



---

# ADA

DOUBLE INLET  
CENTRIFUGAL FAN  
with Airfoil Wheels



# ADA Series

## DOUBLE INLET CENTRIFUGAL FAN with Airfoil Wheels



Kruger Ventilation Industries certifies that the **ADA series** shown herein is 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.



## ADA Series

### Double Inlet Centrifugal Fans – Airfoil wheels

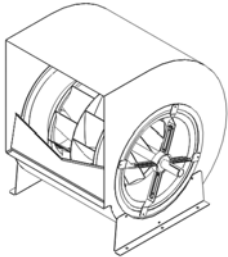
The ADA series is DIDW centrifugal fans with high efficiency non-overloading airfoil impellers. The fans are suitable for supply or exhaust applications in commercial, process and industrial HVAC systems. Sizes of this series are in accordance with AMCA standard 99.

#### Type / Operating Limit

Each fan type has its maximum operating speed and power due to its mechanical design.

The operating limit of different fan types of ADA series is set according to the requirement of class I, II and III limit as defined in AMCA standard 99.

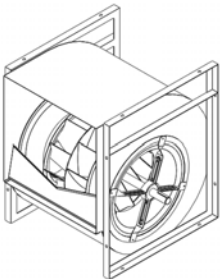
Model 315 to 710		Model 800 to 1400
Type S-C	I	I
Type T	II	II
Type X	III	III
Type Z		III



#### Type S

This type is supplied with mounting feet and can be mounted in three different orientations. The construction is mainly for OEM application which only subject to testing and approval.

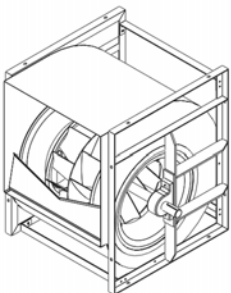
Fan Size : 315 to 710  
 Volume : 1900 to 50000 m<sup>3</sup>/h  
 Total Pressure : up to 2000 Pa



#### Type C

This type has a frame fitted on both sides of the fan which gives better strength and rigidity. It allows mounting in four different orientations.

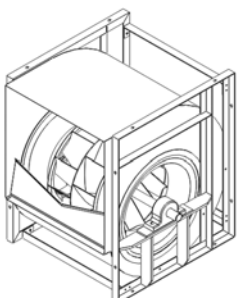
Fan Size : 315 to 710  
 Volume : 1900 to 50000 m<sup>3</sup>/h  
 Total Pressure : up to 2000 Pa



#### Type T

This type has a welded frame, giving increased stiffness and rigidity required for higher operating performance.

Fan Size : 315 to 1400  
 Volume : 1900 to 190 000 m<sup>3</sup>/h  
 Total Pressure : up to 2500 Pa



#### Type X/Z

The structure is similar to type T but utilizes enhanced bearings to support higher dynamic load necessary for the increased performance.

Fan Size : 315 to 1400  
 Volume : 1900 to 260 000 m<sup>3</sup>/h  
 Total Pressure : up to 3200 Pa

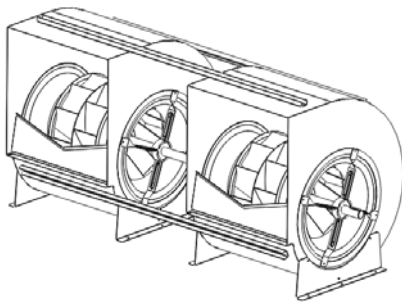
*Type Z is non-standard, for more information, please consult your nearest Kruger Office for details.*

**ADA Twin Fan**

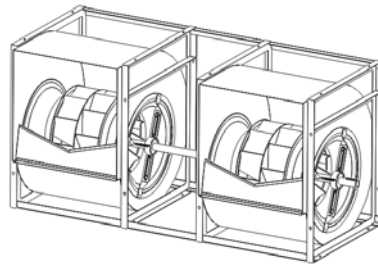
ADA series are also available in twin fan version, with two double inlet fans mounted on the same shaft. To select for twin fans, use the curves of single fan with the following factors :-

Volume	x 2
Absorbed Power	x 2.15
Speed	x 1.05
Noise	+ 3 dB

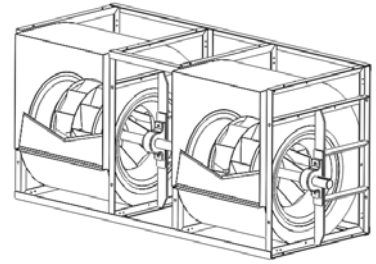
This series is available in type S2, C2 or T2. Performances of twin fan are not licensed by AMCA International.



**Type S2**  
Size: 315 to 500  
Vol.: 5000 to 50000m<sup>3</sup>/h



**Type C2**  
Size: 315 to 500  
Vol.: 5000 to 50000m<sup>3</sup>/h



**Type T2**  
Size: 355 to 630  
Vol.: 10000 to 80000m<sup>3</sup>/h

**TECHNICAL SPECIFICATION**

**Wheel**

The wheel of ADA series is made of cold rolled sheet steel airfoil profile blades with polyester powder coating finish.



**Housing**

For all sizes except 1250 and above, the housing is manufactured in galvanized sheet steel with the housing fixed to the side plates in "pittsburg lock" form system.

Housings for 1250 and 1400 are manufactured in mild steel finished with polyester powder coating.

Fully welded steel plate housings with painted finish are available for all sizes upon request.

**Frame**

The frame is manufactured with galvanized angular bars for type "C". For type "T" and "X", they are manufactured with sections of steel with polyester powder coating finish.

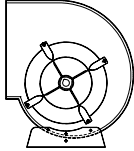
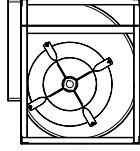
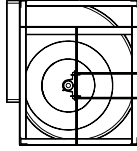
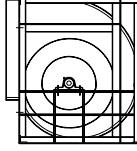
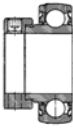
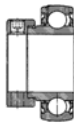
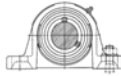
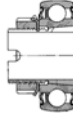
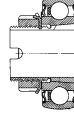

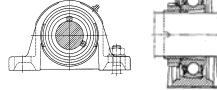
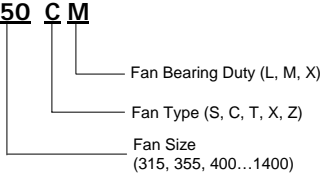
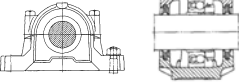
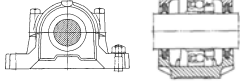
**Shaft**

Shafts are manufactured from C45 carbon steel using an automatic process for positioning and cutting of the keyways. All dimensional tolerances of the shaft are fully checked to ensure a precision fit. All shafts are then coated with an anti-corrosion varnish after assembly.



**Bearings**

Bearings used are either deep groove ball bearing type with an adaptor sleeve, or spherical roller bearings type sealed at both sides for different duty application and classified as below:

Fan Type	Mounted in a rubber housing		Mounted on cast iron supports with grease point	
	<b>S</b> 	<b>C</b> 	<b>T</b> 	<b>X</b> 
Bearing Duty	<b>SL</b> Light Duty 	<b>CL</b> Light Duty 	<b>TL</b> Light Duty 	—
	<b>SM</b> Medium Duty 	<b>CM</b> Medium Duty 	<b>TM</b> Medium Duty 	<b>XM</b> Medium Duty 
eg. Model: <b>ADA 450 C M</b>  <ul style="list-style-type: none"> <li>— Fan Bearing Duty (L, M, X)</li> <li>— Fan Type (S, C, T, X, Z)</li> <li>— Fan Size (315, 355, 400...1400)</li> </ul>			<b>TX</b> Extra Heavy Duty 	<b>XX</b> Extra Heavy Duty 

Except TX, XX, UX extra heavy duty, all bearings are lubricated for life and maintenance-free. If re-lubrication is necessary, it is recommended to use lithium base grease suitable for all temperatures within the operational limits.

**Balancing Quality**

All wheels are statically and dynamically balanced to ISO1940 and AMCA 204 – G2.5 standards.

All fans after assembly are trim-balanced to ISO1940 and AMCA 204 - G2.5 standard.

Clean room application fans with balancing grade of G1.0 are available upon request.

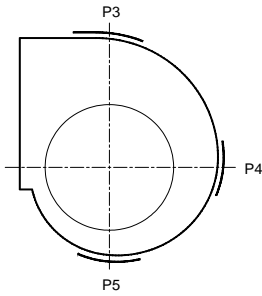
**ACCESSORIES**

**Casing Drain**

This option is available when using fans exposed to the atmosphere or operating in high humidity conditions.

**Outlet Flanges**

Outlet flanges are available upon request.



**Inspection Doors**

The inspection door can be supplied upon request. It can be supplied in one of the three positions (P3, P4 & P5).

**Guards**

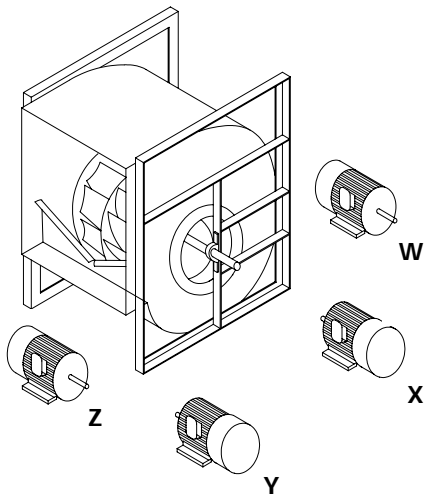
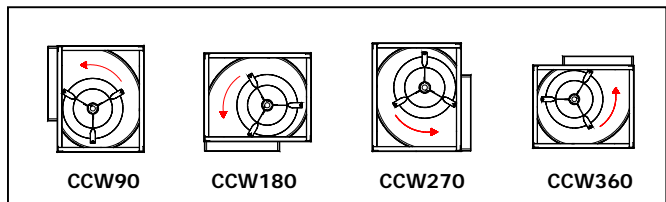
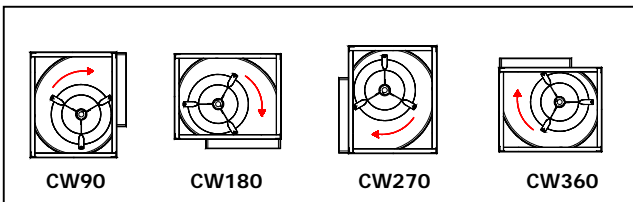
Inlet guards, discharge guards and non-drive end shaft guards are available on request.

**Fan Rotation and Discharge**

The rotation and discharge of the fan is in accordance with AMCA standard 99. The direction of rotation is determined from the drive side of the fan :-

**CW - clockwise rotation**

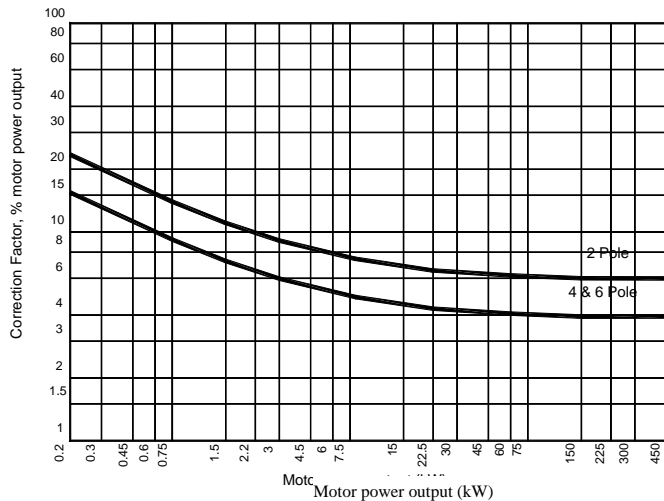
**CCW - counter-clockwise rotation**



**Motor Position**

The position of the motor for belt drive centrifugal fan is in accordance with AMCA standard 99.

Location of motor is determined by facing the drive side of fan and designating the positions by letters W, X, Y, or Z.



**Motor Selection**

The power curves shown on each performance graph represent the absorbed power at the shaft of the fan measured in kW.

To determine the power of the motor to be installed, a correction factors should be applied to compensate for transmission losses.

For conversion to horsepower (HP), use multiplying factor 1.34.

### Inlet Vane Control

The inlet vane control enable energy saving that varies according to the vane control compared to traditional methods of volume control.

Fig.1 shows the volume reduction corresponding to the vane position.

- with vane fully open (Pos 90°) the volume will be 3% less than the catalogue performance.
- with vane fully closed (Pos 0°) the volume will be reduced by 75%.

Performances of inlet vane controls are not licensed by AMCA International.

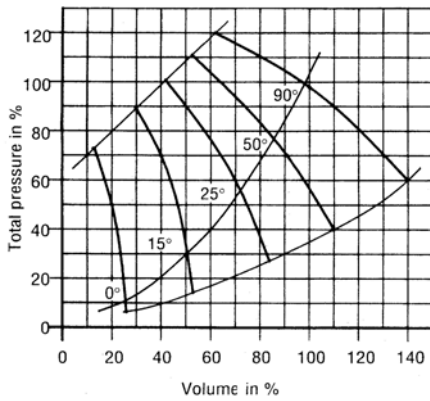
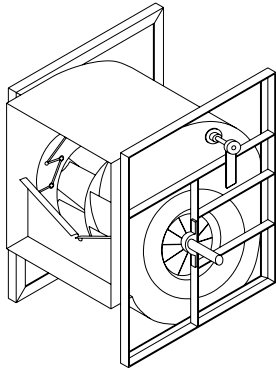


Fig. 1

### IVC orientation and accessories

The standard orientation and lever position for the IVC is indicated in Fig.2. When ordering a complete fan with IVC and accessories, please specify as follows:

- Fan orientation e.g. CCW270
- IVC lever position e.g. Pos. 45°
- Example : Fan Model – CCW270/P45

Orientation	90	180	270	360
IVC Lever Position	225° 	315° 	45° 	135° 
	315° 	45° 	135° 	225° 

Fig.2 - IVC Orientation and Lever Position

### Dynamic Pressure

Both dynamic pressure and outlet air velocity shown on each curve are calculated on the full discharge area, i.e. ducted outlet conditions.

With free outlet conditions the velocity pressure is higher. To determine this new value, multiply the velocity pressure of the ducted outlet obtained from the fan curve by the following correction factor "K".

$$K = 1.67$$

Fan performances calculated with this correction factors are not licensed by AMCA International.

### Performance

The performance data shown on each graph is derived from tests conducted in accordance to AMCA Standard 210 – Fig 12 – installation type B (free inlet and ducted outlet condition).

Ratings refer to the standard air density with the total pressure as a function of the air volume, using logarithmic scales.

It is essential that the same installation type and test standards are used at all times when comparing fan performances.

### Noise

The noise level shown on each graph refer to the "A-weighted" sound power values and the data on the inlet side has been measured in accordance with AMCA Standard 300 fig. 2, Installation Type "B". The noise levels of the fans are determined as follows :

- Sound power level - ("A" scale):  $L_w(A)$  as catalogue
- Octave band spectrum:  $L_w = L_w(A) + L_w \text{ rel. dB}$  [refer to Kruger for more details]
- Sound pressure level:
  - a) free field  
 $L_p(A) = L_w(A) - (20\log_{10}d) - 11$
  - b) room conditions  
 $L_p(A) = L_w(A) - (20\log_{10}d) - 8$where  $d$  = distance from fan (m)

**Performance**

The performance data shown on each diagram is derived from tests conducted in accordance to AMCA Standard 210- Fig 12- Installation type B (free inlet and ducted outlet condition).

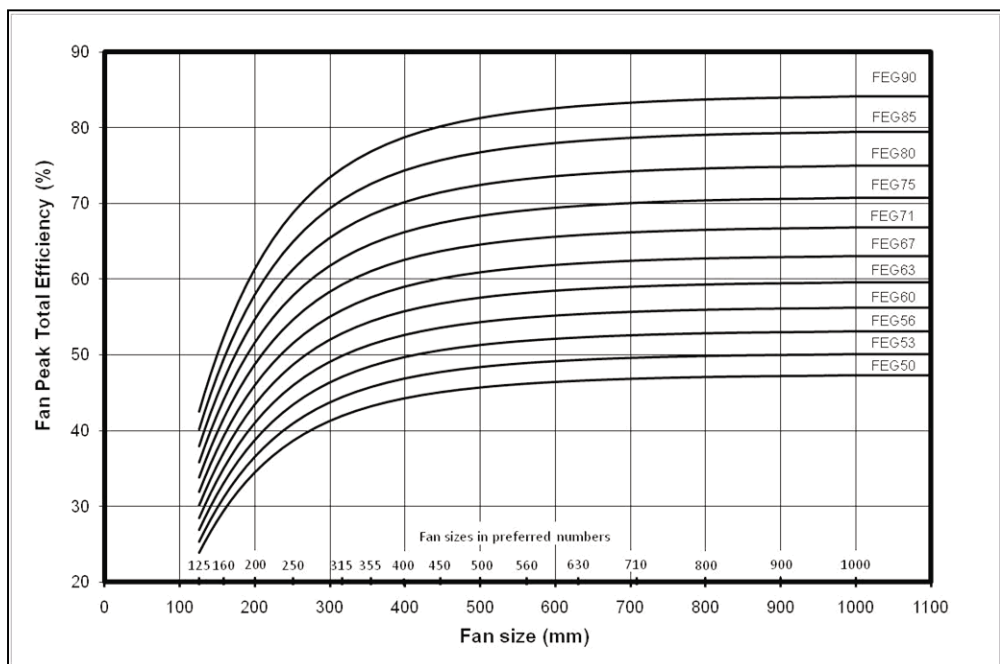
Ratings refer to standard air density with the total pressure as a function of the air volume, using logarithmic scale.

It is essential that the same installation type and test standards are used at all time when comparing fan performance.

According to AMCA 205, ADA series can be classify as FEG 85~90 based on fan peak efficiency. The following is the explanation of FEG classification:

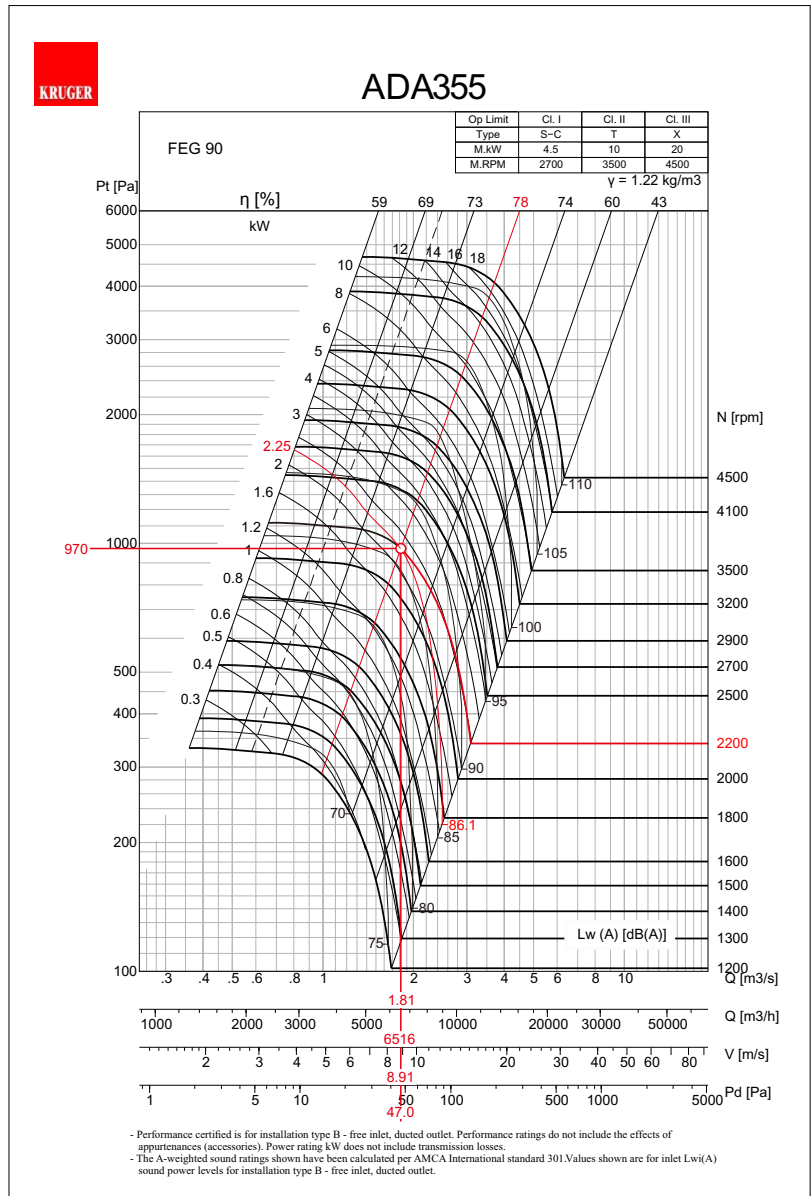
1. Fan size is the impeller diameter in mm.
2. The fan peak efficiency shall be calculated from the fan (total) pressure.
3. If this method is used for a direct driven fan, the fan efficiency is the impeller efficiency.
4. The FEG label for a given fan size is assigned when the fan peak efficiency is equal to or lower than the efficiency at the grade upper limit, and higher than the efficiency at the grade upper limit of the next lower grade for the fan size.
5. For any fan sizes larger than 1016 mm, the values of the grade upper limits are the same as for a size of 1016 mm.
6. No labels are considered for the fans with the fan peak total efficiency below FEG 50.
7. The values of efficiencies are calculated for fan sizes in the preferred R40 Series.
8. Not all available fan sizes are shown.

