



ASA

SINGLE INLET
CENTRIFUGAL FAN
with Airfoil Wheels

The logo consists of the word "KRUGER" in white, uppercase, sans-serif font, centered within a solid red square.

ASA Series

SINGLE INLET CENTRIFUGAL FAN with Airfoil Wheels



Kruger Ventilation Industries Asia Co.,Ltd certifies that the **ASA 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 comply with the requirements of the AMCA Certified Ratings Program.



ASA Series Single Inlet Centrifugal Fans – Airfoil wheels

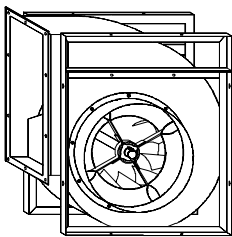
The ASA series is SISW centrifugal fans with high efficiency non-overloading airfoil impellers. The fans are suitable for supply or exhaust applications in commercial, process and industrial HVAC systems. Sizes of this series are in accordance with AMCA standard 99-0098-76 R20.

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 ASA series is set according to the requirement of class I, II and III limit as defined in AMCA standard 99-2408-69.

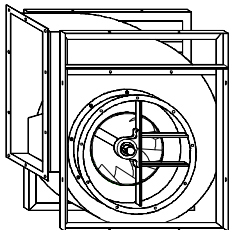
| | Model 315 to 630 | Model 710 to 1400 |
|----------|------------------|-------------------|
| Type C-U | I | I |
| Type T-U | II | II |
| Type X-U | III | II |
| Type Z-U | | III |



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.

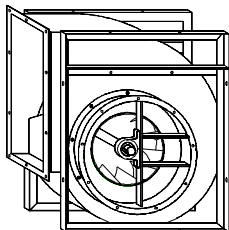
Fan Size : 315 to 630
Volume : 1500 to 20000 m³/h
Total Pressure : up to 1800 Pa



Type T

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

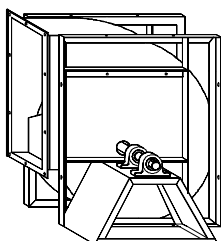
Fan Size : 315 to 1400
Volume : 1500 to 100000 m³/h
Total Pressure : up to 3000 Pa



This 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 : 1500 to 100000 m³/h
Total Pressure: up to 5000 Pa

Type Z is non-standard, for more information, please consult your nearest Kruger office for



Type U

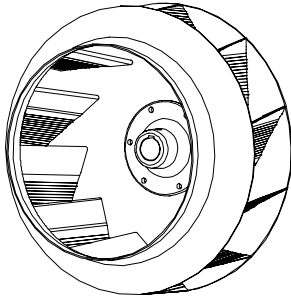
This type is manufactured with a special frame with two bearings fixed externally to the airflow eliminating any obstruction to the inlet and allow operation with air temperature up to max. of 180°C

Fan Size : 315 to 1400
Volume : 1500 to 100000 m³/h
Total Pressure : up to 5000 Pa

TECHNICAL SPECIFICATION

Wheel

The wheel of ASA 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.

Housing 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", "X" and "U", they are manufactured with sections of steel and finished with polyester powder coating.

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 shaft are then coated with anti-corrosion varnish after assembly.

Bearings

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

| | Mounted in a rubber housing | Mounted on cast iron supports with grease point | | |
|--------------|-----------------------------------|---|--------------------------------|--------------------------------|
| Fan Type | C | T | X | U |
| Bearing Duty | CM Medium Duty | TM Medium Duty | XM Medium Duty | UM Medium Duty |
| | eg. Model: ASA 450 C M | TX Extra Heavy Duty | XX Extra Heavy Duty | UX 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 a 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

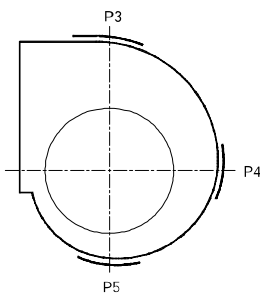
Outlet flanges are available upon request.

Inlet Flanges

This option is set against the fan to facilitate installation. It is available in 2 types-“L” flange or “U” flange.

Inspection Doors

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



Guards

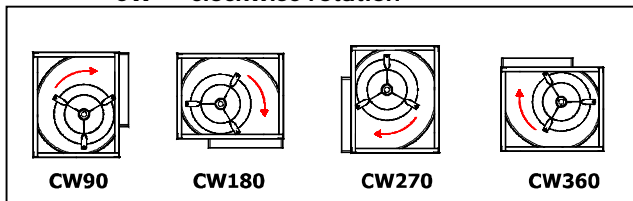
Inlet guard, discharge guards and non-drive end shaft guards are available on request.

Fan Rotation and Discharge

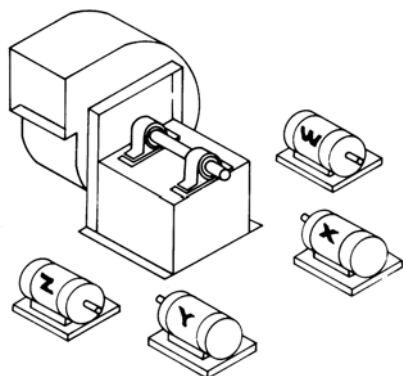
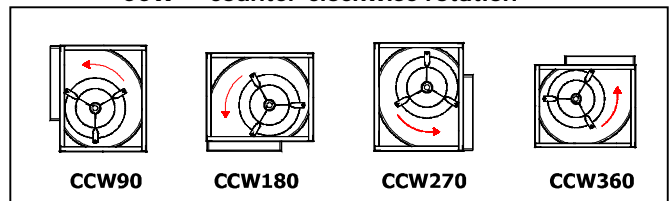
The rotation and discharge of the fan is in accordance with AMCA standard 99-2406-83.

The direction of rotation is determined from the drive side of the fan :-

CW - clockwise rotation



CCW - counter-clockwise rotation

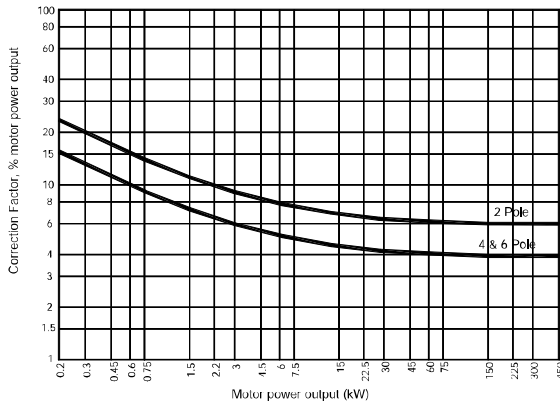


Motor Position

The position of the motor for belt drive centrifugal fan is in accordance with AMCA standard 99-2407-66.

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

Reprinted from AMCA Standard 99-2407-03, Motor Positions for Belt Chain Drive Centrifugal Fans, with the express written permission from the Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.



Motor Selection

The power curve shown on each performance graph represents 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.

Dynamic Pressure

Both dynamic pressure and outlet air velocity shown on each graph are calculated base on the full air 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.

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 levels 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 diag. 2 - configuration "B". The noise levels of the fans are determined as follows:

- Sound power level - ("A" scale): Lw (A) as catalogue
- Octave band spectrum: Lw = Lw(A) + Lw rel. dB [refer to Kruger for more details]
- Sound pressure level:

a) free field
 $Lp(A) = Lw(A) - (20\log_{10}d) - 11$

b) room conditions
 $Lp(A) = Lw(A) - (20\log_{10}d) - 8$

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 duct outlet condition).

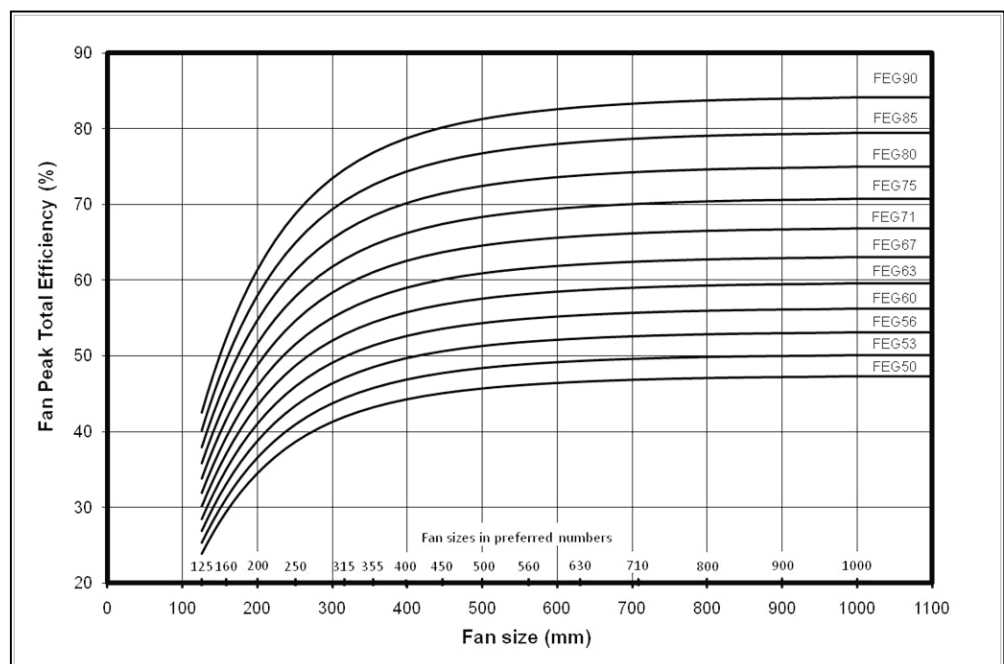
Ratings refer to standard air density with the total pressure as a function of the air volume, using logarithmic scale.

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

According to AMCA 205, ASA series can be classify as FEG 80–85 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



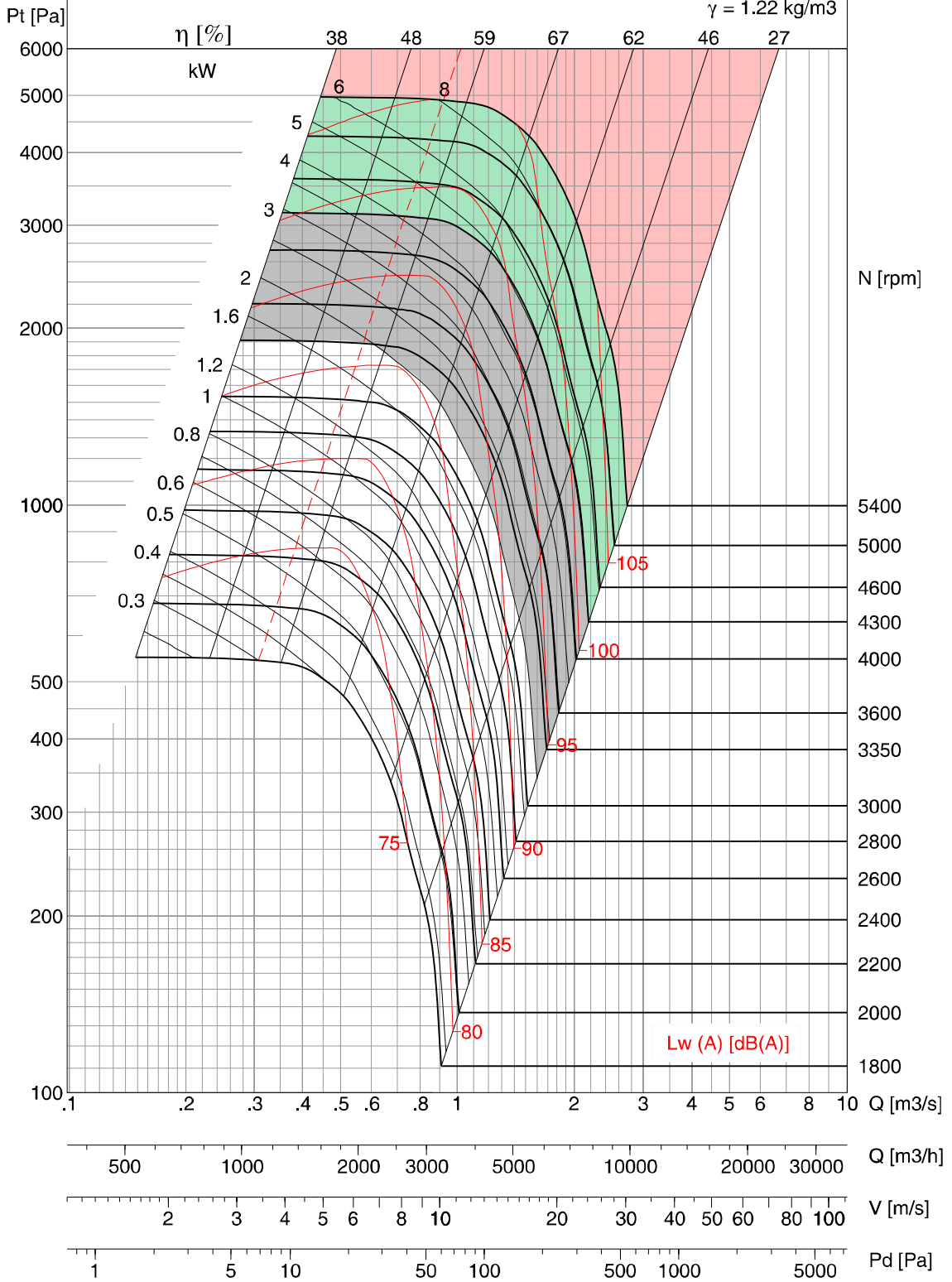


ASA 315

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 2 | 5 | 10 |
| M.RPM | 3350 | 4300 | 5400 |

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



- 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.
 - Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
 - The AMCA Certified Ratings Seal applies to air performance rating only.

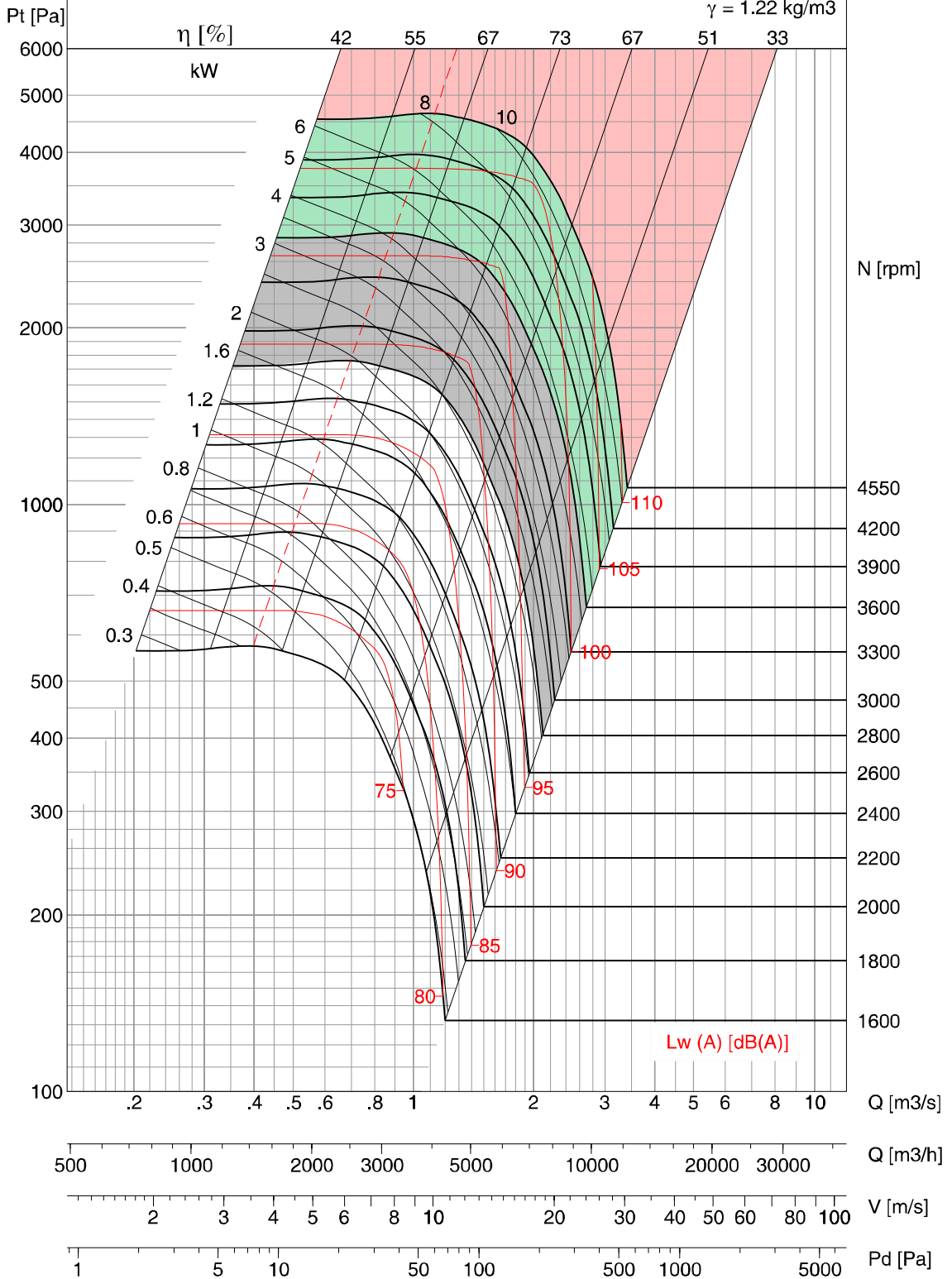


ASA 355

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 3 | 6 | 12 |
| M.RPM | 2800 | 3600 | 4550 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lwi(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
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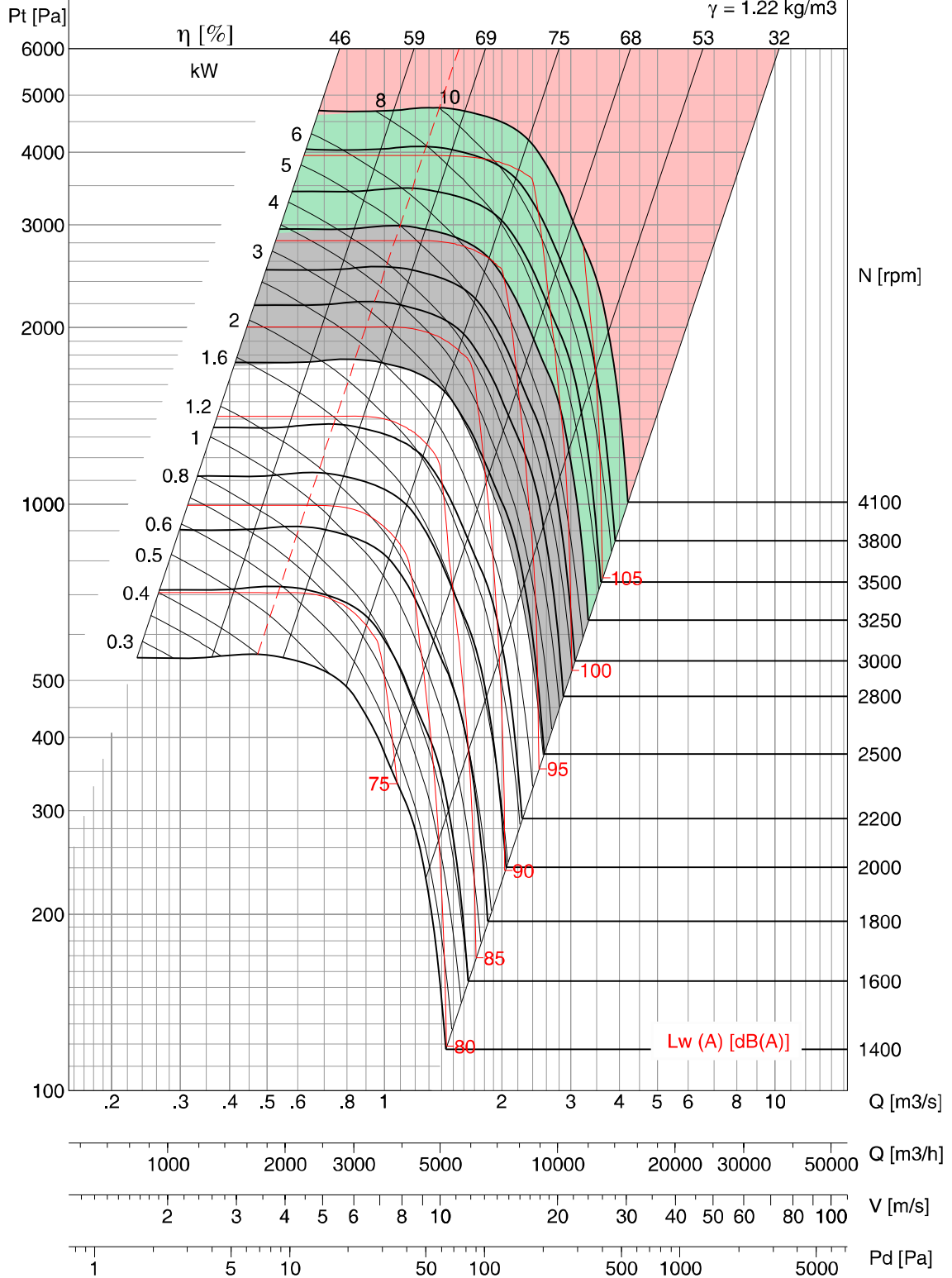


