

英国伦敦风机（天津）有限公司特此证明，此处所示 FCD 系列离心风机获得了加拿大 AMCA 印章的授权。所示额定值系根据 AMCA 出版物 211 和 AMCA 出版物 311 所进行测试和程序确定，并符合 AMCA 认证额定值计划的要求。

双吸离心风机

Double Inlet Centrifugal Fan

前倾(FCD)叶片

Forward Blades(FCD)



样本 LCT-1.1
catalogue LCT-1.1

SINCE 1928
创建于1928年

2012 年 12 月
DECEMBER 2012



认证证书

证书号: USA12Q22588R05

兹证明

伦登风机 (天津) 有限公司

天津市北辰区双口工业园区

邮编: 300000

质量管理体系符合标准

ISO 9001:2008

质量管理体系适用范围

工业风机系列产品的设计、生产 (有许可要求的除外)

发证日期 2012年08月14日
证书有效期至 2015年08月13日

签发:



北京东方纵横认证中心



EACC-1330208

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Certificate

Certificate No.: USA12Q22588R05

This is to certify that the Quality Management System of

LONDON FAN (TIANJIN) CO., LTD

Shuangkou Industrial Area, Beichen District Tianjin China

PC.: 300000

Has been audited to conform to the following Quality Management System standard

ISO 9001:2008

This Quality Management System is valid for the

Design and manufacture of industrial fan series products (except for products required by manufacturing license)

Date of issue: Aug. 14, 2012
Valid period: Aug. 13, 2015

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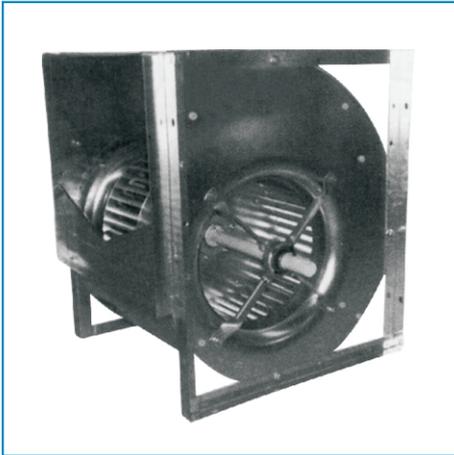
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- The 1st Surveillance Confirming Mark
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- The 3rd Surveillance Confirming Mark

产品范围

该系列风机采用相同形状的外壳和方形出口，风机尺寸的大小符合于 AMCA 99-0098 76 R20 及 DIN323 R20 标准，并且所有尺寸均为 R20 的模数。

本系列风机为双宽度、双吸前倾离心风机，风量由 500m³/h 到250,000m³/h；全压最高可达到 2500Pa；全系列叶轮尺寸共 18 种，从250mm 到1000 mm。



Production range

This fan range employs housings with square – shaped outlet and sizes from the R20 normal number series, in accordance to AMCA Standard 99-0098 76 and to DIN 323.

The FCD range is made of double width, double inlet centrifugal fans. Volume flow rate from 500m³/h to 250,000m³/h.

Total pressure up to 2500 Pa.

18 size from 250 up to 1000 mm wheel diameter.

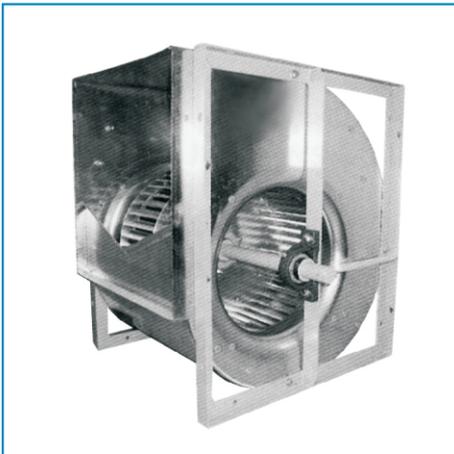
结构型式

FCD 风机包括以下尺寸型号：

Construction versions

FCD fans are available in the following versions:

FCD 系列 / FCD Series		
结构型式 Version	最小尺寸 (mm) From size	最大尺寸 (mm) To size
R	250	710
T	250	1000
T ₁	315	900
T ₂	500	1000



结构说明

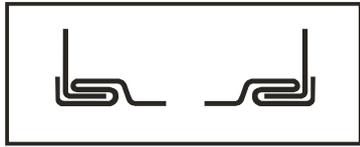
伦敦风机的结构无论采用哪种形式，都是基于强度和可靠性为最大原则，我们产品的共同特点是：

- 高质量
- 高性能
- 最佳的经济性
- 低噪声
- 安装方便

Construction Specifications

The construction standard used for London Fan FCD fans is inspired to the maximum strength and reliability, independently from the construction version. Common characteristics of these products are:

- product quality
- high performance
- outmost economy
- quietness
- ease of assembly

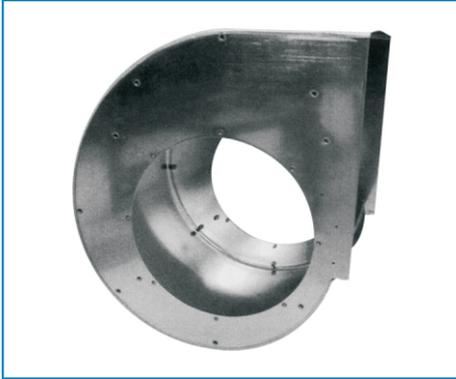


蜗壳

本系列风机外壳都采用优质镀锌钢板制成，蜗壳与侧板的联接，采用“Pittsburgh”卷边成型系统咬合而成，而非电气焊接，因此可以有效避免因各种焊接的焊点而产生的氧化。

Scrolls

All the scrolls are made with hot dip galvanised steel. No electrical spot welding is used as the scroll back is joined to the side plates with the Pittsburgh lock forming system. This prevents any oxidation starting from the welding spots.

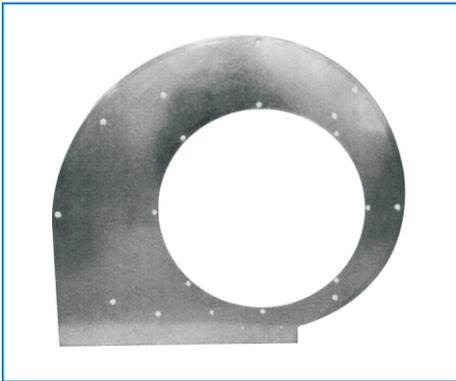


侧板标准孔

侧板上的标准孔是用来固定安装底脚或边框的，通过这些标准孔可以安装出不同结构形式的风机。对于叶轮直径小于或等于 400mm 的风机，这种联结采用自攻螺钉进行；对于叶轮直径大于 400mm 的风机，侧板设有 M10 的固定螺母来进行联结。

Attachment points on the side plates

Standard holes in the side plates are used to attach mounting feet or side frames to create different versions. Up to size 400, self-threading screws are used, while all the larger sizes have captive nuts for use with M10 screws.



叶轮

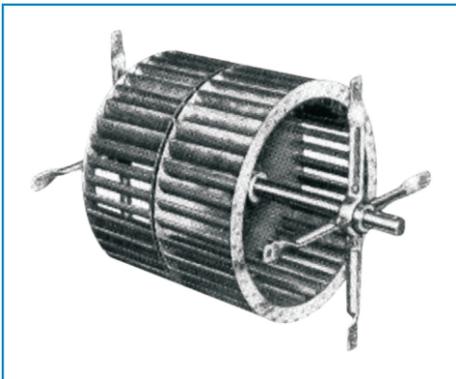
FCD 系列风机的叶轮采用特别设计的插片锁紧式前倾叶片，叶片用镀锌板冷加工制成。

FCD 系列风机叶轮都依据 ISO1940 标准进行动静平衡，平衡的精度达到 G4.0。

Impellers

FCD impellers have specially – designed Tab–lock forward curved blades, built from cold–formed, galvanised steel.

FCD impellers are statically and dynamically balanced according to ISO1940 with grade G4.0.

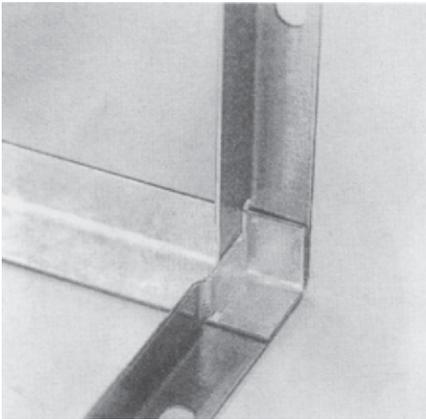


边框

R 系列风机的轻型边框用符合标准的镀锌板冷加工成型；而T、T1、T2、系列风机的重型框架则采用热轧型钢焊接成型，另外边框还可根据客户要求作表面热镀锌处理。

Side frames

Light–construction side frames of the R versions are made with cold–formed, galvanised steel type. Heavy–duty side frames of the T、T1、T2, versions are made with hot –rolled steel sections, welded as an option, they can be protected with hot dip galvanising.



轴

轴采用 C45 碳钢棒料经精磨加工而成并利用精确机床加工键槽。轴在装到风机上以后，表面涂一层醒目、明亮的黄漆以起到保护轴的作用。根据客户需求，伦敦风机也可以提供不锈钢轴。轴径的设计所达到的安全系数，其值为极限转速大于或等于 1.25 倍最高运行转速。

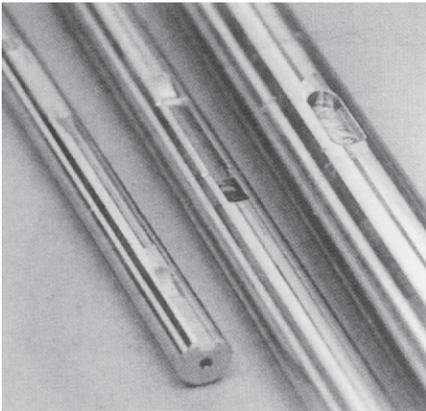
Shafts

Manufactured from precision ground, C45 carbon steel bars, using precision tools to cut keyways.

All the shafts are coated, after assembly, with a clearly distinguishable, bright yellow protective paint.

Stainless steel shafts can be provided on request.

Shaft diameters are selected to achieve a safety factor for critical speed ≥ 1.25 higher than the maximum operating speed.



轴承

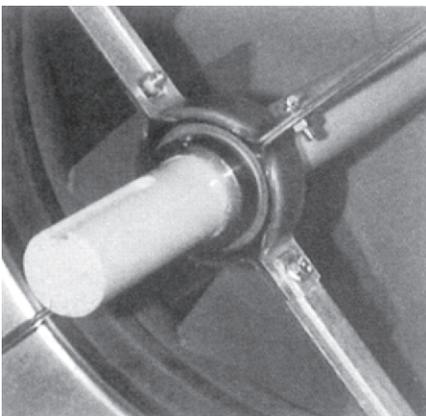
R 型风机选用的轴承均为自动调心气密性封闭的自润滑滚珠轴承，轴承为单排滚珠、深沟槽结构，轴承放在导电橡胶减振套内，并通过螺栓固定在轴承架上。（图1）

T 型风机选用的轴承均为自动调心气密性封闭的单排滚珠轴承，轴承安装在具有润滑孔的铸铁轴承座上，轴承座则固定在边框上。（图2）

T1型风机使用加强单排气密性自动调心滚珠轴承，轴承用圆锥套锁紧在轴上，轴承安装在具有润滑孔的铸铁轴承座上，而轴承座固定在边框上。（图3）

根据风机尺寸的不同，T2型风机采用不同型号的重负荷轴承；当叶轮直径为500mm时，采用单排滚珠轴承用圆锥套固定于铸铁轴承座中；当叶轮直径为560，630，710及800mm时，采用双排滚珠轴承用内分离圆锥套固定于轴承座中；当叶轮直径为900到1400mm时，采用双排圆柱滚子调心轴承固定在单个轴承座上。

所有轴承座具有加润滑剂的孔，轴承座用螺栓固定在专门的加强边框上。（图4）

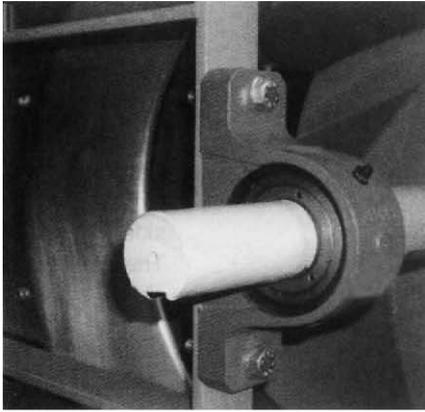


(图1)

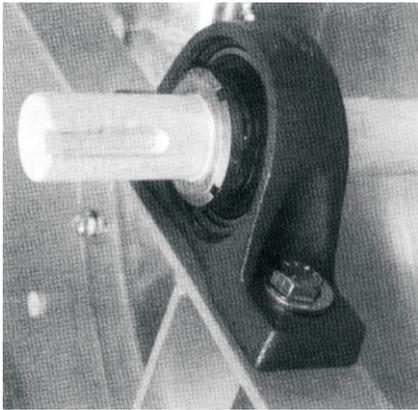
Bearings

Fans of R versions use single row, deep groove, self-aligning ball bearings. Sealed and life lubricated, they are locked on the shaft with an eccentric ring clamp and supported, inside electrically conductive rubber shock absorbers, on inlet bolted spiders (Fig. 1).

