



# TBF带式传动空调风机

后倾机翼型叶轮、双进风  
带式传动

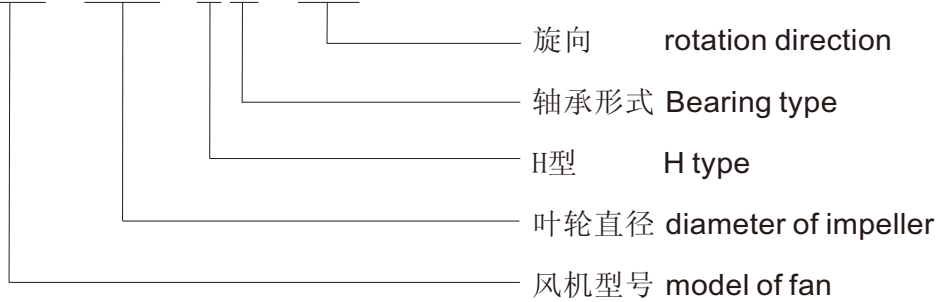
**TBF Series**  
**DWDI, Airfoil Backward Blades**  
**CENTRIFUGAL FAN**



广东肇庆德通有限公司  
GuangDong zhaqing DETON Co., Ltd.  
November 2021

## 产品命名方式 Designation of Products

**TBF - 355 - HM - LG**



## 产品特征 Technical specification

- 叶轮：叶轮采用优质钢板制成,按三元流设计的机翼型叶片与激光加工的中盘及拉伸前盘焊接而成.具有高精度特性.高转速叶轮还焊接有叶轮加强环加强叶轮结构.

Wheel: airfoil backward blade.made of high grade steel sheet, it is to provide a highly efficient and low noise and special-designed blades are welded on the center disc,and inlet beelling of impeller.
- 机壳：机壳采用优质热镀锌钢板制成.侧板采用数控激光切割而成保证高精度的型线.侧板与涡板之间采用咬口工艺连接，G型风机采用加厚焊接涡壳.

Scroll: made of high grade galvanized steelsheet, and it is cutted by laser-cutting machine with high quality. The scroll plate is connected to the side plate by pittsburgh lock way and welding.
- 框架：框架采用角钢或折边角钢焊接或TOX铆接而成,表面采用喷涂处理.

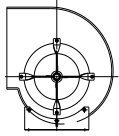
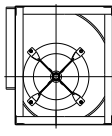
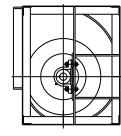
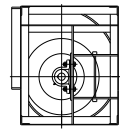
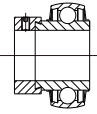
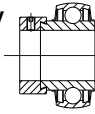
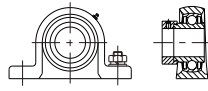
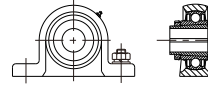
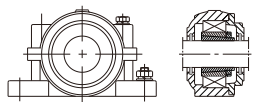
Frame: made of angle sections steel ,and painted with polyester coatings.
- 轴承：轴承采用优质调心滚珠轴承. H及G式风机采用带座轴承.

Bearing: out-spherical ball bearing are used in TBF.
- 主轴：主轴采用优质 45号钢精加工而成,确保主轴的尺寸及行位公差.每根主轴都经过防锈处理.

Shaft: the shaft is made of C45 carbon steel with high tolerance levels.shaft is provided corrosion resistance.
- 平衡：每个叶轮在装配前都经过动平衡,平衡精度满足ISO1940 和AMCA204 标准中G4.0标准.

Balance: all wheel are statically and dynamically balanced to ISO1940 and AMCA 204-G4.0 standard.

### 轴承配套形式 Bearing type

风机形式 Fan type	<b>D</b> 	<b>K</b> 	<b>H</b> 	<b>G</b> 
轻型负载 Light duty	<b>DL</b> 轻载荷 Light duty 	<b>KL</b> 轻载荷 Light duty 	<b>HL</b> 轻载荷 Light duty 	
中型负载 Medium duty			<b>HM</b> 中载荷 Medium duty 	<b>GM</b> 中载荷 Medium duty 

TBF Series

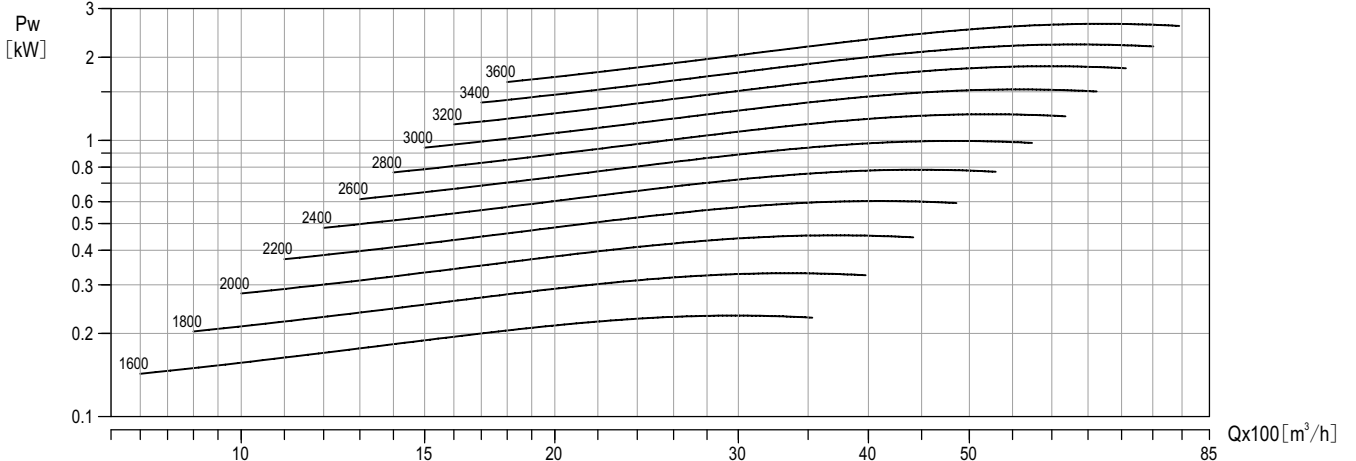
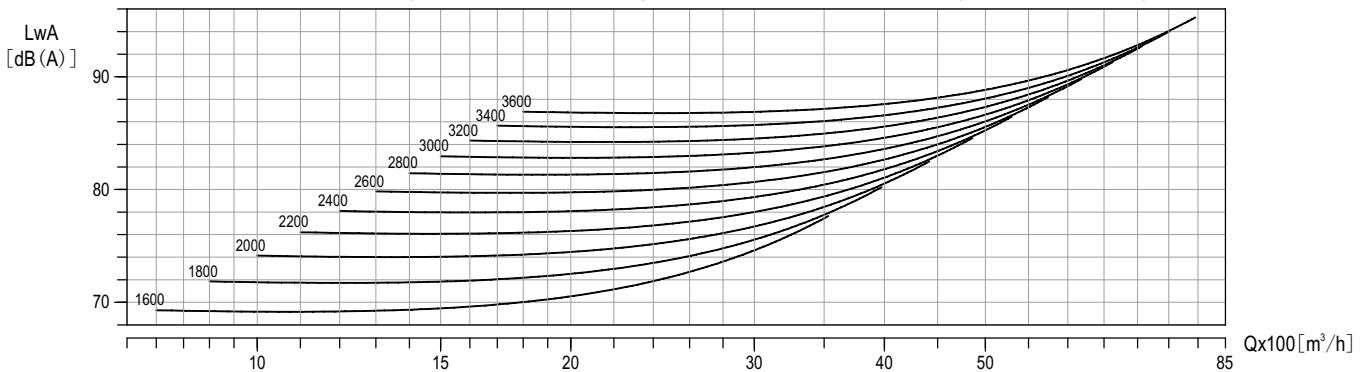
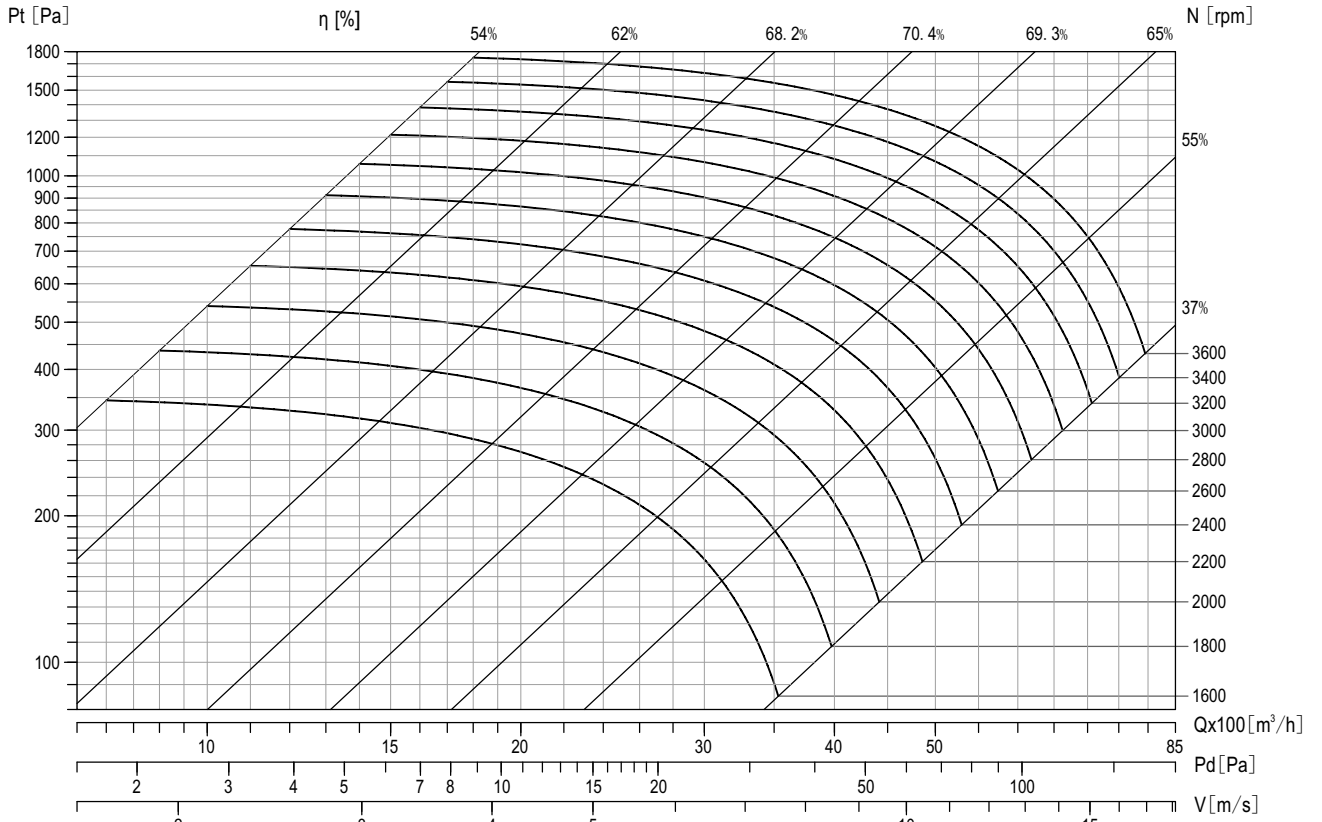
### 运转极限 Operational limits

		形式 Type		280	315	355	400	450	500	560	630	710	800	900	1000	
最大输入功率 Max. power	D-K	L	kW	3	4	4.5	5.5	7.5								
		H	L	kW	5.5	5.5	5.5	6	8	12	14	20	20	18.5	25	
		M	kW	8	8	15	15	15	22	30	35	40	30	43	55	
	G	M	kW						30	38.5	40	60	65	65	80	
风机最高转速 Max. speed	D-K	L	rpm	2800	2600	2100	1800	1500								
		H	L	rpm	3200	2900	2400	2000	1800	1700	1500	1400	1300	1000	900	
		M	rpm	3600	3500	3000	2600	2500	2400	2100	1900	1700	1200	1100	900	
	G	M	rpm						2800	2500	2200	2000	1600	1400	1300	
环境温度/最低-20℃ Temp. /min.-20℃	D-K	Max. °C		40	40	40	40	40								
	H-G	Max. °C		60	60	60	60	60	60	60	60	60	60	60	60	
风机重量 Fan weight	D	L	kg	25	26	37	42	58								
		K	L	kg	26	27	41	45	62							
	H	L	kg	29	39	51.5	65	86.5	113	154.5	192.5	246.5	299	368		
		M	kg	29	40	53	67	89	115.5	158	197	251	299	368	451	
	G	M	kg						124	166	212	271	323	397	500	



