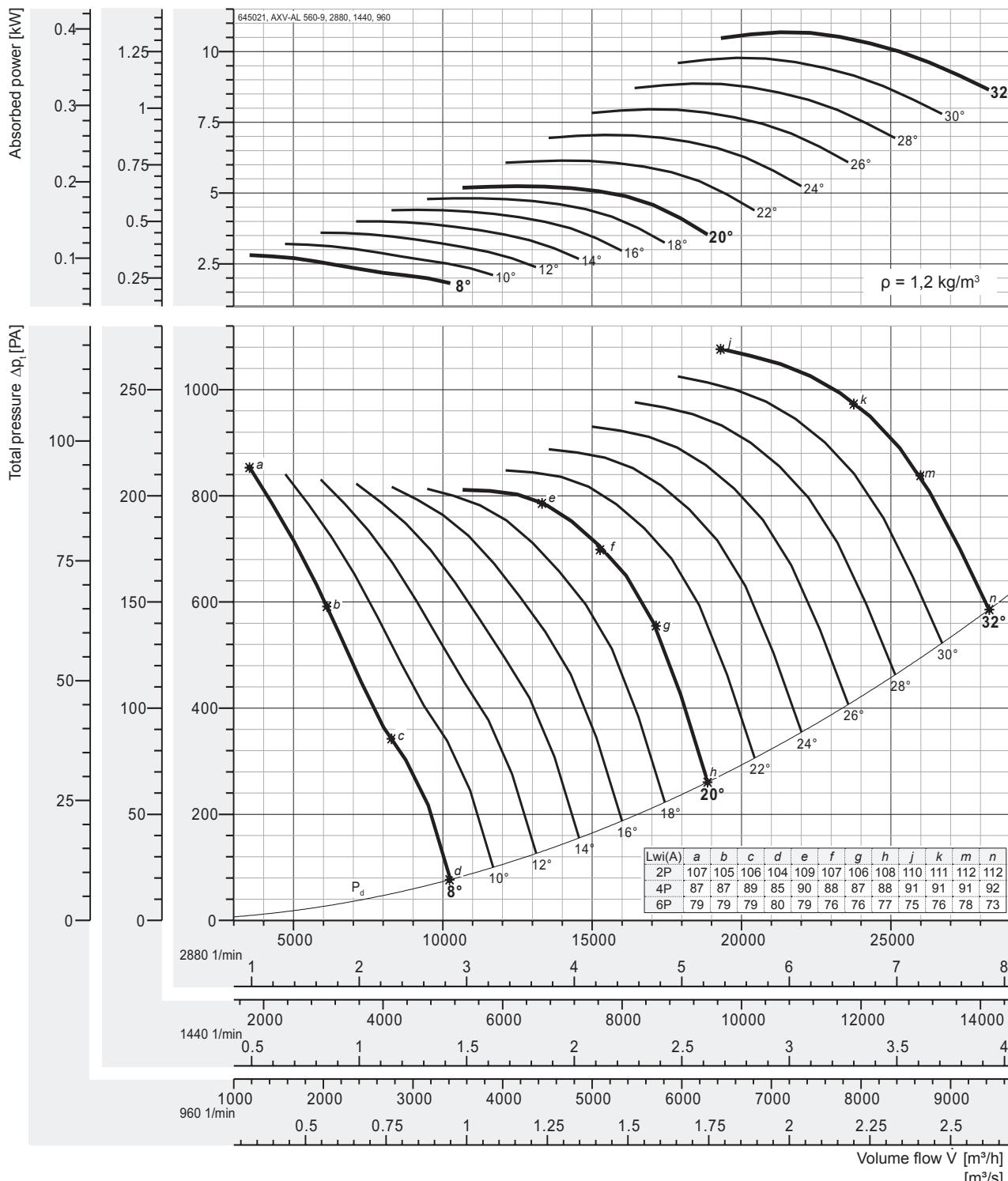


Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
960 motor	0,058	0,068	0,078	0,088	0,098	0,108	0,124	0,141	0,155	0,171	0,187	0,202	0,218	-	-	-	-
1440 motor	0,194	0,228	0,262	0,297	0,331	0,366	0,419	0,471	0,524	0,577	0,630	0,683	0,736	-	-	-	-
2880 motor	1,55	1,83	2,10	2,37	2,65	2,93	3,35	3,77	4,19	4,61	5,04	5,46	5,89	-	-	-	-
					3		4		5,5			7,5					

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
960 motor	0,104	0,119	0,133	0,148	0,163	0,178	0,194	0,228	0,261	0,295	0,329	0,362	0,396	-	-	-	-
	0,37													0,55			
1440 motor	0,351	0,401	0,450	0,500	0,551	0,602	0,655	0,769	0,882	0,995	1,11	1,22	1,34	-	-	-	-
	0,37	0,55			0,75			1,1			1,5						
2880 motor	2,81	3,21	3,60	4,01	4,41	4,82	5,24	6,15	7,06	7,96	8,87	9,78	10,7	-	-	-	-
	3	4		5,5			7,5			11							

