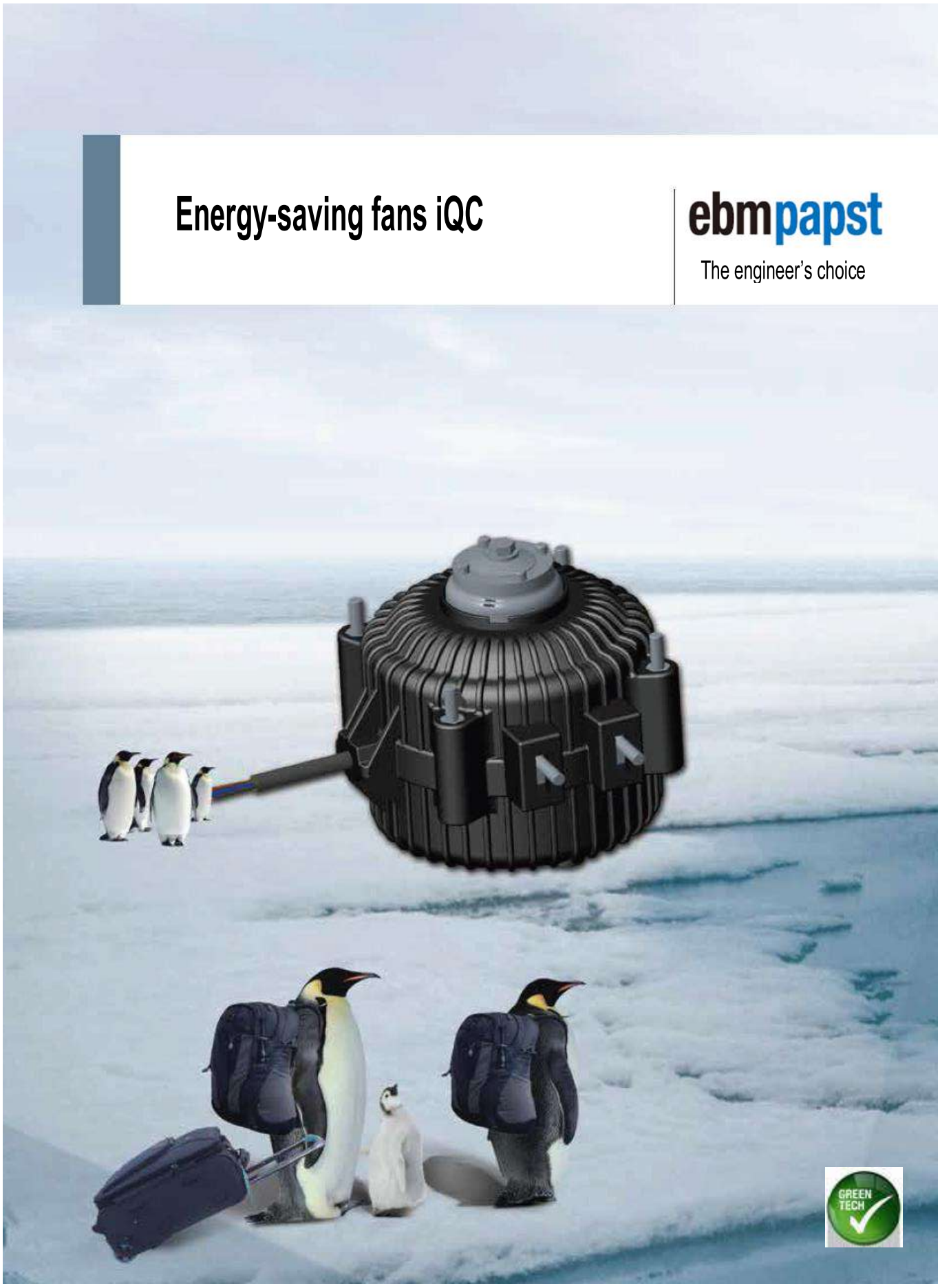
# Energy-saving fans iQC

ebmpapst

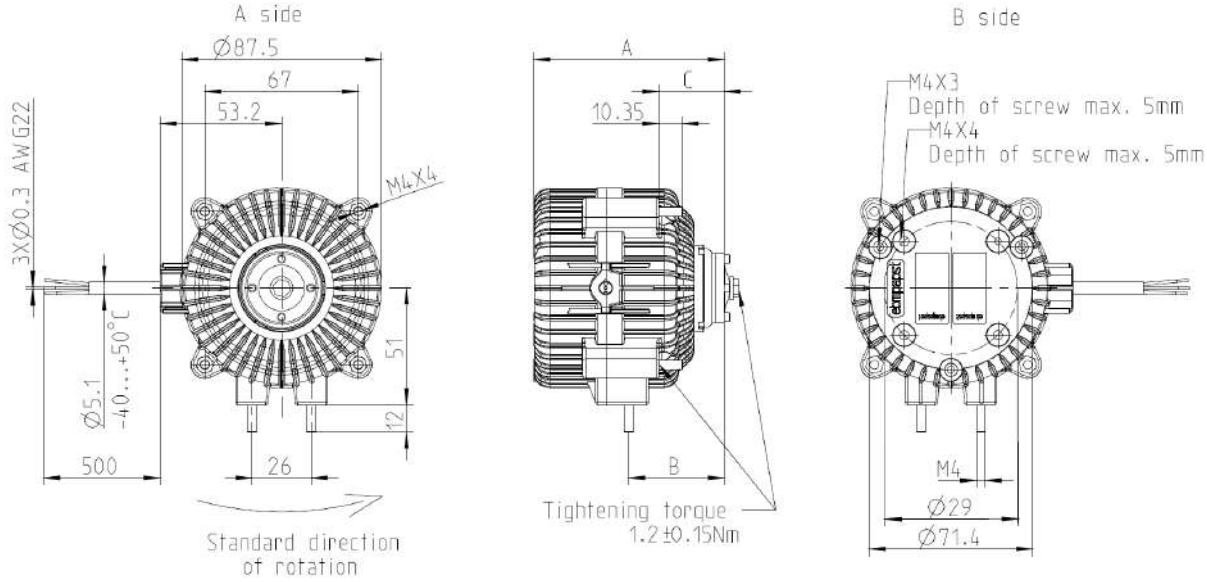
The engineer's choice



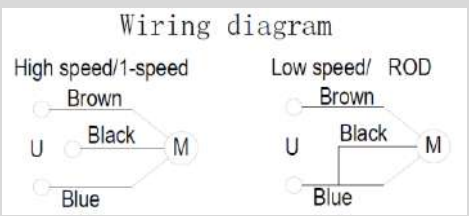
# Technical data

| Nominal data | | Nominal voltage | Frequency | Speed/rpm | Output power | Perm. Amb. Temp. | Mass | Dimensions | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Type** | **Feature** | **V** | **Hz** | **rpm** | **W** | **℃** | **Kg** | **A** | **B** | **C** |
| iQC 3608 | ROS**, 1 Speed | 220-240 | 56/60 | Max. 1800 | 6.5 | -40..+50 | 0,5 | 83 | 41,5-43,5 | 28,5 |
| | ROS**, 2 Speed | 220-240 | 56/60 | 900*/1800 | 6.5 | -40..+50 | 0,5 | | | |
| | ROD | 220-240 | 56/60 | Max. 1800 | 6.5 | -40..+50 | 0,5 | | | |
| iQC 3612 | ROS**, 1 Speed | 220-240 | 56/60 | Max. 1800 | 15 | -40..+50 | 0,5 | 85 | 43,5-45,5 | 30,5 |
| | ROS**, 2 Speed | 220-240 | 56/60 | 900*/1800 | 15 | -40..+50 | 0,5 | | | |
| | ROD | 220-240 | 56/60 | Max. 1800 | 15 | -40..+50 | 0,5 | | | |

*900rpm could be changed on demand(100 integer multiple) **ROS could be canceled on demand ROS: reverse on start 700rpm ROD: reverse on demand 500rpm

