



VORTICE

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RESIDENTIAL VENTILATION 

VORT QUADRO EVO RANGE

NEW



VORT QUADRO EVO RANGE

Residential centrifugal extractor fans

Suitable for wall/ceiling mounting or recessed installation; performance and fire resistance according to DIN 18017-3 standard. Ultra low noise levels perfectly compatible with night operation. High degree of protection (IP45), allowing safe installation in Zone 1 of bathrooms. Modular design: basic units can be combined to match a wide range of installation needs. High aerodynamic efficiency, granting full compliance with Erp Reg. n° 1253/2014, 2nd Tier.

Advanced electronic controls
to satisfy a wide range of needs





Excellent sealing of backdraught shutter (TÜV Certified),
to prevent the risk of bad smells and cold air diffusion
when the product is switched off.





VORT QUADRO EVO RANGE

Residential centrifugal extractor fans

PRODUCT SPECIFICATION

- AC motor, shaft on ball bearings, granting continuous operation at least than 40.000 hours at max rated temperature.
- Forward curved centrifugal impeller, PBT made, granting high rigidity, dimensional stability and great resistance to aggressive chemical agents. Its high efficiency, resulting from accurate aerodynamics studies, grant high pressure levels at nominal airflows.
- Scroll, comprehending the electronic cardboard housing, made of self-extinguishing (V0) ABS.
- Aesthetic front panel, made of self-extinguishing (V0) ABS; perimeter extraction two A hinges allow a wide rotation angle for easy filter maintenance.
- Motor housing and filter frame made of ABS plastic.
- G2 filter, with clogged filter alarm, according to Erp. Reg. N° 1253/2014/Eu , 2nd Tier.