# TBF280

Air Density: 1.2 kg/m<sup>3</sup>

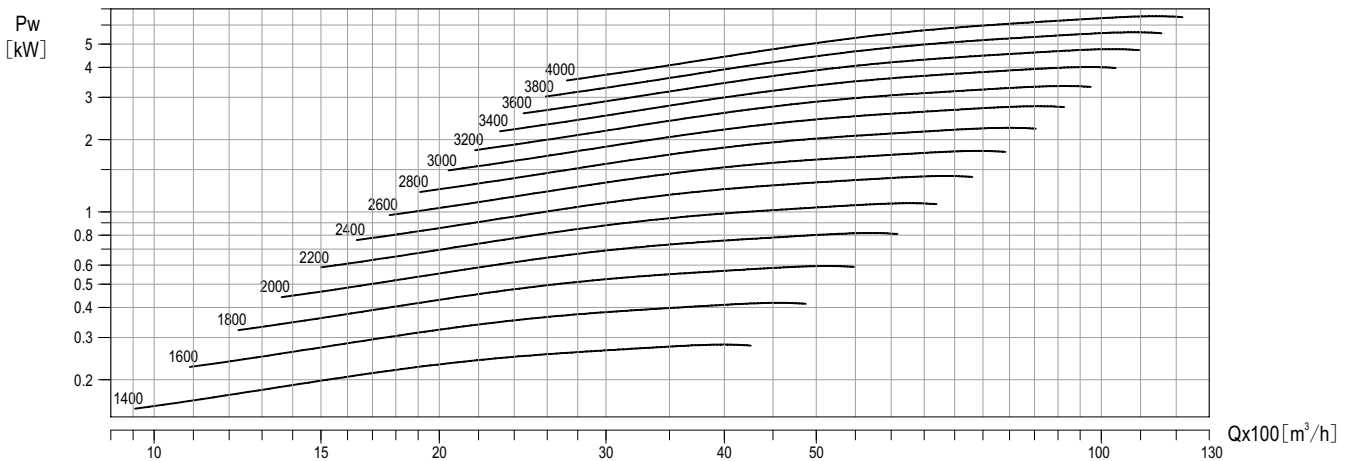
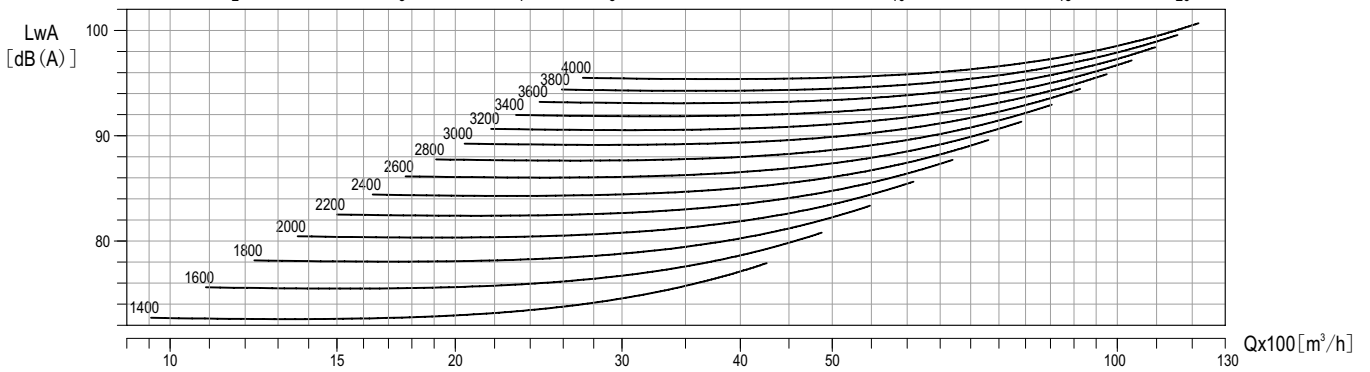
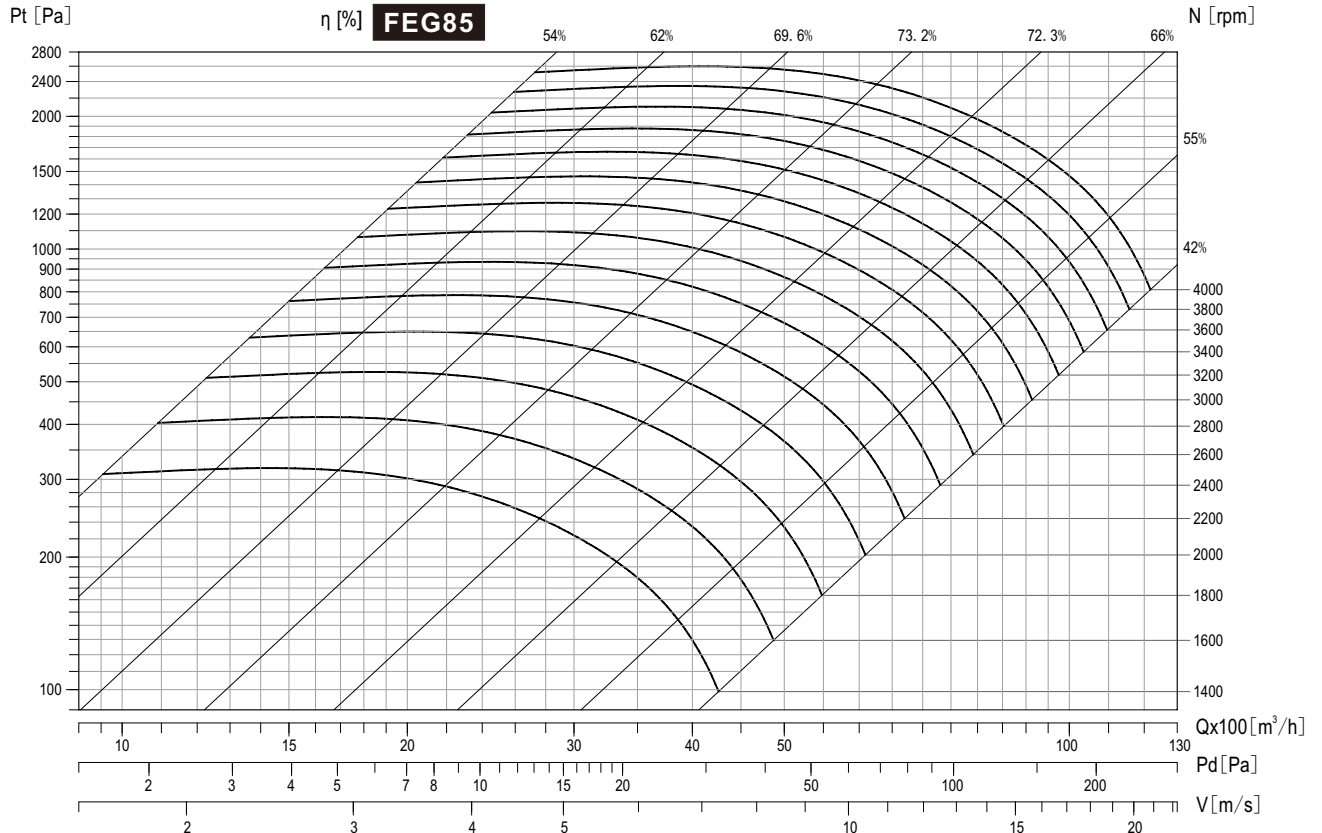


Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values shown are for inlet LwiA sound power levels for Installation type B: free inlet, ducted outlet.  
 MODEL TBF280 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series

# TBF315

Air Density: 1.2 kg/m<sup>3</sup>



Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. 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 B: free inlet, ducted outlet.

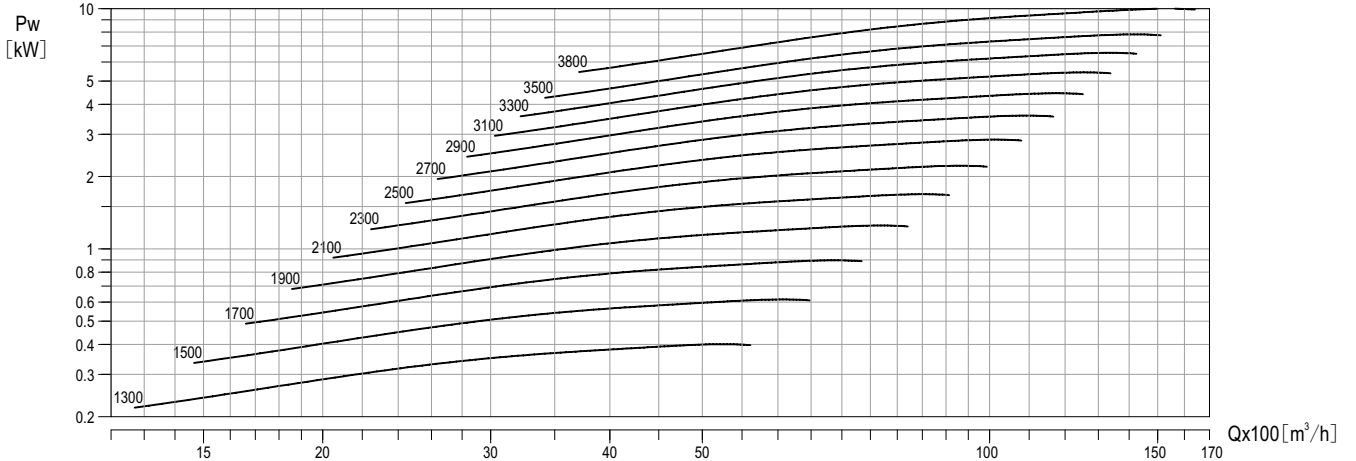
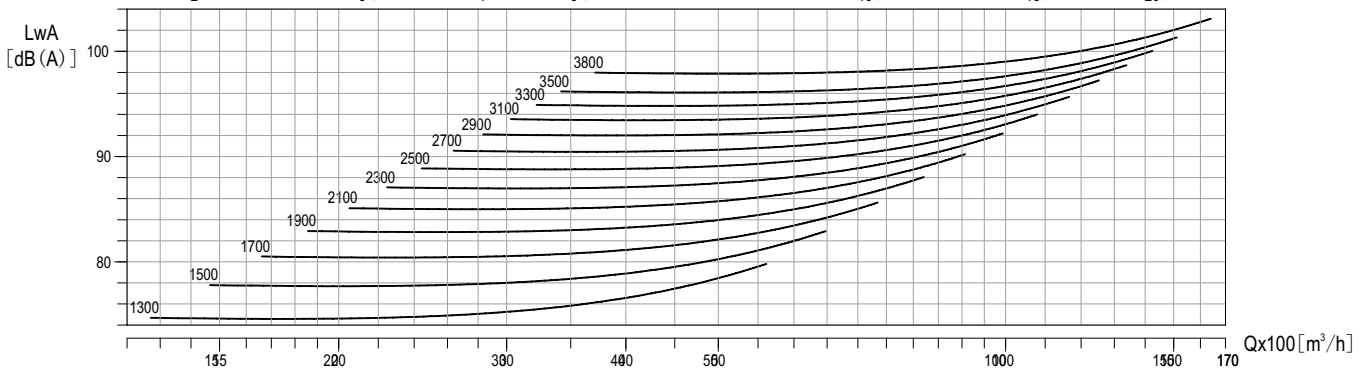
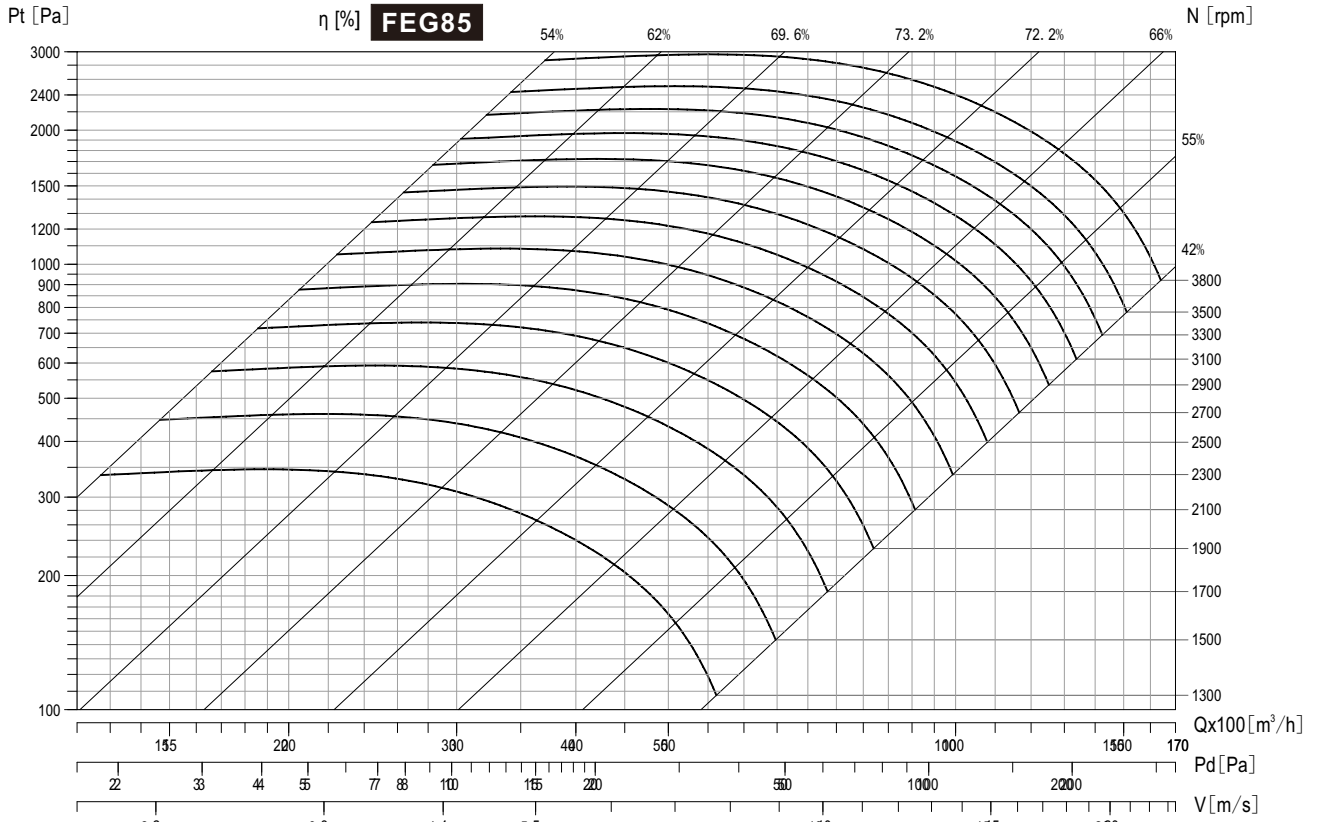
MODEL TBF315 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series