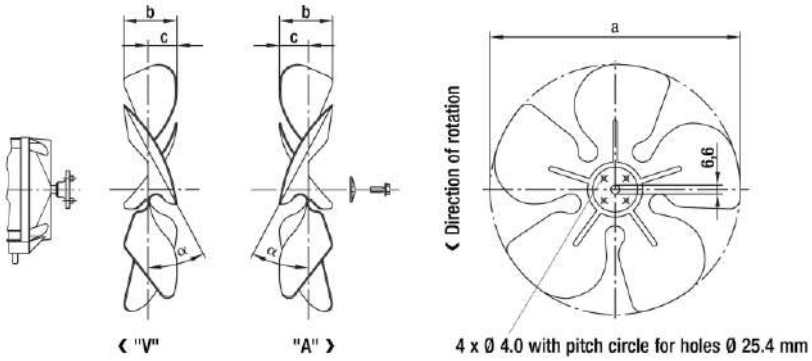



**General overview of data: iQC**

| | | | |
|---|---|---|---|
| **Material** | PBT | **Protection class** | **II** |
| **Direction of air flow** | Sucking or blowing(Depending on axial impeller used) | **Approvals** | CCC; VDE |
| **Direction of rotation** | Counterclockwise, seen on shaft end | **Mounting attachment parts** | Guard grille and wall ring are attached to the projecting thread ends on the A side |
| **System of protection** | IP55 | **Axial impeller attachment** | A plastic adapter with catching peg and M4 screw is used to secure the impeller on the motor shaft |
| **Insulation class** | "B" | **Wire diagram** |  |
| **Mounting position** | Any | | |
| **Mode of operation** | Continuous operation(S1) | | |
| **Bearing** | Maintenance-free ball bearing | | |
| **Motor protection** | Via electronics | | |
| **Electrical connection** | Mains cable | | |
| **Ambient temperature:** | -40℃…+50℃ | | |
| **Relative humidity:** | 0…95% | | |

