# The Straight Way

## K A Series

Systemair Sdn Bhd certifies that the K A Series fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

# K A Series

## K-Fans

- Speed-controllable
- Quiet-running
- Increased efficiency
- Integral thermal contacts
- Can be installed in any position
- Can be installed outdoors
- Maintenance-free and reliable

The K A series is designed for installation in ducts. All K-fans have a minimum 25 mm long spigot connections.

The fans have backward-curved blades and external rotor motors. To simplify the installation the K A fan has a fixing bracket together with screws for mounting the bracket included as standard. The FK mounting clamp facilitates easy installation and removal, and prevents the transfer of vibration to the duct. The fans can be speed-controlled via a stepless thyristor or a 5-step transformer.

To protect the motor from overheating the fan has integral thermal contacts with manual reset.

The casing is manufactured from galvanised sheet steel and folded which gives the fan a close to air tight casing. Duct connected outdoor and wet room applications of the fan are possible due to the air tight casing

# Technical data
## 50 Hz

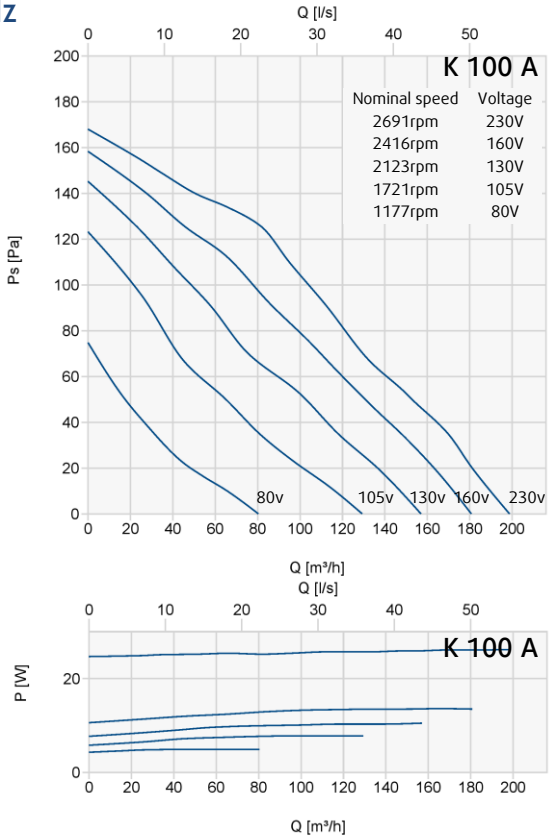
| | | K 100 A | K 100 AL | K 125 A | K 125 AL | K 150 A | K 150 AL | K 160 A |
|---|---|---|---|---|---|---|---|---|
| Article No. | | 508380 | 508381 | 508382 | 508383 | 508384 | 508385 | 508556 |
| Voltage | V | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| Frequency | Hz | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Phase | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum motor input power | W | 26 | 57 | 27 | 58 | 58 | 122 | 58 |
| Current | A | 0.115 | 0.248 | 0.117 | 0.247 | 0.248 | 0.528 | 0.246 |
| Max. airflow | $m^3/h$ | 199 | 253 | 230 | 338 | 440 | 765 | 448 |
| Fan impeller speed | r.p.m. | 2654 | 2550 | 2663 | 2552 | 2531 | 2631 | 2571 |
| Max. temperature of transported air | °C | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| Max. temperature of transported air when voltage controlled. | °C | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| Sound pressure level at 3 m (20$m^3$ Sabine) | dB(A) | 29 | 47 | 31 | 43 | 41 | 51 | 40 |
| Weight | kg | 2.3 | 3 | 2.3 | 2.9 | 3.3 | 4.1 | 3.3 |
| Insulation class | | B | B | B | B | B | F | B |
| Enclosure class, motor | IP | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Capacitor | µF | 1 | 1 | 1 | 1 | 2 | 4 | 2 |

| | | K 160 AL | K 200 A | K 200 AL | K 250 A | K 250 AL | K 315 A | K 315 AL |
|---|---|---|---|---|---|---|---|---|
| Article No. | | 508557 | 508386 | 509457 | 508387 | 509458 | 508388 | 508389 |
| Voltage | V | 230 | 230 | 230 | 230 | 230 | 230 | 230 |
| Frequency | Hz | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Phase | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum motor input power | W | 129 | 125 | 162 | 120 | 161 | 204 | 310 |
| Current | A | 0.549 | 0.528 | 0.692 | 0.524 | 0.689 | 0.847 | 1.32 |
| Max. airflow | $m^3/h$ | 854 | 767 | 889 | 813 | 896 | 1112 | 1734 |
| Fan impeller speed | r.p.m. | 2596 | 2636 | 2563 | 2629 | 2564 | 2560 | 2342 |
| Max. temperature of transported air | °C | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| Max. temperature of transported air when voltage controlled. | °C | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| Sound pressure level at 3 m (20$m^3$ Sabine) | dB(A) | 48 | 45 | 51 | 49 | 51 | 48 | 51.5 |
| Weight | kg | 4 | 4.1 | 4.8 | 3.9 | 4.6 | 5.5 | 6.6 |
| Insulation class | | F | F | F | F | F | F | F |
| Enclosure class, motor | IP | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Capacitor | µF | 4 | 4 | 4 | 4 | 4 | 7 | 7 |

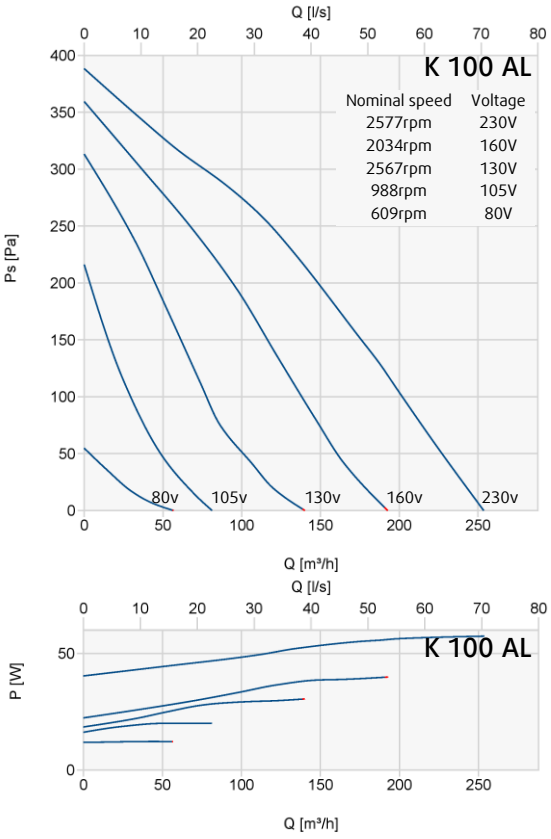
- Performance certified is for installation type D – Ducted inlet, Ducted outlet.
- Speed (RPM) shown is nominal. Performance is based on actual speed of test.
- Performance ratings do not include the effects of appurtenances (accessories).
- Sound pressure level at 3m (20m3 Sabine) are not licensed by AMCA International.