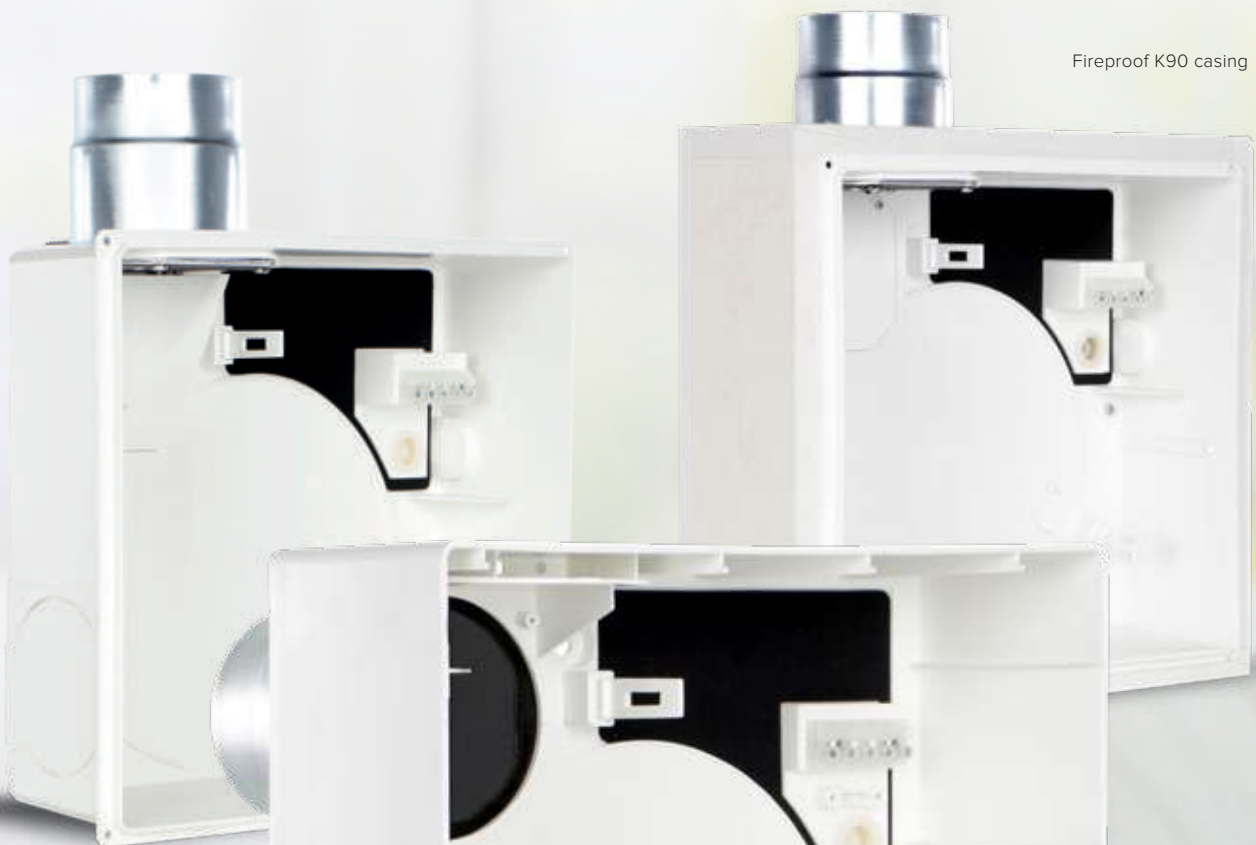


PRODUCT SPECIFICATION

CASINGS

- 10 alternative casings, different for installation and fire protection.
- Integrated spigot (nominal diameters 80 mm) and a backdraught shutter.
- Frame to prevent entry of dirt and plaster at installation supplied with the product.

Fireproof K90 casing



Recessed casing

External casing



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RANGE

Modular concept allows to freely complete ventilation units and casing to match different needs. Vort Quadro Evo Range consists of 23 ventilation units, different for performances and features, and 10 casing, suitable for wall ceiling and flush mounting. Alternative levels of fire protection available.



VENTILATION UNITS:

23 models different for electronic Suite (5) and level of performance (5)

+



CASINGS EXTERNAL/RECESSED MOUNTINGS:

10 casings, different for installation and fire protection grade

VENTILATION UNITS

Consisting of motorfan, scroll, filter, filter frame, electronics and front panel.

BASIC VERSION

- On/off switching through a dedicated remote switch or light switch off.
- Different (60 m³/h or 100 m³/h) levels of max performance.
- Multi-Speed versions available; desired speed selectable through a remote switch. Possibility to operate 24/7 the unit of minimum speed (Continuous Ventilation), boosting it to maximum speed through remote switch.



| CODE | MODELS | DESCRIPTION |
|-------|-----------------|--|
| 11521 | QE 60 LL | 1 speed air volume 60 m ³ /h |
| 11523 | QE 60/35 LL | 2 speeds air volumes 60/35 m ³ /h |
| 11522 | QE 100 LL | 1 speed air volume 100 m ³ /h |
| 11524 | QE 100/60 LL | 2 speeds air volumes 100/60 m ³ /h |
| 11525 | QE 100/60/35 LL | 3 speeds air volumes 100/60/35 m ³ /h |

VENTILATION UNITS

TIMER VERSION (T)

Same as Basic Versions, but with a Timer for delayed switch on/off. Switch or delay can be set at installation between 0-45".

Switch off delay between 0-20'.



| CODE | MODELS | DESCRIPTION |
|-------|----------------|---|
| 11526 | QE 60 LL T | 1 speed air volume 60 m ³ /h and timer |
| 11528 | QE 60/35 LL T | 2 speeds air volumes 60/35 m ³ /h and timer |
| 11527 | QE 100 LL T | 1 speed air volumes 100 m ³ /h and timer |
| 11531 | QE 100/60 LL T | 2 speeds air volumes 100/60 m ³ /h and timer |

TIMER PRO VERSION (TP)

Same as Timer Version, but:

- Switch-on delay can be set at installation 0, 45", 90" or 120", switch-off delay at 6', 10', 15' or 21'.
- In multiple speed models, it is possible at installation (Comfort Mode) to set their start at max speed when the light is switched-on, their switch at max speed when the light is switched-off and finally their stop after 6', 10', 15' or 21'.
- To ensure a proper ventilation of the room, even for extended inactivity periods, is possible to set (Holiday Mode), every 8, 12 or 24 hours, a periodic operation cycle (duration settable to 6', 10', 15' or 21 minutes).



