

## AAVA



### HIGH PRESSURE WITH BACKWARD IMPELLER

#### 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 impeller with self-cleaning system made of Fe360 sheet statically and dynamically balanced. Impellers are painted with polyester primer that resists temperatures up to 300°C.
- Standard asynchronous squirrel-cage motor with IP-55 protection and class F insulation. Manufactured with standard voltages: 230/400V 50Hz for three phase motors up to 4kW and 400/690V 50Hz for higher powers.
- It allows adjusting the orientation locally from models 220 to 630. Models sizes from 710 to 1000 size the orientation is fixed.

## Accessories



**AB**



**AC**



**AVR**



**AVS**



**BA-400**



**EI**



**FS**



**INT**



**JE 45**



**RA**



**RI**



**SFC**

#### APPLICATIONS:

Designed for inline installation, they are suitable for:

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

#### UNDER REQUEST

- Fans for 60Hz and special voltages.
- 2 speed motor.
- C4 coating painting
- Hot dip galvanized
- Special steel (Cor-Ten A, Hardox...)
- Inox 304 (normal or electropolished finish)
- Inox 316 (normal or electropolished finish)
- Cooling wheel
- Anticaloric paint
- Reinforced housing
- Fully welded housing (waterproof)
- Insulated housing
- Split casing (for big sizes)
- Inspection door to facilitate maintenance and cleaning
- Drain plug.
- Airtight axle
- Frontal foot
- Double suction flange
- Available in non-sparking air passage and standard motor.
- Other brands of motors.