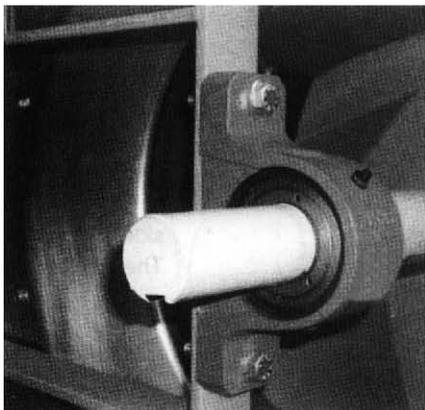
Fans of the T versions use sealed, single row, self-aligning ball bearings, with eccentric clamp mounted inside cast iron pillow blocks, with grease nipples, bolted to the side-frames (Fig. 2).



(图2)



(图3)



(图4)

Fans of the T1 version use reinforced single row sealed ball bearings, locked on the shaft with a conical sleeve and mounted inside cast-iron pillow blocks, with grease nipples, bolted to the side-frames (Fig. 3). All the fans of the T2 version, have sealed heavy-duty bearings of different types, according to the fan size: single row ball bearings with conical sleeve inside cast iron pillow blocks (500); double-row ball bearings with conical sleeve inside split block housings (560, 630, 710 and 800) or double row, self-aligning roller bearings inside single piece pillow blocks (900 to 1400). All the pillow blocks have grease nipples for lubrication and are bolted to specially reinforced side-frames (Fig. 4).

在选配合理尺寸的皮带轮和在风机的最大负载条件下，轴承评价寿命 L_{10} 不小于40000小时（见皮带轮选配章节），在普通的运行条件下时，轴承的平均使用寿命会更高。由于可以广泛选择合理的轴承结构类型，因而更长时间轴承使用寿命的要求可以很容易的达到。

油脂的使用更换时间取决于轴承的使用条件，润滑脂的寿命与轴承 L_{10} 的寿命有所不同。

The bearings allow, with reasonable pulley diameters and at the maximum load conditions, to achieve an L_{10} operating life of 40000 hours (see the chapter "Pulley selection"). With more common operating conditions, the average operating life can be much higher. Thanks to the wide choice of construction versions available, even longer design life requirements can be easily met.

As the operating life of the grease contained in the bearings depends on the operating conditions, it can be different from the L_{10} operating life of the bearings themselves.

除了“正确使用指南”章节之外，“使用与维修手册”章节也含有一些重要的内容：风机的正确安装、使用和维护，尤其是轴承的正确安装、使用和维护。

Apart from the chapter "Guidelines for correct use", the "Use and Maintenance Manual" contains important information covering proper installation, use and maintenance of the fan and particularly of its bearings.

油漆

根据客户的需求，伦敦风机可以提供各种厚度的特制油漆涂层。

Paintings

Special powder-paint coatings of various thickness can be supplied on request.

防爆型风机

根据客户需求伦敦风机可以提供用铝或铜制作进风口，或在进风口边缘镶嵌铜圈的防爆型风机。相关的选型或详情请与伦敦风机联系。

Ignition protected versions

Ignition protected versions can be built on request, with inlet cones made of aluminium, copper or with copper rubbing stripes on the edge of the inlet cones. Please, contact the manufacturer for selection and details.

风机方向

标准风机两端都能安装皮带轮，它们能各自独立使用，或是左旋，或是右旋。所有带边框型号的风机都能以 0° ， 90° ， 180° ，和 270° 四个方向的任一方向来安装。

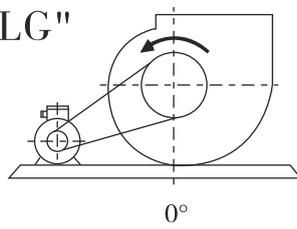
当订购标准风机时，不需要特别说明风机旋向，当订购带有附件的风机（例如排水塞），而附件位置需根据蜗板方向确定时，必须说明风机出口方向。

其他的附件可安装在由字母或数字标识的位置处。请查看每个附件的详细资料。如果客户对风机的旋向有特殊要求时，风机方向可根据 ISO 13349 国际标准和欧洲 Eurovent 1/1 标准来确定，即从驱动侧看，RD 代表右旋（叶轮顺时针旋转），LG 代表左旋（叶轮逆时针旋转）。下列图中表示了可实现的方向：

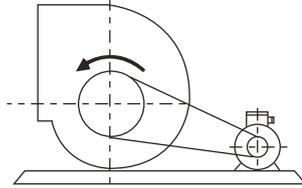
Fan orientation

Standard fans are supplied with both shaft ends prepared to fit a pulley. They can be indifferently used with either RD or LG rotation. All the versions with side frames can be easily turned to install them in one of the four orientations 0° ， 90° ， 180° ，and 270° . There is no need to specify fan orientation when ordering standard fans. Fan orientation must be specified instead when ordering fans fitted with accessories which must be located according to the scroll orientation, like drain plugs. Other accessories may be installed in coded standard positions, identified by letters or numbers. Please, check the details concerning each particular accessory. When requested, fan orientation is identified, according to ISO 13349 and Eurovent 1/1, when looking at the fan from the drive side. RD means right (clockwise) rotation, while LG means left (counterclockwise) rotation. The achievable orientations are shown in the drawing below.

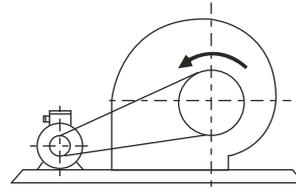
"LG"



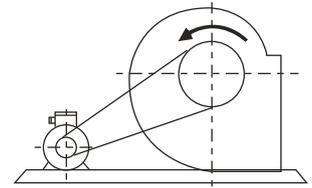
0°



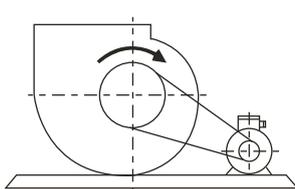
90°



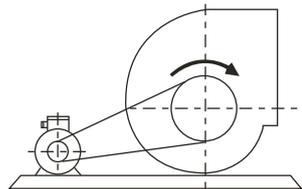
180°



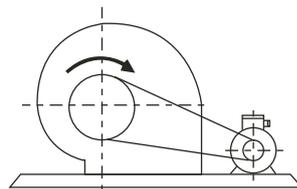
270°



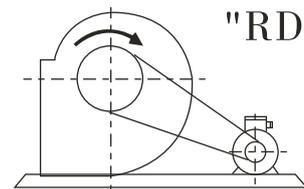
0°



90°



180°



270°

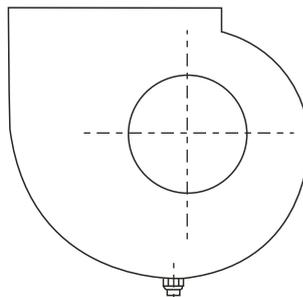
"RD"

例如：

“FCD 500 T 0° +排水丝堵” =FCD 风机系列，尺寸500，“T”型，0° 旋向角度且排水丝堵按图示安装。

Example:

FCD 500 T 0° +DRAIN PLUG” =FCD fan series, size 500 "T" version, with 0° orientation and drain plug installed as shown in the picture.



性能参数

空气性能

本样本所示的风机性能参数，是风机在“B”式安装条件下，对其进行性能测试获得的，“B”式安装即自由进风，接管道出风。

AMCA 210-99 标准

UNI 10531 标准

ISO 5801 标准

所有参数都是在 1.2kg/m^3 空气密度的标准条件下定义的。风机的动压和出风口风速都按比例显示于每张曲线图的下方，这些参数是依据上述标准，使用出风口全面积计算的。

Performance specifications

Air performance

Air performance ratings of the fans described by this catalogue have been derived from performance tests made with installation type "B", with free inlet and ducted outlet. In accordance with the following standards:

AMCA 210-99

UNI 10531

ISO 5801

Ratings are referred to the standard air density of 1.20 kg/m^3 . Dynamic pressure and outlet air velocity, as shown on the scales below each diagram, are calculated in accordance with the said standards, using the total outlet area for calculations.

“自由出风”运行

当风机在“A”式安装条件下运行时（“A”式安装即指自由进风、自由出风）风机的有效静压 P_{SA} 比在接管道出风安装条件下的静压值低，其静压减少值可以通过对样本中的全压值减去动压的增加值得到符合要求的结果。动压的增加值为动压增加系数 K_d 乘正常动压值。性能曲线的校正值 K_d 是不被AMCA国际认可的。 K_d 值如下：

"Free-outlet" operation

When operating in installation type "A", with free inlet and free outlet, the available static pressure of the fan, P_{SA} , is lower than when the fan is used with ducted outlet, and can be satisfactorily calculated subtracting, from the total pressure in the catalogue, an increased dynamic pressure, calculated by multiplying conventional dynamic pressure by a factor. Performance with correction factor K_d is not licensed by AMCA International. K_d shown below:

K_d -FCD
250-1000
1.66

动压的增加是由于气体压缩造成的，而气体压缩是由于蜗舌和没有接风管而产生的，风管的作用相当于一个散流器，他能使增加的动压部分转换化静压。

This dynamic pressure increase represents the effect of the airflow contraction produced by the cut-off plate and the absence of an outlet duct, which would act as a diffuser, allowing at least partial conversion of the excess of dynamic pressure into static pressure.

使用指南

电机选择

驱动风机所需的最小电机功率，是风机轴功率乘以一个系数，该系数包括皮带传动损失和合理的安全余量。安全余量包括在运行工作点或实际风机转速下产生的微小变化，它是由于电机的运行速度和传动比与原先的设计值有一些小不同而引起的。

Guidelines for correct use

Motor selection

The minimum motor power, required to drive the fan, can be calculated multiplying this fan shaft power by a coefficient (function of the shaft power value) which includes both the belt drive power loss, and a reason able safety margin. This safety margin covers and small change in the operating point or in the actual fan speed, which may be due to a motor speed or to a drive ratio slightly different from their design values:

$$W_{Mot} \geq W_{Tot} \cdot T_w$$

其中/where

W_{Tot} 风机轴功率
is the fan shaft power

T_w 电机选配系数
is the motor selection coefficient

对于 FCD 风机:

For FCD fans:

$T_w=1.25$ 当 $W_{Tot} < 0.75KW$ 时
if $W_{Tot} < 0.75KW$

$T_w=1.20$ 当 $0.75KW \leq W_{Tot} < 10KW$ 时
if $0.75KW \leq W_{Tot} < 10KW$

$T_w=1.15$ 当 $W_{Tot} \geq 10KW$ 时
if $W_{Tot} \geq 10KW$

• $1kw=1.36HP$

当电机功率大于7.5KW时,我们强烈推荐用户采用Y/△启动,或者其他方式软启动。

• With motors larger than 7.5KW the use of a star/delta (Y/△)starter or, alternatively, of a soft starter is highly recommended.

如果可以精确的得到实际运用工作点,并可以准确得到皮带的传动损失,则安全系数可以适当减小。

The safety coefficients may be reduced if the actual operating point is precisely known, and the belt drive loss can be accurately calculated.