# Performance

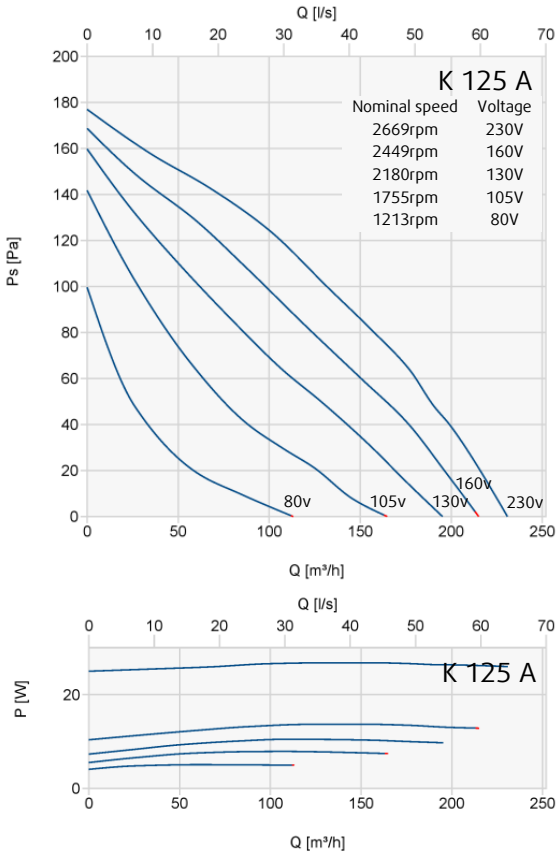
## 50 Hz



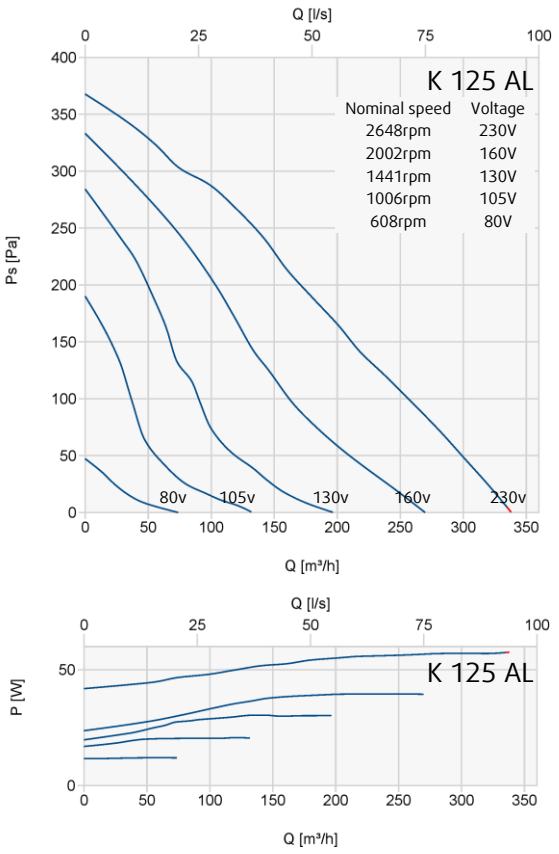

| Measurement point: 230V, 95m3/h @ 105Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 93 | 73 | 66 | 62 | 54 | 47 | 35 | 26 | 66 |
| | Lw Outlet | 82 | 79 | 68 | 69 | 61 | 59 | 57 | 51 | 70 |
| | Lw Surrounding | 54 | 31 | 26 | 31 | 30 | 28 | 18 | 16 | 35 |




| Measurement point: 230V, 111m3/h @ 262Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 96 | 81 | 72 | 70 | 63 | 56 | 50 | 40 | 73 |
| | Lw Outlet | 100 | 83 | 70 | 68 | 63 | 57 | 50 | 40 | 73 |
| | Lw Surrounding | 64 | 34 | 36 | 44 | 47 | 43 | 37 | 64 | 50 |




| Measurement point: 230V, 133m3/h @ 99Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 79 | 70 | 65 | 61 | 52 | 47 | 36 | 26 | 62 |
| | Lw Outlet | 84 | 72 | 63 | 57 | 50 | 46 | 37 | 26 | 62 |
| | Lw Surrounding | 49 | 30 | 27 | 37 | 32 | 30 | 24 | 49 | 38 |




| Measurement point: 230V, 141m3/h @ 243Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 88 | 83 | 74 | 70 | 61 | 58 | 52 | 41 | 73 |
| | Lw Outlet | 85 | 87 | 77 | 68 | 61 | 58 | 51 | 40 | 75 |
| | Lw Surrounding | 57 | 42 | 37 | 49 | 44 | 43 | 36 | 57 | 50 |

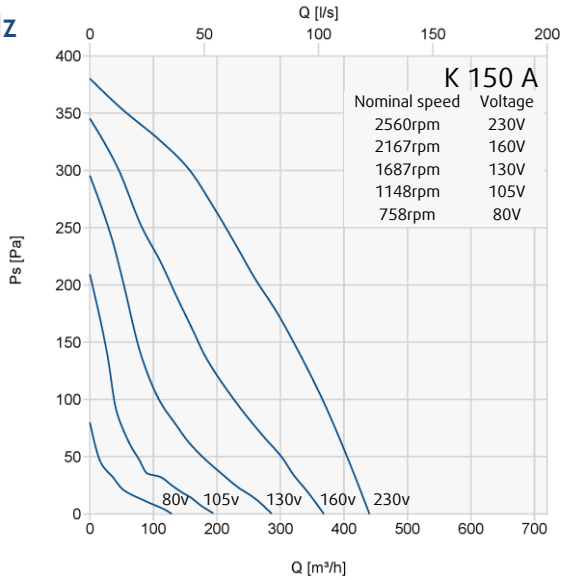
The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.

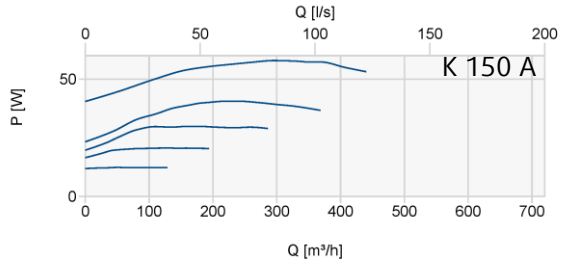
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)

The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

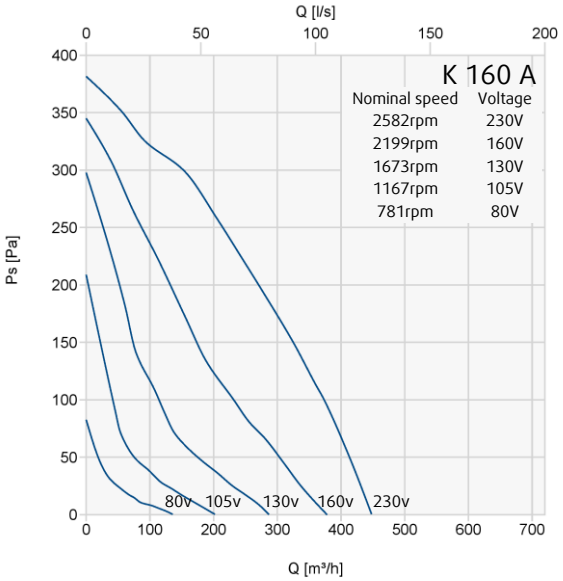
# Performance

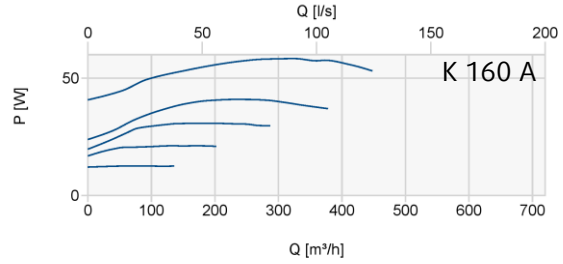
## 50 Hz



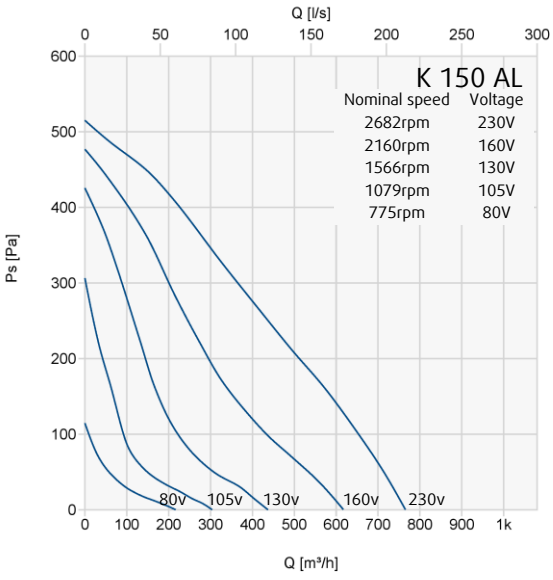



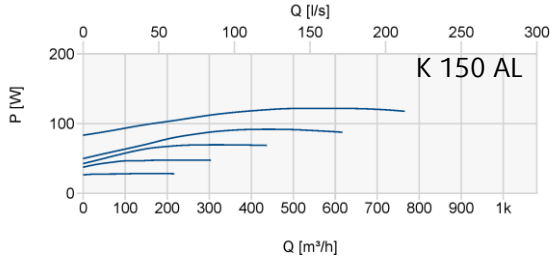

| Measurement point : 230V, 23 m3/h @ 235Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 77 | 75 | 69 | 67 | 59 | 57 | 56 | 45 | 68 |
| | Lw Outlet | 84 | 75 | 64 | 63 | 58 | 55 | 53 | 42 | 66 |
| | Lw Surrounding | 48 | 34 | 38 | 47 | 38 | 41 | 42 | 30 | 48 |