## Technical data

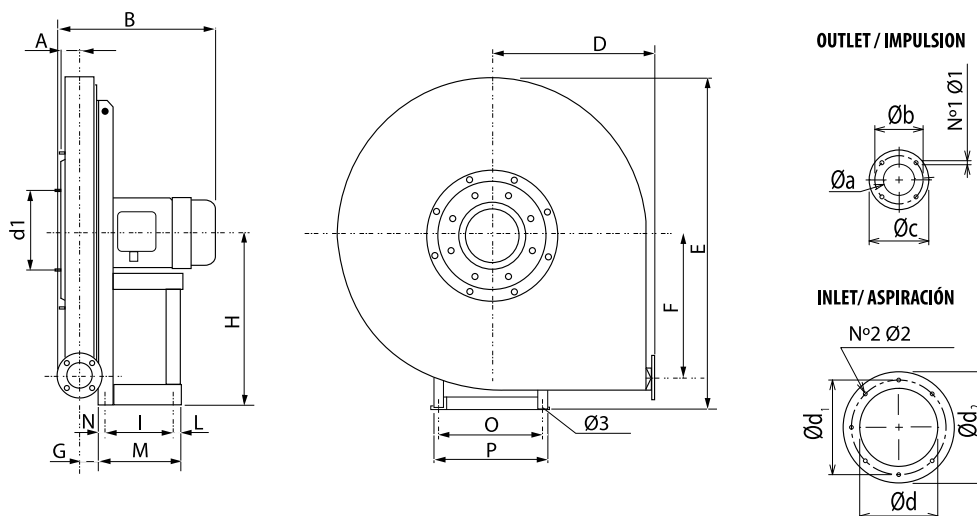
### Three-phase motor / 2 poles

| Code      | Model                 | R.P.M. | Rated I.<br>A |      | Rated power<br>kW | Max.<br>Airflow<br>m³/h | Sound<br>db<br>(A)** | Weight<br>kg | Connect.<br>diagram |
|-----------|-----------------------|--------|---------------|------|-------------------|-------------------------|----------------------|--------------|---------------------|
|           |                       |        | 230V          | 400V |                   |                         |                      |              |                     |
| 502403114 | AAVA 310/P T2 0,25kW  | 2800   | 1,12          | 0,65 | 0,25              | 120                     | 58                   | 29           | 1                   |
| 502403515 | AAVA 350/P T2 0,37kW  | 2800   | 1,58          | 0,91 | 0,37              | 190                     | 59                   | 33           | 1                   |
| 502404016 | AAVA 400/P T2 0,55kW  | 2800   | 2,23          | 1,29 | 0,55              | 260                     | 62                   | 44           | 1                   |
| 502404517 | AAVA 450/P T2 0,75kW  | 2800   | 2,75          | 1,58 | 0,75              | 330                     | 64                   | 46           | 1                   |
| 502405018 | AAVA 500/P T2 1,1kW   | 2800   | 4,05          | 2,33 | 1,10              | 330                     | 66                   | 51           | 1                   |
| 502405619 | AAVA 560/P T2 1,5kW   | 2865   | 5,83          | 3,14 | 1,50              | 370                     | 68                   | 89           | 1                   |
| 502406319 | AAVA 631/P T2 1,5kW   | 2865   | 5,83          | 3,14 | 1,50              | 330                     | 69                   | 116          | 1                   |
| 502406327 | AAVA 632/P T2 2,2kW   | 2840   | 7,97          | 4,58 | 2,20              | 400                     | 70                   | 119          | 1                   |
| 502407129 | AAVA 711/P T2 3kW     | 2880   | 10,3          | 5,92 | 3,00              | 480                     | 72                   | 149          | 1                   |
| 502407132 | AAVA 712/P T2 4kW     | 2880   | 13,3          | 7,63 | 4,00              | 550                     | 73                   | 168          | 1                   |
| 502408032 | AAVA 801/P T2 4kW     | 2880   | 13,3          | 7,63 | 4,00              | 480                     | 75                   | 195          | 1                   |
| 502408034 | AAVA 802/P T2 5,5kW   | 2910   | -             | 10,6 | 5,50              | 550                     | 77                   | 197          | 1                   |
| 502408036 | AAVA 803/P T2 7,5kW   | 2910   | -             | 14,1 | 7,50              | 730                     | 79                   | 197          | 1                   |
| 502409021 | AAVA 901/P T2 11kW    | 2940   | -             | 20,8 | 11,00             | 870                     | 81                   | 330          | 1                   |
| 502409024 | AAVA 902/P T2 15kW    | 2935   | -             | 27,4 | 15,00             | 1.230                   | 83                   | 390          | 1                   |
| 502410026 | AAVA 1001/P T2 18,5kW | 2940   | -             | 34,4 | 18,50             | 1.450                   | 85                   | 442          | 1                   |
| 502410028 | AAVA 1002/P T2 22kW   | 2940   | -             | 39,8 | 22,00             | 1.640                   | 87                   | 501          | 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   | D   | E    | F   | G  | H   | I   | L  |
|-----------------------|----|-----|-----|------|-----|----|-----|-----|----|
| AAVA 310/P T2 0,25kW  | 34 | 280 | 270 | 550  | 220 | 30 | 280 | 86  | 14 |
| AAVA 350/P T2 0,37kW  | 34 | 310 | 270 | 550  | 220 | 30 | 280 | 121 | 23 |
| AAVA 400/P T2 0,55kW  | 34 | 310 | 350 | 705  | 300 | 31 | 355 | 121 | 23 |
| AAVA 450/P T2 0,75kW  | 34 | 335 | 350 | 705  | 300 | 31 | 355 | 121 | 45 |
| AAVA 500/P T2 1,1kW   | 34 | 335 | 350 | 705  | 300 | 31 | 355 | 121 | 45 |
| AAVA 560/P T2 1,5kW   | 34 | 380 | 405 | 830  | 355 | 32 | 425 | 133 | 58 |
| AAVA 631/P T2 1,5kW   | 34 | 380 | 405 | 830  | 355 | 32 | 425 | 133 | 58 |
| AAVA 632/P T2 2,2kW   | 34 | 380 | 405 | 830  | 355 | 32 | 425 | 133 | 58 |
| AAVA 711/P T2 3kW     | 40 | 440 | 455 | 930  | 400 | 38 | 475 | 197 | 49 |
| AAVA 712/P T2 4kW     | 40 | 460 | 455 | 930  | 400 | 38 | 475 | 197 | 49 |
| AAVA 801/P T2 4kW     | 40 | 460 | 505 | 1035 | 450 | 38 | 530 | 197 | 49 |
| AAVA 802/P T2 5,5kW   | 40 | 460 | 505 | 1035 | 450 | 38 | 530 | 197 | 49 |
| AAVA 803/P T2 7,5kW   | 40 | 460 | 505 | 1035 | 450 | 38 | 530 | 197 | 49 |
| AAVA 901/P T2 11kW    | 49 | 610 | 570 | 1170 | 500 | 48 | 600 | 337 | 49 |
| AAVA 902/P T2 15kW    | 49 | 610 | 570 | 1170 | 500 | 48 | 600 | 337 | 49 |
| AAVA 1001/P T2 18,5kW | 49 | 610 | 635 | 1305 | 560 | 48 | 670 | 337 | 49 |
| AAVA 1002/P T2 22kW   | 49 | 610 | 635 | 1305 | 560 | 48 | 670 | 337 | 49 |