| No. | Type | Nominal Voltage | Nominal Frequency | Rated Rotation Speed | Rated Input Power | Rated Output Power | Rated Current |
|---|---|---|---|---|---|---|---|
| ROS | IQC3608-* | 220-240V | 50/60Hz | 700 | 7.00 | 2.70 | 0.07 |
| ROD | IQC3608-* | 220-240V | 50/60Hz | 500 | 6.60 | 2.10 | 0.07 |
| 1 | IQC3608-* | 220-240V | 50/60Hz | 300 | 6.63 | 1.50 | 0.07 |
| 2 | IQC3608-* | 220-240V | 50/60Hz | 400 | 6.96 | 1.87 | 0.07 |
| 3 | IQC3608-* | 220-240V | 50/60Hz | 500 | 7.13 | 2.27 | 0.07 |
| 4 | IQC3608-* | 220-240V | 50/60Hz | 600 | 7.38 | 2.65 | 0.08 |
| 5 | IQC3608-* | 220-240V | 50/60Hz | 700 | 7.59 | 3.05 | 0.08 |
| 6 | IQC3608-* | 220-240V | 50/60Hz | 800 | 7.92 | 3.38 | 0.08 |
| 7 | IQC3608-* | 220-240V | 50/60Hz | 900 | 8.33 | 3.70 | 0.08 |
| 8 | IQC3608-* | 220-240V | 50/60Hz | 1000 | 8.63 | 4.08 | 0.09 |
| 9 | IQC3608-* | 220-240V | 50/60Hz | 1100 | 8.89 | 4.44 | 0.09 |
| 10 | IQC3608-* | 220-240V | 50/60Hz | 1200 | 9.28 | 4.78 | 0.09 |
| 11 | IQC3608-* | 220-240V | 50/60Hz | 1300 | 9.55 | 5.12 | 0.09 |
| 12 | IQC3608-* | 220-240V | 50/60Hz | 1400 | 9.89 | 5.43 | 0.10 |
| 13 | IQC3608-* | 220-240V | 50/60Hz | 1500 | 10.17 | 5.74 | 0.10 |
| 14 | IQC3608-* | 220-240V | 50/60Hz | 1600 | 10.53 | 6.03 | 0.10 |
| 15 | IQC3608-* | 220-240V | 50/60Hz | 1700 | 10.79 | 6.28 | 0.10 |
| 16 | IQC3608-* | 220-240V | 50/60Hz | 1800 | 11.00 | 6.50 | 0.11 |
| ROS | IQC3612-* | 220-240V | 50/60Hz | 700 | 16.10 | 6.00 | 0.15 |
| ROD | IQC3612-* | 220-240V | 50/60Hz | 500 | 15.00 | 4.67 | 0.14 |
| 17 | IQC3612-* | 220-240V | 50/60Hz | 300 | 12.51 | 2.50 | 0.12 |
| 18 | IQC3612-* | 220-240V | 50/60Hz | 400 | 12.42 | 3.24 | 0.12 |
| 19 | IQC3612-* | 220-240V | 50/60Hz | 500 | 13.62 | 4.11 | 0.13 |
| 20 | IQC3612-* | 220-240V | 50/60Hz | 600 | 13.98 | 4.95 | 0.13 |
| 21 | IQC3612-* | 220-240V | 50/60Hz | 700 | 14.79 | 5.80 | 0.14 |
| 22 | IQC3612-* | 220-240V | 50/60Hz | 800 | 15.97 | 6.74 | 0.15 |
| 23 | IQC3612-* | 220-240V | 50/60Hz | 900 | 16.29 | 7.37 | 0.15 |
| 24 | IQC3612-* | 220-240V | 50/60Hz | 1000 | 16.88 | 8.13 | 0.15 |
| 25 | IQC3612-* | 220-240V | 50/60Hz | 1100 | 18.06 | 9.07 | 0.16 |
| 26 | IQC3612-* | 220-240V | 50/60Hz | 1200 | 19.45 | 10.15 | 0.17 |
| 27 | IQC3612-* | 220-240V | 50/60Hz | 1300 | 20.20 | 10.97 | 0.18 |
| 28 | IQC3612-* | 220-240V | 50/60Hz | 1400 | 20.89 | 11.73 | 0.18 |
| 29 | IQC3612-* | 220-240V | 50/60Hz | 1500 | 21.59 | 12.51 | 0.19 |
| 30 | IQC3612-* | 220-240V | 50/60Hz | 1600 | 22.26 | 13.20 | 0.19 |
| 31 | IQC3612-* | 220-240V | 50/60Hz | 1700 | 22.85 | 14.00 | 0.20 |
| 32 | IQC3612-* | 220-240V | 50/60Hz | 1800 | 23.00 | 15.00 | 0.20 |

# Axial impellers




- **Material:** Sheet aluminium

**Axial impellers**

| Part no. for dir. of air flow "V" | Part no. for dir. of air flow "A" | Blade angle α | a | b | c |
|---|---|---|---|---|---|
| 73801-2-3634 | 73761-2-3634 | 22°±1°30' | 154,0 | 27,5 | 14,0 |
| 73802-2-3634 | 73762-2-3634 | 28°±1°30' | 154,0 | 32,0 | 16,0 |
| 73803-2-3634 | 73763-2-3634 | 34°±1°30' | 154,0 | 37,0 | 18,0 |
| 73804-2-3634 | 73764-2-3634 | 22°±1°30' | 172,0 | 31,0 | 14,5 |
| 73805-2-3634 | 73765-2-3634 | 28°±1°30' | 172,0 | 36,0 | 17,0 |
| 73806-2-3634 | 73766-2-3634 | 34°±1°30' | 172,0 | 42,0 | 21,0 |
| 73807-2-3634 | 73767-2-3634 | 22°±1°30' | 200,0 | 32,0 | 15,5 |
| 73808-2-3634 | 73768-2-3634 | 28°±1°30' | 200,0 | 37,5 | 18,0 |
| 73809-2-3634 | 73769-2-3634 | 34°±1°30' | 200,0 | 45,0 | 22,0 |
| 73810-2-3634 | 73710-2-3634 | 22°±1°30' | 230,0 | 35,0 | 17,5 |
| 73811-2-3634 | 73711-2-3634 | 28°±1°30' | 230,0 | 43,0 | 21,5 |
| 73812-2-3634 | 73712-2-3634 | 34°±1°30' | 230,0 | 50,0 | 24,0 |
| 73813-2-3634 | 73713-2-3634 | 22°±1°30' | 254,0 | 37,0 | 19,0 |
| 73814-2-3634 | 73714-2-3634 | 28°±1°30' | 254,0 | 45,0 | 23,5 |
| 73815-2-3634 | 73715-2-3634 | 34°±1°30' | 254,0 | 52,0 | 26,0 |
| 73816-2-3634 | 73716-2-3634 | 22°±1°30' | 300,0 | 43,0 | 21,5 |
| 73817-2-3634 | 73717-2-3634 | 28°±1°30' | 300,0 | 53,5 | 26,5 |
| 73818-2-3634 | 73718-2-3634 | 34°±1°30' | 300,0 | 61,0 | 30,0 |