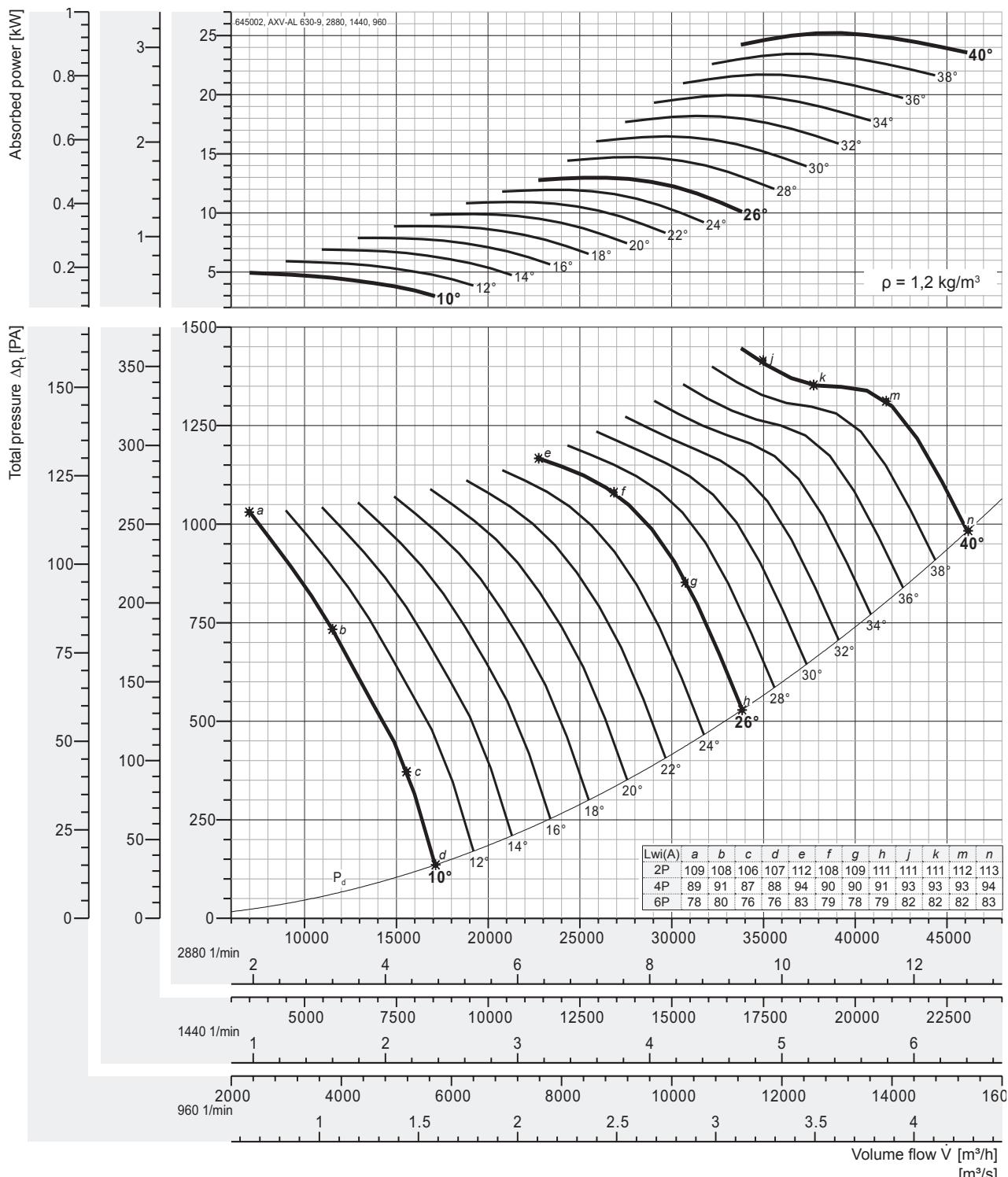
Performance Curve

AXV 630-9, 50 Hz

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Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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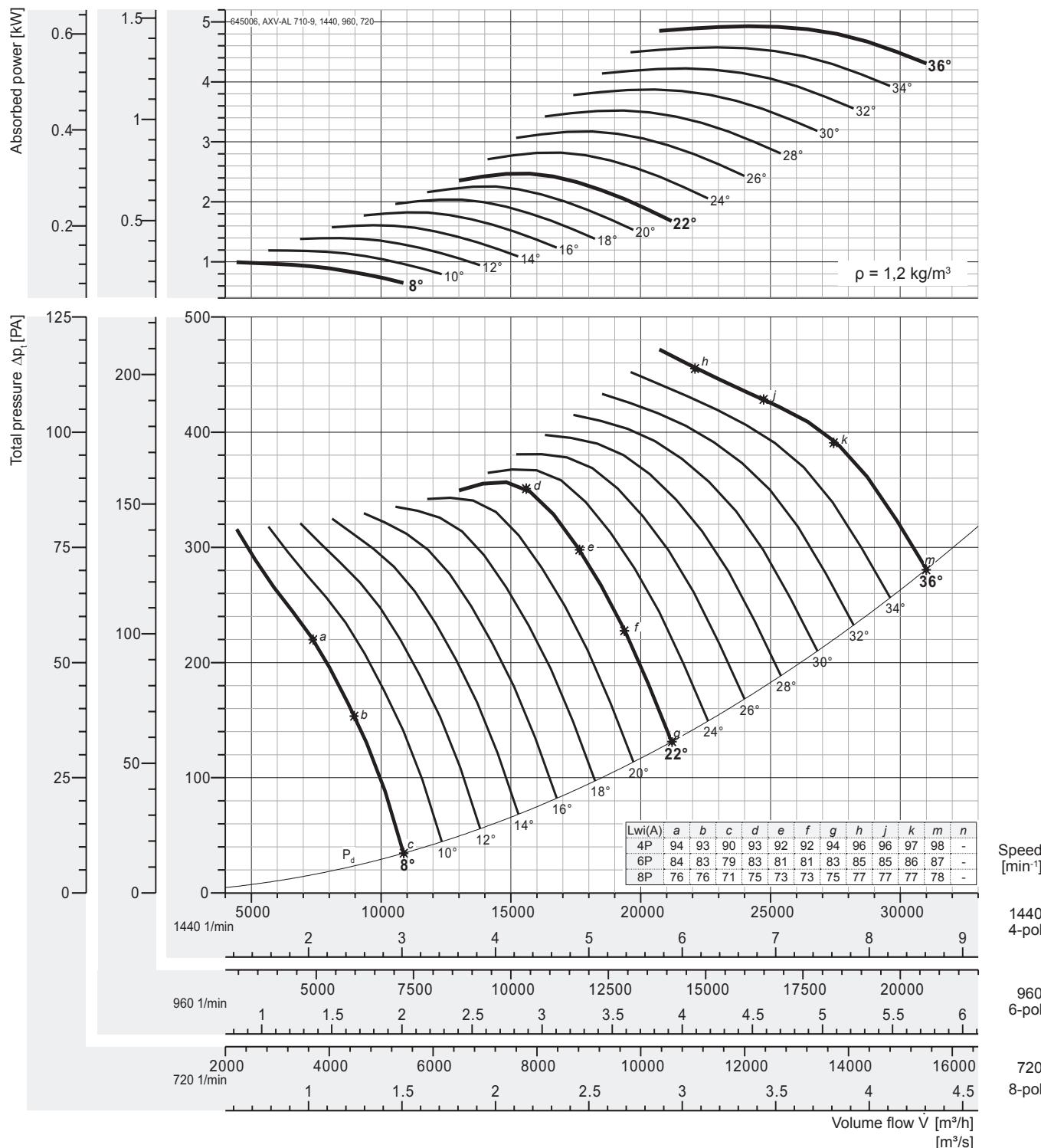


Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
960	-	0,183	0,219	0,256	0,292	0,329	0,367	0,405	0,443	0,481	0,545	0,610	0,675	0,739	0,804	0,868	0,934
motor		0,37						0,55				0,75			1,1		
1440	-	0,618	0,741	0,863	0,986	1,11	1,24	1,37	1,49	1,62	1,84	2,06	2,28	2,50	2,71	2,93	3,15
motor		0,75		1,1		1,5				2,2		3			4		
2880	-	4,94	5,92	6,90	7,88	8,88	9,90	10,9	12,0	13,0	14,7	16,5	18,2	20,0	21,7	23,4	25,2
motor		5,5	7,5		11			15			18,5		22		30		

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720 motor	0,125	0,149	0,175	0,201	0,228	0,255	0,282	0,309	0,335	0,397	0,440	0,484	0,528	0,572	0,616	-	-
	0,37									0,55				0,75			
960 motor	0,295	0,353	0,414	0,477	0,541	0,604	0,668	0,732	0,836	0,940	1,04	1,15	1,25	1,36	1,46	-	-
	0,37		0,55			0,75			1,1			1,5					
1440 motor	0,996	1,19	1,40	1,61	1,83	2,04	2,26	2,47	2,82	3,17	3,52	3,87	4,22	4,58	4,93	-	-
	1,1	1,5		2,2		3			4			5,5					