**Fan Efficiency Grades (FEG) for Fans without Drives (SI) – AMCA 205**



# Example of Selection

- Air Volume  $Q = 6516 \text{ m}^3/\text{h}$
- Outlet Velocity  $V = 8.91 \text{ m/s}$
- Dynamic Pressure  $P_d = 47.0 \text{ Pa}$
- Total Pressure  $P_t = 970 \text{ Pa}$
- Fan Speed  $N = 2200 \text{ rpm}$
- Absorbed Power  $W = 2.25 \text{ kW}$
- Total Efficiency  $\eta = 78 \%$
- Sound Power Level  $L_w(A) = 86.1 \text{ dB(A)}$



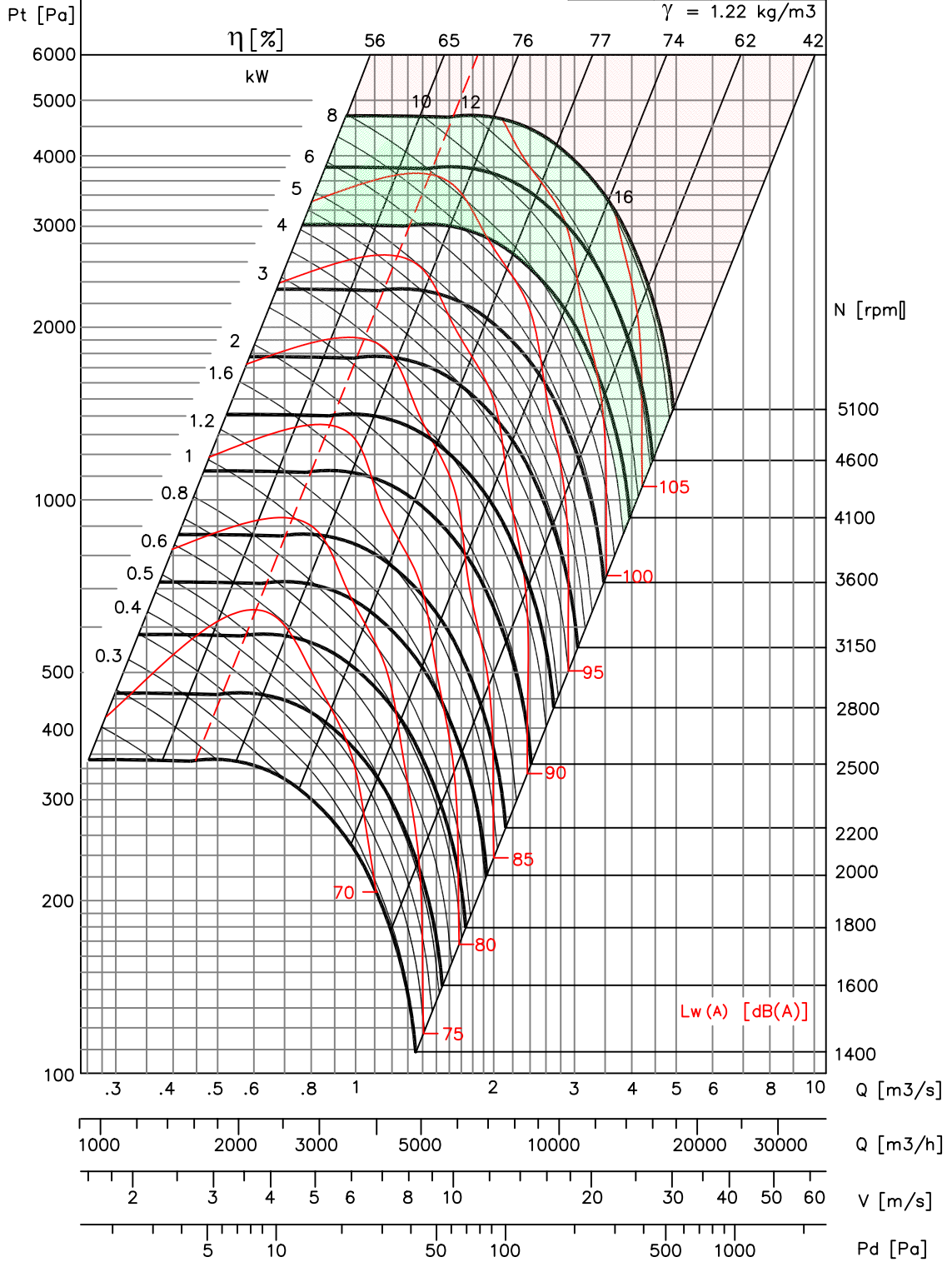


# ADA 315

FEG 90

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M. kW	4	8	16
M. RPM	3150	4100	5100

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

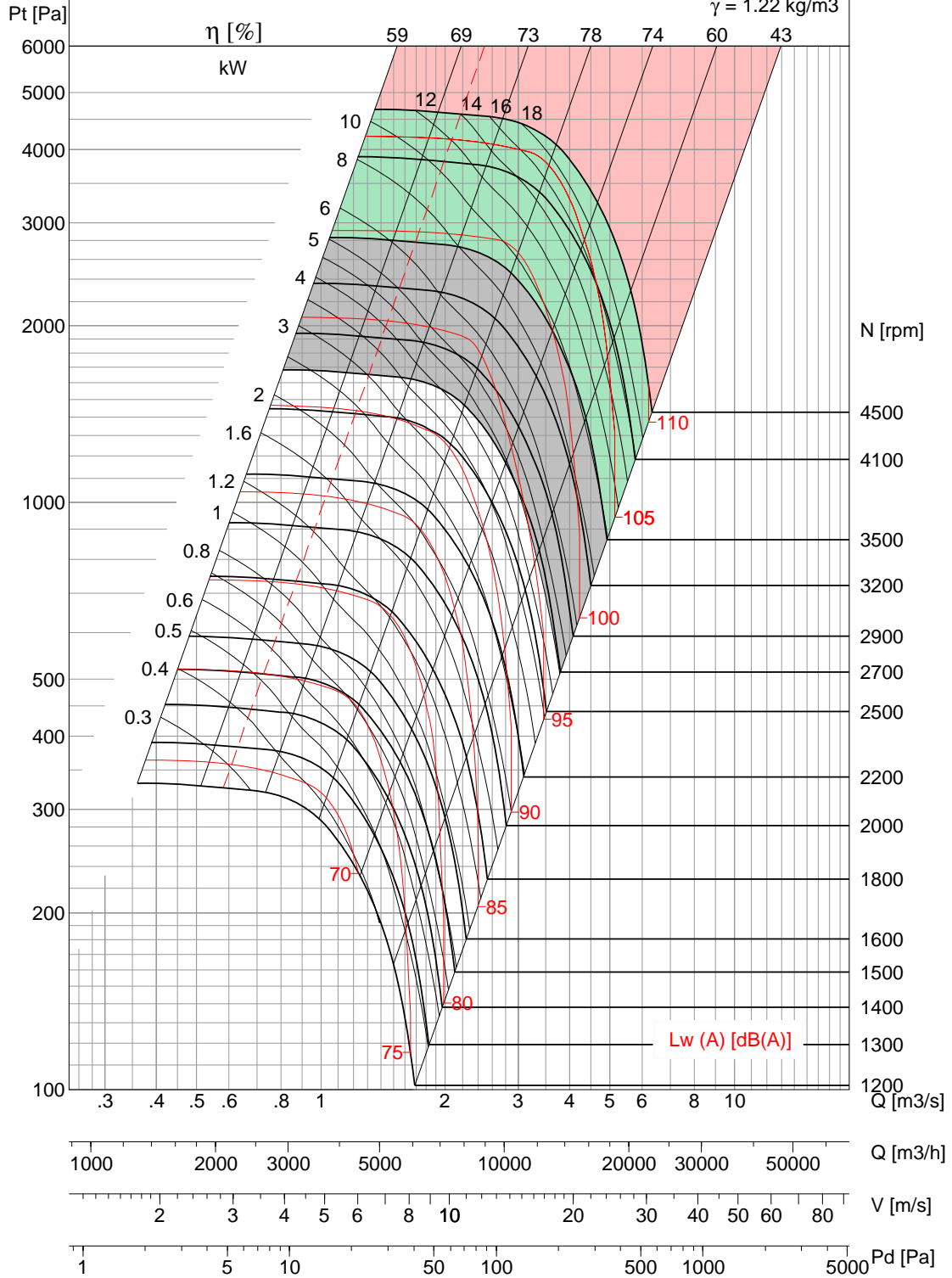


# ADA 355

FEG 90

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M.kW	4.5	10	20
M.RPM	2700	3500	4500

$\gamma = 1.22 \text{ kg/m}^3$

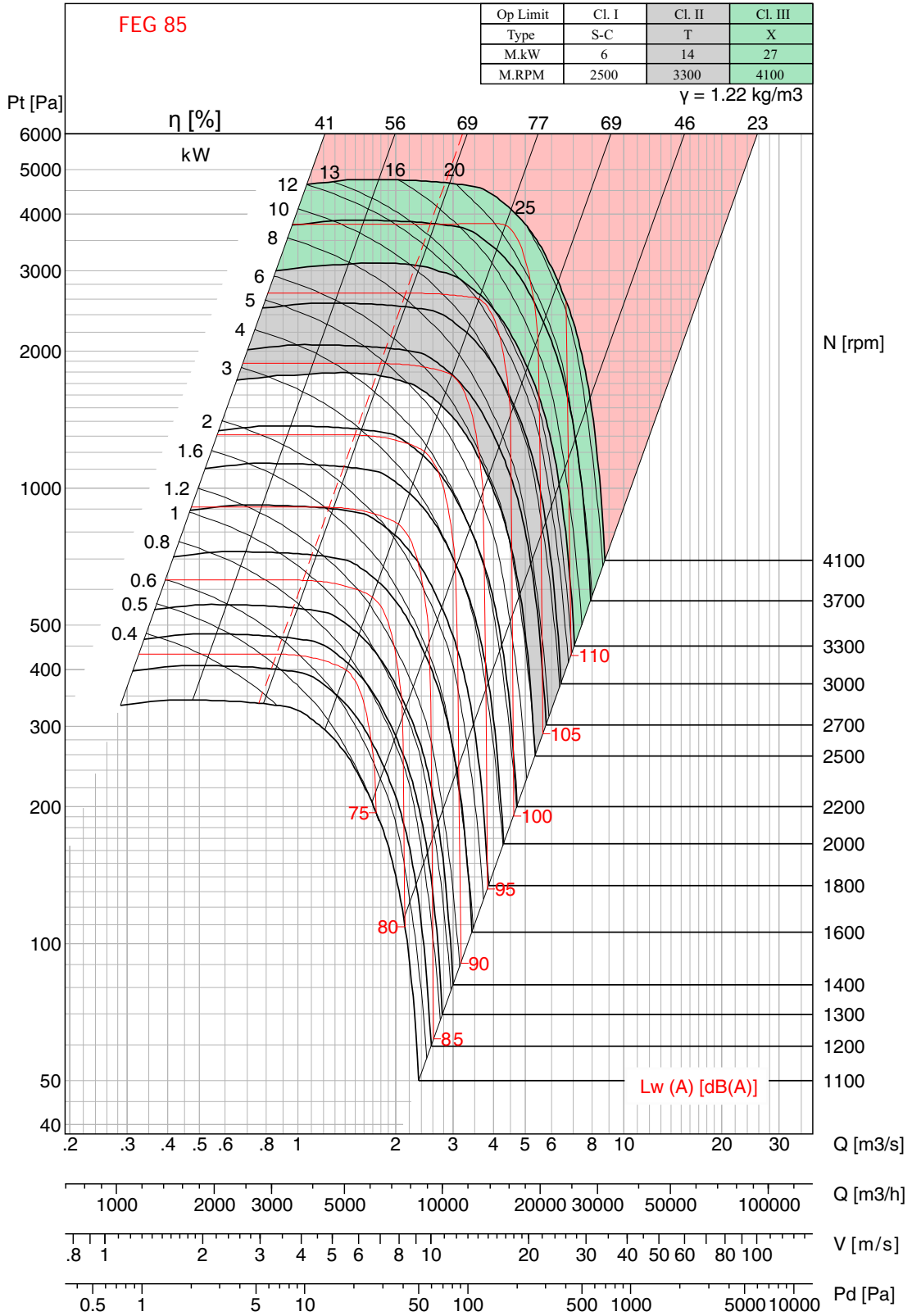


- Performance certified is for installation type B - free inlet, ducted outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating kW does not include transmission losses.  
 - The A-weighted sound ratings shown have been calculated per AMCA International standard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





# ADA 400



- Performance certified 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  $L_{wi}(A)$  sound power levels for installation type B - free inlet, ducted outlet.

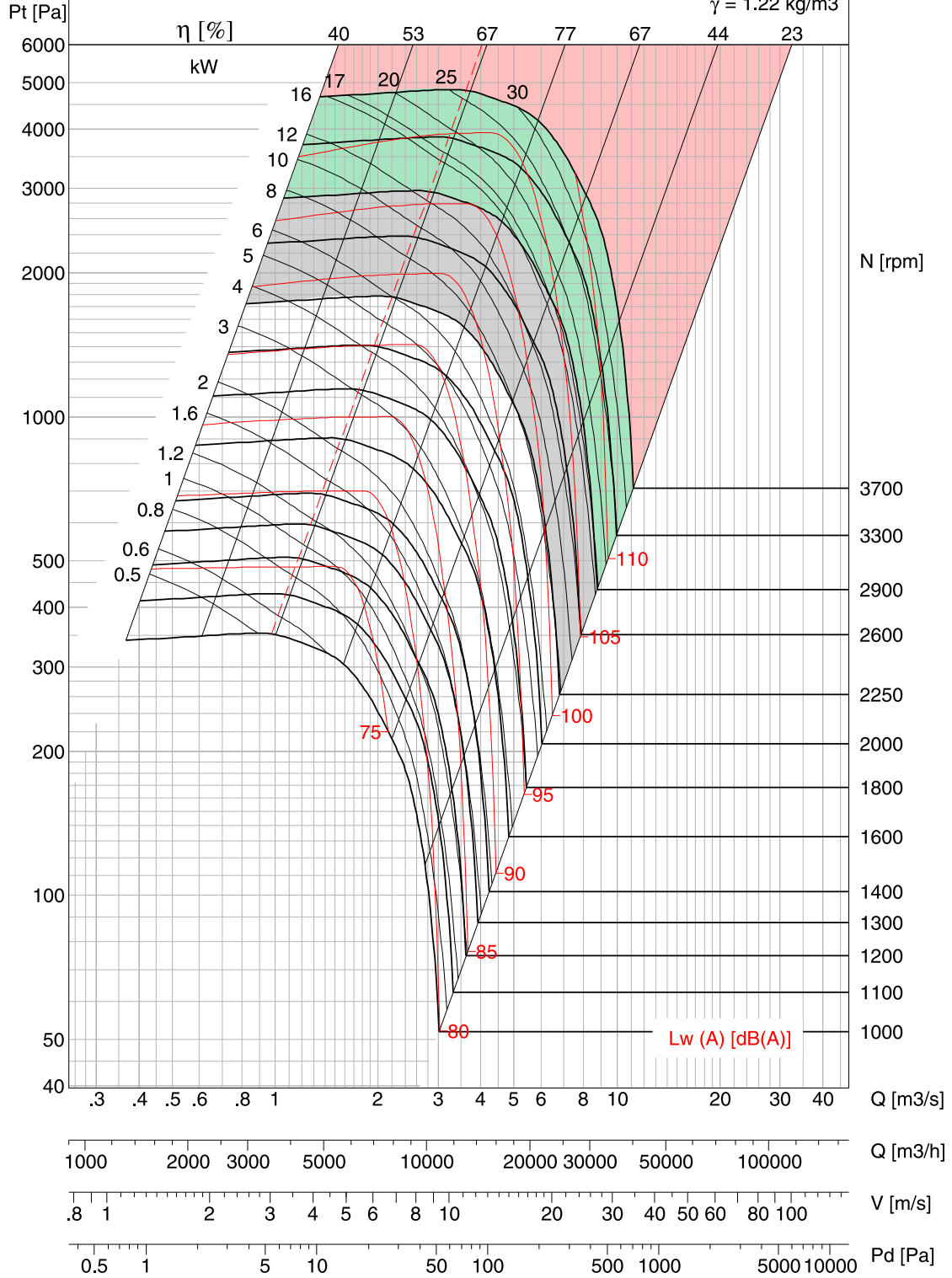


# ADA 450

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M.kW	8	18	37
M.RPM	2250	2900	3700

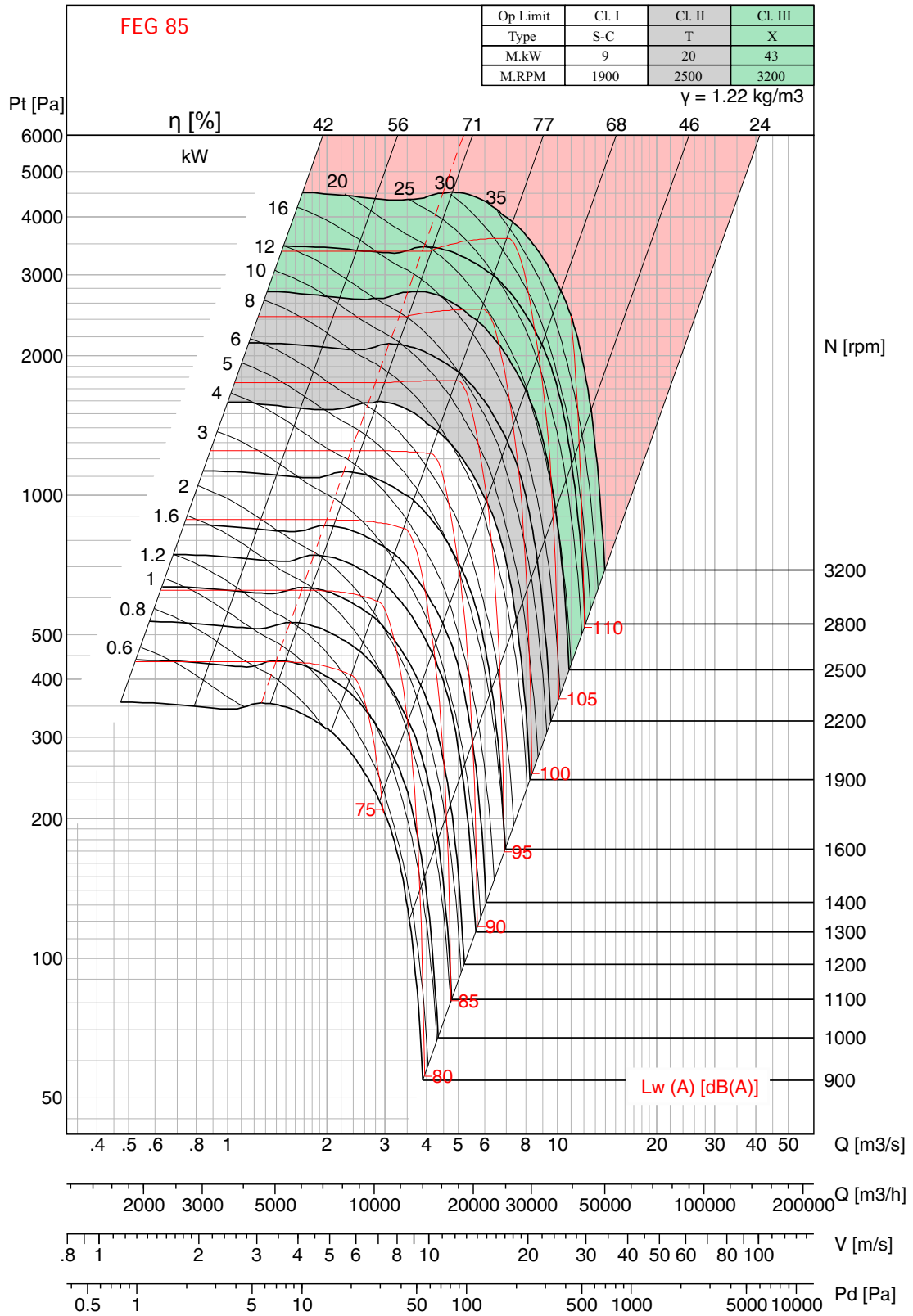
$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.