# TBF355

Air Density: 1.2 kg/m<sup>3</sup>

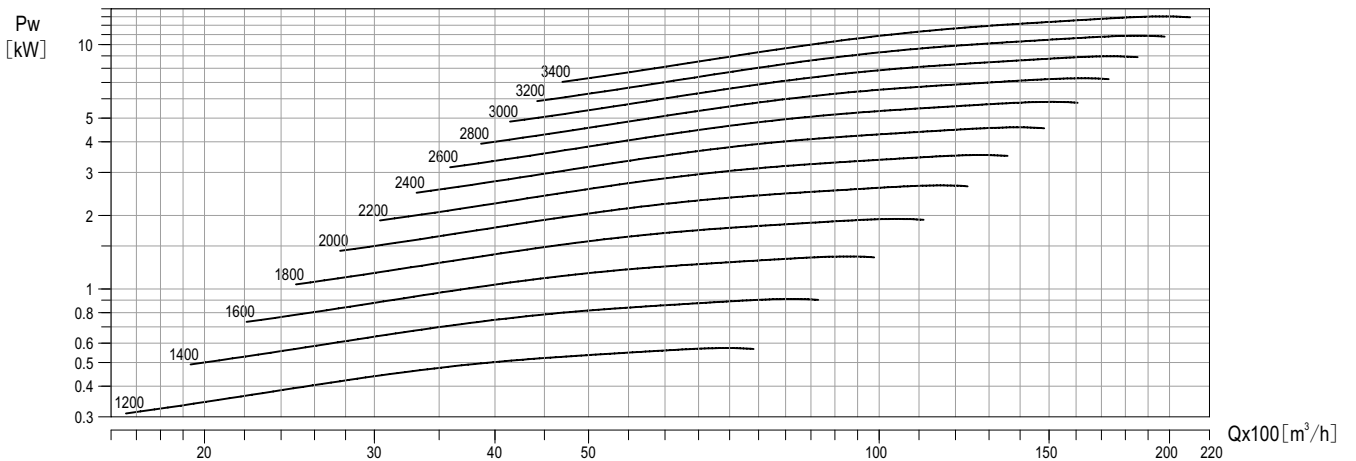
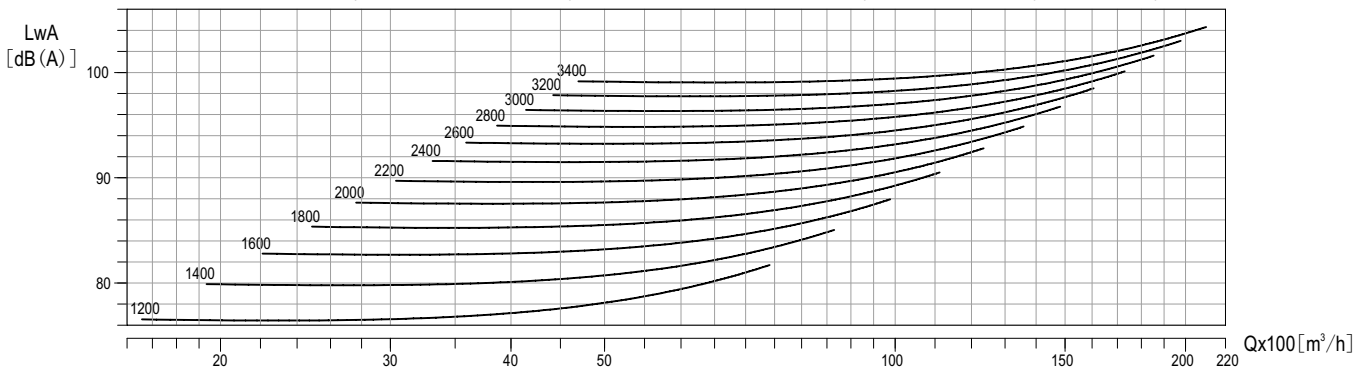
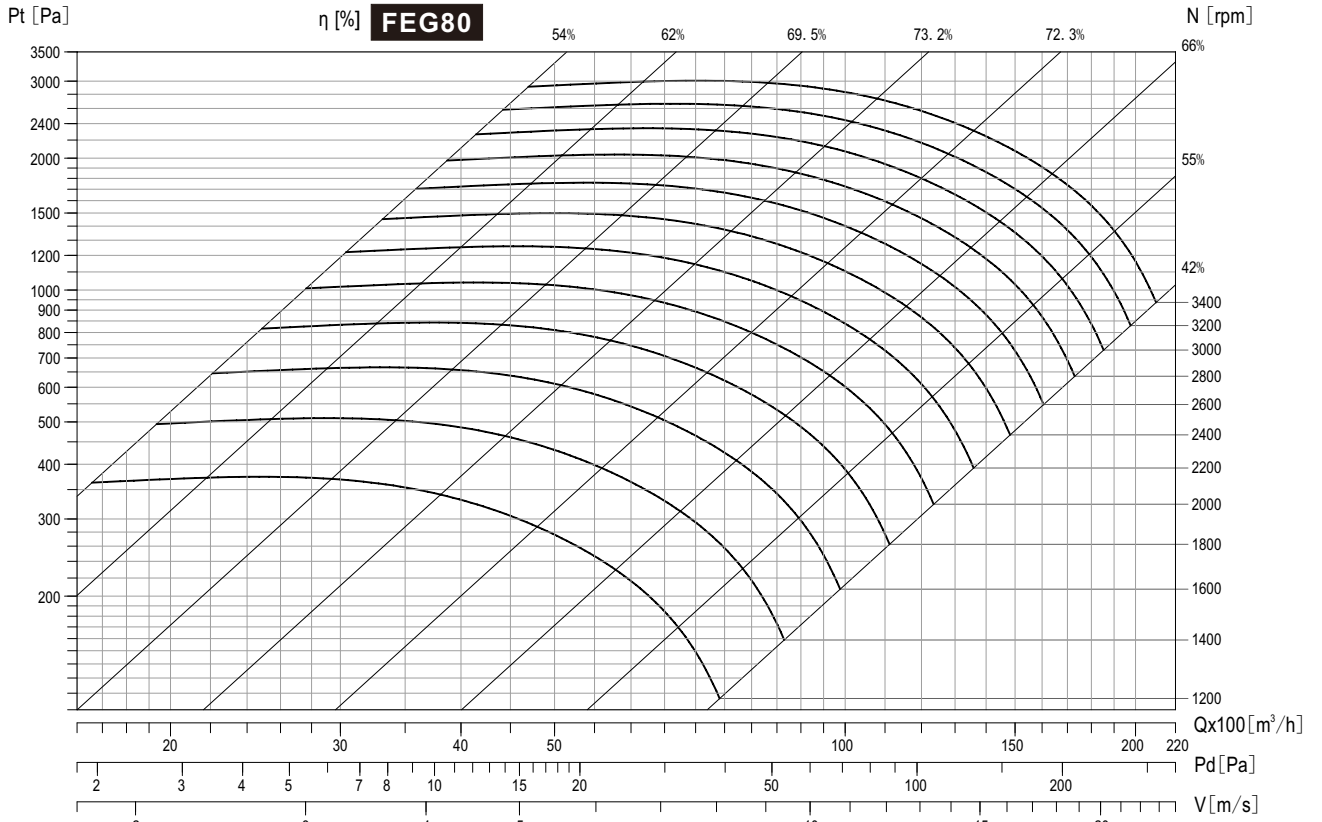


Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values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

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# TBF400

Air Density: 1.2 kg/m<sup>3</sup>



Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. 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 B: free inlet, ducted outlet.

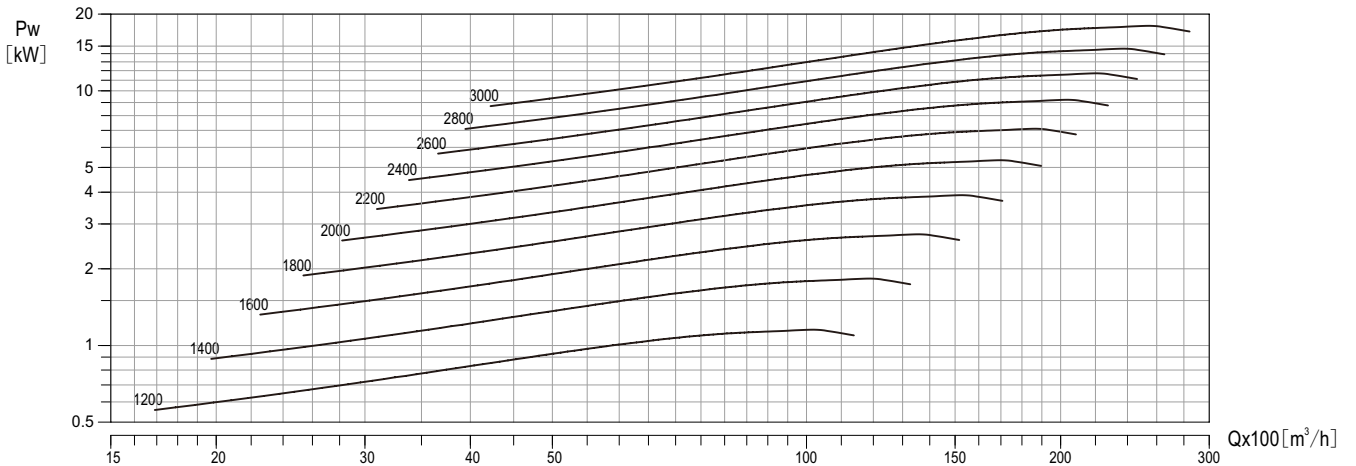
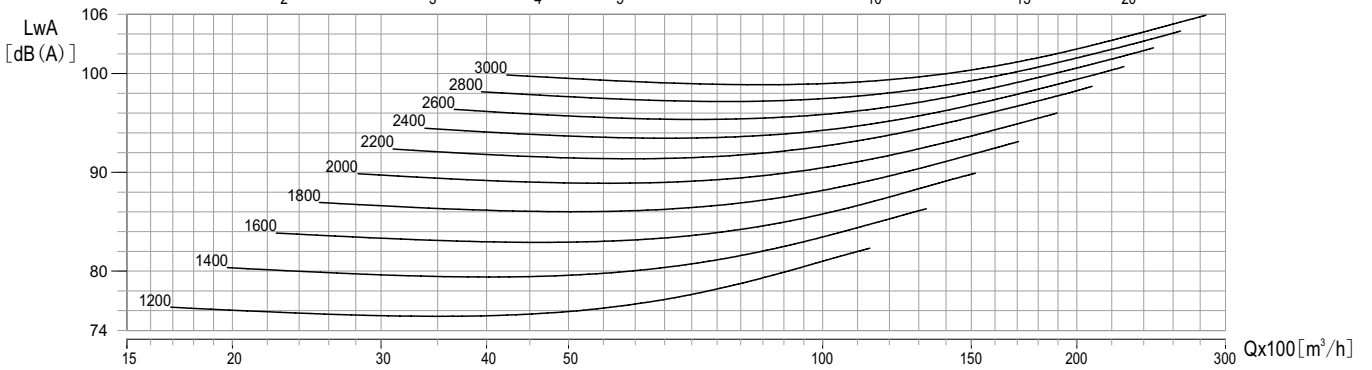
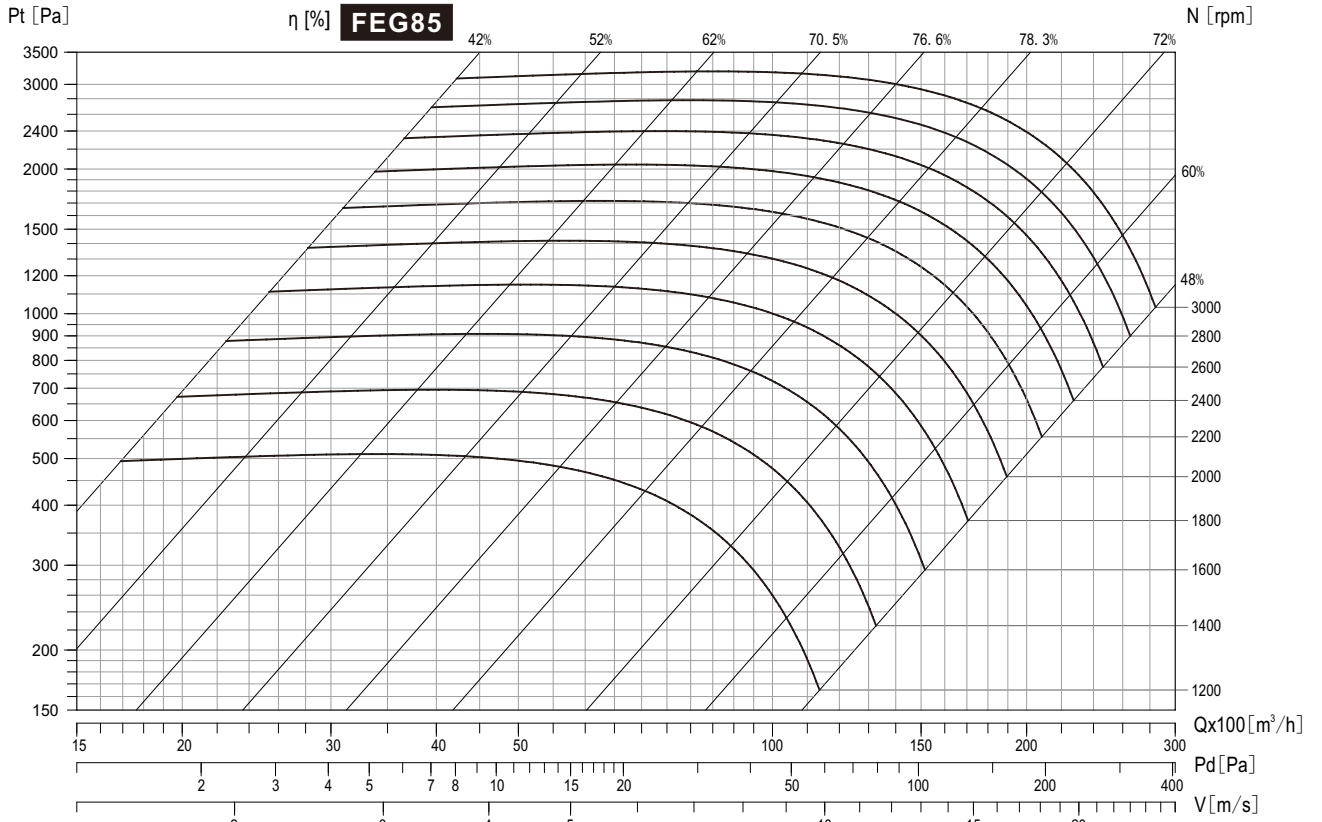
MODEL TBF400 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series



# TBF450

Air Density: 1.2 kg/m<sup>3</sup>



Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. 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 B: free inlet, ducted outlet.

