

## AATVC



### HIGH PRESSURE WITH BACKWARD IMPELLER AND BELT TRANSMISSION

#### MANUFACTURING FEATURES:

- Fan made of Fe360 sheet. The fan paint finish is based on a Qualicoat polyester powder coating stoved at 200°C, with an average film thickness of 70 microns. Average heat resistance of coating is 180°C with peaks of 200°C.
- Fully welded housing.
- High efficiency simple inlet backward curved impeller made of Fe360 sheet statically and dynamically balanced. Impellers are painted with epoxy primer that resists temperatures up to 300°C.
- Motorized fan with basement (configuration 12). Full equipped fans including: motor, pulleys, belts, belts guard and shaft guard. Fitted over a base plate.
- Standard orientation LG270.
- It allows adjusting the orientation locally from models 500 to 630. Models sizes from 710 to 1250 size the orientation is fixed.

### Accessories



AC



BAD



EI



INT



JE-45



RA



RI

#### APPLICATIONS:

Designed for inline installation, they are suitable for:

- Industrial applications, extraction or injection of air.
- Cooling of machines and parts.
- Exhaust after filters, separators and cyclones.
- Pneumatic transport.
- Clean air transport.
- Maximum working temperature: carried air: 130°C, ambient: 60°C.

#### UNDER REQUEST:

- 60Hz fans and special voltages.
- 2 speed motors.
- Fan with free shaft (configuration 1) or with motor supported on the pedestal side (configuration 9).
- Flameproof or explosionproof fans with ATEX certificated motors.
- Fan for air working temperatures up to 350°C with R/R (cooling impeller).
- Hot-dipped galvanised or stainless steel fans.
- Orientation: RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315, LG0, LG45, LG90, LG135, LG180, LG225, LG315.

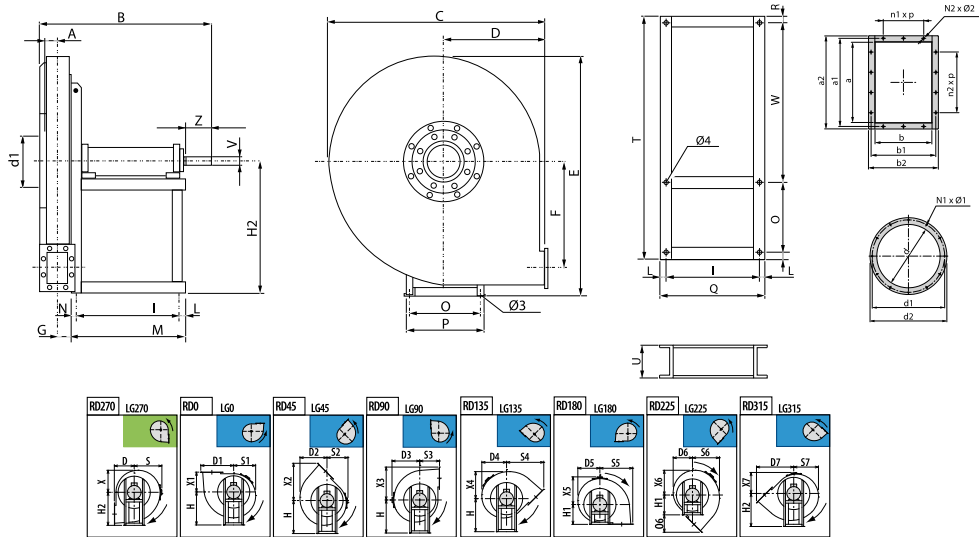
## Technical data

### Three-phase motor

| Code         | Model      | R.P.M. | Rated I. (A) 400V | Rated power kW | Max. Airflow m3/h | Sound db (A)* | Weight | Connect. diagram |
|--------------|------------|--------|-------------------|----------------|-------------------|---------------|--------|------------------|
| 5066050__R__ | AATVC 500  | 1800   | -                 | 5,50           | 980               | 44            | 63     | 1                |
| 5066056__R__ | AATVC 560  | 1600   | -                 | 5,50           | 1.400             | 44            | 79     | 1                |
| 5066063__R__ | AATVC 630  | 1700   | -                 | 11             | 1.850             | 48            | 131    | 1                |
| 5066071__R__ | AATVC 710  | 1400   | -                 | 15             | 2.480             | 46            | 181    | 1                |
| 5066080__R__ | AATVC 800  | 1450   | -                 | 22             | 3.450             | 50            | 199    | 1                |
| 5066090__R__ | AATVC 900  | 1350   | -                 | 37             | 4.670             | 50            | 310    | 1                |
| 5066100__R__ | AATVC 1000 | 1250   | -                 | 55             | 6.320             | 52            | 452    | 1                |
| 5066112__R__ | AATVC 1120 | 1350   | -                 | 90             | 8.340             | 56            | 470    | 1                |
| 5066125__R__ | AATVC 1250 | 1000   | -                 | 90             | 9.750             | 54            | 800    | 1                |

**Notes:**  
 \* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

## Dimensions



| Model     | A  | B   | C   | D   | D1  | D2  | D3  | D4  | D5  |
|-----------|----|-----|-----|-----|-----|-----|-----|-----|-----|
| AATVC 500 | 45 | 668 | 745 | 335 | 386 | 386 | 410 | 370 | 346 |
| AATVC 560 | 50 | 678 | 835 | 375 | 482 | 438 | 460 | 418 | 391 |
| AATVC 630 | 58 | 708 | 940 | 425 | 539 | 493 | 515 | 472 | 441 |

| Model     | D6  | D7  | E    | F   | G  | H   | H1  | H2  | I   |
|-----------|-----|-----|------|-----|----|-----|-----|-----|-----|
| AATVC 500 | 350 | 541 | 796  | 347 | 42 | 450 | 450 | 450 | 407 |
| AATVC 560 | 392 | 606 | 891  | 393 | 48 | 500 | 500 | 500 | 407 |
| AATVC 630 | 438 | 681 | 1001 | 443 | 53 | 560 | 560 | 560 | 407 |

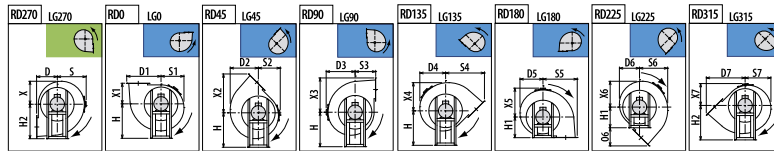
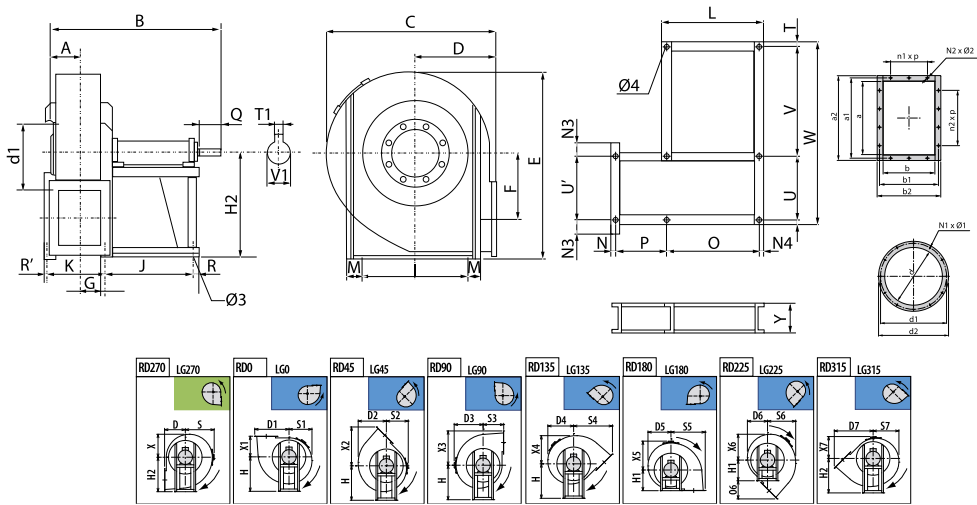
| Model     | L  | M   | N  | N1xØ1 | N2xØ2 | O   | P   | Q   | R  |
|-----------|----|-----|----|-------|-------|-----|-----|-----|----|
| AATVC 500 | 28 | 485 | 50 | 8x8   | 4x10  | 355 | 400 | 463 | 23 |
| AATVC 560 | 28 | 485 | 50 | 8x8   | 4x10  | 355 | 400 | 463 | 23 |
| AATVC 630 | 28 | 485 | 50 | 8x8   | 6x10  | 355 | 400 | 463 | 23 |