# ADA 500



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

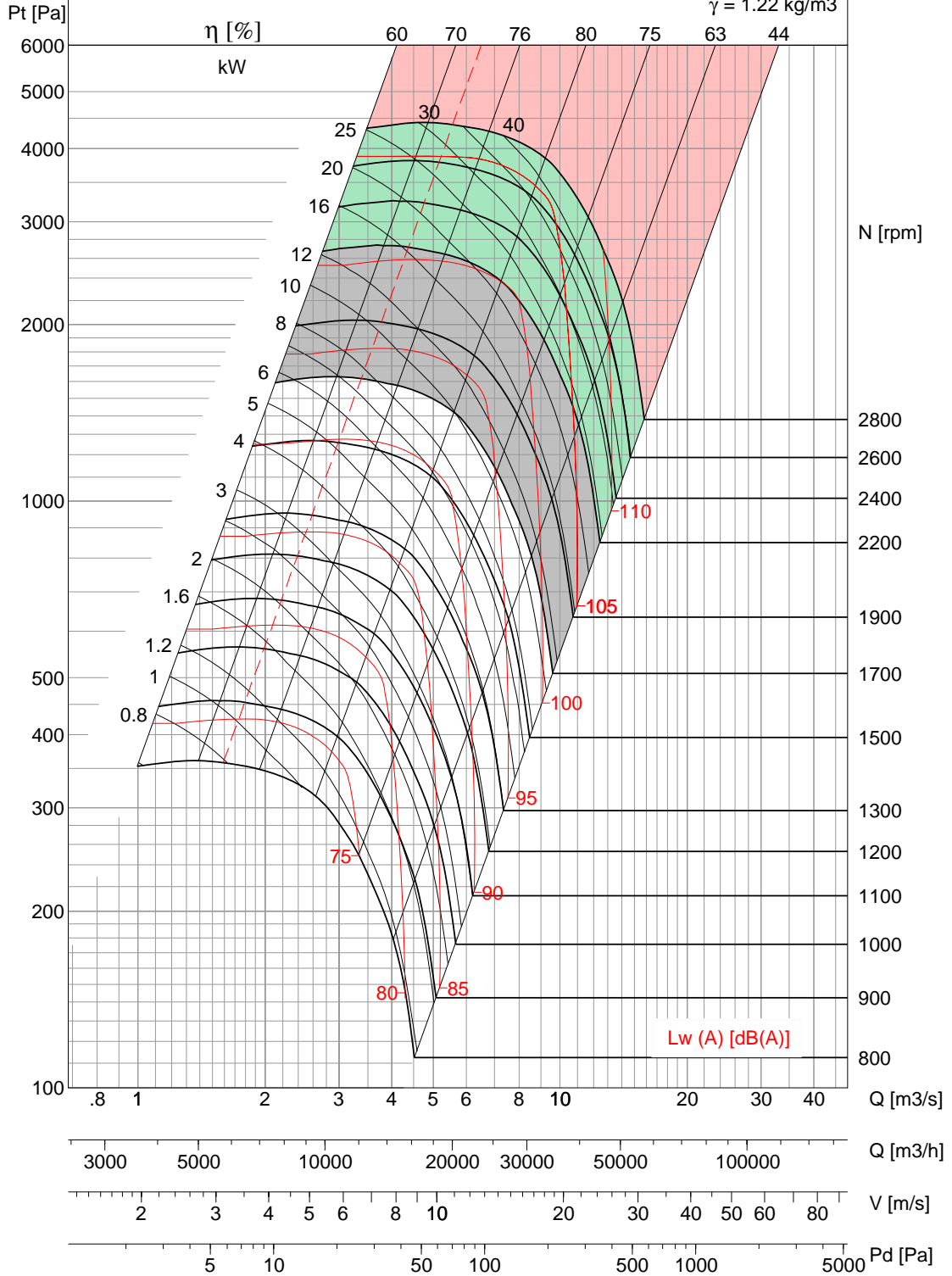


# ADA 560

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M.kW	11	25	50
M.RPM	1700	2200	2800

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

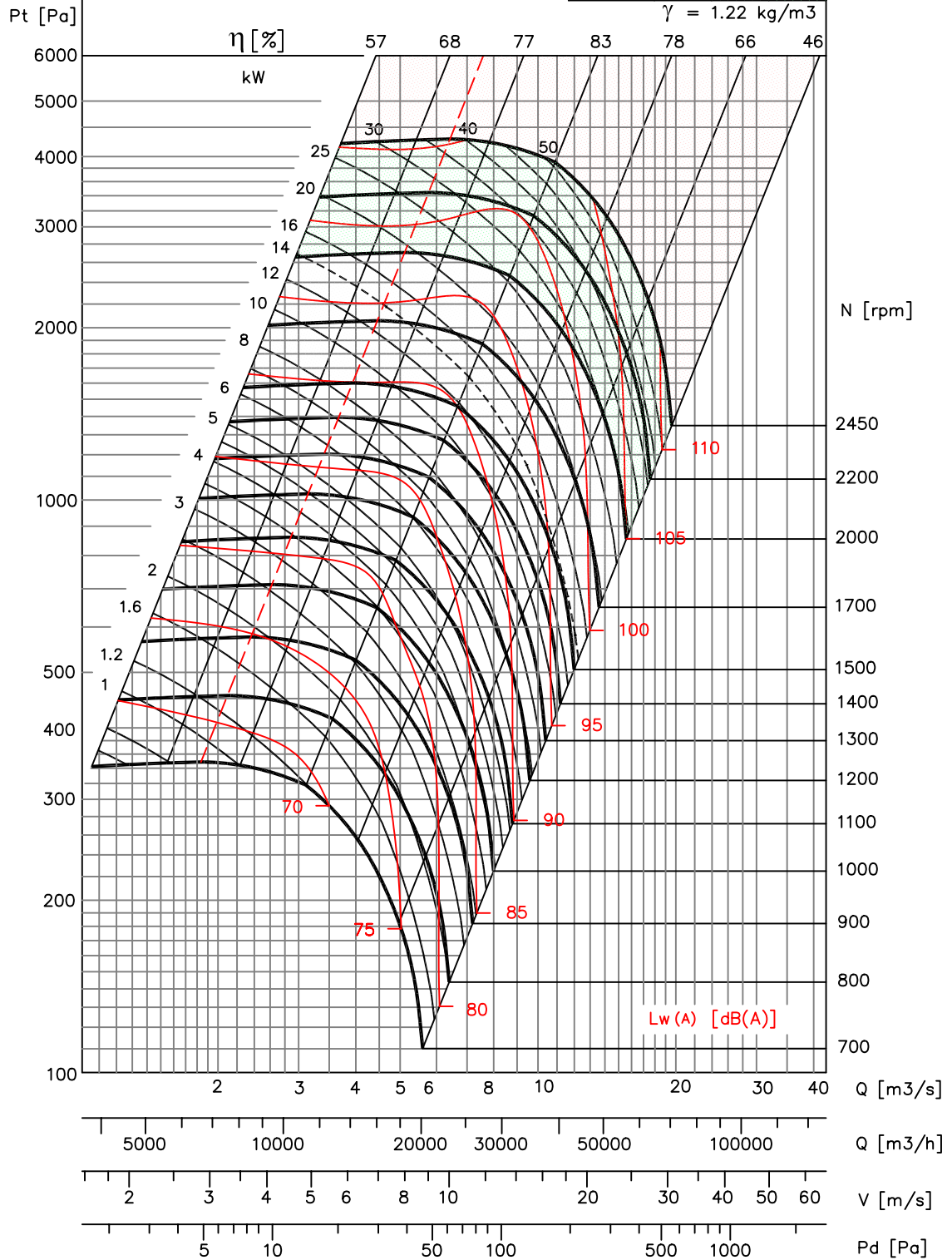


# ADA 630

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M. kW	14	30	60
M. RPM	1500	2000	2450

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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  $L_{wi}$ (A) sound power levels for installation type B - free inlet, ducted outlet.

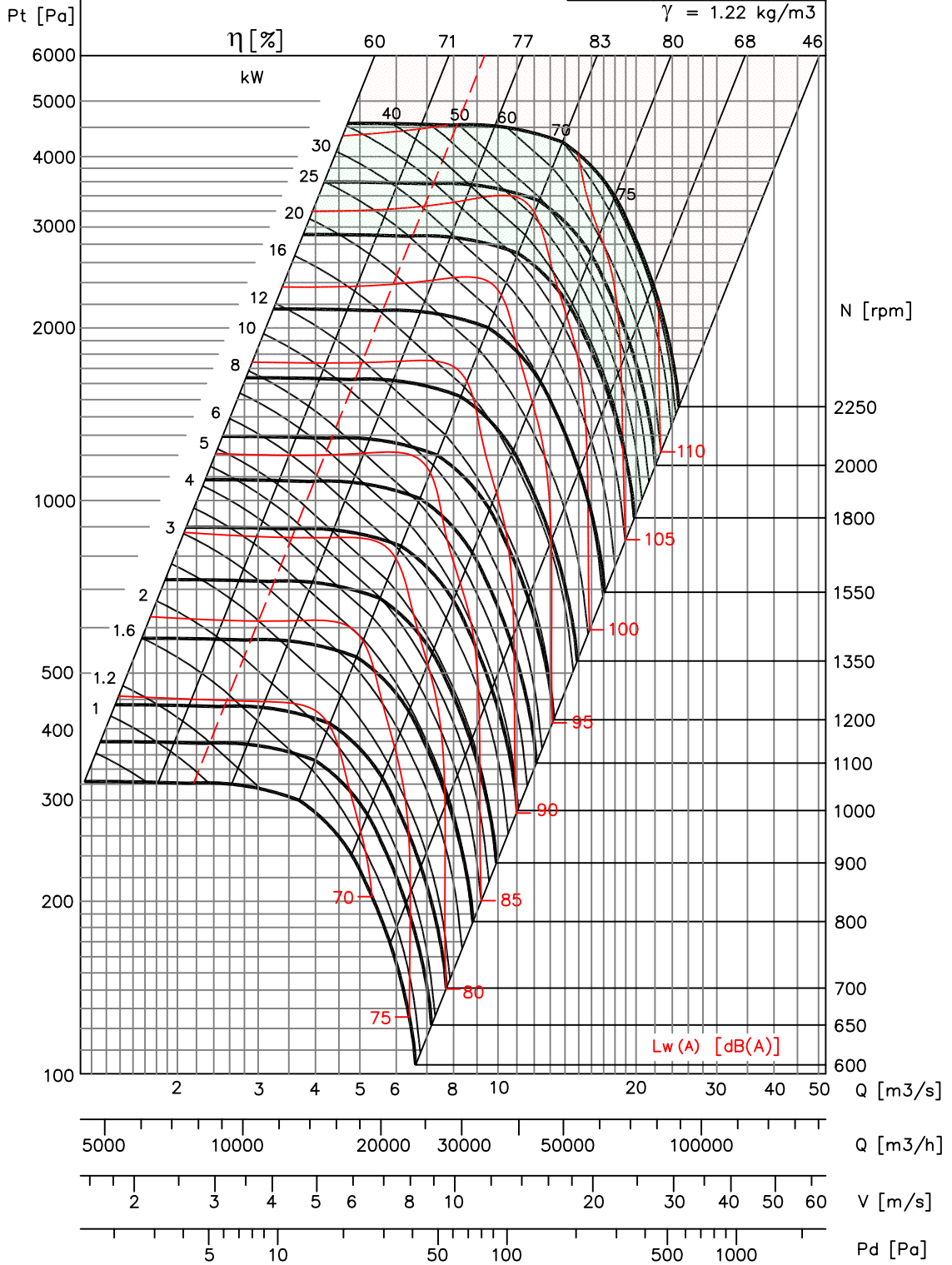


# ADA 710

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	S-C	T	X
M. kW	16	40	75
M. RPM	1350	1800	2250

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.



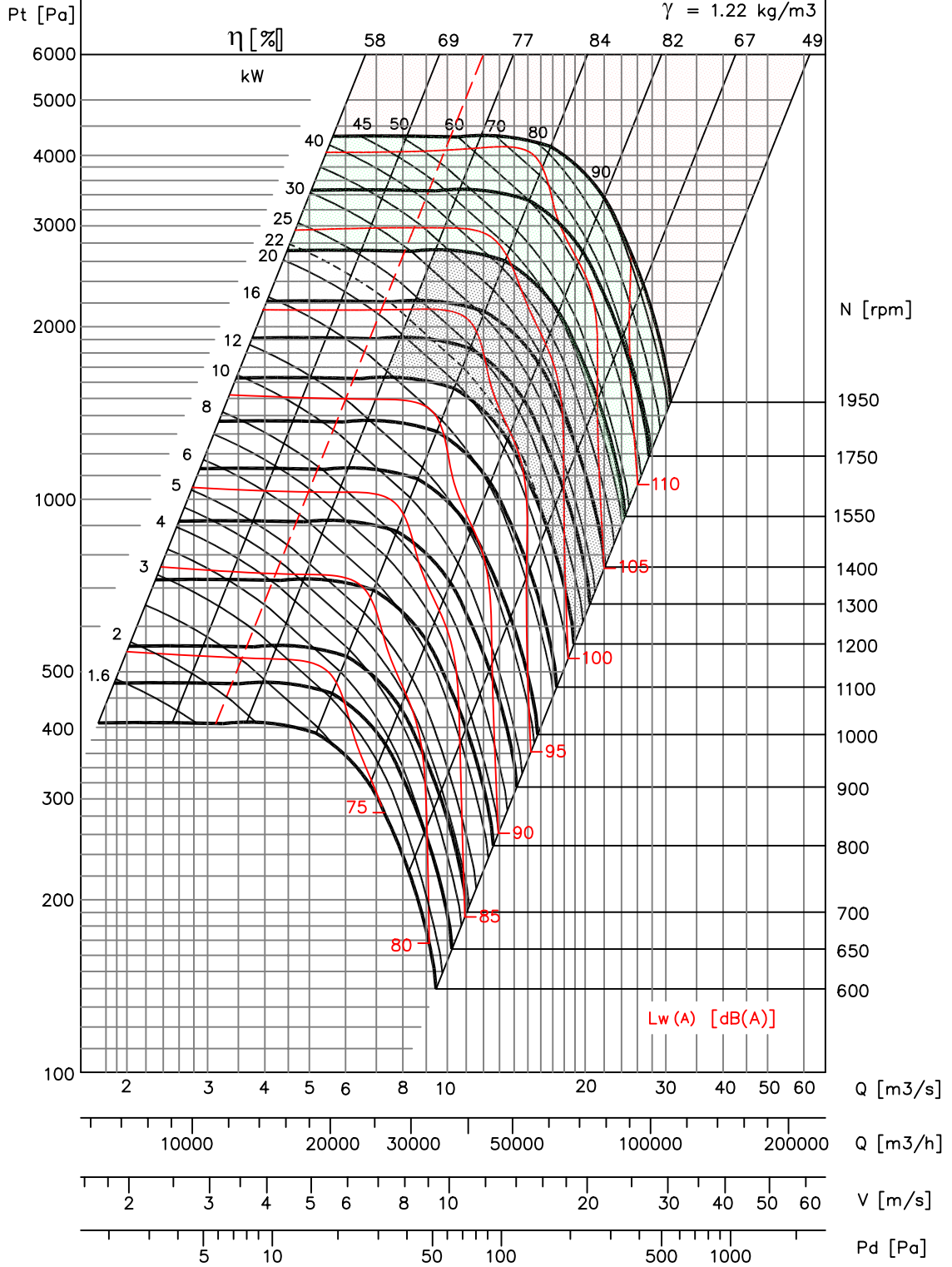


# ADA 800

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	22	45	90
M. RPM	1200	1550	1950

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

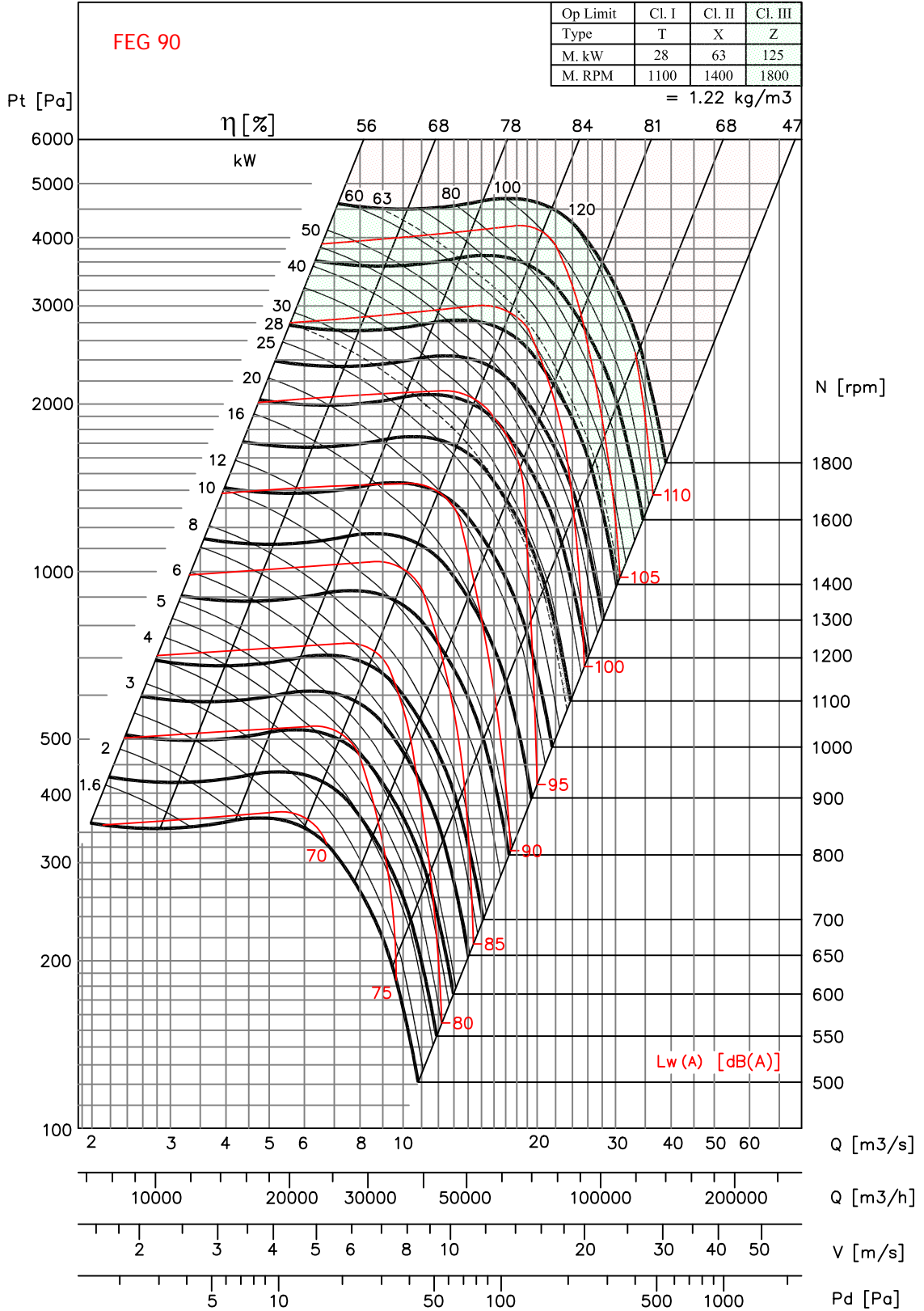


# ADA 900

FEG 90

Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	28	63	125
M. RPM	1100	1400	1800

= 1.22 kg/m<sup>3</sup>



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.