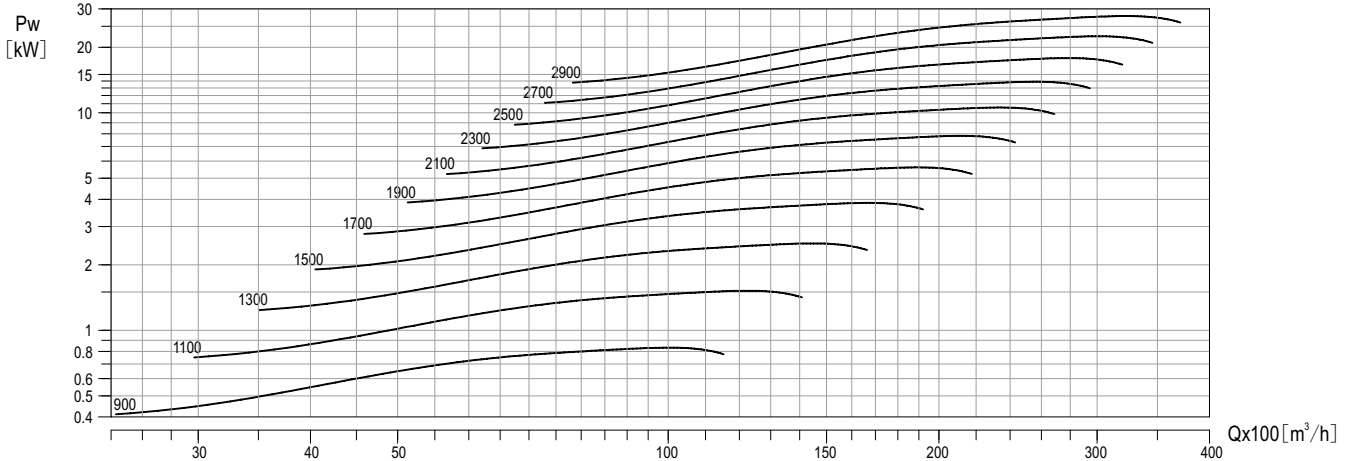
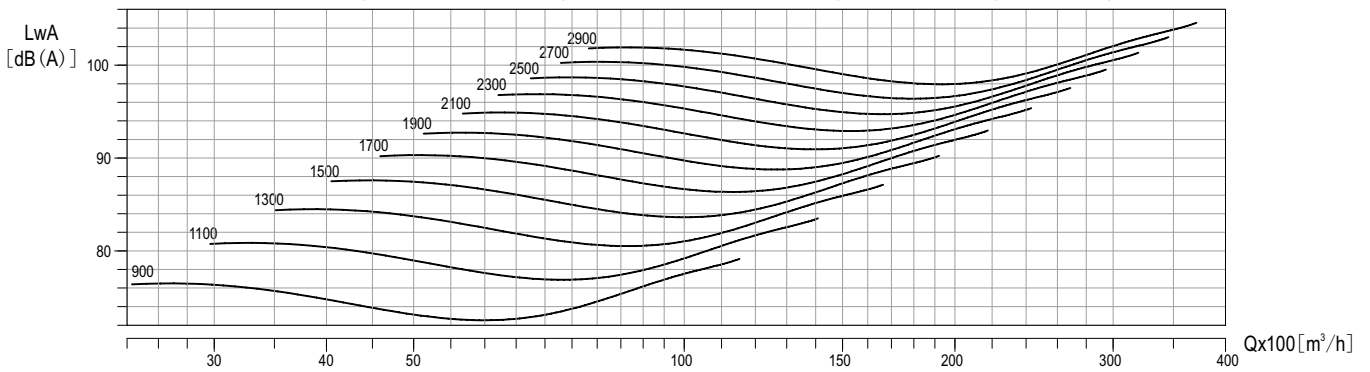
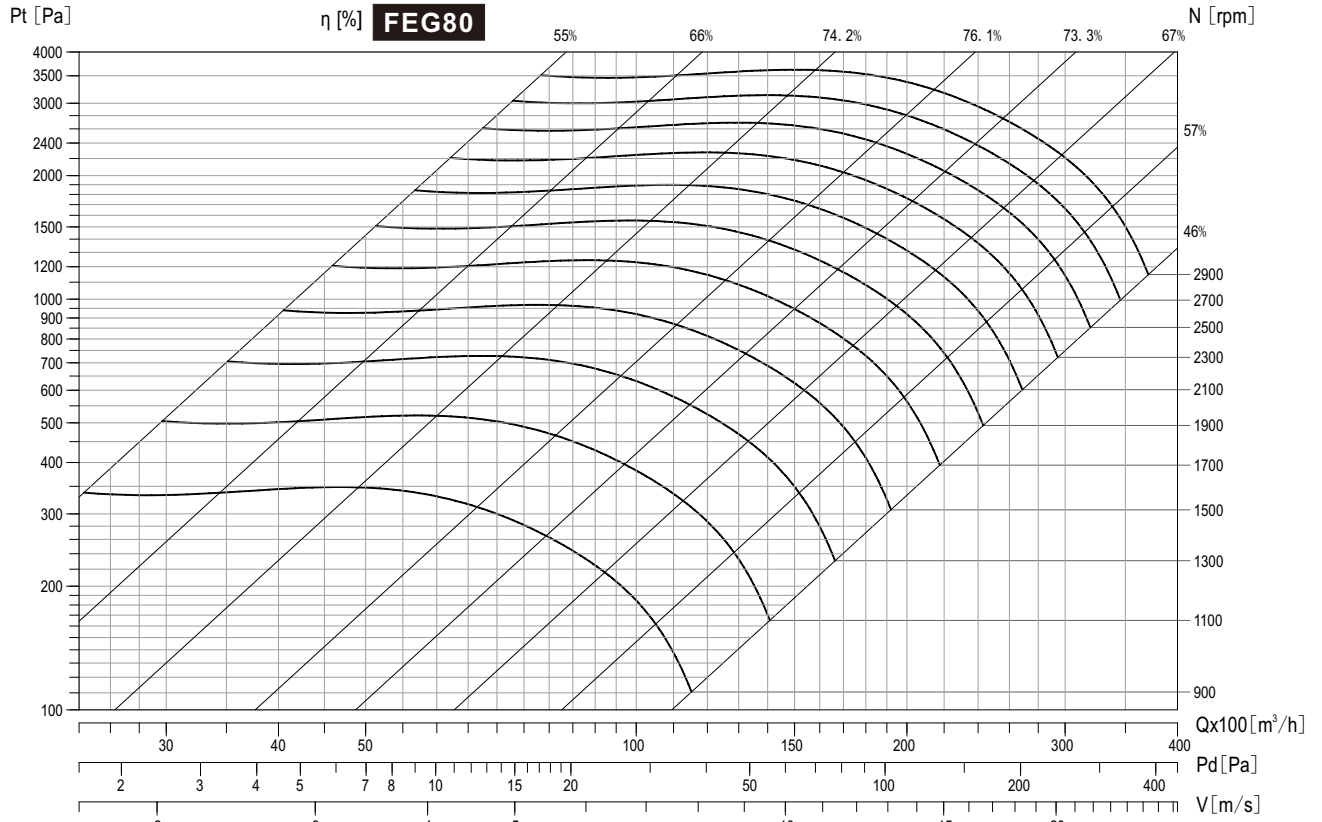
MODEL TBF450 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series



# TBF500

Air Density: 1.2 kg/m<sup>3</sup>



Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. 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 B: free inlet, ducted outlet.

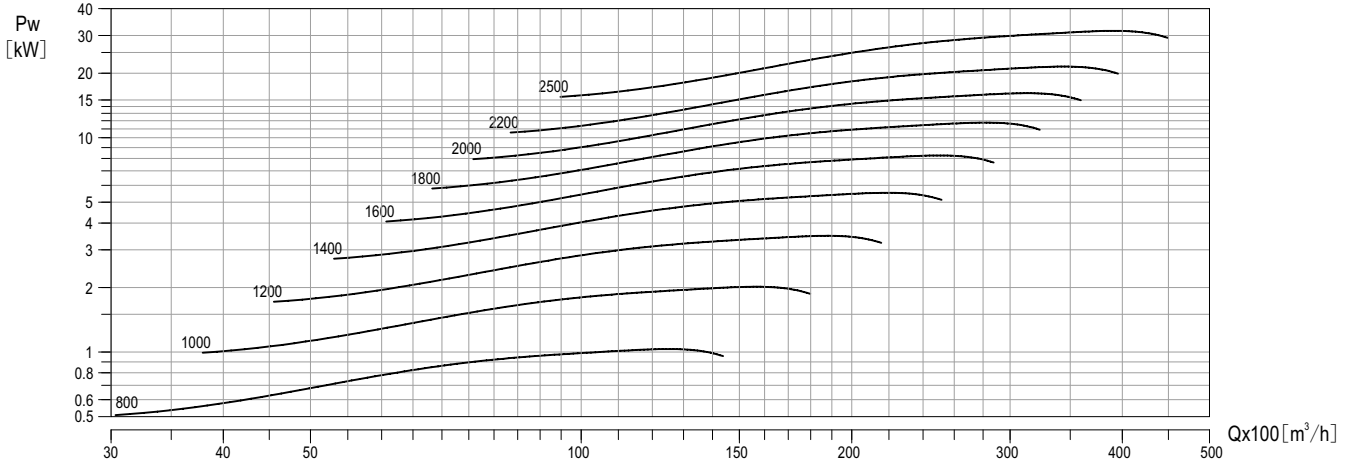
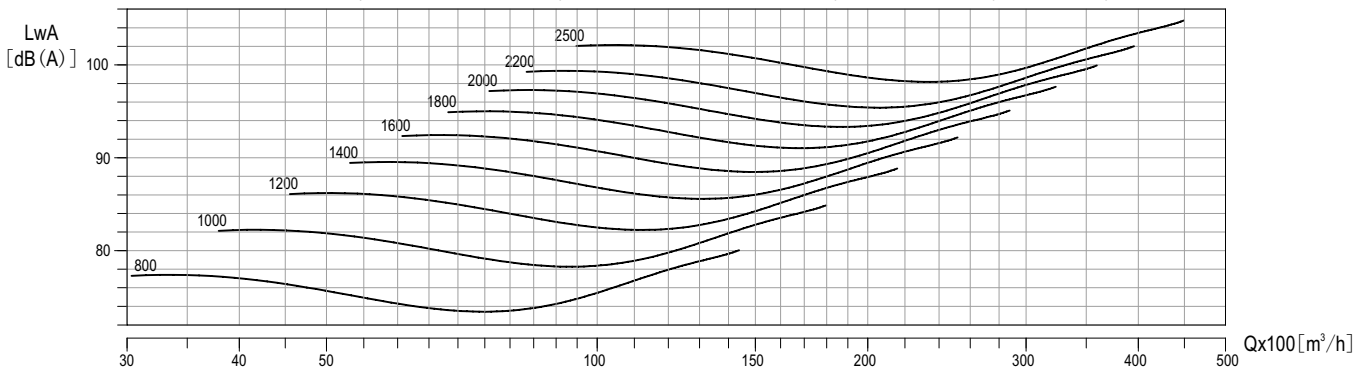
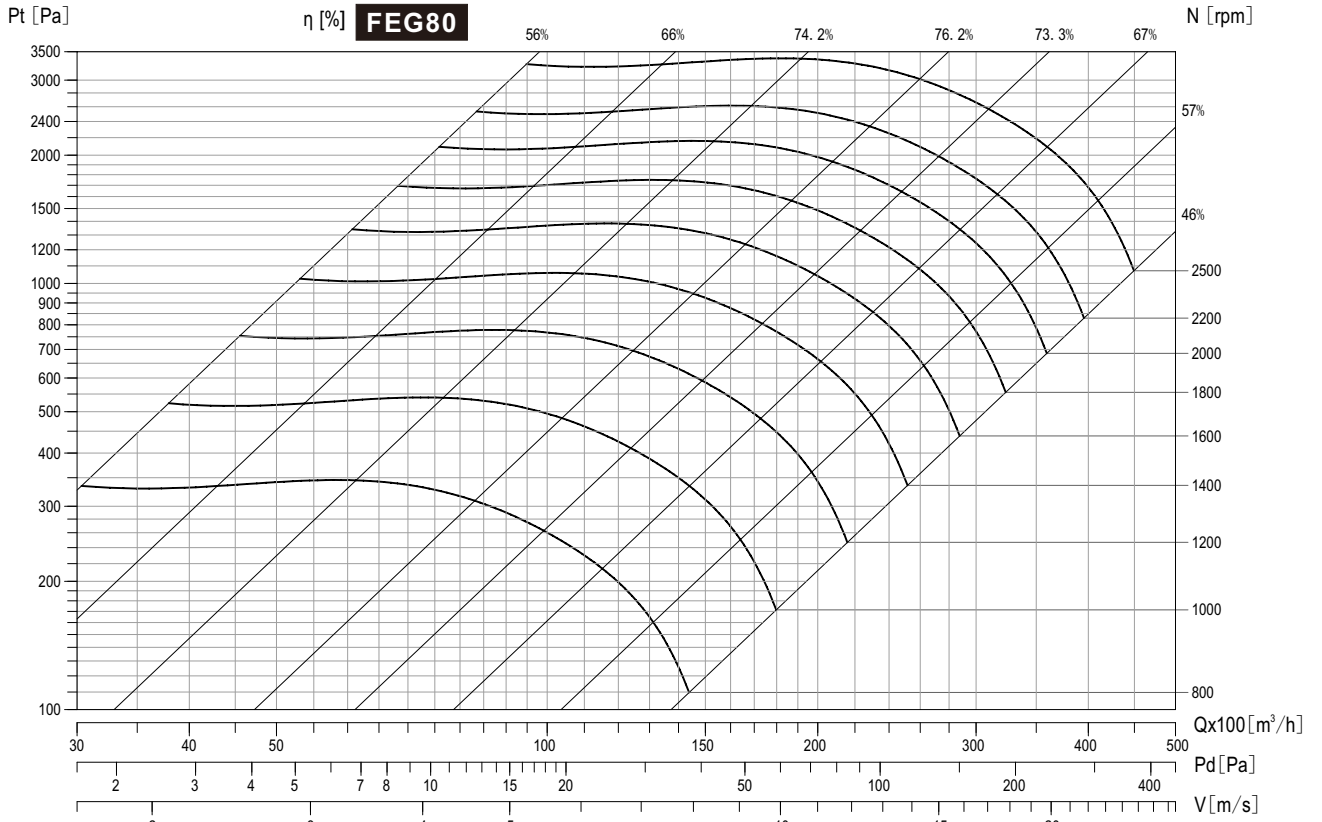
MODEL TBF500 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series