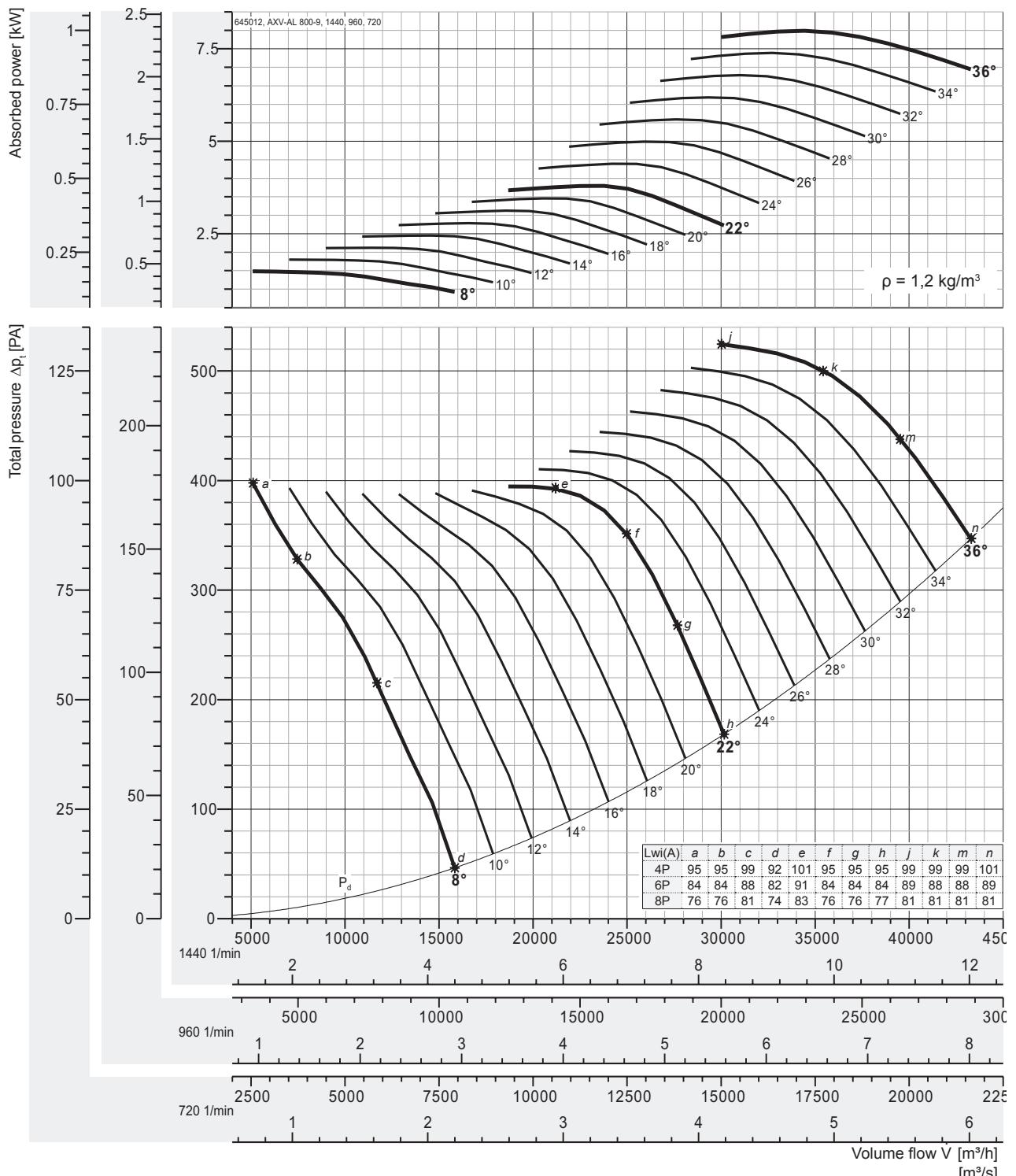
Performance Curve

AXV 800-9, 50 Hz

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Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

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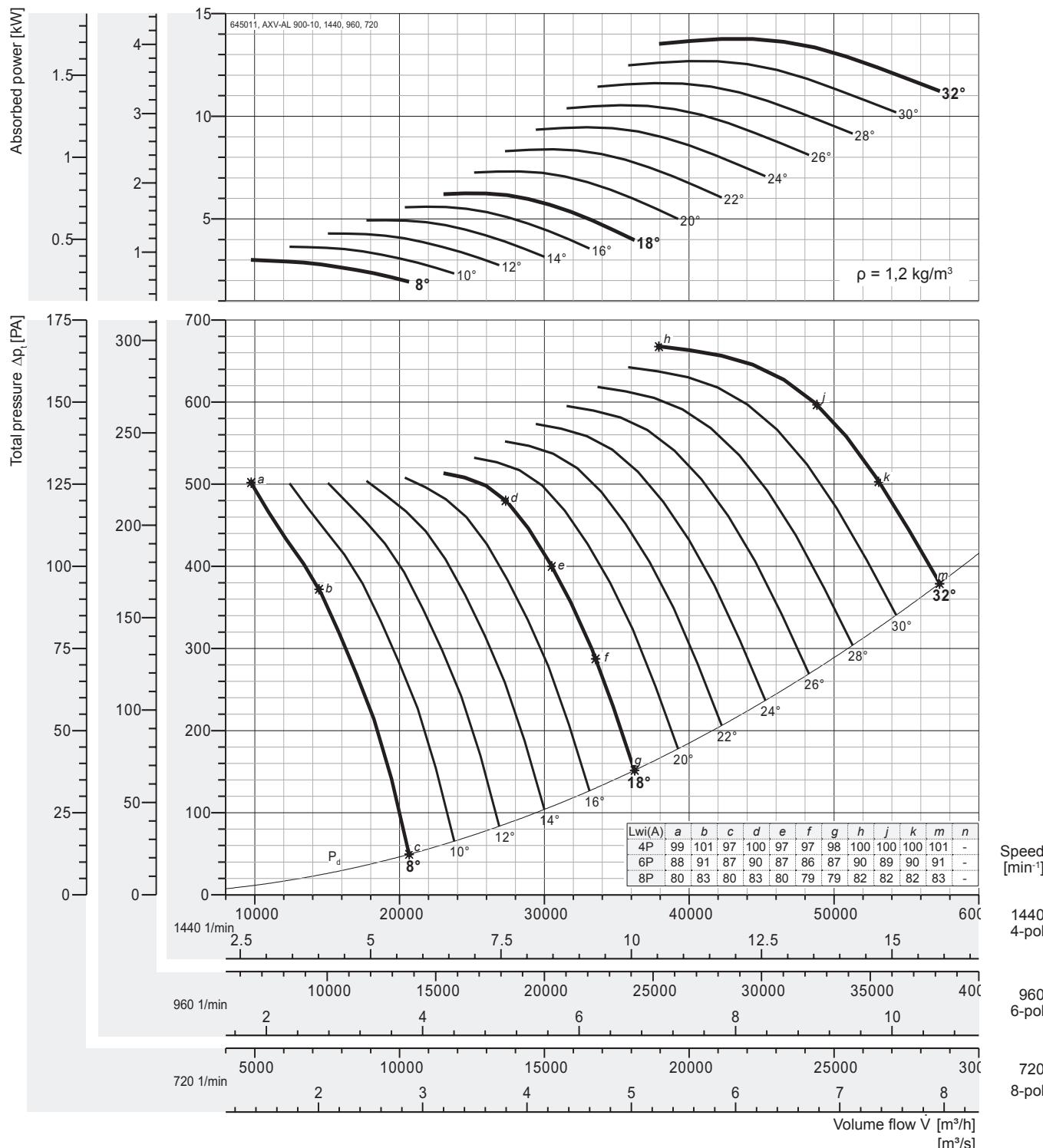


Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720 motor	0,186	0,225	0,265	0,306	0,348	0,390	0,432	0,474	0,549	0,624	0,699	0,774	0,849	0,924	0,999	-	-
960 motor	0,440	0,533	0,628	0,726	0,825	0,925	1,02	1,12	1,30	1,48	1,66	1,83	2,01	2,19	2,37	-	-
1440 motor	1,49	1,80	2,12	2,45	2,79	3,12	3,46	3,79	4,39	4,99	5,59	6,19	6,79	7,39	7,99	-	-
	1,5	2,2	3	4				5,5		7,5				11			

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwiA sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.



Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720 motor	0,376	0,456	0,536	0,617	0,699	0,780	0,914	1,05	1,18	1,32	1,45	1,59	1,72	-	-	-	-
960 motor	0,55		0,75		1,1				1,5			2,2					
1440 motor	0,891	1,08	1,27	1,46	1,66	1,85	2,17	2,49	2,80	3,12	3,44	3,76	4,08	-	-	-	-
	1,1		1,5		2,2			3		4		5,5					
1440 motor	3,01	3,64	4,30	4,93	5,59	6,24	7,31	8,39	9,46	10,5	11,6	12,7	13,8	-	-	-	-
	4		5,5		7,5			11			15						