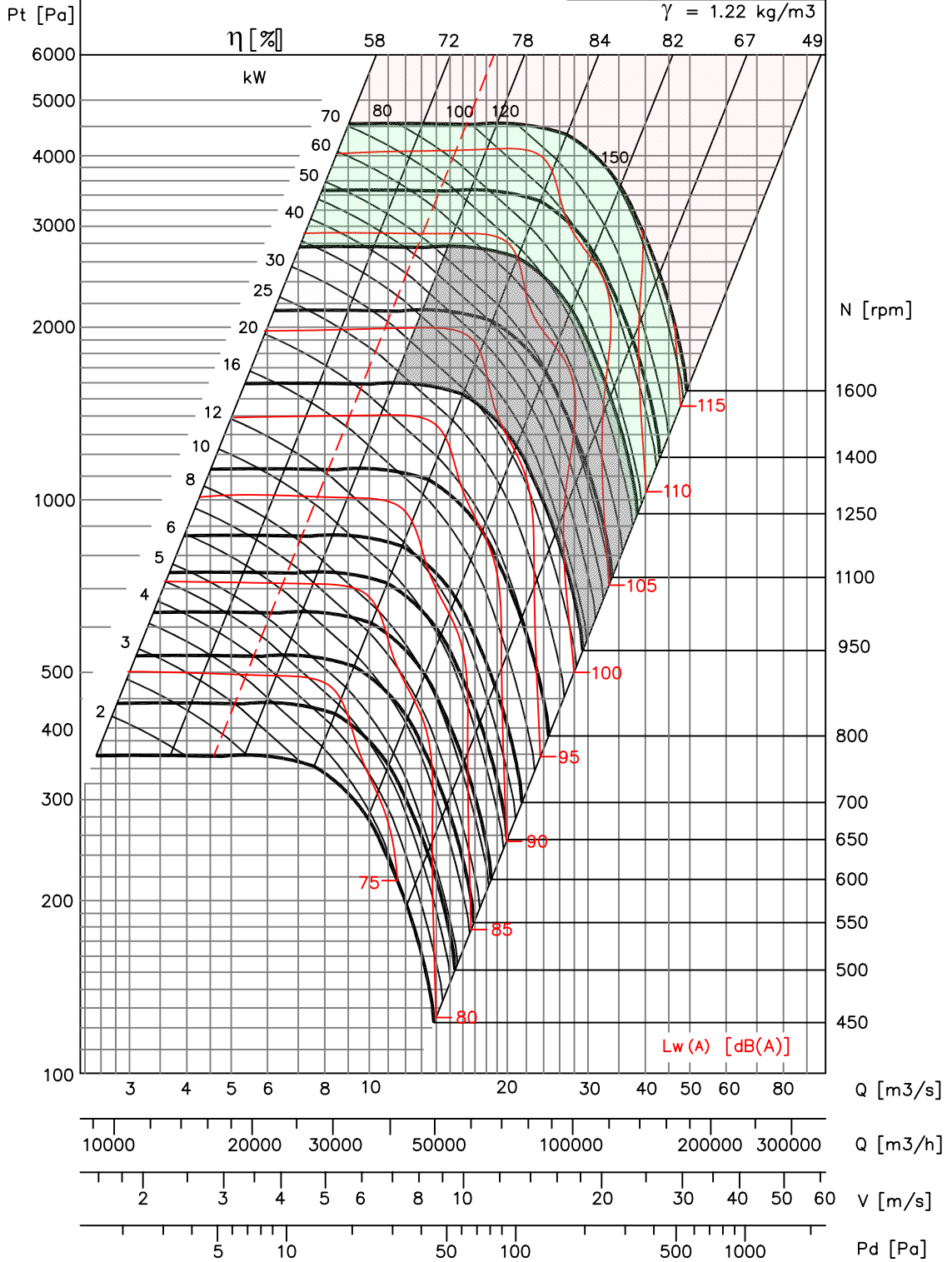


# ADA 1000

FEG 85

Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	35	70	150
M. RPM	950	1250	1600

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

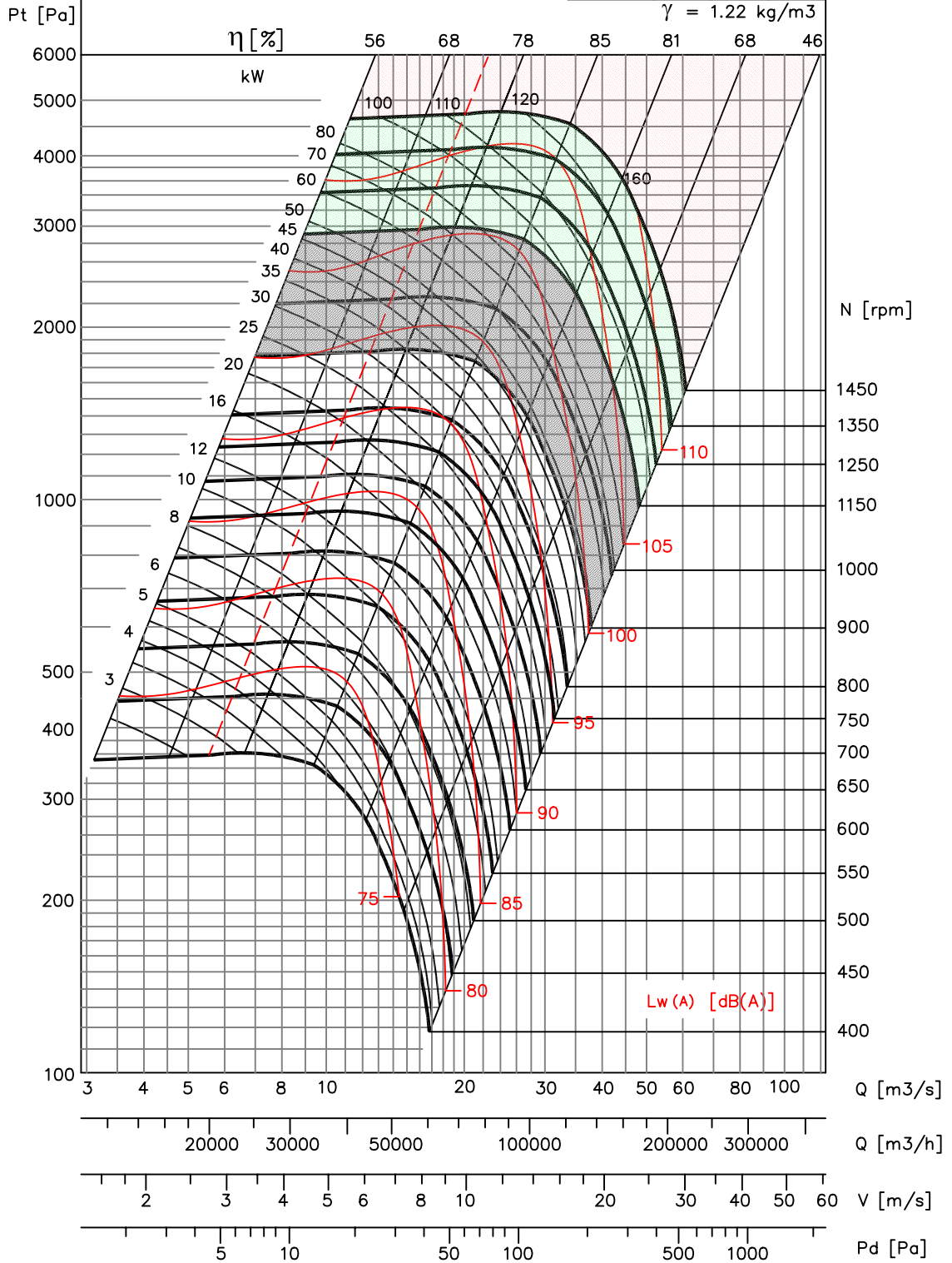


# ADA 1120

FEG 90

Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	45	100	160
M. RPM	900	1150	1450

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

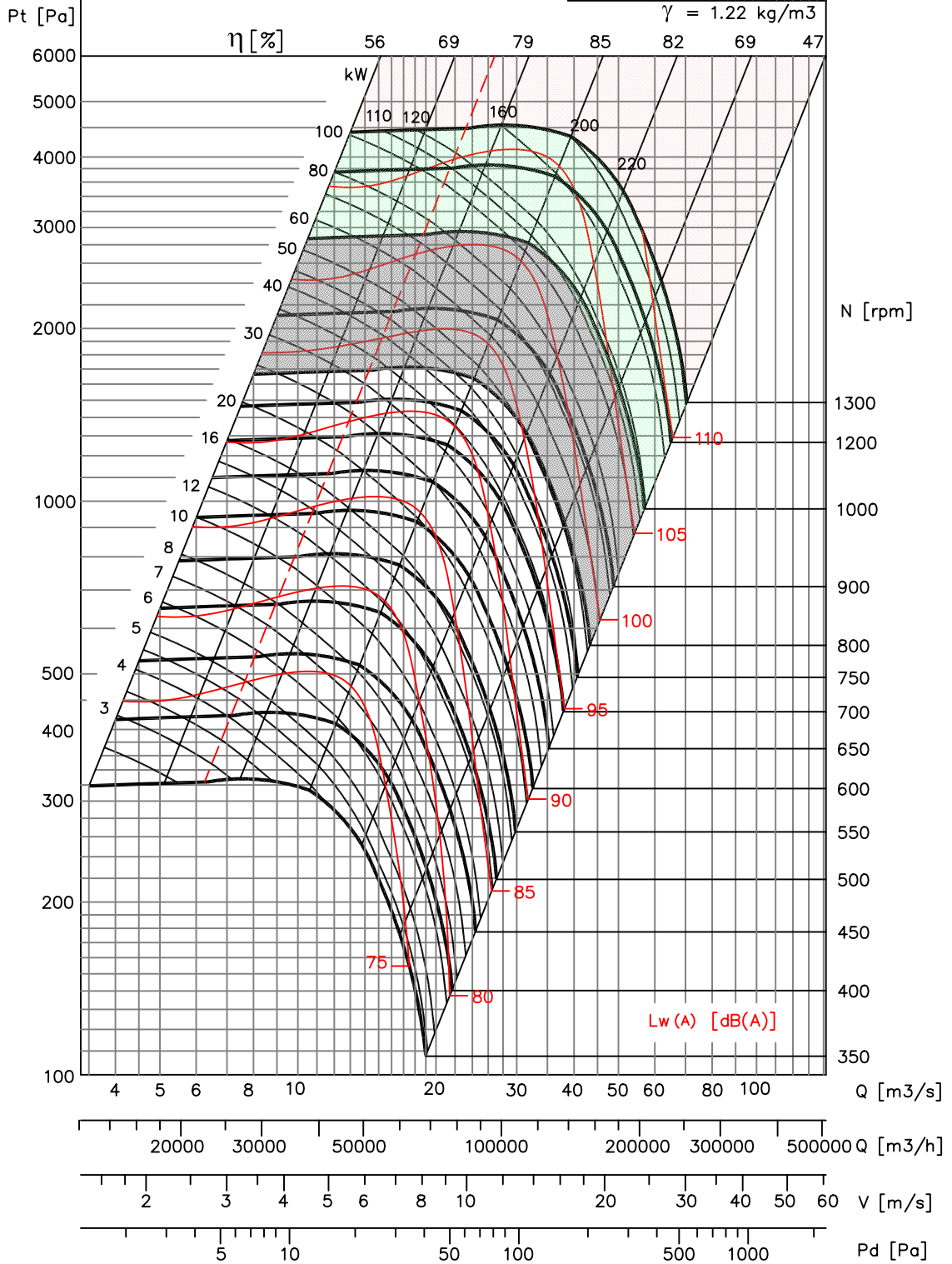


# ADA 1250

FEG 90

Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	50	110	220
M. RPM	800	1000	1300

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

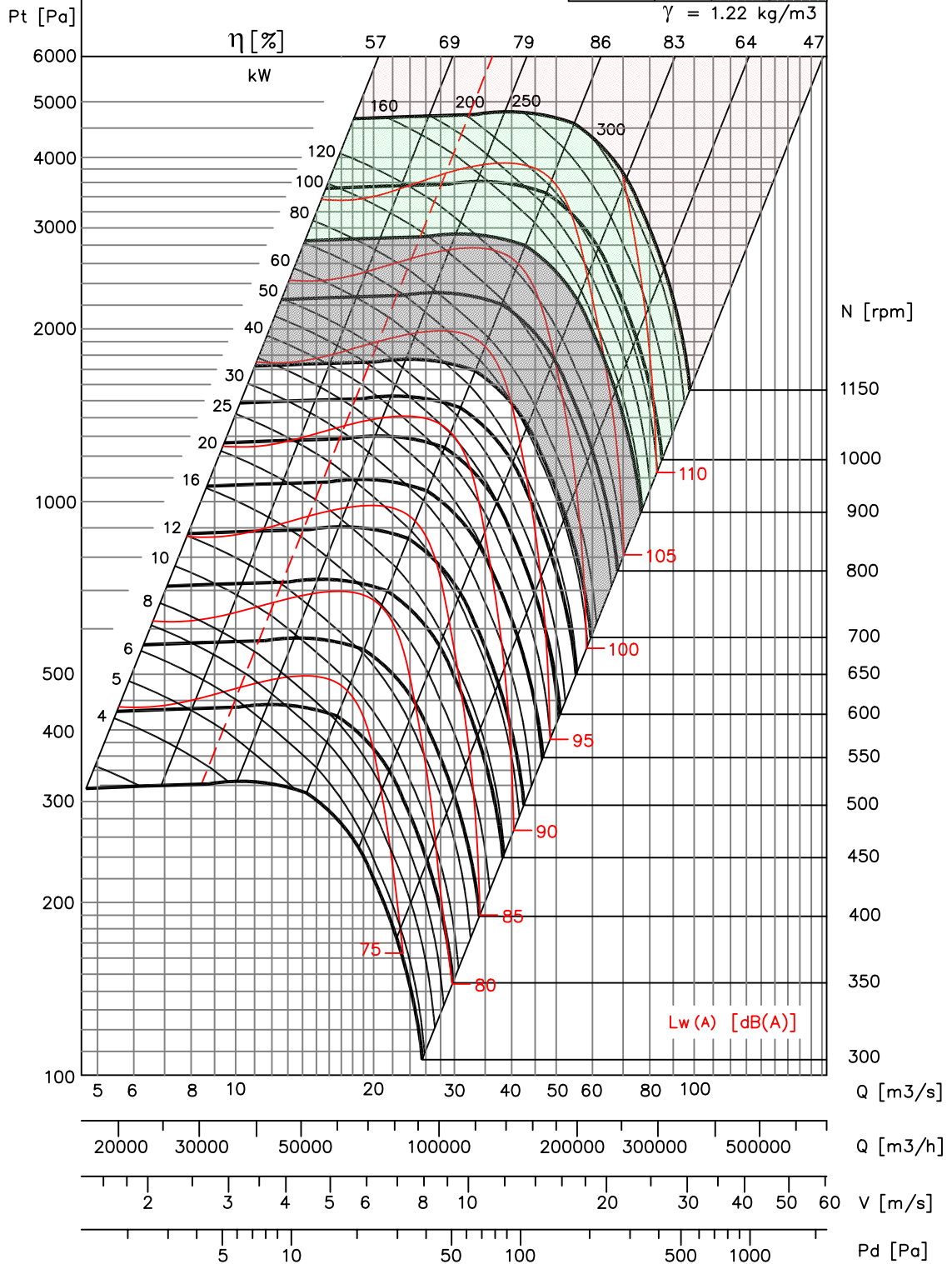


# ADA 1400

FEG 90

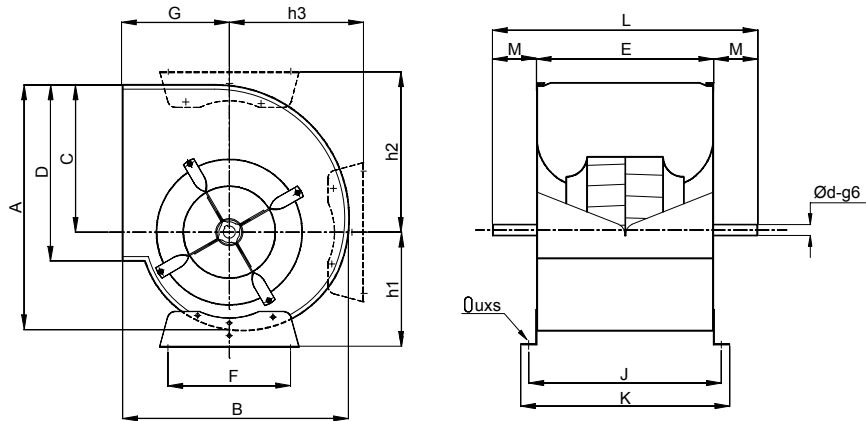
Op Limit	Cl. I	Cl. II	Cl. III
Type	T	X	Z
M. kW	70	160	300
M. RPM	700	900	1150

$\gamma = 1.22 \text{ kg/m}^3$



- Performance certified 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 Lwi(A) sound power levels for installation type B - free inlet, ducted outlet.