| CODE | MODELS | DESCRIPTION |
|-------|--------------------|--|
| 11532 | QE 60 LL TP | 1 speed with air volume 60 m ³ /h and timer pro |
| 11534 | QE 60/35 LL TP | 2 speeds air volumes 60/35 m ³ /h and timer pro |
| 11533 | QE 100 LL TP | 1 speed air volume 100 m ³ /h and timer pro |
| 11535 | QE 100/60 LL TP | 2 speeds air volumes 100/60 m ³ /h and timer pro |
| 11536 | QE 100/60/35 LL TP | 3 speeds air volumes 100/60/35 m ³ /h and timer pro |

TIMER + PIR SENSOR (T PIR)

- The fan immediately starts when the PIR (Passive Infra Red) detects occupants; after the room has been left, the product stops to run with a delay between 0 and 20".
- In case of multiple speed models it possible to set, at installation, the continuous operation at minimum speed (Continuous Ventilation), automatically boosting the fan to higher speed through the PIR sensor.



| CODE | MODELS | DESCRIPTION |
|-------|--------------------|--|
| 11544 | QE 60 LL T PIR | 1 speed air volume 60 m ³ /h timer and PIR sensor |
| 11546 | QE 60/35 LL T PIR | 2 speeds air volumes 60/35 m ³ /h timer and PIR sensor |
| 11545 | QE 100 LL T PIR | 1 speed air volume 100 m ³ /h timer and PIR sensor |
| 11547 | QE 100/60 LL T PIR | 2 speeds air volumes 100/60 m ³ /h timer and PIR sensor |



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VENTILATION UNITS

TIMER EVO + HCS SENSOR (TP HCS)

- Timer EVO mode: the on/off switching realized through the light switch; the on-board electronics allows to set at installation, the start/stop delay when the product is switched on/off (delays can be set at 0, 45", 90" or 120" and at 6', 10', 15' or 21').
- HCS mode: the on/off switching is realized according to ambient relative humidity (RH) detected by the HCS sensor (Humidity Control System) integrated in the on-board electronics. The system operates with three different modes, to ensure the best environmental conditions:
 - The product starts to run when RH the pre-set according to exceeds a threshold, adjustable at installation at 60%, 70%, 80%, 90% (70% is the factory setting). The fan stops when the RH falls 15% below the pre-set value or after two hours of continuous running.
 - The product automatically starts as a result of a sudden RH increase (> 20% in 10 minutes), and immediately stops air when the RH falls 15% below the pre-set limit or after two hours of continuous running.
 - The fan is controlled through a remote switch, independently from the RH detected (E.g. to avoid its switch-on when the outdoor humidity is too high).



| CODE | MODELS | DESCRIPTION |
|-------|------------------------|---|
| 11537 | QE 60 LL TP HCS | 1 speed air volume 60 m ³ /h timer pro and humidity sensor |
| 11541 | QE 60/35 LL TP HCS | 2 speeds air volumes 60/35 m ³ /h timer pro and humidity sensor |
| 11538 | QE 100 LL TP HCS | 1 speed air volume 100 m ³ /h timer pro and humidity sensor. |
| 11542 | QE 100/60 LL TP HCS | 2 speeds air volumes 100/60 m ³ /h timer plus and humidity sensor |
| 11543 | QE 100/60/35 LL TP HCS | 3 speeds with air volume 100/60/35 m ³ /h timer plus and humidity sensor |



Forward curved centrifugal impeller, PBT made, granting high rigidity, dimensional stability and great resistance to aggressive chemical agents. Its high efficiency, resulting from accurate aerodynamics studies, assures high pressure levels in a wide range of airflows.



CASINGS

Casings integrate a nominal 80 mm diameter spigot and a backdraught shutter. Casings are also provided with a frame to prevent entry of dirt and plaster.

BASIC FOR INSTALLATION ON WALLS AND CEILINGS



| CODE | MODEL | DESCRIPTION |
|-------|----------|--|
| 11561 | QE - B M | Basic encasement for surface (wall/ceiling) installation, made of ABS plastic. Spigot made of ABS plastic, integrating the backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute. |

BASIC FOR INSTALLATION ON WALLS AND CEILINGS WITH FIREPROOF (CLASS K90), BACKDRAUGHT SHUTTER



| CODE | MODEL | DESCRIPTION |
|-------|---------------|---|
| 11563 | QE - B M VK90 | Basic encasement for surface (wall/ceiling) installation, made of ABS plastic. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute. |