# TBF560

Air Density: 1.2 kg/m<sup>3</sup>



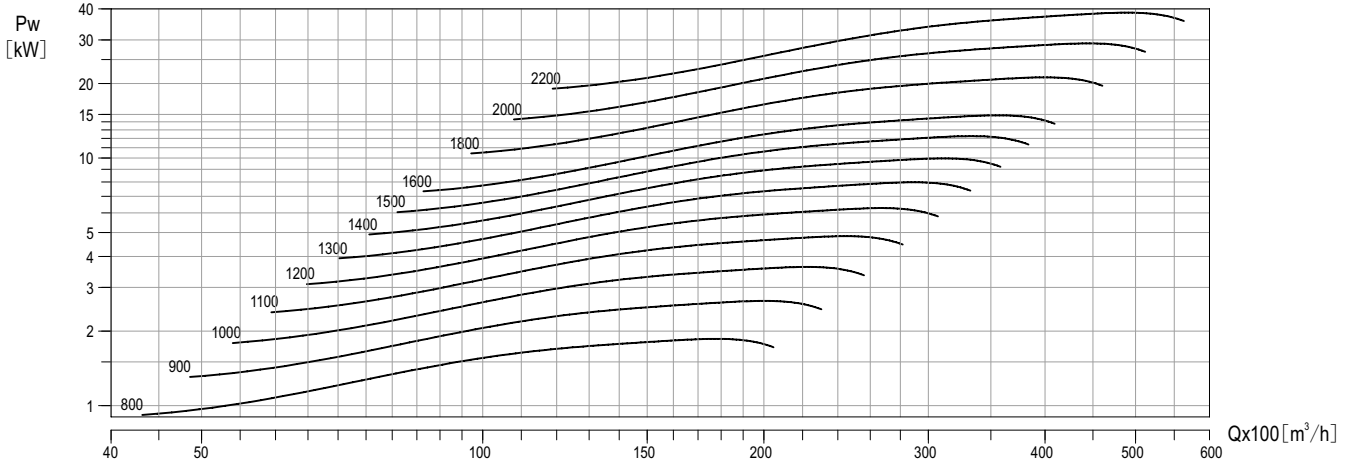
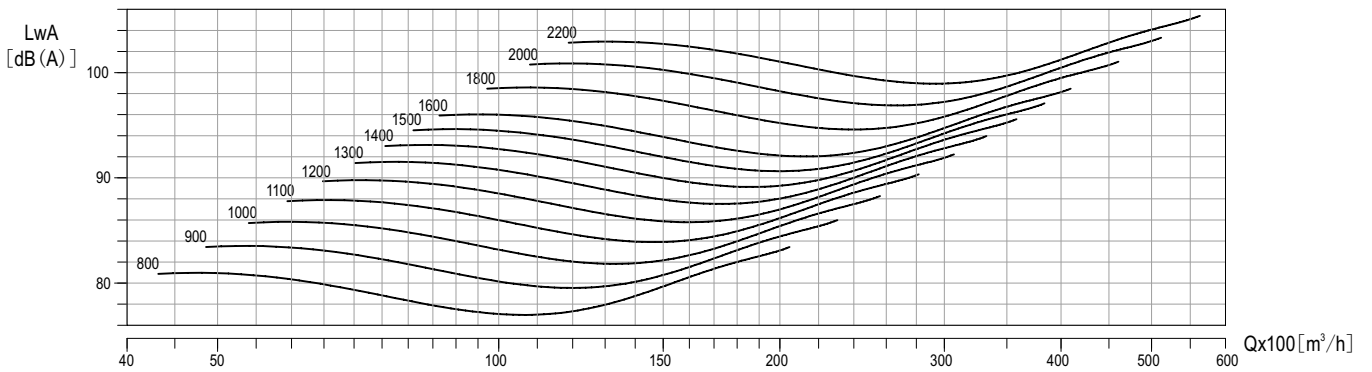
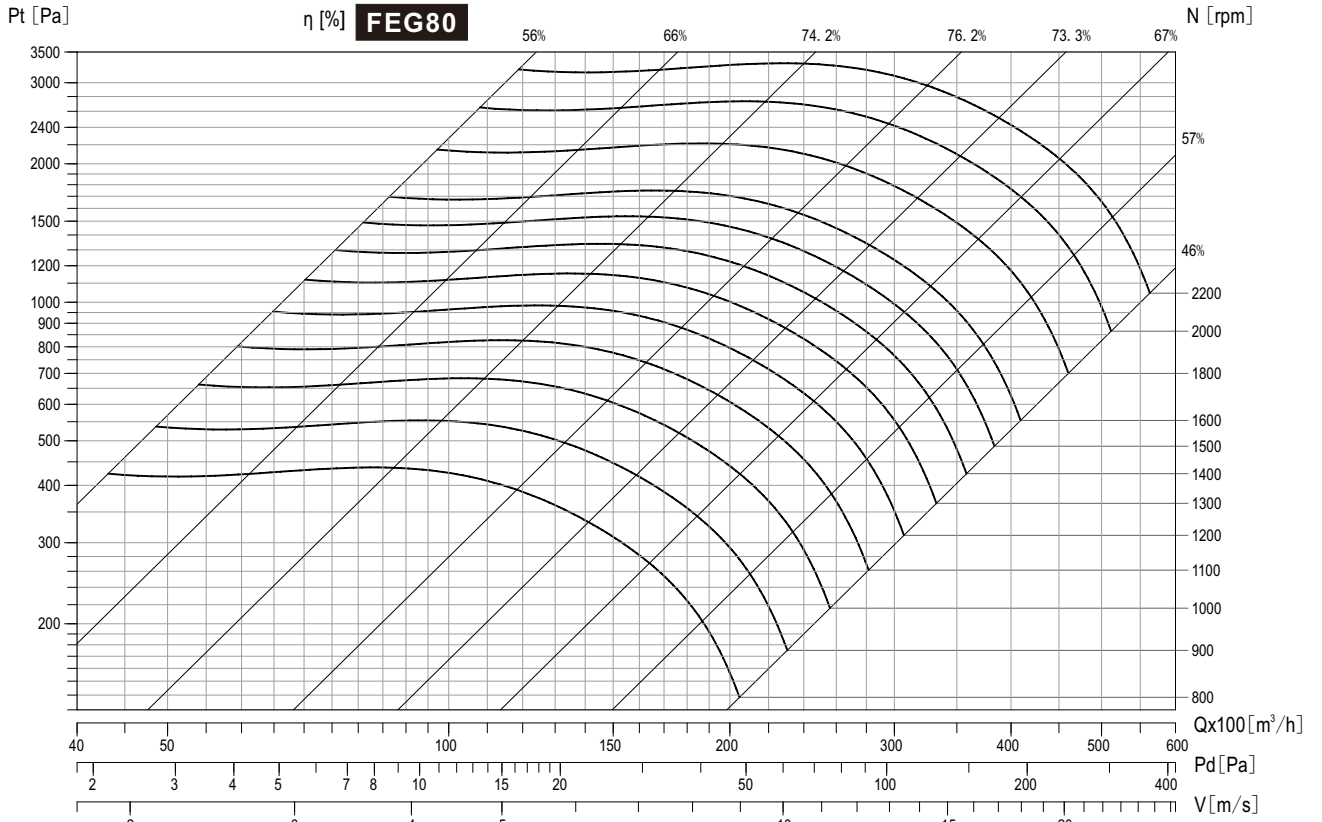
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MODEL TBF560 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