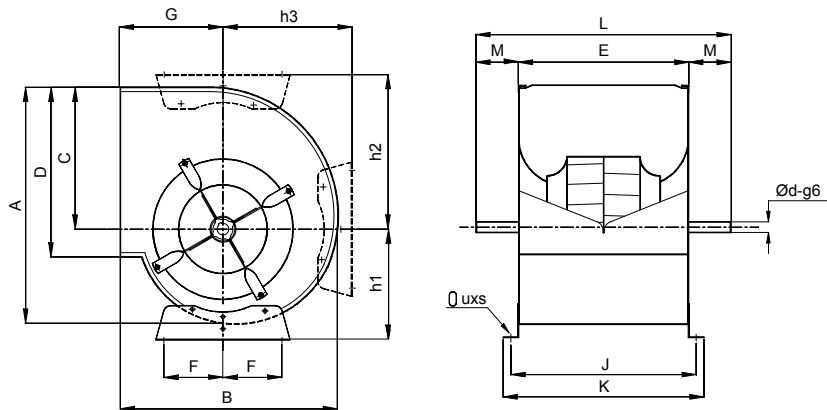
ADA 315-400 'S'



Model	A	B	C	D	E	F	G	J	K	L	M	h1	h2	h3	Ød		uxs
															SL	SM	
315	572	516	340	404	404	280	236	434	464	600	98	261	370	283	25	25	11x16
355	644	576	383	452	452	315	260	492	532	672	110	274	411	320	30	30	11x16
400	724	644	432	506	506	355	290	546	586	726	110	302	462	359	30	30	11x16

All Dimensions in mm.

ADA 450-710 'S'

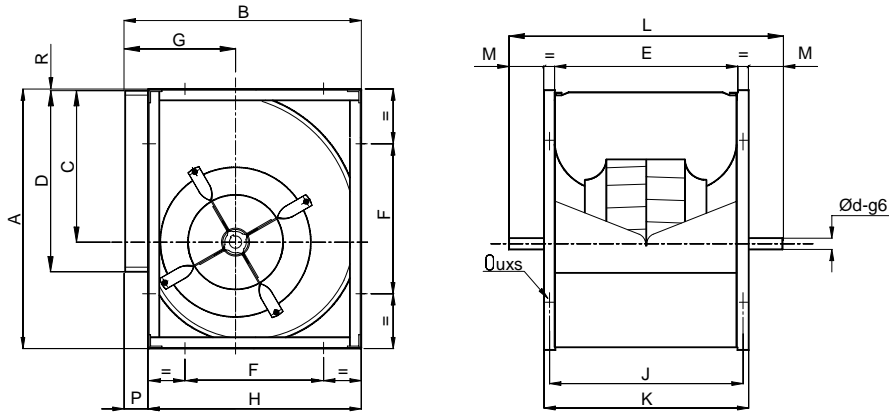


Model	A	B	C	D	E	F	G	J	K	L	M	h1	h2	h3	Ød		uxs
															SL	SM	
450	816	722	486	568	568	200	322	608	648	814	123	336	518	407	35	35	13x18
500	906	794	538	638	638	225	352	678	718	924	143	375	568	448	35	35	13x18
560	1016	886	603	714	714	250	390	764	814	1000	143	416	634	502	40	40	13x18
630	1142	992	679	800	800	280	434	850	900	1092	146	468	707	571	40	45	13x18
710	1286	1114	765	898	898	315	484	948	998	1234	168	531	797	636	50	50	13x18

All Dimensions in mm.



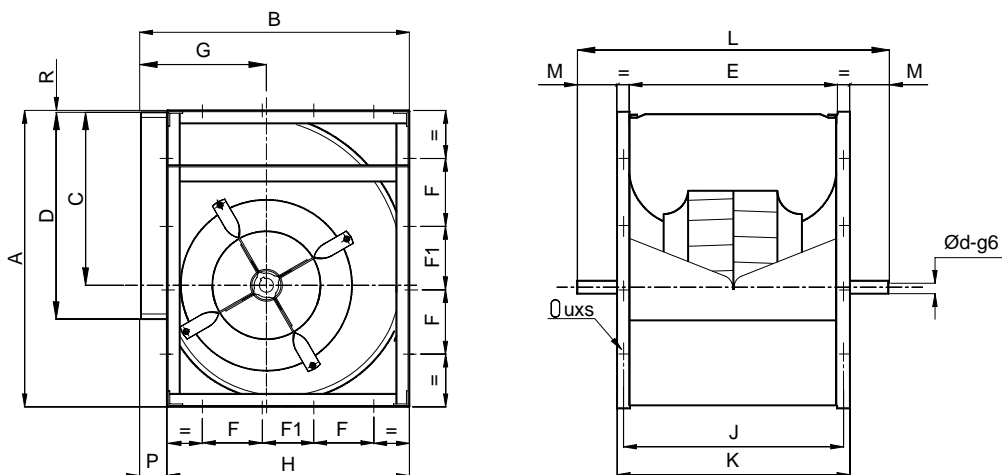
ADA 315-400 'C'



Model	A	B	C	D	E	F	G	H	J	K	L	M	P	R	Ød		uxs
															CL	CM	
315	578	518	340	404	404	330	236	480	434	464	600	68	38	3	25	25	13x18
355	654	578	383	452	452	368	260	548	492	532	672	70	30	6	30	30	13x18
400	736	650	432	506	506	402	290	612	546	586	726	70	38	5	30	30	13x18

All Dimensions in mm.

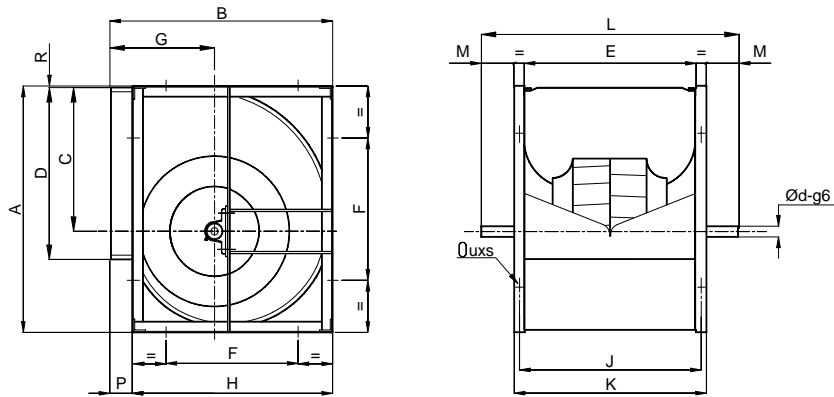
ADA 450-710 'C'



Model	A	B	C	D	E	F	F1	G	H	J	K	L	M	P	R	Ød		uxs
																CL	CM	
450	827	726	486	568	568	200	111	322	681	608	648	814	83	45	5	35	35	13x18
500	918	800	538	638	638	245	120	352	750	678	718	924	103	50	5	35	35	13x18
560	1030	892	603	714	714	280	125	390	844	764	814	1000	93	48	7	40	40	13x18
630	1157	998	679	800	800	328	110	434	945	850	900	1092	96	53	6	40	45	13x18
710	1302	1120	765	898	898	360	150	484	1057	948	998	1234	118	63	7	50	50	17x22

All Dimensions in mm.

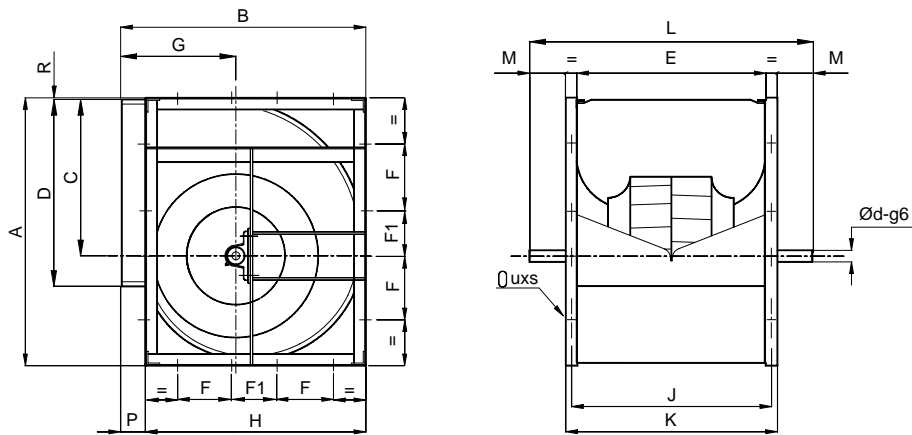
ADA 315-400 'T'



Model	A	B	C	D	E	F	G	H	J	K	L	M	P	R	Ød		uxs
															TL	TM	
315	578	518	340	404	404	330	236	480	434	464	632	84	38	3	30	30	13x18
355	654	578	383	452	452	368	260	548	492	532	718	93	30	6	35	35	13x18
400	736	650	432	506	506	402	290	612	546	586	772	93	38	5	35	35	13x18

All Dimensions in mm.

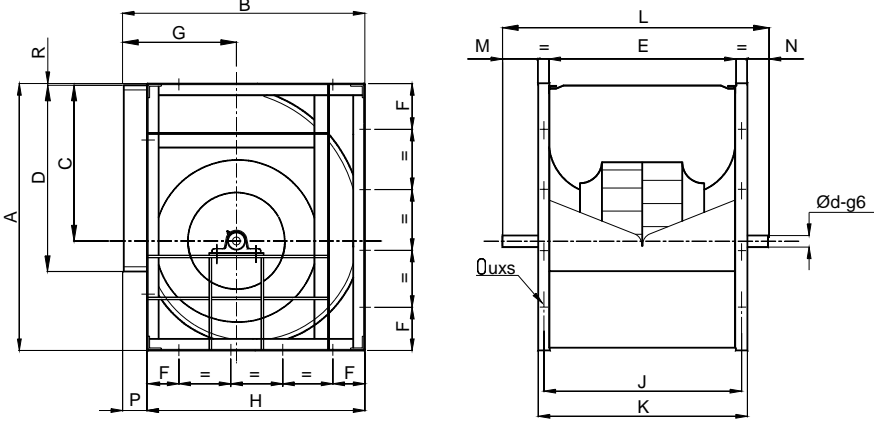
ADA 450-1000 'T'



Model	A	B	C	D	E	F	F1	G	H	J	K	L	M	P	R	Ød		uxs
																TL	TM	
450	827	726	486	568	568	200	111	322	681	608	648	878	115	45	5	40	40	13x18
500	918	800	538	638	638	245	120	352	750	678	718	956	119	50	5	40	45	13x18
560	1030	892	603	714	714	280	125	390	844	764	814	1080	133	48	7	45	45	13x18
630	1157	998	679	800	800	328	110	434	945	850	900	1166	133	53	6	50	50	13x18
710	1302	1120	765	898	898	360	150	484	1057	948	998	1280	141	63	7	50	55	17x22
800	1468	1254	862	1006	1006	405	171	540	1180	1056	1106	1388	141	74	7	55	55	17x22
900	1648	1408	971	1130	1130	455	189	604	1319	1180	1230	1566	168	89	7	60	60	17x22
1000	1810	1540	1066	1266	1266	500	200	656	1450	1316	1366	1724	179	90	9	60	70	17x22

All Dimensions in mm.

ADA 1120-1400 'T'

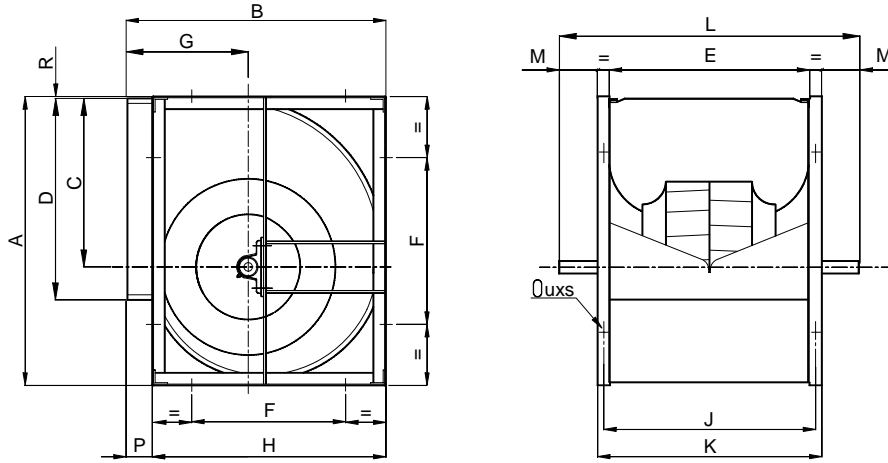


Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Ød		uxs
																TL	TM	
1120	2033	1725	1200	1422	1422	290	748	1630	1482	1548	1800	193	59	95	9	-	75	17x22
1250	2285	1930	1353	1524	1524	300	830	1831	1599	1674	1975	220	81	99	9	-	80	17x22
1400	2568	2170	1515	1794	1794	310	963	2057	1869	1944	2260	227	89	113	13	-	80	17x22

All Dimensions in mm.



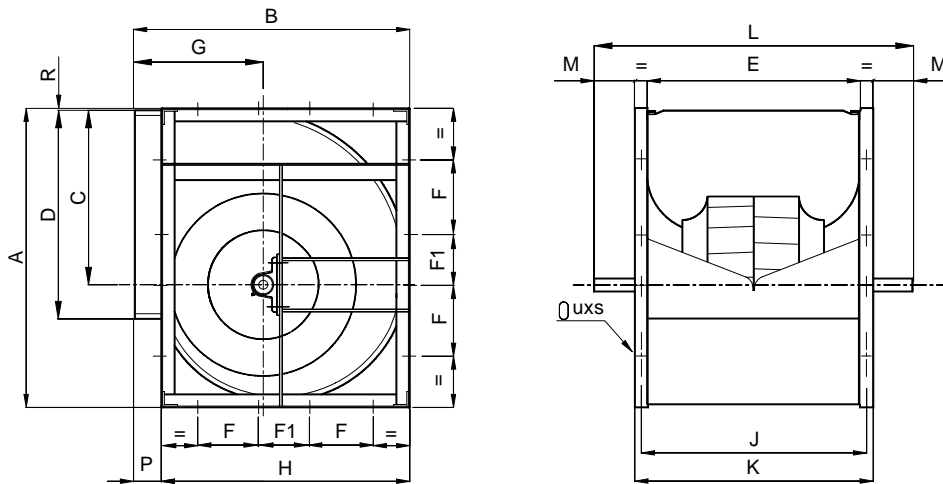
ADA 315-400 'XM'



Model	A	B	C	D	E	F	G	H	J	K	L	M	P	R	Ød	uxs
315	578	518	340	404	404	330	236	480	434	464	732	134	38	3	35	13x18
355	654	578	383	452	452	368	260	548	492	532	822	145	30	6	40	13x18
400	736	650	432	506	506	402	290	612	546	586	876	145	38	5	40	13x18

All dimensions in mm.

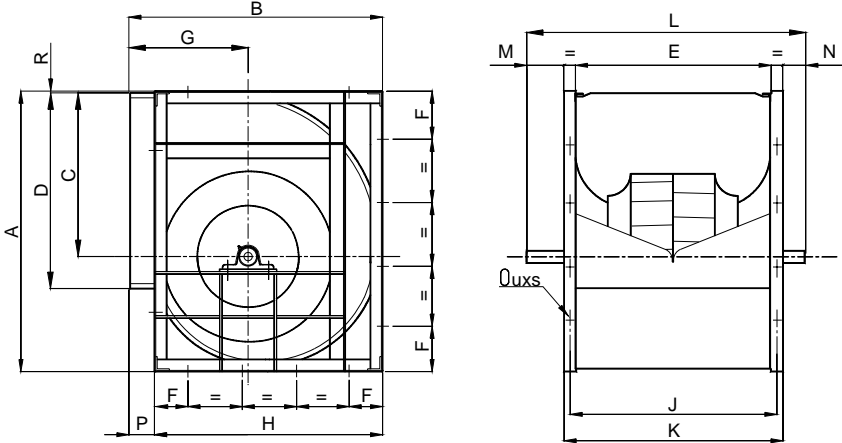
ADA 450-1000 'XM'



Model	A	B	C	D	E	F	F1	G	H	J	K	L	M	P	R	Ød	uxs
450	827	726	486	568	568	200	111	322	681	608	648	946	149	45	5	45	13x18
500	918	800	538	638	638	245	120	352	750	678	718	1066	174	50	5	50	13x18
560	1030	892	603	714	714	280	125	390	844	764	814	1138	162	48	7	55	13x18
630	1157	998	679	800	800	328	110	434	945	850	900	1286	193	53	6	60	13x18
710	1302	1120	765	898	898	360	150	484	1057	948	998	1390	196	63	7	65	17x22
800	1468	1254	862	1006	1006	405	171	540	1180	1056	1106	1498	196	74	7	65	17x22
900	1648	1408	971	1130	1130	455	189	604	1319	1180	1230	1660	215	89	7	70	17x22
1000	1810	1540	1066	1266	1266	500	200	656	1450	1316	1366	1845	239.5	90	9	80	17x22

All dimensions in mm.

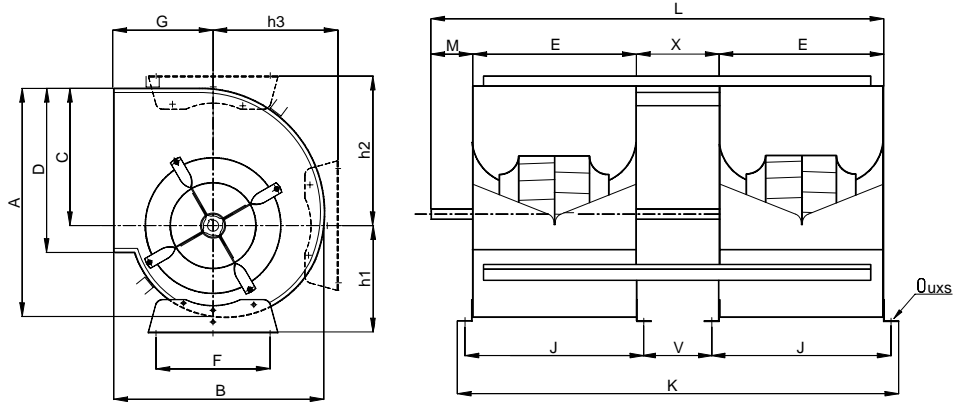
ADA 1120-1400 'XX'



Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Ød	uxs
1120	2033	1725	1200	1422	1422	290	748	1630	1482	1548	1916	266	102	95	9	80	17x22
1250	2285	1930	1353	1524	1524	300	830	1831	1599	1674	2035	265	96	99	9	85	17x22
1400	2568	2170	1515	1794	1794	310	963	2057	1869	1944	2295	256	95	113	13	90	17x22

All dimensions in mm.

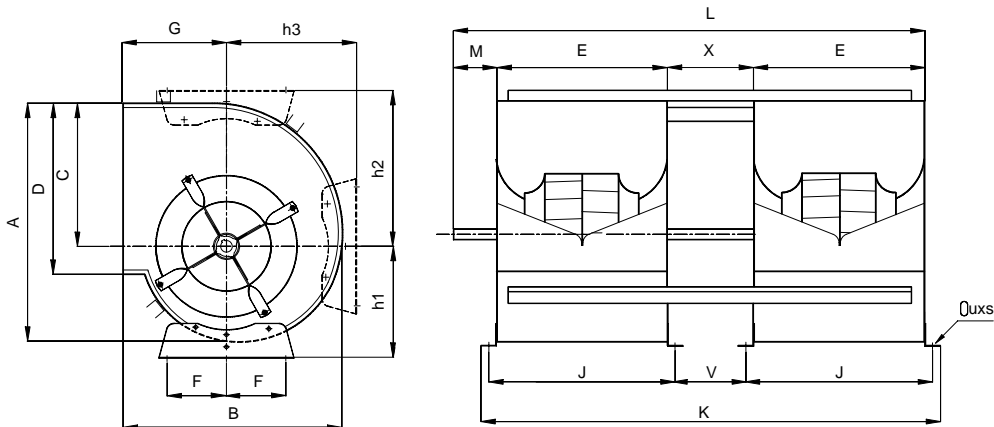
ADA 315-400 'S2M'



Model	A	B	C	D	E	F	G	J	K	L	M	X	V	h1	h2	h3	Ød	uxs
315	572	516	340	404	404	280	236	434	1183	1233	110	315	285	261	370	283	30	11x16
355	644	576	383	452	452	315	260	492	1339	1389	130	355	315	274	411	320	35	11x16
400	724	644	432	506	506	355	290	546	1492	1542	130	400	360	302	462	359	35	11x16

All Dimensions in mm.