ASA 400

FEG 85

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 3 | 7 | 14 |
| M.RPM | 2500 | 3250 | 4100 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
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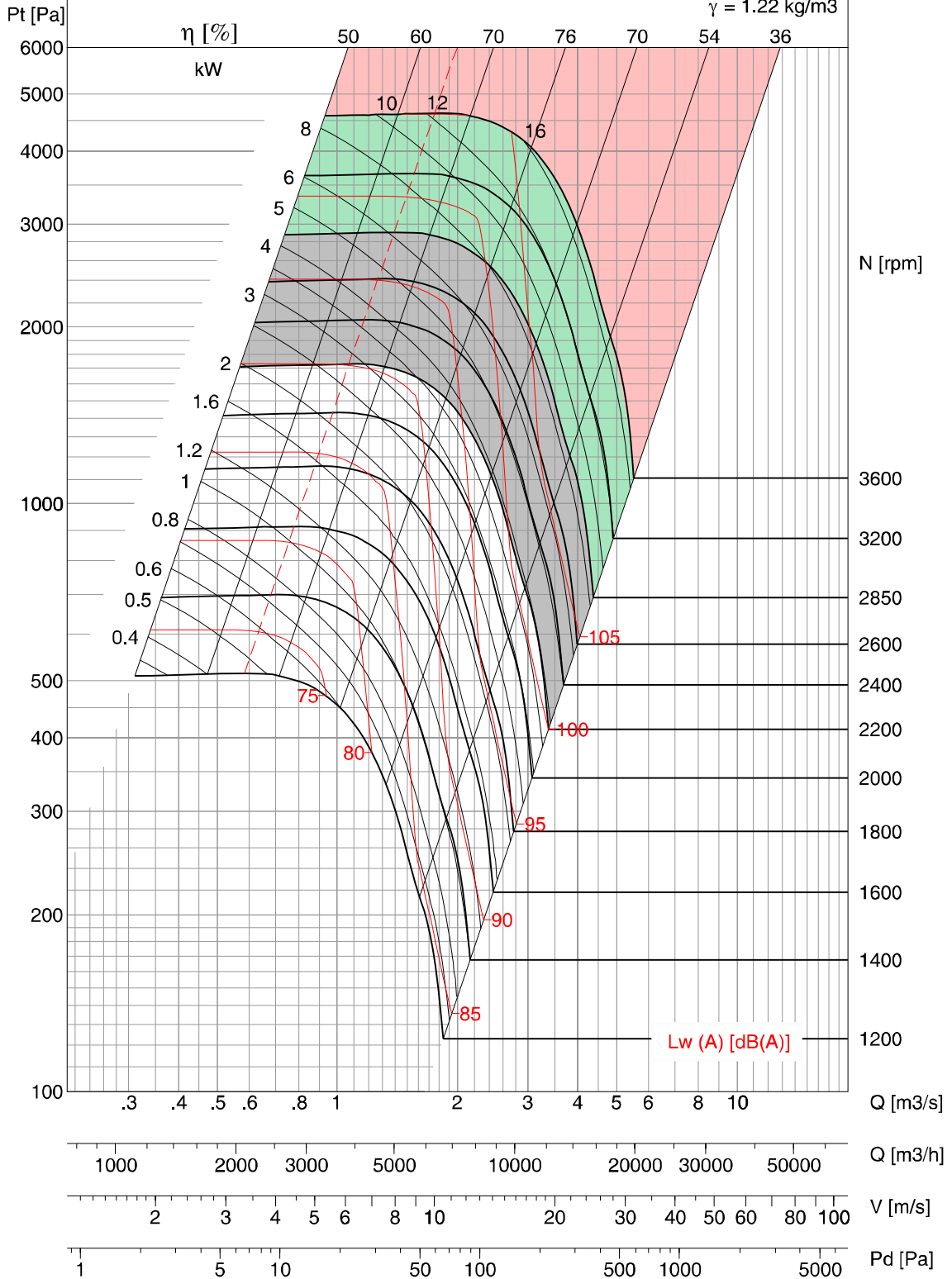


ASA 450

FEG 85

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 4 | 9 | 17 |
| M.RPM | 2200 | 2850 | 3600 |

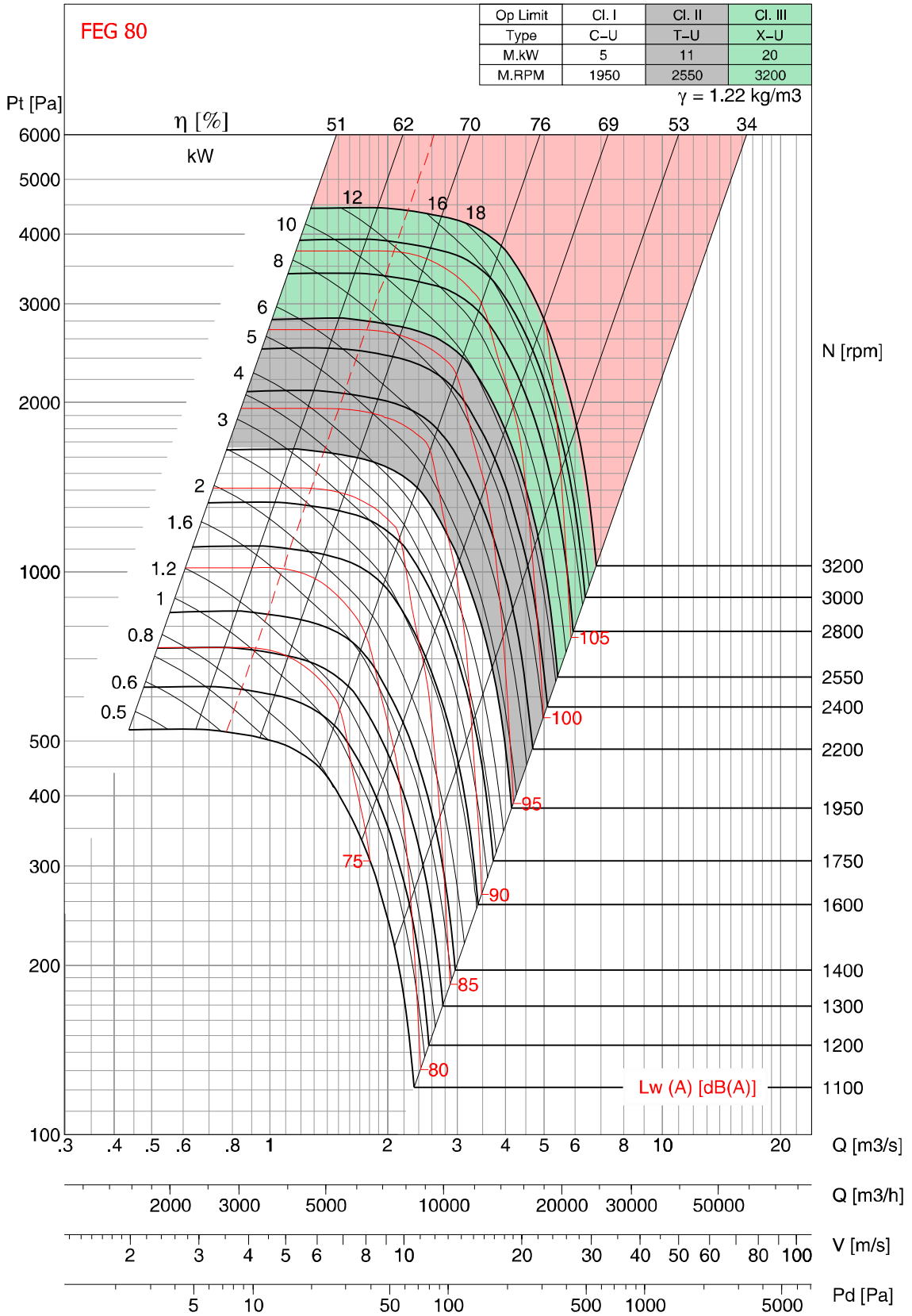
$\gamma = 1.22 \text{ kg/m}^3$



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.



ASA 500



- 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.
 - Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
 - The AMCA Certified Ratings Seal applies to air performance rating only.

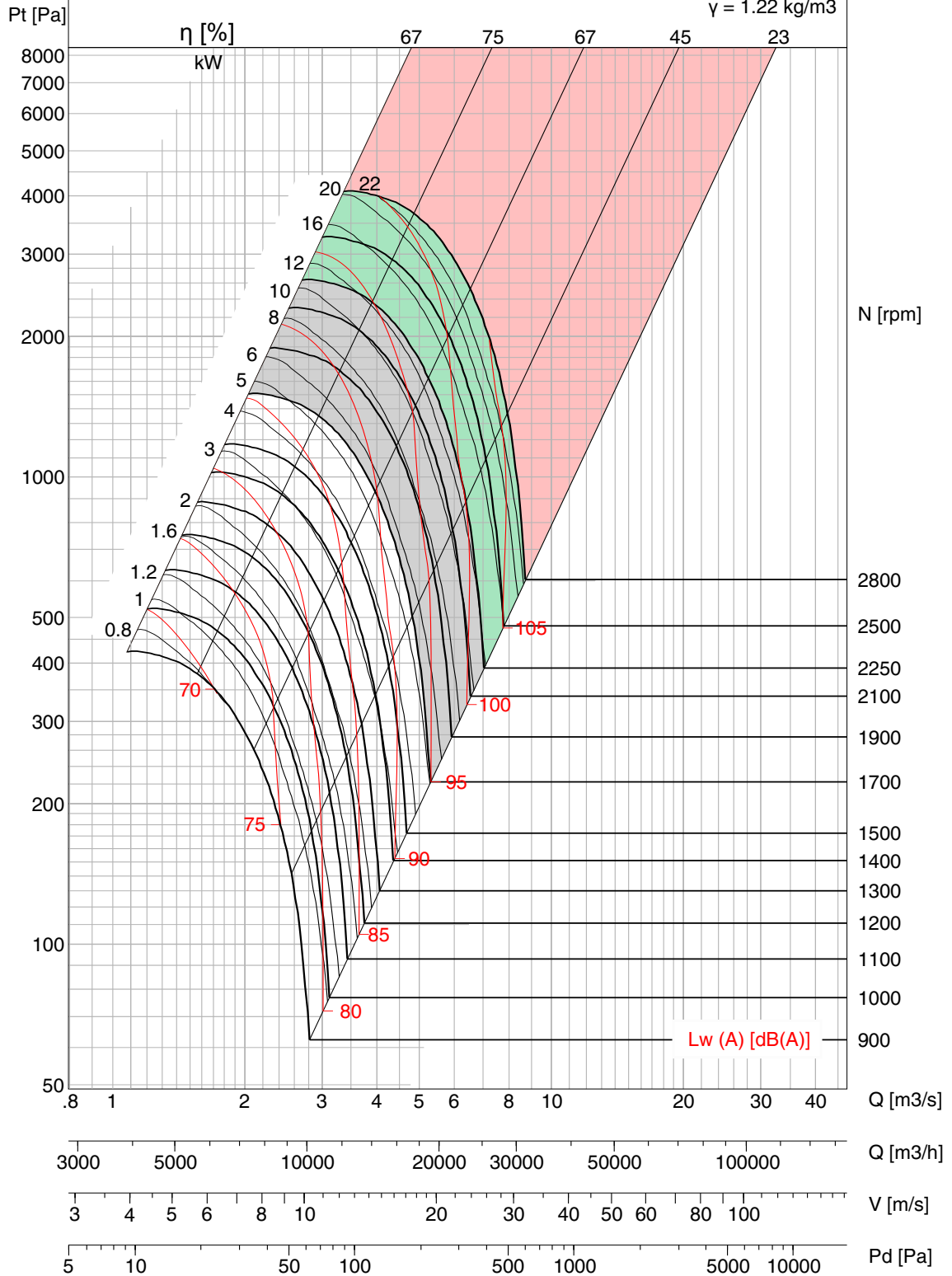


ASA 560

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 6 | 13 | 26 |
| M.RPM | 1700 | 2250 | 2800 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

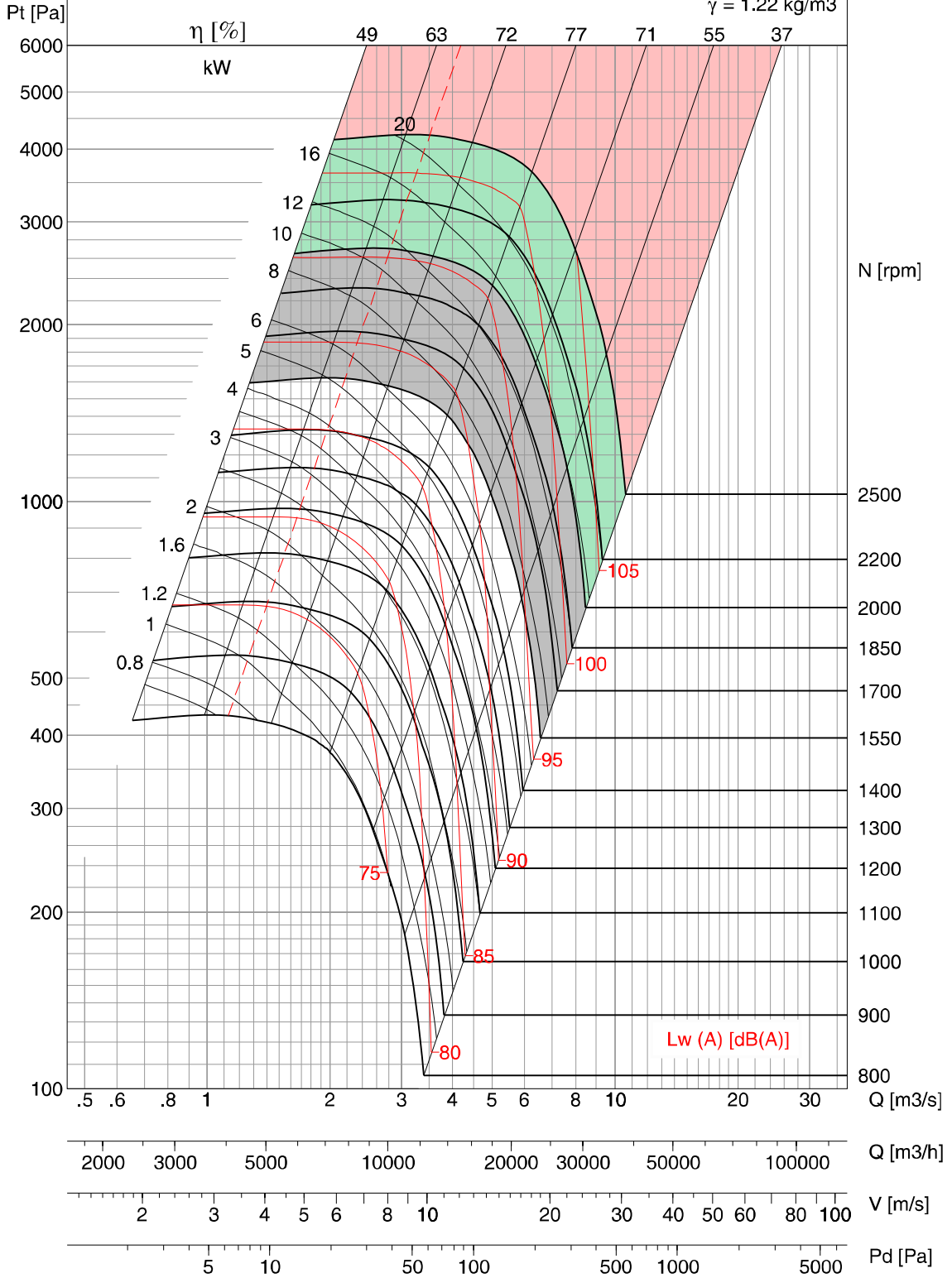


ASA 630

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | C-U | T-U | X-U |
| M.kW | 8 | 16 | 32 |
| M.RPM | 1550 | 2000 | 2500 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

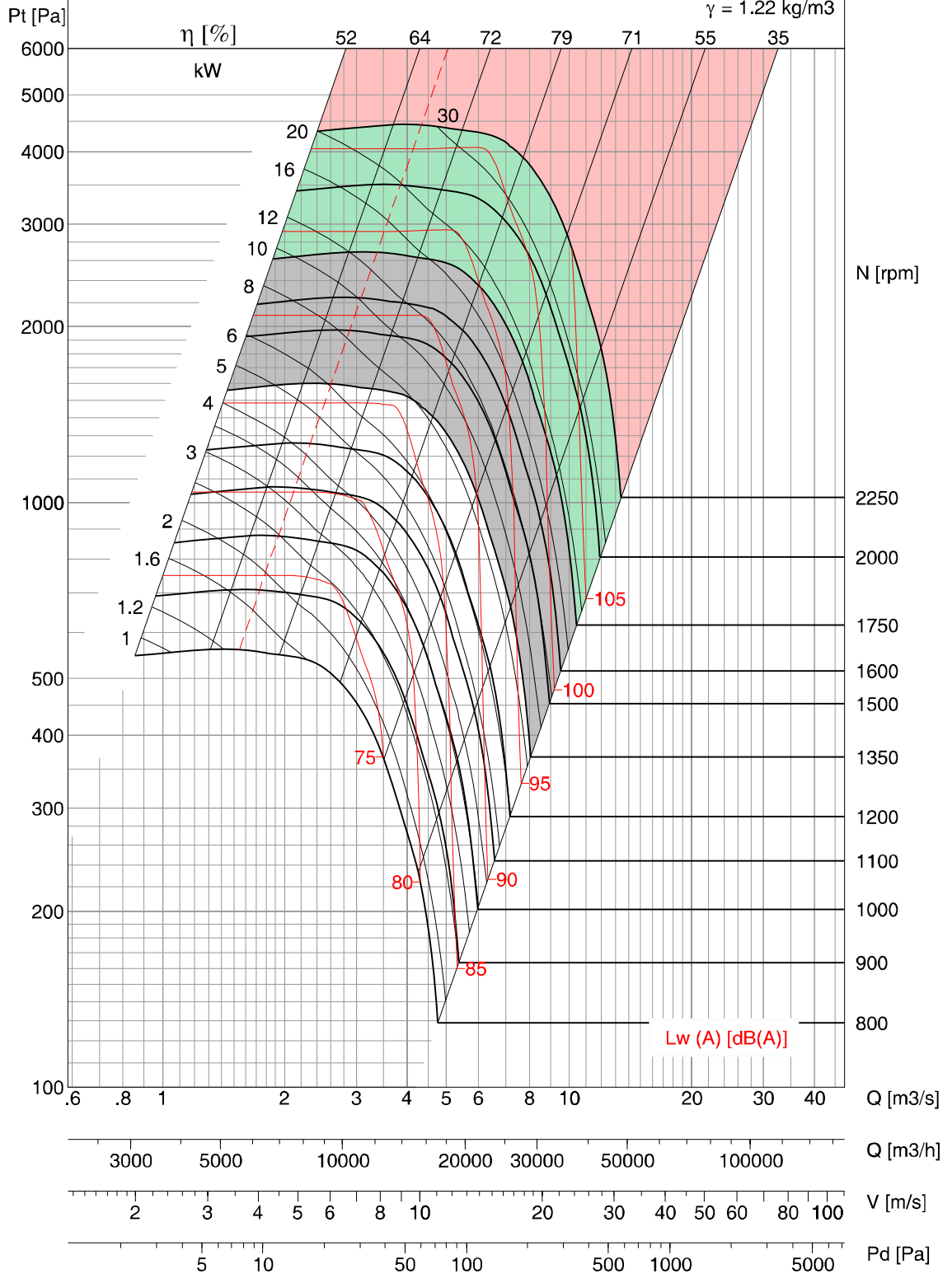


ASA 710

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 10 | 20 | 40 |
| M.RPM | 1350 | 1750 | 2250 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

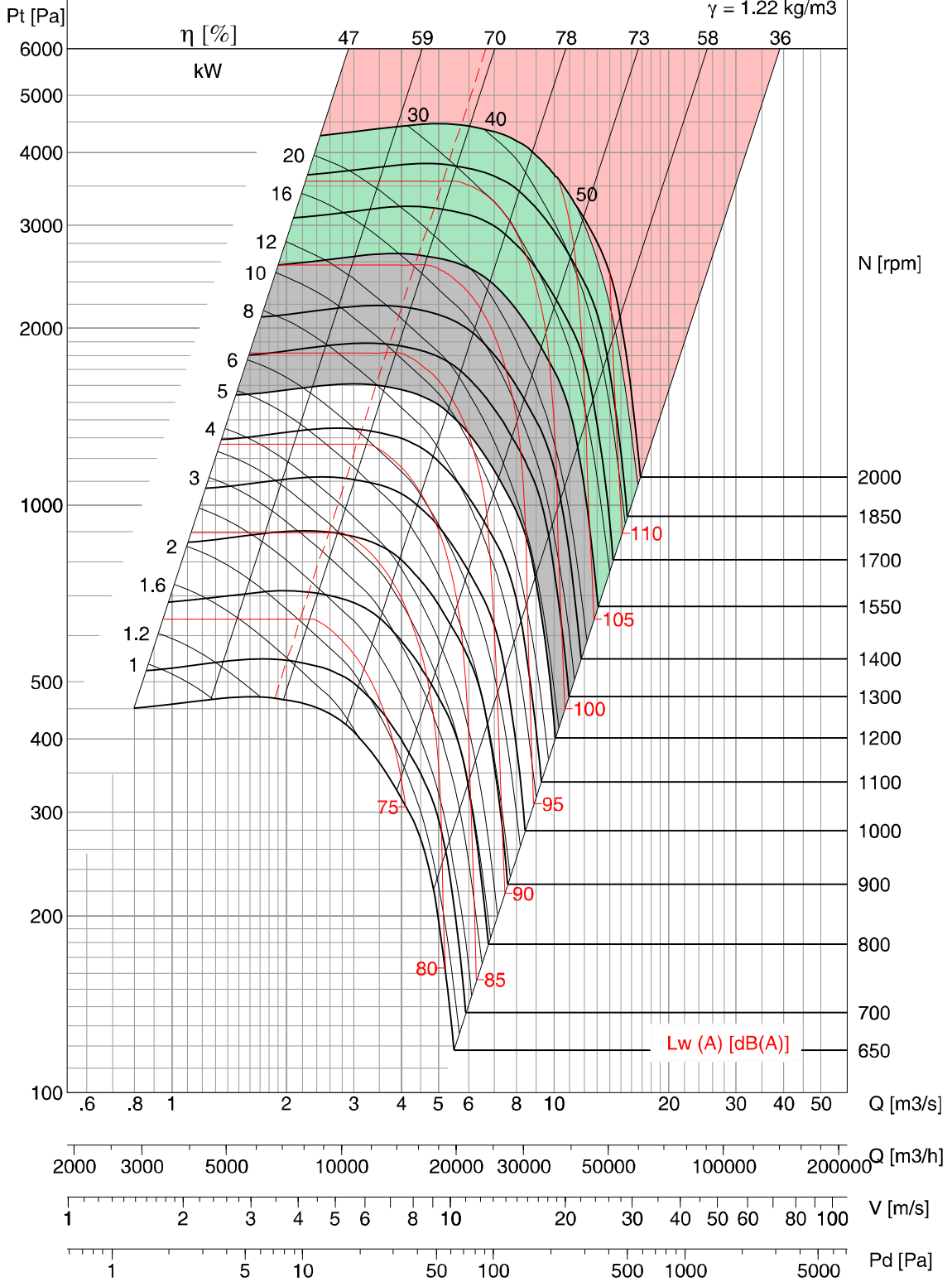


ASA 800

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 12 | 25 | 50 |
| M.RPM | 1200 | 1550 | 2000 |

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



- 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.
 - Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
 - The AMCA Certified Ratings Seal applies to air performance rating only.