TBF Series

# TBF630

Air Density: 1.2 kg/m<sup>3</sup>



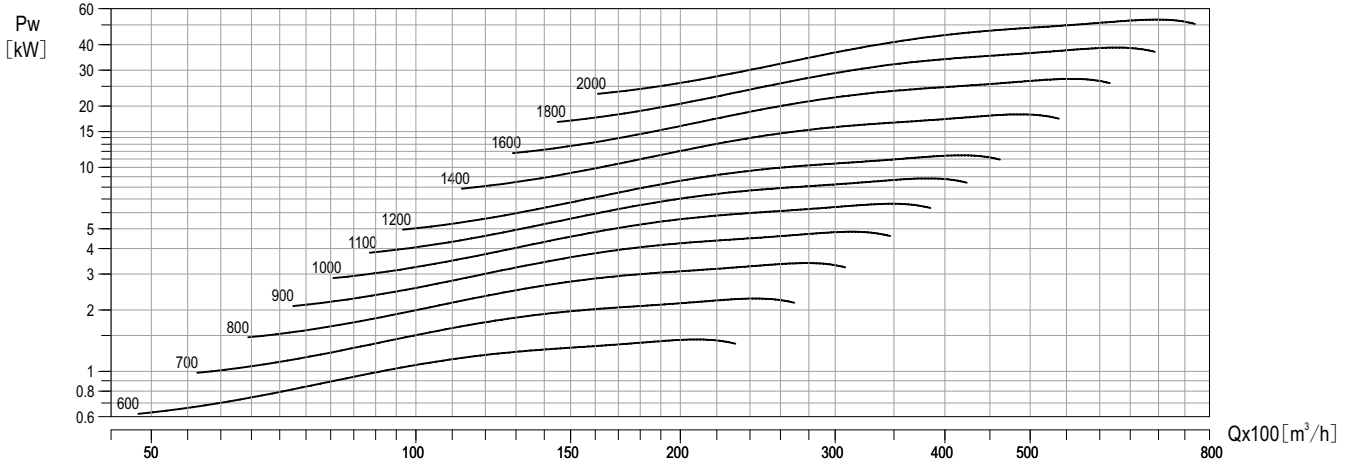
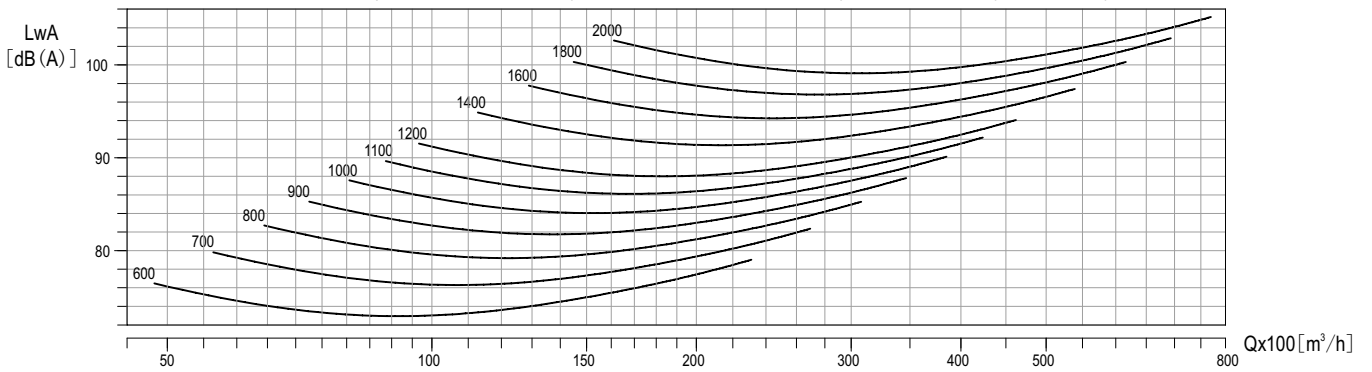
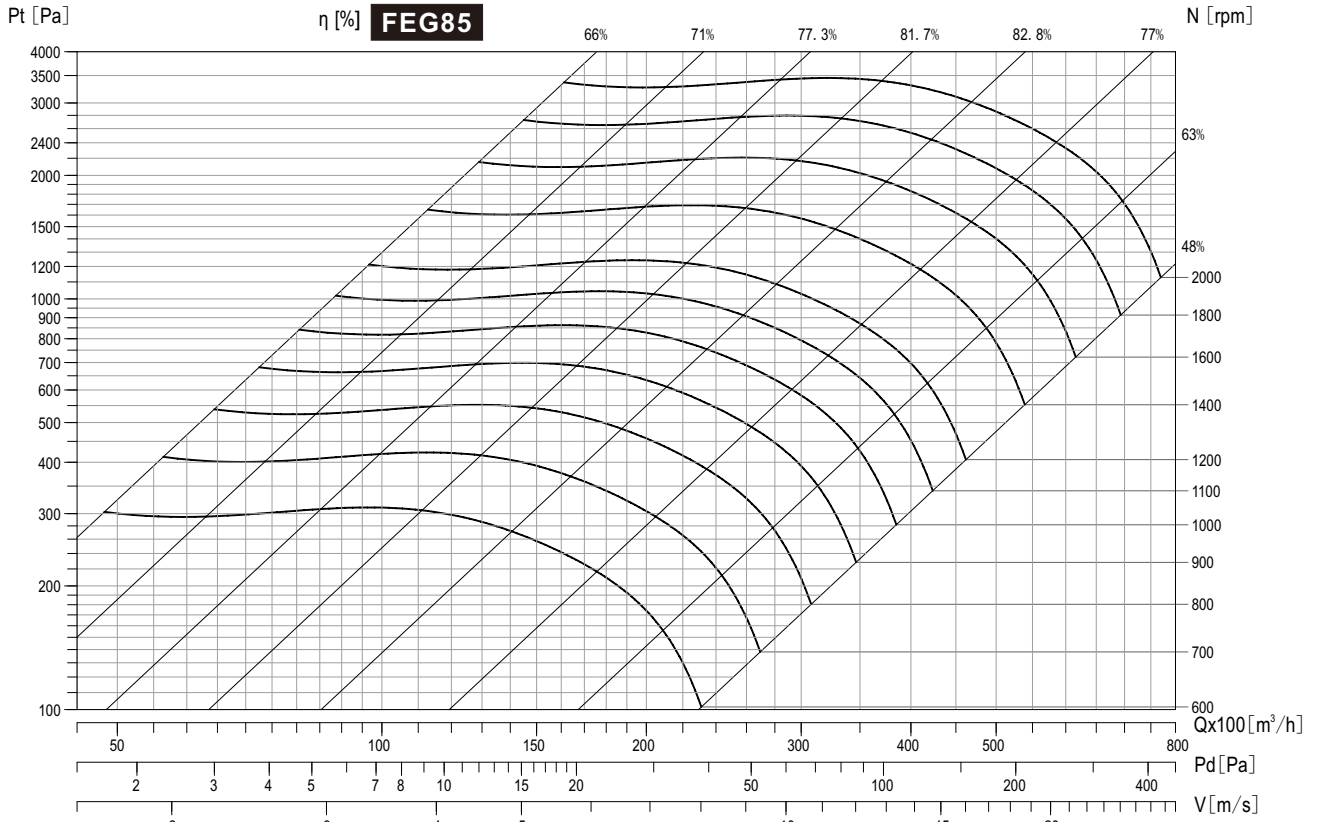
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TBF Series



# TBF710

Air Density: 1.2 kg/m<sup>3</sup>



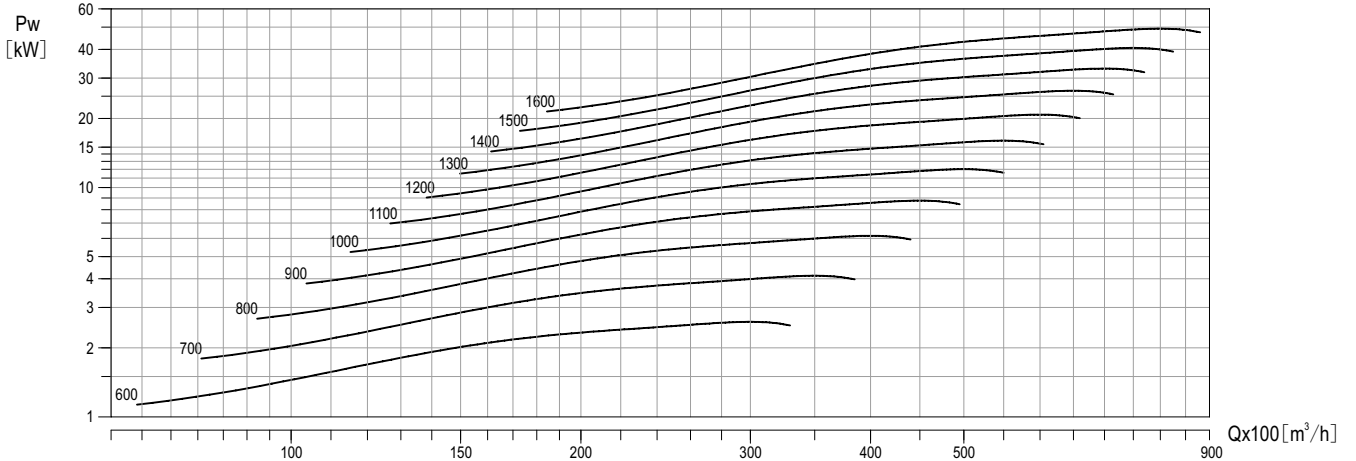
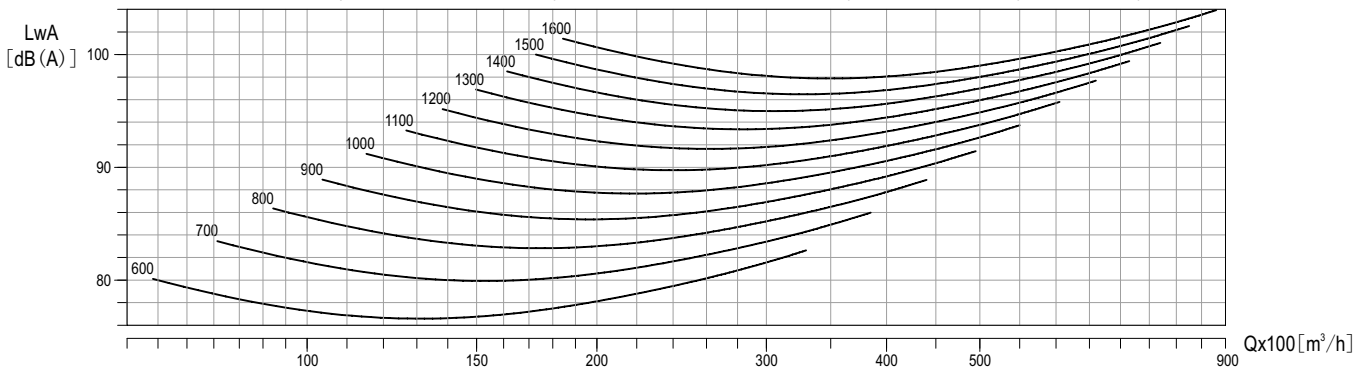
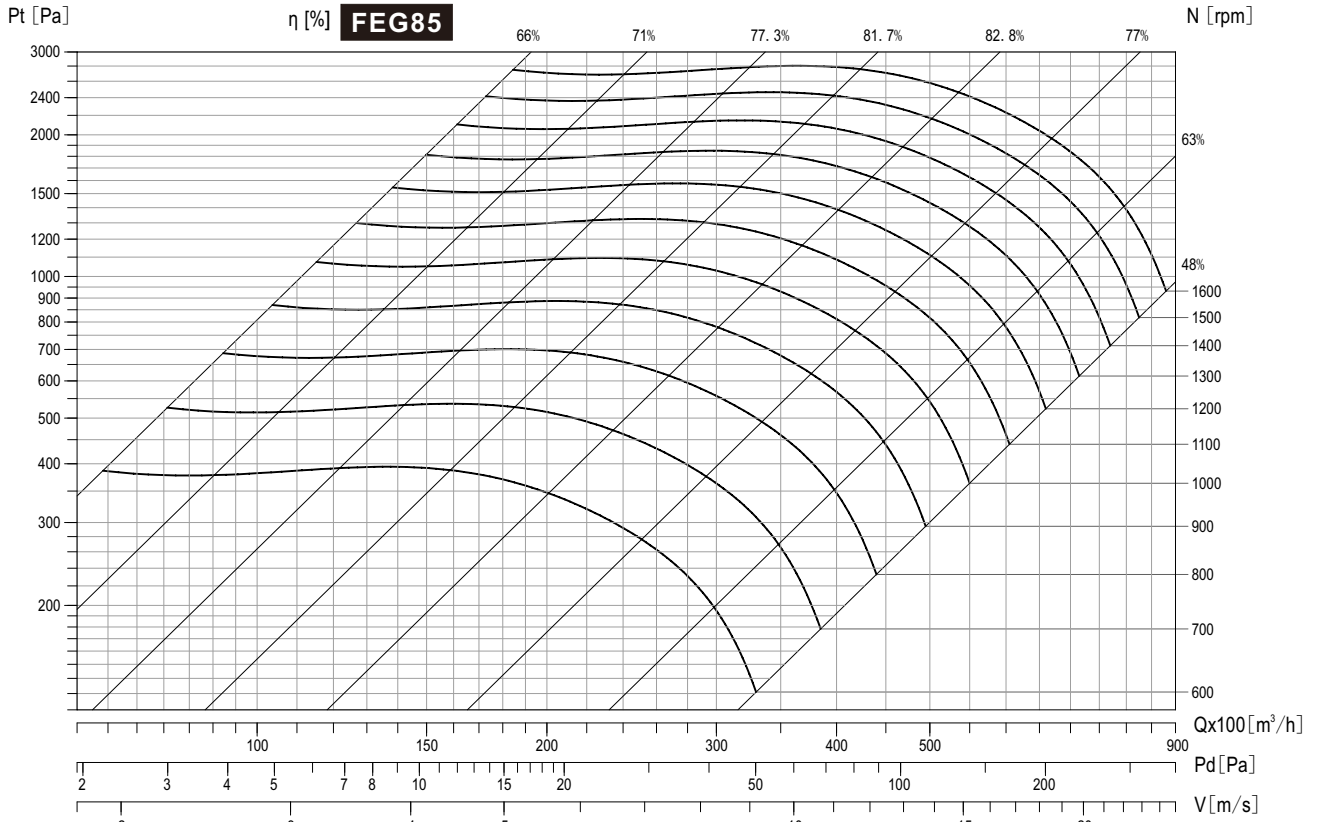
Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values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