BASIC FOR RECESSED INSTALLATION



| CODE | MODEL | DESCRIPTION |
|-------|----------|---|
| 11560 | QE - B I | Basic encasement for recessed installation, made of ABS plastic. Spigot made of ABS plastic, integrating the backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute. Square frame to prevent entry of dirt and plaster. Port to connect a spigot (QE-AD cod. 21118, available as accessory) to extract air from a second room. Possibility of drywall installation. |

BASIC FOR RECESSED INSTALLATION WITH FIREPROOF CLASS K 90, BACKDRAUGHT SHUTTER



| CODE | MODEL | DESCRIPTION |
|-------|---------------|--|
| 11562 | QE - B I VK90 | Basic encasement for recessed installation, made of ABS plastic. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute. Square frame to prevent entry of dirt and plaster. Port to connect a spigot (QE-AD cod. 21118, available as accessory) to extract air from a second room. Possibility of drywall installation. |









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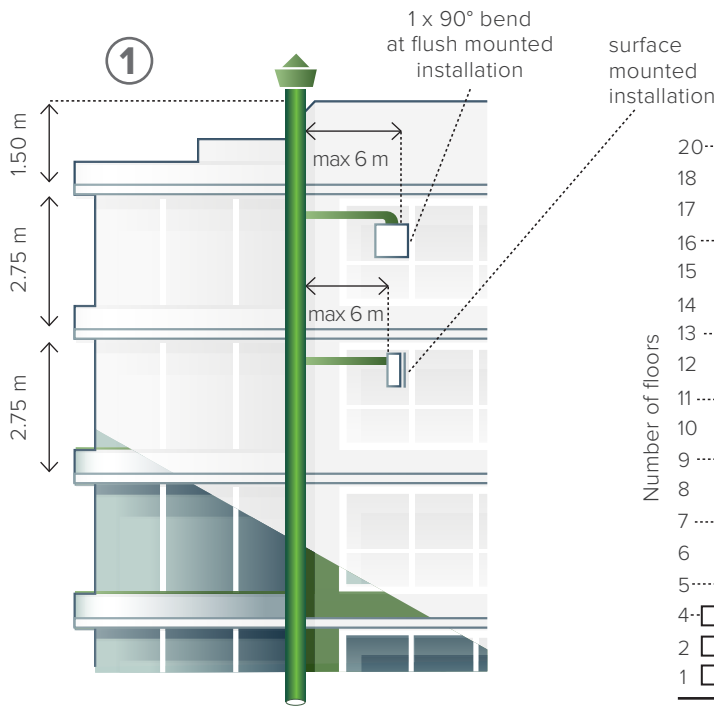
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RECESSED MOUNTINGS