Subject to alterations

## iQC-motor-combination with axial impellers

Power input and air flow

| Motor | Axial impeller diameter | Axial impeller blade angle | n = 1300 rpm | | | n = 1500 rpm | | | n = 1800 rpm | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Input power running at full throttle | Input power running at free air | Air flow at free air | Input power running at full throttle | Input power running at free air | Air flow at free air | Input power running at full throttle | Input power running at free air | Air flow at free air |
| **iQC 3608** | mm | ° | W | W | m3/h | W | W | m3/h | W | W | m3/h |
| | 154 | 22 | 5.30 | 2.72 | 154 | 6.70 | 3.30 | 177 | 8.12 | 4.50 | 215 |
| | 154 | 28 | 5.45 | 2.75 | 165 | 7.87 | 3.60 | 193 | 9.24 | 4.97 | 232 |
| | 154 | 34 | 7.11 | 3.80 | 196 | 9.90 | 4.66 | 228 | 9.74 | 6.89 | 277 |
| | 172 | 22 | 7.52 | 2.99 | 191 | 10.15 | 3.73 | 222 | 9.41 | 4.83 | 262 |
| | 172 | 28 | 9.33 | 3.90 | 238 | 10.79 | 5.27 | 278 | 10.09 | 6.71 | 331 |
| | 172 | 34 | 9.72 | 5.17 | 296 | 10.71 | 5.50 | 338 | 10.92 | 7.30 | 420 |
| | 200 | 22 | 10.51 | 3.94 | 314 | 10.90 | 5.72 | 364 | 10.95 | 7.89 | 432 |
| | 200 | 28 | 10.62 | 7.21 | 435 | 10.95 | 9.26 | 504 | | | |
| **iQC 3612** | mm | ° | W | W | m3/h | W | W | m3/h | W | W | m3/h |
| | 172 | 28 | 10.14 | 4.88 | 243 | 13.59 | 6.00 | 280 | 21.00 | 8.15 | 338 |
| | 172 | 34 | 11.92 | 6.48 | 296 | 16.66 | 8.04 | 342 | 22.27 | 11.41 | 410 |
| | 200 | 22 | 13.74 | 6.04 | 317 | 17.95 | 7.69 | 361 | 22.55 | 9.33 | 435 |
| | 200 | 28 | 19.37 | 9.49 | 441 | 22.80 | 13.18 | 508 | 22.67 | 17.29 | 312 |
| | 200 | 34 | 22.74 | 10.33 | 492 | 22.80 | 13.62 | 566 | 22.86 | 19.21 | 674 |
| | 230 | 22 | 22.04 | 9.19 | 538 | 22.16 | 12.43 | 615 | 22.34 | 18.04 | 743 |
| | 230 | 28 | 22.66 | 14.51 | 677 | 22.44 | 20.99 | 775 | | | |
| | 230* | 34 | 22.79 | 19.83 | 779 | | | | | | |
| | 254 | 22 | 22.40 | 10.40 | 740 | 22.40 | 15.80 | 850 | | | |
| | 254* | 28 | 22.20 | 22.20 | 920 | | | | | | |

subject to alterations

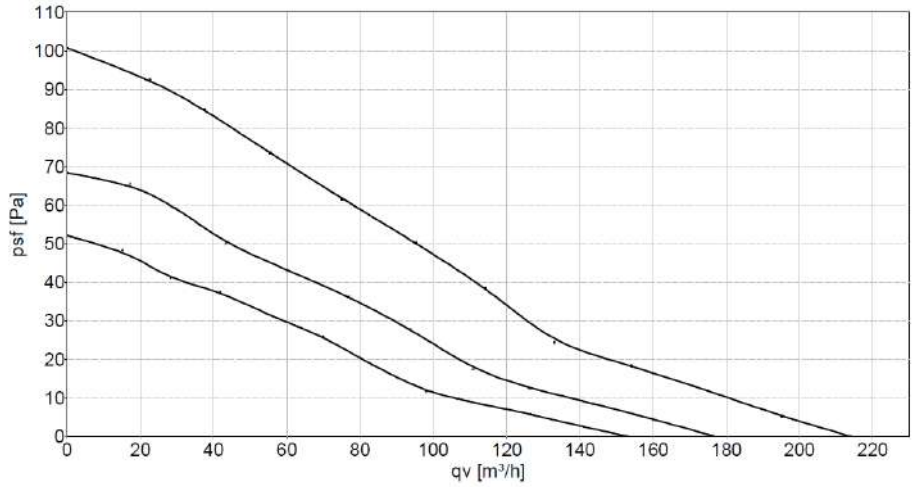
* Depending on back pressure, full nominal speed of 1500 $min^{-1}$ is not reached to some part. Depending on mounting situation and version, a speed of approx. 1200 $min^{-1}$ (+/- 100 $min^{-1}$) is reached. Due to the intelligent electronics, however, safe (permanent) operation is still guaranteed.

Power ratings(220-240 V design): Power input and air flow at 230V/50Hz and a constant speed