偏心夹紧轴承反转带来的影响

安装在R, T型风机上的轴承,设计和安装要求在一个固定的方向下运行,这个方向就是风机的正常旋转方向(如图所示)。如果风机意外反转,就应该认真检查轴承,以确保其依然牢固的锁在轴上。

Effects of backwards rotation on eccentric clamp bearings

Eccentric clamp bearings are used on fan versions R, T. They are designed and installed in such a way that they must be run only in the normal fan operating direction (see picture) . If the fan has been subject to a short accidental backward rotation, the bearings should be carefully inspected, to verify that they are still firmly locked on the shaft.

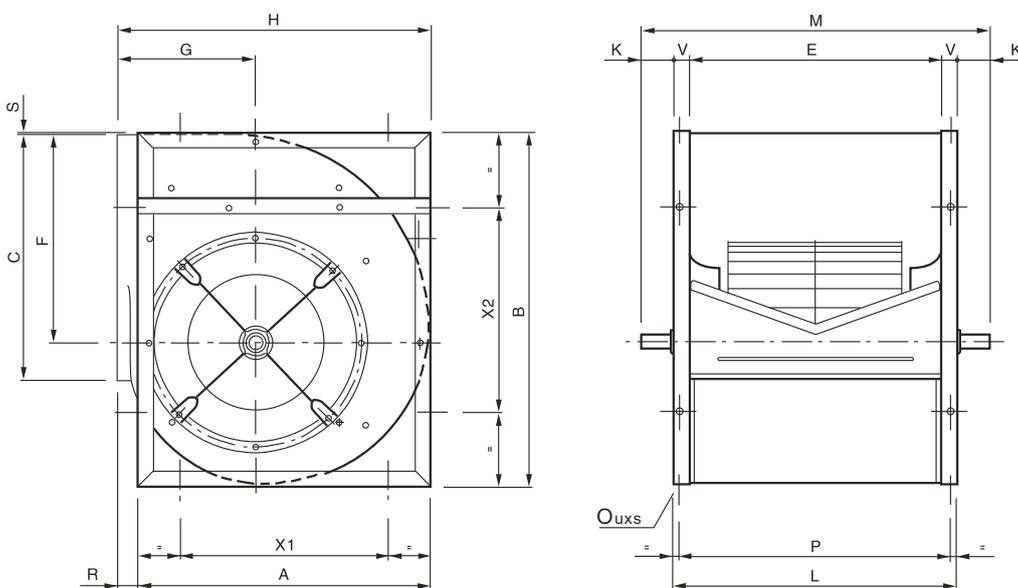
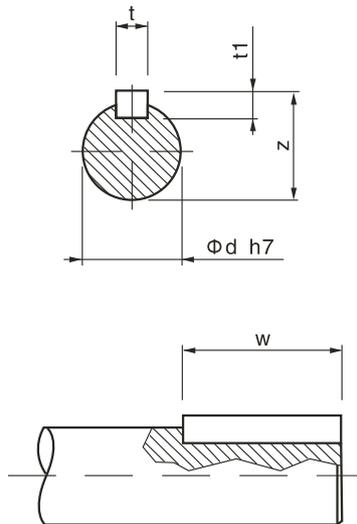
FCD风机运转极限 FCD fans operating limits

最大选配功率 Max. installed power	R	KW	250	280	315	355	400	450	500	560	630	710	800	900	1000
	T	KW	7,5	11	11	15	15	15	15	18,5	18,5	22	22	30	37
	T1	KW	-	-	18,5	22	22	30	30	30	30	37	37	45	-
	T2	KW	-	-	-	-	-	-	37	45	45	55	55	75	75
最高转速 Max. speed	R	rpm	2800	2500	2100	1800	1600	1400	1200	1100	900	750	-	-	-
	T	rpm	3000	2700	2400	2000	1800	1500	1300	1200	1000	85	750	650	600
	T1	rpm	-	-	2400	2000	1800	1500	1400	1300	1100	900	800	700	-
	T2	rpm	-	-	-	-	-	-	1400	1300	1100	900	800	700	650
轴承最大允许载荷 Max. permissible load on bearing	R	N	420	530	530	840	840	1180	1180	1450	1450	1800	-	-	-
	T	N	450	660	660	840	840	1320	1320	1760	1760	1900	1900	3000	3000
	T1	N	-	-	1050	1450	1450	1180	1800	2550	2550	3550	3550	3900	-
	T2	N	-	-	-	-	-	-	2200	3700	3700	5800	5800	7000	7000
空气温度(最低 -20℃) Air temperature (min -20℃)	R	Max. °C	85	85	85	85	85	85	85	85	85	85	-	-	-
	T-T1	Max. °C	100	100	100	100	100	100	100	100	100	100	100	100	100
	K2	Max. °C	-	-	-	-	-	-	100	100	100	100	100	100	100
风机重量 Fan weight	R	kg	13,0	18	22	29	38	50	65	86	106	135	-	-	-
	T	kg	18	24	29	41	52	66	85	134	170	201	249	306	333
	T1	kg	-	-	30	42	53	67	86	142	175	208	261	316	-
	T2	kg	-	-	-	-	-	-	105	150	180	225	278	320	360
叶轮 Wheel	重量 weight	kg	2,7	3,5	4,6	5,5	9	11	18	24	32	40	63	73	89
	转动惯性 Moment of inertia	kg m ²	0,036	0,059	0,10	0,15	0,31	0,48	0,90	0,56	2,59	3,97	8,34	12,6	18,7
			250	280	315	355	400	450	500	560	630	710	800	900	1000

注：叶轮直径大于1000mm的风机运行极限请咨询伦敦风机(天津)有限公司

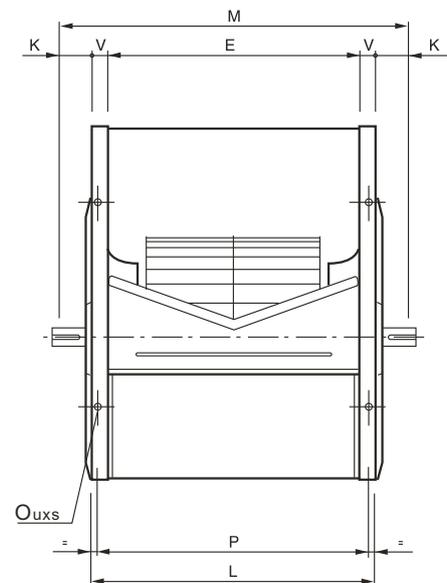
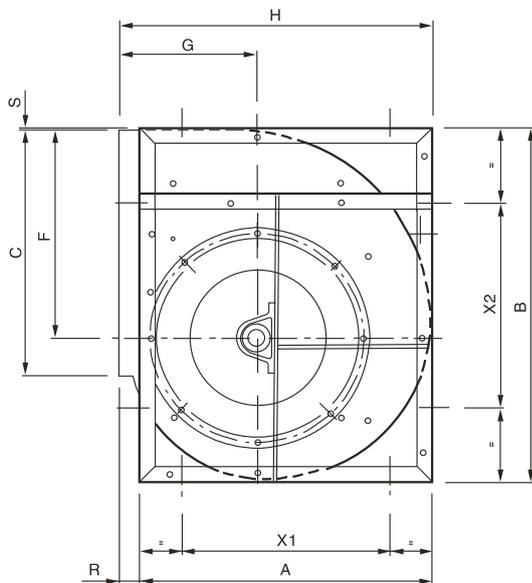
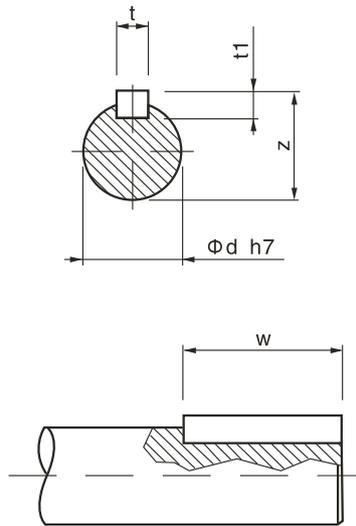
R 型

R系列风机型安装采用冷加工镀锌框架，用螺栓将其固定在侧板上。它可增加风机结构的强度和刚度，并提供四个不同方位上的安装。这类风机适用于尺寸710以下。进一步详情请参阅“运转极限”附表。



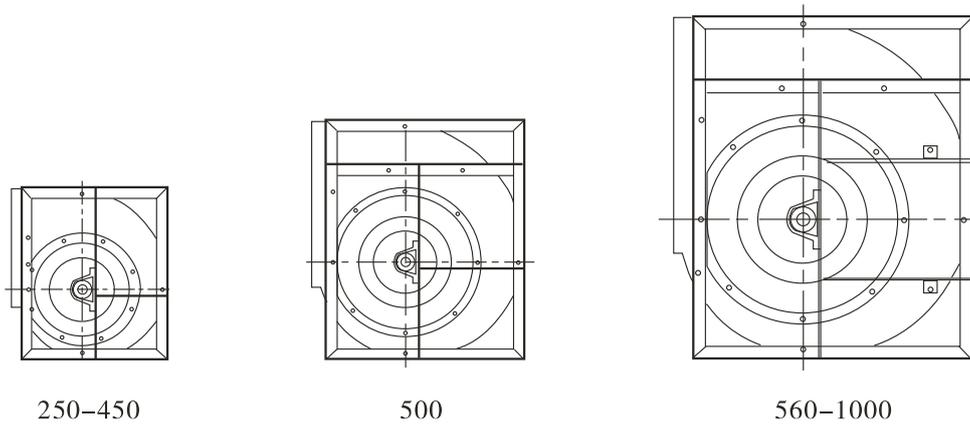
T 型

该系列风机采用热轧型钢焊接并烤漆制成的加强侧框架，也可根据客户要求对框架表面进行热镀锌处理，加强侧框架采用螺栓固定在风机侧板上，使其更加坚固。该系列风机的尺寸大小为从250到1000。所有尺寸风机均配有带铸铁轴承座的轴承。进一步详情请参阅“运行极限”附表。



T version

This version is stiffened through the application of reinforced side frames, bolted on the side plates and made with hot rolled steel sections, welded and coated with alchidic-melamminic paint. As an option, they can be protected with hot-dip galvanising. This version is available in the sizes from 250 up to 1000. All the size are fitted with cast iron, pillow-block bearings. For further information, please see the table "Operational Limits".



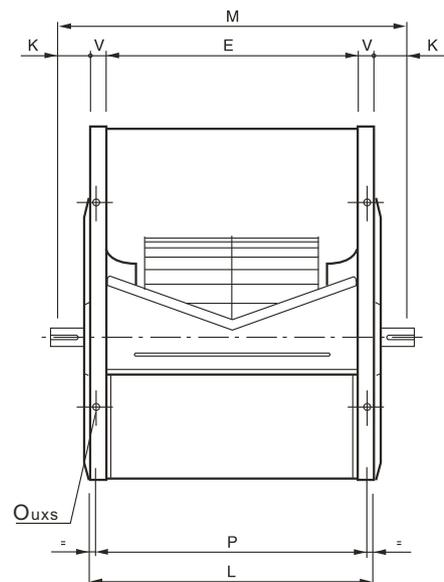
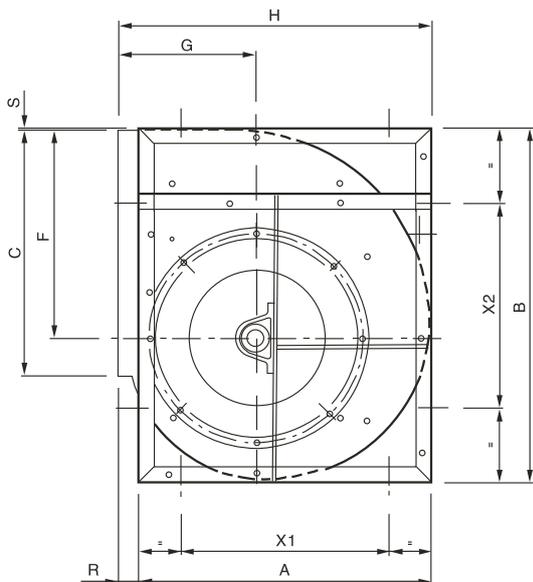
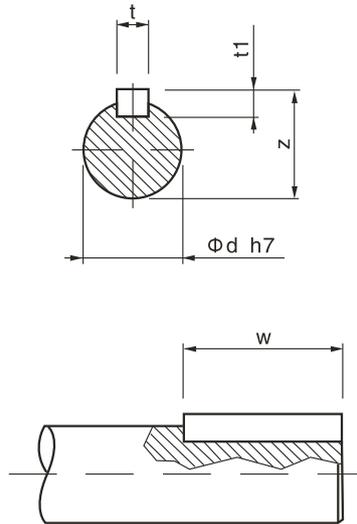
FCD T