| Model                | M   | N  | N1xØ1 | N2xØ2        | O   | P   | Ø3 | Øa | Øb |
|----------------------|-----|----|-------|--------------|-----|-----|----|----|----|
| AAVA 310/P T2 0,25kW | 145 | 45 | 4x8,5 | Nº8<br>M6x20 | 184 | 206 | 10 | 54 | 84 |
| AAVA 350/P T2 0,37kW | 189 | 45 | 4x8,5 | Nº8<br>M6x20 | 203 | 225 | 10 | 54 | 84 |
| AAVA 400/P T2 0,55kW | 189 | 45 | 4x8,5 | Nº8<br>M6x20 | 203 | 225 | 10 | 54 | 84 |

| Model                 | M   | N  | N1xØ1 | N2xØ2        | O   | P   | Ø3 | Øa | Øb  |
|-----------------------|-----|----|-------|--------------|-----|-----|----|----|-----|
| AAVA 450/P T2 0,75kW  | 211 | 45 | 4x8,5 | Nº8<br>M6x20 | 203 | 225 | 10 | 54 | 84  |
| AAVA 500/P T2 1,1kW   | 211 | 45 | 4x8,5 | Nº8<br>M6x20 | 203 | 225 | 10 | 54 | 84  |
| AAVA 560/P T2 1,5kW   | 246 | 55 | 4x8,5 | Nº8<br>M6x20 | 246 | 260 | 10 | 54 | 84  |
| AAVA 631/P T2 1,5kW   | 246 | 55 | 4x8,5 | Nº8<br>M6x20 | 234 | 260 | 10 | 54 | 84  |
| AAVA 632/P T2 2,2kW   | 246 | 55 | 4x8,5 | Nº8<br>M6x20 | 234 | 260 | 10 | 54 | 84  |
| AAVA 711/P T2 3kW     | 276 | 30 | 4x8,5 | Nº8<br>M6x20 | 289 | 324 | 12 | 66 | 102 |
| AAVA 712/P T2 4kW     | 276 | 30 | 4x8,5 | Nº8<br>M6x20 | 289 | 324 | 12 | 66 | 102 |
| AAVA 801/P T2 4kW     | 276 | 30 | 4x8,5 | Nº8<br>M6x20 | 289 | 324 | 12 | 66 | 102 |
| AAVA 802/P T2 5,5kW   | 276 | 30 | 4x8,5 | Nº8<br>M6x20 | 289 | 324 | 12 | 66 | 102 |
| AAVA 803/P T2 7,5kW   | 276 | 30 | 4x8,5 | Nº8<br>M6x20 | 289 | 324 | 12 | 66 | 102 |
| AAVA 901/P T2 11kW    | 436 | 50 | 4x8,5 | Nº8<br>M6x20 | 395 | 440 | 14 | 83 | 118 |
| AAVA 902/P T2 15kW    | 436 | 50 | 4x8,5 | Nº8<br>M6x20 | 395 | 440 | 14 | 83 | 118 |
| AAVA 1001/P T2 18,5kW | 436 | 50 | 4x8,5 | Nº8<br>M6x20 | 395 | 440 | 14 | 83 | 118 |
| AAVA 1002/P T2 22kW   | 436 | 50 | 4x8,5 | Nº8<br>M6x20 | 395 | 440 | 14 | 83 | 118 |