RECESSED INSTALLATION FIREPROOF ENCASEMENT K 90, WITH FIREPROOF CLASS K 90 BACKDRAUGHT SHUTTER

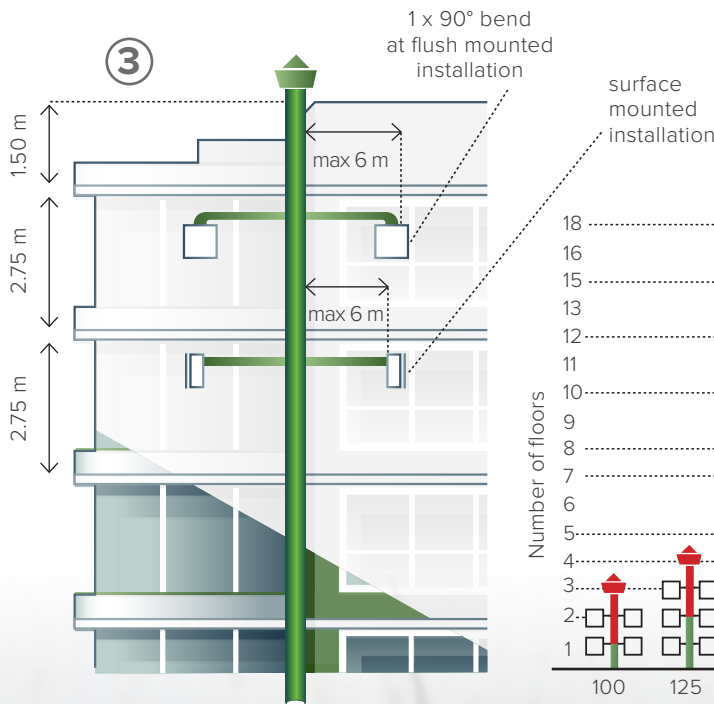
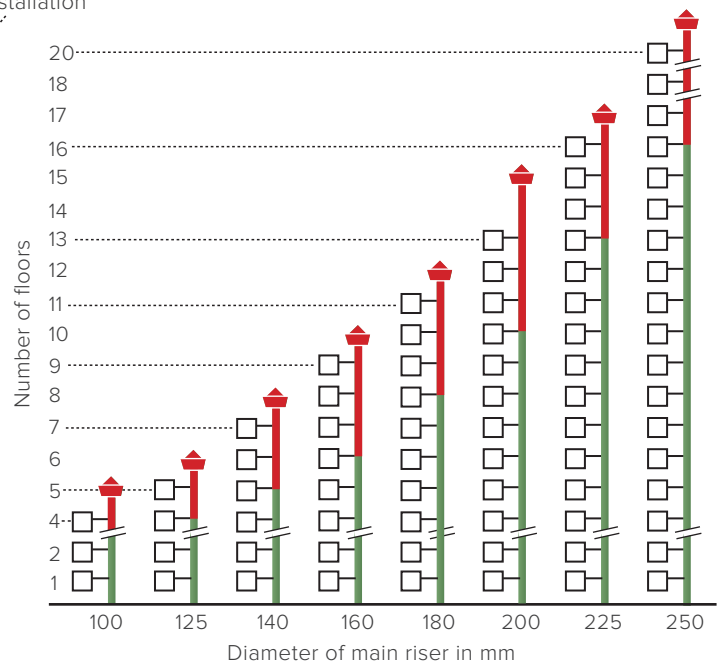
| | CODE | MODELS | DESCRIPTION |
|---|-------|-------------------|--|
|  | 11564 | QE - B I K90 R | Fireproof K90 casing for recessed installation and rear discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. |
|  | 11565 | QE - B I K90 S | Fireproof K90 casing for recessed installation and side discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. |
|  | 11566 | QE - B I K90 R 2R | Fireproof K90 casing for recessed installation and rear discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. Stainless steel spigot, on the right side, able to extract air from a second room. |
|  | 11567 | QE - B I K90 R 2L | Fireproof K90 casing for recessed installation and rear discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. Stainless steel spigot, on the left side, able to extract air from a second room. |
|  | 11568 | QE - B I K90 S 2R | Fireproof K90 casing for recessed installation and side discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. Stainless steel spigot, on the right side, able to extract air from a second room. |
|  | 11569 | QE - B I K90 S 2L | Fireproof K90 casing for recessed installation and side discharge. Stainless steel spigot, integrating the K90 fireproof valve, TUM certified according to DIN 18017-3. Backdraught shutter compliant with DIN 18017-3, as certified by TUV German Institute. Spigot nominal diameter: 80 mm. Square frame to prevent entry of dirt and plaster. Stainless steel spigot, on the left side, able to extract air from a second room. |