尺 寸 DIMENSIONS

型号 Size	mm																					
	A	B	C	E	F	G	H	L	M	P	R	S	V	K	X1	X2	t	t1	W	Z	Φd	UXS
250	381	461	320	320	270	195	419	380	526	350	38	4	30	72	224	224	8	7	40	28	25	11×16
280	429	518	361	361	302	215	466	421	581	391	37	5	30	80	280	280	8	7	40	33	30	13×18
315	480	578	404	412	337.4	236	518	472	625	442	38	6	30	76.5	280	280	8	7	40	33	30	13×18
355	544	655	453	461	380.5	261	578	541	685	501	34	9	40	72	355	355	10	8	50	38	35	13×18
400	613	736	507	515	428.5	290	651	595	750	555	38	8	40	77.5	355	355	10	8	50	38	35	13×18
450	679	827	569	577	482.7	322	725	657	850	617	46	8	40	96.5	530	530	12	8	70	43	40	13×18
500	748	918	638	646	535.7	352	802	736	920	696	53.5	8	40	97	530	530	12	8	70	43	40	13×18
560	839	1030	715	723	581	390	893	823	1070	773	54	10	50	124	530	530	14	9	90	53.5	50	13×18
630	940	1157	807	807	679	434	999	907	1161	857	59	6	50	127	530	530	14	9	90	53.5	50	13×18
710	1050	1303	909	909	765	485	1121	1009	1267	959	71	7	50	129	630	630	14	9	90	53.5	50	17×22
800	1181	1468	1007	1015	858.8	515	1229.7	1115	1360	1065	48.7	11.2	50	123	710	710	14	9	90	53.5	50	17×22
900	1319	1648	1130	1138	967.1	604	1408	1238	1520	1188	89	10.9	50	141	800	800	18	11	90	64	60	17×22
1000	1451	1810	1267	1275	1063.3	657	1541	1375	1660	1325	90	11.7	50	143	900	900	18	11	90	64	60	17×22

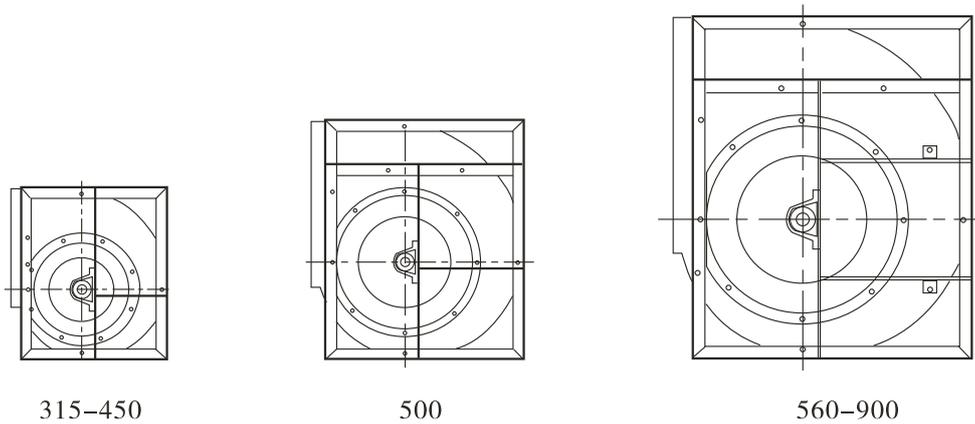
T1 型

这类风机尺寸大小为从315到900。相对于前一种它的结构更加坚固紧凑，同时满足更高的性能参数要求，因为它采用了锥套锁紧轴承，这种轴承可承受更大的载荷，且具有更坚固的结构。进一步详情请参阅“运转极限”附表。



T1 version

This version is available in the sizes from 315 up to 900 . The execution is constructively very similar to the previous one, but allows higher performance thanks to the use of bearings with conical sleeve, suitable for heavier duties and to some structural stiffening. For further information, please see the table "Operational Limits".



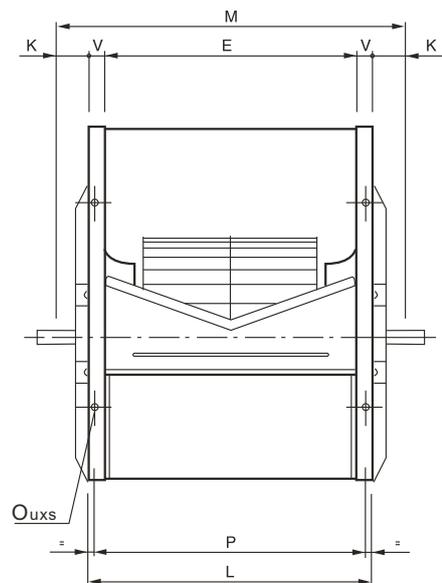
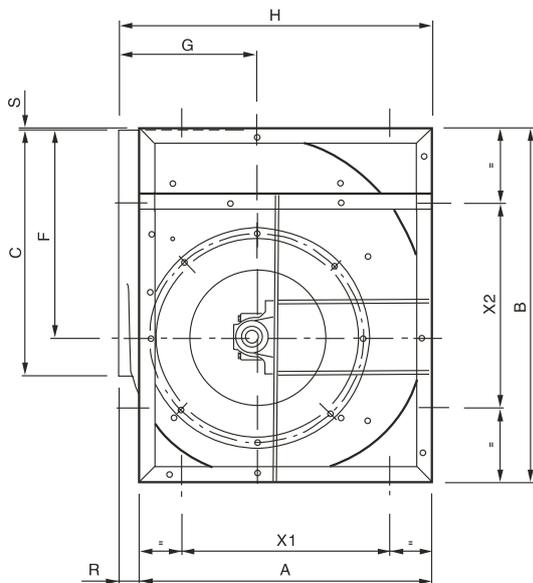
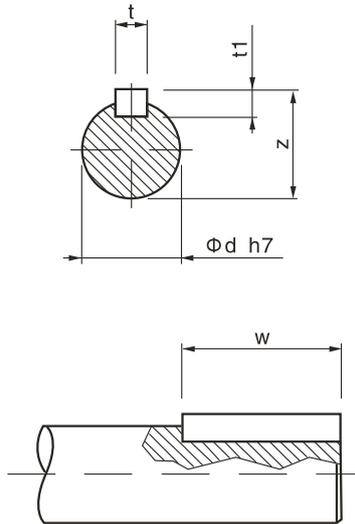
FCD T1

尺寸 DIMENSIONS

型号 Size	mm																					
	A	B	C	E	F	G	H	L	M	P	R	S	V	K	X1	X2	t	t1	W	Z	Φd	UXS
																						11×16
315	480	578	404	412	337	236	518	472	625	442	38	6	30	76.5	280	280	8	7	40	33	30	13×18
355	544	655	453	461	381	261	578	541	685	501	34	9	40	72	355	355	10	8	50	38	35	13×18
400	613	736	507	515	429	290	651	595	750	555	38	85	40	77.5	355	355	10	8	50	38	35	13×18
450	679	827	569	577	483	322	725	657	850	617	46	8	40	96.5	530	530	12	8	70	43	40	13×18
500	748	918	638	646	536	352	802	736	920	696	53.5	8	40	97	530	530	12	8	70	43	40	13×18
560	839	1030	715	723	581	390	893	823	1070	773	54	10	50	124	530	530	14	9	90	53.5	50	13×18
630	940	1157	801	809	676	434	999	909	1155	859	59	10	50	123	530	530	14	9	90	53.5	50	13×18
710	1050	1303	898	906	898	485	1121	1006	1255	956	71	10	50	125	630	630	18	11	90	64	60	17×22
800	1181	1468	1007	1015	859	515	1230	1115	1360	1065	48.7	11.2	50	123	710	710	18	11	90	64	60	17×22
900	1319	1648	1130	1138	967	604	1408	1238	1520	1188	89	10.9	50	141	800	800	18	11	90	64	60	17×22

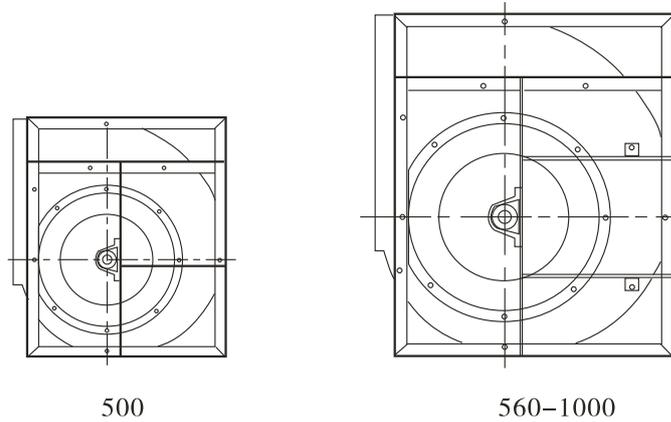
T2 型

这类风机尺寸大小为从500到1000。相对于前两种结构，它的结构更加紧凑，同时满足更高的性能参数要求，因为采用重负荷轴承，并采用相应的加强连接，比如轴、框架，这类风机可以达到更高的性能参数水平。进一步详情请参阅“运转极限”附表。



T2 version

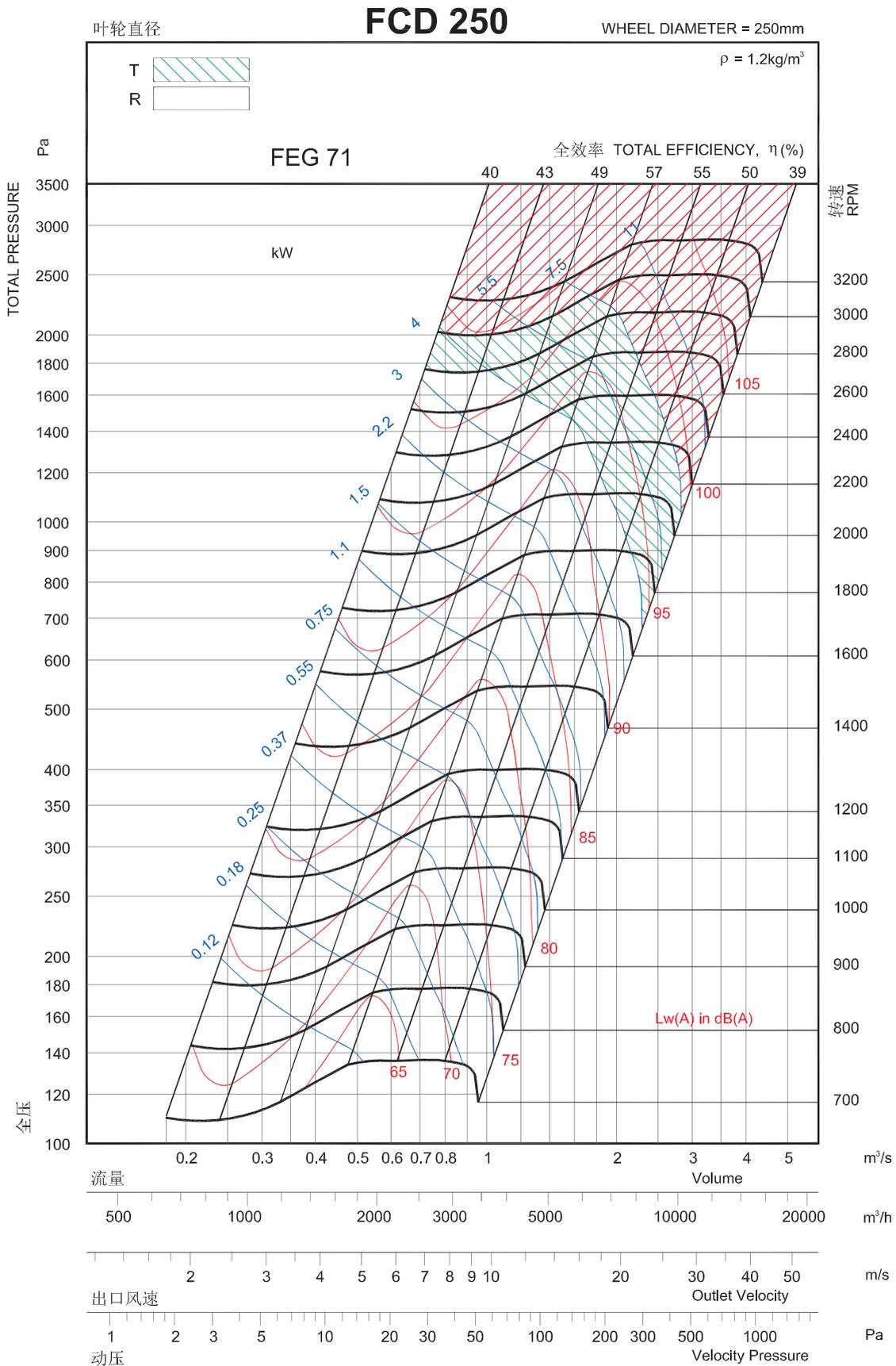
This version is available only in the sizes from 500 up to 1000. Very similar to the two previous versions, thanks to the use of heavy-duty bearings and of appropriately reinforced components, such as shafts and frames, this version achieves very high performance levels. For further information, please see the table "Operational Limits".