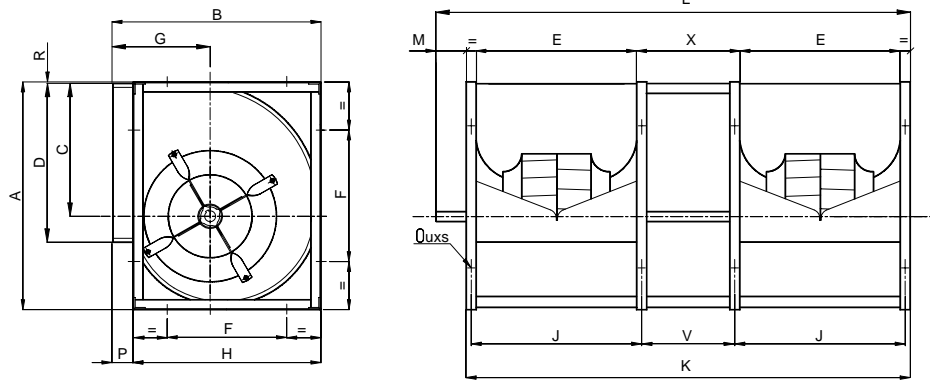
ADA 450-500 'S2M'



Model	A	B	C	D	E	F	G	J	K	L	M	X	V	h1	h2	h3	Ød	uxs
450	816	722	486	568	568	200	322	608	1666	1726	140	450	410	336	518	407	40	13x18
500	906	794	538	638	638	225	352	678	1856	1916	140	500	460	375	568	448	40	13x18

All Dimensions in mm.

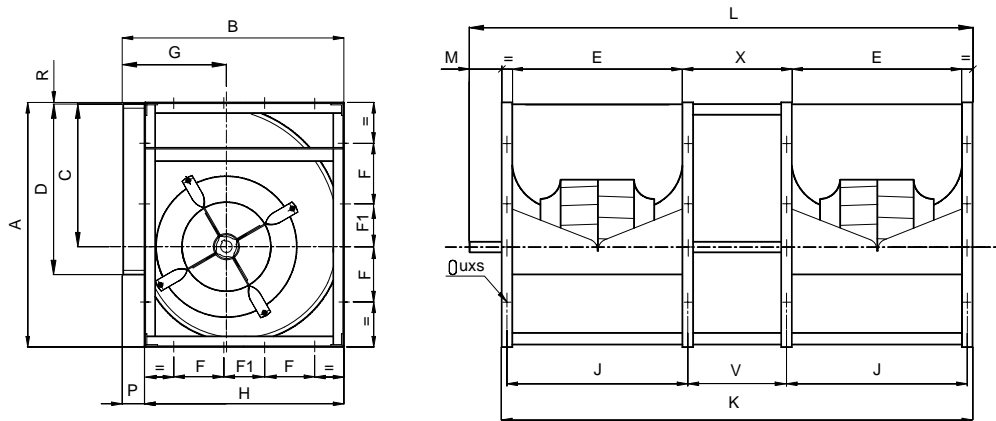
## ADA 315-400 'C2M'



Model	A	B	C	D	E	F	G	H	J	K	L	M	P	R	V	X	Ød	uxs
315	578	518	340	404	404	330	236	480	434	1183	1263	80	38	3	285	315	30	13x18
355	654	578	383	452	452	368	260	548	492	1339	1429	90	30	6	315	355	35	13x18
400	736	650	432	506	506	402	290	612	546	1492	1582	90	38	5	360	400	35	13x18

All Dimensions in mm.

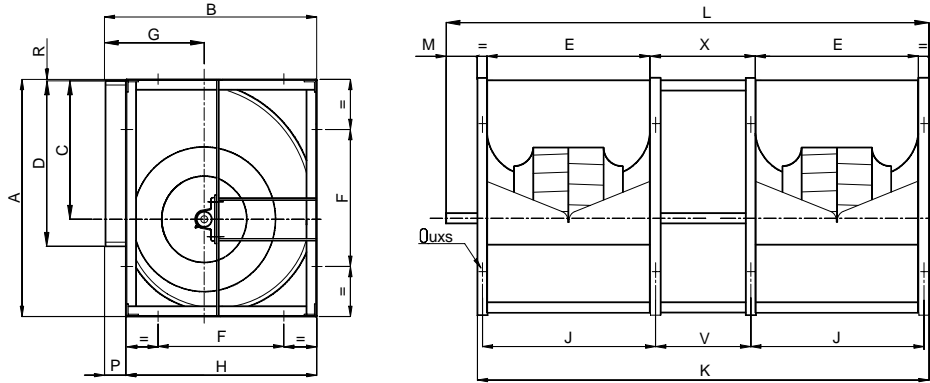
## ADA 450-500 'C2M'



Model	A	B	C	D	E	F	F1	G	H	J	K	L	M	P	R	V	X	Ød	uxs
450	827	726	486	568	568	200	111	322	681	608	1666	1766	100	45	5	410	450	40	13x18
500	918	800	538	638	638	245	120	352	750	678	1856	1956	100	50	5	460	500	40	13x18

All Dimensions in mm.

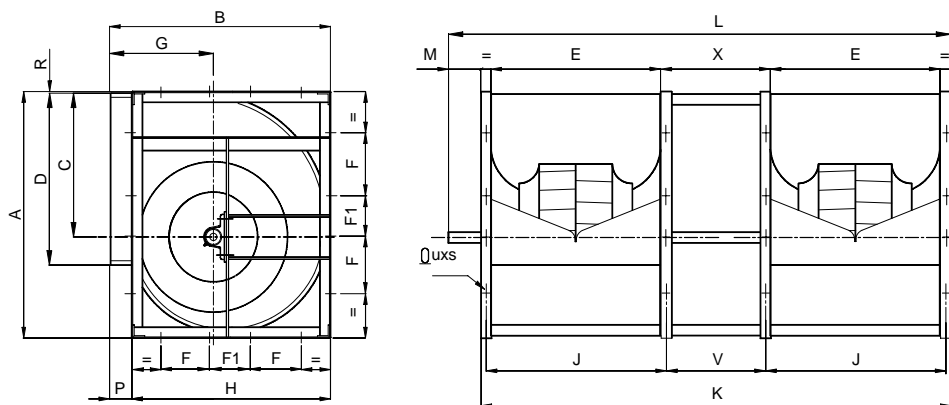
ADA 355-400 'T2M'



Model	A	B	C	D	E	F	G	H	J	K	L	M	X	P	R	V	Ød	uxs
355	654	578	383	452	452	368	260	548	492	1339	1449	110	355	30	6	315	40	13x18
400	736	650	432	506	506	402	290	612	546	1492	1627	135	400	38	5	360	45	13x18

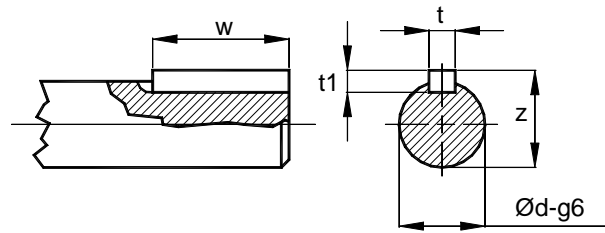
All Dimensions in mm.

ADA 450-630 'T2M'



Model	A	B	C	D	E	F	F1	G	H	J	K	L	M	P	R	V	X	Ød	uxs
450	827	726	486	568	568	200	111	322	681	608	1666	1801	135	45	5	410	450	50	13x18
500	918	800	538	638	638	245	120	352	750	678	1856	1991	135	50	5	460	500	55	13x18
560	1030	892	603	714	714	280	125	390	844	764	2088	2228	140	48	7	510	560	55	13x18
630	1157	998	679	800	800	328	110	434	945	850	2330	2470	140	53	6	580	630	60	13x18

All Dimension s in mm.

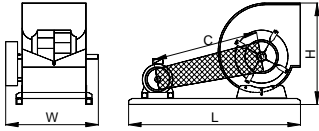


$\varnothing d$	t	t1	w	z
25	8	7	40	28
30	8	7	40	33
35	10	8	50	38
40	12	8	70	43
45	14	9	70	48.5
50	14	9	90	53.5
55	16	10	90	59
60	18	11	90	64
70	20	12	110	74.5
75	20	12	110	79.9
80	22	14	110	85
85	22	14	110	90
90	25	14	140	95

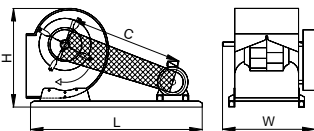
All Dimensions in mm.

# OVERALL DIMENSION – ADA “S” SERIES

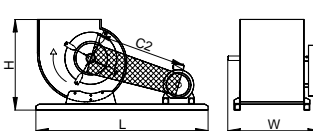
**CW 90° (Pos Z)**



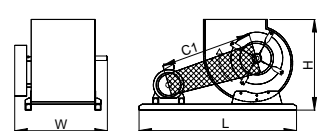
**CW 270° (Pos W)**



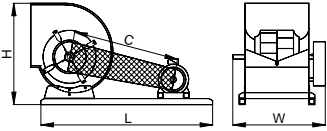
**CW 360° (Pos W)**



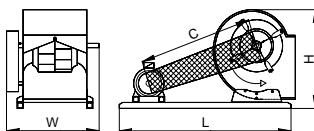
**CW 360° (Pos Z)**



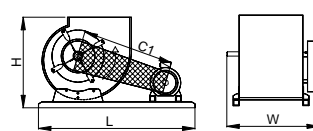
**CCW 90° (Pos W)**



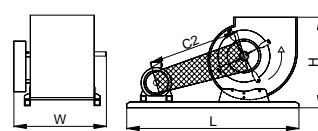
**CCW 270° (Pos Z)**



**CCW 360° (Pos W)**



**CCW 360° (Pos Z)**

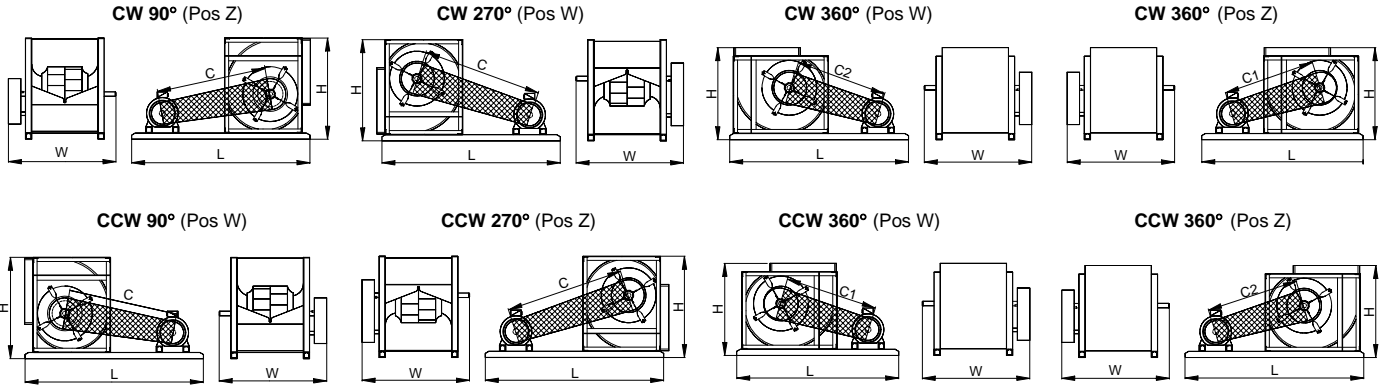


Model	Motor Frame Size	90°/ 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
315	71	445	493	780	630	641	33	551	449	880	630	559	34
	80	472	515	820	630	641	33	577	475	920	630	559	34
	90	498	537	860	630	641	34	604	500	960	630	559	34
	100	524	559	900	630	641	34	630	526	1000	630	559	34
	112	549	580	940	630	641	34	655	550	1040	630	559	35
	132	605	630	1020	630	641	35	711	604	1120	630	559	35
355	80	510	566	880	702	697	43	618	504	980	702	620	44
	90	536	588	920	702	697	43	644	528	1020	702	620	44
	100	562	610	960	702	697	44	670	553	1060	702	620	44
	112	606	648	1020	702	697	44	713	595	1120	702	620	44
	132	662	696	1100	702	697	44	767	648	1200	702	620	45
400	80	547	619	940	756	774	50	696	567	1080	756	689	50
	90	572	639	980	756	774	50	721	590	1120	756	689	51
	100	598	660	1020	756	774	50	747	614	1160	756	689	51
	112	642	697	1080	756	774	50	770	637	1200	756	689	51
	132	696	743	1160	756	774	51	794	659	1250	756	689	51
450	80	604	690	1020	844	862	65	753	612	1160	844	769	66
	90	629	709	1060	844	862	66	777	634	1200	844	769	66
	100	654	730	1100	844	862	66	811	666	1250	844	769	67
	112	677	748	1140	844	862	66	843	696	1300	844	769	67
	132	711	774	1200	844	862	66	866	718	1350	844	769	67
	160	825	874	1350	844	862	67	929	778	1450	844	769	68
500	90	655	746	1120	954	963	86	834	679	1300	954	850	87
	100	679	765	1160	954	963	86	868	711	1350	954	850	87
	112	702	783	1200	954	963	86	900	740	1400	954	850	88
	132	773	843	1300	954	963	87	922	761	1450	954	850	88
	160	837	896	1400	954	963	88	984	820	1550	954	850	89
560	90	709	819	1200	1030	1069	110	906	735	1400	1030	850	111
	100	742	845	1250	1030	1069	110	939	766	1450	1030	942	112
	112	774	870	1300	1030	1069	111	970	794	1500	1030	942	112
	132	844	928	1400	1030	1069	111	1039	860	1600	1030	942	113
	160	907	980	1500	1030	1069	112	1099	918	1700	1030	942	114
630	90	781	908	1300	1122	1197	137	1025	834	1550	1122	1055	139
	100	814	933	1350	1122	1197	138	1057	864	1600	1122	1055	140
	112	844	957	1400	1122	1197	138	1088	891	1650	1122	1055	140
	132	913	1014	1500	1122	1197	139	1108	909	1700	1122	1055	141
	160	974	1062	1600	1122	1197	140	1167	964	1800	1122	1055	141
	180	1046	1125	1700	1122	1197	141	1238	1032	1900	1122	1055	142
710	100	904	1037	1500	1264	1376	201	1141	923	1750	1264	1200	204
	112	935	1061	1550	1264	1376	201	1171	950	1800	1264	1200	204
	132	956	1074	1600	1264	1376	202	1192	968	1850	1264	1200	205
	160	1016	1121	1700	1264	1376	203	1250	1022	1950	1264	1200	206
	180	1087	1182	1800	1264	1376	204	1321	1089	2050	1264	1200	207
	200	1160	1245	1900	1264	1376	206	1344	1111	2100	1264	1200	208

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.

## OVERALL DIMENSION – ADA “C” SERIES



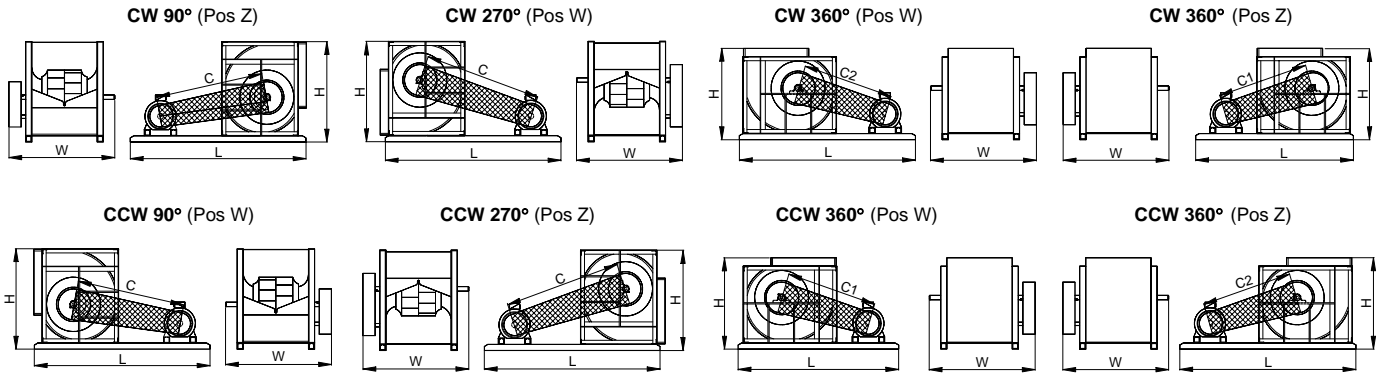
Model	Motor Frame Size	90°/ 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
315	71	460	500	780	630	618	34	534	433	880	630	558	35
	80	488	524	820	630	618	34	561	459	920	630	558	35
	90	515	547	860	630	618	35	587	484	960	630	558	35
	100	542	571	900	630	618	35	614	509	1000	630	558	35
	112	568	594	940	630	618	35	638	533	1040	630	558	36
	132	625	645	1020	630	618	36	694	587	1120	630	558	36
355	80	523	570	880	702	694	47	601	485	980	702	618	48
	90	549	592	920	702	694	47	626	509	1020	702	618	48
	100	576	615	960	702	694	48	652	534	1060	702	618	48
	112	620	654	1020	702	694	48	695	575	1120	702	618	48
	132	676	704	1100	702	694	48	749	628	1200	702	618	49
400	80	569	626	940	756	776	53	677	550	1080	756	690	53
	90	595	647	980	756	776	53	702	573	1120	756	690	54
	100	621	669	1020	756	776	53	727	597	1160	756	690	54
	112	664	708	1080	756	776	53	750	619	1200	756	690	54
	132	719	756	1160	756	776	54	774	641	1250	756	690	54
450	80	633	701	1020	844	867	69	733	593	1160	844	766	70
	90	658	722	1060	844	867	70	757	615	1200	844	766	70
	100	684	743	1100	844	867	70	791	647	1250	844	766	71
	112	707	763	1140	844	867	70	824	678	1300	844	766	71
	132	741	790	1200	844	867	70	846	699	1350	844	766	71
	160	856	894	1350	844	867	71	909	759	1450	844	766	72
500	90	686	760	1120	954	968	93	812	659	1300	954	850	94
	100	711	780	1160	954	968	93	845	691	1350	954	850	94
	112	734	799	1200	954	968	93	877	720	1400	954	850	95
	132	805	861	1300	954	968	94	899	740	1450	954	850	95
	160	870	917	1400	954	968	95	961	799	1550	954	850	96
560	90	739	830	1200	1030	1080	125	884	714	1400	1030	942	126
	100	773	858	1250	1030	1080	125	916	744	1450	1030	942	127
	112	804	884	1300	1030	1080	126	947	773	1500	1030	942	127
	132	875	945	1400	1030	1080	126	1016	838	1600	1030	942	128
	160	938	998	1500	1030	1080	127	1076	895	1700	1030	942	129
630	90	816	923	1300	1122	1207	160	998	811	1550	1122	1048	162
	100	848	950	1350	1122	1207	161	1031	840	1600	1122	1048	163
	112	879	975	1400	1122	1207	161	1061	868	1650	1122	1048	163
	132	948	1034	1500	1122	1207	162	1082	886	1700	1122	1048	164
	160	1010	1085	1600	1122	1207	163	1140	940	1800	1122	1048	164
	180	1082	1149	1700	1122	1207	164	1211	1008	1900	1122	1048	165
710	90	907	1028	1450	1264	1382	225	1080	868	1700	1264	1200	228
	100	941	1055	1500	1264	1382	226	1112	897	1750	1264	1200	229
	112	972	1080	1550	1264	1382	226	1142	924	1800	1264	1200	229
	132	993	1095	1600	1264	1382	227	1162	941	1850	1264	1200	230
	160	1054	1144	1700	1264	1382	228	1220	994	1950	1264	1200	231
	180	1126	1207	1800	1264	1382	229	1290	1061	2050	1264	1200	232
	200	1199	1272	1900	1264	1382	231	1313	1082	2100	1264	1200	233

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.