| Model     | S   | S1  | S2  | S3  | S4  | S5  | S6  | S7  | T    |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| AATVC 500 | 410 | 346 | 350 | 335 | 541 | 430 | 386 | 370 | 1060 |
| AATVC 560 | 460 | 391 | 392 | 375 | 606 | 482 | 438 | 418 | 1180 |
| AATVC 630 | 515 | 441 | 438 | 425 | 681 | 539 | 493 | 472 | 1180 |

| Model     | U   | V  | W   | X   | X1  | X2  | X3  | X4  | X5  |
|-----------|-----|----|-----|-----|-----|-----|-----|-----|-----|
| AATVC 500 | 120 | 28 | 660 | 346 | 335 | 541 | 430 | 386 | 410 |
| AATVC 560 | 120 | 28 | 780 | 391 | 375 | 606 | 482 | 438 | 460 |
| AATVC 630 | 120 | 38 | 780 | 441 | 425 | 681 | 539 | 493 | 515 |

| Model     | X6  | X7  | Z  | a   | a1  | a2  | b  | b1  | b2  |
|-----------|-----|-----|----|-----|-----|-----|----|-----|-----|
| AATVC 500 | 370 | 350 | 60 | 105 | 139 | 165 | 76 | 110 | 136 |
| AATVC 560 | 418 | 392 | 60 | 117 | 151 | 177 | 85 | 119 | 145 |
| AATVC 630 | 472 | 438 | 80 | 131 | 165 | 191 | 95 | 129 | 155 |

| Model     | d   | d1  | d2  | n2xp  | Ø3 | Ø4 |
|-----------|-----|-----|-----|-------|----|----|
| AATVC 500 | 145 | 182 | 215 | -     | 14 | 14 |
| AATVC 560 | 165 | 200 | 235 | -     | 14 | 14 |
| AATVC 630 | 185 | 219 | 250 | 1x100 | 14 | 14 |



| Model      | A   | B    | C    | D   | D1   | D2  | D3  | D4  | D5  |
|------------|-----|------|------|-----|------|-----|-----|-----|-----|
| AATVC 710  | 67  | 825  | 1045 | 475 | 605  | 547 | 570 | 522 | 493 |
| AATVC 800  | 73  | 860  | 1170 | 530 | 678  | 622 | 640 | 592 | 554 |
| AATVC 900  | 84  | 880  | 1315 | 600 | 759  | 696 | 715 | 668 | 628 |
| AATVC 1000 | 90  | 1005 | 1460 | 670 | 846  | 775 | 790 | 735 | 690 |
| AATVC 1120 | 103 | 1026 | 1630 | 750 | 942  | 898 | 880 | 857 | 770 |
| AATVC 1250 | 113 | 1180 | 1815 | 840 | 1054 | 998 | 975 | 944 | 863 |

| Model      | D6  | D7   | E    | F   | G     | H    | H1   | H2  | I    |
|------------|-----|------|------|-----|-------|------|------|-----|------|
| AATVC 710  | 489 | 764  | 1123 | 497 | 115,5 | 630  | 630  | 550 | 485  |
| AATVC 800  | 545 | 854  | 1264 | 560 | 121,5 | 710  | 710  | 620 | 485  |
| AATVC 900  | 617 | 961  | 1428 | 631 | 129,5 | 800  | 800  | 695 | 485  |
| AATVC 1000 | 670 | 1074 | 1590 | 707 | 165,5 | 900  | 900  | 770 | 762  |
| AATVC 1120 | 713 | 1196 | 1770 | 791 | 174,5 | 1000 | 1000 | 860 | 862  |
| AATVC 1250 | 802 | 1339 | 1983 | 890 | 197,5 | 960  | 840  | 960 | 1056 |

| Model      | J   | K   | L   | M  | N  | N1xØ1 | N2xØ2 | N3  | N4 |
|------------|-----|-----|-----|----|----|-------|-------|-----|----|
| AATVC 710  | 477 | 191 | 543 | 12 | 20 | 8x8   | 6x12  | 53  | 33 |
| AATVC 800  | 477 | 203 | 543 | 23 | 20 | 8x8   | 6x12  | 55  | 33 |
| AATVC 900  | 477 | 219 | 543 | 23 | 20 | 8x10  | 6x12  | 60  | 33 |
| AATVC 1000 | 551 | 261 | 629 | 32 | 35 | 8x12  | 8x12  | 188 | 39 |
| AATVC 1120 | 551 | 279 | 629 | 32 | 35 | 8x12  | 8x12  | 203 | 39 |
| AATVC 1250 | 607 | 285 | 697 | 45 | 55 | 8x12  | 10x12 | 105 | 45 |

| Model      | O   | P   | Q   | R  | R' | S   | S1  | S2  | S3  |
|------------|-----|-----|-----|----|----|-----|-----|-----|-----|
| AATVC 710  | 289 | 191 | 110 | 33 | 20 | 570 | 493 | 489 | 475 |
| AATVC 800  | 324 | 203 | 110 | 33 | 20 | 640 | 554 | 545 | 530 |
| AATVC 900  | 361 | 219 | 110 | 33 | 20 | 715 | 628 | 617 | 600 |
| AATVC 1000 | 174 | 261 | 110 | 39 | 35 | 790 | 690 | 670 | 670 |
| AATVC 1120 | 446 | 279 | 110 | 39 | 35 | 880 | 770 | 713 | 750 |
| AATVC 1250 | 607 | 285 | 140 | 45 | 55 | 975 | 863 | 802 | 840 |

| Model      | S4   | S5   | S6  | S7  | T  | T1 | U    | U'   | V    |
|------------|------|------|-----|-----|----|----|------|------|------|
| AATVC 710  | 764  | 605  | 547 | 522 | 23 | 12 | 485  | 400  | 720  |
| AATVC 800  | 854  | 678  | 622 | 592 | 23 | 12 | 485  | 410  | 970  |
| AATVC 900  | 961  | 759  | 696 | 668 | 23 | 14 | 485  | 420  | 970  |
| AATVC 1000 | 1074 | 846  | 775 | 735 | 32 | 14 | 762  | 450  | 974  |
| AATVC 1120 | 1196 | 942  | 898 | 857 | 32 | 16 | 862  | 520  | 974  |
| AATVC 1250 | 1339 | 1054 | 998 | 944 | 45 | 18 | 1056 | 1056 | 1066 |

| Model      | V1 | W    | X   | X1  | X2   | X3   | X4  | X5  | X6  |
|------------|----|------|-----|-----|------|------|-----|-----|-----|
| AATVC 710  | 42 | 1250 | 493 | 475 | 764  | 605  | 547 | 570 | 522 |
| AATVC 800  | 42 | 1500 | 554 | 530 | 854  | 678  | 622 | 640 | 592 |
| AATVC 900  | 48 | 1500 | 628 | 600 | 961  | 759  | 696 | 715 | 668 |
| AATVC 1000 | 48 | 1800 | 690 | 670 | 1074 | 846  | 775 | 790 | 735 |
| AATVC 1120 | 55 | 1800 | 770 | 750 | 1196 | 942  | 898 | 880 | 857 |
| AATVC 1250 | 65 | 2212 | 863 | 840 | 1339 | 1054 | 998 | 975 | 944 |

| Model      | X7  | Y   | a   | a1  | a2  | b   | b1  | b2  | d   |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| AATVC 710  | 489 | 160 | 146 | 182 | 216 | 105 | 139 | 175 | 205 |
| AATVC 800  | 545 | 160 | 166 | 200 | 236 | 117 | 151 | 187 | 228 |
| AATVC 900  | 617 | 160 | 185 | 219 | 255 | 131 | 165 | 201 | 255 |
| AATVC 1000 | 670 | 180 | 207 | 241 | 277 | 148 | 182 | 218 | 285 |
| AATVC 1120 | 713 | 180 | 231 | 265 | 301 | 166 | 200 | 236 | 320 |
| AATVC 1250 | 802 | 220 | 258 | 292 | 328 | 185 | 219 | 255 | 360 |

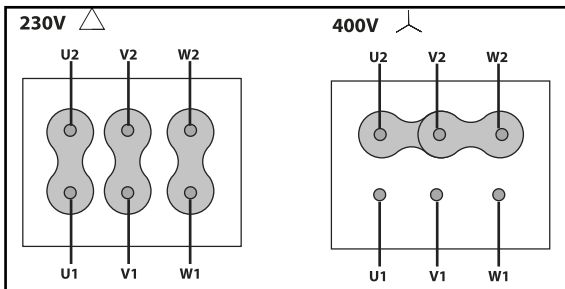
| Model | d1 | d2 | n1xp | n2xp | Ø3 | Ø4 |
|-------|----|----|------|------|----|----|
|-------|----|----|------|------|----|----|

| Model      | d1  | d2  | n1xp  | n2xp  | Ø3 | Ø4 |
|------------|-----|-----|-------|-------|----|----|
| AATVC 710  | 241 | 275 | -     | 1x112 | 19 | 19 |
| AATVC 800  | 265 | 298 | -     | 1x112 | 19 | 19 |
| AATVC 900  | 292 | 325 | -     | 1x112 | 19 | 19 |
| AATVC 1000 | 332 | 365 | 1x112 | 1x112 | 24 | 20 |
| AATVC 1120 | 366 | 400 | 1x112 | 1x112 | 19 | 20 |
| AATVC 1250 | 405 | 440 | 1x112 | 2x112 | 24 | 20 |