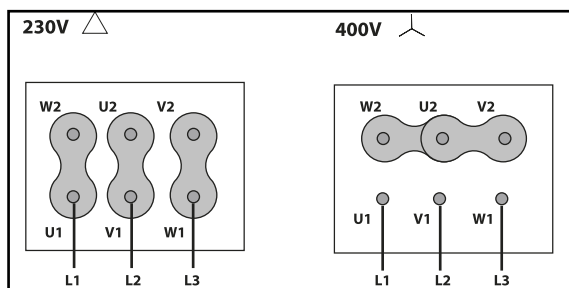
| Model                | Øc  | Ød  | Ød1 | Ød2 |
|----------------------|-----|-----|-----|-----|
| AAVA 310/P T2 0,25kW | 104 | 145 | 182 | 215 |
| AAVA 350/P T2 0,37kW | 104 | 145 | 182 | 215 |
| AAVA 400/P T2 0,55kW | 104 | 145 | 182 | 215 |
| AAVA 450/P T2 0,75kW | 104 | 145 | 182 | 215 |
| AAVA 500/P T2 1,1kW  | 104 | 145 | 182 | 215 |
| AAVA 560/P T2 1,5kW  | 104 | 145 | 182 | 215 |
| AAVA 631/P T2 1,5kW  | 104 | 145 | 182 | 215 |
| AAVA 632/P T2 2,2kW  | 104 | 145 | 182 | 215 |
| AAVA 711/P T2 3kW    | 126 | 165 | 200 | 235 |
| AAVA 712/P T2 4kW    | 126 | 165 | 200 | 235 |
| AAVA 801/P T2 4kW    | 126 | 165 | 200 | 235 |
| AAVA 802/P T2 5,5kW  | 126 | 165 | 200 | 235 |
| AAVA 803/P T2 7,5kW  | 126 | 165 | 200 | 235 |
| AAVA 901/P T2 11kW   | 143 | 185 | 219 | 250 |

| Model                 | Øc  | Ød  | Ød1 | Ød2 |
|-----------------------|-----|-----|-----|-----|
| AAVA 902/P T2 15kW    | 143 | 185 | 219 | 250 |
| AAVA 1001/P T2 18,5kW | 143 | 185 | 219 | 250 |
| AAVA 1002/P T2 22kW   | 143 | 185 | 219 | 250 |