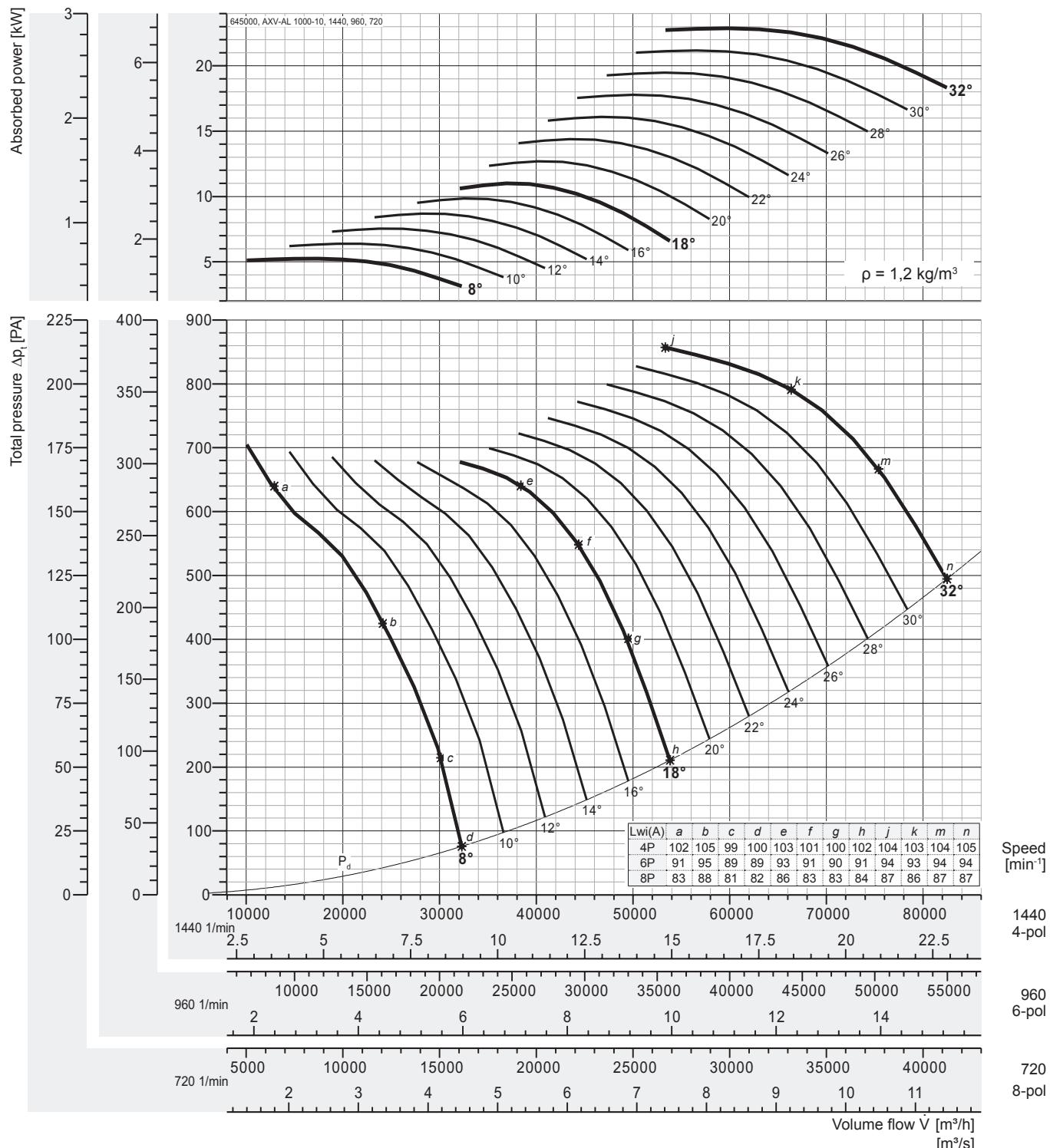
Performance Curve

AXV 1000-10, 50 Hz

wolter

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wiA} sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

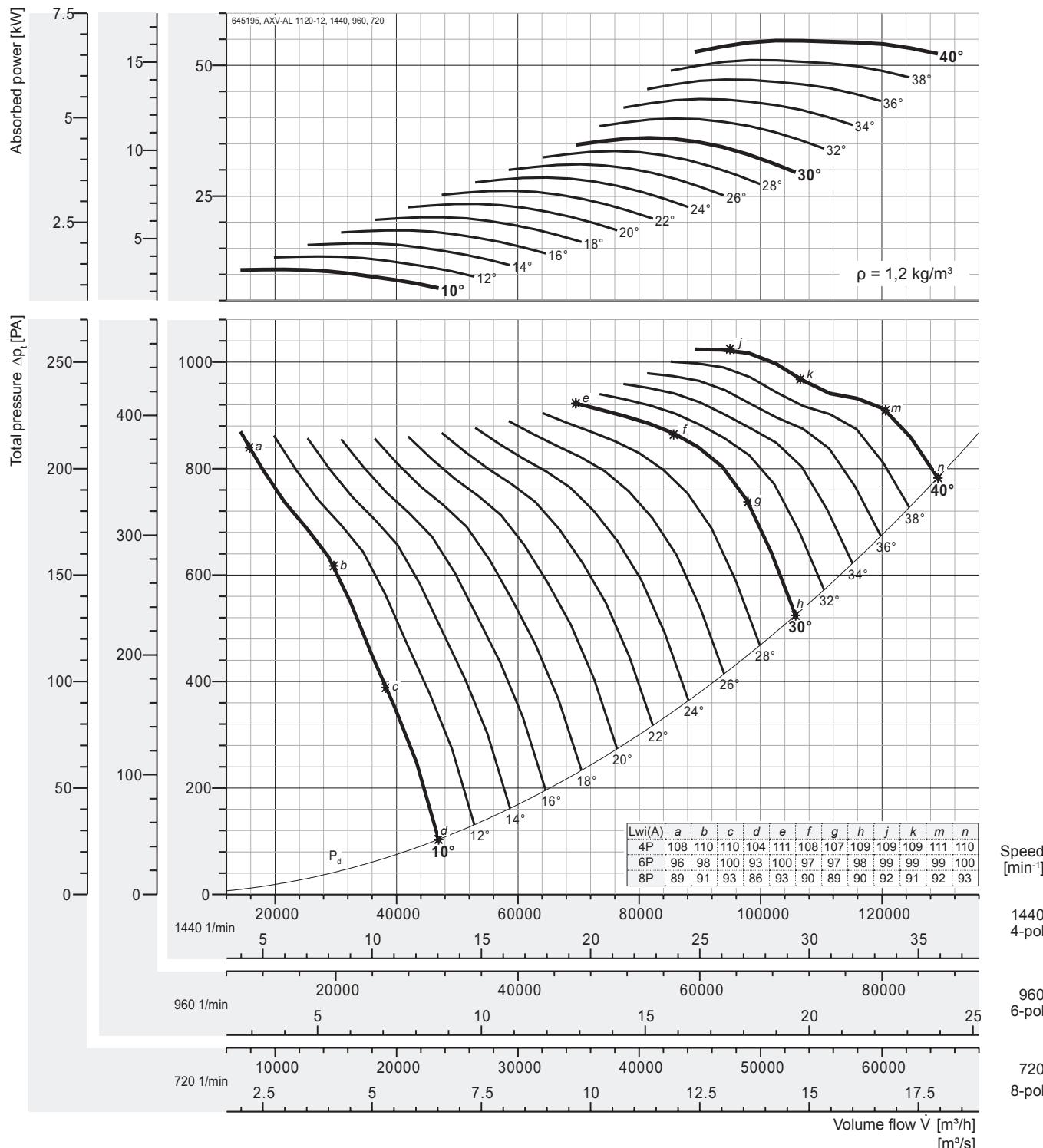


Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720	0,654	0,798	0,942	1,09	1,23	1,38	1,59	1,80	2,01	2,22	2,44	2,65	2,86	-	-	-	-
motor	0,75	1,1			1,5		2,2			3							
960	1,55	1,89	2,23	2,58	2,92	3,26	3,76	4,26	4,77	5,27	5,77	6,27	6,78	-	-	-	-
motor	2,2		3			4		5,5		7,5							
1440	5,23	6,38	7,54	8,69	9,85	11,0	12,7	14,4	16,1	17,8	19,5	21,2	22,9	-	-	-	-
motor	5,5	7,5	11		15		18,5		22		30						

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet LwiA sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.



Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720 motor	-	1,37	1,68	1,99	2,31	2,62	2,94	3,25	3,57	3,89	4,20	4,52	4,98	5,45	5,92	6,38	6,85
	1,5	2,2		3				4			5,5				7,5		
960 motor	-	3,24	3,99	4,73	5,47	6,21	6,96	7,71	8,46	9,21	9,96	10,7	11,8	12,9	14,0	15,1	16,2
	4		5,5		7,5		11					15			18,5		
1440 motor	-	11,0	13,5	16,0	18,5	21,0	23,5	26,0	28,6	31,1	33,6	36,1	39,9	43,6	47,3	51,0	54,8
	11	15	18,5	22		30			37		45		55				

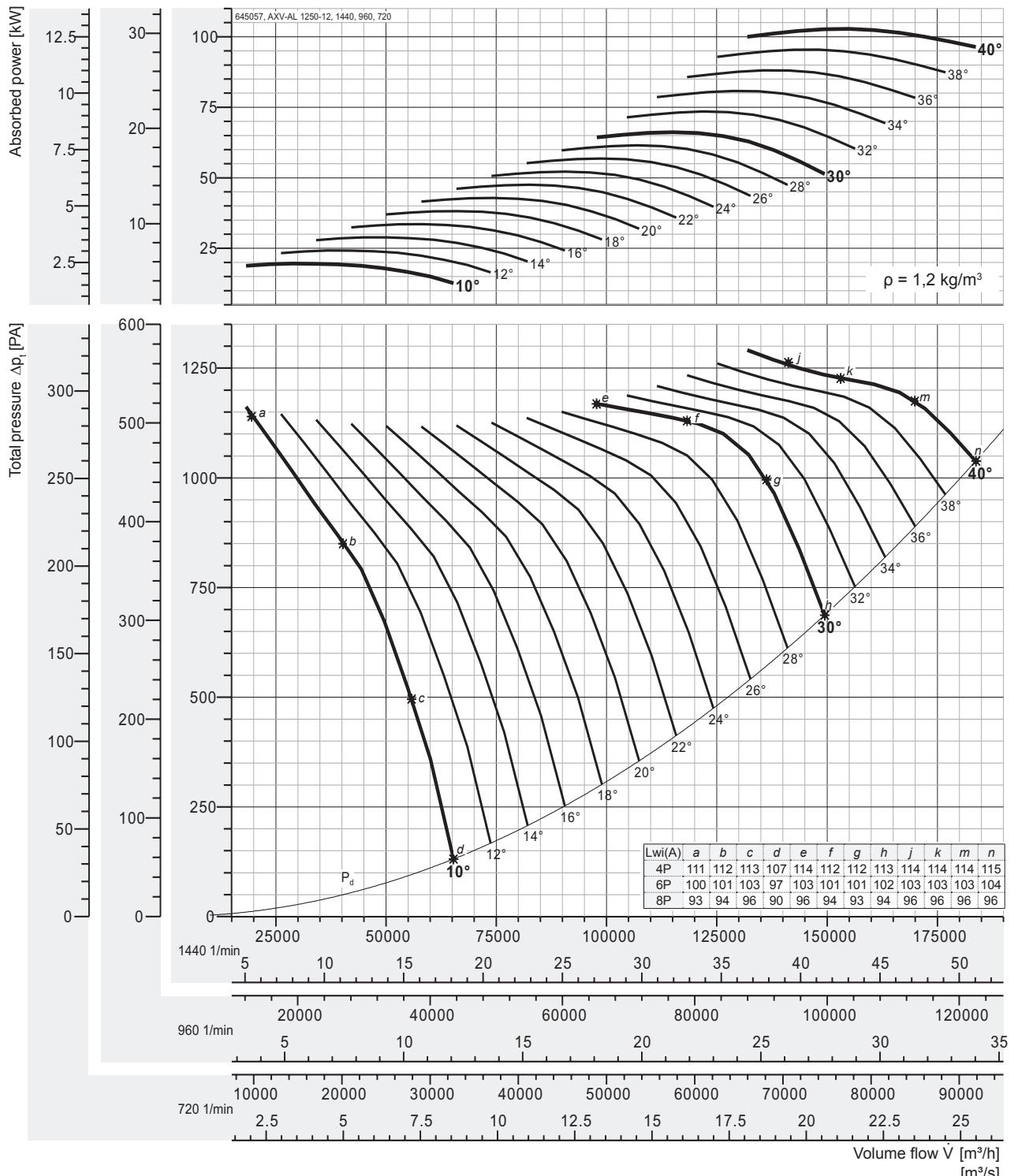
Performance Curve

AXV 1250-12, 50 Hz

wolter

Fan test laboratory AMCA 210/99 Fig.12, Test Chamber. Performance certified is for installation type D - Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet L_{wiA} sound power levels for installation Type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

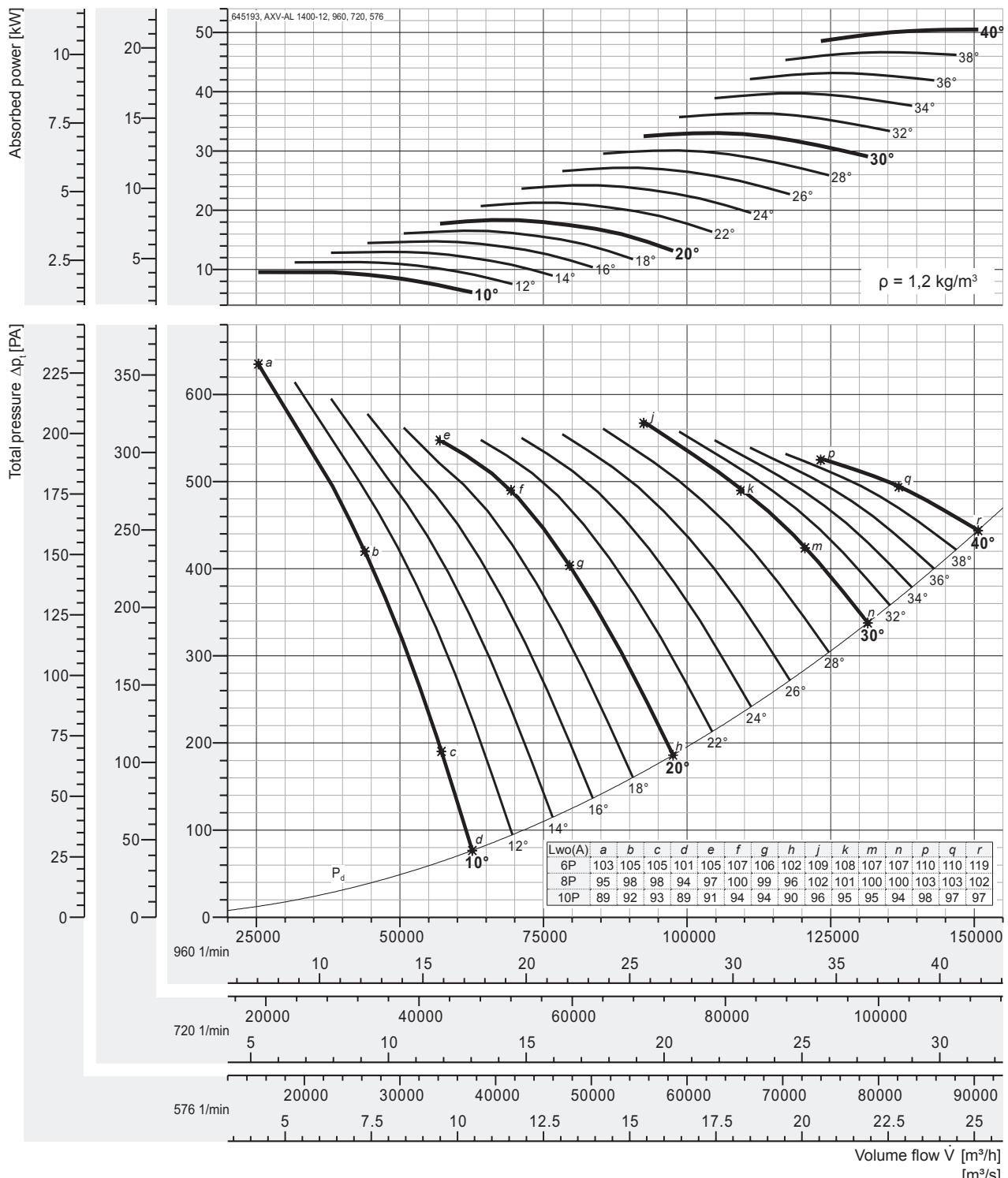


Peak absorbed power [kW]