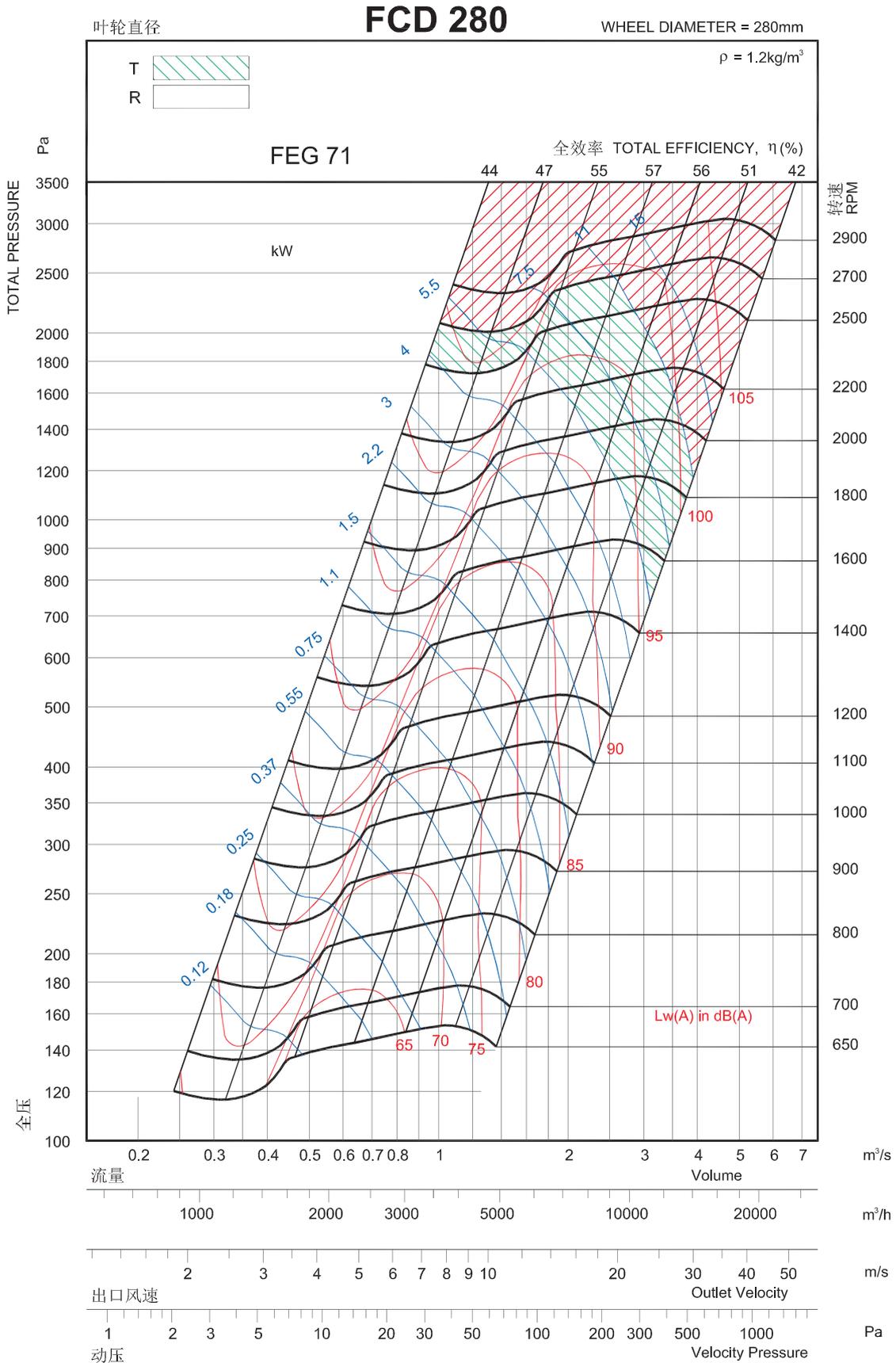
FCD T2

尺 寸 DIMENSIONS

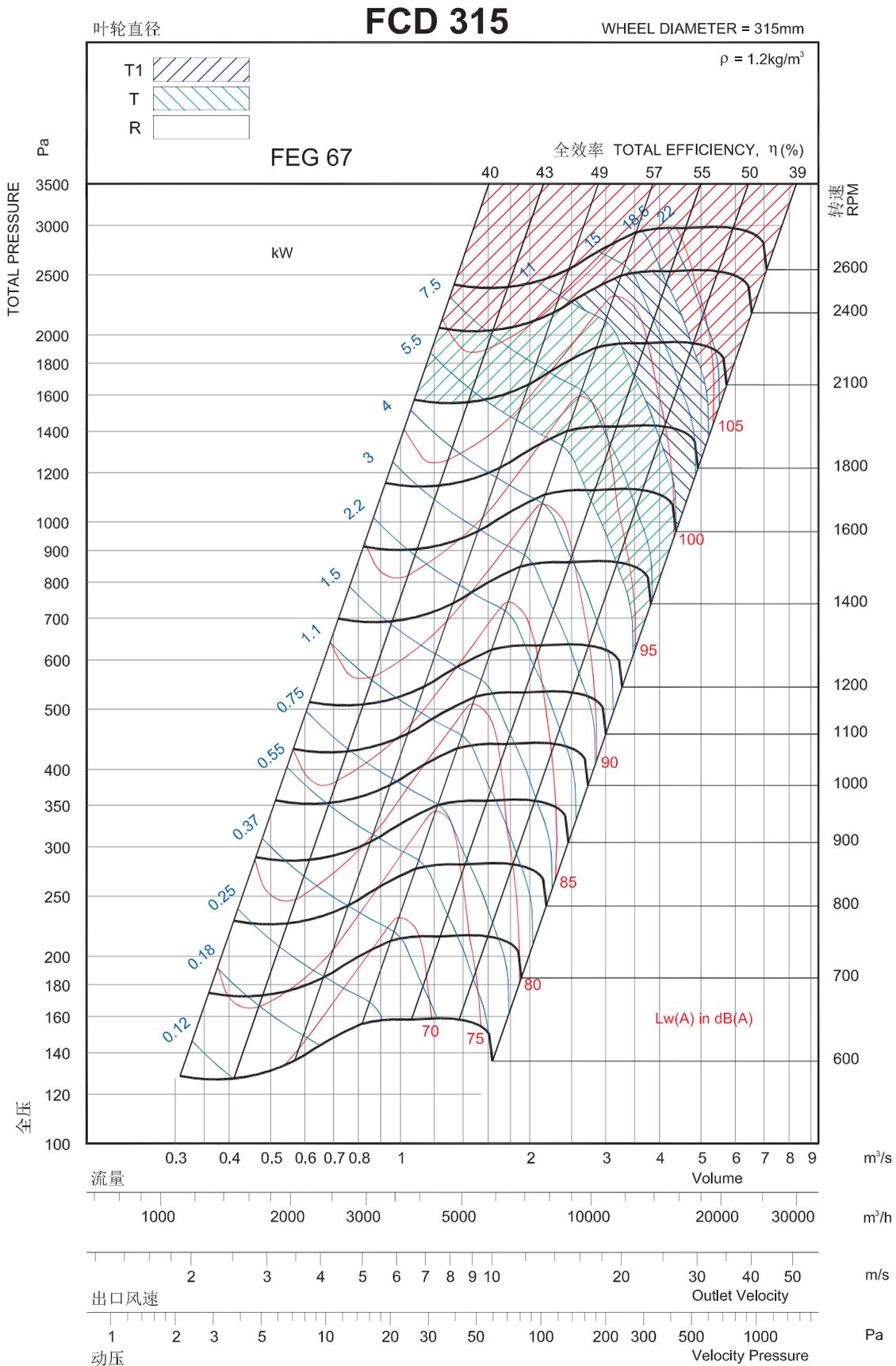
型号 Size	mm																					
	A	B	C	E	F	G	H	L	M	P	R	S	V	K	X1	X2	t	t1	W	Z	Φd	UXS
500	748	918	638	646	536	352	802	736	920	696	53.5	8	40	97	530	530	14	9	90	53.5	50	13×18
560	839	1030	715	723	581	390	893	823	1070	773	54	10	50	124	530	530	14	9	90	53.5	50	13×18
630	940	1157	801	809	676	434	999	909	1155	859	59	10	50	123	530	530	14	9	90	53.5	50	13×18
710	1050	1303	898	906	898	485	1121	1006	1255	956	71	10	50	125	630	630	18	11	90	64	60	17×22
800	1181	1468	1007	1015	859	515	1230	1115	1360	1065	48.7	11.2	50	123	710	710	18	11	90	64	60	17×22
900	1319	1648	1130	1138	967	604	1408	1238	1520	1180	89	10.9	50	141	800	800	18	11	90	64	60	17×22
1000	1451	1810	1267	1275	1063	657	1541	1375	1660	1325	90	11.7	50	143	900	900	18	11	90	64	60	17×22



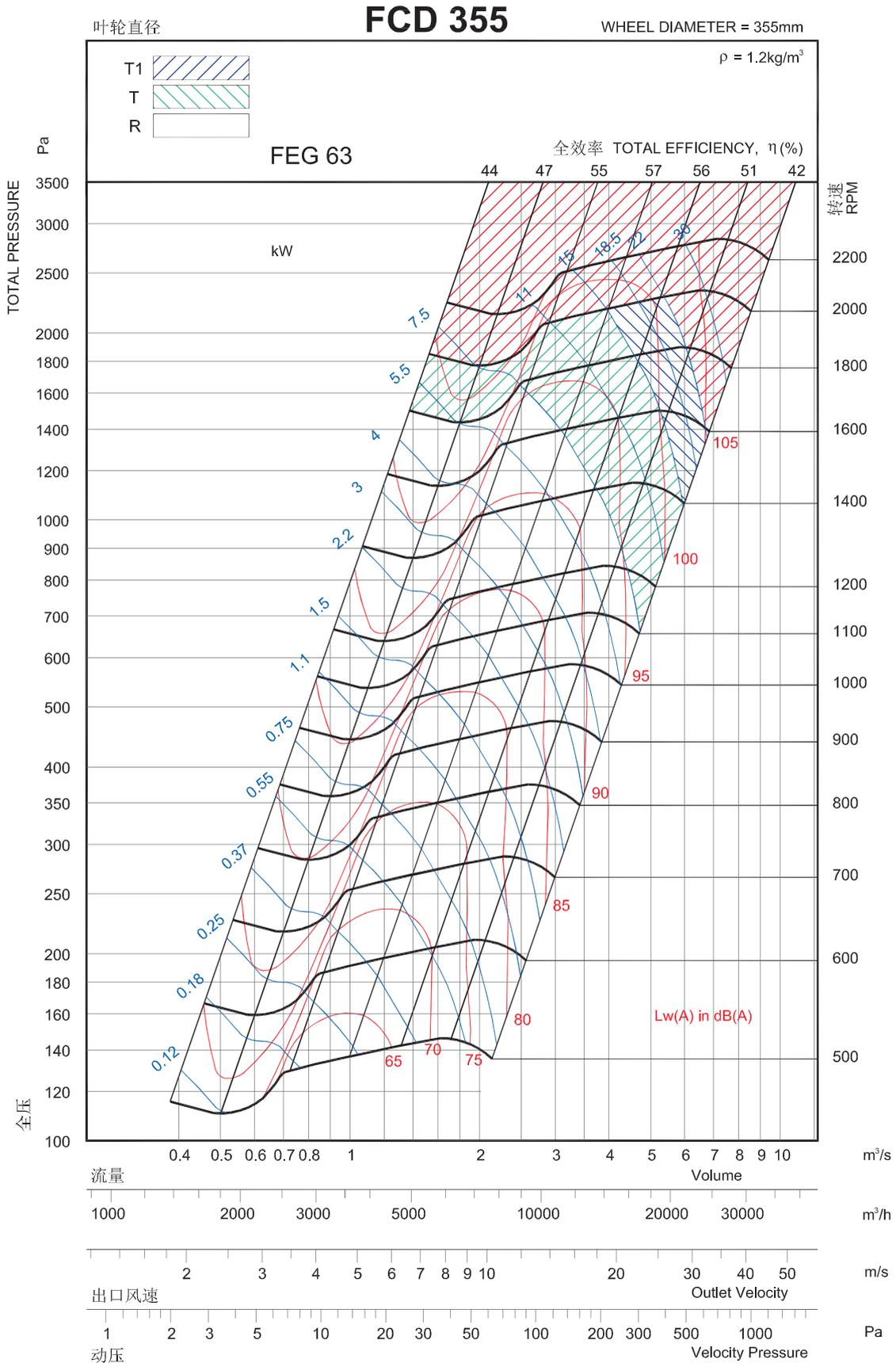
经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



