

In-Line Centrifugal Fans

- WMF Series

Air in Motion.

Wolter Fans.

K01.WMF

wolter 

Table of Content



Contents	Page 1
Design Features	Page 2
Dimensions	Page 3
Fan Performance Curves	Page 4 ~ 16

Subject to change without prior notice.

In-Line Centrifugal Fans

General Information



WMF 250PF to 1000PF

*c/w 25 or 50mm acoustic as optional
13 diameters - 250, 280, 315, 355, 400,
450, 500, 560, 630, 710, 800, 900 and
1000mm*

Design features

Performance

The in-line centrifugal flow fan has all the advantage of axial flow and centrifugal fans. i.e. straight airflow, light weight, compact and space saving design, easy installation, high-pressure stability, low noise level and low running costs. The fans are specially designed with build-in inlet cone to achieve high static efficiency and high volume flow. The performance range is from 50 up to 50,000 m³/hrs on air volume, at static pressure up to 3000 Pa.

Fan Housing

Wolter's WMF250PF to 1000PF rigidly constructed fans box housing made from extruded Aluminium profiles with flame retardant plastic or aluminium corners, side plates and mounting feet for bolting onto supports are fabricated from heavy gauge pre-galvanized sheet.

Fans inlet and outlet can be fitted with DW142 flanges suitable for direct connection to flexible connector are designed for easy removal and installation. The fans housing are design for easy access to the impeller and drive with access panel to facilitated easy maintenance. All steel components are supplied with zinc plated and finish as standard. For special applications, motors can be installed externally on fan housing.

Acoustic Housing - Optional 50mm Acoustic Panel

Frame housing made from extruded Aluminium profiles with flame retardant plastic or aluminium corners. The external side plates are made from pre-galvanized sheet metal with internal perforated galvanized sheet as standard. Epoxy coat as optional. Access panel are provided on each enclosure so that all removable parts can be assessed for maintenance purpose.

Cabinet housing insulated to ensure low noise levels are internally acoustic lining with 32 kg/m³ Fibreglass of inert, non-hygroscopic, vermin and moisture proof as well as asbestos and CFC free and not support growth of bacteria. Servicing side door on request. For weatherproof version, side plates are made of aluminium and a weather-hood is added.

Centrifugal Plug fan Impeller

Wolter backward curve impellers are manufactured from sheet steel as standard.

Finished in epoxy paint as optional. The special design blade configuration guarantees high volume flow and static efficiency with low noise operation. Impellers are statically and dynamically balanced in accordance to quality level G2,5 ISO 21940-11:2017-03 / VDI 2060 Q2.5 / AMCA 204.

Motor

Wolter uses standard closed squirrel cage motor with airstreams rated to IEC 34, if required also in accordance to EPACT. The standard motors have Class F and enclosure IP54 or IP55. Continuous operating ranges from -40°C to +40°C, other operating condition on demand. Multi speed versions with 2 or 3 speeds as optional, TAB or DUAL wounded are also available. The motor bearings have a L10 life. The motors are single/three phase, 50/60 Hz suitable for 220~240 or 380~415 volts. All other voltage can be supplied upon request.

Model with suffix "R" come with external rotor motors are in protection class IP44, IP54 available upon request.

The winding insulation corresponds to insulation Class F with thermal contacts, wired in series suitable for 5-step or 100% speed controllers. Max allowed voltage tolerance of plus and minus 10% is valid. Flying leads as standard. Special cable lengths and fans with mounted terminal box on request

Accessories (optional)

The following accessories are available:

- › Flexible connection:
The flexible connection consists of two galvanized flange, assembled with a gas-tight canvas. Please note that the dimensions of suction side and outlet side can be different and the correct one has to be chosen
- › Inlet and outlet flange:
Equivalent to flexible connection fitting flanges of specification in accordance to DW142 for inlet and outlet side can be ordered. They are pre-galvanized on both sides
- › Dampers:
The self-working dampers with blades made of weatherproof plastic and aluminium frames has to be mounted at the suction side. Motor driven volume control dampers "JK" made of strong extruded aluminium profile are also available at Wolter with any dimension

In-Line Centrifugal Fans

General Information



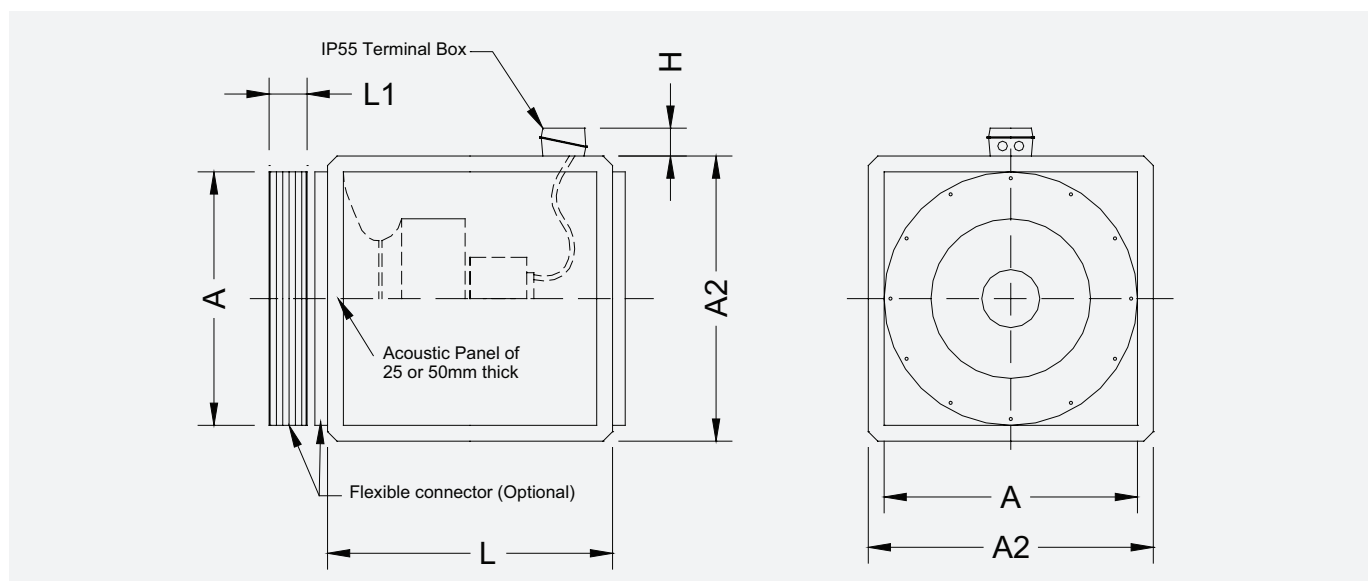
- › Motor with 100% speed controllable
- › Motor with protection through thermal contact
- › Protective guard
- › Anti-vibration mounting isolators

Sound levels

The ascertaining of the sound level follows the Reverberant Room Method in accordance to AMCA 300. The A-weighted sound power levels is shown on the performance curves.

The sound power level at the different octave band mid-frequencies relevant for the interpretation of sound absorbers can be calculated by means of an equation.