60 m³/h BATHROOM OR TOILETS



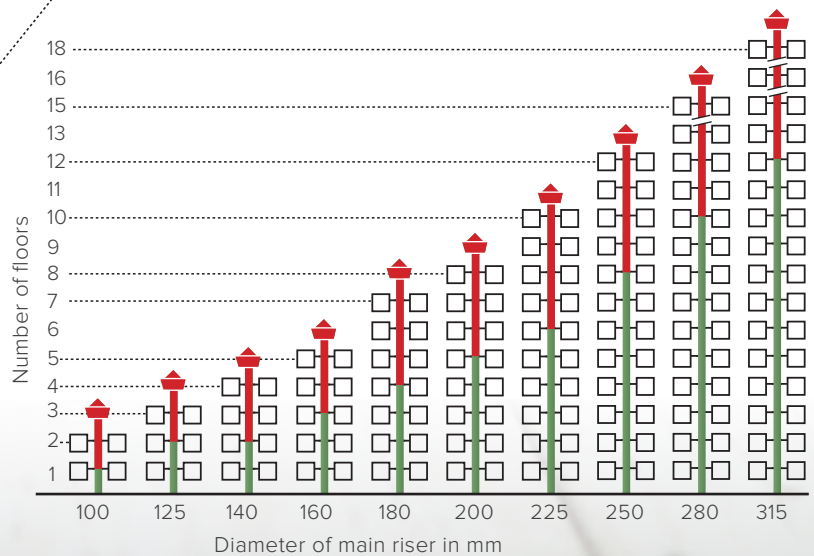
INSTALLATION OF 1 UNIT PER FLOOR

With 60 m³/h designed air flow volume and operation of all units at the same time.



INSTALLATION OF 2 UNITS PER FLOOR

With 60 m³/h designed air flow volume and operation of all units at the same time.



Reference room height 2.75 m; straight ducting without bends; ducting length max. 1.5 m from last unit to air extract above the roof max pressure loss between ventilated room and exhaust opening 60 Pa. The required main riser diameter can be read from above diagram. Data valid for operated at nominal air flow volumes of 60 or 100 m³/h per unit and all units operated at the same time. Copies of approvals are available on request.

⚠ These number of floors are outside of comfort range, therefore non recommendable.

Example 1
Type of room: bathroom/toilet
V = 60 m³/h

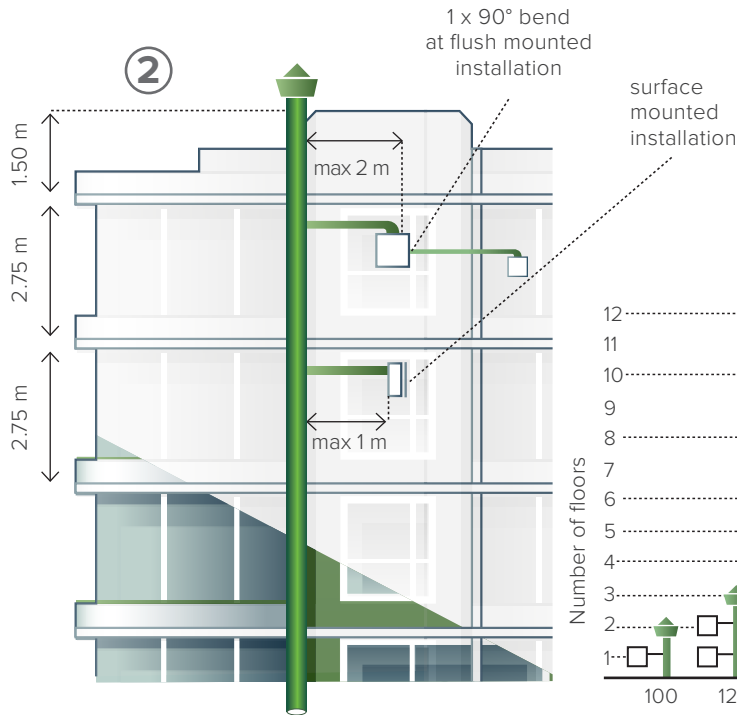
Units per floor: 1
Floor levels: 5
Main riser diameter: 125 mm