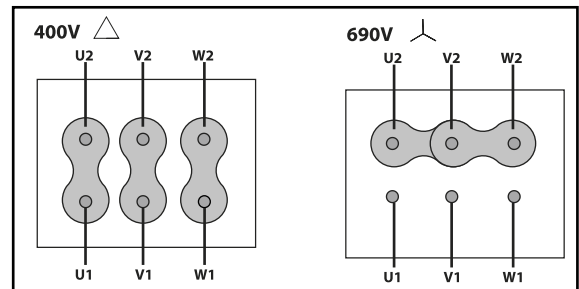
# Wiring diagram

DIAGRAM Nº 1

230/400V



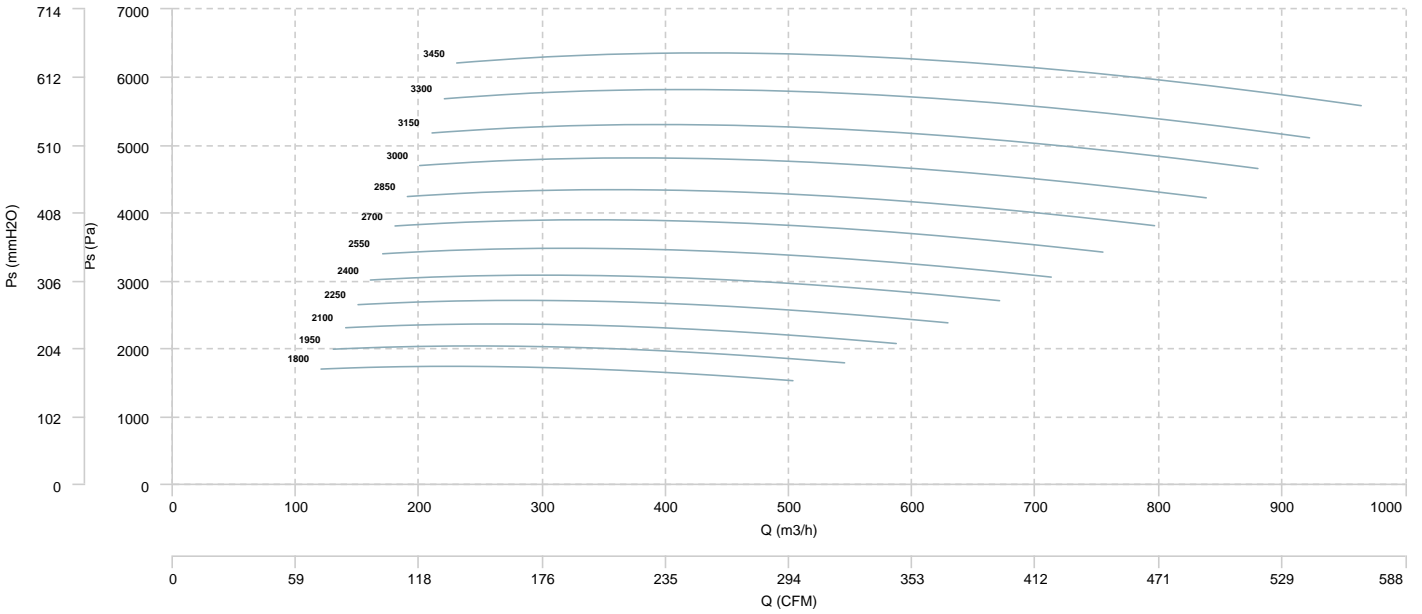
400/690V



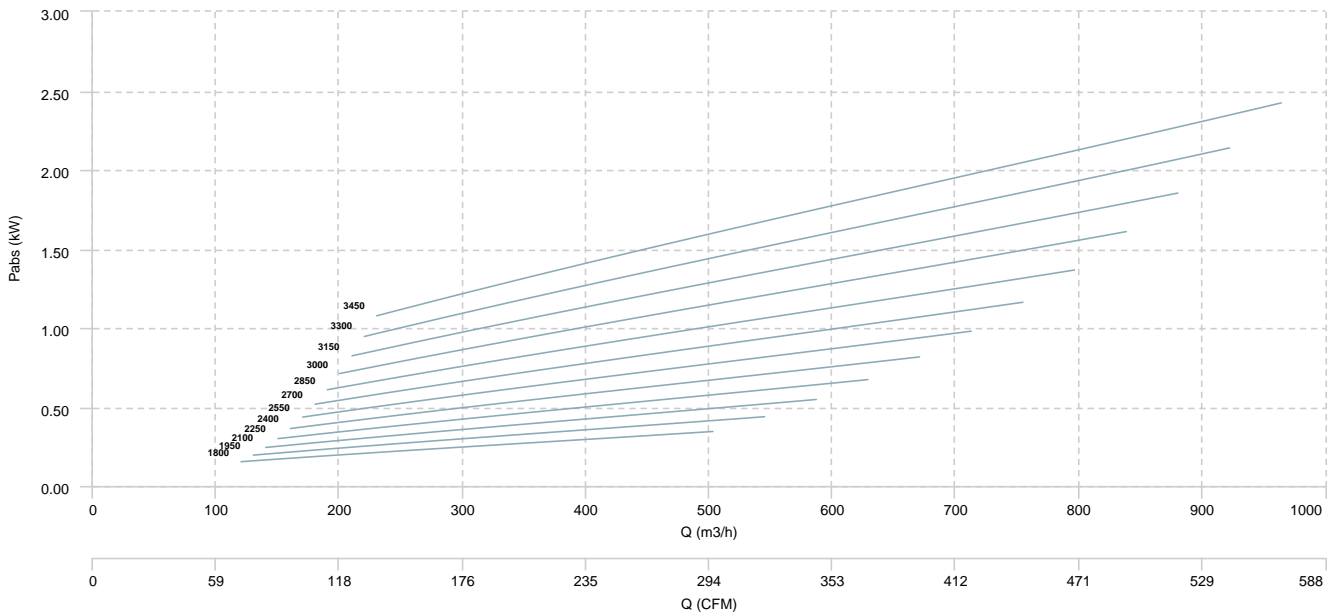
## CHARACTERISTIC CURVE

AATVC 500

### AIR FLOW - PRESSURE



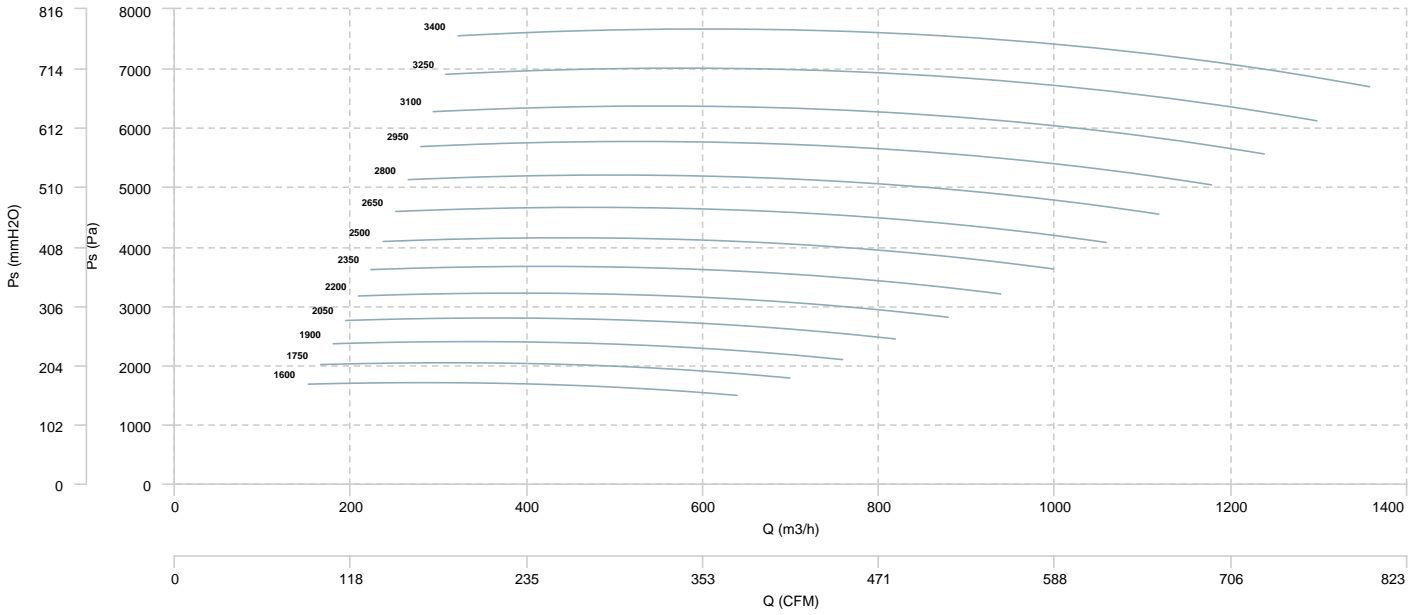
### AIR FLOW - MECHANICAL POWER



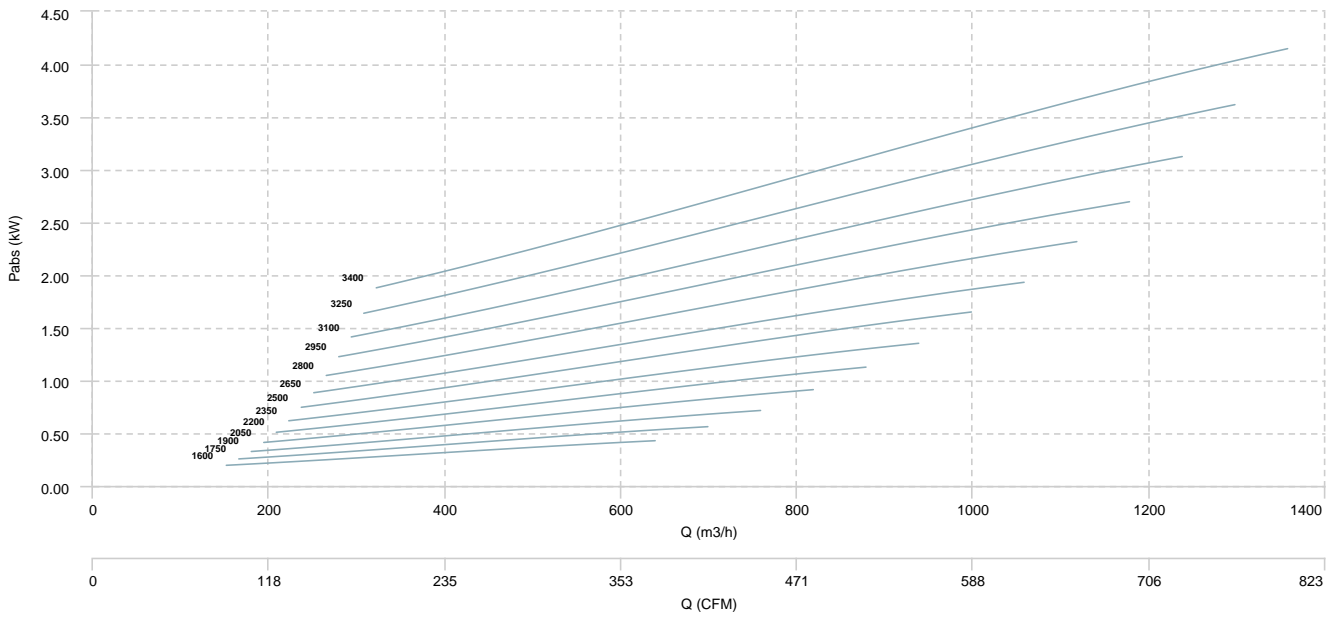


AATVC 560

## AIR FLOW - PRESSURE

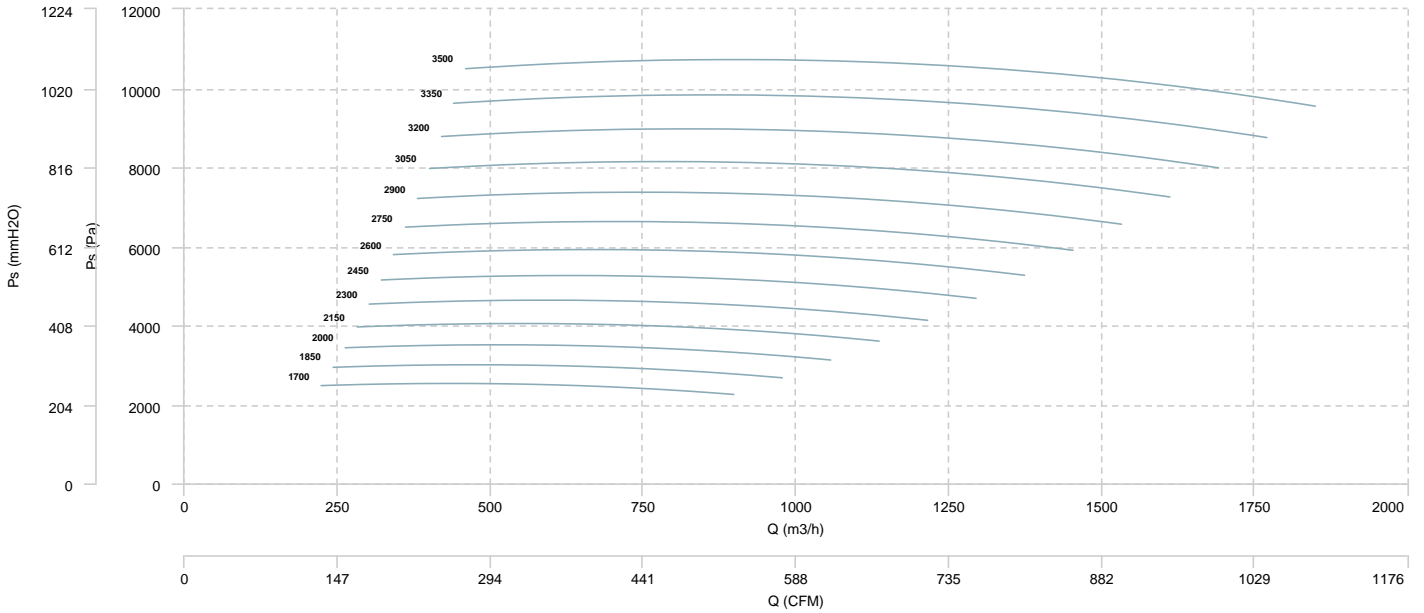