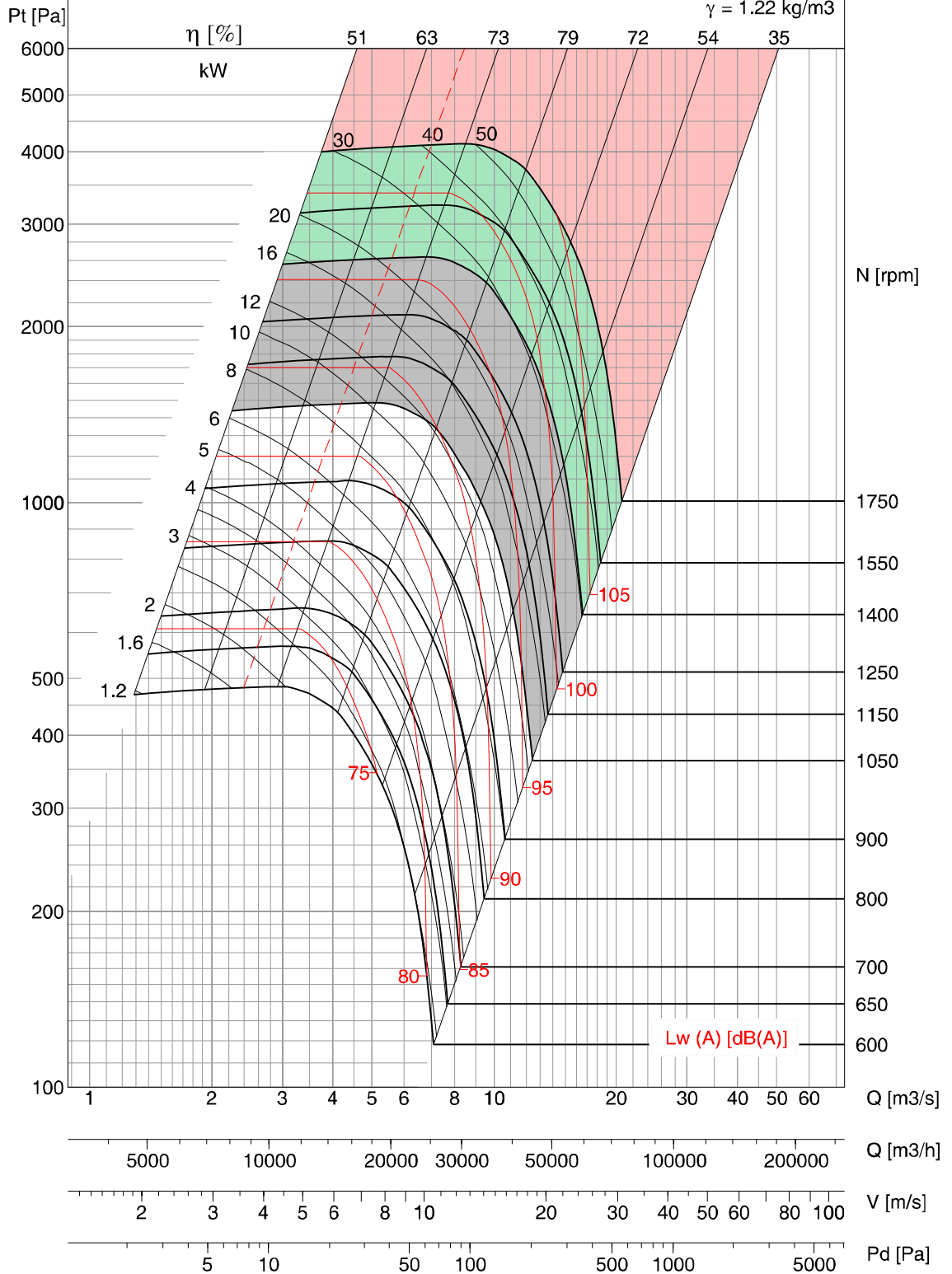


ASA 900

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 15 | 32 | 65 |
| M.RPM | 1050 | 1400 | 1750 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lwi(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

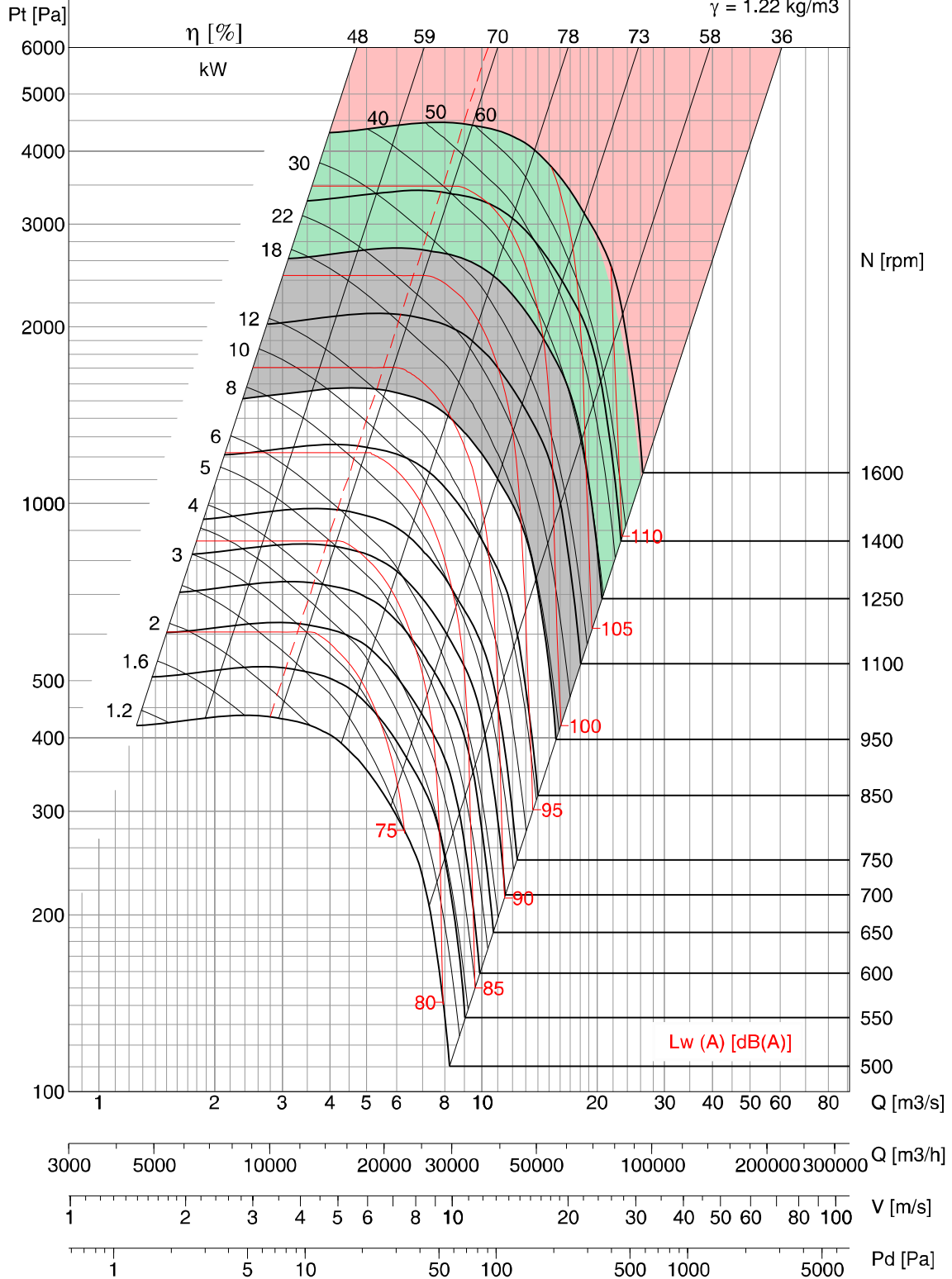


ASA 1000

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 18 | 40 | 80 |
| M.RPM | 950 | 1250 | 1600 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

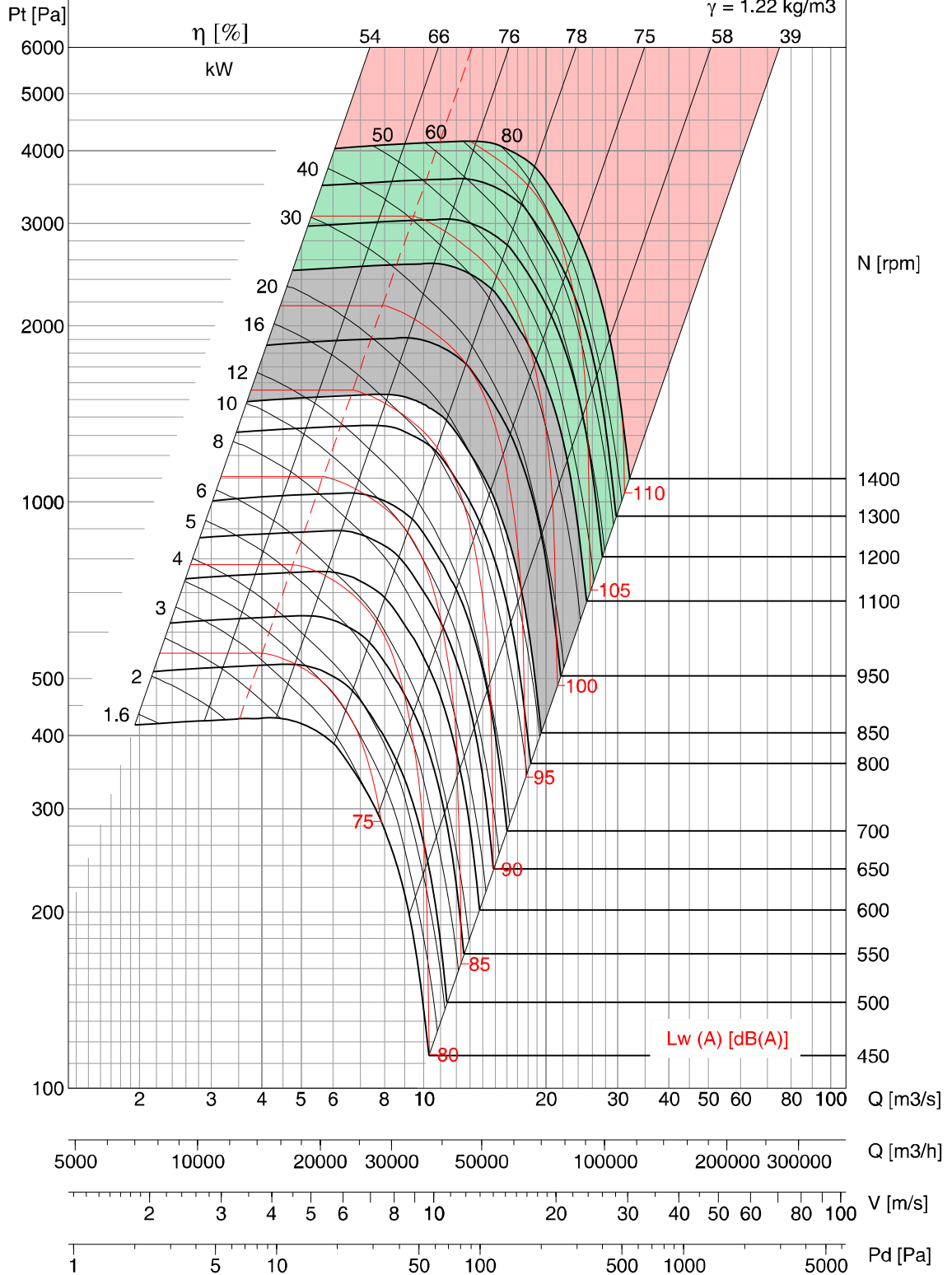


ASA 1120

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 25 | 50 | 100 |
| M.RPM | 850 | 1100 | 1400 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet $L_w(A)$ sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
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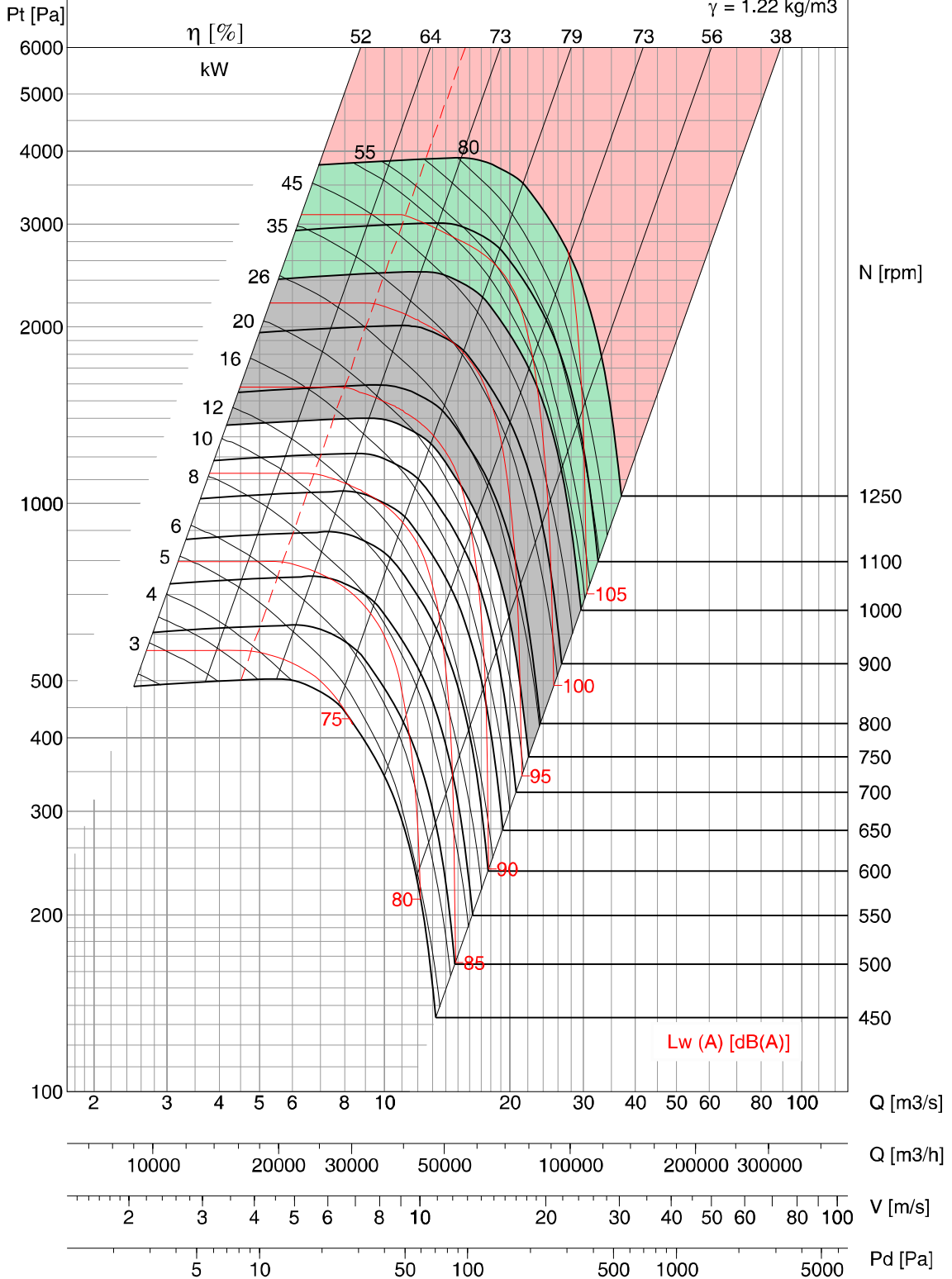


ASA 1250

FEG 80

| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 26 | 55 | 110 |
| M.RPM | 750 | 1000 | 1250 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
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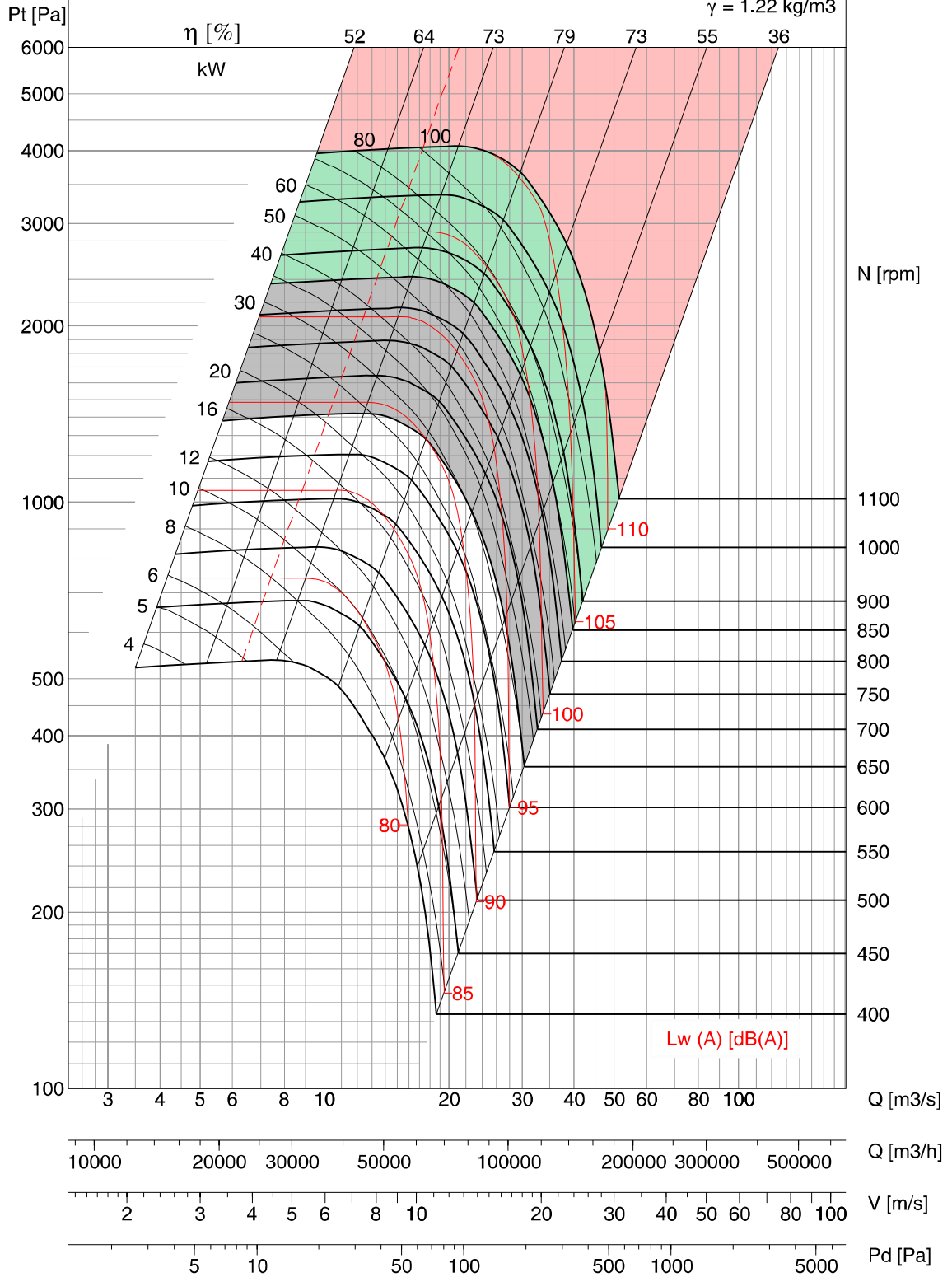


ASA 1400

FEG 80

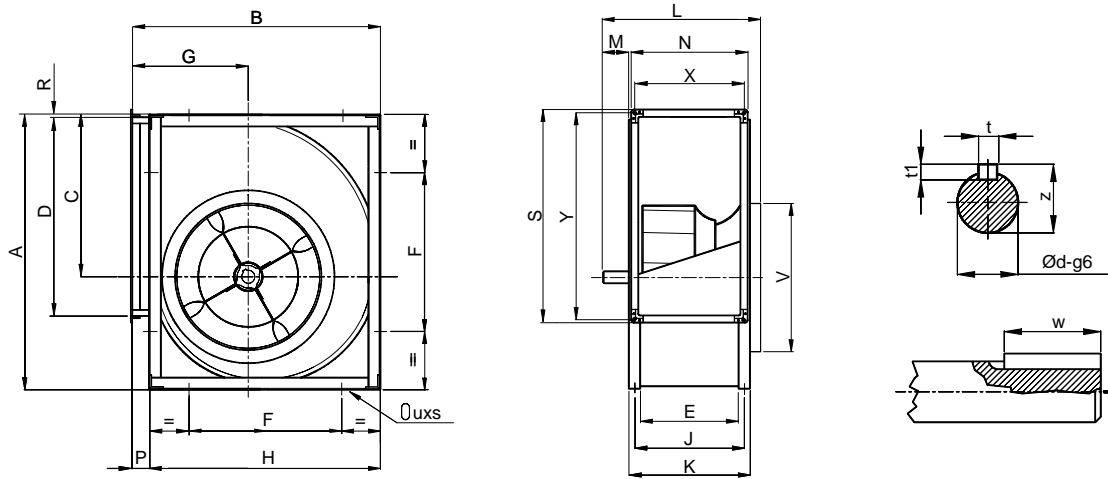
| Op Limit | Cl. I | Cl. II | Cl. III |
|----------|-------|--------|---------|
| Type | T-U | X-U | Z-U |
| M.kW | 35 | 80 | 150 |
| M.RPM | 650 | 850 | 1100 |

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



- 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.
- Test A-weighted sound ratings shown have been calculated per AMCA standard 301. Values shown are for inlet Lw(A) sound power levels for installation type B - free inlet, ducted outlet. Rating do not include the effect of duct end corrections.
- The AMCA Certified Ratings Seal applies to air performance rating only.