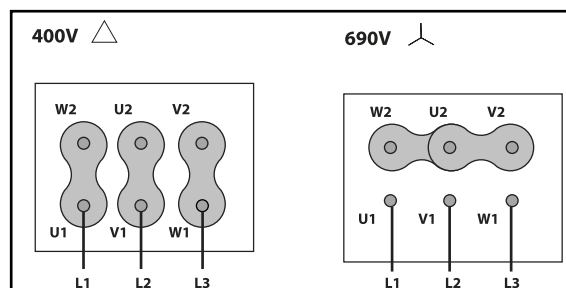
## Wiring diagram

### Wiring diagram Nº 1

230/400V



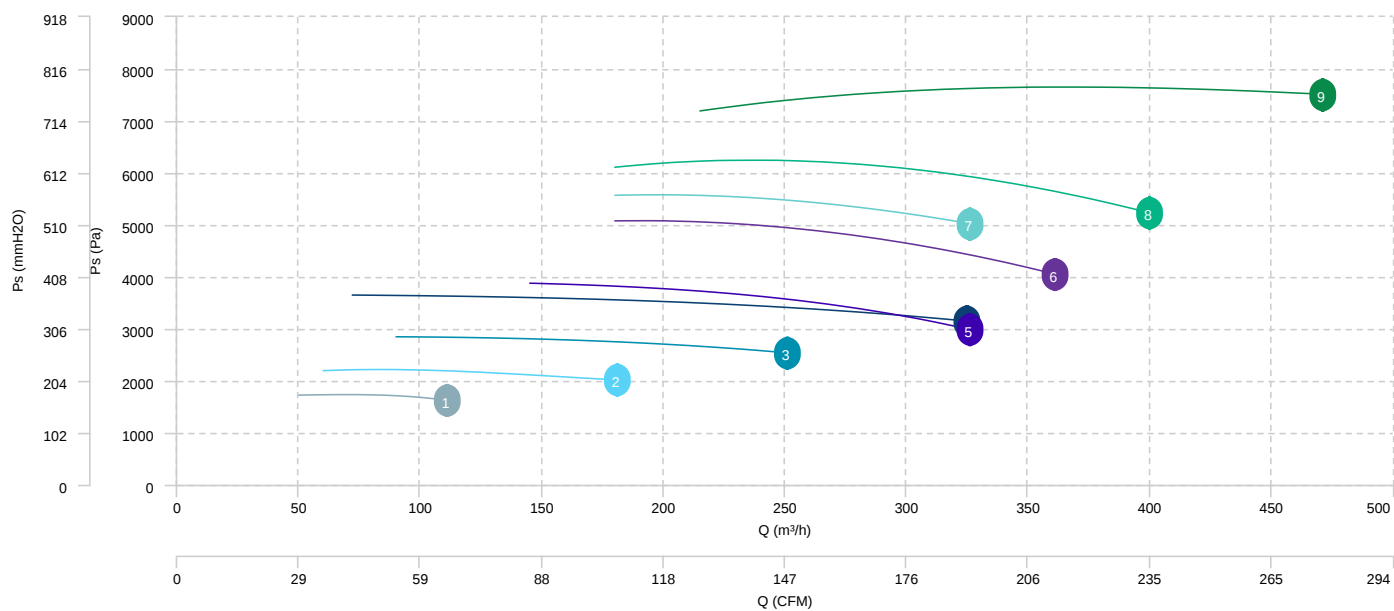
400/690V



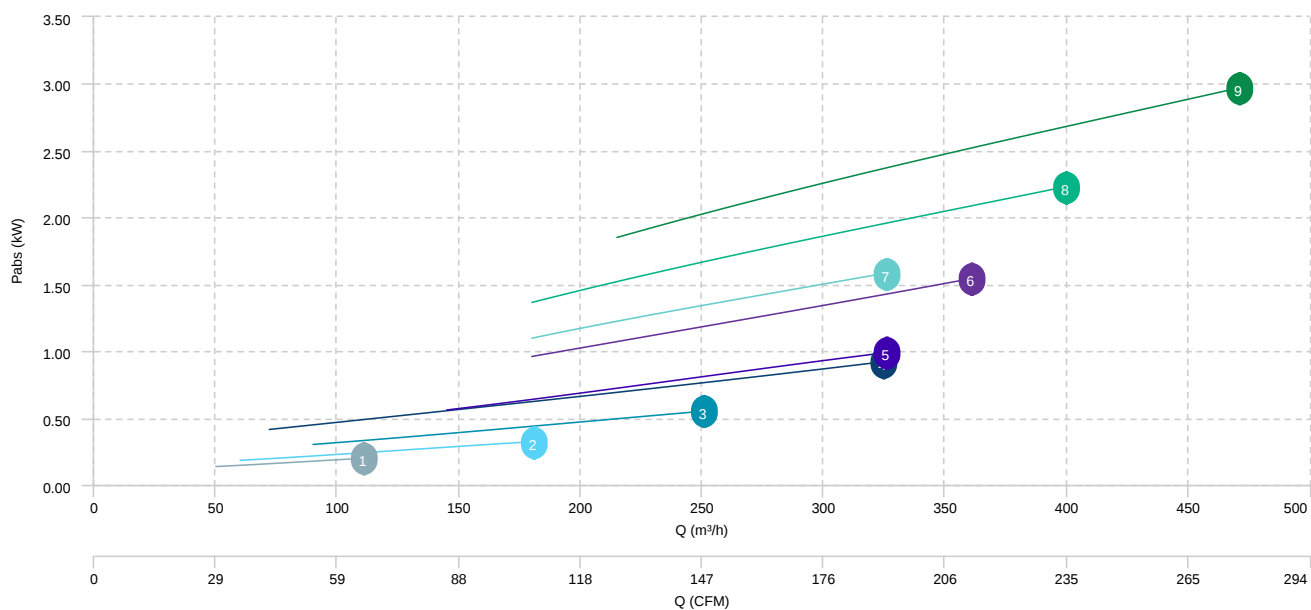
## CHARACTERISCTIC CURVE

|   |                      |   |                      |   |                      |   |                      |
|---|----------------------|---|----------------------|---|----------------------|---|----------------------|
| 1 | AAVA 310/P T2 0,25kW | 2 | AAVA 350/P T2 0,37kW | 3 | AAVA 400/P T2 0,55kW | 4 | AAVA 450/P T2 0,75kW |
| 5 | AAVA 500/P T2 1,1kW  | 6 | AAVA 560/P T2 1,5kW  | 7 | AAVA 631/P T2 1,5kW  | 8 | AAVA 632/P T2 2,2kW  |
| 9 | AAVA 711/P T2 3kW    |   |                      |   |                      |   |                      |