Dimensions



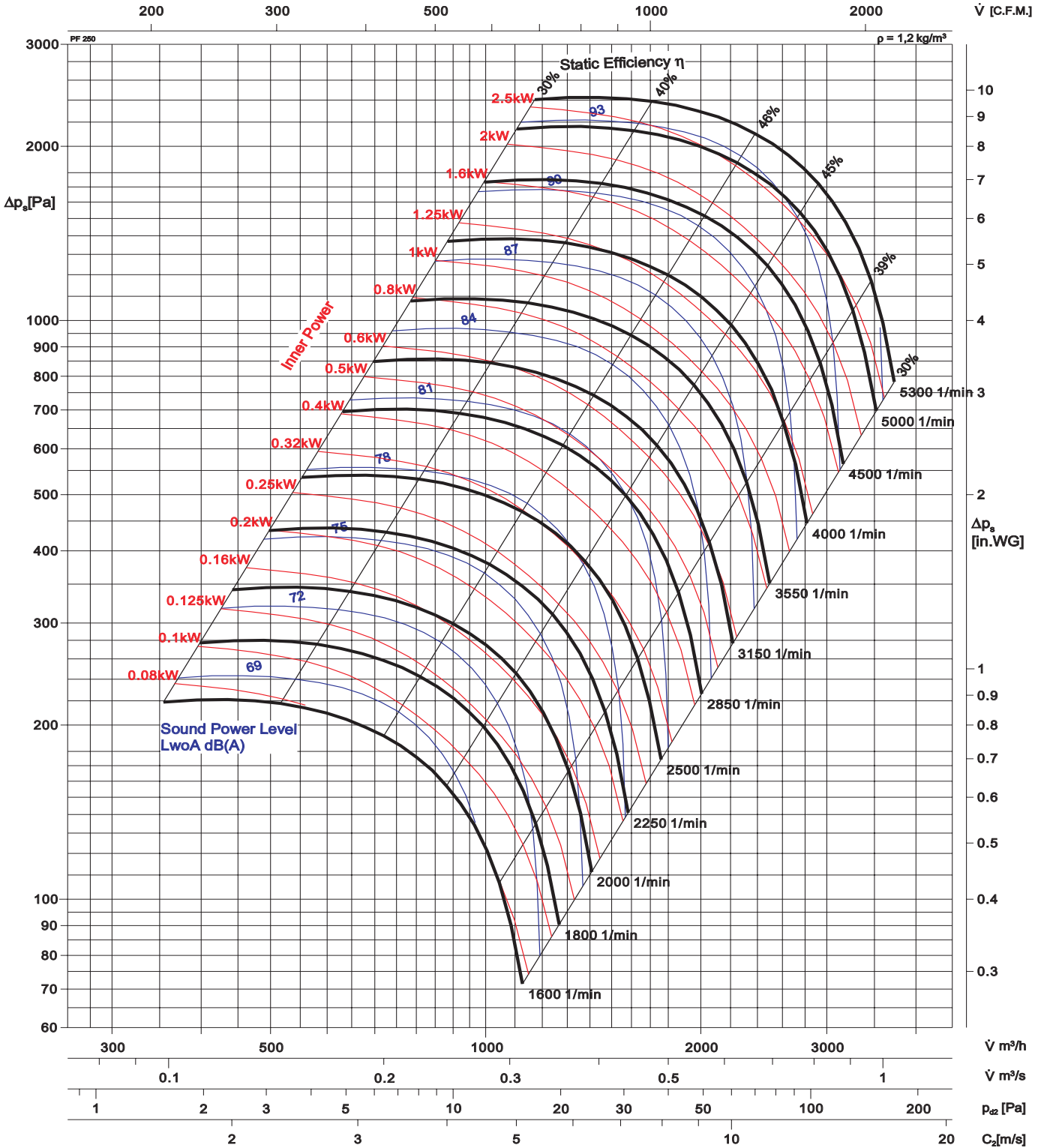
WMF	A	A2						H	L			L1	Weight PF50 w/o Motor [kg]
		Single Skinned PF25	Double Skinned PF25	Single Skinned PF50	Double Skinned PF50	Single Skinned PF100	Double Skinned PF100		PF25	PF50	PF100		
[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
250	450	500	500	550	550	-	-	60	450	500	-	140	30
280	500	550	550	600	600	-	-	60	500	550	-	140	34
315	550	600	600	650	650	-	-	60	550	600	-	140	37
355	600	650	650	700	700	-	-	60	600	650	-	140	41
400	650	700	700	750	750	-	-	60	650	700	-	140	45
450	700	750	750	800	800	-	-	60	700	750	-	140	64
500	800	850	850	900	900	-	-	88	800	850	-	140	81
560	850	900	900	950	950	-	-	88	850	900	-	140	99
630	900	950	950	1000	1000	-	-	88	900	950	-	140	118
710	1000	1050	1050	1100	1100	1200	1200	88	1000	1050	1050	140	182
800	1100	-	-	1200	1200	1300	1300	88	1100	1150	1150	140	210
900	1250	-	-	1350	1350	1450	1450	88	1250	1300	1300	140	242
1000	1350	-	-	1450	1450	1550	1550	88	1350	1400	1400	140	278

• We reserve the right to alter measurements without notice in case of technical improvements.

In-Line Centrifugal Fan Performance Curves



WMF 250PF



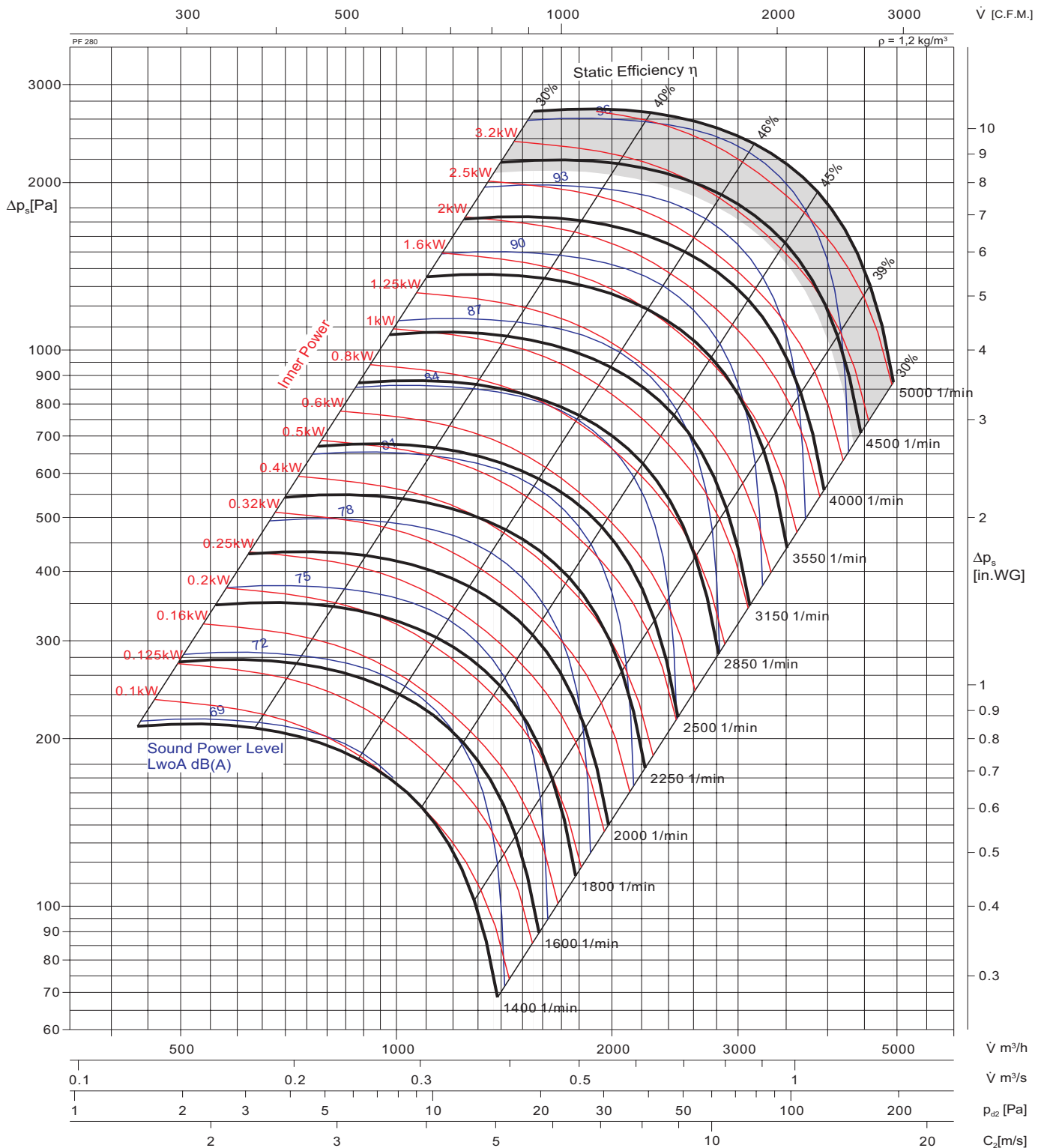
Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
2 Pole	-7.5	-7.5	-8.6	-9.0	-7.1	-10.8	-11.1	-16.5	
4 Pole	-6.7	-7.8	-8.2	-6.4	-10.0	-10.3	-15.7	-17.8	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open