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TBF Series

# TBF800

Air Density: 1.2 kg/m<sup>3</sup>



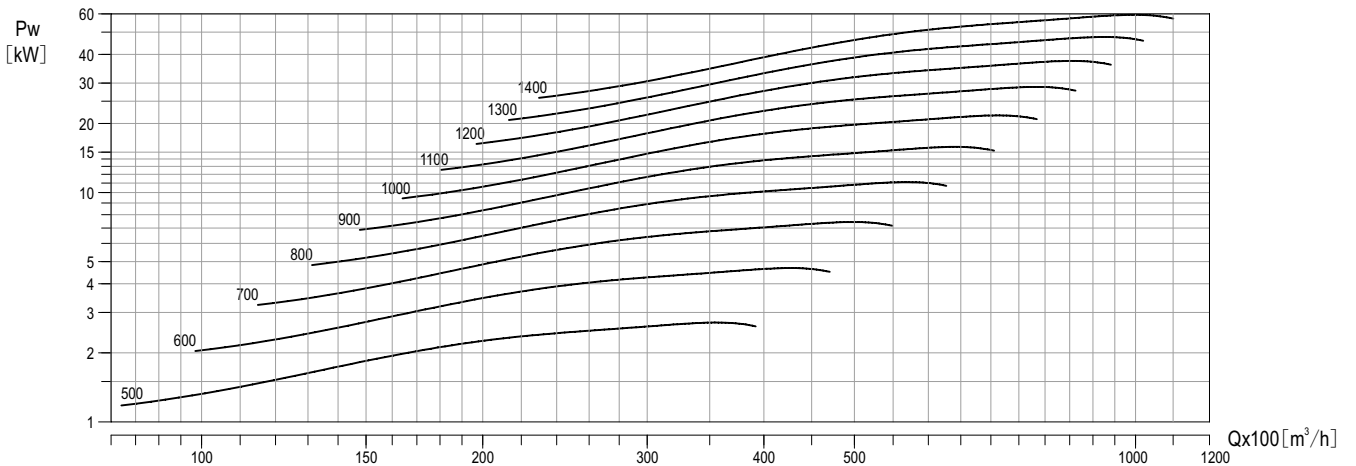
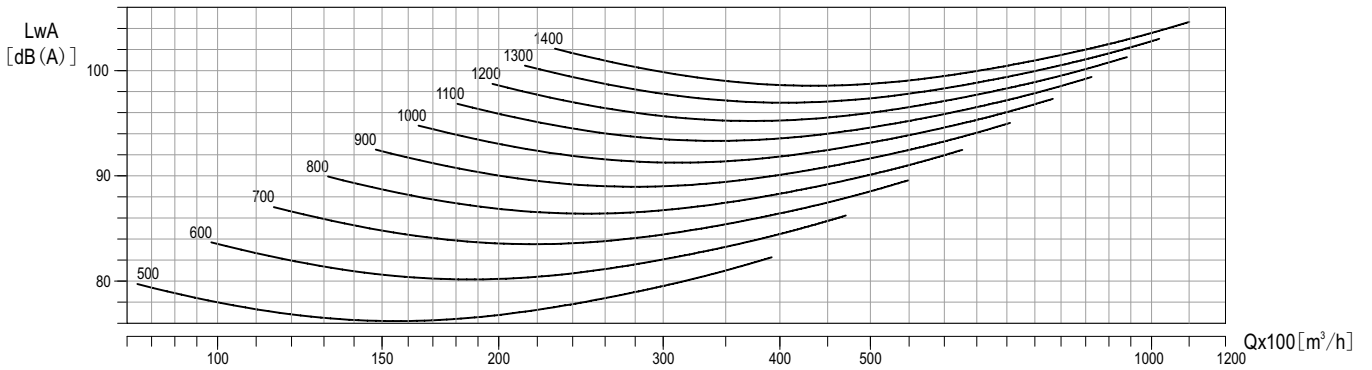
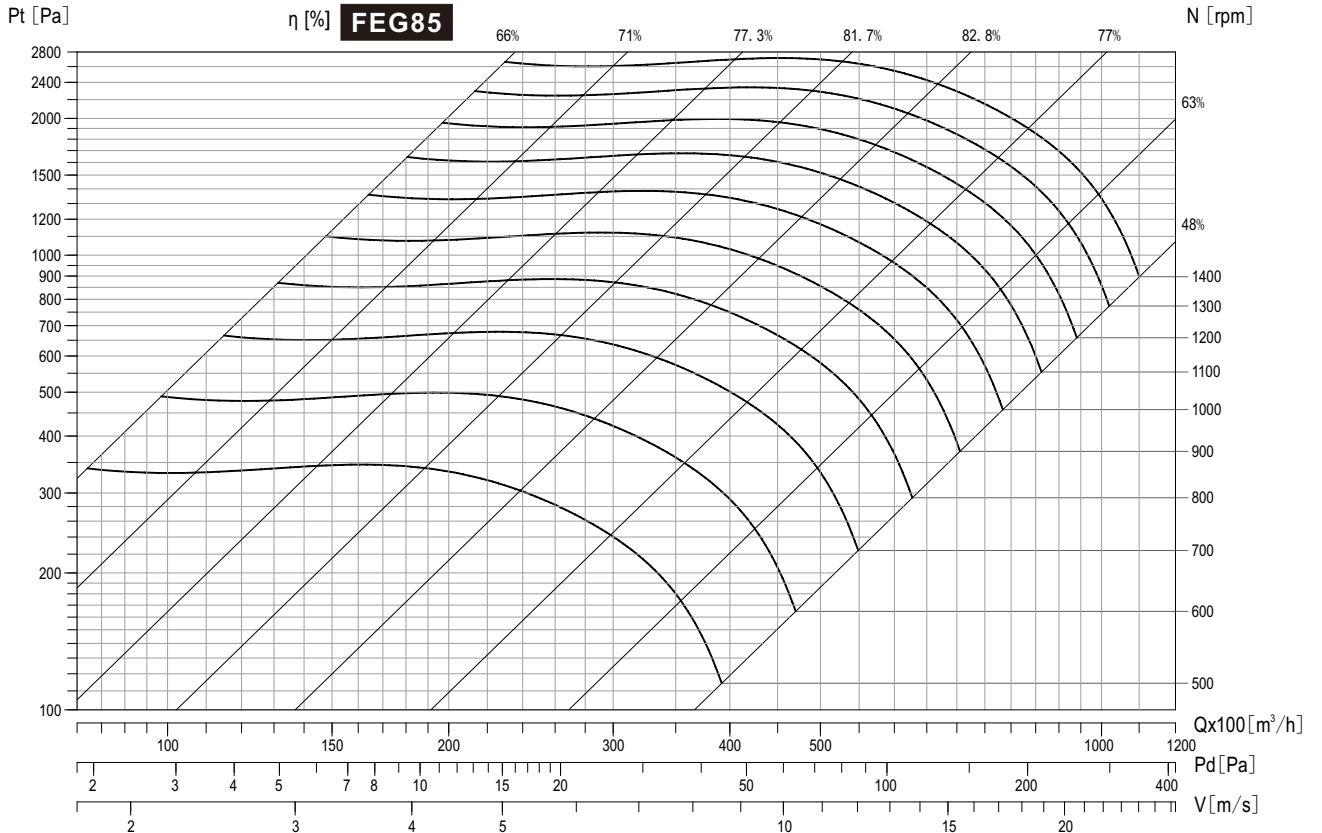
Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values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



# TBF900

Air Density: 1.2 kg/m<sup>3</sup>

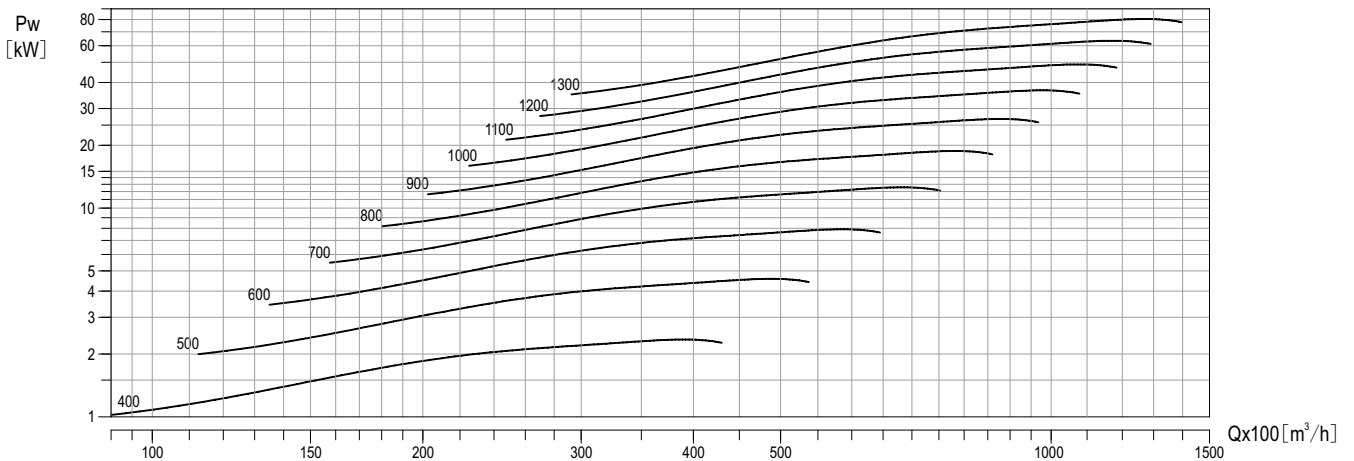
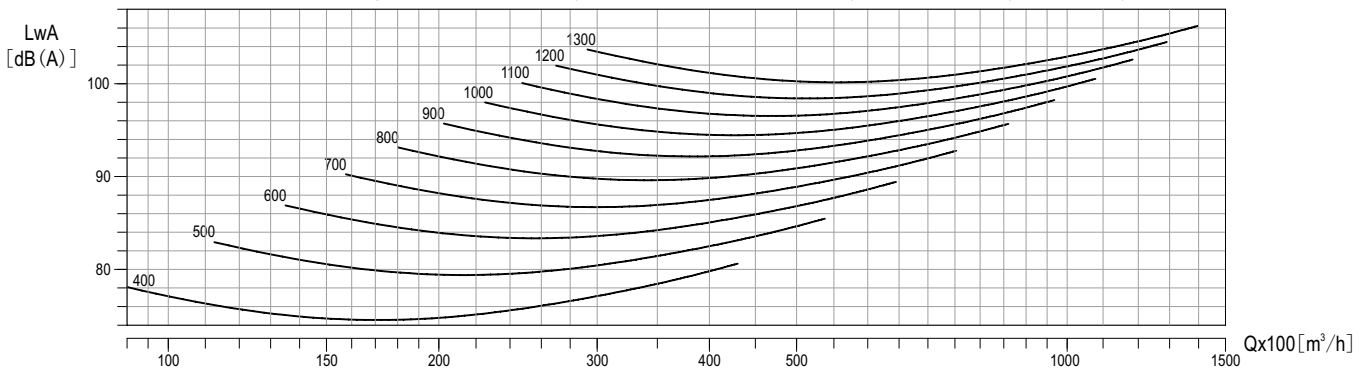
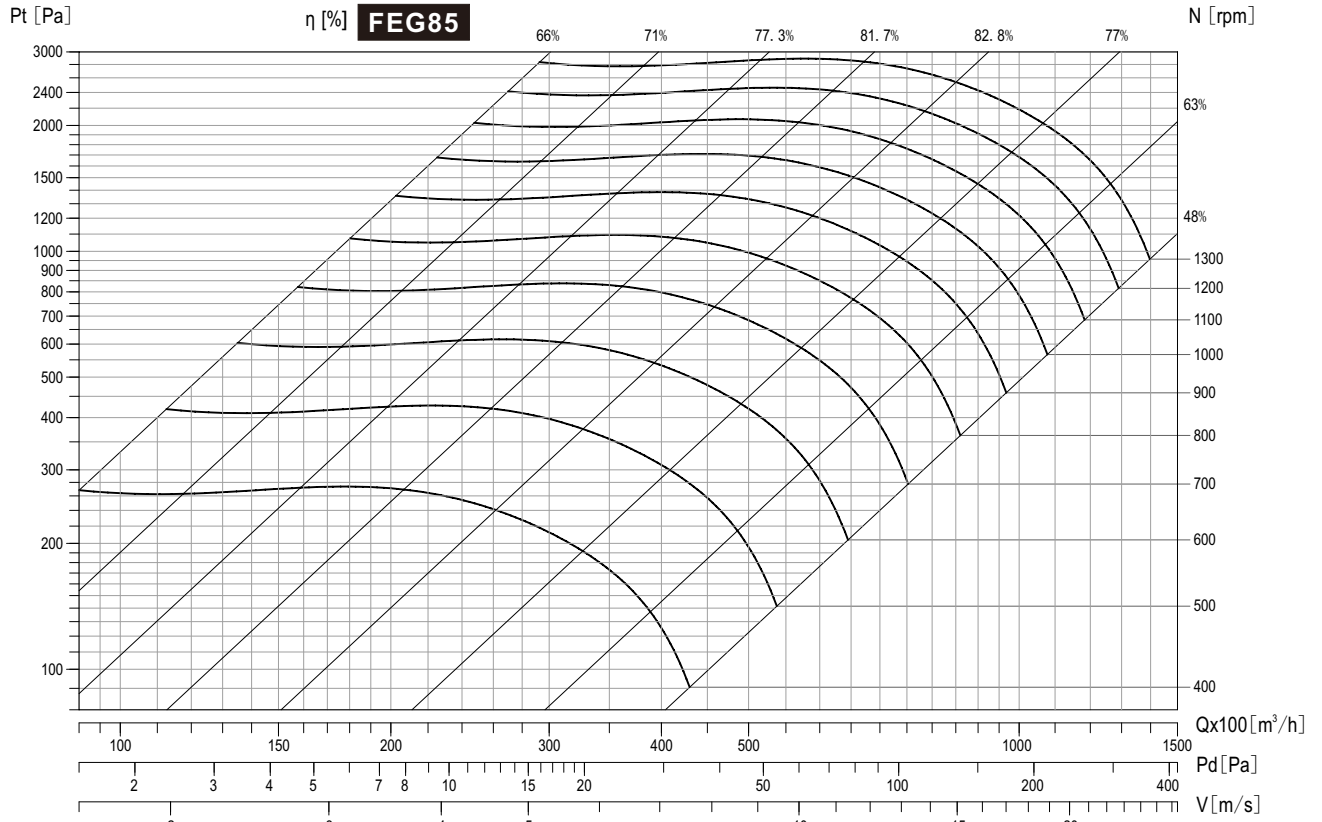


Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values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

MODEL TBF900 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

# TBF1000

Air Density: 1.2 kg/m<sup>3</sup>

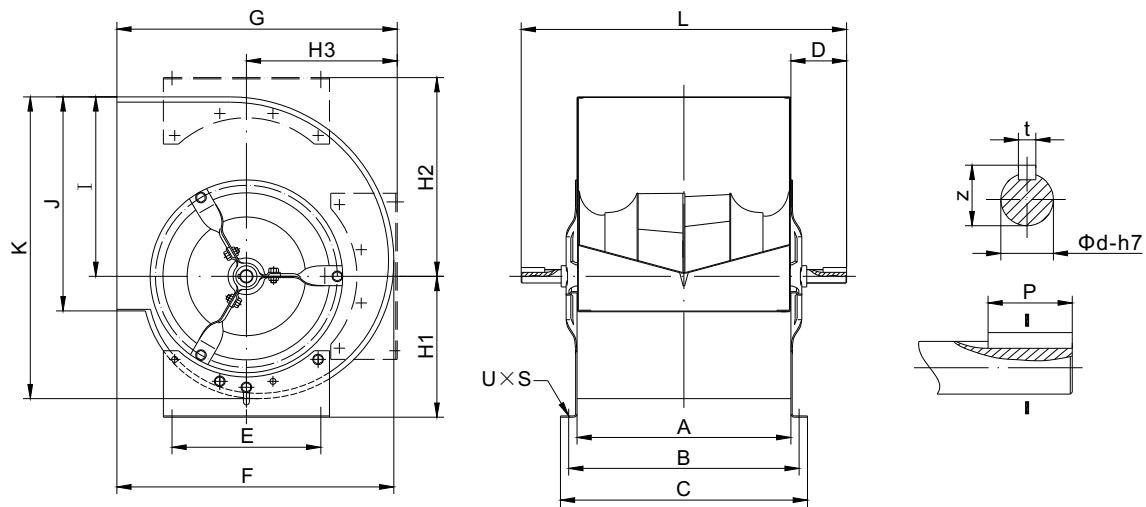


Performance shown is for installation type B-Free inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses. The A-weighted sound ratings shown have been calculated per AMCA International standard 301. Values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

MODEL TBF1000 IS NOT LICENSED TO BEAR THE AMCA CERTIFIED RATINGS SEAL.