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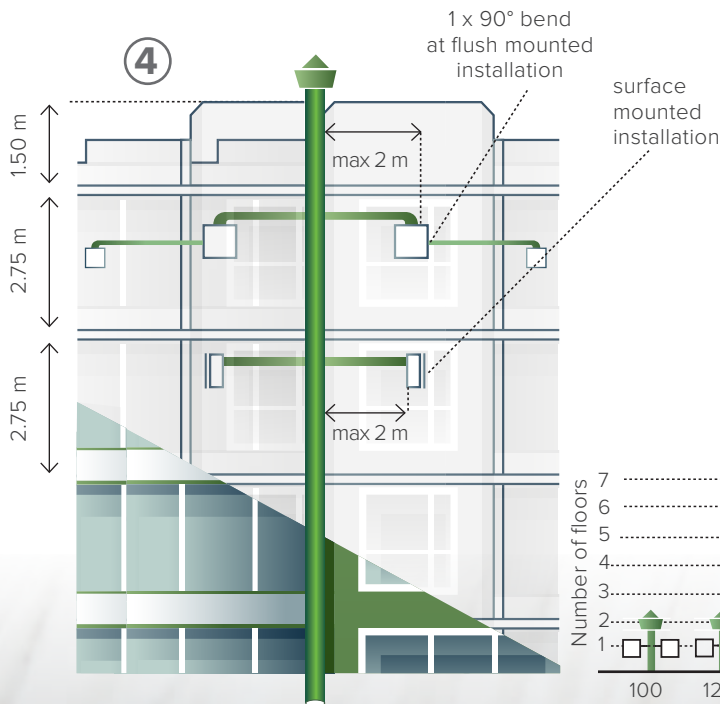
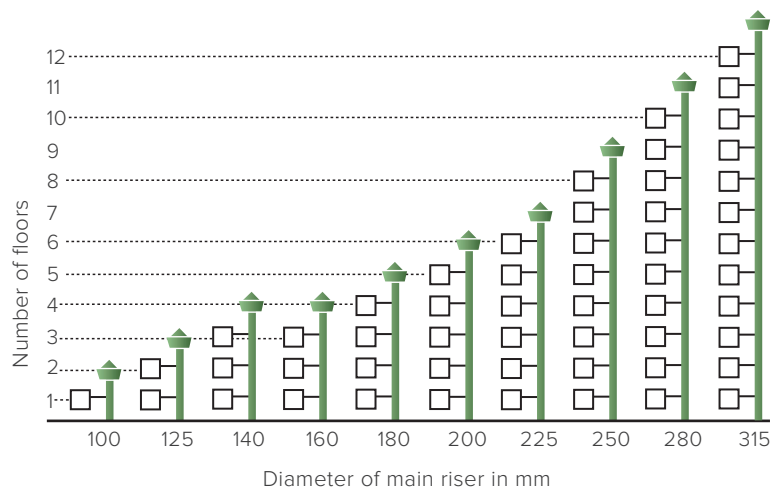
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100 m³/h ONE AND TWO ROOM VENTILATION



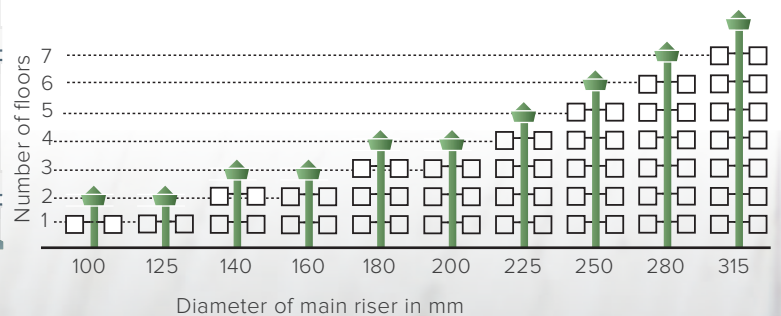
INSTALLATION OF 1 UNIT PER FLOOR

With 100 m³/h designed air flow volume and operation of all units at the same time. (Volume e.g. = 100 m³/h. Second room ventilation with one unit = bathroom 60 m³/h, toilet 35 m³/h)



INSTALLATION OF 2 UNITS PER FLOOR

With 100 m³/h designed air flow volume and operation of all units at the same time. (Volume e.g. = 100 m³/h. Second room ventilation with one unit = bathroom 60 m³/h, toilet 35 m³/h)



Example 2

Type of room: bathroom + toilet (2 rooms) or kitchen
 V = 100 m³/h (bathroom 60 m³/h and toilet 35 m³/h)