n [min⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
720	-	2,45	3,03	3,61	4,19	4,78	5,36	5,94	6,52	7,11	7,69	8,27	9,18	10,1	11,0	11,9	12,8
motor		3	4		5,5			7,5			11				15		
960	-	5,81	7,18	8,55	9,94	11,3	12,7	14,1	15,5	16,8	18,2	19,6	21,8	23,9	26,1	28,3	30,5
motor		7,5		11		15			18,5		22		30			37	
1440	-	19,6	24,2	28,9	33,5	38,2	42,9	47,5	52,2	56,9	61,5	66,2	73,5	80,8	88,1	95,4	102,8
motor		22	30		37	45		55		75			90		110		

Fan test laboratory AMCA 210/99 Fig.15, Test Chamber. Performance certified is for installation type A - Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for outlet LwoA sound power levels for installation Type A: free inlet, free outlet.



Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
576 motor	-	2,06	2,43	2,80	3,19	3,58	3,96	4,60	5,23	5,87	6,50	7,14	7,86	8,58	9,32	10,1	10,9
		2,2	3		4			5,5		7,5		11					
720 motor	-	4,03	4,75	5,47	6,23	6,98	7,74	8,98	10,2	11,5	12,7	13,9	15,3	16,8	18,2	19,7	21,3
		5,5			7,5		11			15		18,5				22	
960 motor	-	9,55	11,3	13,0	14,8	16,6	18,4	21,3	24,2	27,2	30,1	33,0	36,4	39,7	43,2	46,7	50,5
		11	15		18,5		22	30		37		45		55			

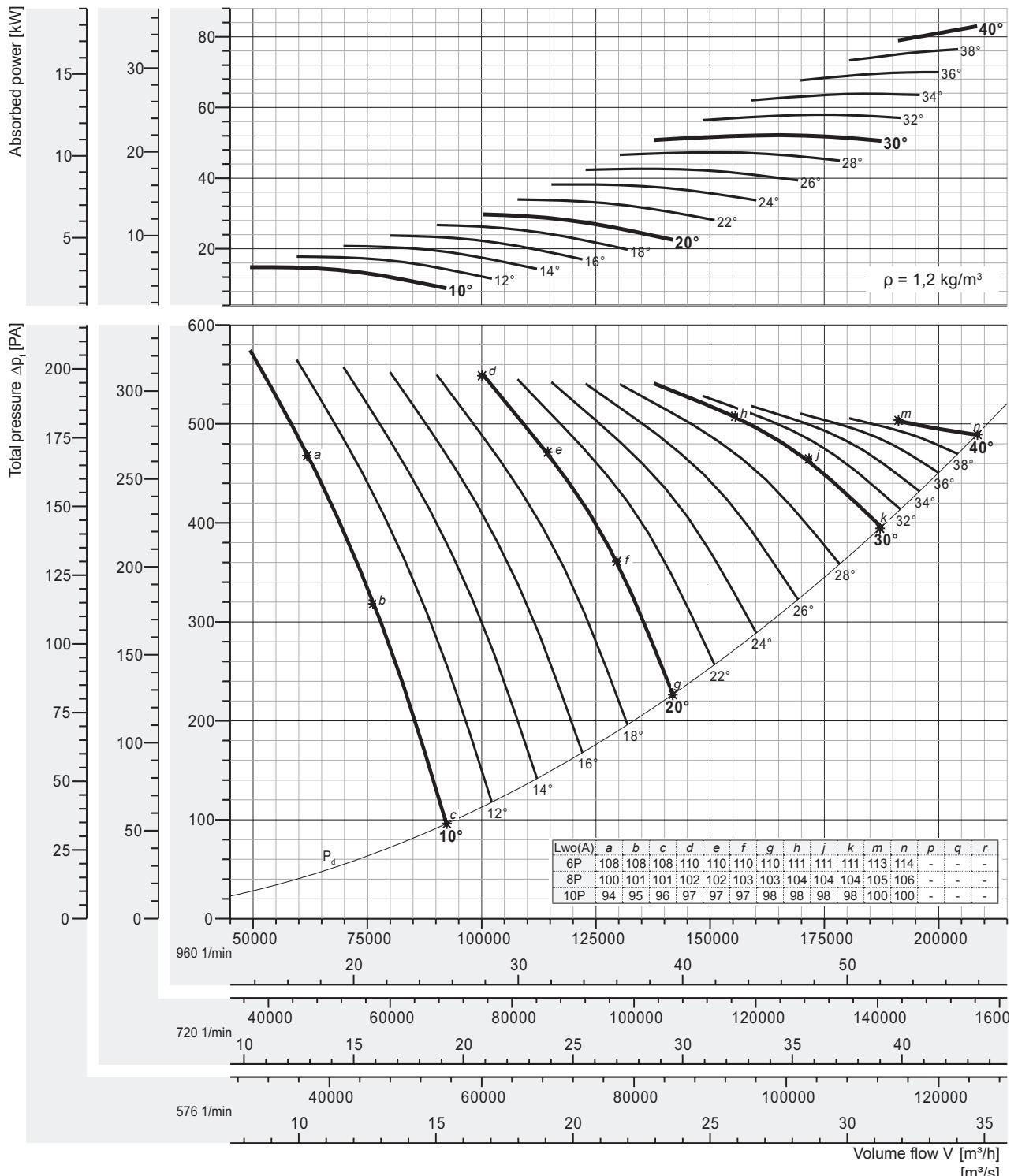
Performance Curve

AXV 1600-12, 50 Hz

wolter

Fan test laboratory AMCA 210/99 Fig.15, Test Chamber. Performance certified is for installation type A - Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for outlet L_{WA} sound power levels for installation Type A: free inlet, free outlet.