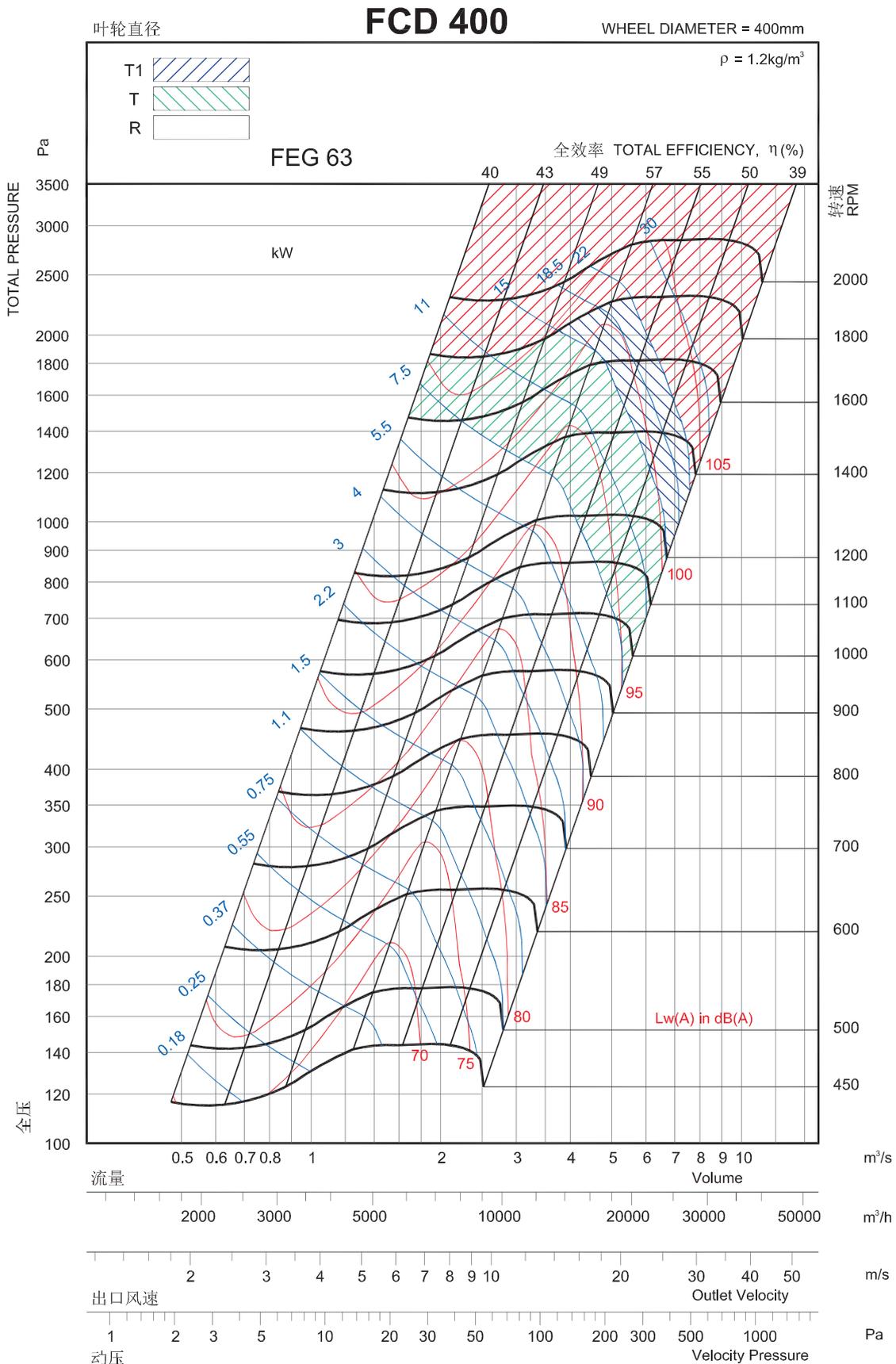
经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口LwIA)。



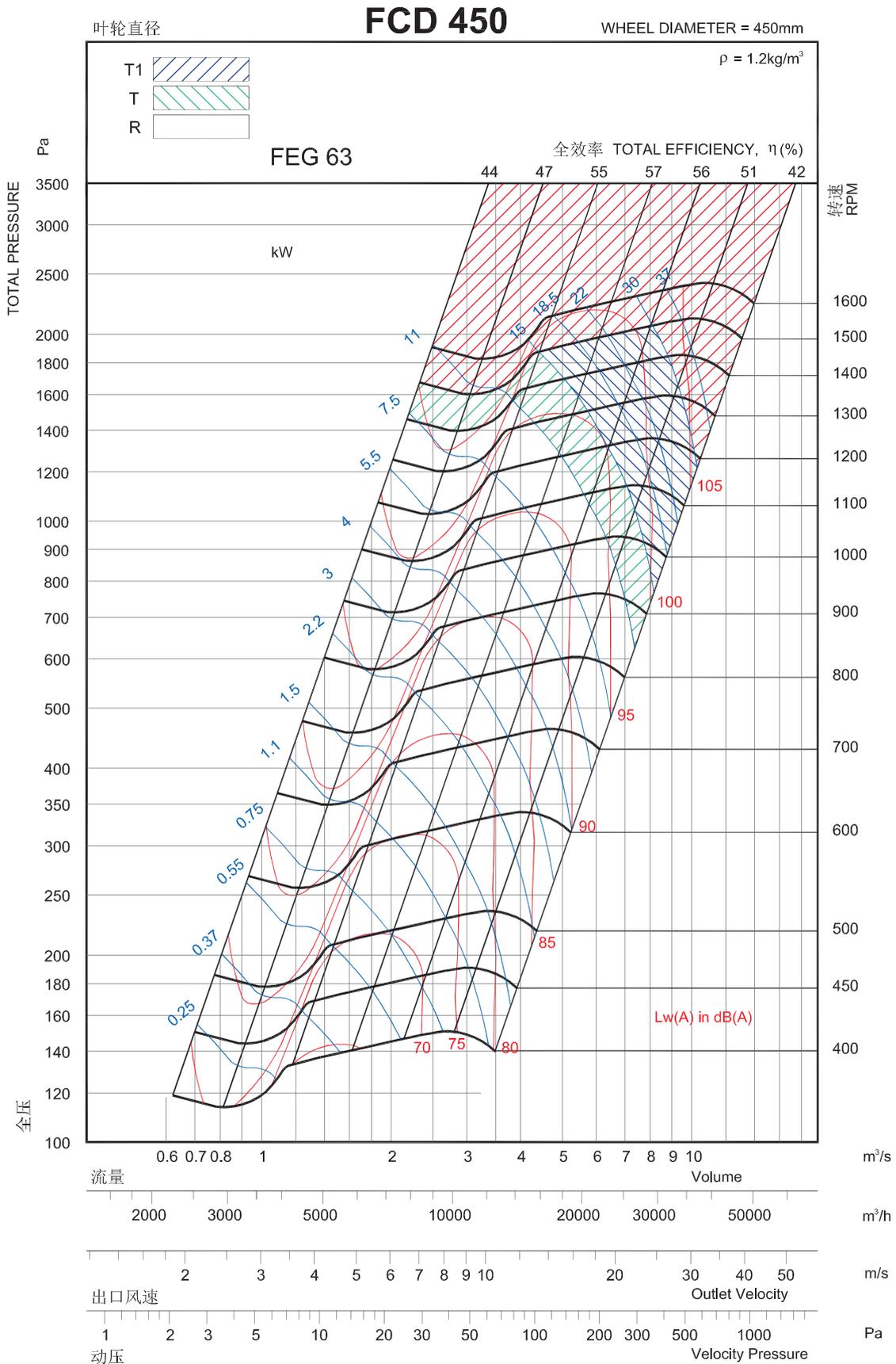
经认证的性能是B类安装-自由入口，管道出口。功率额定值(kW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



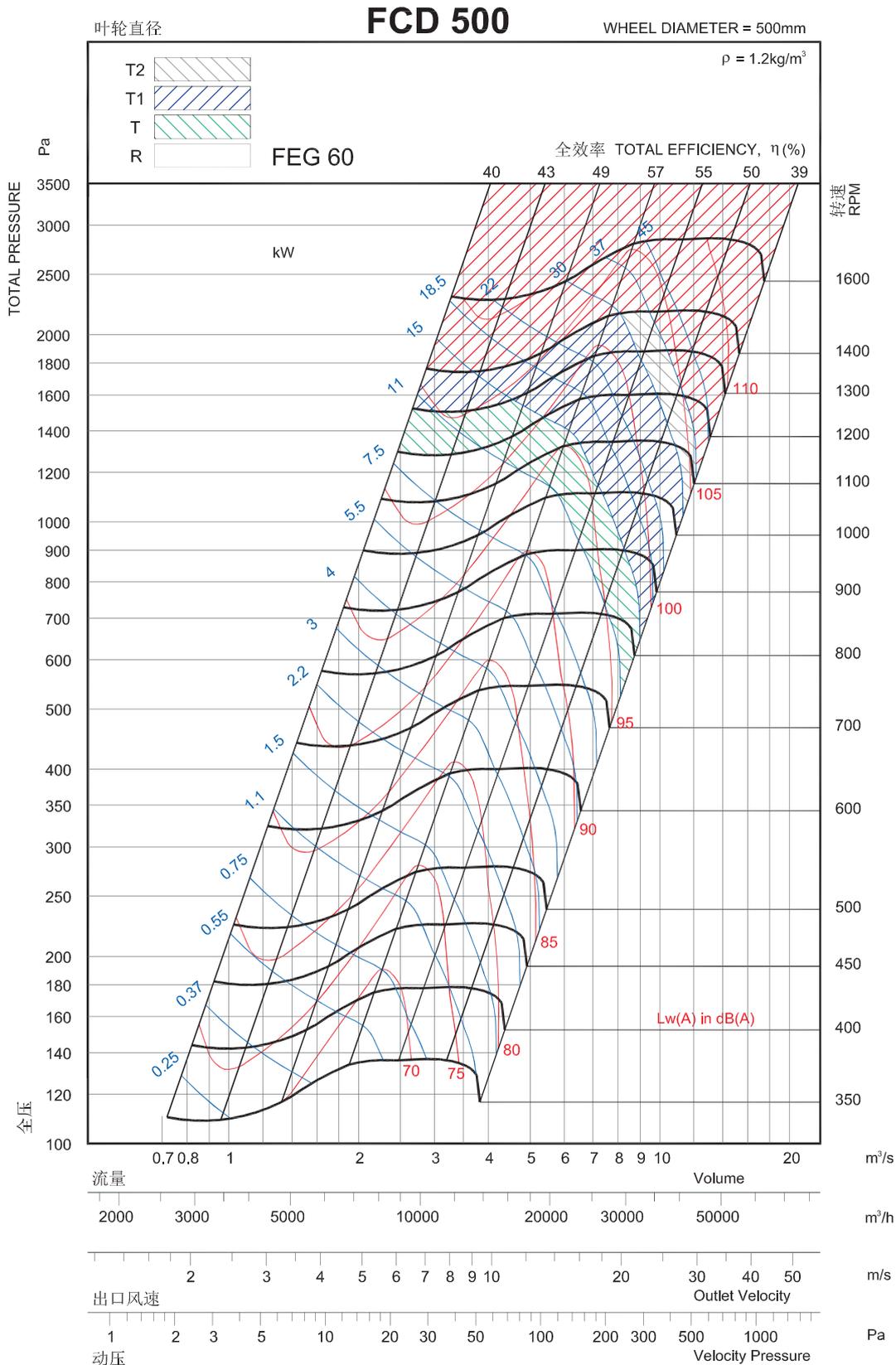
经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International 标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口LwIA)。