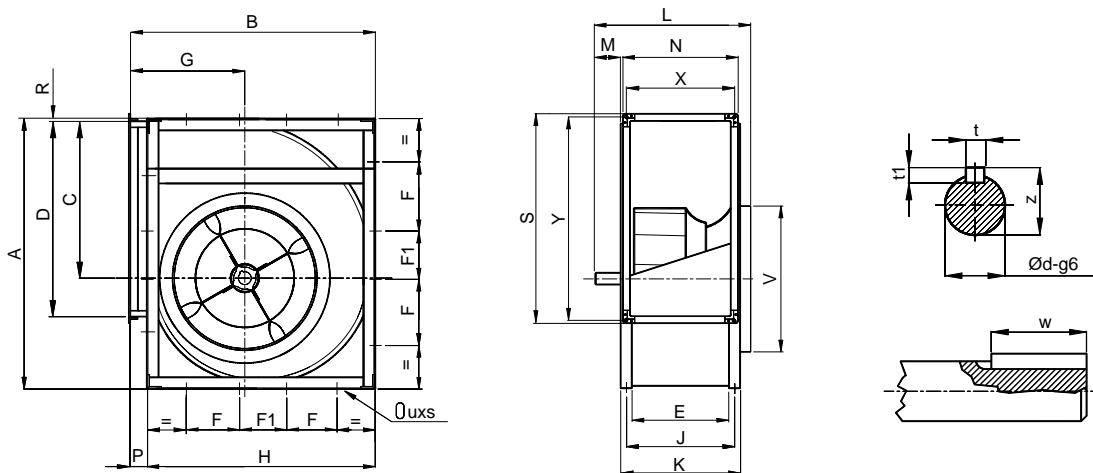
ASA 315-400 'C'



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | V | X | Y | t | t1 | w | z | Ød | UxS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|---|-----|-----|-----|-----|---|----|----|----|----|-------|
| 315 | 578 | 518 | 340 | 404 | 223 | 330 | 236 | 480 | 253 | 283 | 451 | 78 | 279 | 38 | 3 | 460 | 319 | 251 | 432 | 8 | 7 | 40 | 28 | 25 | 13x18 |
| 355 | 654 | 578 | 383 | 452 | 247 | 368 | 260 | 548 | 287 | 327 | 479 | 72 | 303 | 30 | 6 | 508 | 359 | 275 | 480 | 8 | 7 | 40 | 33 | 30 | 13x18 |
| 400 | 736 | 650 | 432 | 506 | 274 | 402 | 290 | 612 | 314 | 354 | 506 | 72 | 330 | 38 | 5 | 562 | 404 | 302 | 534 | 8 | 7 | 40 | 33 | 30 | 13x18 |

All Dimensions in mm.

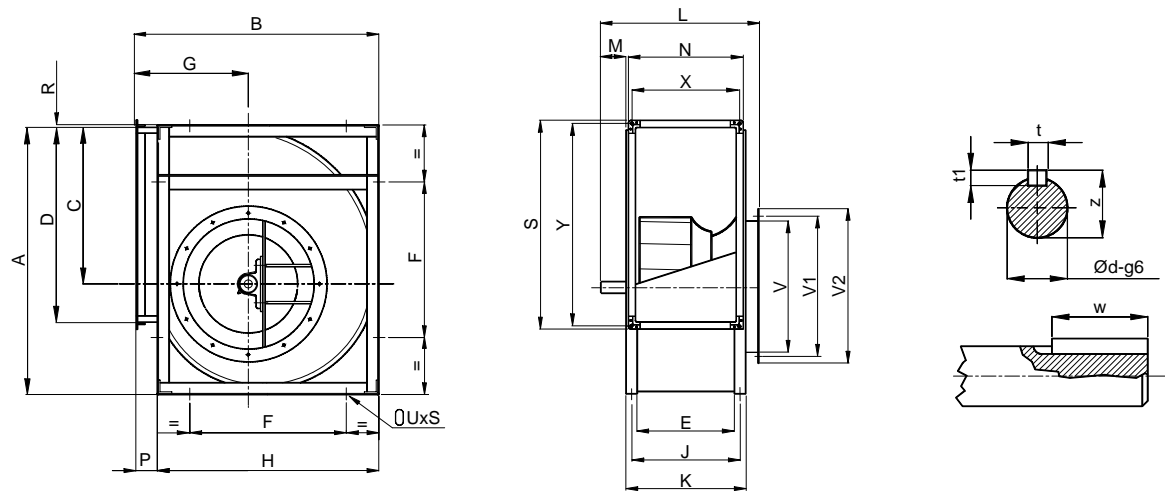
ASA 450-630 'C'



| Model | A | B | C | D | E | F | F1 | G | H | J | K | L | M | N | P | R | S | V | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|---|-----|-----|-----|-----|----|----|----|----|----|-------|
| 450 | 827 | 726 | 486 | 568 | 308 | 200 | 111 | 322 | 681 | 348 | 388 | 556 | 88 | 364 | 45 | 5 | 624 | 454 | 336 | 596 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 500 | 918 | 800 | 538 | 638 | 345 | 245 | 120 | 352 | 750 | 385 | 425 | 593 | 88 | 401 | 50 | 5 | 694 | 504 | 373 | 666 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 560 | 1030 | 892 | 603 | 714 | 383 | 280 | 125 | 390 | 844 | 433 | 483 | 653 | 100 | 439 | 48 | 7 | 770 | 564 | 411 | 742 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 630 | 1157 | 998 | 679 | 800 | 433 | 328 | 110 | 434 | 945 | 483 | 533 | 703 | 100 | 489 | 53 | 6 | 856 | 634 | 461 | 828 | 12 | 8 | 70 | 43 | 40 | 13x18 |

All Dimensions in mm.

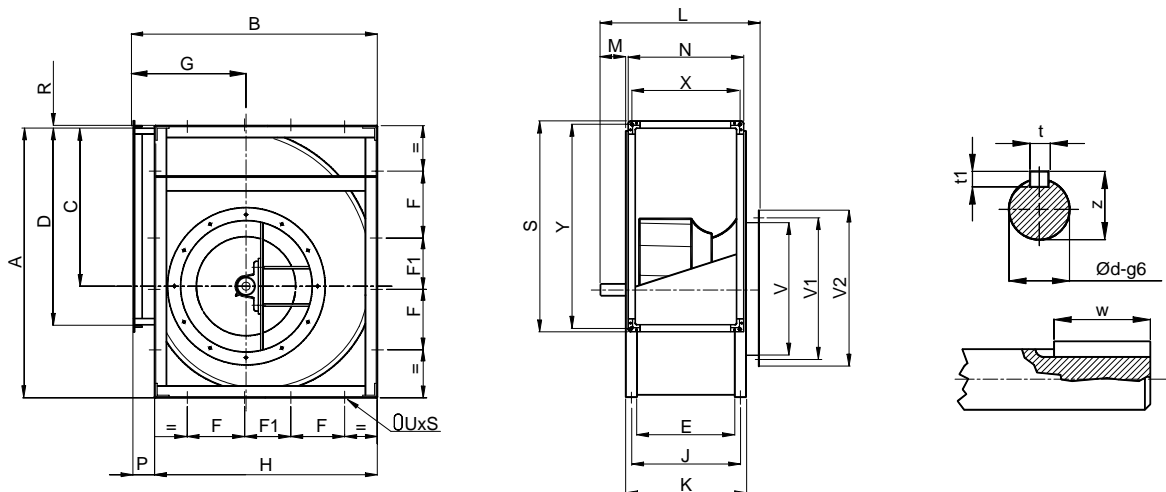
ASA 315-400 'T'



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|---|-----|-----|-----|-----|-----|-----|---|----|----|----|----|-------|
| 315 | 578 | 518 | 340 | 404 | 223 | 330 | 236 | 480 | 253 | 283 | 451 | 78 | 279 | 38 | 3 | 460 | 315 | 356 | 395 | 251 | 432 | 8 | 7 | 40 | 28 | 25 | 13x18 |
| 355 | 654 | 578 | 383 | 452 | 247 | 368 | 260 | 548 | 287 | 327 | 481 | 74 | 303 | 30 | 6 | 508 | 355 | 395 | 435 | 275 | 480 | 8 | 7 | 40 | 33 | 30 | 13x18 |
| 400 | 736 | 650 | 432 | 506 | 274 | 402 | 290 | 612 | 314 | 354 | 508 | 74 | 330 | 38 | 5 | 562 | 400 | 438 | 480 | 302 | 534 | 8 | 7 | 40 | 33 | 30 | 13x18 |

All Dimensions in mm.

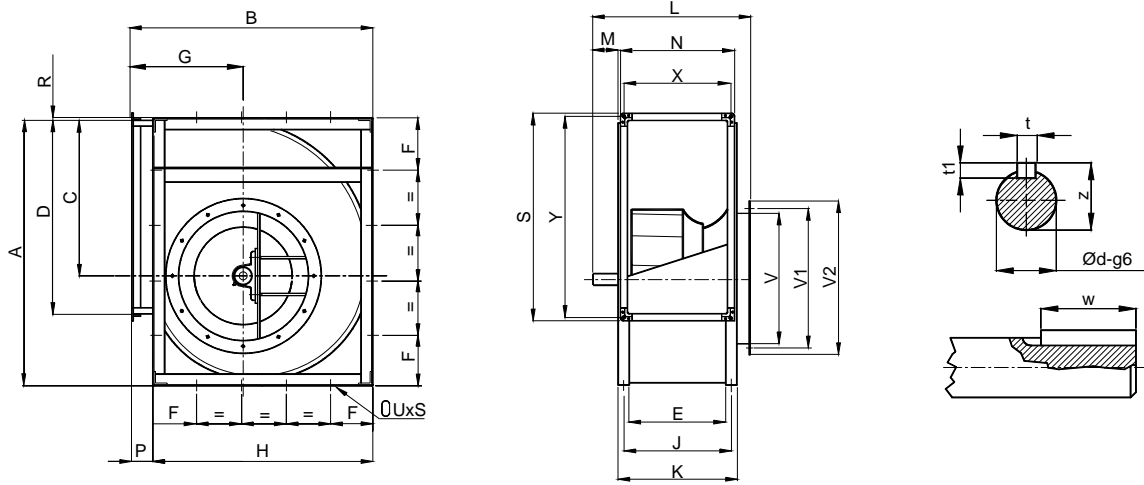
ASA 450-1000 'T'



| Model | A | B | C | D | E | F | F1 | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|----|---|------|------|------|------|-----|------|----|----|----|------|----|-------|
| 450 | 827 | 726 | 486 | 568 | 308 | 200 | 111 | 322 | 681 | 348 | 388 | 564 | 96 | 364 | 45 | 5 | 624 | 450 | 487 | 530 | 336 | 596 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 500 | 918 | 800 | 538 | 638 | 345 | 245 | 120 | 352 | 750 | 385 | 425 | 601 | 96 | 401 | 50 | 5 | 694 | 500 | 541 | 580 | 373 | 666 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 560 | 1030 | 892 | 603 | 714 | 383 | 280 | 125 | 390 | 844 | 433 | 483 | 661 | 108 | 439 | 48 | 7 | 770 | 560 | 605 | 646 | 411 | 742 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 630 | 1157 | 998 | 679 | 800 | 433 | 328 | 110 | 434 | 945 | 483 | 533 | 711 | 108 | 489 | 53 | 6 | 856 | 630 | 674 | 716 | 461 | 828 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 710 | 1302 | 1120 | 765 | 898 | 479 | 360 | 150 | 484 | 1057 | 529 | 579 | 763 | 114 | 535 | 63 | 7 | 954 | 710 | 751 | 796 | 507 | 926 | 14 | 9 | 70 | 48.5 | 45 | 17x22 |
| 800 | 1468 | 1254 | 862 | 1006 | 533 | 405 | 171 | 540 | 1180 | 583 | 633 | 817 | 114 | 589 | 74 | 7 | 1062 | 800 | 837 | 886 | 561 | 1034 | 14 | 9 | 70 | 48.5 | 45 | 17x22 |
| 900 | 1648 | 1408 | 971 | 1130 | 595 | 455 | 189 | 604 | 1319 | 645 | 695 | 906 | 141 | 651 | 89 | 7 | 1186 | 900 | 934 | 986 | 623 | 1158 | 16 | 10 | 90 | 53.5 | 55 | 17x22 |
| 1000 | 1810 | 1540 | 1066 | 1266 | 663 | 500 | 200 | 656 | 1450 | 713 | 763 | 974 | 141 | 719 | 90 | 9 | 1322 | 1000 | 1043 | 1086 | 691 | 1294 | 16 | 10 | 90 | 53.5 | 55 | 17x22 |

All Dimensions in mm.

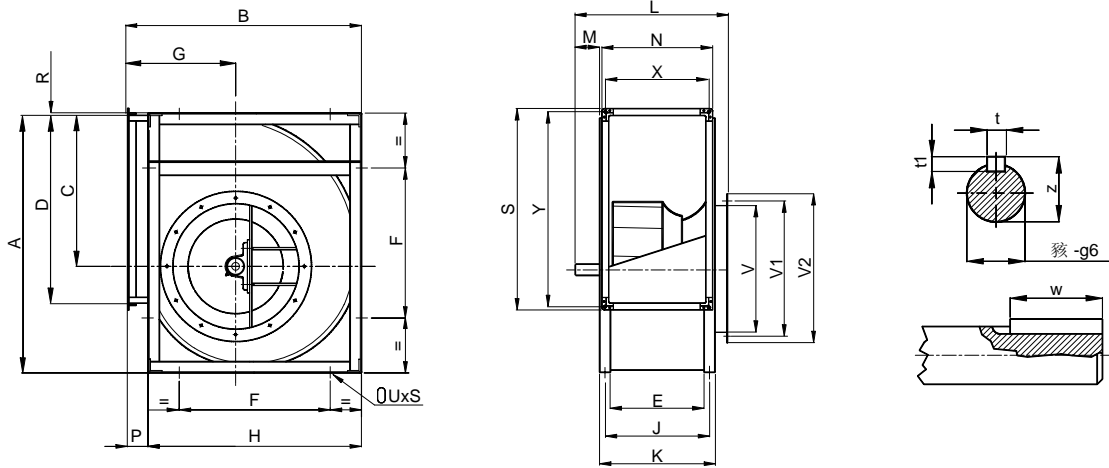
ASA 1120-1400 'T'



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|------|------|------|------|-----|-----|-----|----|------|------|------|------|-----|------|----|----|-----|------|----|-------|
| 1120 | 2033 | 1725 | 1200 | 1422 | 744 | 290 | 748 | 1630 | 804 | 870 | 1146 | 133 | 800 | 95 | 9 | 1478 | 1120 | 1180 | 1226 | 772 | 1450 | 18 | 11 | 90 | 64 | 60 | 17x22 |
| 1250 | 2285 | 1930 | 1353 | 1524 | 807 | 300 | 830 | 1831 | 882 | 957 | 1232 | 148 | 859 | 99 | 9 | 1580 | 1250 | 1303 | 1356 | 831 | 1552 | 18 | 11 | 110 | 69 | 65 | 17x22 |
| 1400 | 2568 | 2170 | 1515 | 1794 | 938 | 310 | 963 | 2057 | 1013 | 1088 | 1381 | 166 | 990 | 113 | 13 | 1850 | 1400 | 1480 | 1506 | 962 | 1822 | 20 | 12 | 110 | 74.5 | 70 | 17x22 |

All Dimensions in mm.

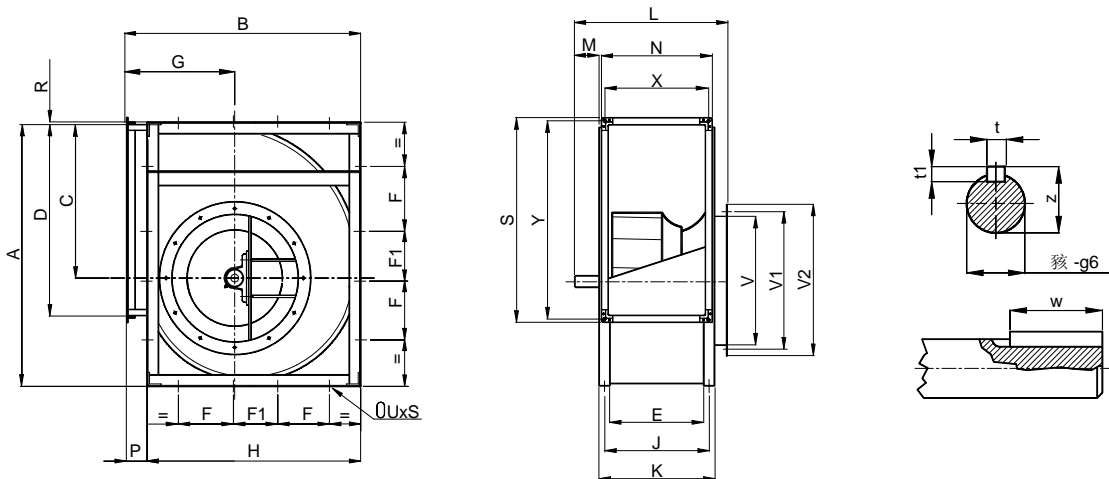
ASA 315-400 'X'



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|---|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-------|
| 315 | 578 | 518 | 340 | 404 | 223 | 330 | 236 | 480 | 253 | 283 | 457 | 84 | 279 | 38 | 3 | 460 | 315 | 356 | 395 | 251 | 432 | 8 | 7 | 40 | 33 | 30 | 13x18 |
| 355 | 654 | 578 | 383 | 452 | 247 | 368 | 260 | 548 | 287 | 327 | 503 | 96 | 303 | 30 | 6 | 508 | 355 | 395 | 435 | 275 | 480 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 400 | 736 | 650 | 432 | 506 | 274 | 402 | 290 | 612 | 314 | 354 | 530 | 96 | 330 | 38 | 5 | 562 | 400 | 438 | 480 | 302 | 534 | 10 | 8 | 50 | 38 | 35 | 13x18 |

All Dimensions in mm.