# OVERALL DIMENSION - ADA "T" SERIES

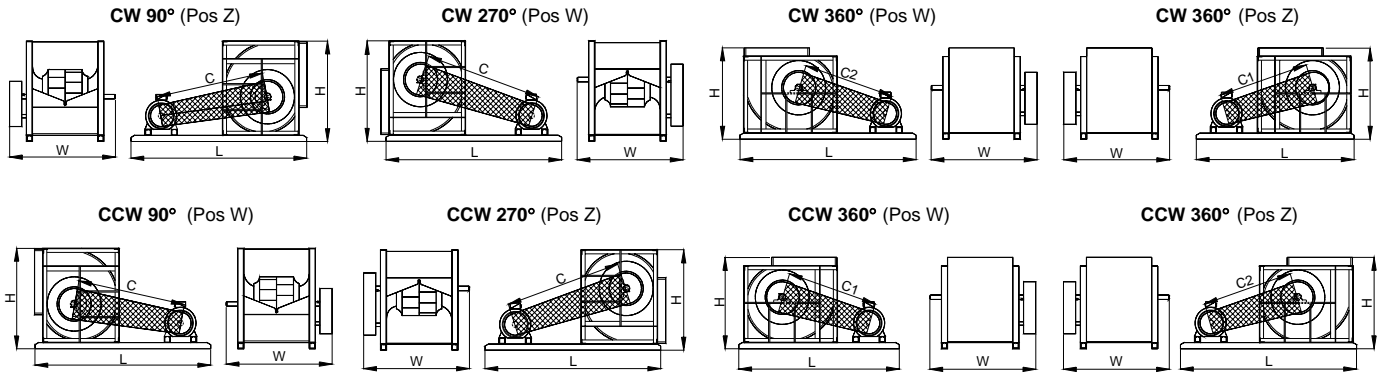


Model	Motor Frame Size	90°/ 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
315	100	542	571	900	662	618	47	614	509	1000	662	558	47
	112	568	594	940	662	618	47	638	533	1040	662	558	48
	132	625	645	1020	662	618	48	694	587	1120	662	558	48
	160	715	728	1140	662	618	48	742	634	1200	662	558	48
355	100	576	615	960	748	694	60	652	534	1060	748	618	60
	112	620	654	1020	748	694	60	695	575	1120	748	618	60
	132	676	704	1100	748	694	60	749	628	1200	748	618	61
	160	745	766	1200	748	694	61	816	693	1300	748	618	61
400	112	664	708	1080	802	776	74	750	619	1200	802	690	75
	132	719	756	1160	802	776	75	774	641	1250	802	690	75
	160	776	806	1250	802	776	75	888	752	1400	802	690	76
	180	854	877	1350	802	776	76	914	778	1450	802	690	76
450	112	707	763	1140	908	867	95	824	678	1300	908	766	96
	132	741	790	1200	908	867	95	846	699	1350	908	766	96
	160	856	894	1350	908	867	96	958	807	1500	908	766	97
	180	883	916	1400	908	867	96	983	832	1550	908	766	97
500	132	805	861	1300	986	968	130	899	740	1450	986	850	131
	160	870	917	1400	986	968	131	961	799	1550	986	850	132
	180	945	985	1500	986	968	132	1034	871	1650	986	850	133
	200	972	1008	1550	986	968	132	1109	944	1750	986	850	133
560	132	875	945	1400	1110	1080	173	968	792	1550	1110	942	175
	160	938	998	1500	1110	1080	174	1076	895	1700	1110	942	176
	180	1012	1064	1600	1110	1080	175	1100	917	1750	1110	942	176
	200	1038	1085	1650	1110	1080	175	1173	989	1850	1110	942	177
630	160	1010	1085	1600	1196	1207	218	1140	940	1800	1196	1048	219
	180	1082	1149	1700	1196	1207	219	1211	1008	1900	1196	1048	220
	200	1107	1169	1750	1196	1207	219	1235	1030	1950	1196	1048	221
	225	1177	1230	1850	1196	1207	220	1301	1095	2050	1196	1048	221
710	160	1054	1144	1700	1310	1382	279	1220	994	1950	1310	1200	282
	180	1126	1207	1800	1310	1382	280	1290	1061	2050	1310	1200	283
	200	1199	1272	1900	1310	1382	282	1313	1082	2100	1310	1200	284
	225	1268	1333	2000	1310	1382	283	1379	1146	2200	1310	1200	285
800	100	1018	1156	1600	1418	1548	327	1218	983	1900	1418	1334	331
	112	1048	1180	1650	1418	1548	328	1247	1009	1950	1418	1334	332
	132	1115	1235	1750	1418	1548	329	1267	1024	2000	1418	1334	332
	160	1174	1283	1850	1418	1548	330	1370	1120	2150	1418	1334	334
	180	1197	1300	1900	1418	1548	331	1391	1139	2200	1418	1334	335
	200	1269	1362	2000	1418	1548	332	1461	1206	2300	1418	1334	336
	225	1336	1420	2100	1418	1548	333	1526	1268	2400	1418	1334	337
900	100	1140	1302	1750	1596	1728	411	1374	1108	2100	1596	1488	415
	112	1169	1325	1800	1596	1728	411	1403	1133	2150	1596	1488	416
	132	1189	1338	1850	1596	1728	412	1421	1148	2200	1596	1488	416
	160	1293	1425	2000	1596	1728	414	1476	1197	2300	1596	1488	417
	180	1315	1441	2050	1596	1728	414	1543	1260	2400	1596	1488	419
	200	1385	1501	2150	1596	1728	416	1564	1278	2450	1596	1488	419
	225	1451	1557	2250	1596	1728	417	1627	1338	2550	1596	1488	420
	250	1518	1615	2350	1596	1728	418	1692	1399	2650	1596	1488	422

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.

## OVERALL DIMENSION - ADA "T" SERIES

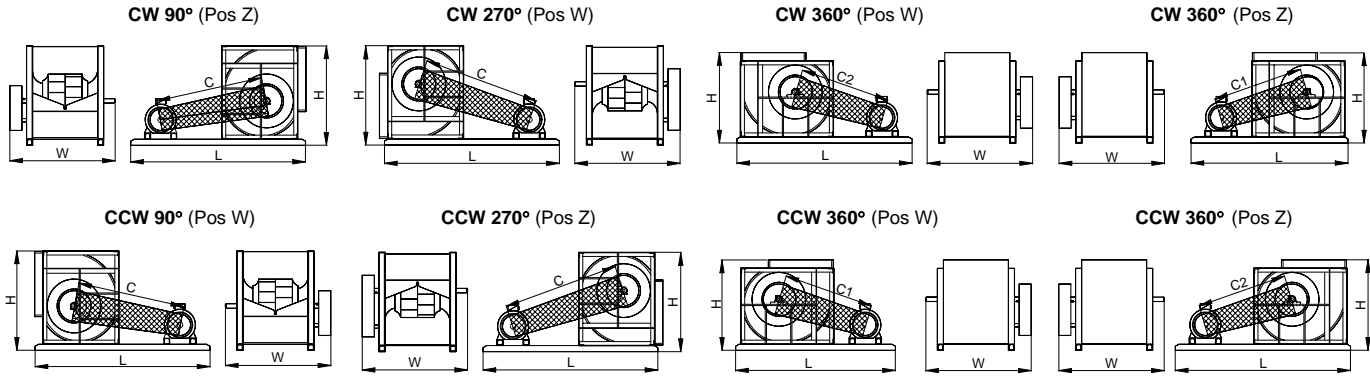


Model	Motor Frame Size	90° / 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
1000	132	1305	1475	2000	1754	1890	505	1532	1236	2350	1754	1620	210
	160	1361	1518	2100	1754	1890	507	1586	1282	2450	1754	1620	511
	180	1429	1575	2200	1754	1890	508	1651	1343	2550	1754	1620	512
	200	1451	1591	2250	1754	1890	508	1719	1405	2650	1754	1620	513
	225	1515	1644	2350	1754	1890	510	1781	1463	2750	1754	1620	515
	250	1581	1700	2450	1754	1890	511	1844	1523	2850	1754	1620	516
1120	132	1423	1615	2150	1830	2158	771	1695	1356	2550	1830	1850	782
	160	1479	1658	2250	1830	2158	774	1749	1403	2650	1830	1850	784
	180	1547	1715	2350	1830	2158	776	1815	1464	2750	1830	1850	787
	200	1568	1730	2400	1830	2158	778	1883	1527	2850	1830	1850	790
	225	1632	1783	2500	1830	2158	780	1945	1585	2950	1830	1850	792
	250	1697	1837	2600	1830	2158	783	2008	1645	3050	1830	1850	795
1250	132	1564	1790	2350	2005	2435	1167	1873	1491	2800	2005	2080	1189
	160	1619	1831	2450	2005	2435	1172	1926	1537	2900	2005	2080	1194
	180	1687	1886	2550	2005	2435	1177	1992	1596	3000	2005	2080	1198
	200	1708	1901	2600	2005	2435	1179	2058	1657	3100	2005	2080	1203
	225	1771	1952	2700	2005	2435	1184	2120	1714	3200	2005	2080	1208
	250	1835	2005	2800	2005	2435	1189	2182	1772	3300	2005	2080	1213
1400	160	1786	2035	2700	2290	2718	1593	2137	1707	3200	2290	2320	1617
	180	1852	2088	2800	2290	2718	1598	2202	1765	3300	2290	2320	1622
	200	1872	2101	2850	2290	2718	1600	2222	1782	3350	2290	2320	1624
	225	1933	2150	2950	2290	2718	1605	2282	1836	3450	2290	2320	1629
	250	1995	2201	3050	2290	2718	1610	2343	1893	3550	2290	2320	1634
	280	2053	2247	3150	2290	2718	1615	2447	1990	3700	2290	2320	1641
	315	2153	2331	3300	2290	2718	1622	2498	2037	3800	2290	2320	1646

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.

## OVERALL DIMENSION - ADA "X" SERIES

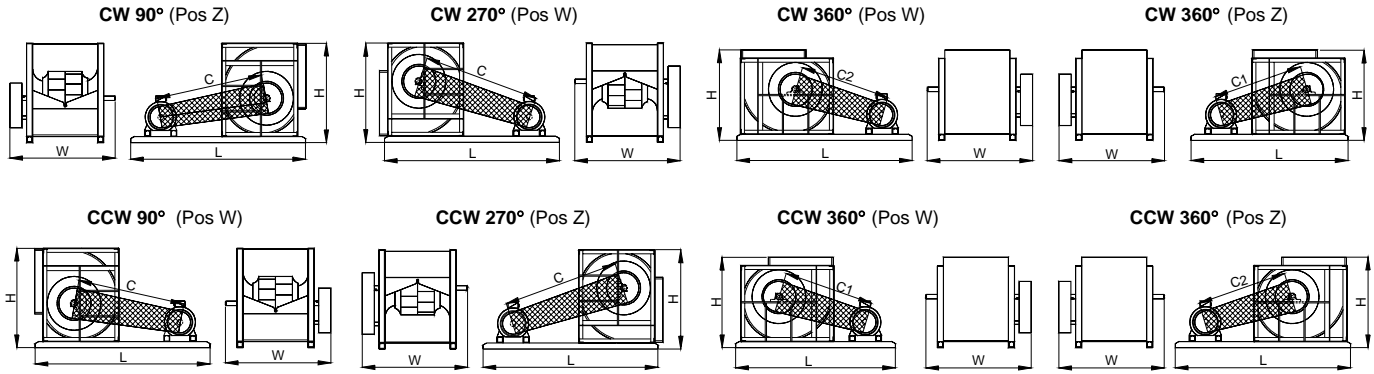


Model	Motor Frame Size	90°/ 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
315	132	625	645	1020	762	618	56	694	587	1120	762	558	56
	160	715	728	1140	762	618	56	791	684	1250	762	558	57
	180	754	764	1200	762	618	56	819	712	1300	762	558	57
	200	834	840	1300	762	618	57	898	790	1400	762	558	57
355	132	676	704	1100	852	694	71	749	628	1200	852	618	72
	160	745	766	1200	852	694	72	816	693	1300	852	618	72
	180	823	839	1300	852	694	72	892	769	1400	852	618	73
	200	852	865	1350	852	694	73	920	797	1450	852	618	73
400	160	776	806	1250	906	776	89	888	752	1400	906	690	90
	180	854	877	1350	906	776	90	914	778	1450	906	690	90
	200	882	902	1400	906	776	90	990	853	1550	906	690	91
	225	956	970	1500	906	776	91	1062	925	1650	906	690	91
450	160	856	894	1350	976	867	100	958	807	1500	976	766	101
	180	883	916	1400	976	867	100	983	832	1550	976	766	101
	200	960	987	1500	976	867	101	1059	906	1650	976	766	102
	225	1032	1055	1600	976	867	101	1130	976	1750	976	766	102
500	180	945	985	1500	1096	968	137	1034	871	1650	1096	850	138
	200	972	1008	1550	1096	968	137	1109	944	1750	1096	850	138
	225	1044	1073	1650	1096	968	138	1179	1013	1850	1096	850	139
	250	1117	1140	1750	1096	968	138	1250	1083	1950	1096	850	140
560	180	1012	1064	1600	1168	1080	185	1100	917	1750	1168	942	186
	200	1038	1085	1650	1168	1080	185	1173	989	1850	1168	942	187
	225	1109	1149	1750	1168	1080	186	1242	1056	1950	1168	942	188
	250	1180	1214	1850	1168	1080	187	1312	1124	2050	1168	942	189
630	200	1107	1169	1750	1316	1207	235	1235	1030	1950	1316	1048	237
	225	1177	1230	1850	1316	1207	236	1301	1095	2050	1316	1048	237
	250	1247	1294	1950	1316	1207	237	1370	1161	2150	1316	1048	238
	280	1362	1401	2100	1316	1207	238	1483	1273	2300	1316	1048	239
710	200	1199	1272	1900	1420	1382	303	1313	1082	2100	1420	1200	305
	225	1268	1333	2000	1420	1382	304	1379	1146	2200	1420	1200	306
	250	1338	1395	2100	1420	1382	305	1447	1211	2300	1420	1200	307
	280	1403	1453	2200	1420	1382	306	1559	1321	2450	1420	1200	309
800	160	1168	1273	1850	1528	1568	374	1363	1112	2150	1528	1354	380
	180	1191	1290	1900	1528	1568	375	1385	1132	2200	1528	1354	381
	200	1264	1353	2000	1528	1568	377	1455	1199	2300	1528	1354	383
	225	1331	1412	2100	1528	1568	379	1521	1261	2400	1528	1354	385
	250	1400	1472	2200	1528	1568	381	1587	1326	2500	1528	1354	387
	280	1464	1528	2300	1528	1568	383	1649	1386	2600	1528	1354	388
900	180	1308	1431	2050	1690	1748	466	1536	1251	2400	1690	1508	473
	200	1380	1492	2150	1690	1748	468	1558	1270	2450	1690	1508	474
	225	1446	1548	2250	1690	1748	470	1621	1330	2550	1690	1508	476
	250	1513	1607	2350	1690	1748	472	1686	1392	2650	1690	1508	478
	280	1576	1660	2450	1690	1748	474	1795	1497	2800	1690	1508	480
	315	1683	1757	2600	1690	1748	477	1899	1599	2950	1690	1508	483
1000	200	1445	1581	2250	1875	1910	573	1712	1397	2650	1875	1640	580
	225	1510	1635	2350	1875	1910	575	1774	1456	2750	1875	1640	582
	250	1576	1691	2450	1875	1910	576	1838	1516	2850	1875	1640	584
	280	1686	1789	2600	1875	1910	579	1897	1572	2950	1875	1640	586
	315	1792	1882	2750	1875	1910	582	2000	1671	3100	1875	1640	589

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.

# OVERALL DIMENSION - ADA "X" SERIES



Model	Motor Frame Size	90° / 270°						360°					
		C (90°)	C (270°)	L	W	H	* Wt (kg)	C1	C2	L	W	H	* Wt (kg)
1120	225	1680	1827	2550	1946	2158	854	1945	1585	2950	1946	1850	864
	250	1746	1882	2650	1946	2158	856	2008	1645	3050	1946	1850	867
	280	1806	1932	2750	1946	2158	859	2067	1700	3150	1946	1850	870
	315	1911	2024	2900	1946	2158	863	2169	1798	3300	1946	1850	874
	355	2012	2112	3050	1946	2158	867	2266	1892	3450	1946	1850	878
1250	225	1819	1995	2750	2065	2435	1286	2120	1714	3200	2065	2080	1308
	250	1883	2049	2850	2065	2435	1291	2182	1772	3300	2065	2080	1313
	280	1943	2097	2950	2065	2435	1296	2240	1825	3400	2065	2080	1318
	315	2046	2186	3100	2065	2435	1303	2340	1921	3550	2065	2080	1325
	355	2145	2272	3250	2065	2435	1310	2436	2013	3700	2065	2080	1332
1400	250	1995	2201	3040	2325	2718	1684	2390	1938	3600	2325	2320	1710
	280	2053	2247	3150	2325	2718	1689	2447	1990	3700	2325	2320	1715
	315	2153	2331	3300	2325	2718	1696	2546	2084	3850	2325	2320	1722
	355	2250	2413	3450	2325	2718	1703	2640	2173	4000	2325	2320	1729

\* The above weight does not include motor and drive unit as these will vary with supplier.

All Dimensions in mm.