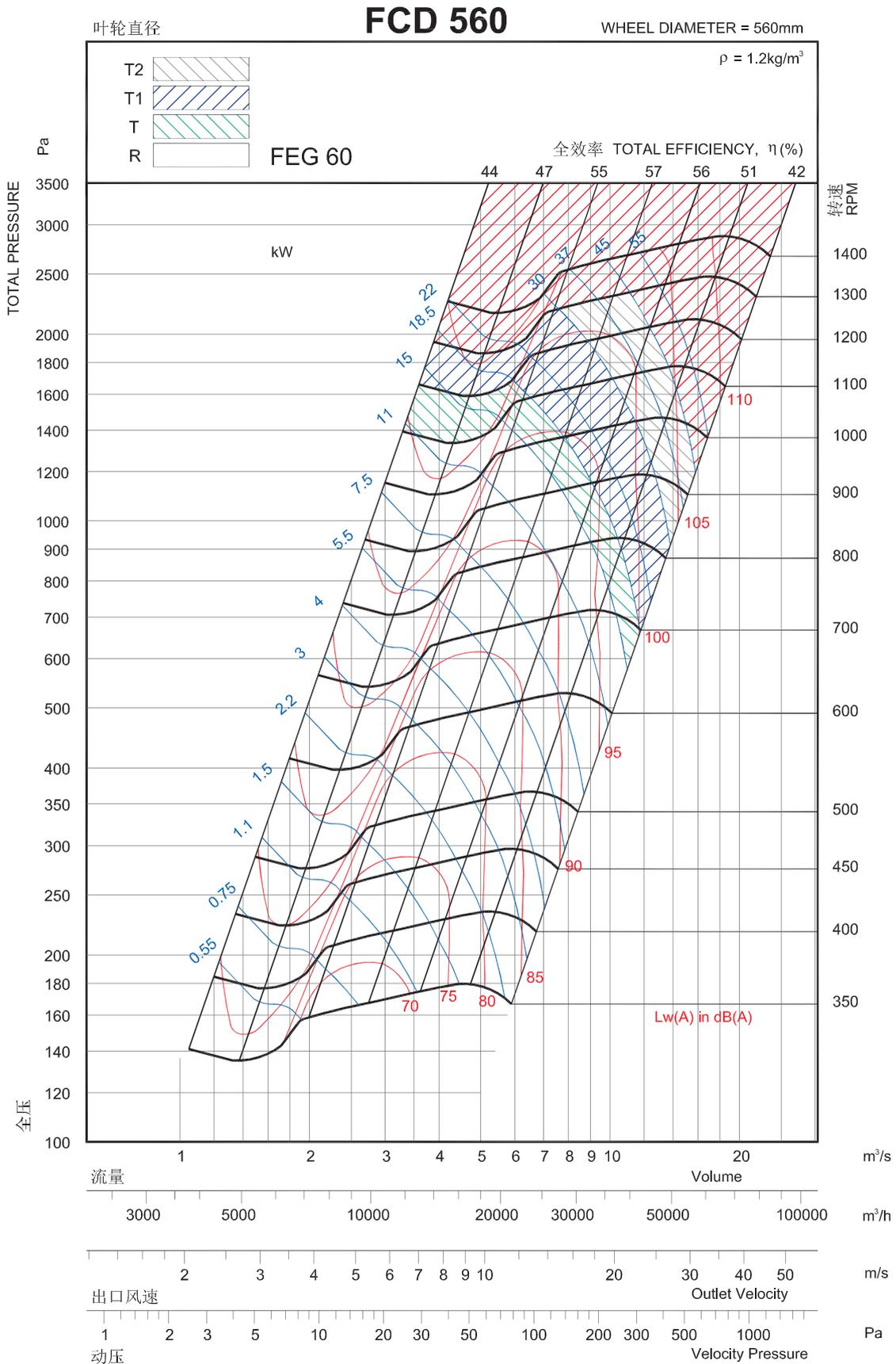


经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准3011计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。

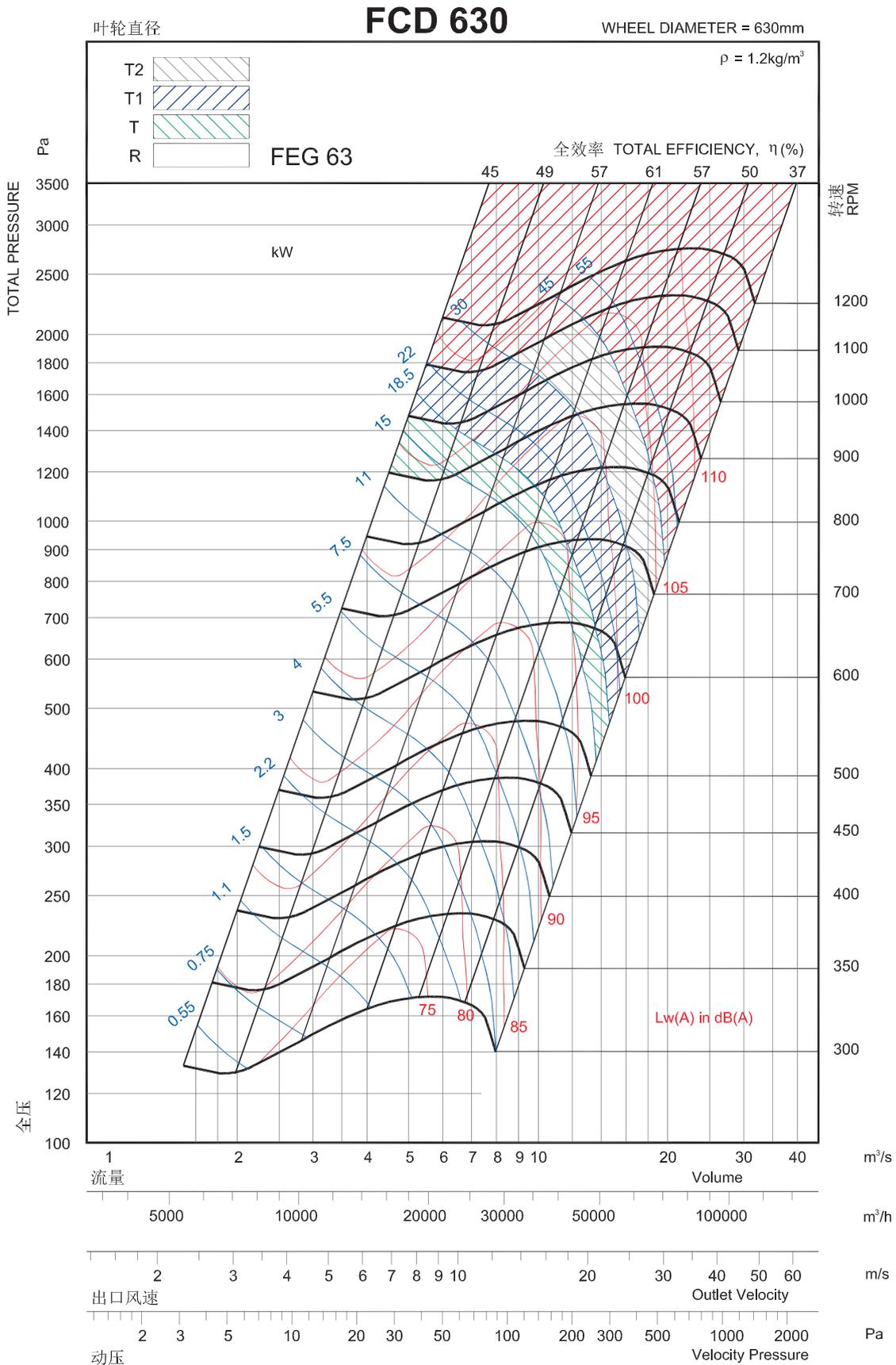


Performance certified for Installation type B - Free Inlet, Ducted outlet. Power rating kW does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B: free inlet, ducted outlet.

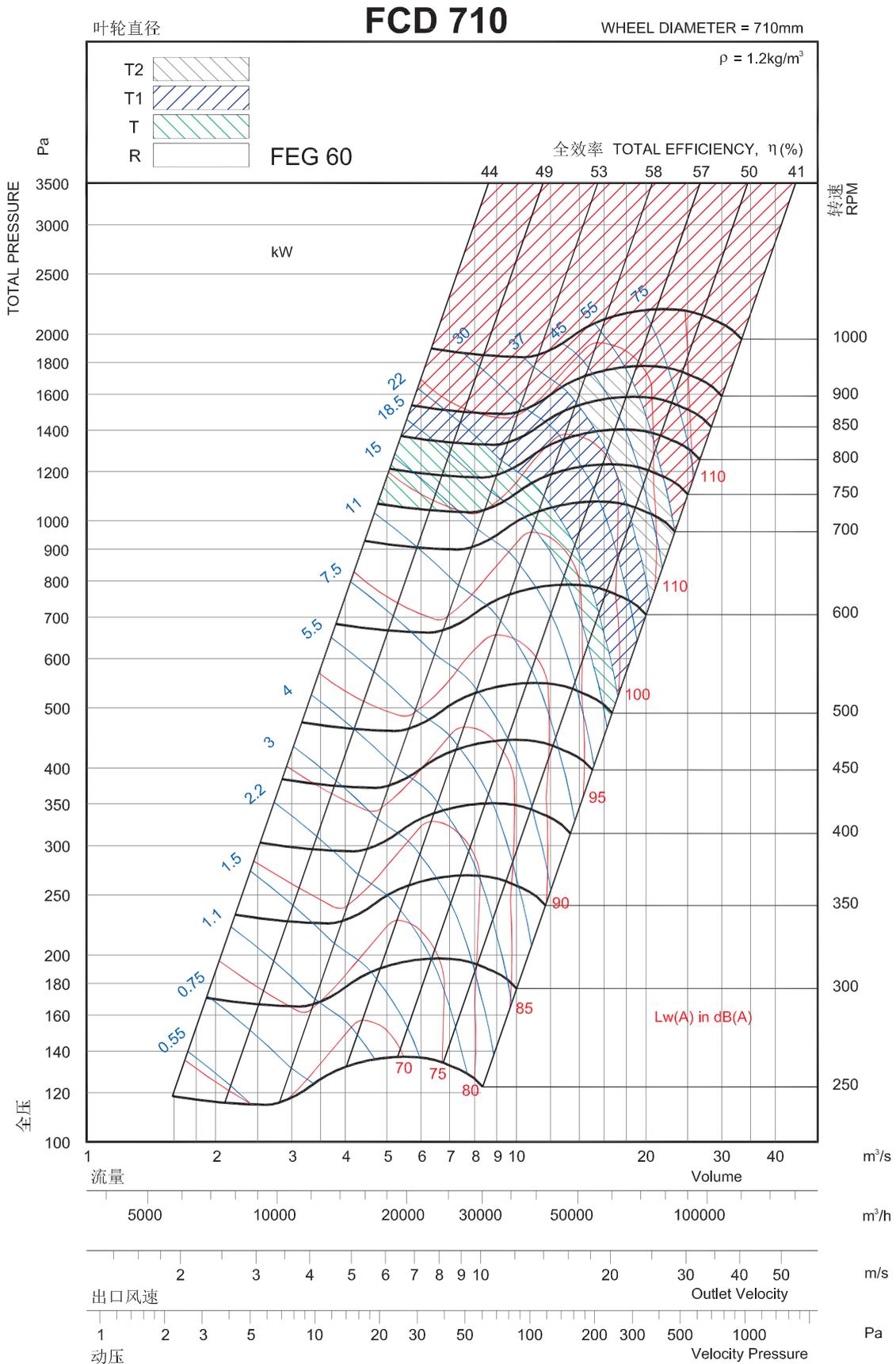
经认证的性能是B类安装-自由入口，管道出口。功率额定值(kW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International 标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