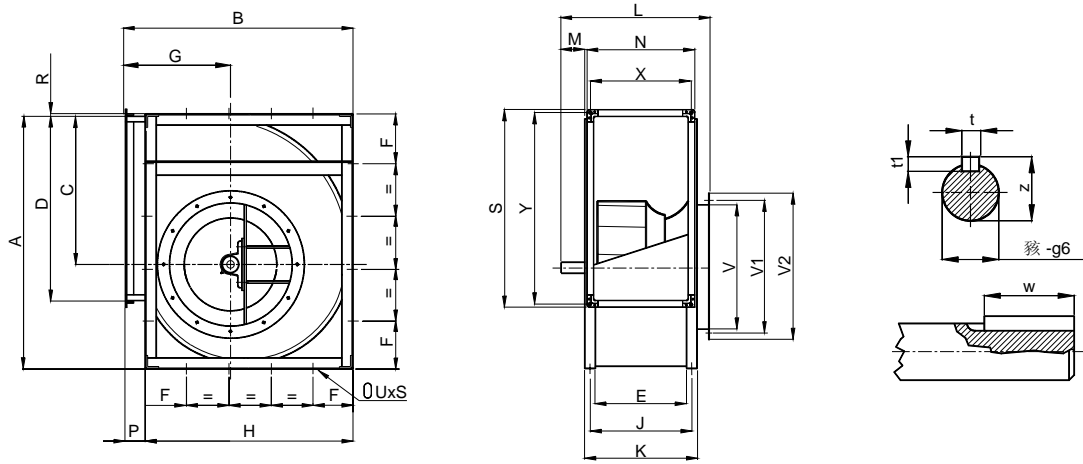
ASA 450-1000 'X'



| Model | A | B | C | D | E | F | F1 | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|----|---|------|------|------|------|-----|------|----|----|----|------|----|-------|
| 450 | 827 | 726 | 486 | 568 | 308 | 200 | 111 | 322 | 681 | 348 | 388 | 586 | 118 | 364 | 45 | 5 | 624 | 450 | 487 | 530 | 336 | 596 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 500 | 918 | 800 | 538 | 638 | 345 | 245 | 120 | 352 | 750 | 385 | 425 | 623 | 118 | 401 | 50 | 5 | 694 | 500 | 541 | 580 | 373 | 666 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 560 | 1030 | 892 | 603 | 714 | 383 | 280 | 125 | 390 | 844 | 433 | 483 | 667 | 114 | 439 | 48 | 7 | 770 | 560 | 605 | 646 | 411 | 742 | 14 | 9 | 70 | 48.5 | 45 | 13x18 |
| 630 | 1157 | 998 | 679 | 800 | 433 | 328 | 110 | 434 | 945 | 483 | 533 | 717 | 114 | 489 | 53 | 6 | 856 | 630 | 674 | 716 | 461 | 828 | 14 | 9 | 70 | 48.5 | 45 | 13x18 |
| 710 | 1302 | 1120 | 765 | 898 | 479 | 360 | 150 | 484 | 1057 | 529 | 579 | 787 | 138 | 535 | 63 | 7 | 954 | 710 | 751 | 796 | 507 | 926 | 14 | 9 | 90 | 53.5 | 50 | 17x22 |
| 800 | 1468 | 1254 | 862 | 1006 | 533 | 405 | 171 | 540 | 1180 | 583 | 633 | 841 | 138 | 589 | 74 | 7 | 1062 | 800 | 837 | 886 | 561 | 1034 | 14 | 9 | 90 | 53.5 | 50 | 17x22 |
| 900 | 1648 | 1408 | 971 | 1130 | 595 | 455 | 189 | 604 | 1319 | 645 | 695 | 911 | 146 | 651 | 89 | 7 | 1186 | 900 | 934 | 986 | 623 | 1158 | 18 | 11 | 90 | 64 | 60 | 17x22 |
| 1000 | 1810 | 1540 | 1066 | 1266 | 663 | 500 | 200 | 656 | 1450 | 713 | 763 | 979 | 146 | 719 | 90 | 9 | 1322 | 1000 | 1043 | 1086 | 691 | 1294 | 18 | 11 | 90 | 64 | 60 | 17x22 |

All Dimensions in mm.

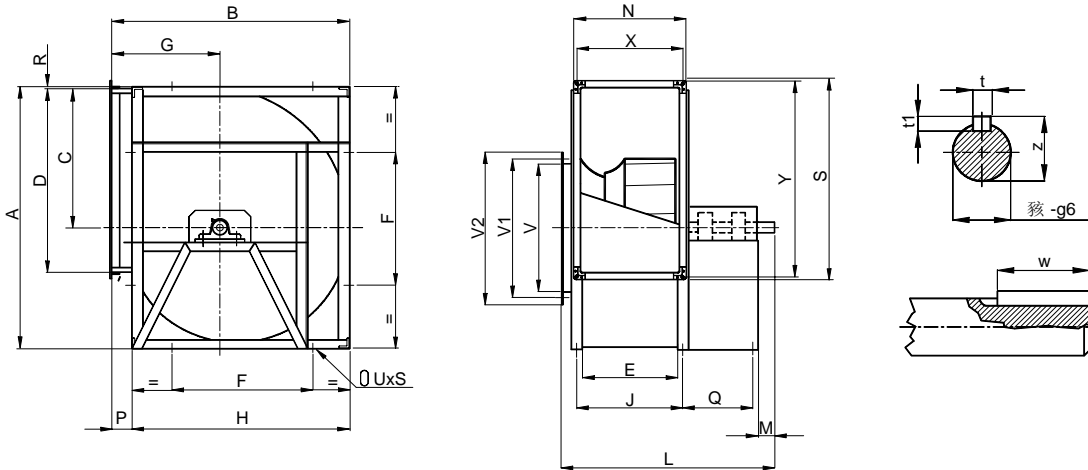
ASA 1120-1400 'X'



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|------|------|------|------|-----|-----|-----|----|------|------|------|------|-----|------|----|----|-----|------|----|-------|
| 1120 | 2033 | 1725 | 1200 | 1422 | 744 | 290 | 748 | 1630 | 804 | 870 | 1173 | 160 | 800 | 95 | 9 | 1478 | 1120 | 1180 | 1226 | 772 | 1450 | 18 | 11 | 110 | 69 | 65 | 17x22 |
| 1250 | 2285 | 1930 | 1353 | 1524 | 807 | 300 | 830 | 1831 | 882 | 957 | 1250 | 166 | 859 | 99 | 9 | 1580 | 1250 | 1303 | 1356 | 831 | 1552 | 20 | 12 | 110 | 74.5 | 70 | 17x22 |
| 1400 | 2568 | 2170 | 1515 | 1794 | 938 | 310 | 963 | 2057 | 1013 | 1088 | 1396 | 181 | 990 | 113 | 13 | 1850 | 1400 | 1480 | 1506 | 962 | 1822 | 22 | 14 | 110 | 85 | 80 | 17x22 |

All Dimensions in mm.

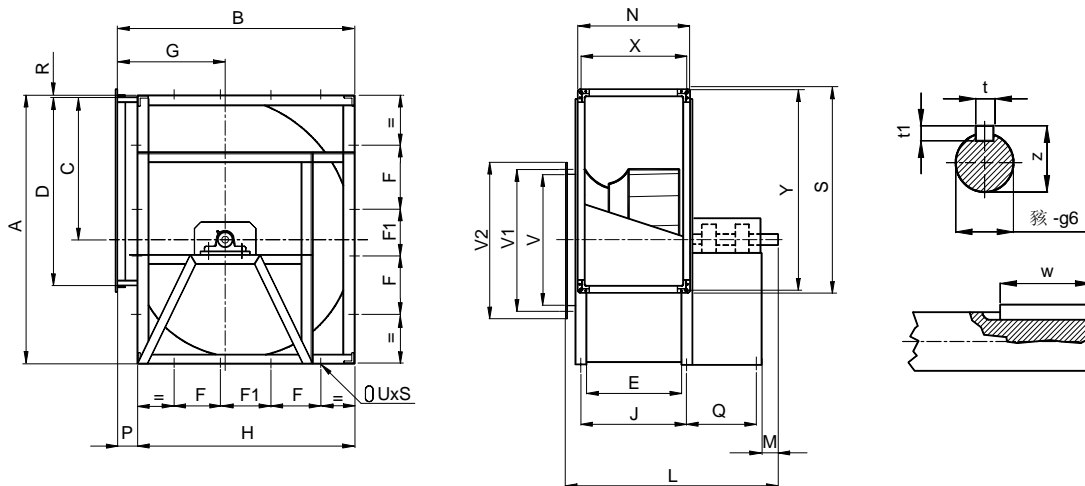
ASA 315-400 'UI'



| Model | A | B | C | D | E | F | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|-----|---|-----|-----|-----|-----|-----|-----|---|----|----|----|----|-------|
| 315 | 578 | 518 | 340 | 404 | 223 | 330 | 236 | 480 | 253 | 705 | 60 | 279 | 38 | 274 | 3 | 460 | 315 | 356 | 395 | 251 | 432 | 8 | 7 | 40 | 28 | 25 | 13x18 |
| 355 | 654 | 578 | 383 | 452 | 247 | 368 | 260 | 548 | 287 | 765 | 60 | 303 | 30 | 300 | 6 | 508 | 355 | 395 | 435 | 275 | 480 | 8 | 7 | 40 | 33 | 30 | 13x18 |
| 400 | 736 | 650 | 432 | 506 | 274 | 402 | 290 | 612 | 314 | 812 | 60 | 330 | 38 | 320 | 5 | 562 | 400 | 438 | 480 | 302 | 534 | 8 | 7 | 40 | 33 | 30 | 13x18 |

All Dimensions in mm.

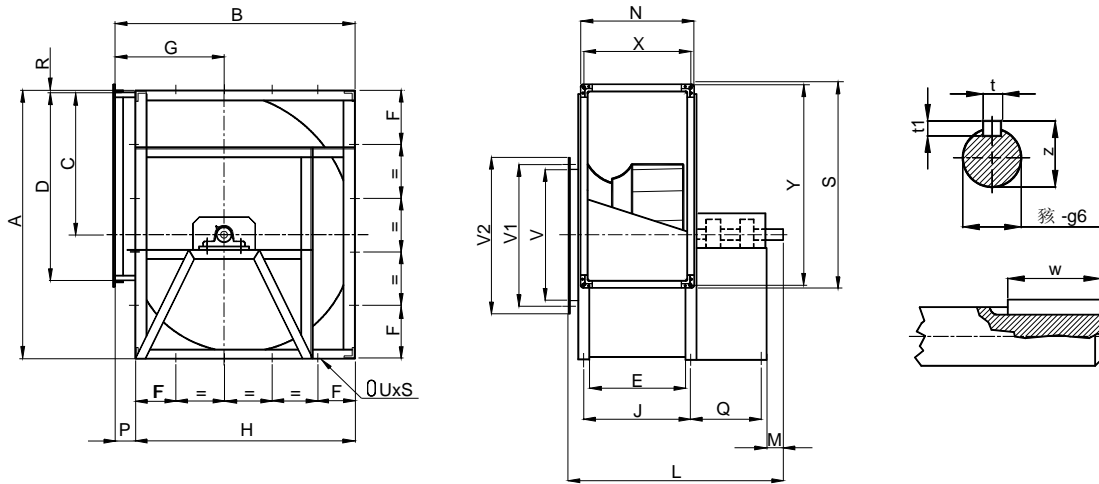
ASA 450-1000 'UI'



| Model | A | B | C | D | E | F | F1 | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|-----|------|-----|------|-----|-----|----|-----|---|------|------|------|------|-----|------|----|----|----|------|----|-------|
| 450 | 827 | 726 | 486 | 568 | 308 | 200 | 111 | 322 | 681 | 348 | 876 | 80 | 364 | 45 | 340 | 5 | 624 | 450 | 487 | 530 | 336 | 596 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 500 | 918 | 800 | 538 | 638 | 345 | 245 | 120 | 352 | 750 | 385 | 933 | 80 | 401 | 50 | 360 | 5 | 694 | 500 | 541 | 580 | 373 | 666 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 560 | 1030 | 892 | 603 | 714 | 383 | 280 | 125 | 390 | 844 | 433 | 1018 | 90 | 439 | 48 | 378 | 7 | 770 | 560 | 605 | 646 | 411 | 742 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 630 | 1157 | 998 | 679 | 800 | 433 | 328 | 110 | 434 | 945 | 483 | 1090 | 90 | 489 | 53 | 400 | 6 | 856 | 630 | 674 | 716 | 461 | 828 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 710 | 1302 | 1120 | 765 | 898 | 479 | 360 | 150 | 484 | 1057 | 529 | 1156 | 90 | 535 | 63 | 420 | 7 | 954 | 710 | 751 | 796 | 507 | 926 | 14 | 9 | 70 | 48.5 | 45 | 17x22 |
| 800 | 1468 | 1254 | 862 | 1006 | 533 | 405 | 171 | 540 | 1180 | 583 | 1228 | 90 | 589 | 74 | 440 | 7 | 1062 | 800 | 837 | 886 | 561 | 1034 | 14 | 9 | 70 | 48.5 | 45 | 17x22 |
| 900 | 1648 | 1408 | 971 | 1130 | 595 | 455 | 189 | 604 | 1319 | 645 | 1360 | 110 | 651 | 89 | 490 | 7 | 1186 | 900 | 934 | 986 | 623 | 1158 | 16 | 10 | 90 | 53.5 | 55 | 17x22 |
| 1000 | 1810 | 1540 | 1066 | 1266 | 663 | 500 | 200 | 656 | 1450 | 713 | 1448 | 110 | 719 | 90 | 510 | 9 | 1322 | 1000 | 1043 | 1086 | 691 | 1294 | 16 | 10 | 90 | 53.5 | 55 | 17x22 |

All Dimensions in mm.

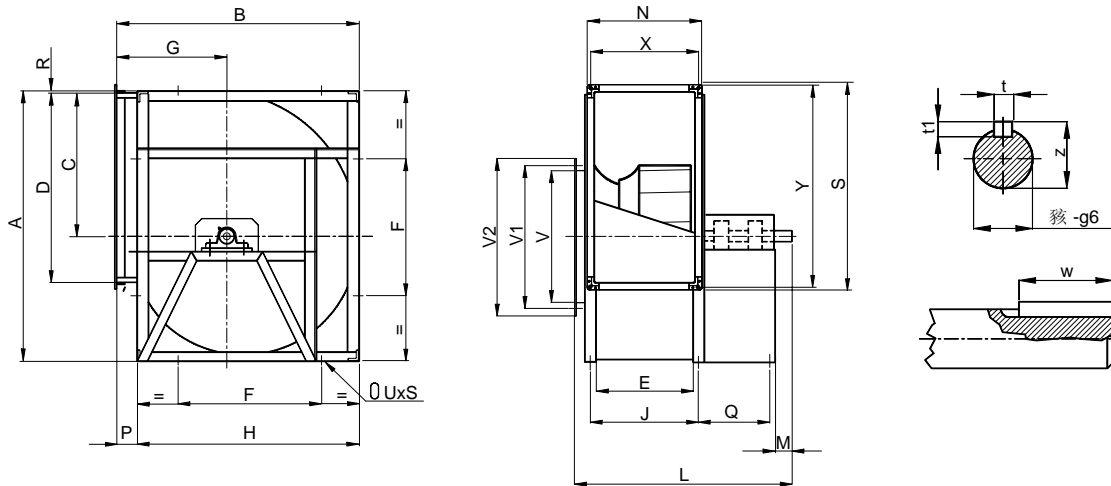
ASA 1120-1400 'UI'



| Model | A | B | C | D | E | F | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|------|------|------|-----|-----|-----|-----|----|------|------|------|------|-----|------|----|----|-----|------|----|-------|
| 1120 | 2033 | 1725 | 1200 | 1422 | 744 | 290 | 748 | 1630 | 804 | 1680 | 110 | 800 | 95 | 572 | 9 | 1478 | 1120 | 1180 | 1226 | 772 | 1450 | 18 | 11 | 90 | 64 | 60 | 17x22 |
| 1250 | 2285 | 1930 | 1353 | 1524 | 807 | 300 | 830 | 1831 | 882 | 1844 | 140 | 859 | 99 | 632 | 9 | 1580 | 1250 | 1303 | 1356 | 831 | 1552 | 18 | 11 | 110 | 69 | 65 | 17x22 |
| 1400 | 2568 | 2170 | 1515 | 1794 | 938 | 310 | 963 | 2057 | 1013 | 2060 | 140 | 990 | 113 | 717 | 13 | 1850 | 1400 | 1480 | 1506 | 962 | 1822 | 20 | 12 | 110 | 74.5 | 70 | 17x22 |

All Dimensions in mm.

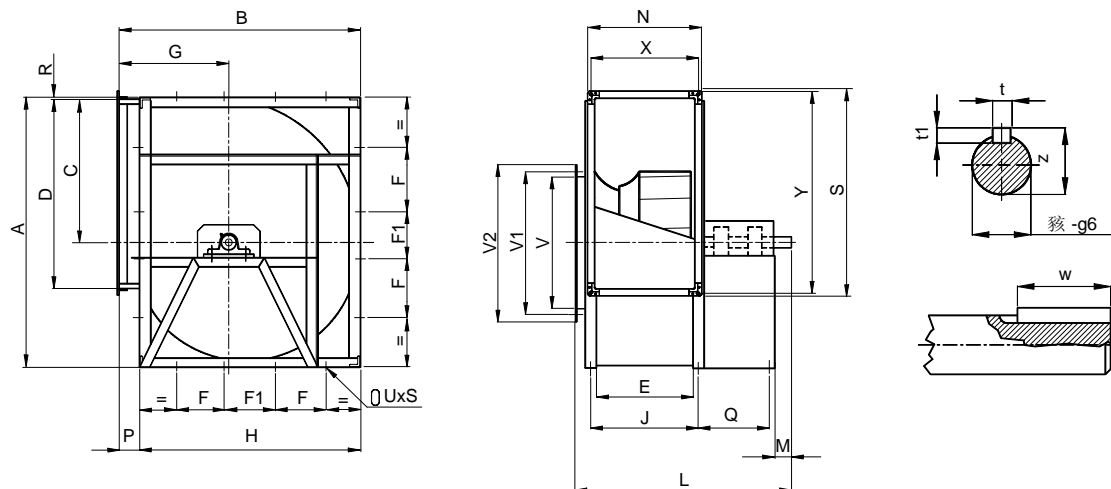
ASA 315-400 'UII'



| Model | A | B | C | D | E | F | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|----|-----|---|-----|-----|-----|-----|-----|-----|---|----|----|----|----|-------|
| 315 | 578 | 518 | 340 | 404 | 223 | 330 | 236 | 480 | 253 | 705 | 60 | 279 | 38 | 274 | 3 | 460 | 315 | 356 | 395 | 251 | 432 | 8 | 7 | 40 | 28 | 25 | 13x18 |
| 355 | 654 | 578 | 383 | 452 | 247 | 368 | 260 | 548 | 287 | 765 | 60 | 303 | 30 | 300 | 6 | 508 | 355 | 395 | 435 | 275 | 480 | 8 | 7 | 40 | 33 | 30 | 13x18 |
| 400 | 736 | 650 | 432 | 506 | 274 | 402 | 290 | 612 | 314 | 812 | 60 | 330 | 38 | 320 | 5 | 562 | 400 | 438 | 480 | 302 | 534 | 8 | 7 | 40 | 33 | 30 | 13x18 |

All Dimensions in mm.

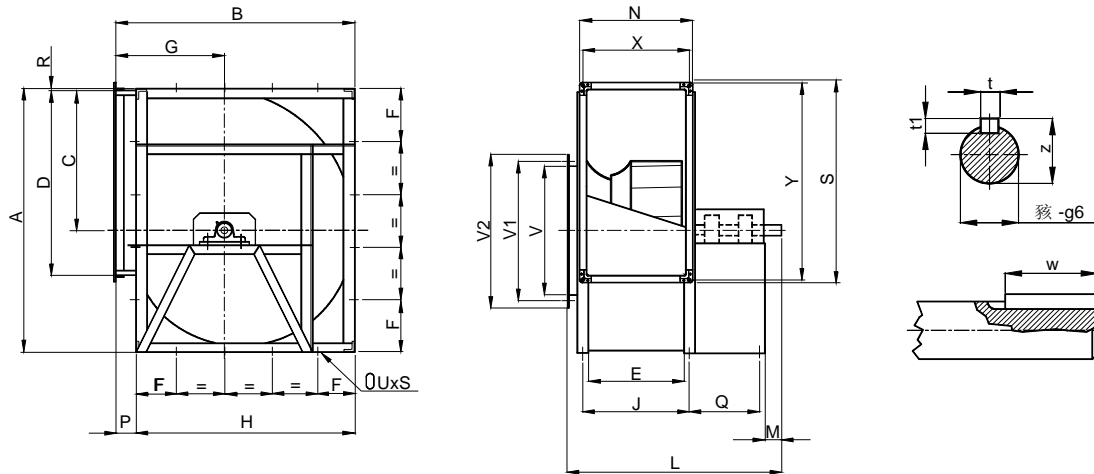
ASA 450-1000 'UII'



| Model | A | B | C | D | E | F | F1 | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|-----|------|-----|------|-----|-----|----|-----|---|------|------|------|------|-----|------|----|----|----|------|----|-------|
| 450 | 827 | 726 | 486 | 568 | 308 | 200 | 111 | 322 | 681 | 348 | 876 | 70 | 364 | 45 | 340 | 5 | 624 | 450 | 487 | 530 | 336 | 596 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 500 | 918 | 800 | 538 | 638 | 345 | 245 | 120 | 352 | 750 | 385 | 933 | 70 | 401 | 50 | 360 | 5 | 694 | 500 | 541 | 580 | 373 | 666 | 10 | 8 | 50 | 38 | 35 | 13x18 |
| 560 | 1030 | 892 | 603 | 714 | 383 | 280 | 125 | 390 | 844 | 433 | 1018 | 90 | 439 | 48 | 378 | 7 | 770 | 560 | 605 | 646 | 411 | 742 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 630 | 1157 | 998 | 679 | 800 | 433 | 328 | 110 | 434 | 945 | 483 | 1090 | 90 | 489 | 53 | 400 | 6 | 856 | 630 | 674 | 716 | 461 | 828 | 12 | 8 | 70 | 43 | 40 | 13x18 |
| 710 | 1302 | 1120 | 765 | 898 | 479 | 360 | 150 | 484 | 1057 | 529 | 1176 | 110 | 535 | 63 | 420 | 7 | 954 | 710 | 751 | 796 | 507 | 926 | 14 | 9 | 90 | 53.5 | 50 | 17x22 |
| 800 | 1468 | 1254 | 862 | 1006 | 533 | 405 | 171 | 540 | 1180 | 583 | 1248 | 110 | 589 | 74 | 440 | 7 | 1062 | 800 | 837 | 886 | 561 | 1034 | 14 | 9 | 90 | 53.5 | 50 | 17x22 |
| 900 | 1648 | 1408 | 971 | 1130 | 595 | 455 | 189 | 604 | 1319 | 645 | 1360 | 110 | 651 | 89 | 490 | 7 | 1186 | 900 | 934 | 986 | 623 | 1158 | 18 | 11 | 90 | 64 | 60 | 17x22 |
| 1000 | 1810 | 1540 | 1066 | 1266 | 663 | 500 | 200 | 656 | 1450 | 713 | 1448 | 110 | 719 | 90 | 510 | 9 | 1322 | 1000 | 1043 | 1086 | 691 | 1294 | 18 | 11 | 90 | 64 | 60 | 17x22 |

All Dimensions in mm.