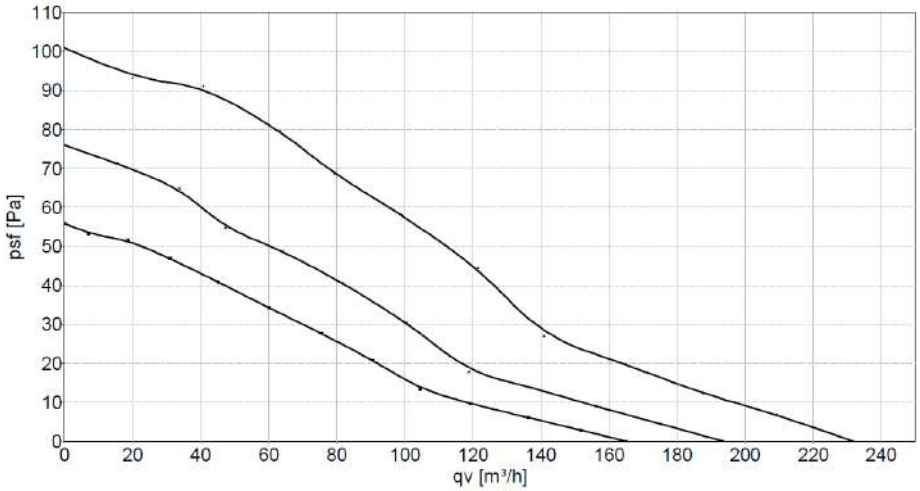
## iQC-motor

Air performance curves measured in wall ring, at constant speed

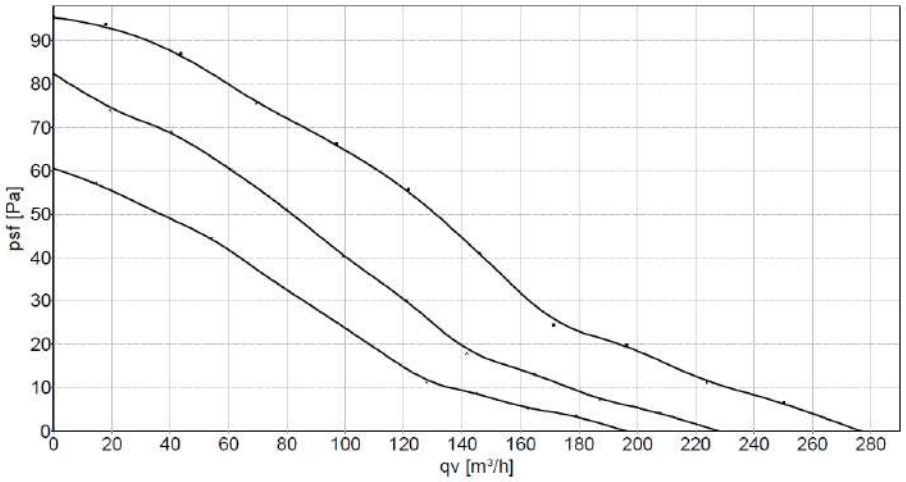
**iQC 3608, Φ154@22°**



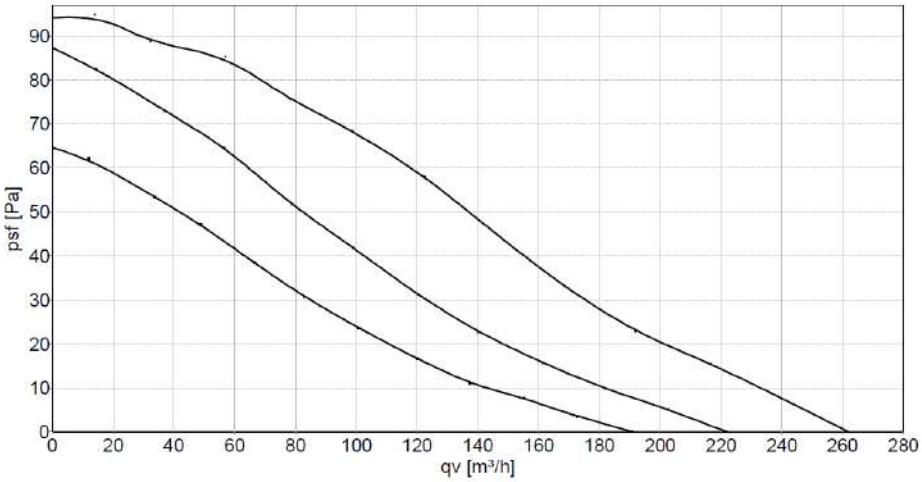

**iQC 3608, Φ154@28°**




**iQC 3608, Φ154@34°**




**iQC 3608, Φ172@22°**

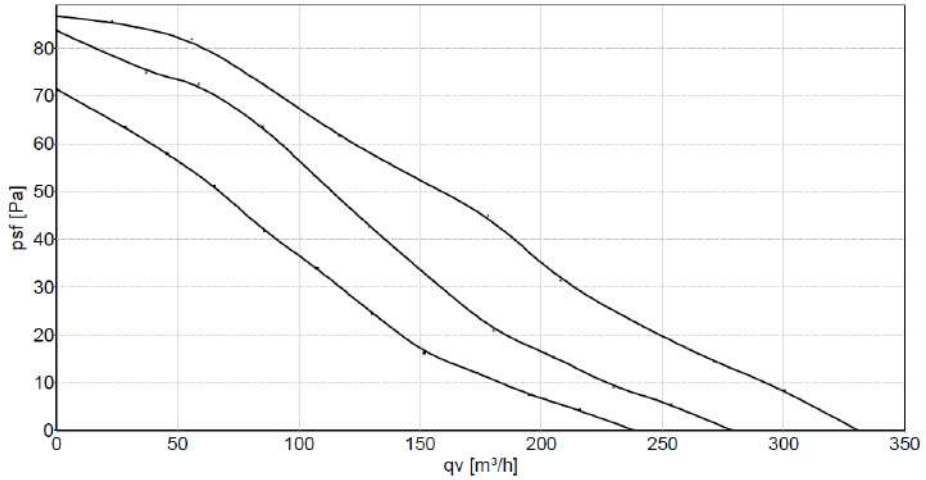



3 Curves: Speed of 1300rpm 1500rpm and 1800rpm

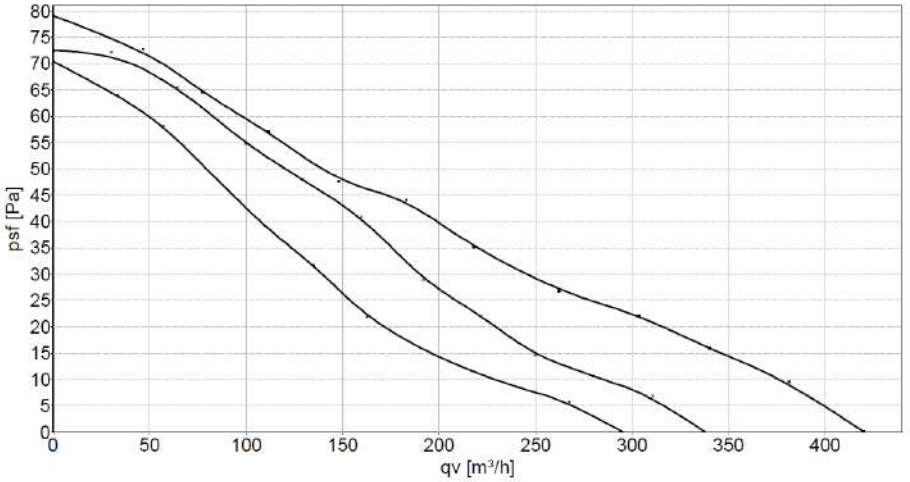


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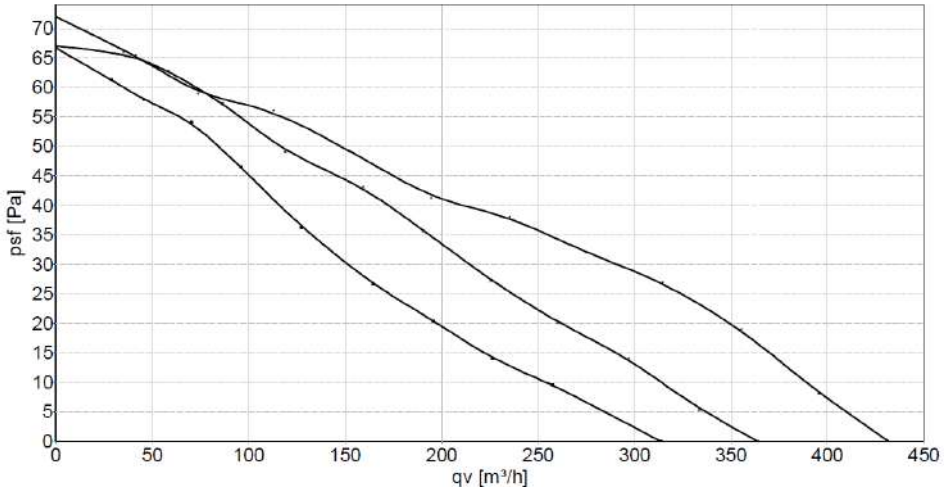
**iQC 3608, Φ172@28°**