## AIR FLOW - MECHANICAL POWER

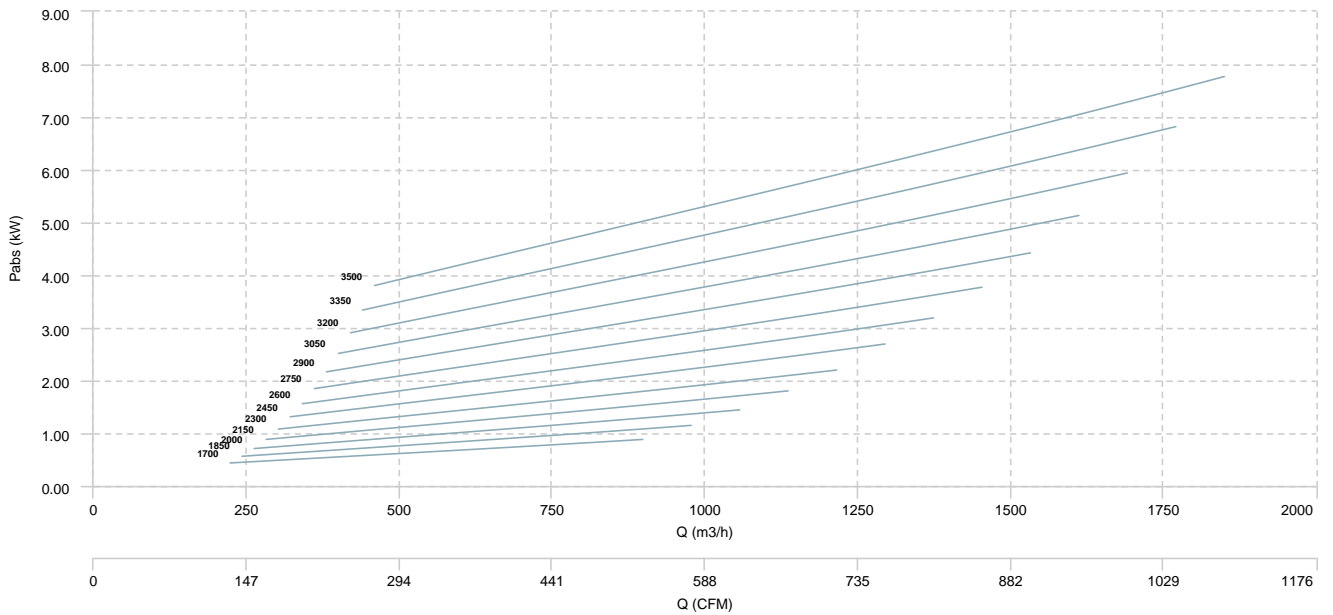


AATVC 630

## AIR FLOW - PRESSURE

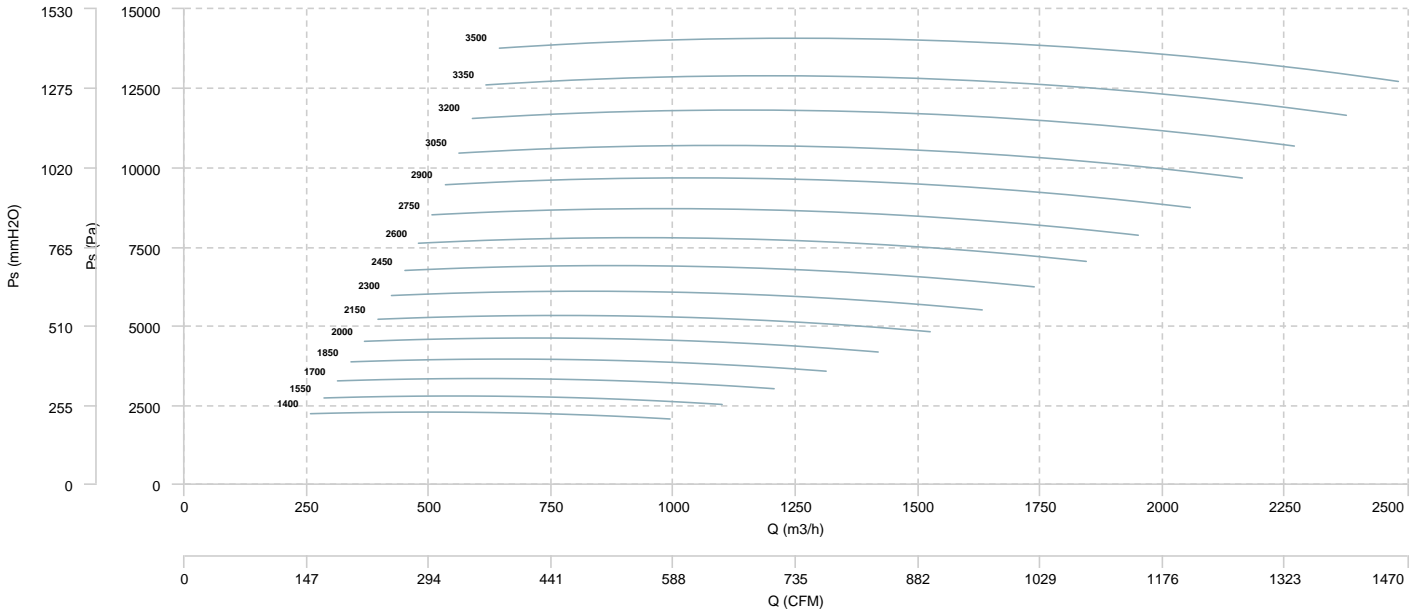


## AIR FLOW - MECHANICAL POWER

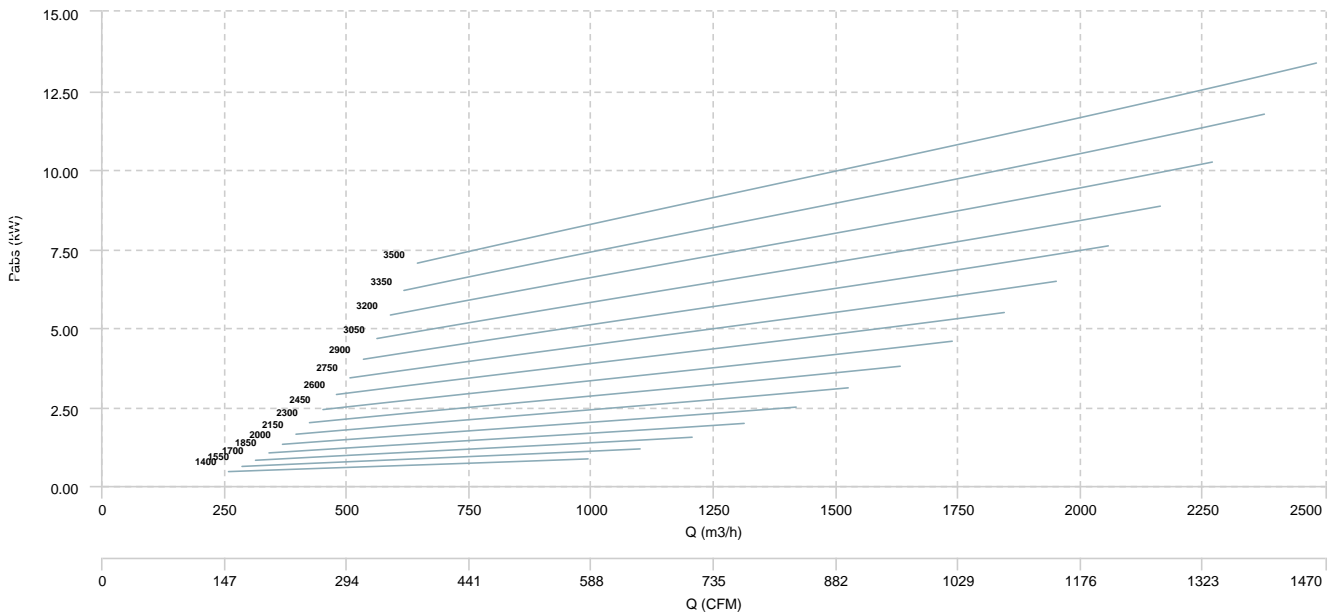


AATVC 710

## AIR FLOW - PRESSURE

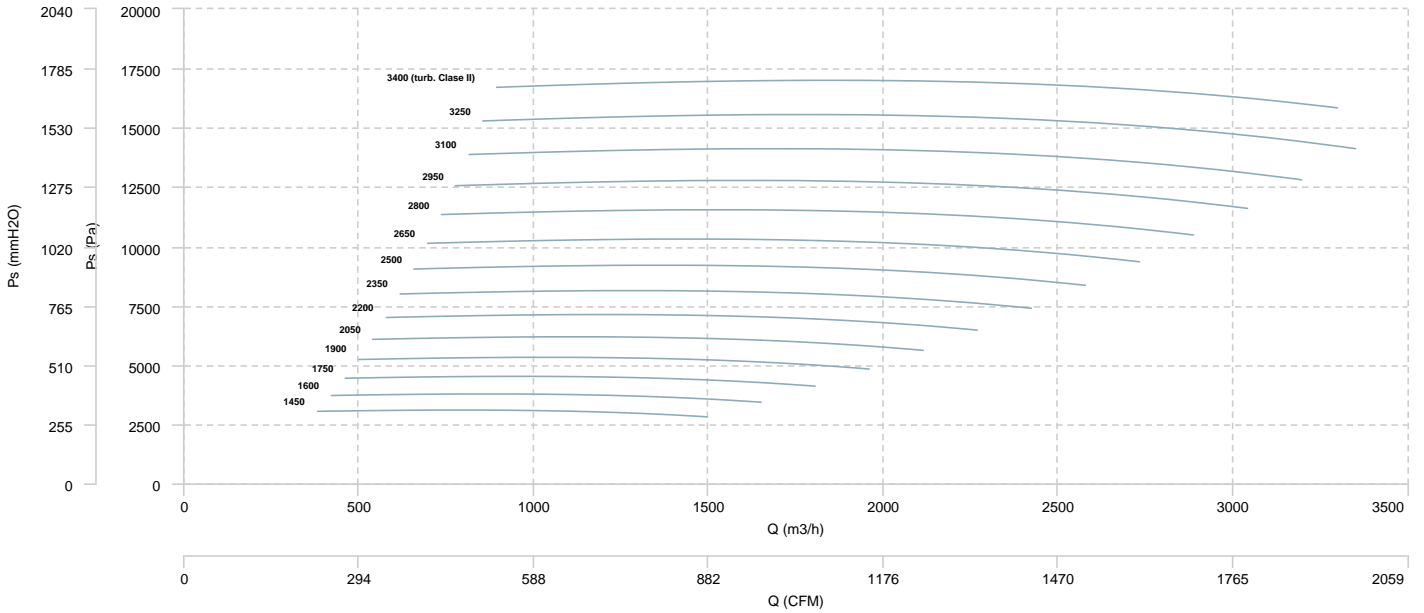


## AIR FLOW - MECHANICAL POWER

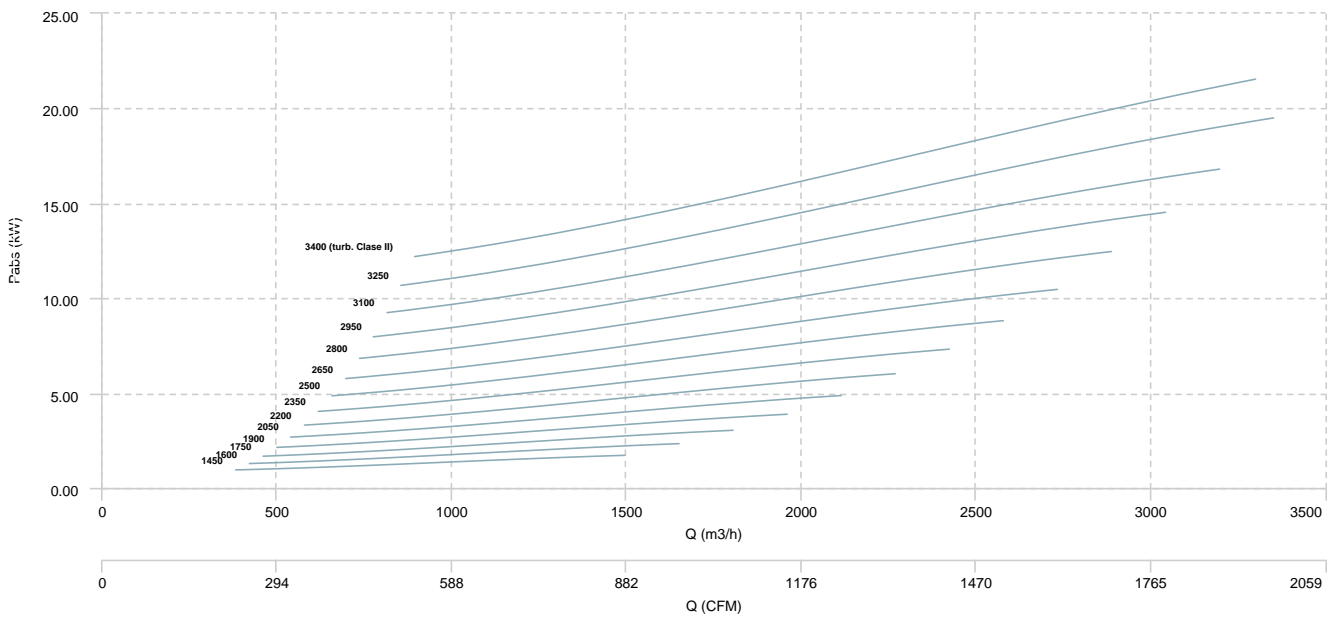


AATVC 800

## AIR FLOW - PRESSURE

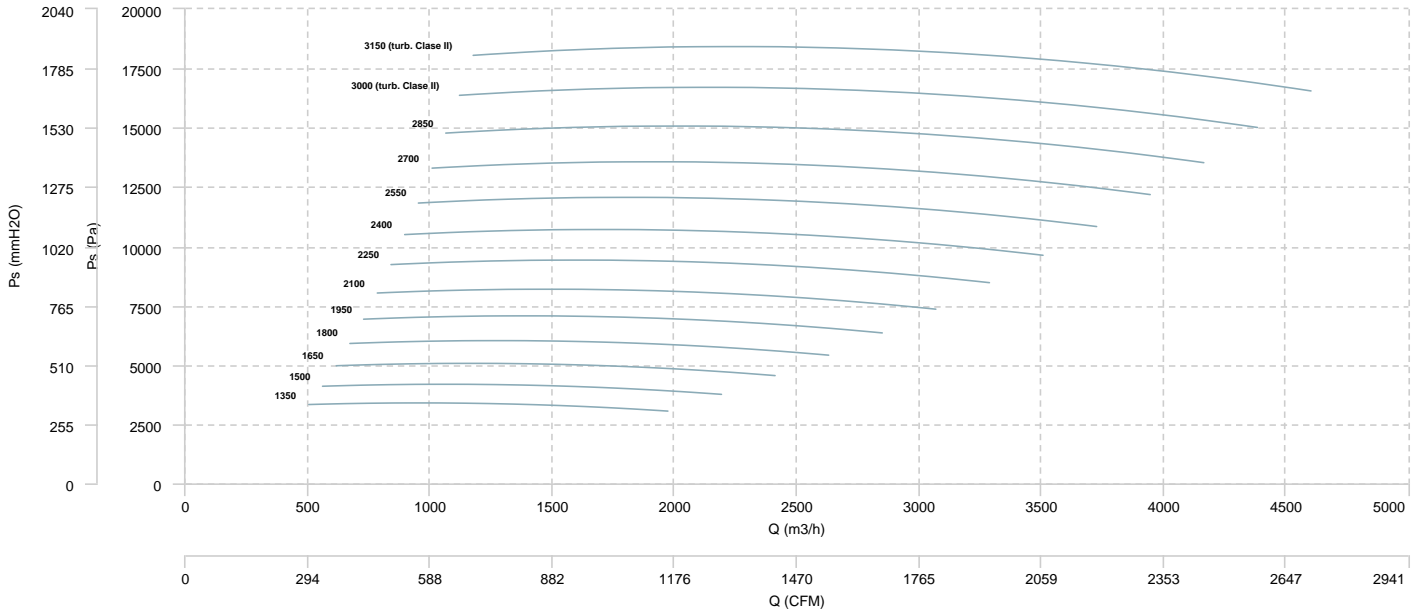


## AIR FLOW - MECHANICAL POWER

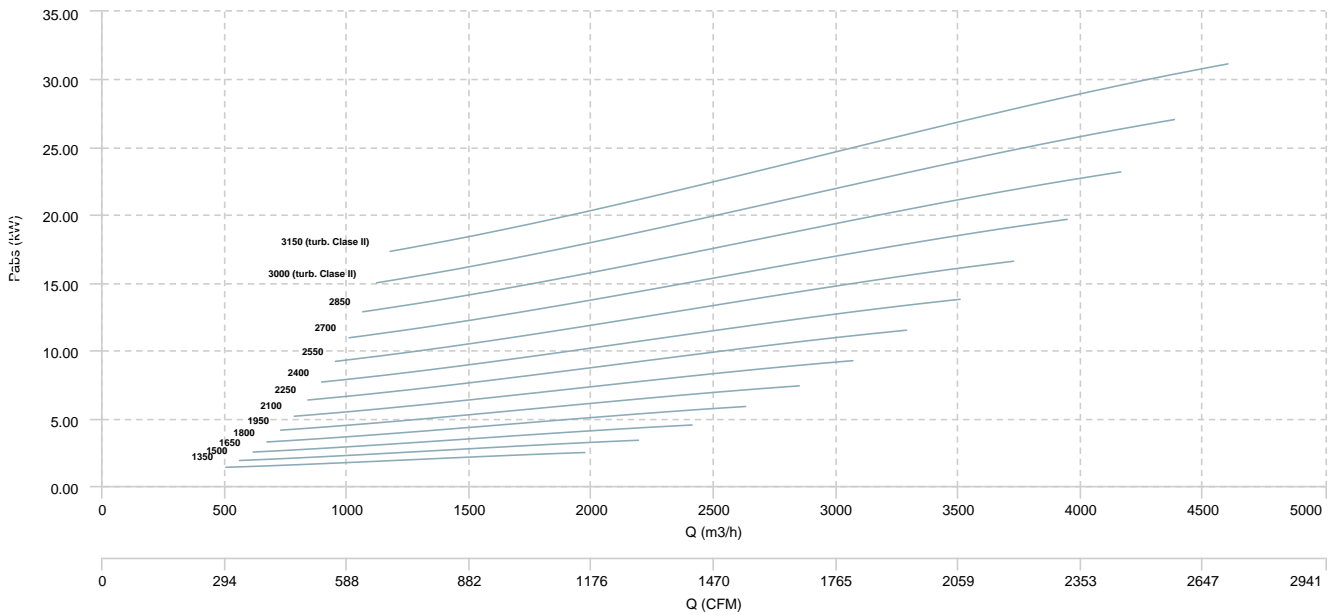