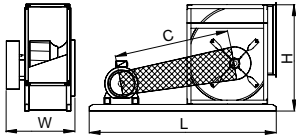
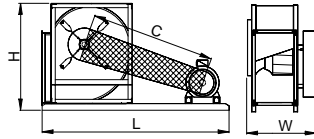
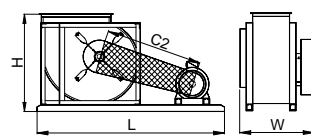
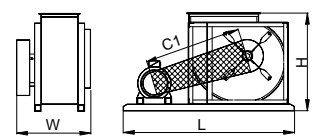
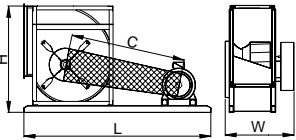
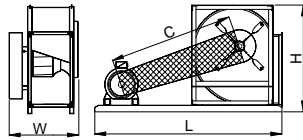
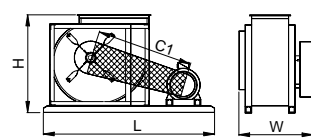
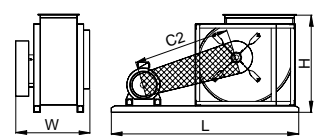
ASA 1120-1400 'UII'



| Model | A | B | C | D | E | F | G | H | J | L | M | N | P | Q | R | S | V | V1 | V2 | X | Y | t | t1 | w | z | Ød | UxS |
|-------|------|------|------|------|-----|-----|-----|------|------|------|-----|-----|-----|-----|----|------|------|------|------|-----|------|----|----|-----|------|----|-------|
| 1120 | 2033 | 1725 | 1200 | 1422 | 744 | 290 | 748 | 1630 | 804 | 1710 | 140 | 800 | 95 | 572 | 9 | 1478 | 1120 | 1180 | 1226 | 772 | 1450 | 18 | 11 | 110 | 69 | 65 | 17x22 |
| 1250 | 2285 | 1930 | 1353 | 1524 | 807 | 300 | 830 | 1831 | 882 | 1844 | 140 | 859 | 99 | 632 | 9 | 1580 | 1250 | 1303 | 1356 | 831 | 1552 | 20 | 12 | 110 | 74.5 | 70 | 17x22 |
| 1400 | 2568 | 2170 | 1515 | 1794 | 938 | 310 | 963 | 2057 | 1013 | 2060 | 140 | 990 | 113 | 717 | 13 | 1850 | 1400 | 1480 | 1506 | 962 | 1822 | 22 | 14 | 110 | 85 | 80 | 17x22 |

All Dimensions in mm.

OVERALL DIMENSION – ASA “C” 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)


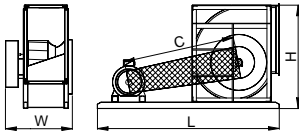
| Model | Motor Frame Size | 90°/ 270° | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|-----|------|-----------|------|-----|------|-----|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) | C1 | C2 | L | W | H | * Wt (kg) |
| 315 | 63 | 432 | 476 | 740 | 481 | 618 | 24 | 507 | 407 | 840 | 481 | 558 | 25 |
| | 71 | 460 | 500 | 780 | 481 | 618 | 24 | 534 | 433 | 880 | 481 | 558 | 25 |
| | 80 | 488 | 524 | 820 | 481 | 618 | 25 | 561 | 459 | 920 | 481 | 558 | 25 |
| | 90 | 515 | 547 | 860 | 481 | 618 | 25 | 587 | 484 | 960 | 481 | 558 | 25 |
| | 100 | 542 | 571 | 900 | 481 | 618 | 25 | 614 | 509 | 1000 | 481 | 558 | 25 |
| | 112 | 568 | 594 | 940 | 481 | 618 | 25 | 638 | 533 | 1040 | 481 | 558 | 26 |
| 355 | 71 | 496 | 547 | 840 | 509 | 694 | 30 | 593 | 479 | 960 | 509 | 618 | 31 |
| | 80 | 523 | 570 | 880 | 509 | 694 | 30 | 601 | 485 | 980 | 509 | 618 | 31 |
| | 90 | 549 | 592 | 920 | 509 | 694 | 30 | 626 | 509 | 1020 | 509 | 618 | 31 |
| | 100 | 576 | 615 | 960 | 509 | 694 | 31 | 652 | 534 | 1060 | 509 | 618 | 31 |
| | 112 | 620 | 654 | 1020 | 509 | 694 | 31 | 695 | 575 | 1120 | 509 | 618 | 31 |
| 400 | 71 | 561 | 621 | 920 | 536 | 776 | 38 | 651 | 527 | 1040 | 536 | 690 | 39 |
| | 80 | 569 | 626 | 940 | 536 | 776 | 39 | 677 | 550 | 1080 | 536 | 690 | 39 |
| | 90 | 595 | 647 | 980 | 536 | 776 | 39 | 702 | 573 | 1120 | 536 | 690 | 39 |
| | 100 | 621 | 669 | 1020 | 536 | 776 | 39 | 727 | 597 | 1160 | 536 | 690 | 40 |
| | 112 | 664 | 708 | 1080 | 536 | 776 | 39 | 750 | 619 | 1200 | 536 | 690 | 40 |
| | 132 | 719 | 756 | 1160 | 536 | 776 | 40 | 823 | 689 | 1300 | 536 | 690 | 40 |
| 450 | 71 | 607 | 680 | 980 | 586 | 867 | 48 | 708 | 571 | 1120 | 586 | 766 | 49 |
| | 80 | 633 | 701 | 1020 | 586 | 867 | 48 | 733 | 593 | 1160 | 586 | 766 | 49 |
| | 90 | 658 | 722 | 1060 | 586 | 867 | 48 | 757 | 615 | 1200 | 586 | 766 | 49 |
| | 100 | 684 | 743 | 1100 | 586 | 867 | 49 | 791 | 647 | 1250 | 586 | 766 | 49 |
| | 112 | 707 | 763 | 1140 | 586 | 867 | 49 | 824 | 678 | 1300 | 586 | 766 | 50 |
| | 132 | 741 | 790 | 1200 | 586 | 867 | 49 | 846 | 699 | 1350 | 586 | 766 | 50 |
| 500 | 71 | 654 | 736 | 1060 | 623 | 968 | 65 | 791 | 642 | 1250 | 623 | 850 | 66 |
| | 80 | 661 | 740 | 1080 | 623 | 968 | 65 | 779 | 629 | 1250 | 623 | 850 | 66 |
| | 90 | 686 | 760 | 1120 | 623 | 968 | 65 | 812 | 659 | 1300 | 623 | 850 | 67 |
| | 100 | 711 | 780 | 1160 | 623 | 968 | 66 | 845 | 691 | 1350 | 623 | 850 | 67 |
| | 112 | 734 | 799 | 1200 | 623 | 968 | 66 | 877 | 720 | 1400 | 623 | 850 | 67 |
| | 132 | 805 | 861 | 1300 | 623 | 968 | 67 | 899 | 740 | 1450 | 623 | 850 | 68 |
| 560 | 80 | 734 | 827 | 1180 | 683 | 1080 | 89 | 897 | 728 | 1400 | 683 | 942 | 91 |
| | 90 | 739 | 830 | 1200 | 683 | 1080 | 89 | 884 | 714 | 1400 | 683 | 942 | 91 |
| | 100 | 773 | 858 | 1250 | 683 | 1080 | 90 | 916 | 744 | 1450 | 683 | 942 | 91 |
| | 112 | 804 | 884 | 1300 | 683 | 1080 | 90 | 947 | 773 | 1500 | 683 | 942 | 92 |
| | 132 | 875 | 945 | 1400 | 683 | 1080 | 91 | 968 | 792 | 1550 | 683 | 942 | 92 |
| | 160 | 938 | 998 | 1500 | 683 | 1080 | 92 | 1028 | 848 | 1650 | 683 | 942 | 93 |
| 630 | 80 | 829 | 937 | 1300 | 733 | 1207 | 115 | 967 | 782 | 1500 | 733 | 1048 | 117 |
| | 90 | 862 | 964 | 1350 | 733 | 1207 | 116 | 998 | 811 | 1550 | 733 | 1048 | 117 |
| | 100 | 848 | 950 | 1350 | 733 | 1207 | 116 | 1031 | 840 | 1600 | 733 | 1048 | 118 |
| | 112 | 879 | 975 | 1400 | 733 | 1207 | 116 | 1061 | 868 | 1650 | 733 | 1048 | 118 |
| | 132 | 948 | 1034 | 1500 | 733 | 1207 | 117 | 1082 | 886 | 1700 | 733 | 1048 | 119 |
| | 160 | 1010 | 1085 | 1600 | 733 | 1207 | 118 | 1140 | 940 | 1800 | 733 | 1048 | 119 |

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

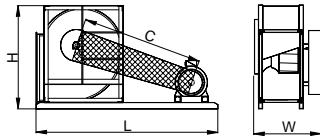
All Dimensions in mm.

OVERALL DIMENSION - ASA "T" SERIES

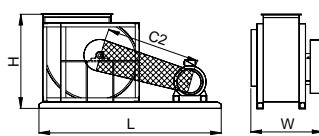
CW 90° (Pos Z)



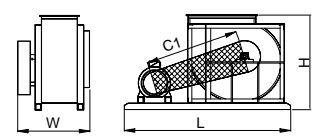
CW 270° (Pos W)



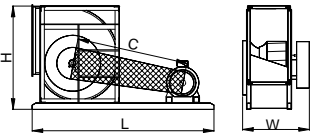
CW 360° (Pos W)



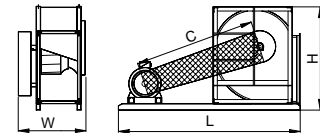
CW 360° (Pos Z)



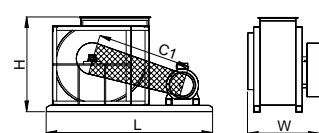
CCW 90° (Pos W)



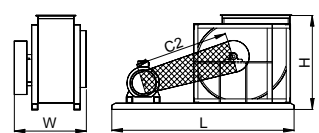
CCW 270° (Pos Z)



CCW 360° (Pos W)



CCW 360° (Pos Z)

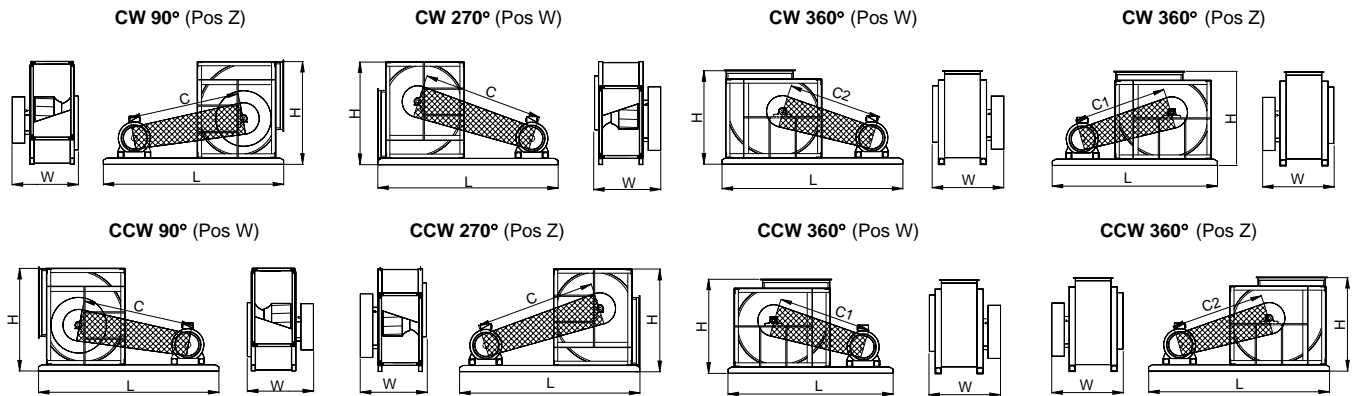


| Model | Motor Frame Size | 90°/ 270° | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|-----|------|-----------|------|------|------|-----|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) | C1 | C2 | L | W | H | * Wt (kg) |
| 315 | 80 | 488 | 524 | 820 | 481 | 618 | 39 | 561 | 459 | 920 | 481 | 558 | 39 |
| | 90 | 515 | 547 | 860 | 481 | 618 | 39 | 587 | 484 | 960 | 481 | 558 | 39 |
| | 100 | 542 | 571 | 900 | 481 | 618 | 39 | 614 | 509 | 1000 | 481 | 558 | 39 |
| | 112 | 568 | 594 | 940 | 481 | 618 | 39 | 638 | 533 | 1040 | 481 | 558 | 40 |
| | 132 | 625 | 645 | 1020 | 481 | 618 | 40 | 694 | 587 | 1120 | 481 | 558 | 40 |
| 355 | 80 | 523 | 570 | 880 | 511 | 694 | 54 | 601 | 485 | 980 | 511 | 618 | 55 |
| | 90 | 549 | 592 | 920 | 511 | 694 | 54 | 626 | 509 | 1020 | 511 | 618 | 55 |
| | 100 | 576 | 615 | 960 | 511 | 694 | 55 | 652 | 534 | 1060 | 511 | 618 | 55 |
| | 112 | 620 | 654 | 1020 | 511 | 694 | 55 | 695 | 575 | 1120 | 511 | 618 | 55 |
| | 132 | 676 | 704 | 1100 | 511 | 694 | 55 | 749 | 628 | 1200 | 511 | 618 | 56 |
| 400 | 90 | 595 | 647 | 980 | 538 | 776 | 65 | 702 | 573 | 1120 | 538 | 690 | 65 |
| | 100 | 621 | 669 | 1020 | 538 | 776 | 65 | 727 | 597 | 1160 | 538 | 690 | 66 |
| | 112 | 664 | 708 | 1080 | 538 | 776 | 65 | 750 | 619 | 1200 | 538 | 690 | 66 |
| | 132 | 719 | 756 | 1160 | 538 | 776 | 66 | 823 | 689 | 1300 | 538 | 690 | 66 |
| | 160 | 776 | 806 | 1250 | 538 | 776 | 66 | 888 | 752 | 1400 | 538 | 690 | 67 |
| 450 | 90 | 658 | 722 | 1060 | 594 | 867 | 77 | 757 | 615 | 1200 | 594 | 766 | 78 |
| | 100 | 684 | 743 | 1100 | 594 | 867 | 78 | 791 | 647 | 1250 | 594 | 766 | 78 |
| | 112 | 707 | 763 | 1140 | 594 | 867 | 78 | 824 | 678 | 1300 | 594 | 766 | 79 |
| | 132 | 741 | 790 | 1200 | 594 | 867 | 78 | 846 | 699 | 1350 | 594 | 766 | 79 |
| | 160 | 807 | 847 | 1300 | 594 | 867 | 79 | 909 | 759 | 1450 | 594 | 766 | 79 |
| 500 | 90 | 686 | 760 | 1120 | 631 | 968 | 99 | 812 | 659 | 1300 | 631 | 850 | 101 |
| | 100 | 711 | 780 | 1160 | 631 | 968 | 100 | 845 | 691 | 1350 | 631 | 850 | 101 |
| | 112 | 734 | 799 | 1200 | 631 | 968 | 100 | 877 | 720 | 1400 | 631 | 850 | 101 |
| | 132 | 805 | 861 | 1300 | 631 | 968 | 101 | 899 | 740 | 1450 | 631 | 850 | 102 |
| | 160 | 870 | 917 | 1400 | 631 | 968 | 101 | 961 | 799 | 1550 | 631 | 850 | 103 |
| 560 | 100 | 773 | 858 | 1250 | 691 | 1080 | 137 | 916 | 744 | 1450 | 691 | 942 | 138 |
| | 112 | 804 | 884 | 1300 | 691 | 1080 | 137 | 947 | 773 | 1500 | 691 | 942 | 139 |
| | 132 | 875 | 945 | 1400 | 691 | 1080 | 138 | 968 | 792 | 1550 | 691 | 942 | 139 |
| | 160 | 938 | 998 | 1500 | 691 | 1080 | 139 | 1028 | 848 | 1650 | 691 | 942 | 140 |
| | 180 | 1012 | 1064 | 1600 | 691 | 1080 | 139 | 1100 | 917 | 1750 | 691 | 942 | 141 |
| 630 | 100 | 848 | 950 | 1350 | 741 | 1207 | 167 | 985 | 797 | 1550 | 741 | 1048 | 168 |
| | 112 | 879 | 975 | 1400 | 741 | 1207 | 167 | 1015 | 824 | 1600 | 741 | 1048 | 169 |
| | 132 | 948 | 1034 | 1500 | 741 | 1207 | 168 | 1082 | 886 | 1700 | 741 | 1048 | 170 |
| | 160 | 1010 | 1085 | 1600 | 741 | 1207 | 169 | 1140 | 940 | 1800 | 741 | 1048 | 170 |
| | 180 | 1034 | 1103 | 1650 | 741 | 1207 | 169 | 1211 | 1008 | 1900 | 741 | 1048 | 171 |
| | 200 | 1107 | 1169 | 1750 | 741 | 1207 | 170 | 1235 | 1030 | 1950 | 741 | 1048 | 172 |
| 710 | 90 | 907 | 1028 | 1450 | 793 | 1382 | 214 | 1080 | 868 | 1700 | 793 | 1200 | 217 |
| | 100 | 941 | 1055 | 1500 | 793 | 1382 | 215 | 1112 | 897 | 1750 | 793 | 1200 | 218 |
| | 112 | 972 | 1080 | 1550 | 793 | 1382 | 215 | 1142 | 924 | 1800 | 793 | 1200 | 218 |
| | 132 | 993 | 1095 | 1600 | 793 | 1382 | 216 | 1162 | 941 | 1850 | 793 | 1200 | 219 |
| | 160 | 1054 | 1144 | 1700 | 793 | 1382 | 217 | 1220 | 994 | 1950 | 793 | 1200 | 220 |
| | 180 | 1126 | 1207 | 1800 | 793 | 1382 | 218 | 1290 | 1061 | 2050 | 793 | 1200 | 221 |
| 800 | 100 | 1018 | 1156 | 1600 | 847 | 1548 | 255 | 1218 | 983 | 1900 | 847 | 1334 | 259 |
| | 112 | 1048 | 1180 | 1650 | 847 | 1548 | 256 | 1247 | 1009 | 1950 | 847 | 1334 | 260 |
| | 132 | 1115 | 1235 | 1750 | 847 | 1548 | 257 | 1267 | 1024 | 2000 | 847 | 1334 | 260 |
| | 160 | 1174 | 1283 | 1850 | 847 | 1548 | 258 | 1370 | 1120 | 2150 | 847 | 1334 | 262 |
| | 180 | 1197 | 1300 | 1900 | 847 | 1548 | 259 | 1391 | 1139 | 2200 | 847 | 1334 | 263 |
| | 200 | 1269 | 1362 | 2000 | 847 | 1548 | 260 | 1461 | 1206 | 2300 | 847 | 1334 | 264 |

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

All Dimensions in mm.