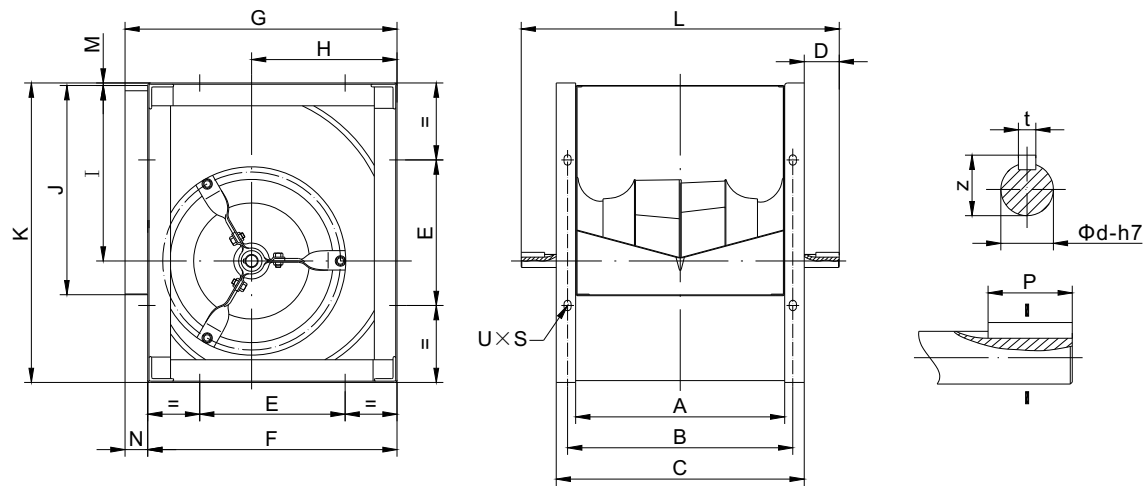
TBF Series

### TBF-D Dimension



型号 Model	A	B	C	D	E	F	G	H1	H2	H3	I	J	K	L	Φd	t	z	P	UXS
TBF280	361	391	421	90	280	432	470	240	330	255	311	361	510	540	25	8	28.3	40	11X16
TBF315	404	434	464	98	280	480	519	259	370	288	350	404	572	600	25	8	28.3	40	11X16
TBF355	452	492	532	110	315	548	580	279	410	327	394	452	644	672	30	8	33.3	40	11X16
TBF400	506	546	586	93	355	612	649	314	462	370	444	506	724	726	30	8	33.3	40	11X16
TBF450	568	608	648	115	400	681	729	336	518	407	500	568	816	814	35	10	38.3	50	13X18

### TBF-K Dimension



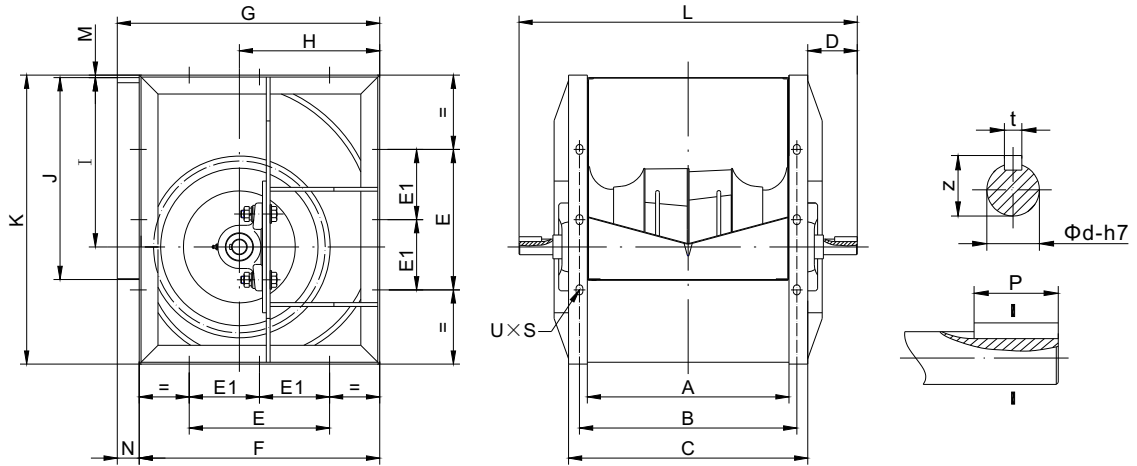
型号 Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Φd	t	z	P	UXS
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TBF315	404	434	464	68	280	480	518	285	350	404	578	600	3	38	25	8	28.3	40	13X18
TBF355	452	492	532	70	315	548	578	322	394	452	654	672	6	30	30	8	33.3	40	13X18
TBF400	506	546	586	70	355	612	650	364	444	506	736	726	5	38	30	8	33.3	40	13X18
TBF450	568	608	648	83	400	681	726	409	500	568	827	814	5	45	35	10	38.3	50	13X18

说明：所有尺寸允许偏差±4mm

Note: Overall dimension tolerance range ±4mm .

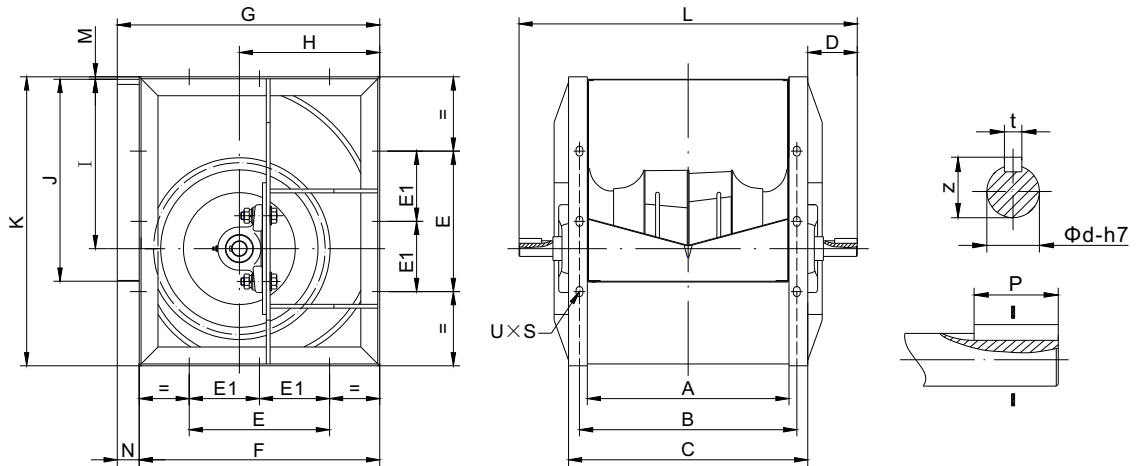


### TBF -HL Dimension



Model	A	B	C	D	E	E1	F	G	H	I	J	K	L	M	N	$\Phi d$	t	z	P	UXS
TBF280	361	391	421	77	280		432	466	254	311	361	518	575	5	34	25	8	28.3	40	11X16
TBF315	404	434	464	84	280		480	518	285	350	404	578	632	3	38	25	8	28.3	40	13X18
TBF355	452	492	532	84	315		548	578	322	394	452	654	700	6	30	30	8	33.3	40	13X18
TBF400	506	546	586	87	355		612	650	364	444	506	736	760	5	38	30	8	33.3	40	13X18
TBF450	568	608	648	98.5	400		681	726	409	500	568	827	845	5	45	35	10	38.3	50	13X18
TBF500	638	678	718	98.5	450		750	800	453	553	638	918	915	5	50	35	10	38.3	50	13X18
TBF560	714	764	814	93		250	844	892	508	620	714	1030	1000	7	48	40	12	43.3	70	13X18
TBF630	800	850	900	95		280	945	998	570	698	800	1157	1090	6	53	45	14	48.5	70	13X18
TBF710	898	948	998	128.5		315	1057	1120	643	786	898	1302	1255	7	63	50	14	53.5	90	17X22
TBF800	1006	1056	1106	141		355	1180	1254	722	886	1006	1468	1388	7	74	55	16	59	90	17X22
TBF900	1130	1193	1256	155		400	1319	1408	813	998	1130	1648	1566	7	89	60	18	64	90	17X22

### TBF -HM Dimension

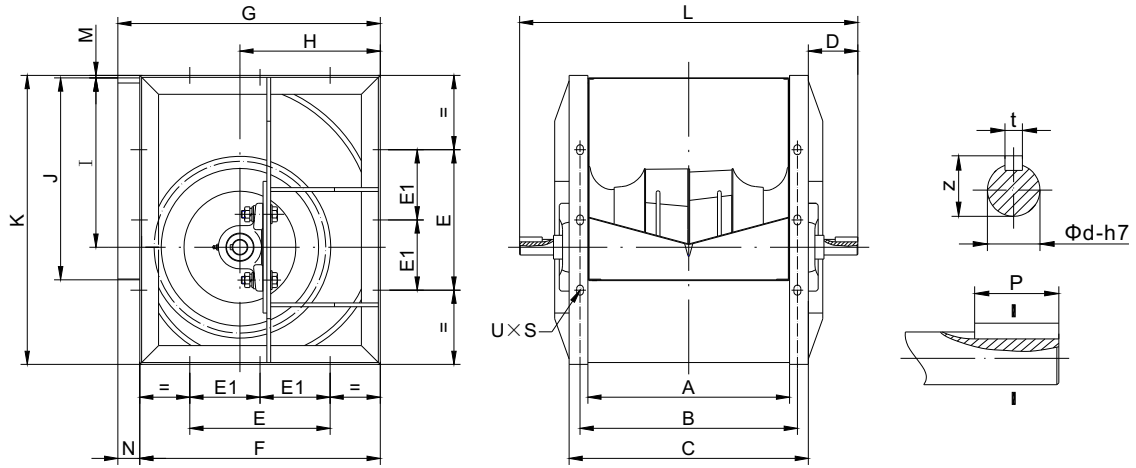


Model	A	B	C	D	E	E1	F	G	H	I	J	K	L	M	N	$\Phi d$	t	z	P	UXS
TBF280	361	391	421	77	280		432	466	254	311	361	518	575	5	34	25	8	28.3	40	11X16
TBF315	404	434	464	84	280		480	518	285	350	404	578	632	3	38	30	8	33.3	50	13X18
TBF355	452	492	532	93	315		548	578	322	394	452	654	718	6	30	35	10	38.3	50	13X18
TBF400	506	546	586	93	355		612	650	364	444	506	736	772	5	38	35	10	38.3	50	13X18
TBF450	568	608	648	115	400		681	726	409	500	568	827	878	5	45	40	12	43.3	70	13X18
TBF500	638	678	718	119	450		750	800	453	553	638	918	956	5	50	40	12	43.3	70	13X18
TBF560	714	764	814	128		250	844	892	508	620	714	1030	1070	7	48	45	14	48.3	70	13X18
TBF630	800	850	900	127.5		280	945	998	570	698	800	1157	1155	6	53	50	14	53.8	90	13X18
TBF710	898	948	998	141		315	1057	1120	643	786	888	1302	1280	7	63	55	16	59	90	17X22
TBF800	1006	1056	1106	141		355	1180	1254	722	886	996	1468	1388	7	74	55	16	59	90	17X22
TBF900	1130	1193	1256	155		400	1319	1408	813	998	1120	1648	1566	7	89	60	18	64	100	17X22
TBF1000	1266	1329	1392	213		450	1450	1540	894	1096	1256	1810	1818	9	90	65	18	69	100	17X22

说明：所有尺寸允许偏差±4mm

Note: Overall dimension tolerance range ±4mm .

TBF -GM Dimension



Model	A	B	C	D	E	E1	F	G	H	I	J	K	L	M	N	$\Phi d$	t	z	P	UXS
TBF500	638	678	718	171	450	/	750	800	453	553	638	918	1060	5	50	40	12	43.3	70	13X18
TBF560	714	764	814	173	/	250	844	892	508	620	714	1030	1160	7	48	50	14	53.8	70	13X18
TBF630	800	850	900	200	/	280	945	998	570	698	800	1157	1300	6	53	50	14	53.8	90	13X18
TBF710	898	948	998	217	/	315	1057	1120	643	786	888	1302	1432	7	63	60	18	64	90	17X22
TBF800	1006	1056	1106	217	/	355	1180	1254	722	886	996	1468	1540	7	74	60	18	64	90	17X22
TBF900	1130	1193	1256	208	/	400	1319	1408	813	998	1120	1648	1672	7	89	65	18	69	100	17X22
TBF1000	1266	1329	1392	213	/	450	1450	1540	894	1096	1256	1810	1818	9	90	65	18	69	100	17X22

说明：所有尺寸允许偏差±4mm

Note: Overall dimension tolerance range  $\pm 4mm$ .