WMF 280PF



Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

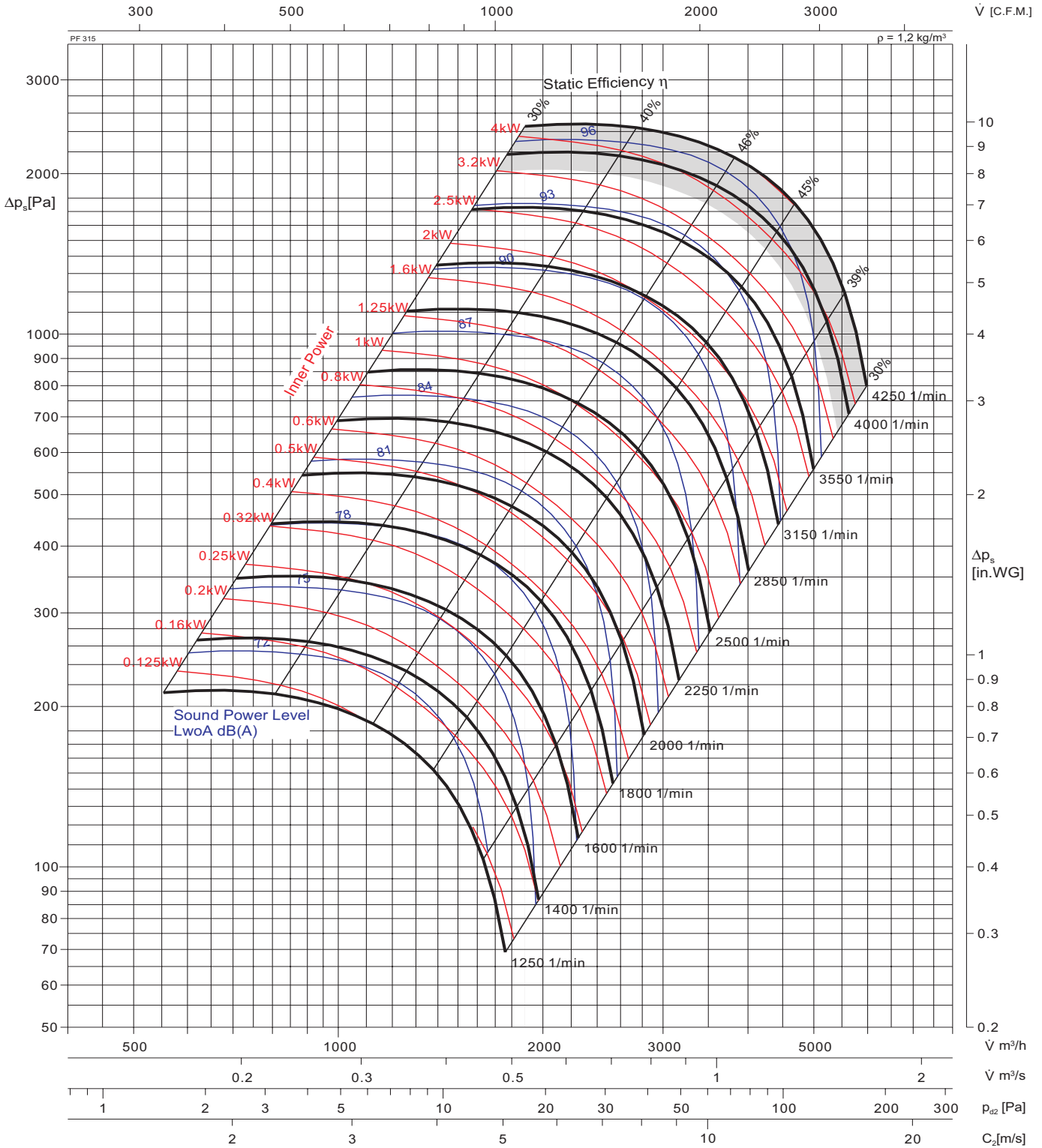
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
2 Pole	-7.2	-7.2	-8.5	-8.9	-7.3	-11.2	-11.7	-17.1	
4 Pole	-6.4	-7.7	-8.0	-6.4	-10.4	-10.8	-16.2	-18.4	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 315PF



Relative frequency spectrum in $\Delta\text{dB/Okt}$

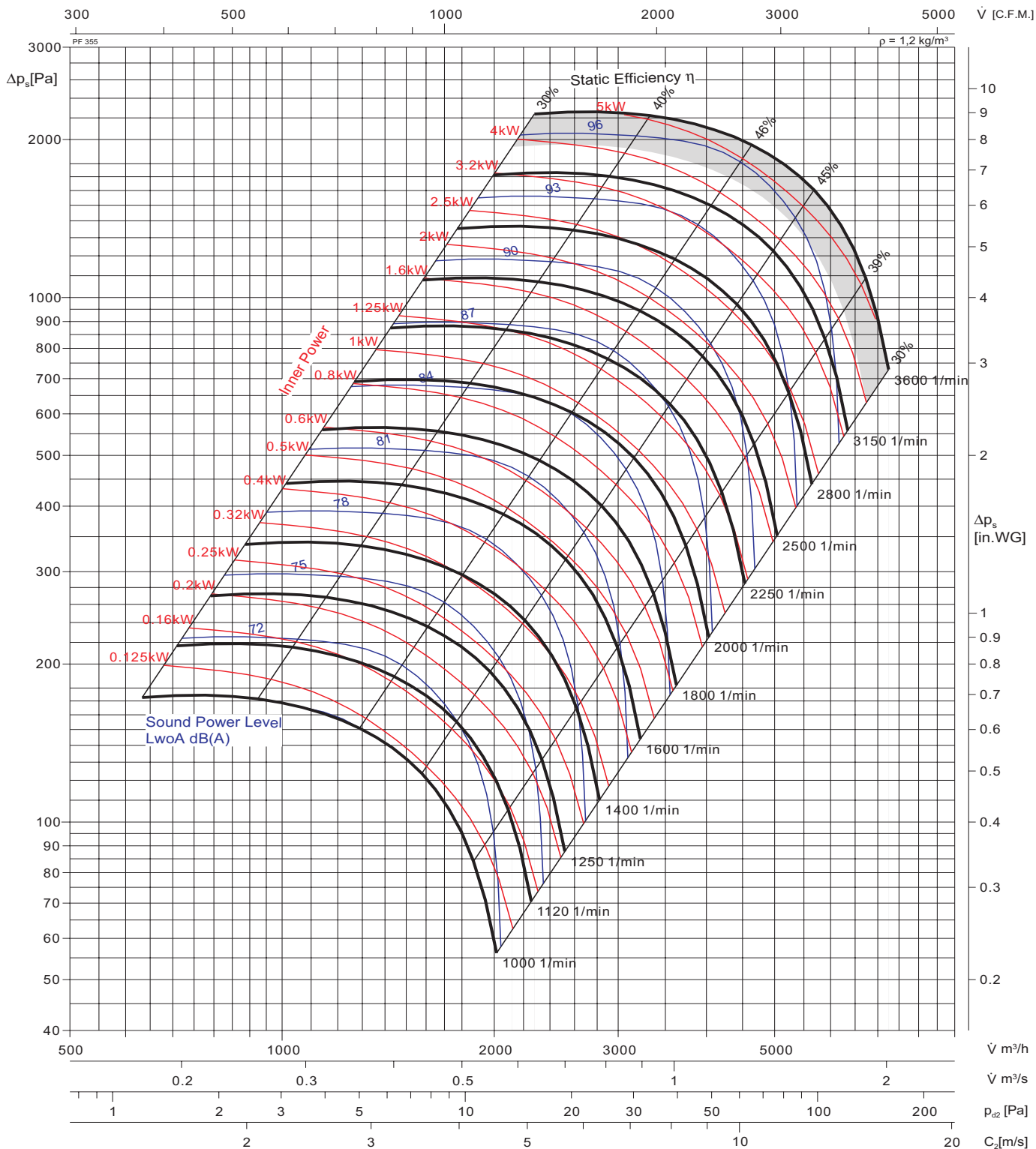
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
2 Pole	-7.0	-7.0	-8.5	-8.8	-7.5	-11.7	-12.2	-17.7	
4 Pole	-6.0	-7.5	-7.9	-6.6	-10.7	-11.3	-16.8	-18.9	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 355PF