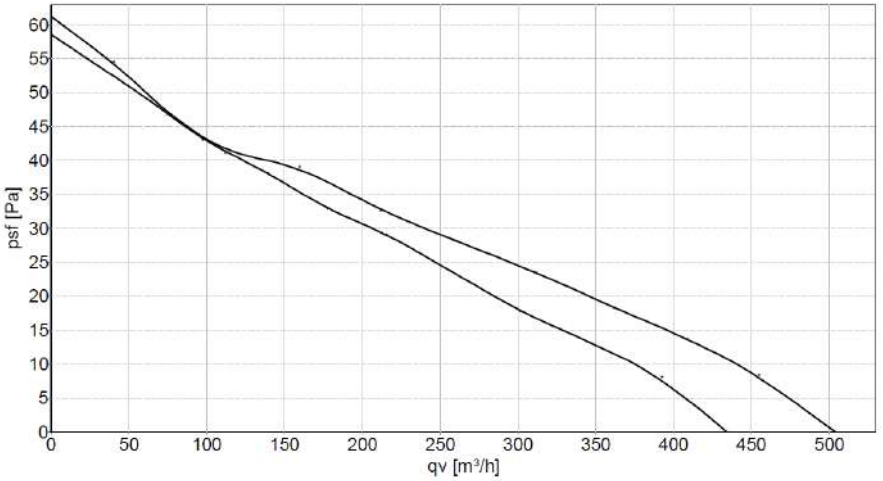

**iQC 3608, Φ172@34°**




**iQC 3608, Φ200@22°**




**iQC 3608, Φ200@28°**



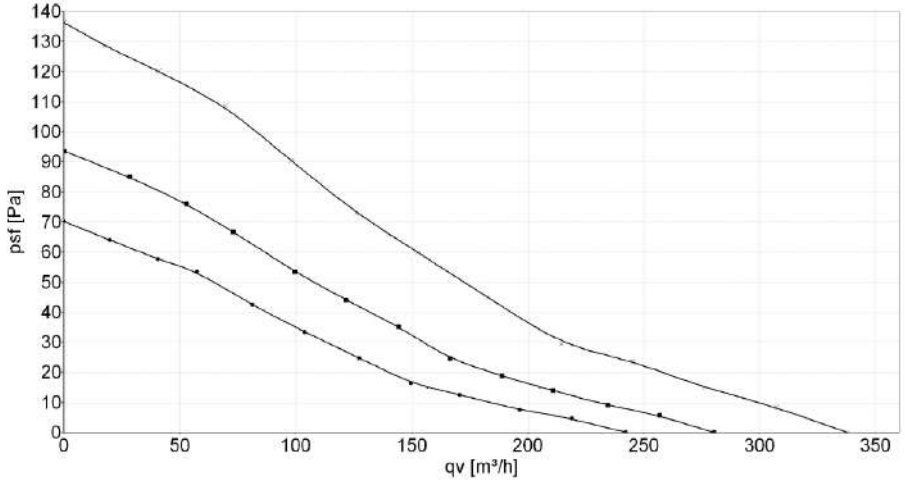

2 Curves: Speed of 1300rpm and 1500rpm

3 Curves: Speed of 1300rpm 1500rpm and 1800rpm

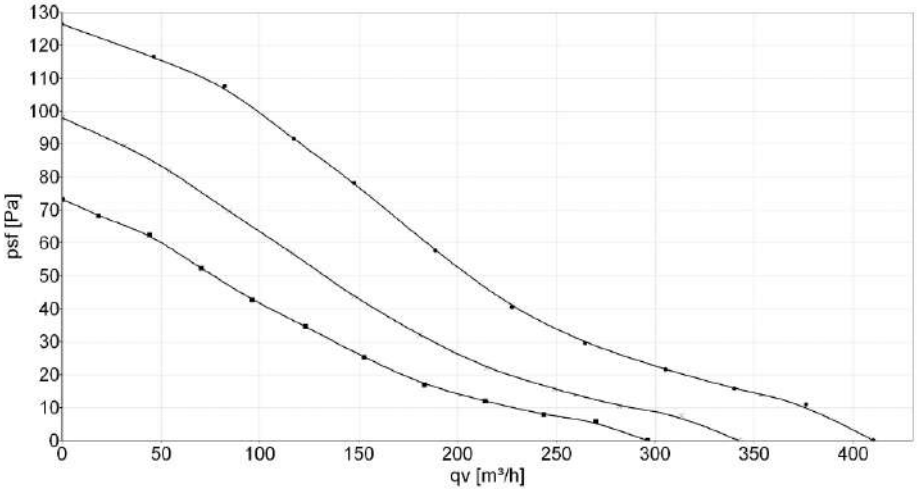


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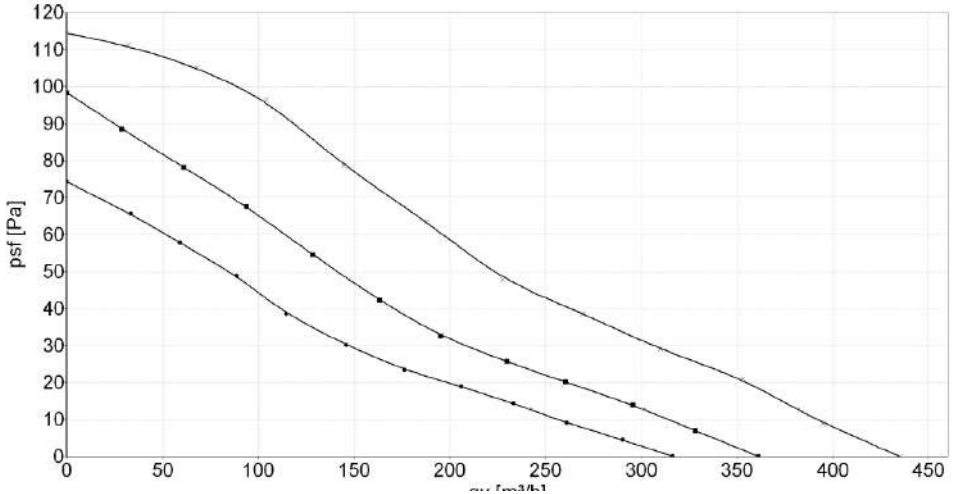