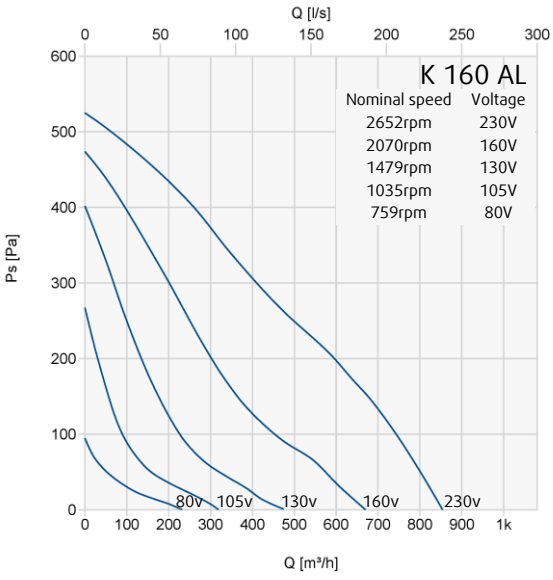



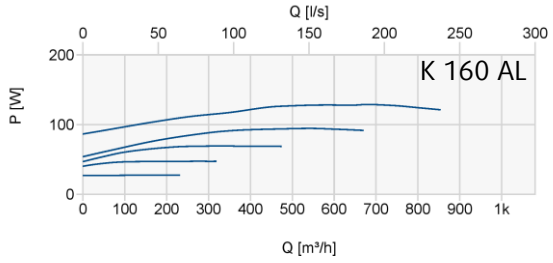

| Measurement point : 230V, 24 m3/h @ 226Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 79 | 73 | 71 | 66 | 60 | 57 | 53 | 45 | 68 |
| | Lw Outlet | 82 | 75 | 65 | 63 | 58 | 56 | 51 | 42 | 66 |
| | Lw Surrounding | 48 | 36 | 43 | 45 | 38 | 42 | 36 | 28 | 47 |




| Measurement point : 230V, 329m3/h @ 325Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 85 | 95 | 79 | 78 | 70 | 65 | 57 | 49 | 81 |
| | Lw Outlet | 88 | 93 | 72 | 75 | 67 | 63 | 58 | 48 | 79 |
| | Lw Surrounding | 55 | 38 | 44 | 50 | 40 | 42 | 42 | 31 | 50 |



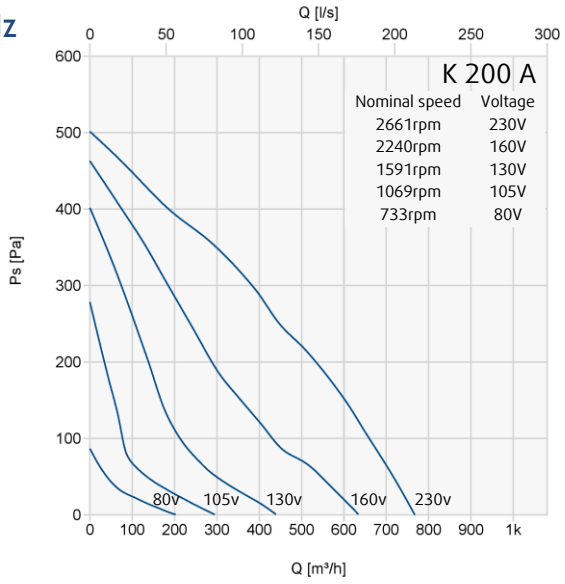



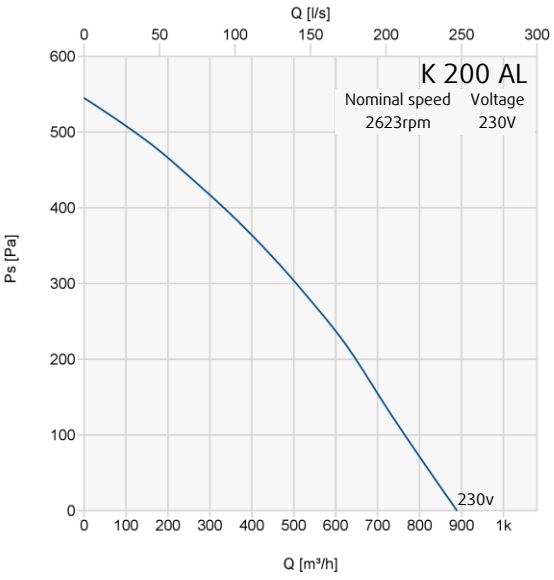

| Measurement point : 230V, 347m3/h @ 338Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 92 | 96 | 81 | 78 | 68 | 63 | 56 | 49 | 82 |
| | Lw Outlet | 95 | 95 | 73 | 74 | 67 | 61 | 55 | 47 | 80 |
| | Lw Surrounding | 55 | 59 | 49 | 54 | 50 | 48 | 42 | 29 | 55 |

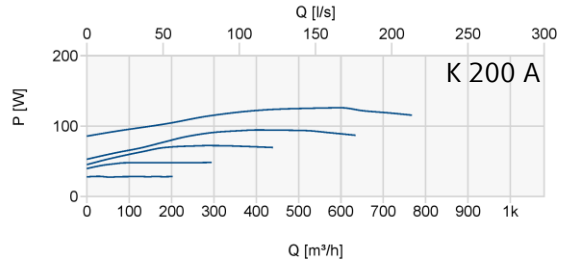
The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)
The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

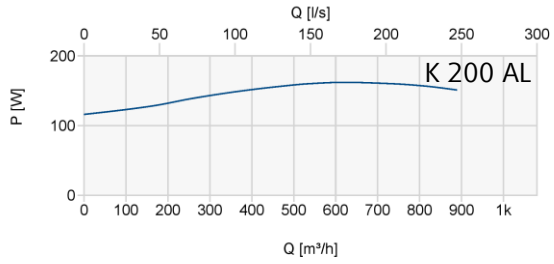
# Performance

## 50 Hz



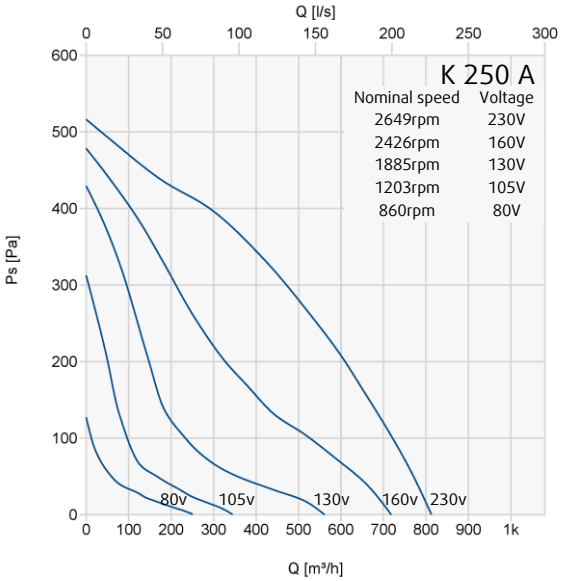



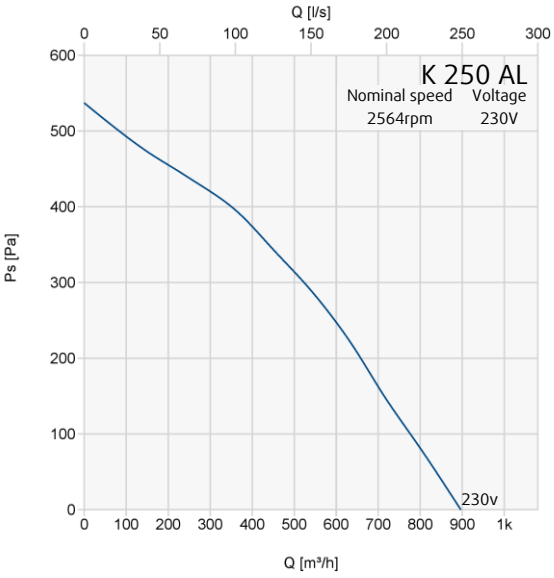

Measurement point : 230V, 390m3/h @ 296Pa

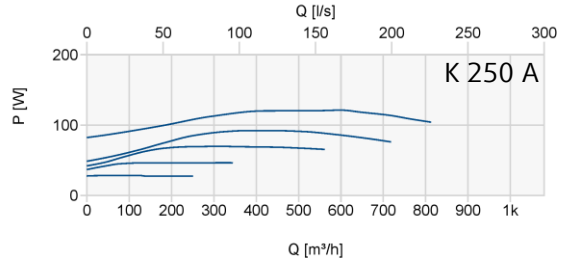
| dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| Lw Inlet | 87 | 83 | 77 | 72 | 67 | 63 | 53 | 47 | 74 |
| Lw Outlet | 90 | 85 | 70 | 71 | 63 | 61 | 54 | 45 | 72 |
| Lw Surrounding | 54 | 46 | 50 | 48 | 48 | 43 | 37 | 29 | 51 |

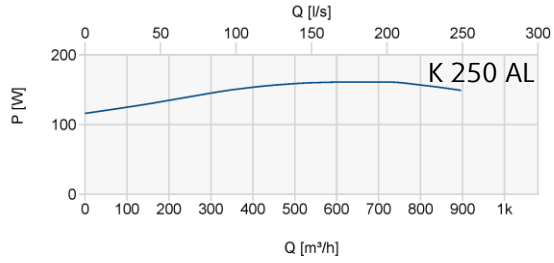
Measurement point : 230V, 619m3/h @ 223Pa

| dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| Lw Inlet | 80 | 84 | 75 | 74 | 69 | 66 | 58 | 51 | 75 |
| Lw Outlet | 82 | 83 | 71 | 68 | 67 | 64 | 59 | 49 | 73 |