Relative frequency spectrum in Δ dB/Okt

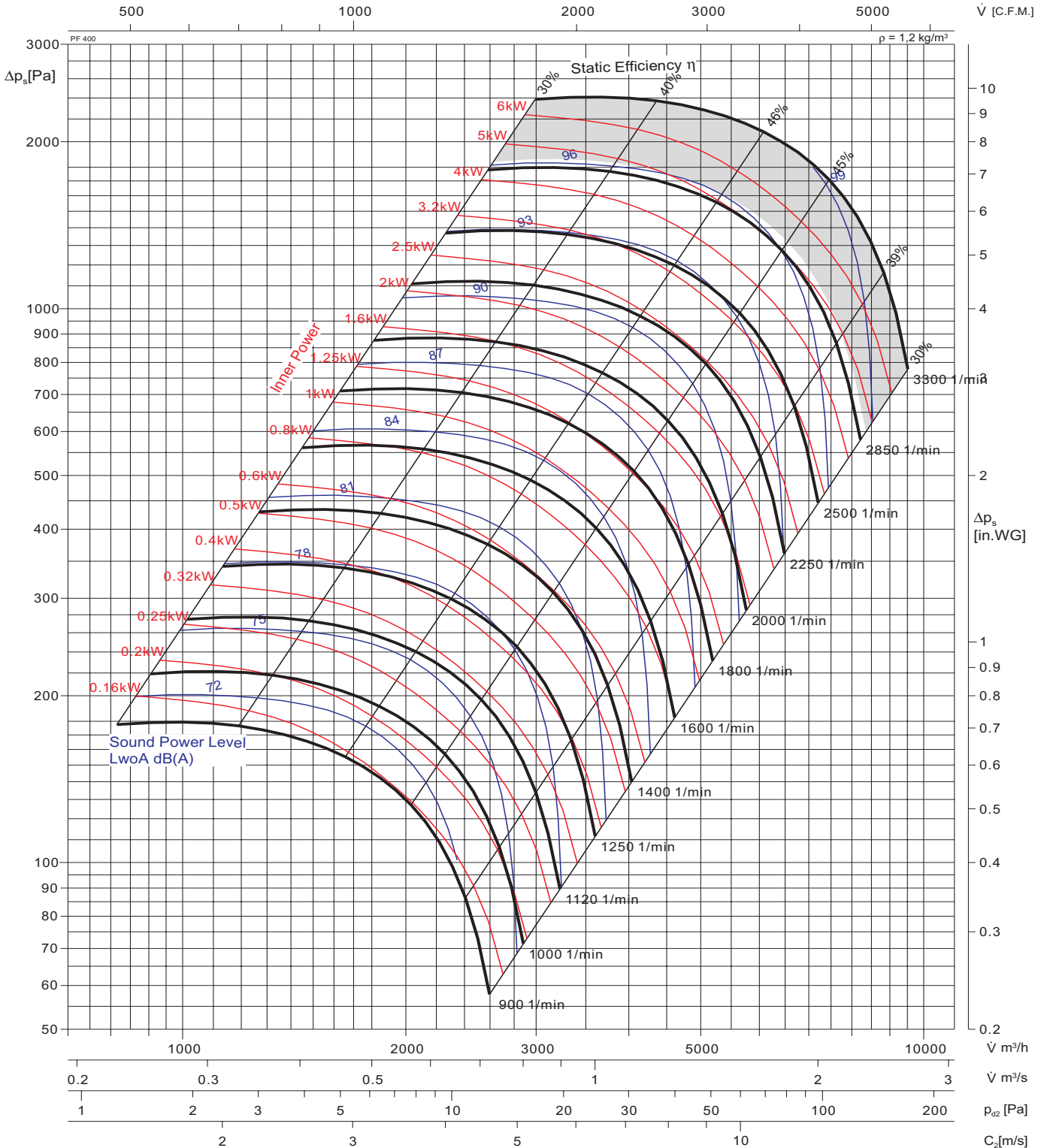
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
2 Pole	-6.7	-6.7	-8.5	-8.7	-7.8	-12.2	-13.1	-17.8	
4 Pole	-5.6	-7.4	-7.7	-6.7	-11.1	-12.0	-16.7	-20.0	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 400PF



Relative frequency spectrum in Δ dB/Okt

N [1/min]	Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
2 Pole	-6	-6	-9	-9	-8	-13	-14	-19
4 Pole	-5	-7	-8	-7	-12	-12	-18	-20
6 Pole	-6	-7	-6	-9	-12	-14	-19	-19

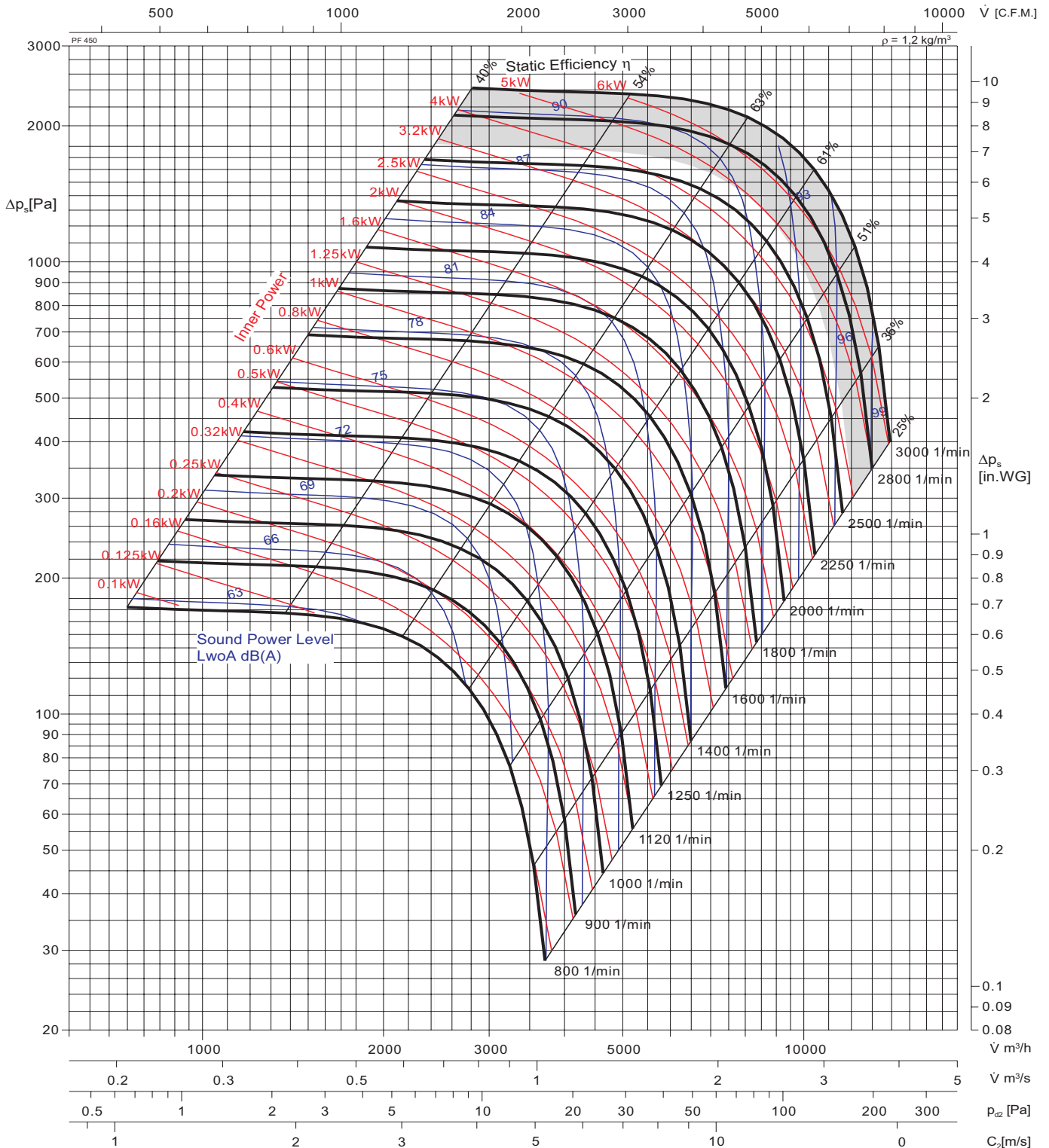
Note: Performance test method per AMCA 210 / ISO 5801 with one side open

8	-6.4	-6.4	-8.5	-8.7	-8.1	-12.7	-13.5	-19.0
	-5.3	-7.4	-7.7	-7.0	-11.6	-12.4	-17.9	-20.1
	-5.7	-6.6	-6.1	-8.6	-11.6	-14.2	-19.3	-18.9