OVERALL DIMENSION - ASA "X" SERIES

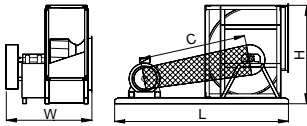
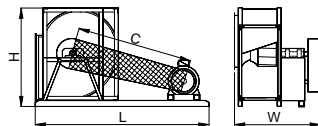
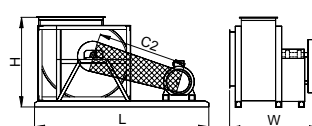
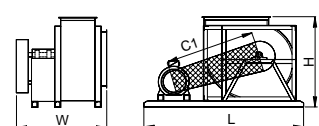
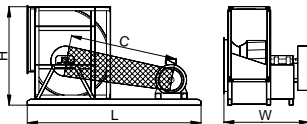
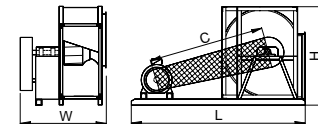
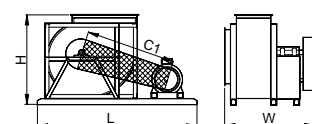
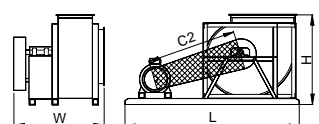


| Model | Motor Frame Size | 90°/ 270° | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|------|------|-----------|------|------|------|------|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) | C1 | C2 | L | W | H | * Wt (kg) |
| 315 | 112 | 568 | 594 | 940 | 487 | 618 | 41 | 638 | 533 | 1040 | 487 | 558 | 42 |
| | 132 | 625 | 645 | 1020 | 487 | 618 | 42 | 694 | 587 | 1120 | 487 | 558 | 42 |
| | 160 | 715 | 728 | 1140 | 487 | 618 | 42 | 791 | 684 | 1250 | 487 | 558 | 43 |
| 355 | 132 | 676 | 704 | 1100 | 533 | 694 | 57 | 749 | 628 | 1200 | 533 | 618 | 58 |
| | 160 | 745 | 766 | 1200 | 533 | 694 | 58 | 816 | 693 | 1300 | 533 | 618 | 58 |
| | 180 | 823 | 839 | 1300 | 533 | 694 | 58 | 892 | 769 | 1400 | 533 | 618 | 59 |
| 400 | 132 | 719 | 756 | 1160 | 560 | 776 | 67 | 823 | 689 | 1300 | 560 | 690 | 67 |
| | 160 | 776 | 806 | 1250 | 560 | 776 | 67 | 888 | 752 | 1400 | 560 | 690 | 68 |
| | 180 | 854 | 877 | 1350 | 560 | 776 | 68 | 914 | 778 | 1450 | 560 | 690 | 68 |
| 450 | 160 | 807 | 847 | 1300 | 616 | 867 | 81 | 909 | 759 | 1450 | 616 | 766 | 81 |
| | 180 | 883 | 916 | 1400 | 616 | 867 | 81 | 983 | 832 | 1550 | 616 | 766 | 82 |
| | 200 | 960 | 987 | 1500 | 616 | 867 | 82 | 1059 | 906 | 1650 | 616 | 766 | 82 |
| 500 | 160 | 870 | 917 | 1400 | 653 | 968 | 103 | 961 | 799 | 1550 | 653 | 850 | 105 |
| | 180 | 945 | 985 | 1500 | 653 | 968 | 104 | 1034 | 871 | 1650 | 653 | 850 | 105 |
| | 200 | 972 | 1008 | 1550 | 653 | 968 | 105 | 1109 | 944 | 1750 | 653 | 850 | 106 |
| 560 | 160 | 938 | 998 | 1500 | 697 | 1080 | 142 | 1076 | 895 | 1700 | 697 | 942 | 143 |
| | 180 | 1012 | 1064 | 1600 | 697 | 1080 | 142 | 1100 | 917 | 1750 | 697 | 942 | 144 |
| | 200 | 1038 | 1085 | 1650 | 697 | 1080 | 143 | 1173 | 989 | 1850 | 697 | 942 | 144 |
| | 225 | 1109 | 1149 | 1750 | 697 | 1080 | 144 | 1242 | 1056 | 1950 | 697 | 942 | 145 |
| 630 | 180 | 1034 | 1103 | 1650 | 747 | 1207 | 171 | 1211 | 1008 | 1900 | 747 | 1048 | 173 |
| | 200 | 1107 | 1169 | 1750 | 747 | 1207 | 172 | 1235 | 1030 | 1950 | 747 | 1048 | 174 |
| | 225 | 1177 | 1230 | 1850 | 747 | 1207 | 173 | 1301 | 1095 | 2050 | 747 | 1048 | 174 |
| | 250 | 1247 | 1294 | 1950 | 747 | 1207 | 174 | 1370 | 1161 | 2150 | 747 | 1048 | 175 |
| 710 | 160 | 1054 | 1144 | 1700 | 817 | 1382 | 220 | 1220 | 994 | 1950 | 817 | 1200 | 223 |
| | 180 | 1126 | 1207 | 1800 | 817 | 1382 | 221 | 1290 | 1061 | 2050 | 817 | 1200 | 224 |
| | 200 | 1150 | 1226 | 1850 | 817 | 1382 | 222 | 1313 | 1082 | 2100 | 817 | 1200 | 225 |
| | 225 | 1219 | 1286 | 1950 | 817 | 1382 | 223 | 1379 | 1146 | 2200 | 817 | 1200 | 226 |
| 800 | 180 | 1197 | 1300 | 1900 | 871 | 1548 | 263 | 1391 | 1139 | 2200 | 871 | 1334 | 267 |
| | 200 | 1269 | 1362 | 2000 | 871 | 1548 | 264 | 1461 | 1206 | 2300 | 871 | 1334 | 268 |
| | 225 | 1336 | 1420 | 2100 | 871 | 1548 | 266 | 1526 | 1268 | 2400 | 871 | 1334 | 269 |
| | 250 | 1404 | 1480 | 2200 | 871 | 1548 | 267 | 1592 | 1332 | 2500 | 871 | 1334 | 270 |
| 900 | 180 | 1315 | 1441 | 2050 | 941 | 1728 | 324 | 1543 | 1260 | 2400 | 941 | 1488 | 328 |
| | 200 | 1385 | 1501 | 2150 | 941 | 1728 | 325 | 1564 | 1278 | 2450 | 941 | 1488 | 329 |
| | 225 | 1451 | 1557 | 2250 | 941 | 1728 | 326 | 1627 | 1338 | 2550 | 941 | 1488 | 330 |
| | 250 | 1518 | 1615 | 2350 | 941 | 1728 | 327 | 1692 | 1399 | 2650 | 941 | 1488 | 331 |
| 1000 | 200 | 1451 | 1591 | 2250 | 1009 | 1890 | 375 | 1719 | 1405 | 2650 | 1009 | 1620 | 380 |
| | 225 | 1515 | 1644 | 2350 | 1009 | 1890 | 376 | 1781 | 1463 | 2750 | 1009 | 1620 | 381 |
| | 250 | 1581 | 1700 | 2450 | 1009 | 1890 | 377 | 1844 | 1523 | 2850 | 1009 | 1620 | 382 |
| | 280 | 1690 | 1796 | 2600 | 1009 | 1890 | 379 | 1903 | 1579 | 2950 | 1009 | 1620 | 384 |
| 1120 | 200 | 1616 | 1773 | 2450 | 1203 | 2158 | 675 | 1836 | 1482 | 2800 | 1203 | 1850 | 684 |
| | 225 | 1680 | 1827 | 2550 | 1203 | 2158 | 678 | 1945 | 1585 | 2950 | 1203 | 1850 | 688 |
| | 250 | 1746 | 1882 | 2650 | 1203 | 2158 | 680 | 2008 | 1645 | 3050 | 1203 | 1850 | 691 |
| | 280 | 1806 | 1932 | 2750 | 1203 | 2158 | 683 | 2067 | 1700 | 3150 | 1203 | 1850 | 694 |
| 1250 | 200 | 1717 | 1914 | 2600 | 1275 | 2410 | 950 | 2068 | 1669 | 3100 | 1275 | 2055 | 974 |
| | 225 | 1779 | 1965 | 2700 | 1275 | 2410 | 955 | 2129 | 1725 | 3200 | 1275 | 2055 | 979 |
| | 250 | 1842 | 2017 | 2800 | 1275 | 2410 | 960 | 2190 | 1782 | 3300 | 1275 | 2055 | 984 |
| | 280 | 1901 | 2064 | 2900 | 1275 | 2410 | 965 | 2247 | 1835 | 3400 | 1275 | 2055 | 989 |
| 1400 | 225 | 1942 | 2164 | 2950 | 1422 | 2693 | 1262 | 2291 | 1848 | 3450 | 1422 | 2295 | 1286 |
| | 250 | 2004 | 2214 | 3050 | 1422 | 2693 | 1267 | 2352 | 1903 | 3550 | 1422 | 2295 | 1291 |
| | 280 | 2060 | 2259 | 3150 | 1422 | 2693 | 1272 | 2408 | 1954 | 3650 | 1422 | 2295 | 1296 |
| | 315 | 2160 | 2343 | 3300 | 1422 | 2693 | 1279 | 2505 | 2046 | 3800 | 1422 | 2295 | 1303 |

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

All Dimensions in mm.

OVERALL DIMENSION – ASA “UI” SERIES

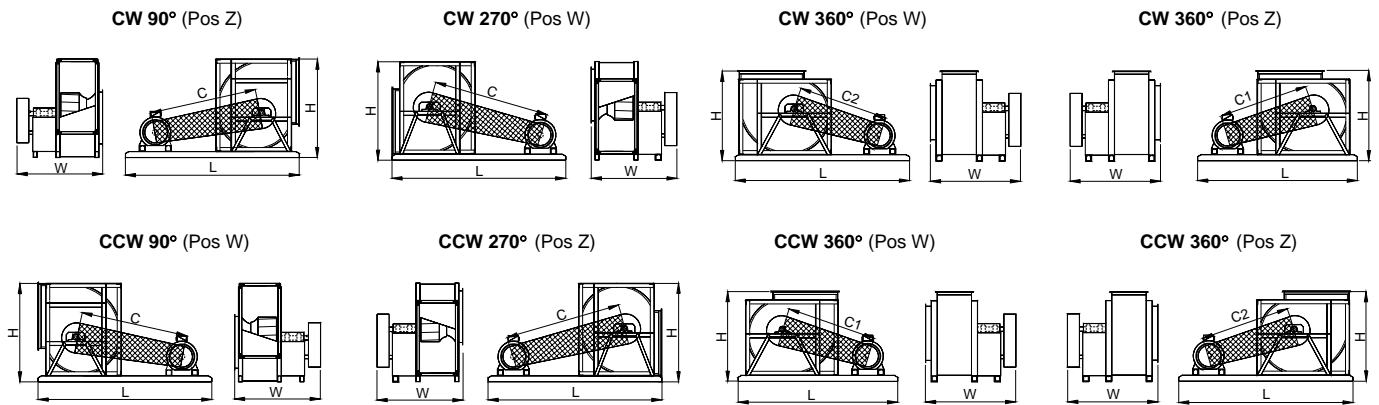
CW 90° (Pos Z)

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) 90° | * Wt (kg) 270° | C1 | C2 | L | W | H | * Wt (kg) |
| 315 | 63 | 432 | 476 | 740 | 735 | 618 | 40 | 41 | 507 | 407 | 840 | 735 | 558 | 41 |
| | 71 | 460 | 500 | 780 | 735 | 618 | 40 | 41 | 534 | 433 | 880 | 735 | 558 | 41 |
| | 80 | 488 | 524 | 820 | 735 | 618 | 41 | 41 | 561 | 459 | 920 | 735 | 558 | 41 |
| | 90 | 515 | 547 | 860 | 735 | 618 | 41 | 41 | 587 | 484 | 960 | 735 | 558 | 42 |
| | 100 | 542 | 571 | 900 | 735 | 618 | 41 | 42 | 614 | 509 | 1000 | 735 | 558 | 42 |
| | 112 | 568 | 594 | 940 | 735 | 618 | 42 | 42 | 638 | 533 | 1040 | 735 | 558 | 42 |
| 355 | 71 | 496 | 547 | 840 | 795 | 694 | 52 | 55 | 593 | 479 | 960 | 795 | 618 | 55 |
| | 80 | 523 | 570 | 880 | 795 | 694 | 53 | 55 | 601 | 485 | 980 | 795 | 618 | 55 |
| | 90 | 549 | 592 | 920 | 795 | 694 | 53 | 55 | 626 | 509 | 1020 | 795 | 618 | 56 |
| | 100 | 576 | 615 | 960 | 795 | 694 | 53 | 56 | 652 | 534 | 1060 | 795 | 618 | 56 |
| | 112 | 620 | 654 | 1020 | 795 | 694 | 54 | 56 | 695 | 575 | 1120 | 795 | 618 | 56 |
| 400 | 71 | 561 | 621 | 920 | 842 | 776 | 63 | 65 | 651 | 527 | 1040 | 842 | 690 | 65 |
| | 80 | 569 | 626 | 940 | 842 | 776 | 63 | 65 | 677 | 550 | 1080 | 842 | 690 | 65 |
| | 90 | 595 | 647 | 980 | 842 | 776 | 64 | 65 | 702 | 573 | 1120 | 842 | 690 | 66 |
| | 100 | 621 | 669 | 1020 | 842 | 776 | 64 | 65 | 727 | 597 | 1160 | 842 | 690 | 66 |
| | 112 | 664 | 708 | 1080 | 842 | 776 | 64 | 66 | 750 | 619 | 1200 | 842 | 690 | 66 |
| | 132 | 719 | 756 | 1160 | 842 | 776 | 65 | 66 | 823 | 689 | 1300 | 842 | 690 | 67 |
| 450 | 71 | 607 | 680 | 980 | 906 | 867 | 78 | 79 | 708 | 571 | 1120 | 906 | 766 | 78 |
| | 80 | 633 | 701 | 1020 | 906 | 867 | 78 | 79 | 733 | 593 | 1160 | 906 | 766 | 79 |
| | 90 | 658 | 722 | 1060 | 906 | 867 | 78 | 79 | 757 | 615 | 1200 | 906 | 766 | 79 |
| | 100 | 684 | 743 | 1100 | 906 | 867 | 79 | 80 | 791 | 647 | 1250 | 906 | 766 | 79 |
| | 112 | 707 | 763 | 1140 | 906 | 867 | 79 | 80 | 824 | 678 | 1300 | 906 | 766 | 80 |
| | 132 | 741 | 790 | 1200 | 906 | 867 | 79 | 80 | 846 | 699 | 1350 | 906 | 766 | 80 |
| 500 | 71 | 654 | 736 | 1060 | 963 | 968 | 101 | 101 | 791 | 642 | 1250 | 963 | 850 | 102 |
| | 80 | 661 | 740 | 1080 | 963 | 968 | 101 | 101 | 779 | 629 | 1250 | 963 | 850 | 102 |
| | 90 | 686 | 760 | 1120 | 963 | 968 | 102 | 102 | 812 | 659 | 1300 | 963 | 850 | 103 |
| | 100 | 711 | 780 | 1160 | 963 | 968 | 102 | 102 | 845 | 691 | 1350 | 963 | 850 | 103 |
| | 112 | 734 | 799 | 1200 | 963 | 968 | 103 | 103 | 877 | 720 | 1400 | 963 | 850 | 104 |
| | 132 | 805 | 861 | 1300 | 963 | 968 | 104 | 104 | 899 | 740 | 1450 | 963 | 850 | 105 |
| 560 | 80 | 734 | 827 | 1180 | 1048 | 1080 | 131 | 134 | 897 | 728 | 1400 | 1048 | 942 | 135 |
| | 90 | 739 | 830 | 1200 | 1048 | 1080 | 131 | 134 | 884 | 714 | 1400 | 1048 | 942 | 135 |
| | 100 | 773 | 858 | 1250 | 1048 | 1080 | 132 | 135 | 916 | 744 | 1450 | 1048 | 942 | 136 |
| | 112 | 804 | 884 | 1300 | 1048 | 1080 | 132 | 135 | 947 | 773 | 1500 | 1048 | 942 | 136 |
| | 132 | 875 | 945 | 1400 | 1048 | 1080 | 133 | 136 | 968 | 792 | 1550 | 1048 | 942 | 137 |
| | 160 | 938 | 998 | 1500 | 1048 | 1080 | 135 | 138 | 1028 | 848 | 1650 | 1048 | 942 | 138 |
| 630 | 80 | 829 | 937 | 1300 | 1120 | 1207 | 161 | 164 | 967 | 782 | 1500 | 1120 | 1048 | 165 |
| | 90 | 862 | 964 | 1350 | 1120 | 1207 | 161 | 164 | 998 | 811 | 1550 | 1120 | 1048 | 165 |
| | 100 | 848 | 950 | 1350 | 1120 | 1207 | 161 | 164 | 1031 | 840 | 1600 | 1120 | 1048 | 166 |
| | 112 | 879 | 975 | 1400 | 1120 | 1207 | 162 | 165 | 1061 | 868 | 1650 | 1120 | 1048 | 167 |
| | 132 | 948 | 1034 | 1500 | 1120 | 1207 | 163 | 166 | 1082 | 886 | 1700 | 1120 | 1048 | 167 |
| | 160 | 1010 | 1085 | 1600 | 1120 | 1207 | 164 | 167 | 1140 | 940 | 1800 | 1120 | 1048 | 168 |
| 710 | 90 | 907 | 1028 | 1450 | 1186 | 1382 | 219 | 220 | 1080 | 868 | 1700 | 1186 | 1200 | 226 |
| | 100 | 941 | 1055 | 1500 | 1186 | 1382 | 220 | 221 | 1112 | 897 | 1750 | 1186 | 1200 | 226 |
| | 112 | 972 | 1080 | 1550 | 1186 | 1382 | 221 | 222 | 1142 | 924 | 1800 | 1186 | 1200 | 227 |
| | 132 | 993 | 1095 | 1600 | 1186 | 1382 | 222 | 223 | 1162 | 941 | 1850 | 1186 | 1200 | 228 |
| | 160 | 1054 | 1144 | 1700 | 1186 | 1382 | 224 | 225 | 1220 | 994 | 1950 | 1186 | 1200 | 230 |
| | 180 | 1126 | 1207 | 1800 | 1186 | 1382 | 225 | 227 | 1290 | 1061 | 2050 | 1186 | 1200 | 232 |

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

All Dimensions in mm.

OVERALL DIMENSION – ASA “UI” SERIES

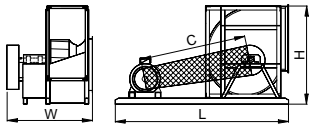
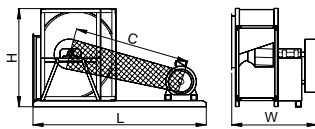
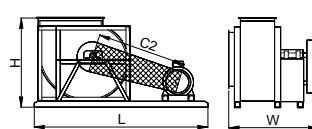
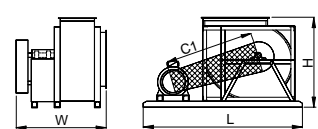
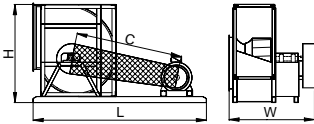
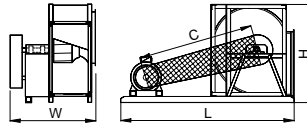
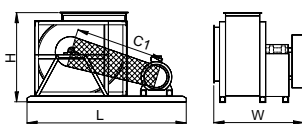
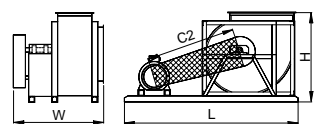


| Model | Motor Frame Size | 90°/ 270° | | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|------|------|---------------|----------------|------|------|------|------|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) 90° | * Wt (kg) 270° | C1 | C2 | L | W | H | * Wt (kg) |
| 800 | 100 | 1018 | 1156 | 1600 | 1258 | 1548 | 286 | 294 | 1218 | 983 | 1900 | 1258 | 1334 | 297 |
| | 112 | 1048 | 1180 | 1650 | 1258 | 1548 | 287 | 295 | 1247 | 1009 | 1950 | 1258 | 1334 | 298 |
| | 132 | 1115 | 1235 | 1750 | 1258 | 1548 | 289 | 297 | 1267 | 1024 | 2000 | 1258 | 1334 | 299 |
| | 160 | 1174 | 1283 | 1850 | 1258 | 1548 | 291 | 299 | 1370 | 1120 | 2150 | 1258 | 1334 | 302 |
| | 180 | 1197 | 1300 | 1900 | 1258 | 1548 | 292 | 300 | 1391 | 1139 | 2200 | 1258 | 1334 | 303 |
| | 200 | 1269 | 1362 | 2000 | 1258 | 1548 | 294 | 301 | 1461 | 1206 | 2300 | 1258 | 1334 | 305 |
| 900 | 100 | 1140 | 1302 | 1750 | 1390 | 1728 | 350 | 359 | 1374 | 1108 | 2100 | 1390 | 1488 | 366 |
| | 112 | 1169 | 1325 | 1800 | 1390 | 1728 | 351 | 360 | 1403 | 1133 | 2150 | 1390 | 1488 | 367 |
| | 132 | 1189 | 1338 | 1850 | 1390 | 1728 | 352 | 361 | 1421 | 1148 | 2200 | 1390 | 1488 | 368 |
| | 160 | 1293 | 1425 | 2000 | 1390 | 1728 | 354 | 364 | 1476 | 1197 | 2300 | 1390 | 1488 | 370 |
| | 180 | 1315 | 1441 | 2050 | 1390 | 1728 | 355 | 365 | 1543 | 1260 | 2400 | 1390 | 1488 | 372 |
| | 200 | 1385 | 1501 | 2150 | 1390 | 1728 | 357 | 367 | 1564 | 1278 | 2450 | 1390 | 1488 | 373 |
| 1000 | 112 | 1286 | 1463 | 1950 | 1478 | 1890 | 398 | 405 | 1514 | 1222 | 2300 | 1478 | 1620 | 426 |
| | 132 | 1305 | 1475 | 2000 | 1478 | 1890 | 399 | 405 | 1532 | 1236 | 2350 | 1478 | 1620 | 427 |
| | 160 | 1361 | 1518 | 2100 | 1478 | 1890 | 401 | 407 | 1586 | 1282 | 2450 | 1478 | 1620 | 429 |
| | 180 | 1429 | 1575 | 2200 | 1478 | 1890 | 403 | 409 | 1651 | 1343 | 2550 | 1478 | 1620 | 431 |
| | 200 | 1451 | 1591 | 2250 | 1478 | 1890 | 403 | 410 | 1719 | 1405 | 2650 | 1478 | 1620 | 433 |
| | 225 | 1515 | 1644 | 2350 | 1478 | 1890 | 405 | 412 | 1781 | 1463 | 2750 | 1478 | 1620 | 434 |
| 1120 | 112 | 1358 | 1564 | 2050 | 1710 | 2158 | 728 | 728 | 1631 | 1300 | 2450 | 1710 | 1850 | 745 |
| | 132 | 1423 | 1615 | 2150 | 1710 | 2158 | 732 | 732 | 1695 | 1356 | 2550 | 1710 | 1850 | 749 |
| | 160 | 1479 | 1658 | 2250 | 1710 | 2158 | 736 | 736 | 1749 | 1403 | 2650 | 1710 | 1850 | 753 |
| | 180 | 1547 | 1715 | 2350 | 1710 | 2158 | 740 | 740 | 1815 | 1464 | 2750 | 1710 | 1850 | 757 |
| | 200 | 1616 | 1773 | 2450 | 1710 | 2158 | 744 | 744 | 1836 | 1482 | 2800 | 1710 | 1850 | 759 |
| | 225 | 1680 | 1827 | 2550 | 1710 | 2158 | 748 | 748 | 1945 | 1585 | 2950 | 1710 | 1850 | 765 |
| | 250 | 1746 | 1882 | 2650 | 1710 | 2158 | 752 | 752 | 2008 | 1645 | 3050 | 1710 | 1850 | 769 |
| 1250 | 132 | 1575 | 1805 | 2350 | 1869 | 2410 | 1088 | 1088 | 1884 | 1504 | 2800 | 1869 | 2055 | 1123 |
| | 160 | 1629 | 1846 | 2450 | 1869 | 2410 | 1096 | 1096 | 1937 | 1550 | 2900 | 1869 | 2055 | 1130 |
| | 180 | 1696 | 1900 | 2550 | 1869 | 2410 | 1103 | 1103 | 2002 | 1608 | 3000 | 1869 | 2055 | 1137 |
| | 200 | 1717 | 1914 | 2600 | 1869 | 2410 | 1106 | 1106 | 2068 | 1669 | 3100 | 1869 | 2055 | 1144 |
| | 225 | 1779 | 1965 | 2700 | 1869 | 2410 | 1114 | 1114 | 2129 | 1725 | 3200 | 1869 | 2055 | 1152 |
| | 250 | 1842 | 2017 | 2800 | 1869 | 2410 | 1121 | 1121 | 2190 | 1782 | 3300 | 1869 | 2055 | 1159 |
| 1400 | 132 | 1744 | 2011 | 2600 | 2086 | 2693 | 1425 | 1425 | 2096 | 1675 | 3100 | 2086 | 2295 | 1461 |
| | 160 | 1796 | 2050 | 2700 | 2086 | 2693 | 1432 | 1432 | 2148 | 1720 | 3200 | 2086 | 2295 | 1468 |
| | 180 | 1815 | 2062 | 2750 | 2086 | 2693 | 1435 | 1435 | 2212 | 1778 | 3300 | 2086 | 2295 | 1475 |
| | 200 | 1881 | 2115 | 2850 | 2086 | 2693 | 1443 | 1443 | 2232 | 1794 | 3350 | 2086 | 2295 | 1479 |
| | 225 | 1942 | 2164 | 2950 | 2086 | 2693 | 1450 | 1450 | 2291 | 1848 | 3450 | 2086 | 2295 | 1486 |
| | 250 | 2004 | 2214 | 3050 | 2086 | 2693 | 1457 | 1457 | 2352 | 1903 | 3550 | 2086 | 2295 | 1493 |
| | 280 | 2060 | 2259 | 3150 | 2086 | 2693 | 1464 | 1464 | 2408 | 1954 | 3650 | 2086 | 2295 | 1500 |

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

All Dimensions in mm.