Measurement point : 230V, 418m3/h @ 333Pa

| dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| Lw Inlet | 84 | 80 | 75 | 65 | 63 | 60 | 56 | 49 | 71 |
| Lw Outlet | 83 | 81 | 67 | 66 | 62 | 61 | 56 | 47 | 69 |
| Lw Surrounding | 50 | 38 | 50 | 49 | 51 | 50 | 41 | 32 | 55 |

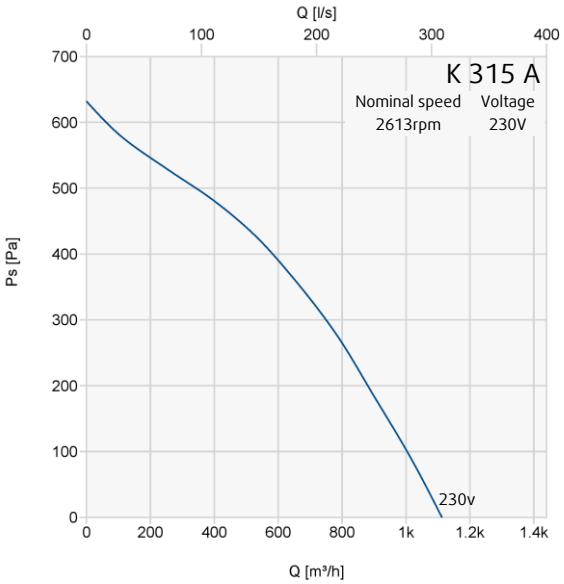
Measurement point : 230V, 626m3/h @ 337Pa

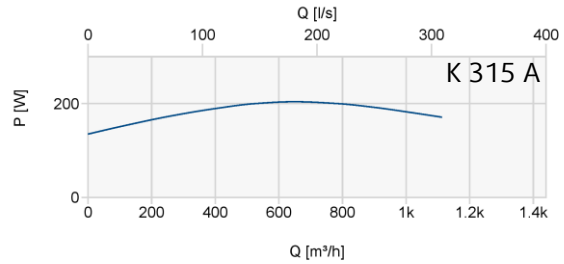
| dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| Lw Inlet | 79 | 85 | 78 | 68 | 65 | 61 | 54 | 48 | 74 |
| Lw Outlet | 81 | 83 | 73 | 67 | 67 | 66 | 63 | 53 | 73 |

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.

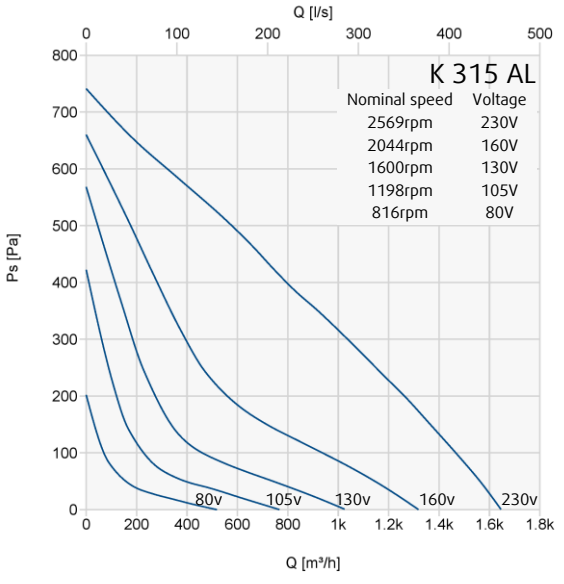
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)

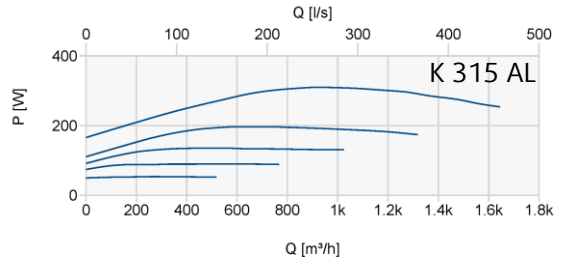
The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.




| Measurement point : 230V, 900m3/h @ 184Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 79 | 84 | 80 | 69 | 69 | 66 | 64 | 61 | 76 |
| | Lw Outlet | 82 | 84 | 76 | 67 | 66 | 66 | 63 | 59 | 74 |




| Measurement point : 230V, 651m3/h @ 466Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 84 | 88 | 80 | 79 | 71 | 66 | 66 | 61 | 79 |
| | Lw Outlet | 89 | 80 | 80 | 74 | 70 | 67 | 63 | 58 | 77 |
| | Lw Surrounding | 62 | 60 | 53 | 54 | 47 | 48 | 46 | 36 | 56 |

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)
The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

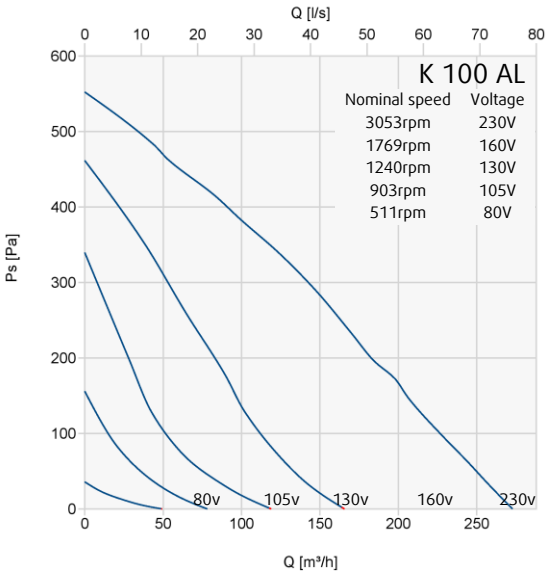
# Technical data
## 60 Hz

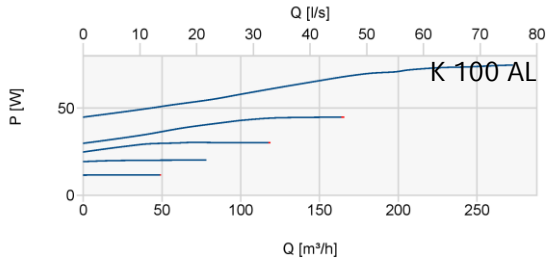
| | | K 100 AL | K 125 A | K 125 AL | K 150 A | K 150 AL | K 160 A |
|---|---|---|---|---|---|---|---|
| Article No. | | 508381 | 508382 | 508383 | 508384 | 508385 | 508556 |
| Voltage | V | 230 | 230 | 230 | 230 | 230 | 230 |
| Frequency | Hz | 60 | 60 | 60 | 60 | 60 | 60 |
| Phase | - | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum motor input power | W | 75 | 28 | 74 | 76 | 173 | 77 |
| Current | A | 0.331 | 0.119 | 0.325 | 0.33 | 0.758 | 0.333 |
| Max. airflow | $m^3/h$ | 273 | 271 | 358 | 501 | 833 | 512 |
| Fan impeller speed | r.p.m. | 2706 | 3095 | 2741 | 2698 | 2826 | 2726 |
| Max. temperature of transported air | °C | 70 | 70 | 70 | 70 | 70 | 70 |
| Max. temperature of transported air when voltage controlled. | °C | 70 | 70 | 70 | 70 | 70 | 70 |
| Sound pressure level at 3 m (20$m^3$ Sabine) | dB(A) | 47 | 35 | 44 | 44 | 53 | 43 |
| Weight | kg | 3 | 2.3 | 2.9 | 3.3 | 4.1 | 3.3 |
| Insulation class | | B | B | B | B | F | B |
| Enclosure class, motor | IP | 44 | 44 | 44 | 44 | 44 | 44 |
| Capacitor | µF | 1 | 1 | 1 | 2 | 4 | 2 |

| | | K 160 AL | K 200 A | K 250 A |
|---|---|---|---|---|
| Article No. | | 508557 | 508386 | 508387 |
| Voltage | V | 230 | 230 | 230 |
| Frequency | Hz | 60 | 60 | 60 |
| Phase | - | 1 | 1 | 1 |
| Maximum motor input power | W | 180 | 177 | 175 |
| Current | A | 0.785 | 0.769 | 0.763 |
| Max. airflow | $m^3/h$ | 915 | 839 | 926 |
| Fan impeller speed | r.p.m. | 2680 | 2780 | 2815 |
| Max. temperature of transported air | °C | 70 | 70 | 70 |
| Max. temperature of transported air when voltage controlled. | °C | 70 | 70 | 70 |
| Sound pressure level at 3 m (20$m^3$ Sabine) | dB(A) | 49 | 50 | 50 |
| Weight | kg | 4 | 4.1 | 3.9 |
| Insulation class | | F | F | F |
| Enclosure class, motor | IP | 44 | 44 | 44 |
| Capacitor | µF | 4 | 4 | 4 |