In-Line Centrifugal Fan Performance Curves



WMF 450PF



Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

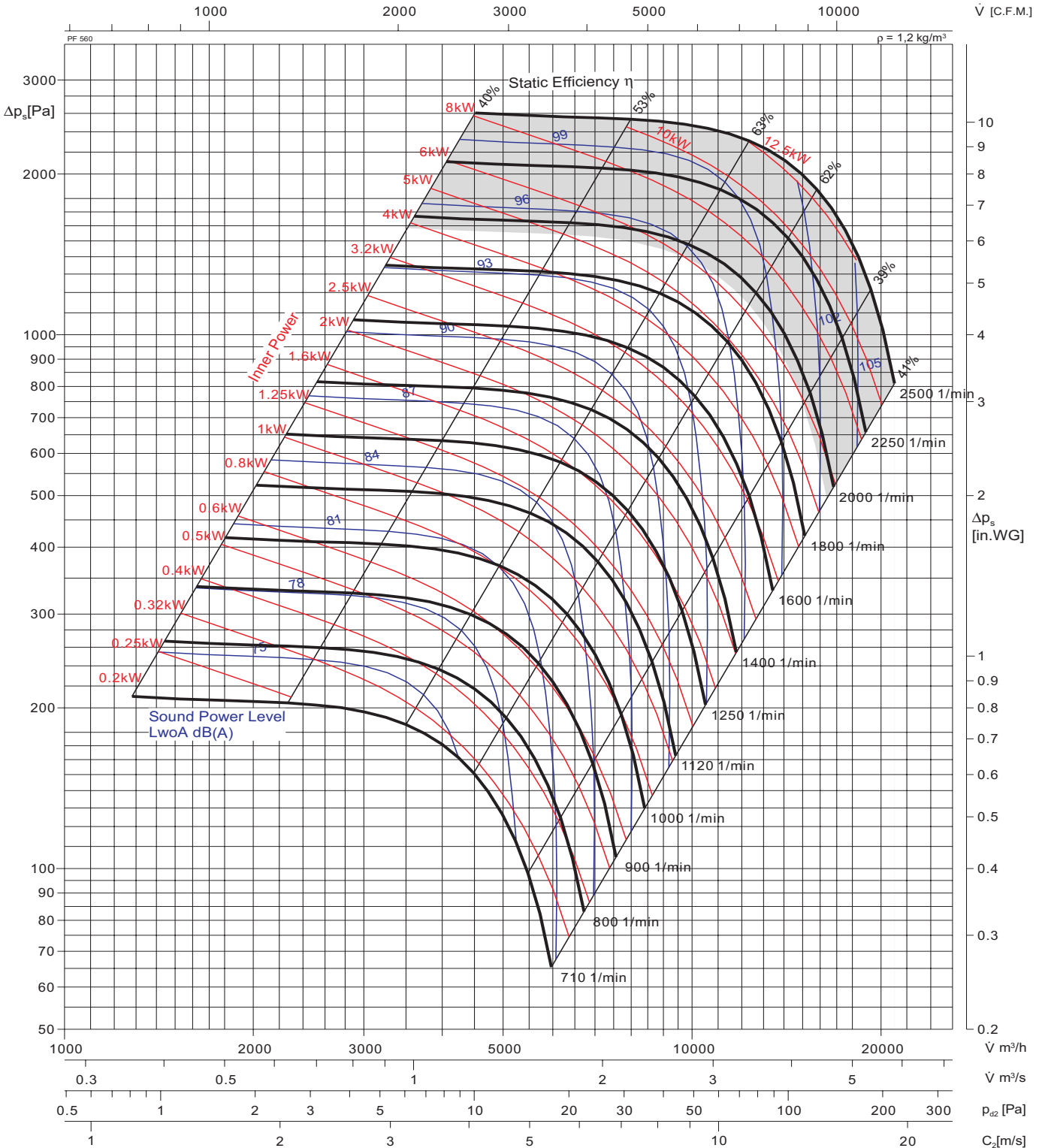
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
2 Pole	-14	-14	-8	-8	-7	-6	-9	-15	
4 Pole	-14	-8	-8	-7	-6	-9	-15	-22	
6 Pole	-11	-8	-7	-6	-7	-12	-19	-26	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 500PF



Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

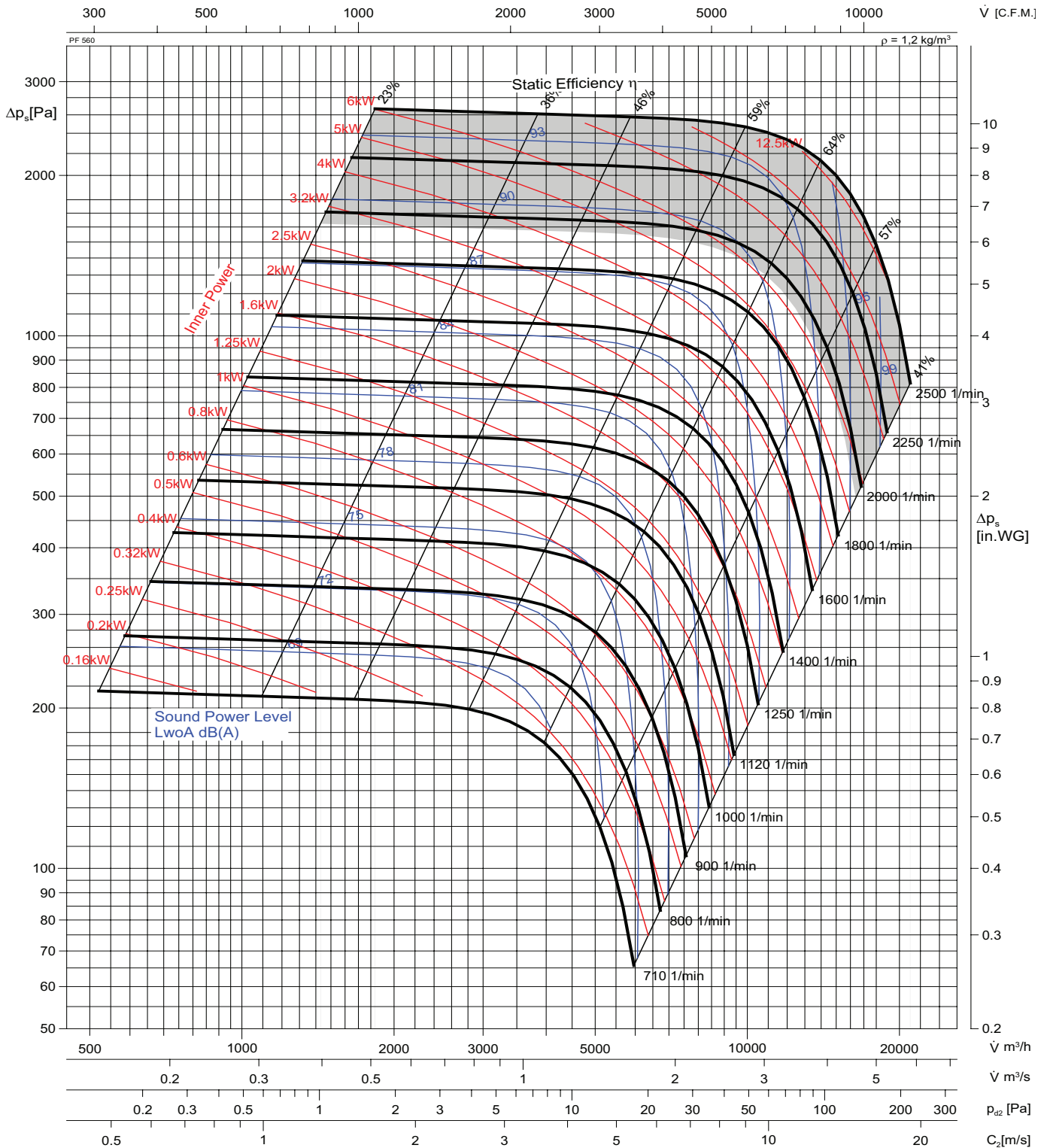
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
4 Pole	-13	-8	-8	-7	-6	-9	-15	-23	
6 Pole	-10	-7	-7	-6	-7	-12	-20	-26	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 560PF



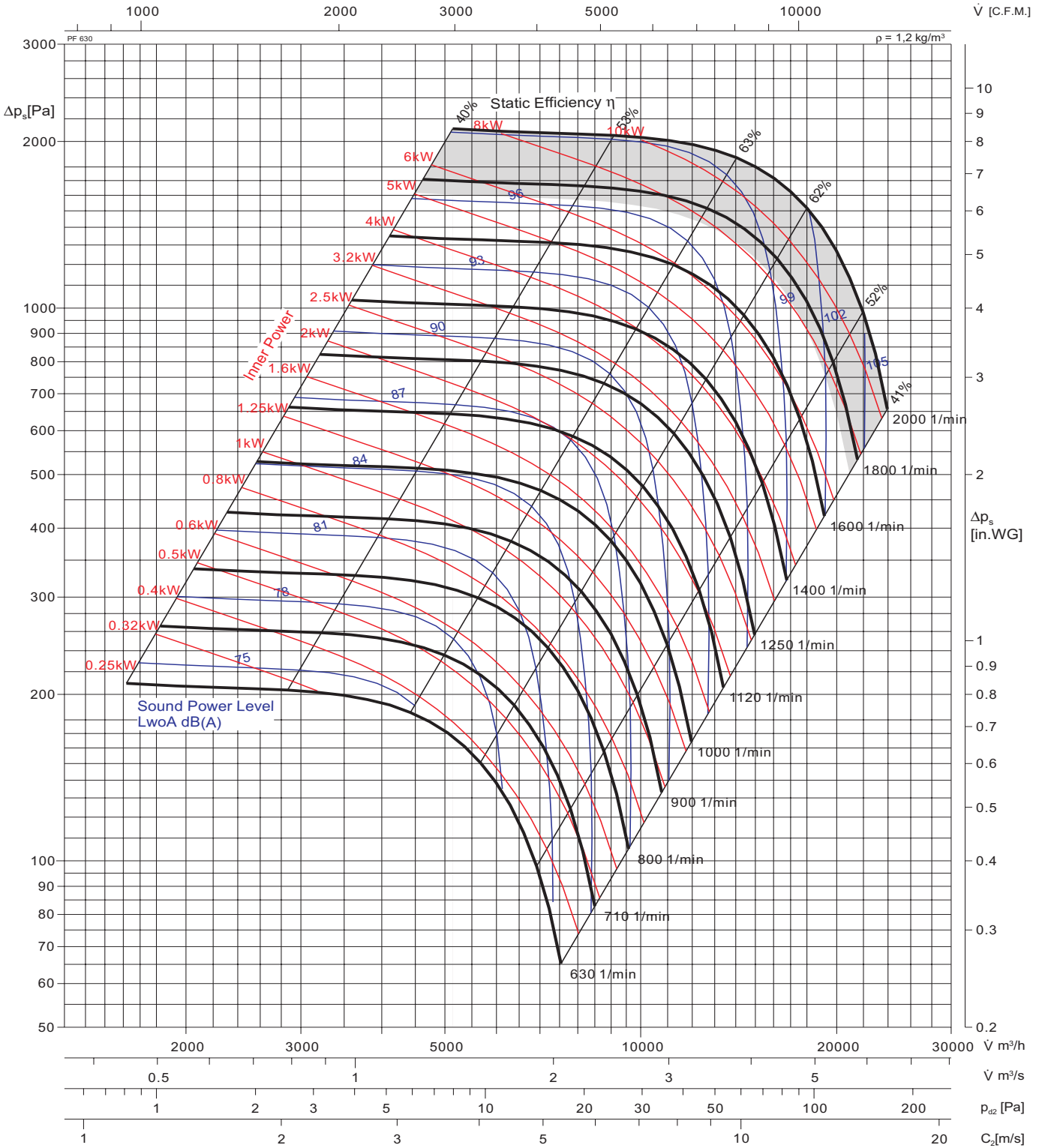
Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
4 Pole	-13	-8	-7	-7	-6	-9	-16	-23	
6 Pole	-10	-7	-7	-6	-7	-12	-20	-27	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open