AATVC 900

## AIR FLOW - PRESSURE

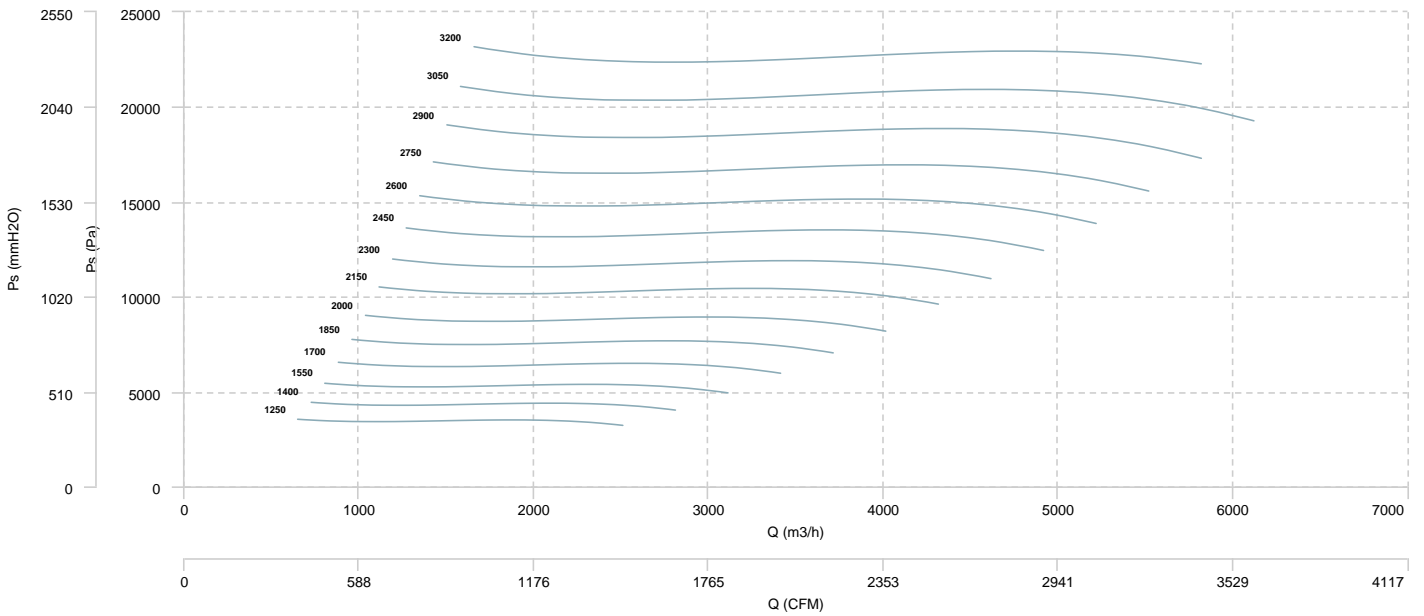


## AIR FLOW - MECHANICAL POWER

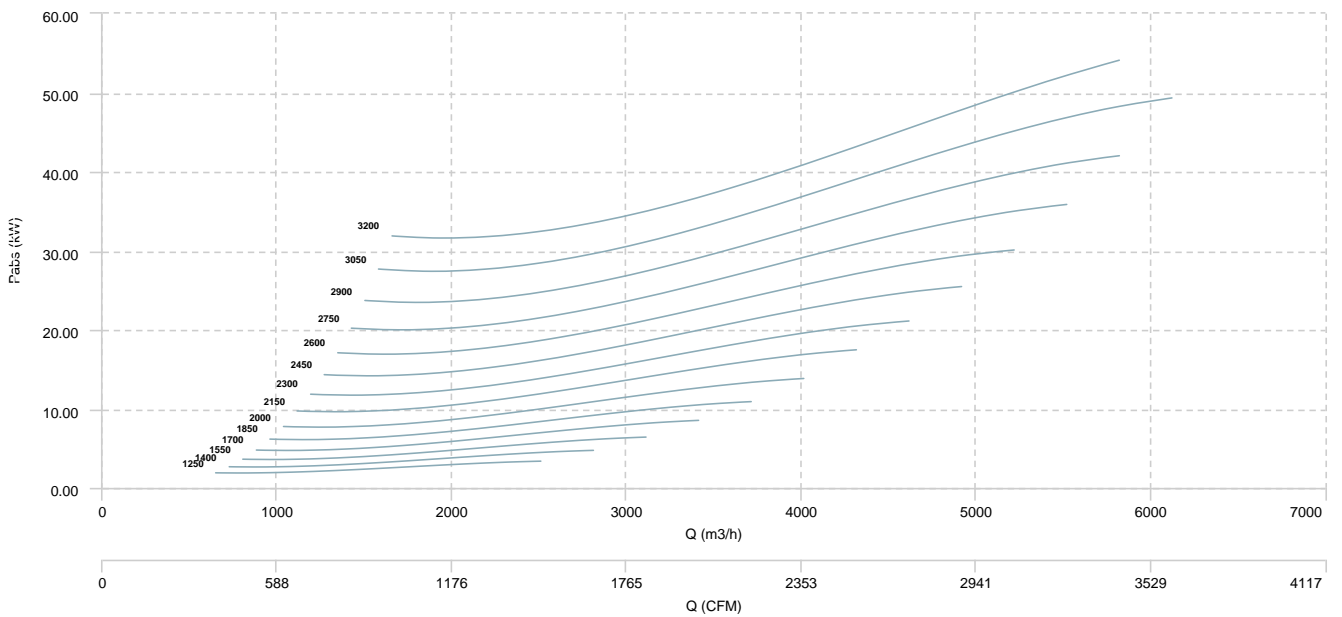


AATVC 1000

## AIR FLOW - PRESSURE

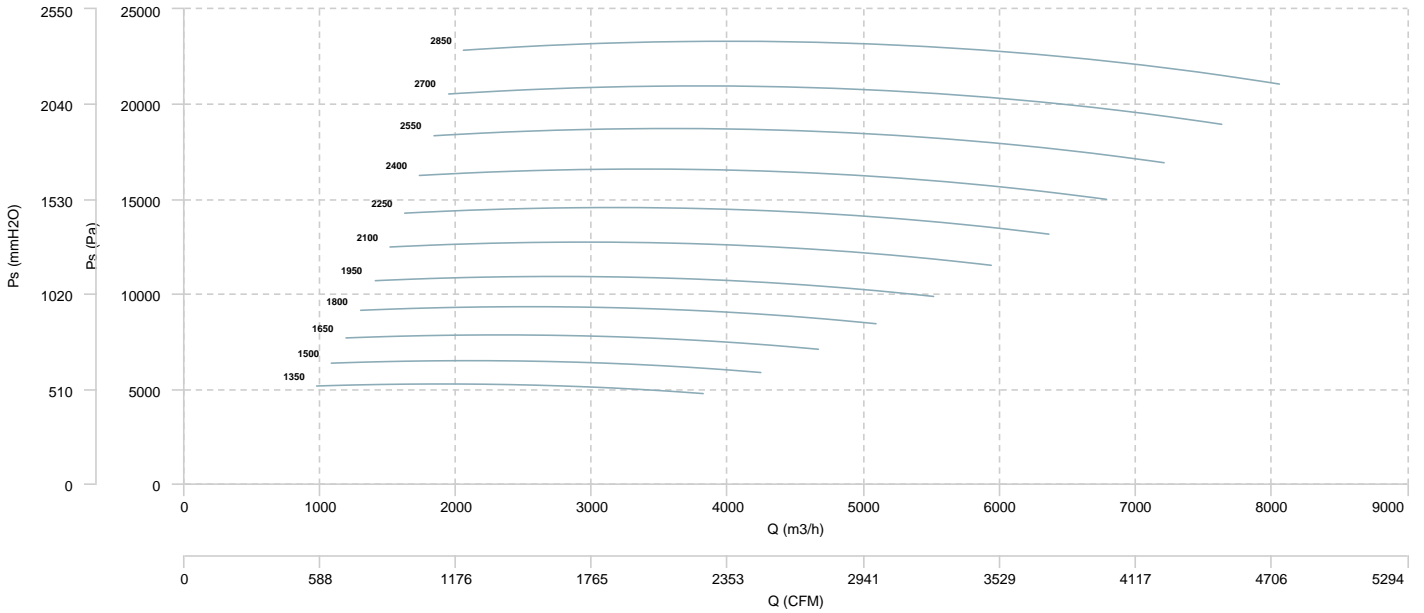


## AIR FLOW - MECHANICAL POWER

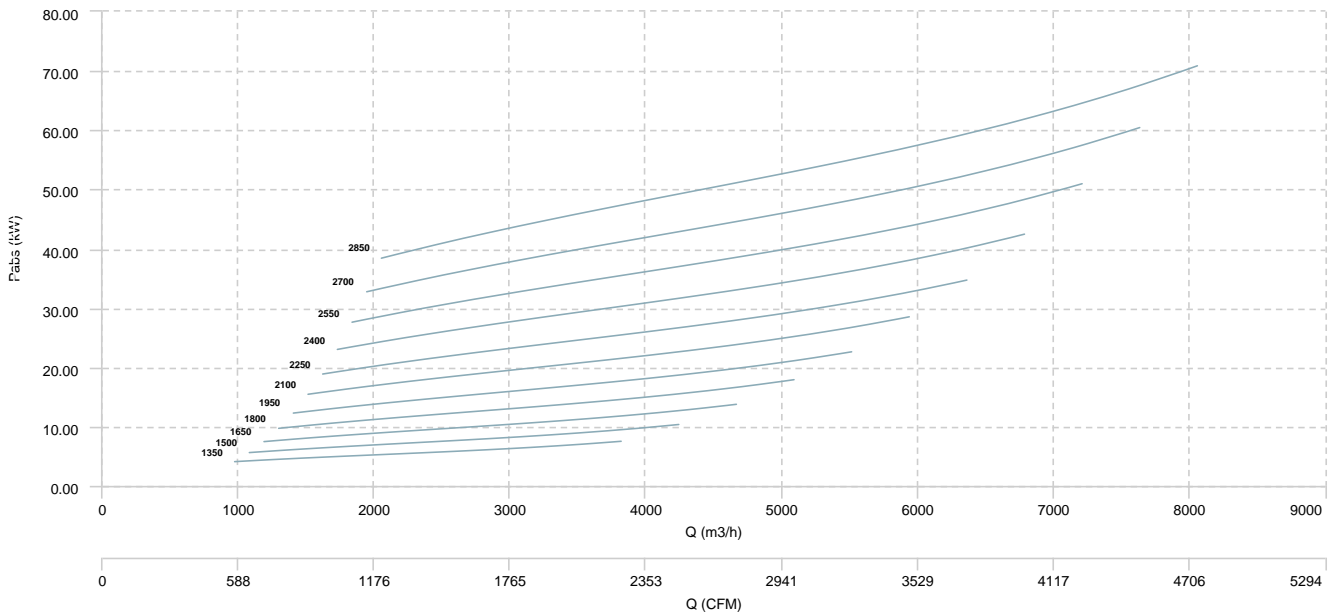


AATVC 1120

## AIR FLOW - PRESSURE

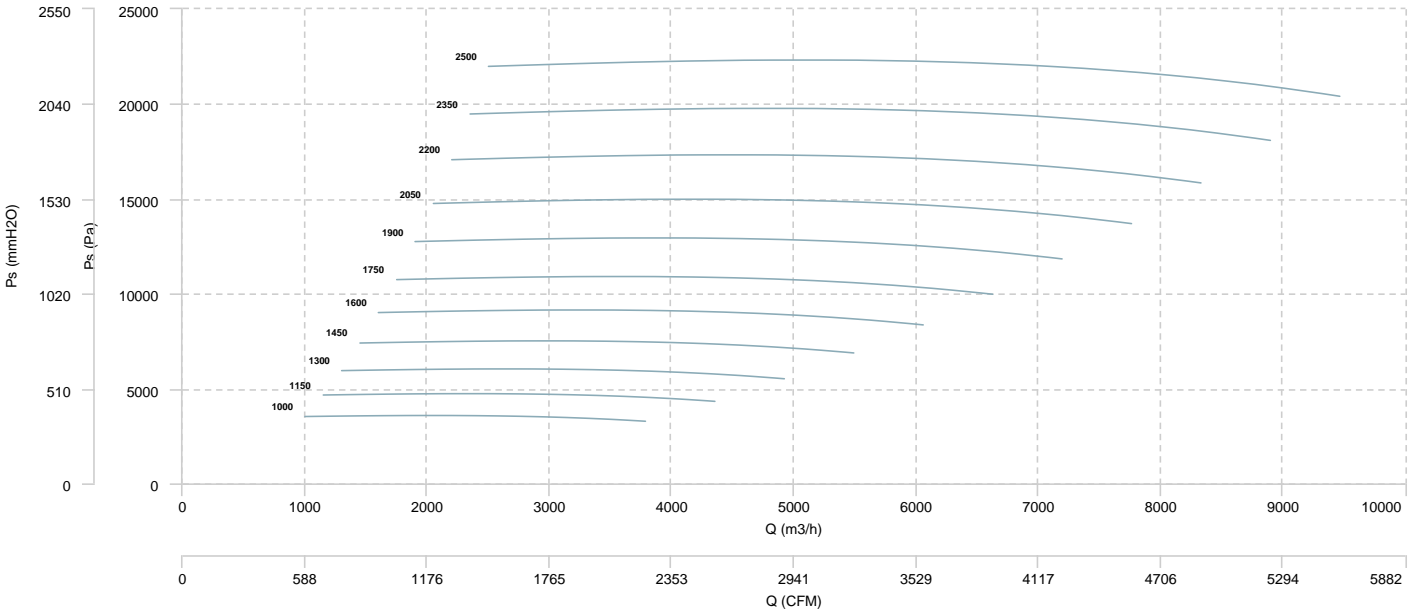


## AIR FLOW - MECHANICAL POWER

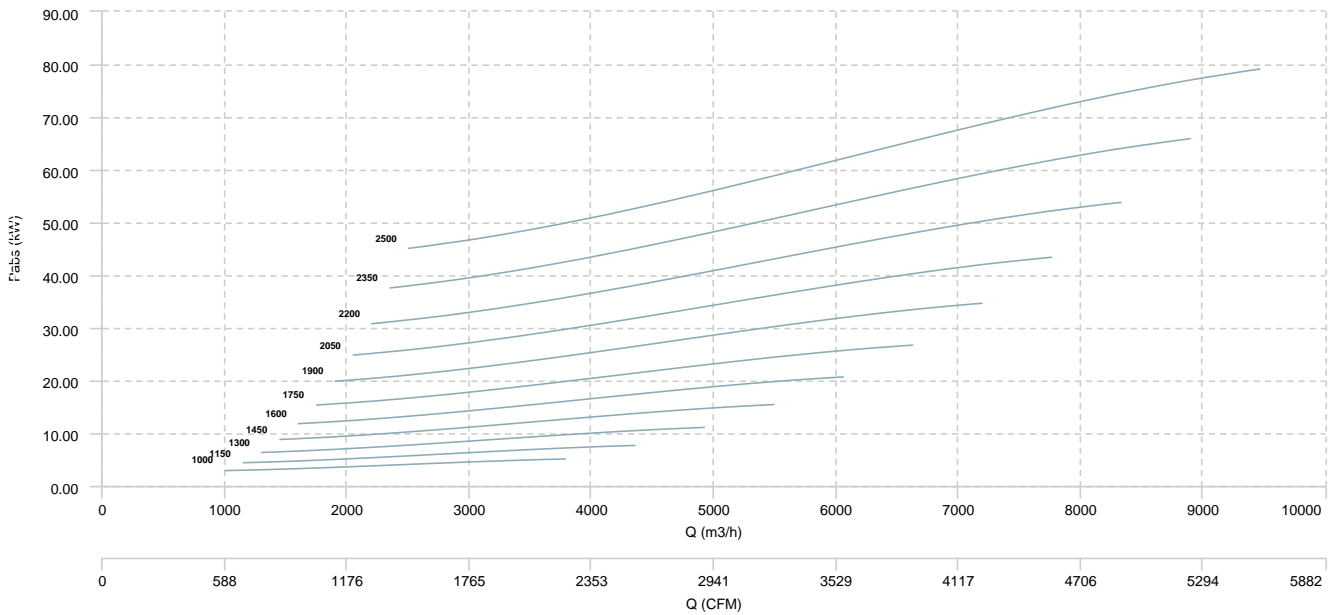