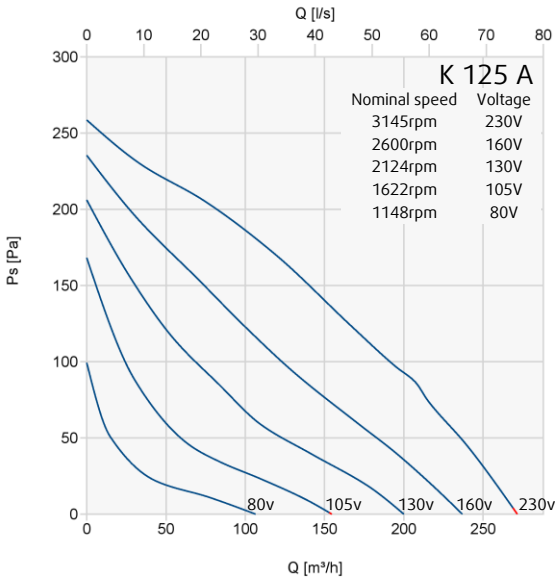
- Performance certified is for installation type D – Ducted inlet, Ducted outlet.
- Speed (RPM) shown is nominal. Performance is based on actual speed of test.
- Performance ratings do not include the effects of appurtenances (accessories).
- Sound pressure level at 3m (20m3 Sabine) are not licensed by AMCA International.

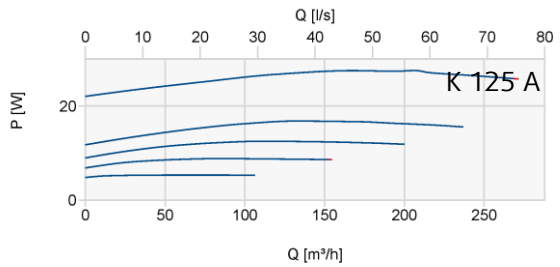
# Performance
## 60 Hz



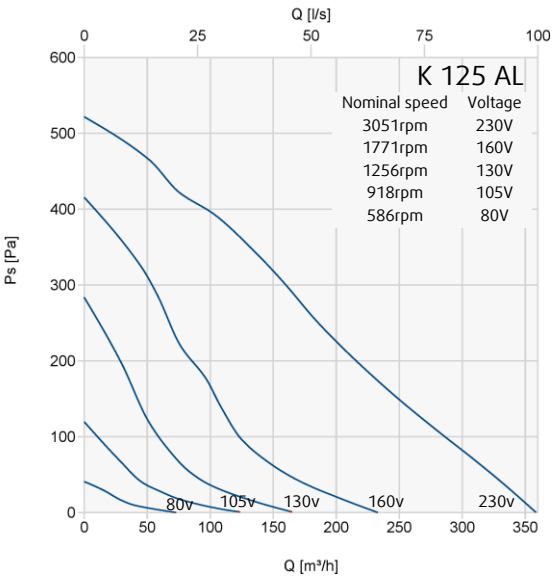



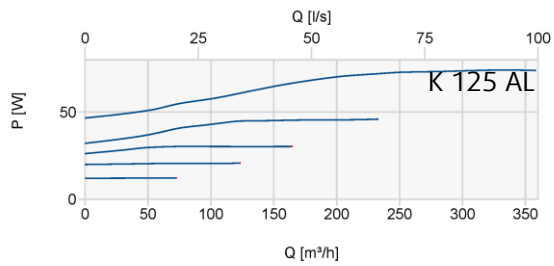

| Measurement point: 230V, 127m3/h @ 338Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 86 | 84 | 75 | 73 | 66 | 59 | 54 | 44 | 74 |
| | Lw Outlet | 93 | 87 | 73 | 72 | 67 | 60 | 54 | 45 | 75 |
| | Lw Surrounding | 46 | 36 | 40 | 46 | 50 | 45 | 41 | 29 | 53 |




| Measurement point: 230V, 119m3/h @ 169Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 80 | 77 | 70 | 65 | 56 | 51 | 41 | 30 | 67 |
| | Lw Outlet | 93 | 76 | 66 | 60 | 54 | 50 | 42 | 30 | 67 |
| | Lw Surrounding | 50 | 37 | 32 | 41 | 36 | 34 | 29 | 20 | 42 |



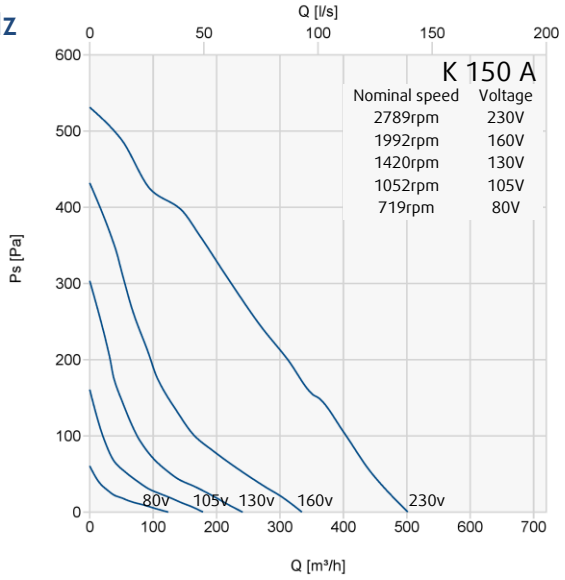



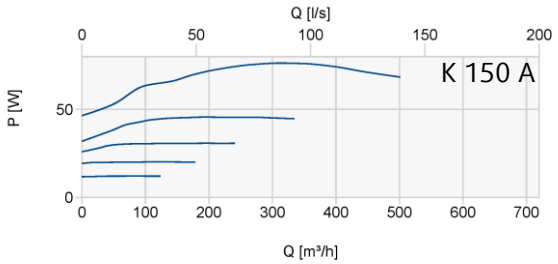

| Measurement point: 230V, 132m3/h @ 350Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 87 | 81 | 76 | 74 | 65 | 61 | 57 | 46 | 74 |
| | Lw Outlet | 89 | 84 | 74 | 70 | 64 | 60 | 53 | 44 | 74 |
| | Lw Surrounding | 50 | 34 | 41 | 50 | 43 | 45 | 40 | 50 | 50 |

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA international. Ratings include the effects of duct end correction.
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)
The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

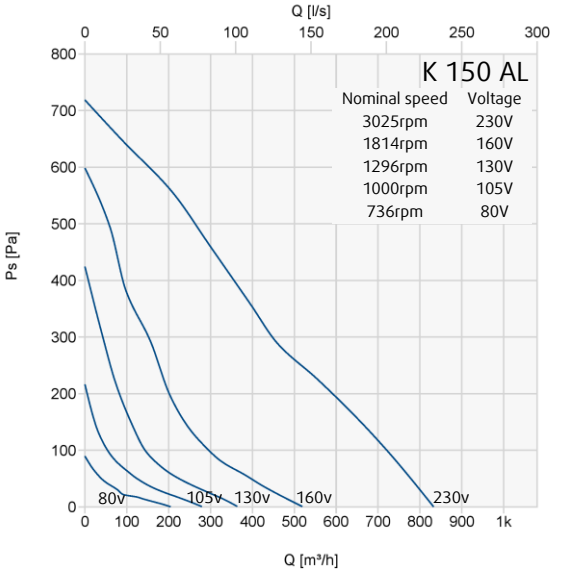
# Performance

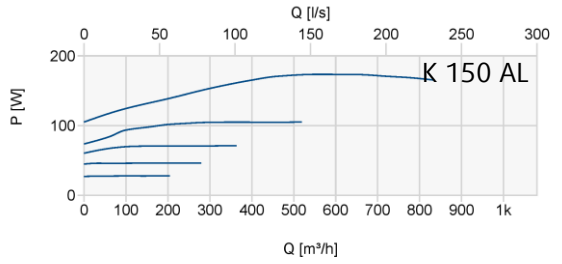
## 60 Hz



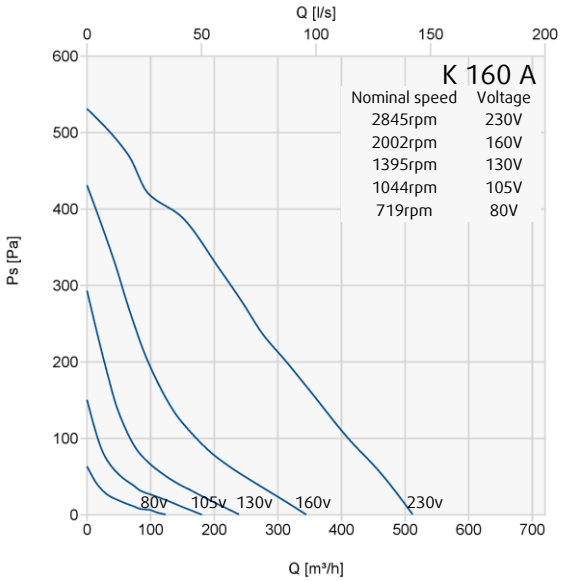



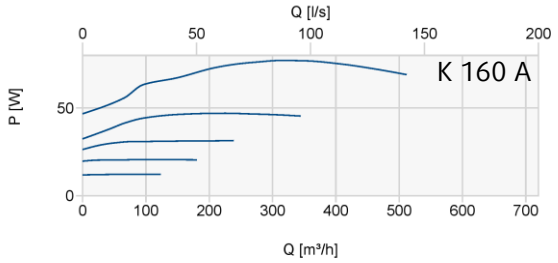

| Measurement point : 230V, 215m3/h @ 308Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 91 | 78 | 74 | 69 | 61 | 59 | 57 | 47 | 71 |
| | Lw Outlet | 94 | 79 | 67 | 66 | 60 | 58 | 55 | 45 | 70 |
| | Lw Surrounding | 55 | 38 | 44 | 50 | 40 | 42 | 42 | 55 | 50 |