WMF 630PF



Relative frequency spectrum in Δ dB/Okt

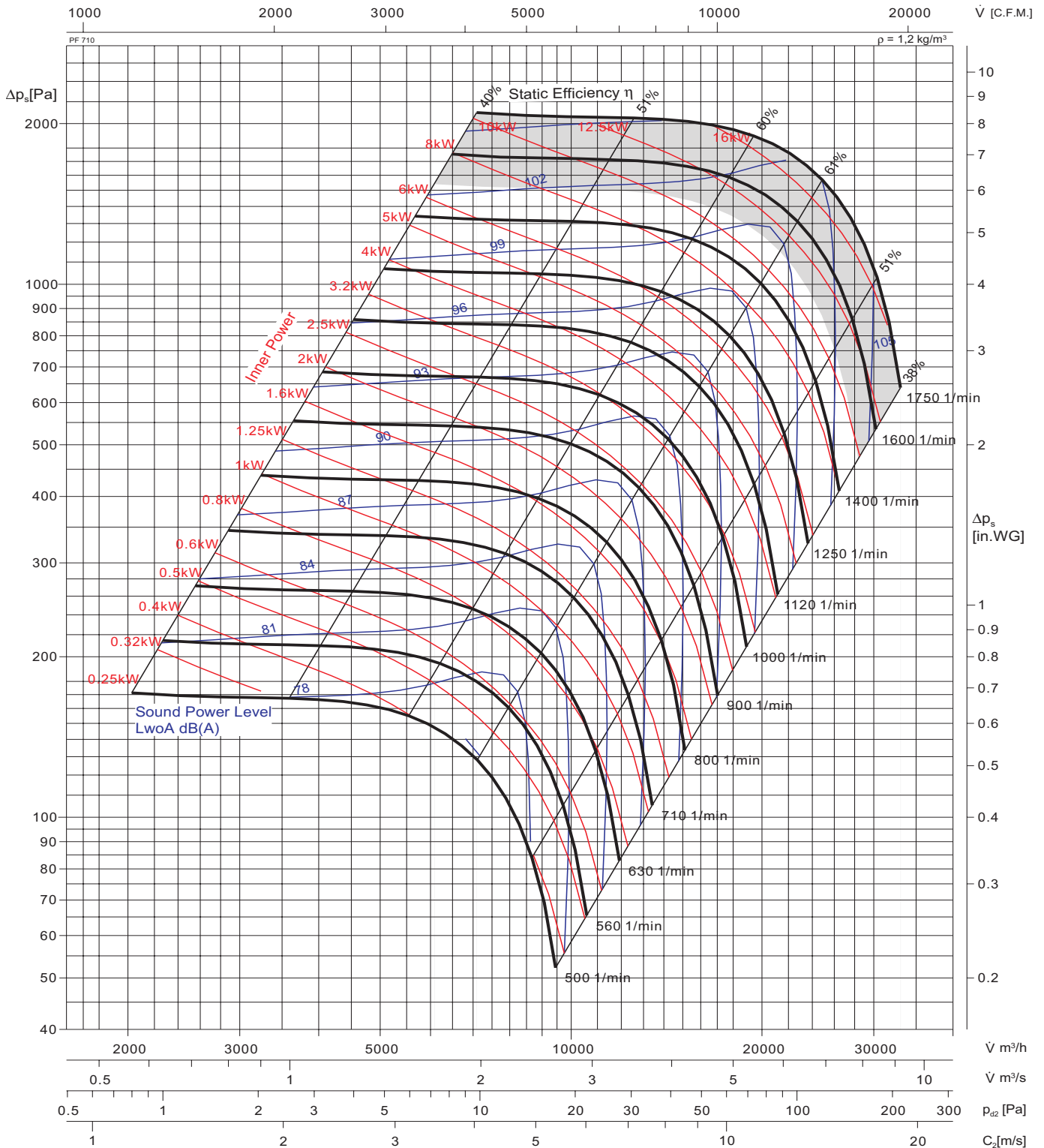
N [1/min]	Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
4 Pole	-12	-8	-7	-7	-6	-9	-16	-23
6 Pole	-9	-7	-7	-6	-7	-13	-20	-27
8 Pole	-8	-7	-7	-6	-9	-16	-23	-30

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 710PF



Relative frequency spectrum in $\Delta\text{dB}/\text{Okt}$

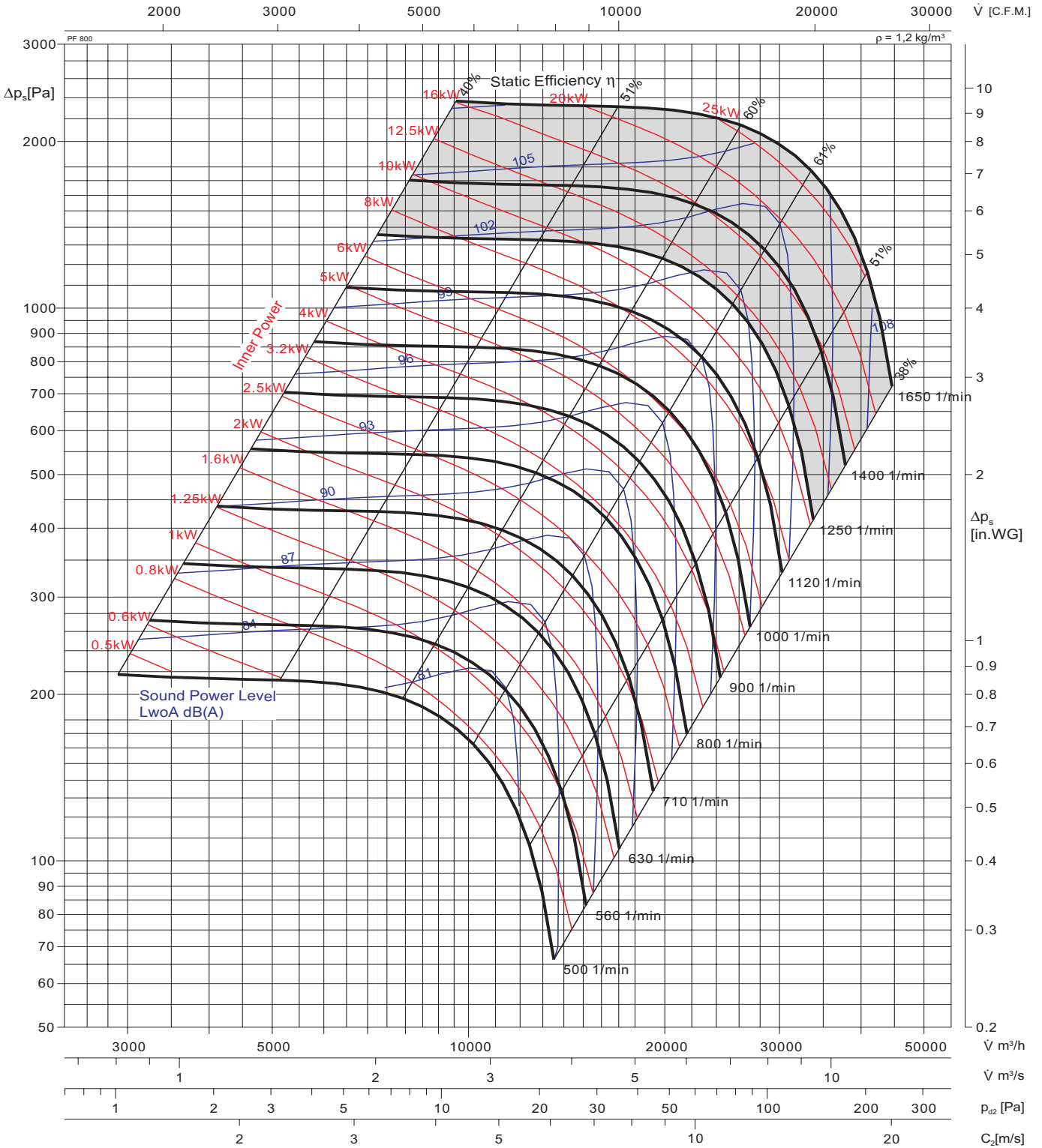
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
4 Pole	-12	-13	-8	-6	-7	-8	-12	-20	
6 Pole	-13	-8	-6	-6	-7	-10	-17	-25	
8 Pole	-13	-7	-5	-6	-7	-12	-20	-28	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 800PF