### AIR FLOW - PRESSURE

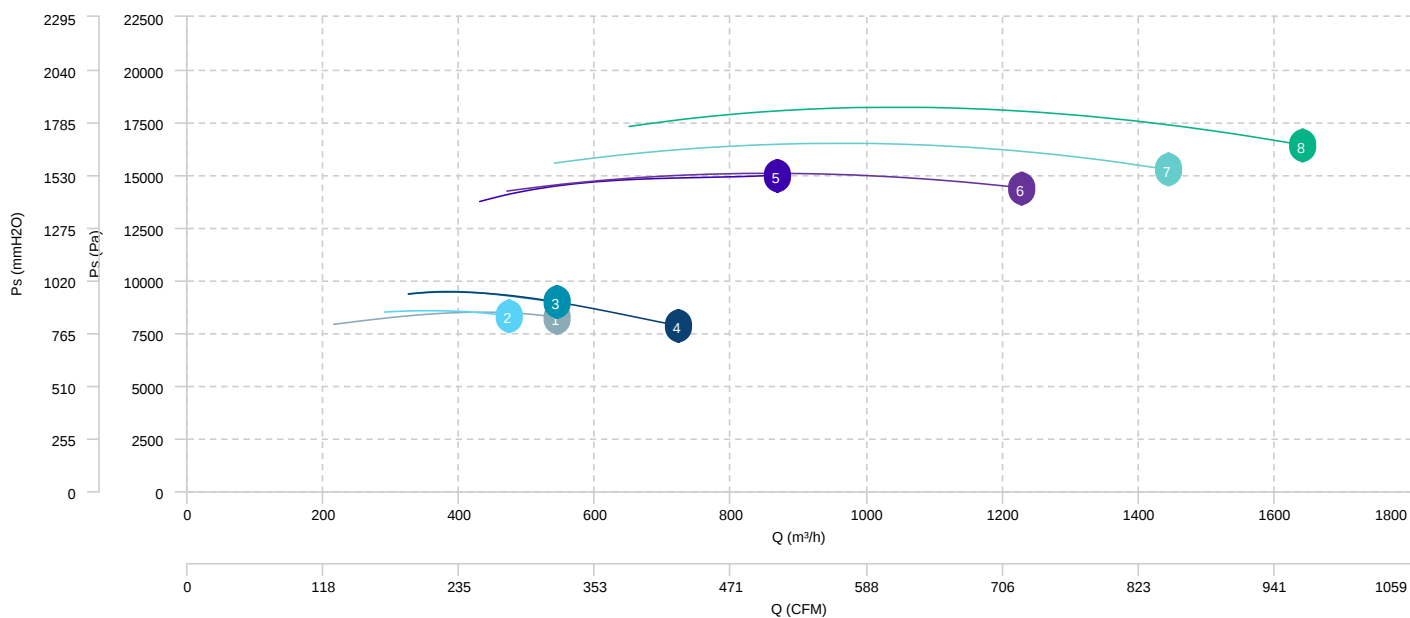


### AIR FLOW - ABSORBED POWER

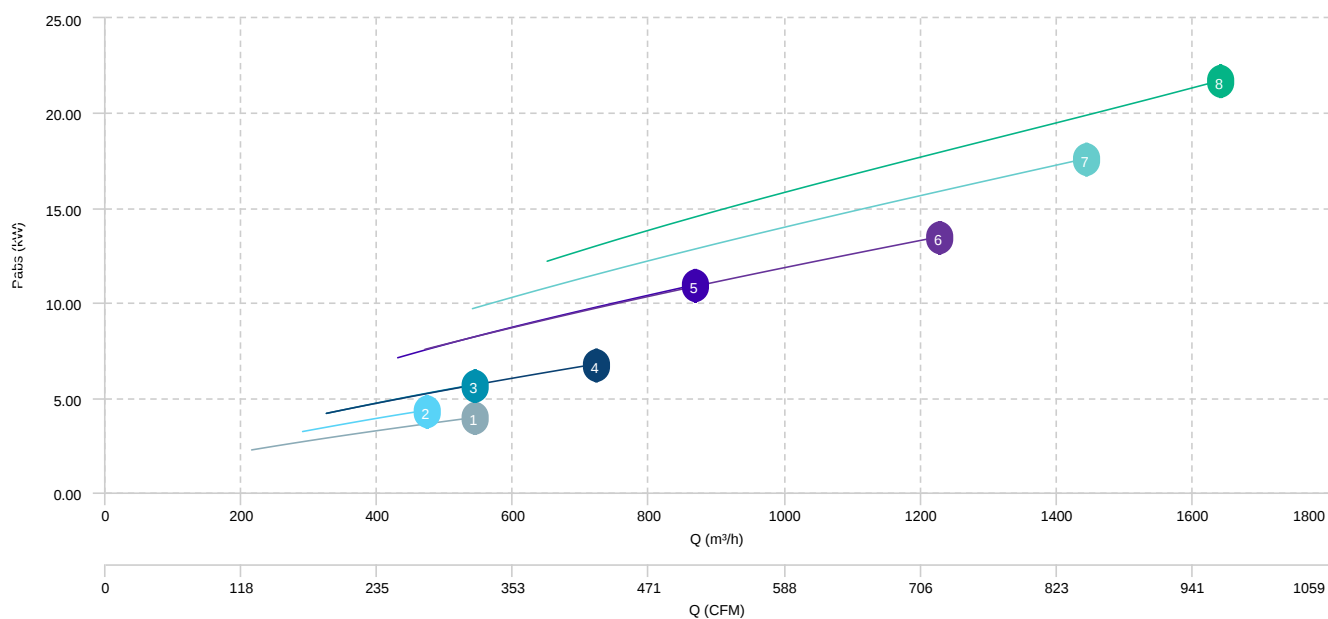


|   |                    |   |                    |   |                       |   |                     |
|---|--------------------|---|--------------------|---|-----------------------|---|---------------------|
| 1 | AAVA 712/P T2 4kW  | 2 | AAVA 801/P T2 4kW  | 3 | AAVA 802/P T2 5,5kW   | 4 | AAVA 803/P T2 7,5kW |
| 5 | AAVA 901/P T2 11kW | 6 | AAVA 902/P T2 15kW | 7 | AAVA 1001/P T2 18,5kW | 8 | AAVA 1002/P T2 22kW |

## AIR FLOW - PRESSURE



## AIR FLOW - ABSORBED POWER



## Sound data

### Sound / 2 poles

| Sound power Lw dB (A) |       |       |        |        |        |         |         |         |         |       |
|-----------------------|-------|-------|--------|--------|--------|---------|---------|---------|---------|-------|
| Model                 |       | 63 Hz | 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz | 8000 Hz | Total |
| AAVA 310/P T2 0,25kW  | Inlet | 47    | 62     | 70     | 78     | 79      | 78      | 70      | 71      | 84    |
| AAVA 350/P T2 0,37kW  | Inlet | 49    | 63     | 72     | 80     | 81      | 80      | 72      | 72      | 85    |
| AAVA 400/P T2 0,55kW  | Inlet | 51    | 65     | 74     | 82     | 83      | 82      | 74      | 75      | 88    |
| AAVA 450/P T2 0,75kW  | Inlet | 53    | 67     | 76     | 84     | 85      | 84      | 76      | 76      | 90    |