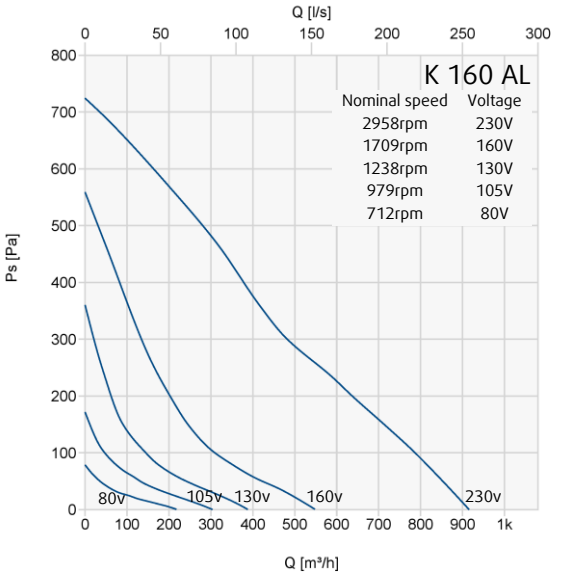



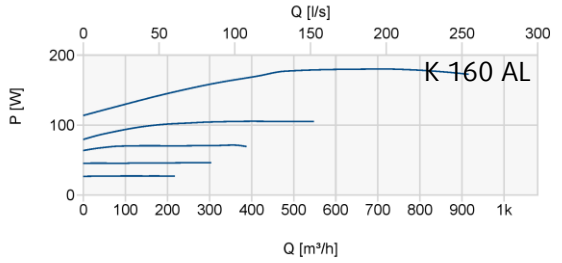

| Measurement point : 230V, 303m3/h @ 456Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 88 | 97 | 83 | 80 | 72 | 67 | 60 | 54 | 83 |
| | Lw Outlet | 92 | 97 | 75 | 77 | 69 | 66 | 61 | 52 | 82 |
| | Lw Surrounding | 43 | 53 | 51 | 59 | 52 | 54 | 49 | 43 | 60 |




| Measurement point : 230V, 210m3/h @ 318Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 91 | 78 | 74 | 68 | 63 | 60 | 54 | 47 | 91 |
| | Lw Outlet | 100 | 81 | 67 | 66 | 61 | 59 | 54 | 44 | 72 |
| | Lw Surrounding | 57 | 40 | 43 | 48 | 40 | 45 | 38 | 57 | 50 |



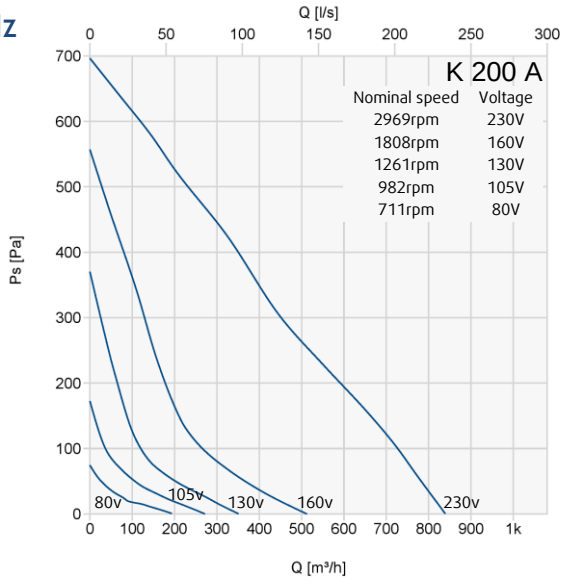



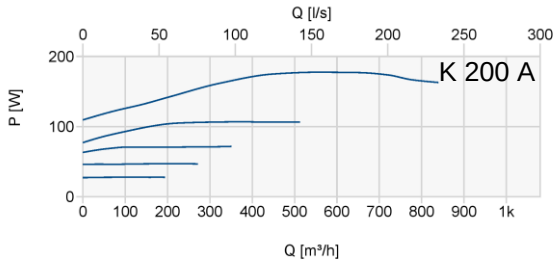

| Measurement point : 230V, 318m3/h @ 466Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 96 | 89 | 85 | 78 | 70 | 64 | 57 | 52 | 80 |
| | Lw Outlet | 97 | 88 | 76 | 75 | 68 | 63 | 58 | 51 | 77 |
| | Lw Surrounding | 58 | 51 | 53 | 54 | 49 | 50 | 43 | 58 | 56 |

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.
Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories).
The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

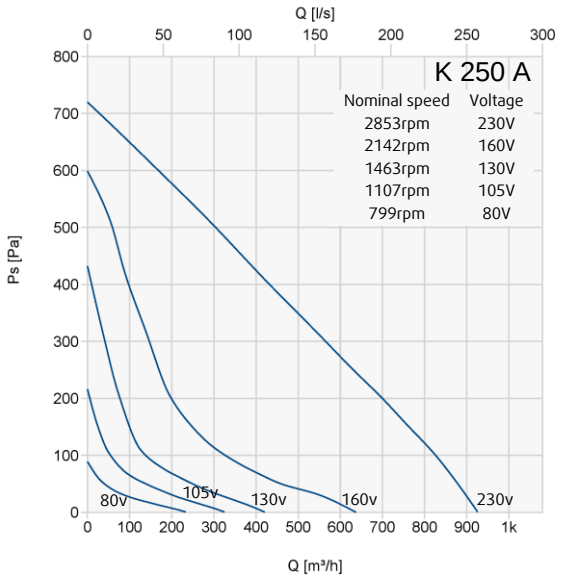
# Performance

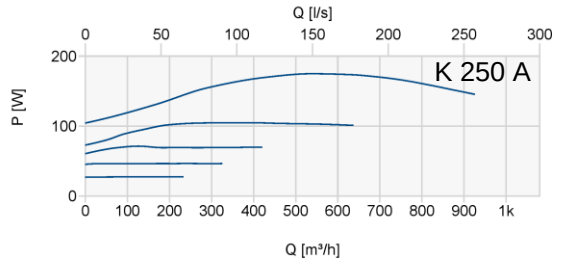
## 60 Hz




| Measurement point : 230V, 323m3/h @ 428Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 98 | 90 | 84 | 78 | 72 | 68 | 58 | 53 | 81 |
| | Lw Outlet | 99 | 91 | 74 | 76 | 69 | 66 | 60 | 52 | 78 |
| | Lw Surrounding | 67 | 54 | 54 | 54 | 52 | 49 | 42 | 67 | 57 |