Relative frequency spectrum in $\Delta\text{dB/Okt}$

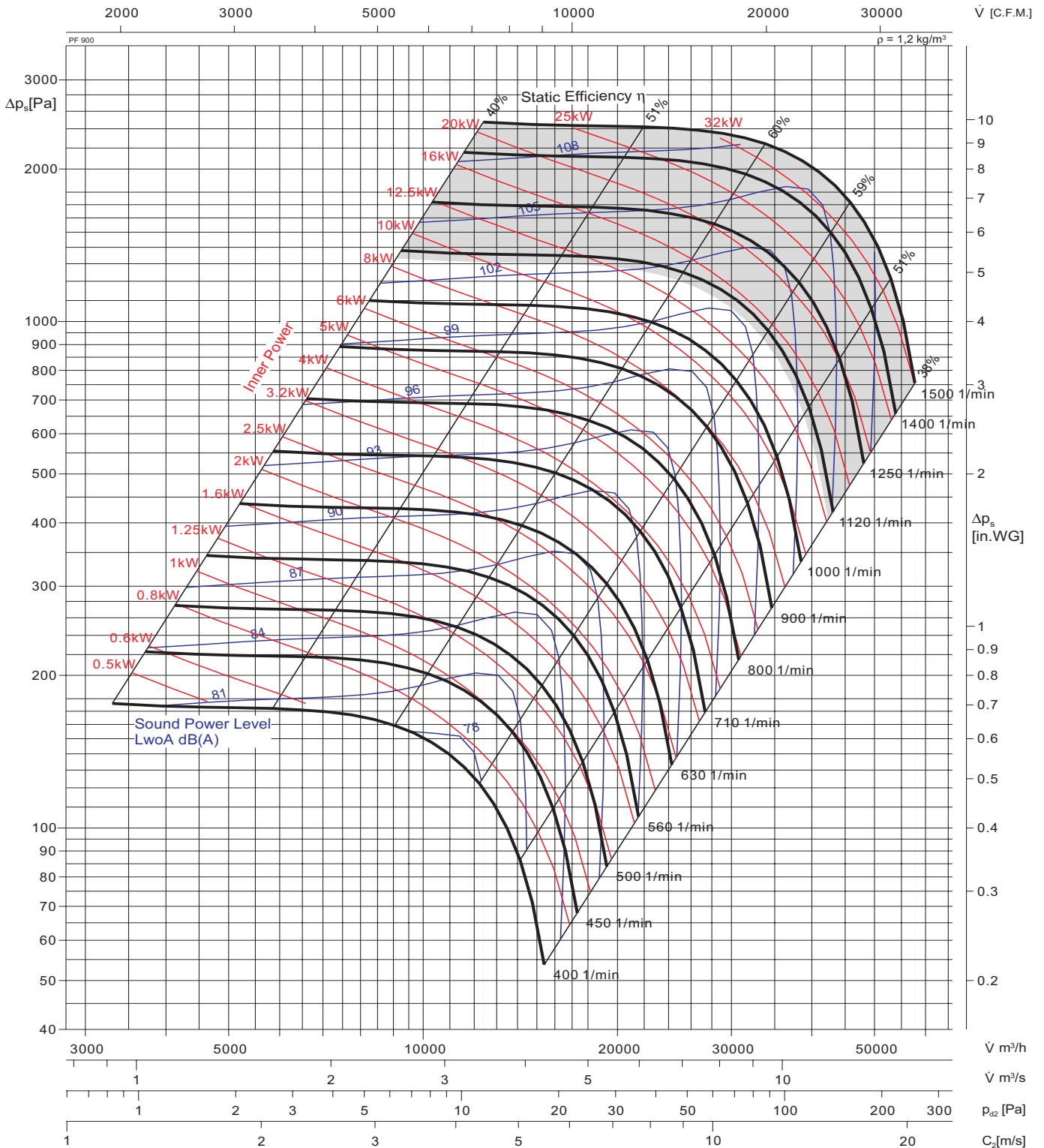
N [1/min]	Octave b. midfreq. [Hz]								
	RPM	63	125	250	500	1K	2K	4K	8K
4 Pole	-11	-12	-8	-6	-7	-8	-13	-21	
6 Pole	-13	-8	-6	-6	-7	-10	-17	-26	
8 Pole	-12	-7	-5	-7	-7	-12	-20	-28	

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 900PF



Relative frequency spectrum in $\Delta dB/Okt$

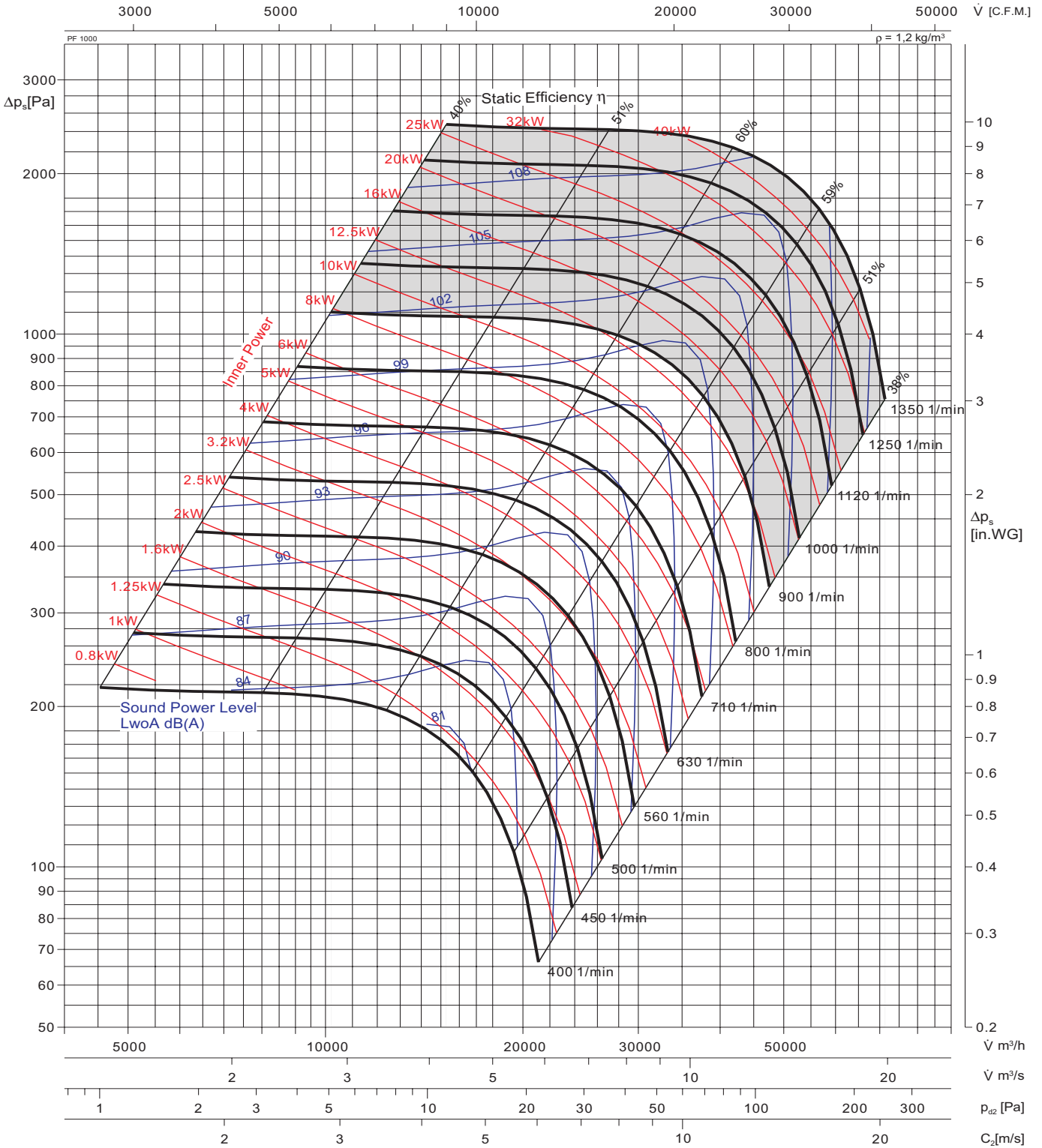
N [1/min]	Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
4 Pole	-10	-6	-7	-7	-8	-13	-18	-25
6 Pole	-7	-6	-7	-7	-10	-15	-22	-30
8 Pole	-5	-7	-6	-8	-12	-18	-25	-32