OVERALL DIMENSION – ASA “UI” 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)


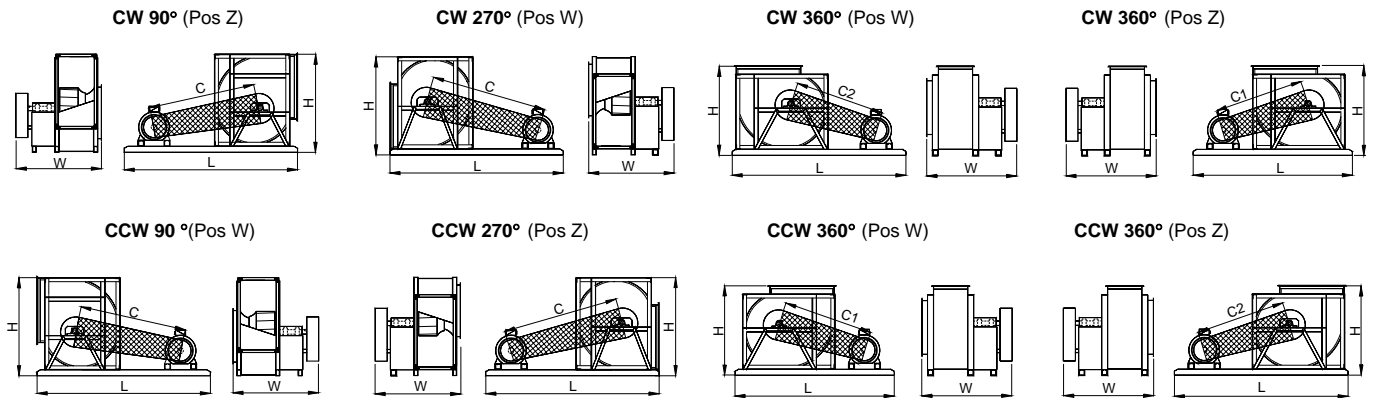
| Model | Motor Frame Size | 90°/ 270° | | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|------|------|---------------|----------------|------|------|------|------|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) 90° | * Wt (kg) 270° | C1 | C2 | L | W | H | * Wt (kg) |
| 315 | 80 | 488 | 524 | 820 | 735 | 618 | 41 | 42 | 561 | 459 | 920 | 735 | 558 | 42 |
| | 90 | 515 | 547 | 860 | 735 | 618 | 41 | 42 | 587 | 484 | 960 | 735 | 558 | 42 |
| | 100 | 542 | 571 | 900 | 735 | 618 | 41 | 42 | 614 | 509 | 1000 | 735 | 558 | 43 |
| | 112 | 568 | 594 | 940 | 735 | 618 | 42 | 43 | 638 | 533 | 1040 | 735 | 558 | 43 |
| | 132 | 625 | 645 | 1020 | 735 | 618 | 42 | 43 | 694 | 587 | 1120 | 735 | 558 | 44 |
| 355 | 80 | 523 | 570 | 880 | 795 | 694 | 53 | 56 | 601 | 485 | 980 | 795 | 618 | 56 |
| | 90 | 549 | 592 | 920 | 795 | 694 | 53 | 56 | 626 | 509 | 1020 | 795 | 618 | 57 |
| | 100 | 576 | 615 | 960 | 795 | 694 | 53 | 56 | 652 | 534 | 1060 | 795 | 618 | 57 |
| | 112 | 620 | 654 | 1020 | 795 | 694 | 54 | 57 | 695 | 575 | 1120 | 795 | 618 | 57 |
| | 132 | 676 | 704 | 1100 | 795 | 694 | 55 | 58 | 749 | 628 | 1200 | 795 | 618 | 58 |
| 400 | 90 | 595 | 647 | 980 | 842 | 776 | 63 | 66 | 702 | 573 | 1120 | 842 | 690 | 66 |
| | 100 | 621 | 669 | 1020 | 842 | 776 | 63 | 66 | 727 | 597 | 1160 | 842 | 690 | 67 |
| | 112 | 664 | 708 | 1080 | 842 | 776 | 64 | 66 | 750 | 619 | 1200 | 842 | 690 | 67 |
| | 132 | 719 | 756 | 1160 | 842 | 776 | 64 | 67 | 823 | 689 | 1300 | 842 | 690 | 68 |
| | 160 | 776 | 806 | 1250 | 842 | 776 | 65 | 68 | 888 | 752 | 1400 | 842 | 690 | 68 |
| 450 | 90 | 658 | 722 | 1060 | 906 | 867 | 78 | 80 | 757 | 615 | 1200 | 906 | 766 | 80 |
| | 100 | 684 | 743 | 1100 | 906 | 867 | 78 | 81 | 791 | 647 | 1250 | 906 | 766 | 81 |
| | 112 | 707 | 763 | 1140 | 906 | 867 | 78 | 81 | 824 | 678 | 1300 | 906 | 766 | 81 |
| | 132 | 741 | 790 | 1200 | 906 | 867 | 79 | 81 | 846 | 699 | 1350 | 906 | 766 | 81 |
| | 160 | 807 | 847 | 1300 | 906 | 867 | 80 | 82 | 909 | 759 | 1450 | 906 | 766 | 82 |
| 500 | 90 | 686 | 760 | 1120 | 963 | 968 | 100 | 102 | 812 | 659 | 1300 | 963 | 850 | 104 |
| | 100 | 711 | 780 | 1160 | 963 | 968 | 101 | 103 | 845 | 691 | 1350 | 963 | 850 | 104 |
| | 112 | 734 | 799 | 1200 | 963 | 968 | 101 | 103 | 877 | 720 | 1400 | 963 | 850 | 105 |
| | 132 | 805 | 861 | 1300 | 963 | 968 | 102 | 104 | 899 | 740 | 1450 | 963 | 850 | 105 |
| | 160 | 870 | 917 | 1400 | 963 | 968 | 103 | 106 | 961 | 799 | 1550 | 963 | 850 | 107 |
| 560 | 100 | 773 | 858 | 1250 | 1048 | 1080 | 133 | 136 | 916 | 744 | 1450 | 1048 | 942 | 137 |
| | 112 | 804 | 884 | 1300 | 1048 | 1080 | 134 | 137 | 947 | 773 | 1500 | 1048 | 942 | 138 |
| | 132 | 875 | 945 | 1400 | 1048 | 1080 | 135 | 138 | 968 | 792 | 1550 | 1048 | 942 | 139 |
| | 160 | 938 | 998 | 1500 | 1048 | 1080 | 136 | 139 | 1028 | 848 | 1650 | 1048 | 942 | 140 |
| | 180 | 1012 | 1064 | 1600 | 1048 | 1080 | 138 | 140 | 1100 | 917 | 1750 | 1048 | 942 | 141 |
| 630 | 100 | 848 | 950 | 1350 | 1120 | 1207 | 163 | 166 | 985 | 797 | 1550 | 1120 | 1048 | 167 |
| | 112 | 879 | 975 | 1400 | 1120 | 1207 | 163 | 167 | 1015 | 824 | 1600 | 1120 | 1048 | 167 |
| | 132 | 948 | 1034 | 1500 | 1120 | 1207 | 164 | 168 | 1082 | 886 | 1700 | 1120 | 1048 | 169 |
| | 160 | 1010 | 1085 | 1600 | 1120 | 1207 | 166 | 169 | 1140 | 940 | 1800 | 1120 | 1048 | 170 |
| | 180 | 1034 | 1103 | 1650 | 1120 | 1207 | 166 | 169 | 1211 | 1008 | 1900 | 1120 | 1048 | 171 |
| | 200 | 1107 | 1169 | 1750 | 1120 | 1207 | 167 | 171 | 1235 | 1030 | 1950 | 1120 | 1048 | 172 |
| 710 | 100 | 941 | 1055 | 1500 | 1206 | 1382 | 221 | 223 | 1112 | 897 | 1750 | 1206 | 1200 | 228 |
| | 112 | 972 | 1080 | 1550 | 1206 | 1382 | 222 | 224 | 1142 | 924 | 1800 | 1206 | 1200 | 229 |
| | 132 | 993 | 1095 | 1600 | 1206 | 1382 | 223 | 225 | 1162 | 941 | 1850 | 1206 | 1200 | 230 |
| | 160 | 1054 | 1144 | 1700 | 1206 | 1382 | 225 | 227 | 1220 | 994 | 1950 | 1206 | 1200 | 232 |
| | 180 | 1126 | 1207 | 1800 | 1206 | 1382 | 227 | 229 | 1290 | 1061 | 2050 | 1206 | 1200 | 234 |
| | 200 | 1150 | 1226 | 1850 | 1206 | 1382 | 228 | 230 | 1313 | 1082 | 2100 | 1206 | 1200 | 235 |
| | 225 | 1219 | 1286 | 1950 | 1206 | 1382 | 230 | 231 | 1379 | 1146 | 2200 | 1206 | 1200 | 237 |
| 800 | 112 | 1048 | 1180 | 1650 | 1278 | 1548 | 289 | 297 | 1247 | 1009 | 1950 | 1278 | 1334 | 300 |
| | 132 | 1115 | 1235 | 1750 | 1278 | 1548 | 291 | 299 | 1267 | 1024 | 2000 | 1278 | 1334 | 301 |
| | 160 | 1174 | 1283 | 1850 | 1278 | 1548 | 293 | 301 | 1370 | 1120 | 2150 | 1278 | 1334 | 304 |
| | 180 | 1197 | 1300 | 1900 | 1278 | 1548 | 294 | 302 | 1391 | 1139 | 2200 | 1278 | 1334 | 305 |
| | 200 | 1269 | 1362 | 2000 | 1278 | 1548 | 296 | 304 | 1461 | 1206 | 2300 | 1278 | 1334 | 307 |
| | 225 | 1336 | 1420 | 2100 | 1278 | 1548 | 298 | 305 | 1526 | 1268 | 2400 | 1278 | 1334 | 309 |
| | 250 | 1404 | 1480 | 2200 | 1278 | 1548 | 299 | 307 | 1592 | 1332 | 2500 | 1278 | 1334 | 310 |

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

All Dimensions in mm.



OVERALL DIMENSION – ASA “UI” SERIES



| Model | Motor Frame Size | 90°/ 270° | | | | | | | 360° | | | | | |
|-------|------------------|-----------|----------|------|------|------|---------------|----------------|------|------|------|------|------|-----------|
| | | C (90°) | C (270°) | L | W | H | * Wt (kg) 90° | * Wt (kg) 270° | C1 | C2 | L | W | H | * Wt (kg) |
| 900 | 112 | 1169 | 1325 | 1800 | 1390 | 1728 | 354 | 363 | 1403 | 1133 | 2150 | 1390 | 1488 | 371 |
| | 132 | 1189 | 1338 | 1850 | 1390 | 1728 | 355 | 364 | 1421 | 1148 | 2200 | 1390 | 1488 | 371 |
| | 160 | 1293 | 1425 | 2000 | 1390 | 1728 | 357 | 367 | 1476 | 1197 | 2300 | 1390 | 1488 | 373 |
| | 180 | 1315 | 1441 | 2050 | 1390 | 1728 | 358 | 368 | 1543 | 1260 | 2400 | 1390 | 1488 | 375 |
| | 200 | 1385 | 1501 | 2150 | 1390 | 1728 | 360 | 369 | 1564 | 1278 | 2450 | 1390 | 1488 | 376 |
| | 225 | 1451 | 1557 | 2250 | 1390 | 1728 | 362 | 371 | 1627 | 1338 | 2550 | 1390 | 1488 | 378 |
| | 250 | 1518 | 1615 | 2350 | 1390 | 1728 | 364 | 373 | 1692 | 1399 | 2650 | 1390 | 1488 | 380 |
| 1000 | 132 | 1305 | 1475 | 2000 | 1478 | 1890 | 402 | 409 | 1532 | 1236 | 2350 | 1478 | 1620 | 423 |
| | 160 | 1361 | 1518 | 2100 | 1478 | 1890 | 404 | 411 | 1586 | 1282 | 2450 | 1478 | 1620 | 425 |
| | 180 | 1429 | 1575 | 2200 | 1478 | 1890 | 406 | 412 | 1651 | 1343 | 2550 | 1478 | 1620 | 427 |
| | 200 | 1451 | 1591 | 2250 | 1478 | 1890 | 407 | 413 | 1719 | 1405 | 2650 | 1478 | 1620 | 428 |
| | 225 | 1515 | 1644 | 2350 | 1478 | 1890 | 409 | 415 | 1781 | 1463 | 2750 | 1478 | 1620 | 430 |
| | 250 | 1581 | 1700 | 2450 | 1478 | 1890 | 411 | 417 | 1844 | 1523 | 2850 | 1478 | 1620 | 432 |
| | 280 | 1690 | 1796 | 2600 | 1478 | 1890 | 413 | 420 | 1903 | 1579 | 2950 | 1478 | 1620 | 434 |
| 1120 | 132 | 1423 | 1615 | 2150 | 1740 | 2158 | 738 | 738 | 1695 | 1356 | 2550 | 1740 | 1850 | 754 |
| | 160 | 1479 | 1658 | 2250 | 1740 | 2158 | 742 | 742 | 1749 | 1403 | 2650 | 1740 | 1850 | 758 |
| | 180 | 1547 | 1715 | 2350 | 1740 | 2158 | 746 | 746 | 1815 | 1464 | 2750 | 1740 | 1850 | 762 |
| | 200 | 1616 | 1773 | 2450 | 1740 | 2158 | 750 | 750 | 1836 | 1482 | 2800 | 1740 | 1850 | 764 |
| | 225 | 1680 | 1827 | 2550 | 1740 | 2158 | 754 | 754 | 1945 | 1585 | 2950 | 1740 | 1850 | 770 |
| | 250 | 1746 | 1882 | 2650 | 1740 | 2158 | 758 | 758 | 2008 | 1645 | 3050 | 1740 | 1850 | 774 |
| | 280 | 1806 | 1932 | 2750 | 1740 | 2158 | 762 | 762 | 2067 | 1700 | 3150 | 1740 | 1850 | 778 |
| 1250 | 132 | 1575 | 1805 | 2350 | 1869 | 2410 | 1094 | 1094 | 1884 | 1504 | 2800 | 1869 | 2055 | 1127 |
| | 160 | 1629 | 1846 | 2450 | 1869 | 2410 | 1101 | 1101 | 1937 | 1550 | 2900 | 1869 | 2055 | 1134 |
| | 180 | 1696 | 1900 | 2550 | 1869 | 2410 | 1109 | 1109 | 2002 | 1608 | 3000 | 1869 | 2055 | 1141 |
| | 200 | 1717 | 1914 | 2600 | 1869 | 2410 | 1119 | 1112 | 2068 | 1669 | 3100 | 1869 | 2055 | 1148 |
| | 225 | 1779 | 1965 | 2700 | 1869 | 2410 | 1119 | 1119 | 2129 | 1725 | 3200 | 1869 | 2055 | 1155 |
| | 250 | 1842 | 2017 | 2800 | 1869 | 2410 | 1127 | 1127 | 2190 | 1782 | 3300 | 1869 | 2055 | 1163 |
| | 280 | 1901 | 2064 | 2900 | 1869 | 2410 | 1134 | 1134 | 2247 | 1835 | 3400 | 1869 | 2055 | 1170 |
| 1400 | 160 | 1796 | 2050 | 2700 | 2086 | 2693 | 1446 | 1446 | 2148 | 1720 | 3200 | 2086 | 2295 | 1482 |
| | 180 | 1815 | 2062 | 2750 | 2086 | 2693 | 1449 | 1449 | 2212 | 1778 | 3300 | 2086 | 2295 | 1489 |
| | 200 | 1881 | 2115 | 2850 | 2086 | 2693 | 1456 | 1456 | 2232 | 1794 | 3350 | 2086 | 2295 | 1492 |
| | 225 | 1942 | 2164 | 2950 | 2086 | 2693 | 1464 | 1464 | 2291 | 1848 | 3450 | 2086 | 2295 | 1500 |
| | 250 | 2004 | 2214 | 3050 | 2086 | 2693 | 1471 | 1471 | 2352 | 1903 | 3550 | 2086 | 2295 | 1507 |
| | 280 | 2060 | 2259 | 3150 | 2086 | 2693 | 1478 | 1478 | 2408 | 1954 | 3650 | 2086 | 2295 | 1514 |
| | 315 | 2160 | 2343 | 3300 | 2086 | 2693 | 1489 | 1489 | 2505 | 2046 | 3800 | 2086 | 2295 | 1525 |

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

All Dimensions in mm.

Operational Limits - "ASA"

| | | 315 | 355 | 400 | 450 | 500 | 560 | 630 | 710 | 800 | 900 | 1000 | 1120 | 1250 | 1400 |
|--------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Maximum Absorbed Power | C | 2 | 3 | 3 | 4 | 5 | 6 | 7 | | | | | | | |
| | T | 5 | 6 | 7 | 9 | 11 | 13 | 16 | 10 | 12 | 15 | 18 | 25 | 25 | 35 |
| | X | 10 | 11 | 14 | 17 | 20 | 26 | 32 | 20 | 25 | 32 | 38 | 50 | 55 | 75 |
| | UI | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 10 | 10 | 12 | 15 | 25 | 25 | 35 |
| | UII | 5 | 6 | 7 | 9 | 11 | 13 | 16 | 20 | 25 | 32 | 38 | 50 | 55 | 75 |
| | UIII | 10 | 11 | 14 | 17 | 20 | 26 | 32 | 40 | 50 | 65 | 76 | 100 | 110 | 150 |
| Maximum Fan Speed | C | 3350 | 2800 | 2500 | 2200 | 1950 | 1700 | 1550 | | | | | | | |
| | T | 4300 | 3600 | 3250 | 2850 | 2550 | 2250 | 2000 | 1350 | 1200 | 1050 | 950 | 850 | 750 | 650 |
| | X | 5400 | 4550 | 4100 | 3600 | 3200 | 2800 | 2500 | 1750 | 1550 | 1400 | 1250 | 1100 | 1000 | 850 |
| | UI | 3350 | 2800 | 2500 | 2200 | 1950 | 1700 | 1550 | 1350 | 1200 | 1050 | 950 | 850 | 750 | 650 |
| | UII | 4300 | 3600 | 3250 | 2850 | 2550 | 2250 | 2000 | 1750 | 1550 | 1400 | 1250 | 1100 | 1000 | 850 |
| | UIII | 5400 | 4550 | 4100 | 3600 | 3200 | 2800 | 2500 | 2250 | 2000 | 1750 | 1550 | 1400 | 1250 | 1100 |
| Temperature Range / Min. -20°C | C | 85 | 85 | 85 | 85 | 85 | 85 | 85 | | | | | | | |
| | T | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | X | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| | UI | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| | UII | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| | UIII | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| Fan weight | C | 19 | 24 | 32 | 41 | 53 | 76 | 101 | | | | | | | |
| | T | 33 | 48 | 58 | 70 | 87 | 123 | 152 | 189 | 228 | 286 | 331 | 575 | 767 | 1049 |
| | X | 35 | 50 | 59 | 72 | 89 | 126 | 154 | 192 | 232 | 290 | 338 | 586 | 780 | 1069 |
| | UI | 32 | 44 | 54 | 67 | 81 | 112 | 140 | 180 | 250 | 312 | 359 | 601 | 831 | 1140 |
| | UII | 33 | 45 | 54 | 68 | 82 | 113 | 142 | 182 | 252 | 315 | 362 | 606 | 837 | 1153 |



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. FSA 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 ³ /h <input type="checkbox"/> m ³ /min <input type="checkbox"/> m ³ /s <input type="checkbox"/> cfm | |
| ■ Pressure (static & total) | | SP : _____ TP : _____ <input type="checkbox"/> Pa <input type="checkbox"/> mmH ₂ 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 ³ <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 |

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The company is always improving and developing its products, therefore the company reserves the right of making changes to the illustrated products.
Certified dimension can be provided upon request.

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