AATVC 1250

## AIR FLOW - PRESSURE



## AIR FLOW - MECHANICAL POWER





## Sound data

| Sound power Lw dB (A) |       |       |        |        |        |         |         |         |         |       |
|-----------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| AATVC 500 (1800 RPM)  | Inlet | 42    | 54     | 61     | 65     | 66      | 61      | 55      | 52      | 70    |
| AATVC 560 (1600 RPM)  | Inlet | 43    | 55     | 61     | 65     | 66      | 61      | 55      | 52      | 70    |
| AATVC 630 (1700 RPM)  | Inlet | 46    | 58     | 65     | 69     | 70      | 65      | 59      | 56      | 74    |
| AATVC 710 (1400 RPM)  | Inlet | 45    | 57     | 63     | 67     | 68      | 63      | 57      | 54      | 72    |
| AATVC 800 (1450 RPM)  | Inlet | 48    | 60     | 67     | 71     | 72      | 67      | 60      | 57      | 76    |
| AATVC 900 (1350 RPM)  | Inlet | 49    | 61     | 67     | 71     | 72      | 68      | 61      | 58      | 76    |
| AATVC 1000 (1250 RPM) | Inlet | 51    | 63     | 69     | 73     | 74      | 69      | 63      | 60      | 78    |
| AATVC 1120 (1350 RPM) | Inlet | 54    | 66     | 73     | 77     | 78      | 73      | 67      | 64      | 82    |
| AATVC 1250 (1000 RPM) | Inlet | 53    | 65     | 71     | 75     | 76      | 72      | 65      | 62      | 80    |

**Notes:**

\* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$