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

In-Line Centrifugal Fan Performance Curves



WMF 1000PF



Relative frequency spectrum in Δ dB/Okt

N [1/min]	Octave b. midfreq. [Hz]							
	63	125	250	500	1K	2K	4K	8K
4 Pole	-10	-12	-8	-6	-7	-8	-13	-21
6 Pole	-12	-7	-6	-7	-8	-10	-17	-26
8 Pole	-11	-7	-6	-7	-8	-13	-20	-29

Note: Performance test method per AMCA 210 / ISO 5801 with one side open

Wolter Sales Network

Inland

Ing. Günther Rößler
D-07619 Schkölen
Tel. (+49) 03 66 94 / 22 359
Fax (+49) 03 66 94 / 22 357
guenther.roessler@wolterfans.de

Mattias Industrievertretungen
D-16259 Bad Freienwalde
Tel. (+49)03344/301994
Fax (+49)03344/301996
thomas.mattias@wolterfans.de

Industrieservice Drexler
D-49080 Osnabrück
Tel. (+49) 0 541 / 20 04 88 3
Fax (+49) 0 541 / 20 04 88 4
wolfgang.drexler@wolterfans.de

Burkhardt Projekt GmbH
D-67583 Guntersblum
Tel. (+49) 0 62 49 / 82 01
Fax (+49) 0 62 49 / 88 58
info@bp-wolter.de

Friedrich Glock
D-97980 Bad Mergentheim
Tel. (+49) 0 79 31 / 37 44
Fax (+49) 0 79 31 / 28 58
friedrich.glock@wolterfans.de

Europe

Danmark:

Aircon Teknik A/S
DK-8200 Aarhus N
Tel. +45 (0) 86 / 34 51 11
Fax +45 (0) 86 / 34 58 10
post@airconteknik.dk

The Netherlands:

AirFan B. V.
NL-7442 CX Nijverdal
Tel. (+31)054/8366366
Fax (+31)054/8365320
ventilatie@airfan.nl

Poland:

Wentoprodukt
44-100 Gliwice
Tel. (+48)32 33 13 424
Fax (+48)32 72 97 653 75
biuro@wentoprodukt.pl

Russia:

Daichi Co. Ltd
RU-123022 Moscow
Tel. +7 (0) 495 / 73 73 733
Fax +7 (0) 495 / 73 73 732
info@daichi.ru

Switzerland:

Anson AG Zürich
CH-8055 Zürich
Tel. (+41) 0 44 / 46 11 111
Fax (+41) 0 44 / 46 13 111
info@anson.ch

Ventra Technik AG
CH-8599 Salsmisch
Tel. (+41) 0 71 / 46 11 447
Fax (+41) 0 71 / 46 11 448
ventra@bluewin.ch

Turkey:

Air Trade Centre Ltd Sti Türkiye,
TR-34418 Seyrantepe / Istanbul
Tel. (+90) 02 12 / 28 34 510
Fax (+90) 02 12 / 27 83 964
atc.turkey@airtradecentre.com

United Kingdom:

Wolter (UK) Ltd.
GB-Leicestershire LE65 1AL
Tel. (+44) 01530 / 412 473
info@wolteruk.com

Middle East and North Africa

Israel:

Pach Taas (Ashkelon) Ltd.
IL-78100 Ashkelon
Tel. (+972) 0 8 / 67 19 770
Fax (+972) 0 8 / 67 19 771
info@pachtaas.com

UAE, Qatar, Lebanon, Jordan,
Saudi Arabia:

Energy International Co.
UAE-Sharjah, P.O. Box 3562
Tel. (+971) 06 / 53 43 477
Fax (+971) 06 / 53 43 756
fsalibi@energyssh.ae

Energy International Co.
P.O. Box 45217 Abu Dhabi, UAE
Tel. (+971) 2 67 11 10 8
Fax (+971) 2 67 69 669
amohsen@energyintl.ae

Energy International Co.(Dubai-Sharjah)
P.O. Box 3562 Sharjah, UAE
Tel. (+971) 65 34 34 77
Fax (+971) 65 34 37 56
fsalibi@energyssh.ae

Energy International Corporation
Malaz Area, Siteen Highway Beside BANK
ALBILAD Riyadh, Saudi Arabia
Tel. (+966) 14 15 39 59
msheet@energyintl.com

Energy International Corporation
P.O. Box 37364 Doha, Qatar
Tel. (+974) 45 80 765
Fax (+974) 45 81 126
aassi@energyintl.com

Energy International
234 Balbesi Blg 2nd floor Al-Madinah,
Al Munawarah St Amman, Jordan
Tel. (+962) 65 67 19 15
Fax (+962) 65 67 19 16
eabuzahra@energyintl.com

Energy International & Engineering
Mar Roukoz Center-Block B - First Floor,
Hazmieh, Lebanon
Tel. (+961) 54 50 61 0
Fax (+961) 54 51 16 9
bsaab@energyintl.com

Asia

China Mainland:
Dongguan Wolter Chemco Ventilation Ltd.
Chemco Building, Miao Bian Wang Ind.
Shipai, Dongguan City, Guangdong
Tel. (+86) 0 769 / 8655 7298
Fax (+86) 0 769 / 8655 7278
info@wolterfans.com

Taizhou Wolter Ventilation Co. Ltd.
Hengjie, Luqiao District
Taizhou City, Zhejiang
Tel. (+86) 0 576 / 26 22 666 (26 52 888)
Fax (+86) 0 576 / 26 56 830

Hongkong:

Wolter Asia Ltd.
Hong Kong
Tel. (+852) 0 2456 0198
Fax (+852) 0 2456 0290
info@wolter.com.hk

India:

Wolter Ventilators India Pvt. Ltd.
867 D, Block-A, Sushant Lok, Phase-I,
Gurgaon - 122009 (Haryana)
Tel. +91 124 2577797, 4261001-3
sales@wolterindia.in

Indonesia:

PT Lung Makmur Abadi.
Kawasan Pergudangan Taman Tekno Blok
M/16, Serpong-Tangerang 15310
Tel. +62 (0) 21 / 7588 2609 ext 104
Fax +62 (0) 21 / 7588 2610
lma.wolter@gmail.com

Korea:

Kaceco-Wolter
14-1, Dang-dong, Gunpo-shi, Gyeonggi-do
Tel. +82 (0) 31 / 4773 104
Fax +82 (0) 31 / 4773 132
wolter@kaceco.com / info@kaceco.com

Malaysia:

Vibrantech (M) Sdn Bhd.
47200 Petaling Jaya Selangor, Malaysia
Tel. +603 (0) 7847 3500
Fax +603 (0) 7847 3380
sales@vibrantech-sb.com

Singapore:

Wolter Pte. Ltd.
SG-569738 Singapore
Tel. (+65) 0 63 / 52 95 48
Fax (+65) 0 63 / 52 95 47
info@wolterfans.com.sg

Sri Lanka:

Sirocco Air Technologies (Pvt) Ltd.
28/12, Gemunu Mawatha, Kotuwegoda,
Rajagiriya, Sri Lanka
Tel. +94 11 7 392 010
Fax +94 11 7 392 015
suren@sairt.com

Taiwan:

Waxlink International Co., Ltd.
8F-2 No.218 Roosevelt Rd., Sec.6,
Taipei, Taiwan
Tel. (+886) 02 / 8932 1196
Fax (+886) 02 / 8932 1197
waxlink@mail.waxlinktw.com

Thailand:

Wolter Ventilation Co., Ltd.
Thamai Kratumban Samutsakorn 74110
Thailand
Tel. +66 (0) 3486 6555
Fax +66 (0) 3486 6599
natiphan@wolterfan.com

Australia

The Sydney Fan Company.
NSW 2147, Sydney, Australia
Tel. +61 (0) 2 / 9624 4000
Fax +61 (0) 2 / 9624 4100
sales@thesydneyfancompany.com

Wolter GmbH

Maschinen-und Apparatebau KG

Am Wasen 11
D-76316 Malsch / Germany
Tel. +49 (0) 7204/9201-0
Fax +49 (0) 7204/9201-11
www.wolter.eu
info@wolter.eu



Air in Motion

Reference: **K01.WMF**, V2021/November, Printed in November, 2021

Dongguan Wolter Chemco Ventilation Ltd. (Wolter Asia)

Shipai, Dongguan City, Guangdong Province, P.R.China

Tel. (+86)769 8655 7298, Fax (+86)769 8655 7278

www.wolterfans.com

info@wolterfans.com