### Operational Limits - "ADA"

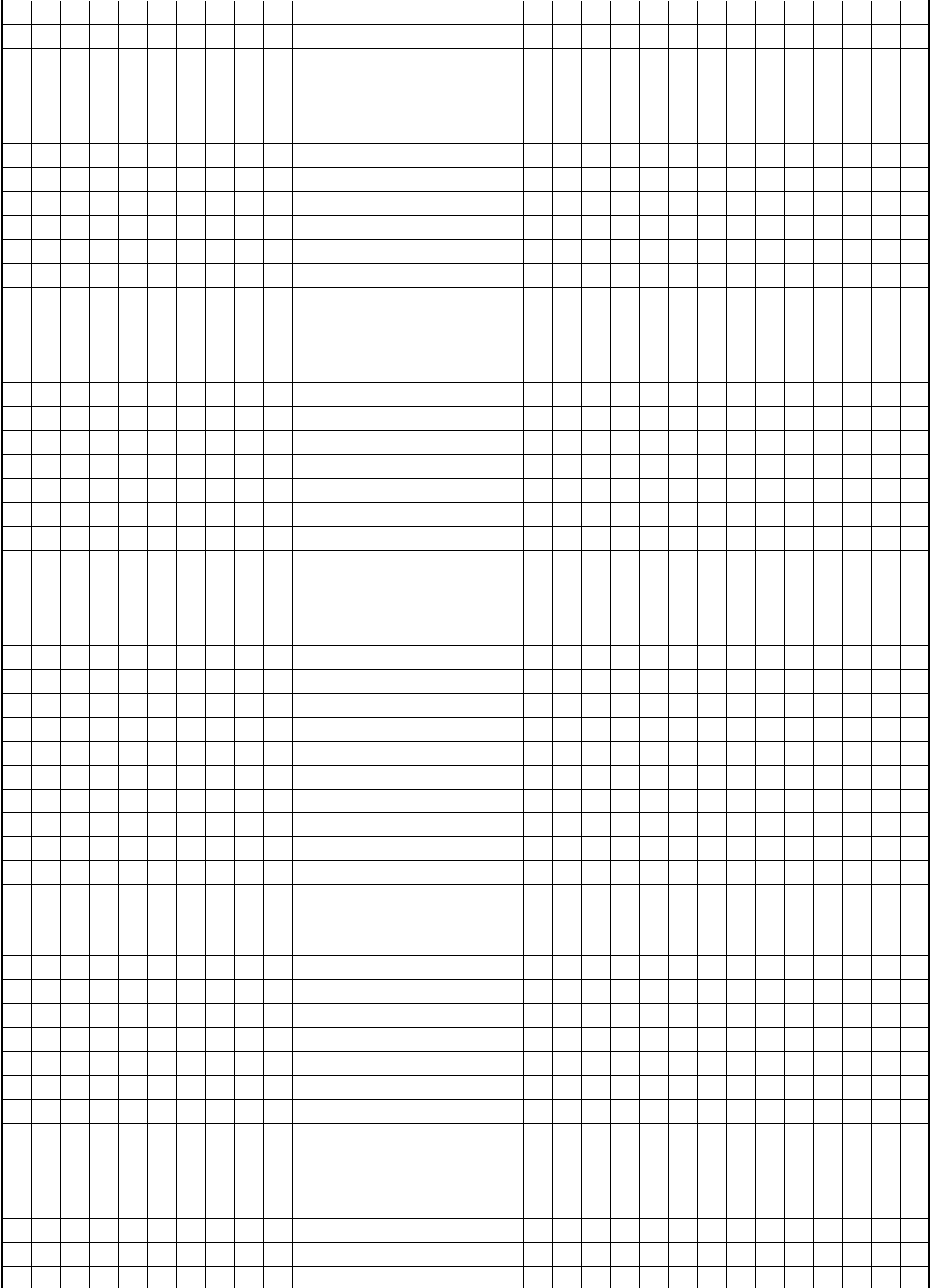
		315	355	400	450	500	560	630	710	800	900	1000	1120	1250	1400	
Maximum Absorbed Power	<b>S-C</b>	kW	4	4.5	6	8	9	11	14	16						
	<b>T</b>	kW	8	10	13	17	20	25	30	40	22	28	35	45	50	70
	<b>X</b>	kW	16	20	25	35	40	50	60	75	45	63	70	100	110	160
	<b>Z</b>	kW									90	125	150	160	220	300
	<b>S2-C2</b>	kW	5	6.5	6.5	7.5	7.5	7.5								
Maximum Fan Speed	<b>T2</b>	kW		15	15	22	24	25	25							
	<b>S-C</b>	rpm	3150	2700	2500	2250	1900	1700	1500	1350						
	<b>T</b>	rpm	4100	3500	3300	2900	2500	2200	2000	1800	1200	1100	950	900	800	700
	<b>X</b>	rpm	5100	4500	4100	3700	3200	2800	2450	2250	1550	1400	1250	1150	1000	900
	<b>Z</b>	rpm									1950	1800	1600	1450	1300	1150
Temperature Range / Min. -20°C	<b>S2-C2</b>	rpm	2400	2200	1800	1700	1250									
	<b>T2</b>	rpm		3000	2500	2400	2150	1600	1350							
	<b>S-C</b>	Max.°C	85	85	85	85	85	85	85	85						
	<b>T-X</b>	Max.°C	100	100	100	100	100	100	100	100	100	100	100	100	100	100
	<b>S2-C2</b>	Max.°C	85	85	85	85	85									
Fan weight	<b>T2</b>	Max.°C		100	100	100	100	100	100							
	<b>S</b>	kg	27	36	42	57	71	94	120	170						
	<b>C</b>	kg	28	40	45	61	78	109	143	195						
	<b>T</b>	kg	40	52	66	86	114	156	198	246	294	374	464	672	974	1370
	<b>X</b>	kg	48	63	80	90	119	166	214	267	319	405	505	744	1074	1444
	<b>S2</b>	kg	46	65	75	100	128									
	<b>C2</b>	kg	53	75	90	114	147									
	<b>T2</b>	kg		104	131	144	175	236	300							



## Centrifugal Fan Ordering Information

Fan Details			
■ Fan type		<input type="checkbox"/> DIDW <input type="checkbox"/> SISW	
■ Impeller type		<input type="checkbox"/> Forward Curved <input type="checkbox"/> Backward Curved <input type="checkbox"/> Others : _____ (Please State)	
■ Model & size e.g. ADA 560 C		<input type="checkbox"/> Model : _____ (If known)	
■ Drive type - belt, direct, coupling (if differ from standard)		<input type="checkbox"/> Belt <input type="checkbox"/> Direct <input type="checkbox"/> Coupling <input type="checkbox"/> Others : _____ (Please State)	
■ Arrangement (1 & 3 for bare shaft fan; 4, 8 & 12 for complete with drive system)		<input type="checkbox"/> Bare fan <input type="checkbox"/> Complete with drive system	
■ Rotation & Discharge e.g. CCW 270		<input type="checkbox"/> CW <input type="checkbox"/> CCW <input type="checkbox"/> 90 <input type="checkbox"/> 180 <input type="checkbox"/> 270 <input type="checkbox"/> 360	
■ Motor position (refer to diagram) e.g. W		<input type="checkbox"/> W <input type="checkbox"/> X <input type="checkbox"/> Y <input type="checkbox"/> Z	
■ Air Flow Rate		Q : _____ <input type="checkbox"/> L/S <input type="checkbox"/> m <sup>3</sup> /h <input type="checkbox"/> m <sup>3</sup> /min <input type="checkbox"/> m <sup>3</sup> /s <input type="checkbox"/> cfm	
■ Pressure (static & total)		SP : _____ TP : _____ <input type="checkbox"/> Pa <input type="checkbox"/> mmH <sub>2</sub> O <input type="checkbox"/> inWG	
■ Fan RPM (if specified)		Max. : _____ Min. : _____	
■ Noise level		<input type="checkbox"/> dB <input type="checkbox"/> dBA Lw : _____ Lp : _____ at Distance : _____ m <input type="checkbox"/> free field <input type="checkbox"/> room condition <input type="checkbox"/> corner / wall	
■ Ambient temperature		<input type="checkbox"/> Temp. : _____ °C	
■ Air density, if differ from standard		<input type="checkbox"/> Density : _____ kg/m <sup>3</sup> <input type="checkbox"/> Altitude : _____ m	
Motor Details		Fittings Detail	
■ Power	<input type="checkbox"/> kW : _____ <input type="checkbox"/> HP : _____	■ Accessories	<input type="checkbox"/> Inspection door <input type="checkbox"/> Drain plug <input type="checkbox"/> Flexible duct <input type="checkbox"/> Inlet vane control
■ No. of Poles / RPM	<input type="checkbox"/> 2P <input type="checkbox"/> 4P <input type="checkbox"/> 6P <input type="checkbox"/> 8P <input type="checkbox"/> Others : _____ (pls state RPM)		<input type="checkbox"/> Vibration Isolators: <input type="checkbox"/> Rubber <input type="checkbox"/> Spring <input type="checkbox"/> Floor-mount <input type="checkbox"/> Ceiling-hang
■ Voltage	<input type="checkbox"/> 220V <input type="checkbox"/> 415V <input type="checkbox"/> 380V <input type="checkbox"/> 440V <input type="checkbox"/> 400V <input type="checkbox"/> Others : _____		<input type="checkbox"/> Silencers : <input type="checkbox"/> With pod <input type="checkbox"/> Without pod <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet <input type="checkbox"/> Both inlet & outlet
■ Phase	<input type="checkbox"/> 1φ <input type="checkbox"/> 3φ		<input type="checkbox"/> Counter-flanges : <input type="checkbox"/> Flat <input type="checkbox"/> L-type <input type="checkbox"/> U-type <input type="checkbox"/> Inlet <input type="checkbox"/> Outlet
■ Frequency	<input type="checkbox"/> 50 Hz <input type="checkbox"/> 60 Hz	Special Features	
■ Frame size	<input type="checkbox"/> IEC : _____ <input type="checkbox"/> NEMA : _____ <input type="checkbox"/> Others : _____	■ Other Requirements	<input type="checkbox"/> Painting <input type="checkbox"/> Powder coating <input type="checkbox"/> Hot-dipped galvanizing
■ Make, if specified	<input type="checkbox"/> Brand : _____ <input type="checkbox"/> Mfr. : _____ <input type="checkbox"/> Country : _____		<input type="checkbox"/> Spark-resistant <input type="checkbox"/> Corrosion-resistant <input type="checkbox"/> Heat-resistant, temp. _____ °C <input type="checkbox"/> Smoke Spill, Max. temp. _____ °C for _____ Hr

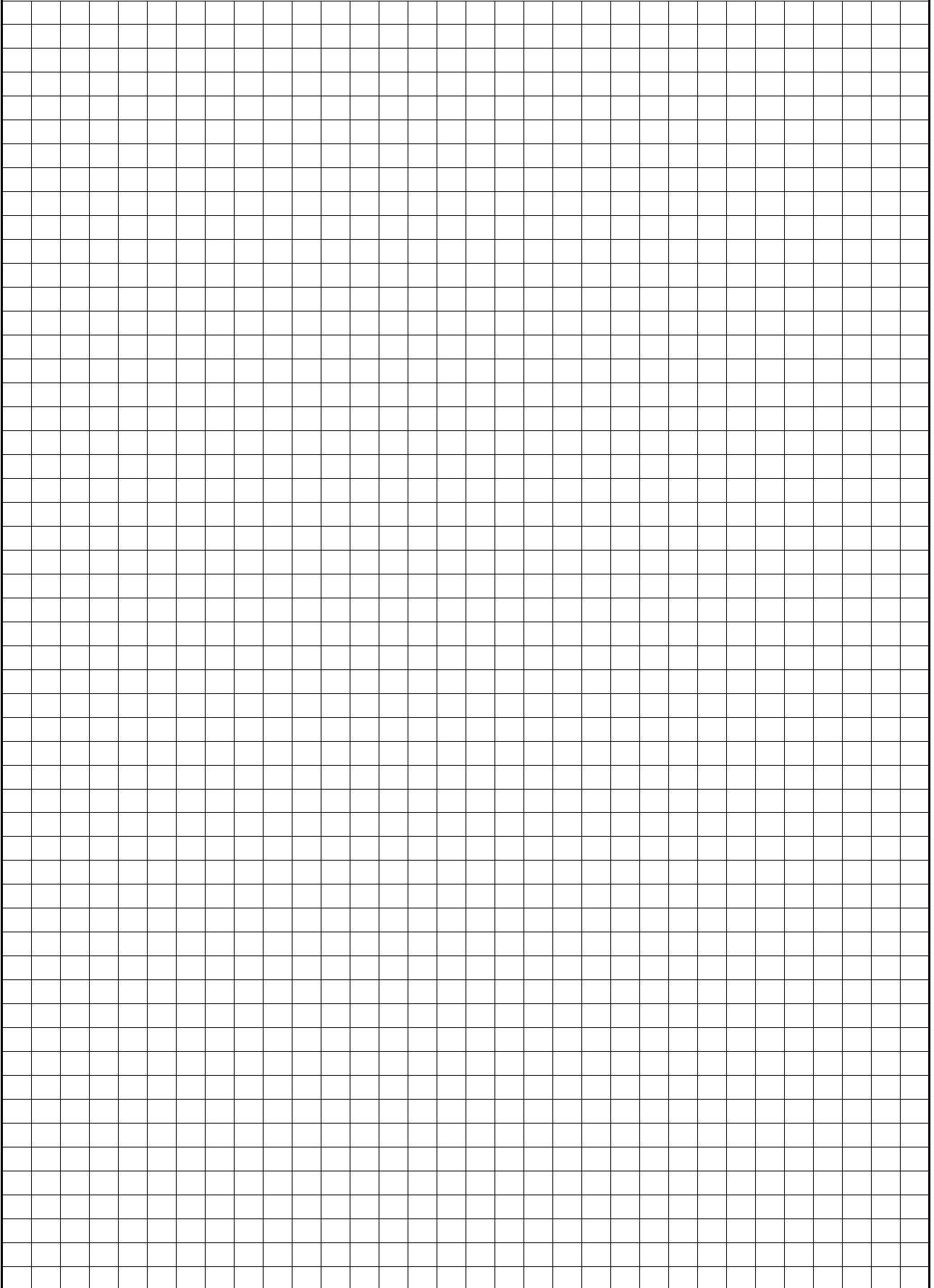
## NOTES







## NOTES



# KRUGER GROUP (VENTILATION)

## • SINGAPORE (KVI)

### KRUGER VENTILATION INDUSTRIES PTE LTD

No. 10 Buroh Street #06-06, West Connect Building, Singapore 627564  
Tel. +65 68611577 - Fax +65 68613577  
Email: mktg@krugerasia.com  
Website: www.krugerfan.com

## • THAILAND (KVA)

### KRUGER VENTILATION INDUSTRIES ASIA CO. LTD.

30/105 Moo 1, Sinsakorn Industrial Estate,  
Chetsadawithi Road, Khok Kham Mueng, Samuthsakorn 74000, Thailand  
Tel. +662 1050399 - Fax +662 1050373  
Email: mktg@krugerventasia.co.th

## • MALAYSIA

### KRUVENT INDUSTRIES (M) SDN BHD

Lot 850, Jalan Subang 7, Taman Perindustrian Subang,  
47500, Subang Jaya, Selangor D.E.  
Tel. +603 80743399 - Fax +603 80743388  
Email: mktg@kruger.com.my

## • SHANGHAI

### SHANGHAI KRUGER VENTILATION CO. LTD

No. 500 Yuanguo Road, Anting, Jiading, Shanghai 201814 P.R. China  
Tel. +86 21-69573266 - Fax +86 21-69573296  
Email: shkruger@krugerschina.com

## • BEIJING

### BEIJING KRUGER VENTILATION CO. LTD

Level 7, A Block, Rising International Building, 29 JingHai San Road, BDA,  
Beijing, P.R.China 100176  
Tel. +86 10-67881366 - Fax +86 10-67880566  
Email: krugertj@krugertj.com

## • TIANJIN

### TIANJIN KRUGER VENTILATION CO. LTD

No.168 Anyuan Road, Jingjin Science and Technology Park  
Wuqing District, Tianjin, China  
Tel. +86 22-22143480/3481 - Fax +86 22-22143482  
Email: krugertj@krugertj.com

## • PHILIPPINES

### KRUGER M&E INDUSTRIES CORPORATION

FAPI Compound, E. Rodriguez Ave.  
Tunasan, Muntinlupa City 1773, Philippines  
Tel. +63 2-8622892/4/6/7, 5534059 - Fax +63 2-8622891  
Email: mktg@krugerph.net

## • INDONESIA

### P.T. KRUGER VENTILATION INDONESIA

JL. Teuku Umar No.20,  
Karawaci - Tangerang 15115, Indonesia  
Tel. +62 21-5512288/5513557 - Fax +62 21-5513502  
Email: mktg@krugerindo.co.id

## • KOREA

### NEOMATE CO. LTD

2-1010, Ace High Tech City B/D, 775 Gyeongin-ro,  
Yeongdeungpo-gu, Seoul, Korea. Postal Code 07299  
Tel. +82-2-2679-2052 - Fax. +82-2-2679-2174  
Email: y7890@neomate.co.kr

## • DUBAI

### KRUGER VENTILATION INDUSTRIES, GULF BRANCH

Jebel Ali Free Zone Area (JAFZA)  
P.O. Box No. 262949, Dubai, UAE  
Tel. +971 4 8819188/8832017 - Fax. +971 4 8832018  
Email: johncs@krugerasia.com

## • MYANMAR

### KRUGER VENTILATION (MYANMAR) CO.,LTD

Room No. F21, Thiri Yadanar Whole Sale Market, (Htawunbe)  
Toe Chae Ward, North Okkalapa Township, Yangon.  
Tel. +959 763141081/2/3  
Email: htoon@krugermm.com

## • SINGAPORE (KEN)

### KRUGER ENGINEERING PTE LTD

No. 10 Buroh Street #06-06, West Connect Building, Singapore 627564  
Tel. +65 68631191 - Fax +65 68631151  
Email: mktg@krugerasia.com

## • THAILAND (KVT)

### KRUGER VENTILATION IND. (THAILAND) CO. LTD

30/105 Moo 1, Sinsakorn Industrial Estate,  
Chetsadawithi Road, Khok Kham Mueng, Samuthsakorn 74000, Thailand  
Tel. +662 1050399 - Fax + 662 1050370-2  
Email: mktg@kruger.co.th

## • TAIPEI

### KRUGER VENTILATION (TAIWAN) CO. LTD

No. 157, Ping-an Rd, Hengfeng Village,  
Dayuan Shiang Taoyuan County 337, Taiwan  
Tel. +886 3-3859119 - Fax +886 3-3859118  
Email: sales@krugertwn.com.tw

## • GUANGZHOU

### GUANGZHOU KRUGER VENTILATION CO. LTD

No. 9 Huahui Road, Huashan, Huadu, Guangzhou, P.R. China 510880  
Tel. +86 20-66356635 - Fax +86 20-86786001/86786500  
Email: gzkruiger@krugergz.com

## • WUHAN

### WUHAN KRUGER VENTILATION CO. LTD

No. 805, Huian Ave, Dongxihu District, Wuhan, Hubei, P.R. China 430000  
Tel. +86 27- 83248840/83060522/83097505  
Fax +86 27- 83261886  
Email: whkruger@krugerwh.com

## • HONG KONG

### KRUGER VENTILATION (HONG KONG) LIMITED

Flat C, 9/F, Yeung Yiu Chung (No.8) Industrial Building,  
20 Wang Hoi Road, Kowloon Bay, Kowloon, Hong Kong  
Tel. +852 22469182 - Fax +852 22469187  
Email: info@kruger.com.hk

## • AUSTRALIA

### S&P-KRUGER AUSTRALIA PTY LTD

2 Cunningham St,  
Moorebank N.S.W. 2170  
Tel. +61 2-98227747 - Fax +61 2-98227757  
Email: info@sandpkruger.com.au

## • INDIA

### KRUGER VENTILATION INDUSTRIES (INDIA) PVT LTD

Kruger Centre, Mumbai-Nasik Highway,  
Kalamgaon, Shahapur, Thane 421601, Maharashtra, India  
Tel. +91 9960558899/9975577211 - Fax +91 2527 240075  
Email: sales@krugerindia.com

## • INDIA (NORTH)

### KRUGER VENTILATION INDUSTRIES (NORTH INDIA) PVT LTD

Plot No. - 191, Sector - 59, Ballabgarh, Faridabad - 121 004, Haryana, India  
Tel. +91-9958991660/9717449696  
Fax. +91-1294135820  
Email: sales.kni@krugerindia.com

## • VIETNAM

### KRUGER VENTILATION INDUSTRIES (VIETNAM) CO. LTD

Lot A7. 2-4, C2 Road, Bourbon An Hoa IP, An Hoa,  
Trang Bang Dist., Tay Ninh Province, Vietnam  
Tel. +84-66 3585200/01/02 - Fax +84-66 3585199  
Email: mktg@krugervn.com

---

**Kruger Ventilation Industries Pte Ltd**

No. 17 Tuas Avenue 10 Singapore 639141

Tel. +65 68611577 - Fax +65 68613577

Website: [www.krugerfan.com](http://www.krugerfan.com)

CNo. - CAT007.E6 December 2016

A member of  
**Soler&Palau**  
Ventilation Group

The logo for Soler&Palau Ventilation Group features the company name in a bold, sans-serif font. To the right of the text is a stylized red circular graphic composed of two curved segments, resembling a fan or a partial circle.