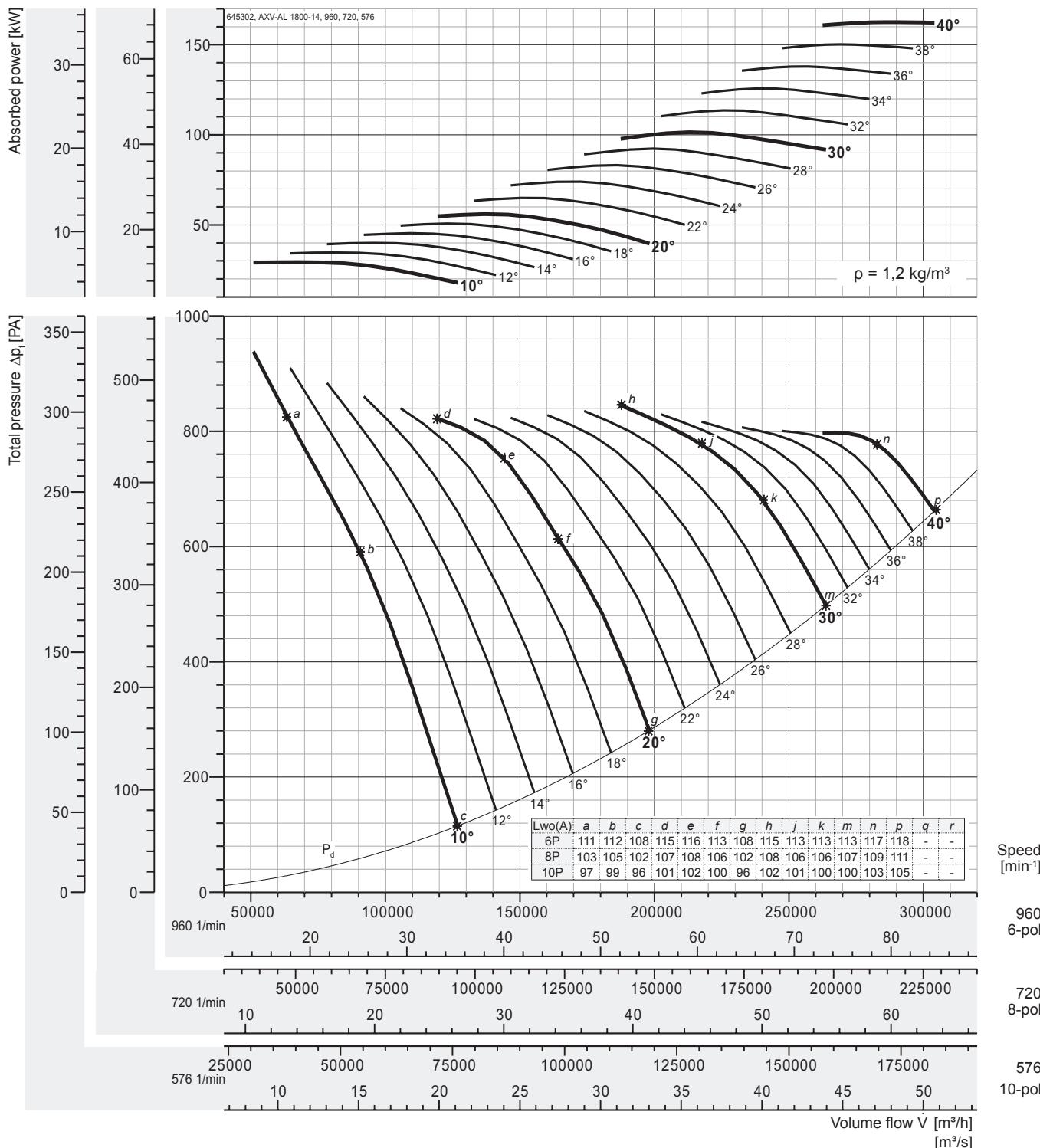


Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
576 motor	-	3,20	3,85	4,49	5,14	5,78	6,43	7,34	8,25	9,21	10,2	11,3	12,5	13,8	15,1	16,5	17,9
		4	5,5			7,5			11			15			18,5		
720 motor	-	6,25	7,51	8,77	10,0	11,3	12,6	14,3	16,1	18,0	20,0	22,0	24,4	26,9	29,5	32,3	35,0
		7,5	11			15			18,5		22	30			37		
960 motor	-	14,8	17,8	20,8	23,8	26,8	29,8	34,0	38,2	42,6	47,3	52,1	57,9	63,9	70,0	76,5	83,0
		18,5	22		30			37	45		55		75			90	

Fan test laboratory AMCA 210/99 Fig.15, Test Chamber. Performance certified is for installation type A - Free inlet, Free outlet. Performance ratings do not include the effects of appurtenances (accessories).

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for outlet LwoA sound power levels for installation Type A: free inlet, free outlet.



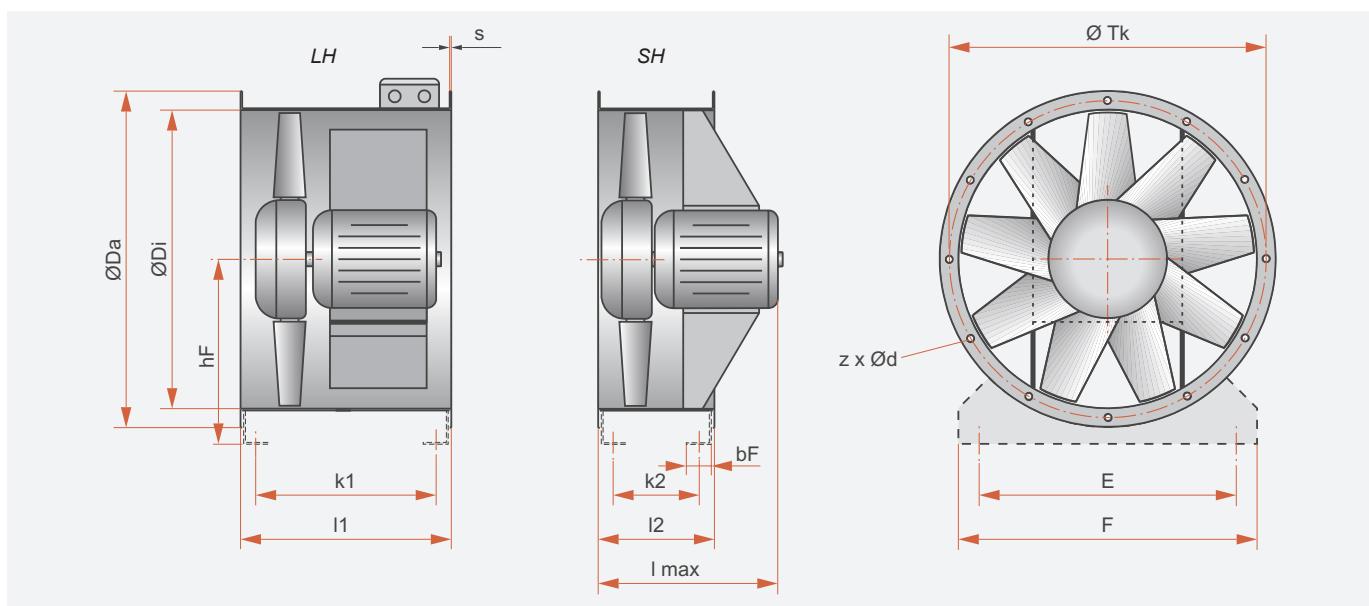
Peak absorbed power [kW]

n [min ⁻¹]	Pitch angle [°]																
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
576 motor	-	6,33	7,49	8,64	9,80	11,0	12,1	14,0	16,0	18,0	19,9	21,9	24,5	27,2	29,8	32,4	35,1
		7,5	11				15		18,5		22		30		37		
720 motor	-	12,4	14,6	16,9	19,1	21,4	23,6	27,4	31,2	35,1	38,9	42,8	47,9	53,0	58,2	63,4	68,6
		15		18,5	22		30		37		45		55		75		
960 motor	-	29,3	34,7	40,0	45,4	50,7	56,1	65,0	74,0	83,2	92,3	101,5	113,6	125,7	137,9	150,2	162,6
		37		45	55		75		90	110		132		160		200	

Axial Flow Fans

AXV

Dimensions



Model size	Da [mm]	Di [mm]	hF [mm]	z x d [mm]	Tk [mm]	E [mm]	F [mm]	bF [mm]
315	398	320	205	8 x 12	366	265	315	60
355	438	359	225	8 x 12	405	305	355	60
400	484	401	250	12 x 12	448	350	400	60
450	534	450	280	12 x 12	497	400	450	60
500	584	504	315	12 x 12	551	440	500	70
560	664	565	345	16 x 14	629	500	560	70
630	734	634	400	16 x 14	698	570	630	70
710	814	711	450	16 x 14	775	650	710	70
800	904	797	500	12* x 14	861	730	800	80
900	1004	894	580	12* x 14	958	830	900	80
1000	1105	1003	630	12* x 14	1067	930	990	80
1120	1245	1125	690	16* x 18	1200	1050	1110	100
1250	1370	1250	750	16* x 18	1337	1180	1240	100
1400	1525	1405	830	16* x 18	1475	1330	1390	100
1600	1725	1605	930	20* x 18	1675	1530	1590	100
1800	1950	1810	1120	20* x 18	1900	1660	1800	100