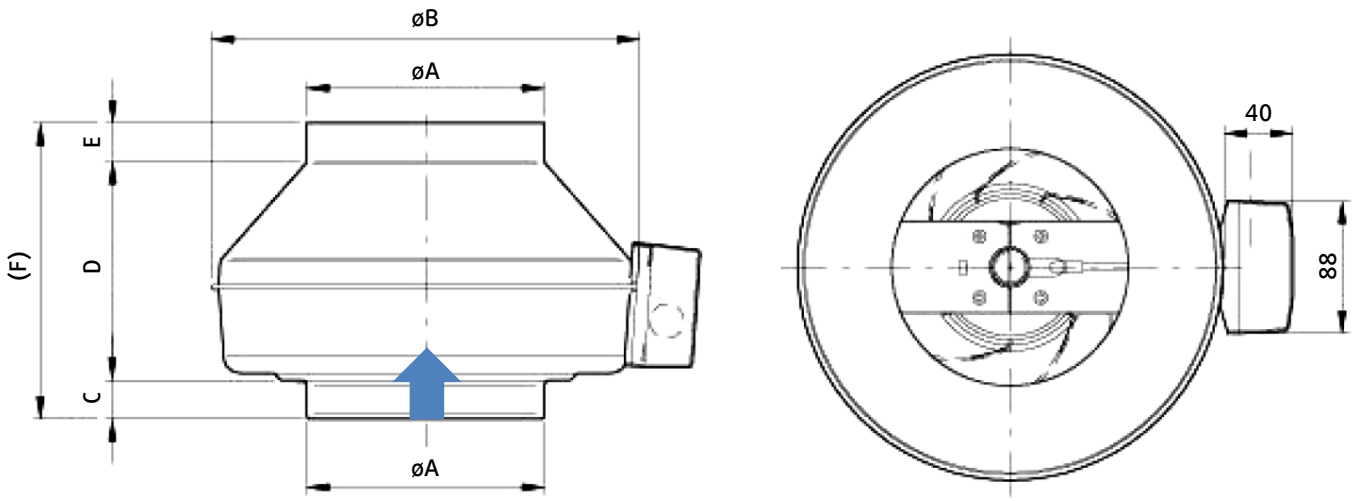

| Measurement point : 230V, 427m3/h @ 405Pa | dB | Frequency bands (Hz) | | | | | | | | Tot (LwA) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K | |
| | Lw Inlet | 97 | 83 | 77 | 67 | 66 | 63 | 57 | 52 | 74 |
| | Lw Outlet | 93 | 84 | 70 | 67 | 65 | 64 | 58 | 50 | 72 |
| | Lw Surrounding | 67 | 44 | 47 | 50 | 53 | 52 | 43 | 67 | 57 |

The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for inlet Lwi & LwiA and outlet Lwo & LwoA sound power levels for installation type D ducted inlet, ducted outlet. LwA Surrounding are not licensed by AMCA International. Ratings include the effects of duct end correction.

Performance certified is for installation type D-Ducted inlet. Ducted outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. Performance ratings do not include the effects of appurtenances (accessories)

The sound power level ratings shown are in decibels, referred to $10^{-12}$ watts, calculated per AMCA International Standard 301.

# Dimensions




IN METRIC

| K | AØ | BØ | C | D | E | (F) |
|---|---|---|---|---|---|---|
| 100 A | 99 | 218 | 26 | 166 | 26 | 218 |
| 100 AL | 99 | 246 | 26 | 161 | 26 | 213 |
| 125 A | 124 | 218 | 27 | 142 | 27 | 196 |
| 125 AL | 124 | 246 | 26 | 151 | 26 | 203 |
| 150 A | 149 | 286 | 25 | 152 | 25 | 202 |
| 150 AL | 149 | 336 | 29 | 171 | 26 | 226 |
| 160 A | 159 | 286 | 25 | 147 | 26 | 198 |
| 160 AL | 159 | 336 | 29 | 166 | 26 | 221 |
| 200 A | 199 | 336 | 30 | 148 | 27 | 205 |
| 200 AL | 199 | 336 | 30 | 174 | 27 | 231 |
| 250 A | 249 | 336 | 30.5 | 119.5 | 27 | 177 |
| 250 AL | 249 | 336 | 30.5 | 144.5 | 27 | 202 |
| 315 A | 314 | 408 | 32.5 | 160.5 | 27 | 220 |
| 315 AL | 314 | 408 | 37.5 | 160.5 | 27 | 22.5 |

# Electrical accessories

**VBC 315-3 Water heating battery**
Art no: 9844
Water-heating battery for heating air in ventilation systems with circular ducts. Aluzinc-coated casing, heat transmission element with copper tubes and aluminium fins. Removable cover for cleaning the unit.
The water-heating battery can be installed in a horizontal or a vertical duct with optional direction of airflow.

Max operating temperature 150 °C
Max operating pressure 1,6 MPa (16Bar)
3-rows battery

**RETP 6 Temp/Pressure regulator**
Art no: 32293
Pressure/Temperature regulation, single phase
Thyristor-type stepless pressure or temperature regulation (P-regulation) for single-phase motors with variable voltage control. Used, for example, for room-temperature regulation where the heating is conducted by air. An integral motor protection device is included which switch off the supply voltage to the fan if the thermal contact in the fan motor is activated.

**REV-3POL/03 ON/OFF**
Art no: 33978
REV- Isolator mounted on a bracket, leads connected l max 20 A.
- 3POL/03
3-pole ( closing/auxillary contact 1) lead 3x1,5 mm² for 1 phase motor. TK not lead out
**When operating with Explosion proof fans the REV has to be placed outside the EX zone!**

**RE 1,5 Speed control**
Art no: 5000
Manual five-step transformer

A single-phase transformer which controls the fan speed by altering the supply voltage in five fixed steps. The steps are adjusted manually, using the control knob on the front of the unit. The transformer has 230V terminals for operating dampers, electric heater batteries or other external equipment. When the transformer knob is in position 0, the outlet has no current. The indicator lamp on the front shows that the transformer is in operation. The fuse may be reset from outside. The RE has a self extinguishing thermoplastic casing.

NOTE! Fans with external contact leads (TK) must always be connected to a motor protection device.

**REU 1.5 Speed control**
Art no: 5004
Manual five-step transformer

A single-phase transformer which controls the fan speed by altering the supply voltage in five fixed steps. The steps are adjusted manually, using the control knob on the front of the unit. There are two control switches: one for higher fan speeds and one for lower fan speeds. Switching between the high and low settings is done by an external change-over contact, which could be a thermostat or a timer. The indicator lamp on the front shows when the transformer is in operation. The fuse may be reset from outside. The REU has a self-extinguishing thermoplastic casing. Supply voltage: 230V 50/60Hz.

NOTE! Fans with external thermal contact leads (TK) must always be connected to a motor protection device.

**DTV500-OEM including connection kit**
Art no: 5044
Differential pressure switch for air and non-corrosive gasses. Relay contact data 250 V AC 5 A, change-over.

# Electrical accessories

**HR1 Room Humidistat IP21**
Art no: 5150
Room humidistat
A humidistat for controlling exhaust air fans in response to the relative humidity. The humidistat uses human hair as the humidity sensor medium. The set-point can be anywhere between 10 and 95% RH. Base plate in black plastic and cover in white plastic.

The HR1 is supplied with a sliding cover over the set-point dial, which can be locked.

The humidistat should be mounted in a location with good air circulation and constant temperature and humidity. It should not be fitted on external walls, walls in direct sunlight, corners etc.

The humidistat´s mounting holes make it suitable for fixing on to a terminal box with screws at 60 mm centers.

The humidistat should be precision-calibrated after it has been mounted, and should be recalibrated regularly. Dust and other matter should be removed with a soft brush at regular intervals.

Contacts 1 and 3 close when the air humidity exceeds the preset value.

**RT 0-30 Room Thermostat**
Art no: 5151
The RT 0-30 is an electronic room thermostat for indoor wall mounting, with a change-over relay for regulating either heating or cooling. It has an integral sensor, but an external sensor such as the TG-K330 or TG-R630 can also be connected to the thermostat. The RT 0-30 can also be used with other external temperature sensors to achieve different temperature range.

**T 120 Timer**
Art no: 5165
Timer with 120-minute operating time. Supplied with flange for fitting into equipment housing. Casing for surface mounting is available as an extra. A switch for closing and breaking circuits. A link can be used to produce a change-over function. The timer makes a quiet ticking sound when connected.

This timer is suitable for controlling the REU and RTRDU five step transformers.

**REE 2 Speed control**
Art no: 5316
**Thyristor speed controller**
**- REE 1 or REE 2 surface- or flush mounting**
**- REE 4 only surface mounting**

For the manual control of speed and air flow of electrical fans, AC-induction motors of universal motor- and permanent-capacitor type. The jetproof IP 54 enclosure is achieved with the included surface mounting case. (Flush mounting without the surface mounting case, gives a splash proof IP 44 enclosure also suitable for highly demanding environments as bathrooms etc.) Several motors can be connected in parallel as long as the total current does not exceed current range. Starting currents must be considered when choosing speed controller type. Fans to be used with this controller require a built-in overheating protection and should be designed for thyristor speed control.


**REPT 6 Digital regulator**
Art no: 5698
Digital voltage regulation, single phase

Thyristor-type digital regulation for single-phase motors with variable voltage control. Used, for example, for the pressure regulation of fans in systems where there is a risk of increased draught, and compensation is required for outdoor temperature conditions and other pressure conditions. An integral motor protection device is included which cuts the supply voltage to the fan if the thermal contact in the fan motor is activated.

Radio interference suppression in accordance with EN 50081-1 and EN 50082-2.