| AAVA 500/P T2 1,1kW   | Inlet | 55    | 70     | 78     | 86     | 87      | 86      | 78      | 79      | 92    |
| AAVA 560/P T2 1,5kW   | Inlet | 57    | 72     | 80     | 88     | 89      | 88      | 80      | 81      | 94    |
| AAVA 631/P T2 1,5kW   | Inlet | 58    | 73     | 81     | 89     | 90      | 89      | 81      | 82      | 95    |
| AAVA 632/P T2 2,2kW   | Inlet | 59    | 74     | 82     | 90     | 91      | 90      | 82      | 83      | 96    |
| AAVA 711/P T2 3kW     | Inlet | 61    | 76     | 84     | 92     | 93      | 92      | 84      | 85      | 98    |
| AAVA 712/P T2 4kW     | Inlet | 63    | 77     | 85     | 93     | 95      | 93      | 85      | 86      | 99    |
| AAVA 801/P T2 4kW     | Inlet | 65    | 79     | 88     | 96     | 97      | 95      | 87      | 88      | 101   |
| AAVA 802/P T2 5,5kW   | Inlet | 67    | 81     | 90     | 98     | 99      | 97      | 90      | 90      | 103   |
| AAVA 803/P T2 7,5kW   | Inlet | 69    | 83     | 92     | 100    | 101     | 99      | 92      | 92      | 105   |
| AAVA 901/P T2 11kW    | Inlet | 70    | 85     | 93     | 101    | 102     | 101     | 93      | 94      | 107   |
| AAVA 902/P T2 15kW    | Inlet | 72    | 87     | 95     | 103    | 104     | 103     | 95      | 96      | 109   |
| AAVA 1001/P T2 18,5kW | Inlet | 74    | 89     | 97     | 105    | 106     | 105     | 97      | 98      | 111   |
| AAVA 1002/P T2 22kW   | Inlet | 76    | 91     | 99     | 107    | 108     | 107     | 99      | 100     | 113   |