Model size	LH/1				LH/2				SH			
	s [mm]	k1 [mm]	l1 [mm]	motor max.	s [mm]	k1 [mm]	l1 [mm]	motor max.	s [mm]	k2 [mm]	l2 [mm]	lmax [mm]
315	2	356	420	80					2	161	225	350
355	2	356	420	80					2	161	225	350
400	2	371	435	90					2	161	225	400
450	2	371	435	112					2	161	225	500
500	2	396	470	112					2	151	225	600
560	2	396	470	112	3	624	700	160	3	224	300	750
630	2	396	470	112	3	624	700	160	3	224	300	750
710	2,5	395	470	112	2,5	490	565	132	2,5	225	300	600
800	2,5	385	470	112	3	614	700	160	3	214	300	750
900	3	479	565	132	4	612	700	160	4	212	300	750
1000	3	479	565	132	4	692	780	180	4	262	350	800
1120	4	592	700	160	4	892	1000	200	4	242	350	800
1250	4	592	700	160	4	892	1000	225	4	242	350	800
1400					4	892	1000	225	4	242	350	800
1600					4	892	1000	280	4	242	350	800
1800					4	1290	1400	315	4			



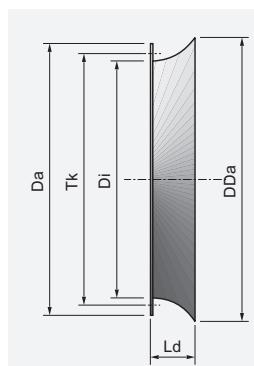
SH



LH

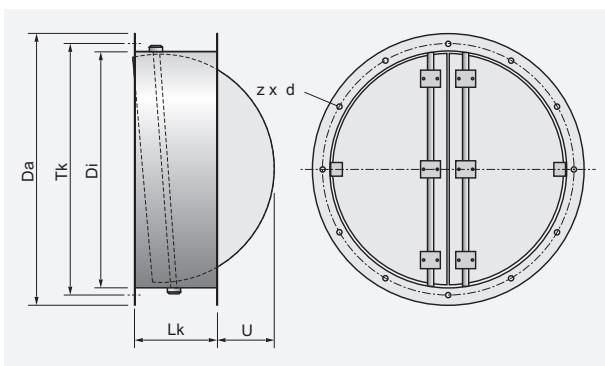
ED

Bellmouth inlet



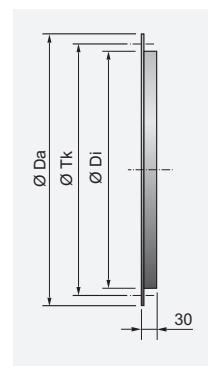
LRK

Air-operated damper



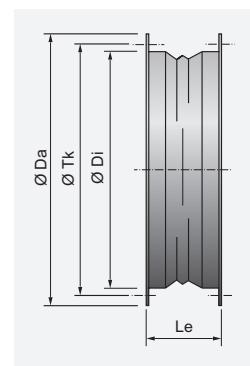
GL-AXV

Matching flange



EV-AXV

Flexible connector compl.



Model size	Da [mm]	Di [mm]	Tk [mm]	zx d [mm]	DDa [mm]	Ld [mm]	Lk [mm]	Le [mm]	U [mm]
315	398	320	366	8 x 12	426	165	250	130	-
355	438	359	405	8 x 12	435	165	250	130	-
400	484	401	448	12 x 12	507	165	250	130	-
450	534	450	497	12 x 12	555	165	250	130	15
500	584	504	551	12 x 12	617	165	250	130	45
560	664	565	629	16 x 14	667	165	250	130	80
630	734	634	698	16 x 14	757	165	250	130	120
710	814	711	775	16 x 14	816	170	350	130	60
800	904	797	861	12* x 14	915	250	350	130	110
900	1004	894	958	12* x 14	1015	250	350	130	170
1000	1105	1003	1067	12* x 14	1115	250	350	130	225
1120	1245	1125	1200	16* x 18	1243	250	350	130	255
1250	1370	1250	1337	16* x 18	1364	250	400	170	375
1400	1525	1405	1475	16* x 18	1523	250	400	170	450
1600	1725	1605	1675	20* x 18	1723	250	400	170	550
1800	1950	1810	1900	20* x 18	1962	280	450	170	650

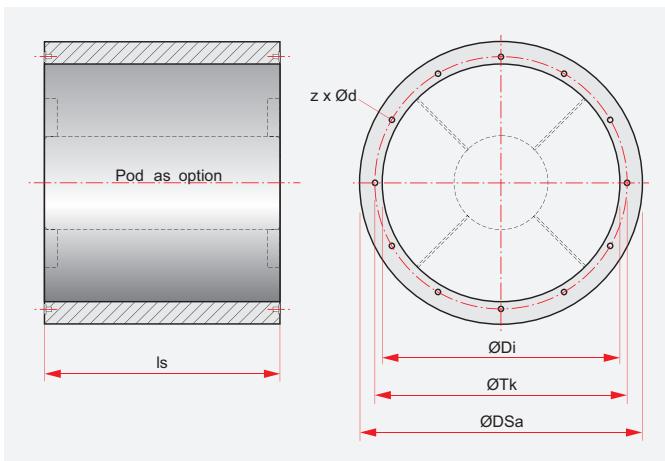
Tubular Sound Attenuator for AXV

SA, SPA

SPA 315 -1D

Length	
Size	315...1800
Sound attenuator	
SA - without pod	
SPA - with pod	

Attenuators made of galvanised sheet steel. Connecting flanges correspond to those of the AXV axial fan series.



Size	Dsa [mm]	Tk [mm]	Di [mm]	ls						Length	Type	Pitch angle setting	Octave band mid-frequency [Hz]							
				x 1D [mm]	x 2D [mm]	SA-1D [kg]	SPA-1D [kg]	SA-2D [kg]	SPA-2D [kg]				63	125	250	500	1k	2k	4k	8k
315	420	366	320	315	630	9,5	15	13	19	1D	SA-1D	all	2	4	6	10	14	10	7	8
355	459	405	359		710	12	18	16	23		SPA-1D	low	4	6	8	13	20	21	18	16
400	601	448	401		800	14	23	19	29			med	4	6	8	12	18	19	18	14
450	650	497	450		900	18	29	23	36			high	4	6	8	11	13	16	16	11
500	704	551	504		1000	22	36	28	43		SA-2D	low	4	7	12	18	22	17	12	13
560	765	629	565		1120	25	41	31	50			med	4	7	11	17	21	17	13	12
630	834	698	634		1260	29	47	37	59			high	4	7	10	15	19	16	13	10
710	911	775	711		1420	37	60	47	75		SPA-2D	low	7	10	15	24	32	35	30	28
800	997	861	797		1600	69	108	90	141			med	7	10	15	21	26	24	22	20
												high	7	10	15	16	15	17	13	13
900	1094	958	894	900	1800	86	135	112	176	1D	SA-1D	all	3	4	8	14	14	9	8	7
1000	1203	1067	1003		2000	125	190	156	234			low	4	6	11	22	21	16	14	11
1120	1325	1200	1125		2240	132	210	169	260			med.	4	6	11	20	19	15	13	11
1250	1450	1337	1250		2500	146	234	185	294			high	4	6	11	17	17	14	12	11
1400	1605	1475	1405		2800	197	316	250	397	2D	SA-2D	low	6	8	14	22	20	13	12	10
1600	1805	1675	1605		3200	275	540	348	682			med.	6	8	13	21	18	12	11	10
1800	2010	1900	1810		3600	384	923	484	1172			high	6	8	12	19	15	11	10	9
											SPA-2D	low	8	11	19	30	32	30	24	17
												med.	8	11	19	26	27	26	22	17
												high	8	11	19	21	20	22	20	16

Reference: **A09-G**, V2012/June, Printed in June, 2012



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