# Electrical accessories

**CO2RT-R-D Transmitter**
Art no: 6993
**Measuring system CO2-sensor**
The CO2-concentration is measured by means of infrared light, a technique that measures the absorption in gases. It has a reference measuring system that compensates values in relation to changes in light intensity. The method gives several advantages:

- Very high accuracy
- Exact identification of the detected gas
- Low risk for contamination
- Short response time
- High long term stability
- Long calibration interval (>5 years)

**Display**
The display models have an LCD-display showing actual values in an alternated series.

**Applications**
Measuring the CO2-level gives a direct indication about the indoor air quality. With this basic information ventilation can be controlled with high precision and air quality improved. At the same time supply air will only be increased when it is necessary thus cutting energy costs.

**Presence detector/IR24-P**
Art no: 6995
Presence detector

A detector that gives a signal when someone is present in the room under supervision. The detector has a pulse detecting function that minimizes the risk for false alarm. Settable output on/off delay.
Intended for wall or ceiling mounting.

IR24-P is a presence detector designed for automatic ventilation control of HVAC systems.

**MicroREX D21 Plus Time Switch**
Art no: 17822
The MicroREX D21 is a digital 7 day time switch with a circular segmented display for general rail mounting use or on walls in a box, included. Up to 8 program pictures can be set. A program picture incorporates both ON and OFF time. If no button is pressed for 60 seconds during programming the time switch goes back to the start position.

The copying function enables program to be copied to other days. Minimum switching time is 1 minute. The switching times are protected but can be overlaid by other programs. Programs are displayed with a minimum segment size of 30 minutes. The time and the week days are presented digitally. The summer-/winter changeover can be programmed for hand or automatic operation. Plastic housing for easy wall mounting, is available.
Spring reserve 6 years.

# Ventilation accessories

**FK 315 Fast clamp**
Art no: 1613
Fast clamps

Mounting clips which facilitate the installation and removal of fans for service and cleaning. Made from galvanised sheet steel and fitted with an 8 mm neoprene lining which suppresses vibrations and ensures a tight fit. The mounting clips are clamped together by two screws which allow for small differences in dimension.

**VKK-315 Back draft damper**
Art no: 1628
Back draft damper for installation in horizontal ducts. The profiled vanes produce a strong upward force which reduces the air resistance. This means that the vanes opens fully at low air velocities as well. The box is manufactured from galvanised sheet steel. The damper inside the box is manufactured in weather-resistant and shock-proof nylon material. The robust construction ensures that the vanes will not become deformed or loose. Air velocity should not exceed 12 m/s.

**VBF 315 Water heating battery**
Art no: 1734
Water-heating battery with integral EU5 bag filter for heating air in ventilation systems with circular ducts. Casing from galvanised sheet steel, with copper tubes and aluminium fins. Inspection cover which facilitates cleaning and replacing the filter.

The water-heating battery must be installed in a horizontal duct. The bag filter must always be fitted vertically. The VBF is fitted with connections for connecting to a filter monitor.

The Systemair fan selection programme includes a special selection programme for water-heating batteries. The recommended final pressure drop is 200 Pa.

**FFR 315 Filter cassette**
Art no: 1779
Filter cassette for circular ducts

The FFR filter cassette is designed for bag filters of the F3, F5 or F7 standard filter types. The cassette is manufactured from galvanised sheet steel with rubber-sealed circular connections and locks with toggle fasteners.
The cassette is fitted with connections for connecting to a pressure sensor. The filters for FFR are BFR bag filters. Available in the F3, F5 or F7 filter classes and are ordered separately and supplied individually. The recommended final pressure drop is 170 Pa for the F3 filter, 200 Pa for the F5 filter and 250 Pa for the F7 filter.

**FGR 315 Filter cassette G3**
Art no: 1818
Filter cassette for circular ducts

The FGR filter cassette is fitted with a standard type F3 panel filter. The cassette housing is manufactured from galvanised sheet steel with rubber-sealed circular connections, toggle locks and disposable filters. Replacement PFR filters are sold in packs of five.

**CWK 315-3-2,5 Duct cooler,circ**
Art no: 30025
CWK water-cooling battery for circular ducts

Casing of galvanised sheet steel with copper tubes and aluminium fins. Inspection covers for easy cleaning and maintenance.

Connection sleeves with rubber seal.

Max operating temperature 150 °C
Max operating pressure 1,6 MPa (16Bar)

# Ventilation accessories

**LDC 315-900 Silencer**
Art no: 5197
**Silencer**
Easily-fitted silencer for circular ducts, fitted with a connection that complies with the spiral duct standard. The LD effectively reduces noise in the duct. Two silencers can be used together in installations where noise reduction is a particularly strong requirement. This is very effective. For the most effective noise reduction, the silencer should be fitted immediately behind a fan or bend. The silencer should be used together with an insulated fan where there is a requirement for noise reduction both in the duct and in the surroundings as a whole. Insulation thickness 50 mm.

**CB 315-6,0 400V/2 Duct heater**
Art no: 5374
Electrical duct heater

Duct heater with spigot connection for standard spiral ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CB heater has rubber seals on the connecting spigots. Suitable for control by room thermostat or Pulser. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C. The CB can be installed in a horizontal or vertical duct. In a horizontal duct, the connection box should be installed facing upwards, or rotated 90° to one side. Installation with the connection box facing downwards is not allowed.

**CB 315-9,0 400V/3 Duct heater**
Art no: 5375
Electrical duct heater

Duct heater with spigot connection for standard spiral ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CB heater has rubber seals on the connecting spigots. Suitable for control by room thermostat or Pulser. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C. The CB can be installed in a horizontal or vertical duct. In a horizontal duct, the connection box should be installed facing upwards, or rotated 90° to one side. Installation with the connection box facing downwards is not allowed.

**CB 315-3,0 230V/1 Duct heater**
Art no: 5386
Electrical duct heater

Duct heater with spigot connection for standard spiral ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CB heater has rubber seals on the connecting spigots. Suitable for control by room thermostat or Pulser. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C. The CB can be installed in a horizontal or vertical duct. In a horizontal duct, the connection box should be installed facing upwards, or rotated 90° to one side. Installation with the connection box facing downwards is not allowed.

**CB 315-12,0 400V/3 Duct heater**
Art no: 5387
Electrical duct heater

Duct heater with spigot connection for standard spiral ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CB heater has rubber seals on the connecting spigots. Suitable for control by room thermostat or Pulser. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C. The CB can be installed in a horizontal or vertical duct. In a horizontal duct, the connection box should be installed facing upwards, or rotated 90° to one side. Installation with the connection box facing downwards is not allowed.

**VBC 315-2 Water heating batt**
Art no: 5461
Water-heating battery for heating air in ventilation systems with circular ducts. Aluzinc-coated casing, heat transmission element with copper tubes and aluminium fins. Removable cover for cleaning the unit.

The water-heating battery can be installed in a horizontal or a vertical duct with optional direction of airflow.

Max operating temperature 150 °C
Max operating pressure 1,6 MPa (16Bar)
2-rows battery

# Ventilation accessories

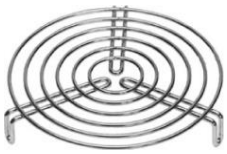
**CBM 315-9,0 400V/3 Duct heater**
Art no: 5485
Duct heater with integral control equipment

Duct heater with spigot connection for standard spiral circular ducts. Manufactured from Aluzinc-coated sheet steel with a heating element in stainless steel. The heater has integral overheating protection with a manual reset function. The CBM have rubber seals on the connecting spigots. The temperature is set on the cover of the duct heater. The unit is controlled by an integral electronic temperature regulator, using so-called time-proportional Pulse/Pause technology. This provides extremely precise temperature control. As a thyristor is used for adjusting the temperature, the unit has no moving parts. This means that it is silent and not susceptible to wear and tear. Terminals for interlocking the heater, via a pressure- and airflow guard are available in the terminal box. The minimum air volume is based on a minimum air velocity of 1.5 m/s. These duct heaters are designed for a maximum output air temperature of 50°C.

All CBMs are delivered with duct sensor TG-K330 (0-30°C) as standard.

**RSK-315 Back draft damper**
Art no: 5604
**Back draft damper**

Back draft damper for circular ducts, manufactured from galvanised sheet steel. The two blades are spring-loaded, which means that the damper can also be mounted vertically.



**SG 315 Protection guard**
Art no: 5611
Protection grille for duct fans, mounted with three screws.

**VK-30 Louvre shutter**
Art no: 5641
Louvre shutter

Louvre shutters for vertical mounting on a wall. The profiled vanes produce a strong upward force which reduces the air resistance. This means that the vanes opens fully at low air velocities as well.

All the parts are manufactured in weather-resistant and shockproof nylon material (PVC containing special synthetic). The robust construction ensures that the vanes will not become deformed or loose.

Above size 45, the vanes are fitted with a cast counterweight. Air velocity should not exceed 12 m/s. Maximum allowed temperature is 60 °C. The louvre shutters are easy to install. Wall plugs and screws are included above size 15.

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