**iQC 3612, Φ172@28°**



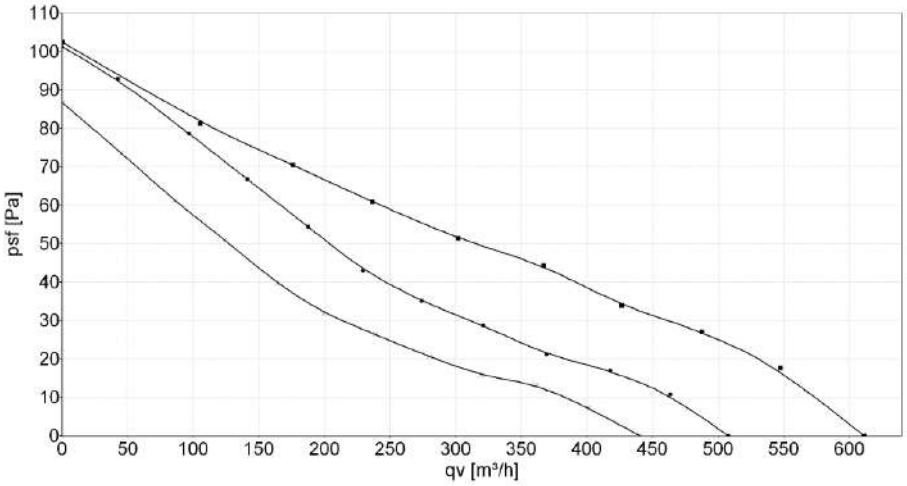

**iQC 3612, Φ172@34°**




**iQC 3612, Φ200@22°**




**iQC 3612, Φ200@28°**



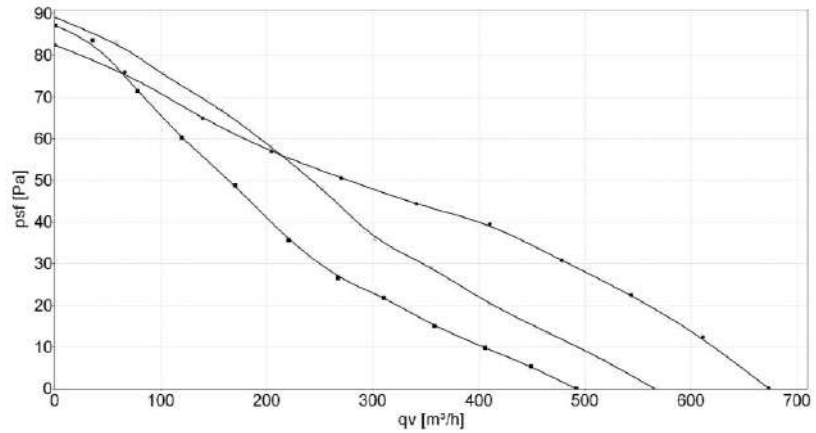

2 Curves: Speed of 1300rpm and 1500rpm

3 Curves: Speed of 1300rpm 1500rpm and 1800rpm

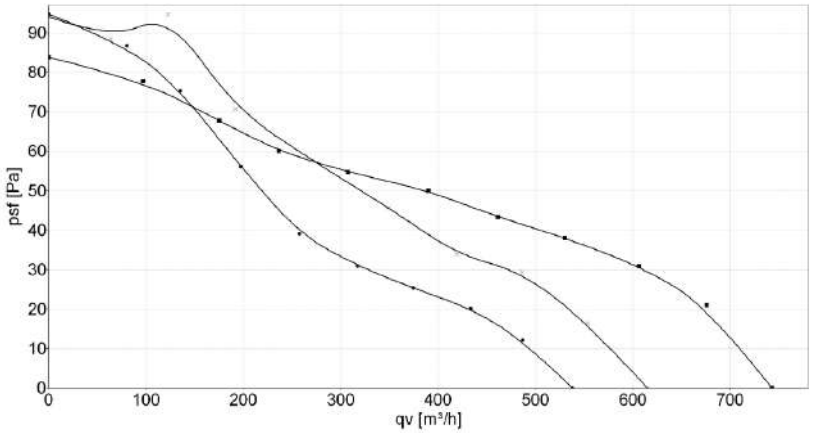


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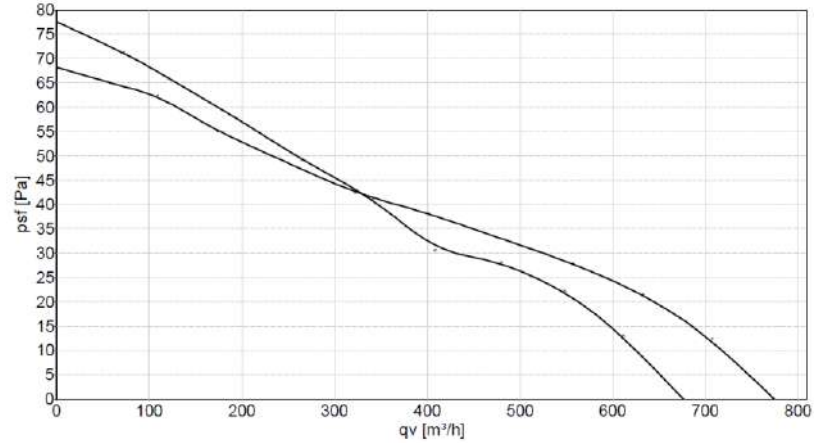
**iQC 3612, Φ200@34°**