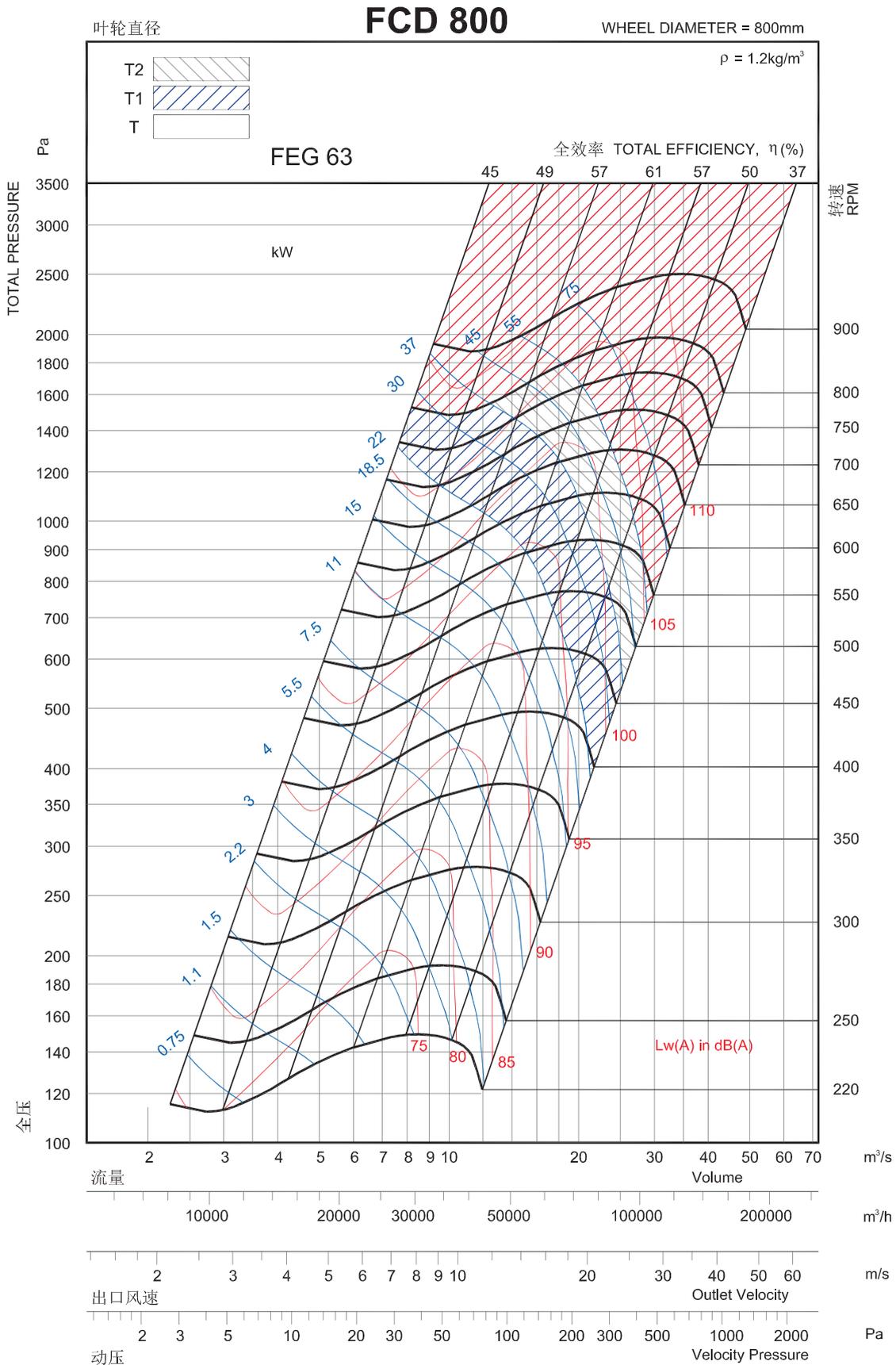
经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



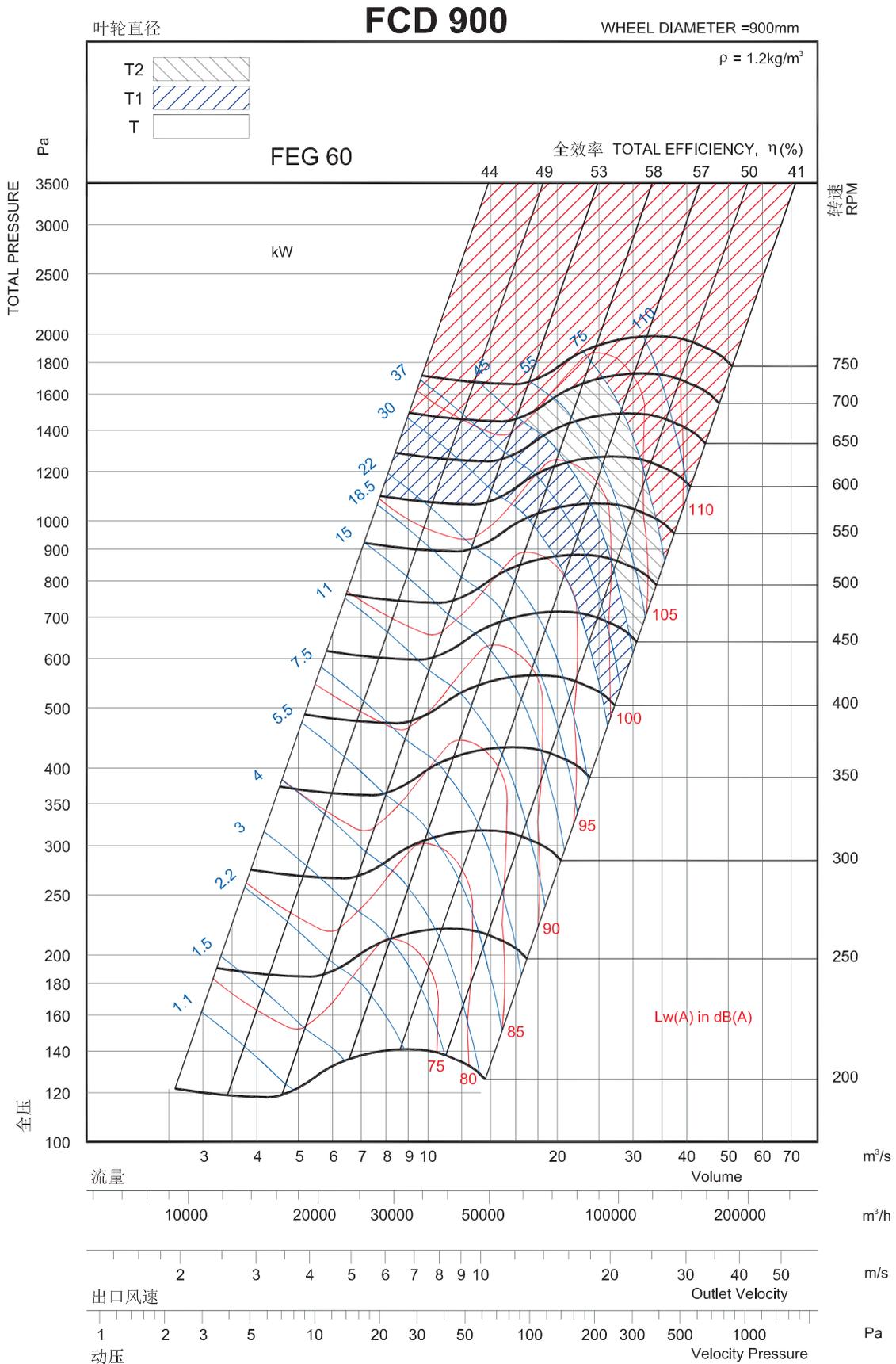
经认证的性能是B类安装-自由入口，管道出口。功率额定值(KW)不包括传输(动)损失。各项性能额定值不包括附属物(附件)的影响。所示A加权声音性能额定值已按AMCA International标准301计算。所示值为安装类型B-自由入口，管道出口的声功率级(入口Lw(A))。



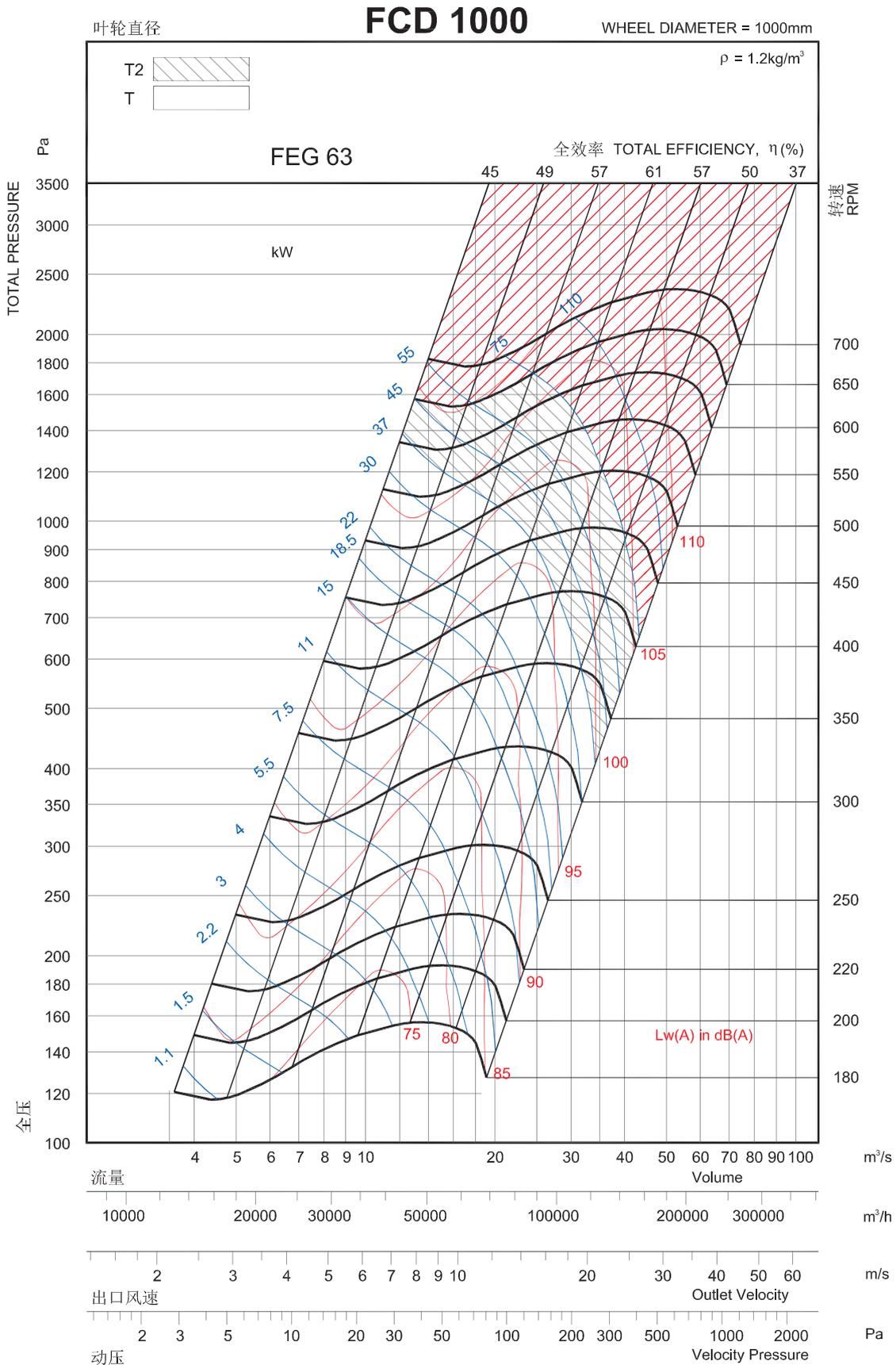
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