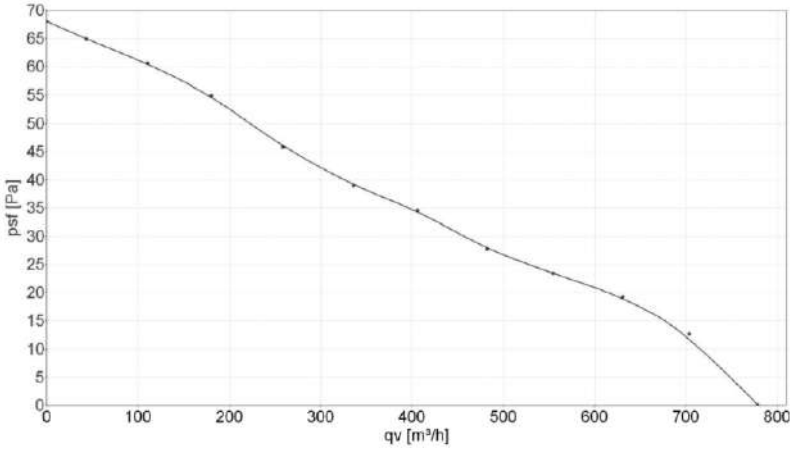

**iQC 3612, Φ230@22°**




**iQC 3612, Φ230@28°**




**iQC 3612, Φ230* @34°**



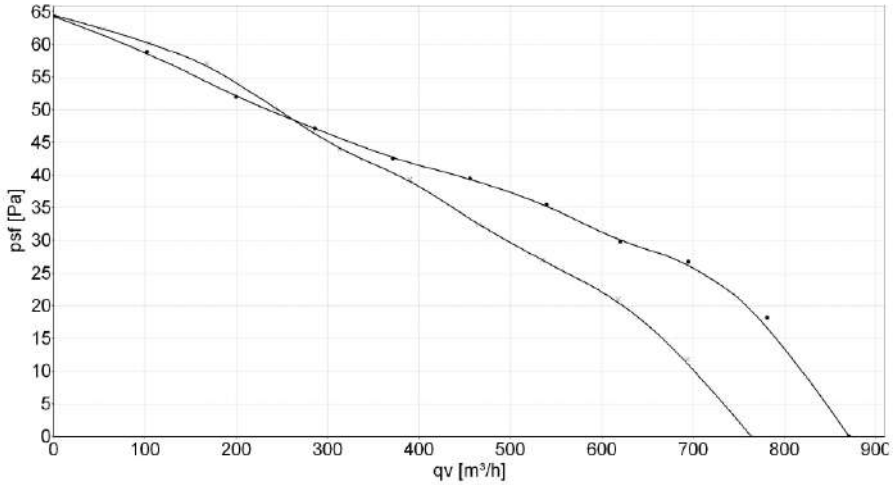

2 Curves: Speed of 1300rpm and 1500rpm

3 Curves: Speed of 1300rpm 1500rpm and 1800rpm

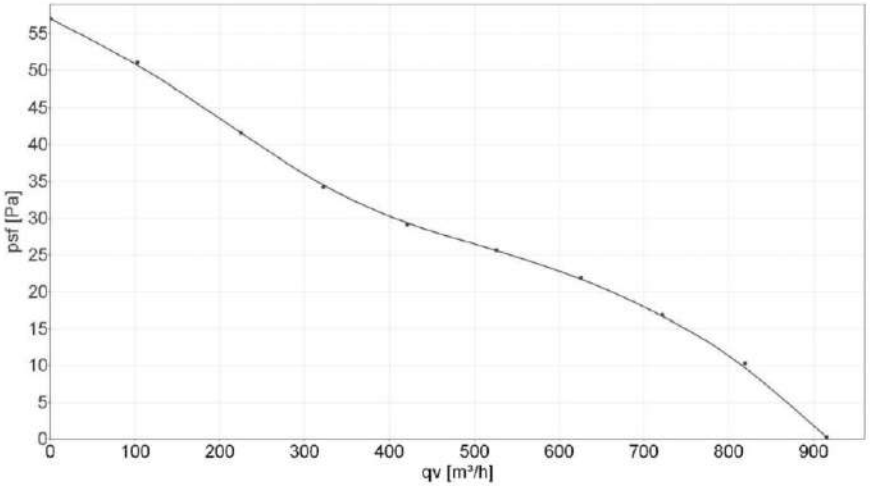
subject to alterations

* Depending on back pressure, full nominal speed of 1500 $min^{-1}$ is not reached to some part. Depending on mounting situation and version, a speed of approx. 1200 $min^{-1}$ (+/- 100 $min^{-1}$) is reached. Due to the intelligent electronics, however, safe (permanent) operation is still guaranteed.

**iQC 3612, Φ254@22°**




**iQC 3612, Φ254* @28°**




1 Curve : Speed of 1300rpm

2 Curves: Speed of 1300rpm and 1500rpm

3 Curves: Speed of 1300rpm 1500rpm and 1800rpm

subject to alterations

* Depending on back pressure, full nominal speed of 1500 $min^{-1}$ is not reached to some part. Depending on mounting situation and version, a speed of approx. 1200 $min^{-1}$ (+/- 100 $min^{-1}$) is reached. Due to the intelligent electronics, however, safe (permanent) operation is still guaranteed.

ebm-papst Ventilator (Shanghai) Co., Ltd.
No.418, Huajing Road, Pudong, Shanghai
Phone: 021-50460183
Fax: 021-50461119
sales@cn.ebmpapst.com

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