Units per floor: 2
 Floor levels: 3
 Main riser diameter: 180 mm



TECHNICAL DATA

Referred to Max, Mid, Min speed when available

| CODE | MODELS | V ~ 50 Hz | W | A | MAX AIRFLOW | | MAX PRESSURE | | MAX °C |
|-------|------------------------|-----------|---------------|----------------------|-----------------|---------------------|--------------------|------------------|--------|
| | | | | | m³/h | l/s | mmH ₂ O | Pa | |
| 11521 | QE 60 LL | | | | | | | | |
| 11526 | QE 60 LL T | | | | | | | | |
| 11532 | QE 60 LL TP | 220 - 240 | 16 | 0.14 | 60 | 16,7 | 35 | 343 | 50 |
| 11537 | QE 60 LL TP HCS | | | | | | | | |
| 11544 | QE 60 LL T PIR | | | | | | | | |
| 11523 | QE 60/35 LL | | | | | | | | |
| 11528 | QE 60/35 LL T | | | | | | | | |
| 11534 | QE 60/35 LL TP | 220 - 240 | 16 9 | 0.14 0.11 | 60 35 | 16,7 9,7 | 35 10 | 343 98 | 50 |
| 11541 | QE 60/35 LL TP HCS | | | | | | | | |
| 11546 | QE 60/35 LL T PIR | | | | | | | | |
| 11522 | QE 100 LL | | | | | | | | |
| 11527 | QE 100 LL T | | | | | | | | |
| 11533 | QE 100 LL TP | 220 - 240 | 26 | 0.17 | 100 | 27,8 | 36 | 353 | 50 |
| 11538 | QE 100 LL TP HCS | | | | | | | | |
| 11545 | QE 100 LL T PIR | | | | | | | | |
| 11524 | QE 100/60 LL | | | | | | | | |
| 11531 | QE 100/60 LL T | | | | | | | | |
| 11535 | QE 100/60 LL TP | 220-240 | 26 16 | 0.17 0.14 | 100 60 | 27,8 16,7 | 36 35 | 353 343 | 50 |
| 11542 | QE 100/60 LL TP HCS | | | | | | | | |
| 11547 | QE 100/60 LL T PIR | | | | | | | | |
| 11525 | QE 100/60/35 LL | | | | | | | | |
| 11536 | QE 100/60/35 LL TP | 220 - 240 | 26 16 9 | 0.17 0.14 0.11 | 100 60 35 | 27,8 16,7 9,7 | 36 35 10 | 353 343 98 | 50 |
| 11543 | QE 100/60/35 LL TP HCS | | | | | | | | |

SOUND LEVELS

| SOUND POWER L _{wA} | | | | | | | | |
|--------------------------------|---------------|------|------|----|--------------|-------------------|----|------|
| Airflow m³/h | WALL MOUNTING | | | 35 | Airflow m³/h | RECESSED MOUNTING | | |
| | 100 | 60 | 35 | | | 100 | 60 | 35 |
| dB(A) | 50.5 | 43.7 | 33.7 | | dB(A) | 50.2 | 42 | 32.7 |

| SOUND PRESSURE* L _{p 1,5 m} | | | | | | | | |
|---|---------------|------|------|----|--------------|-------------------|------|------|
| Airflow m³/h | WALL MOUNTING | | | 35 | Airflow m³/h | RECESSED MOUNTING | | |
| | 100 | 60 | 35 | | | 100 | 60 | 35 |
| dB(A) | 39.0 | 32.2 | 22.2 | | dB(A) | 38.7 | 30.5 | 21.2 |

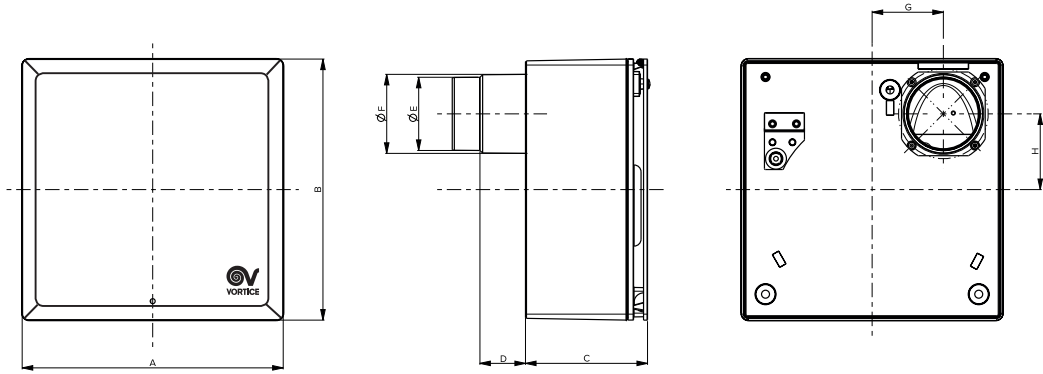
*Sound pressure calculated in free-field conditions, 1,5 m distance, emispheric distribution.



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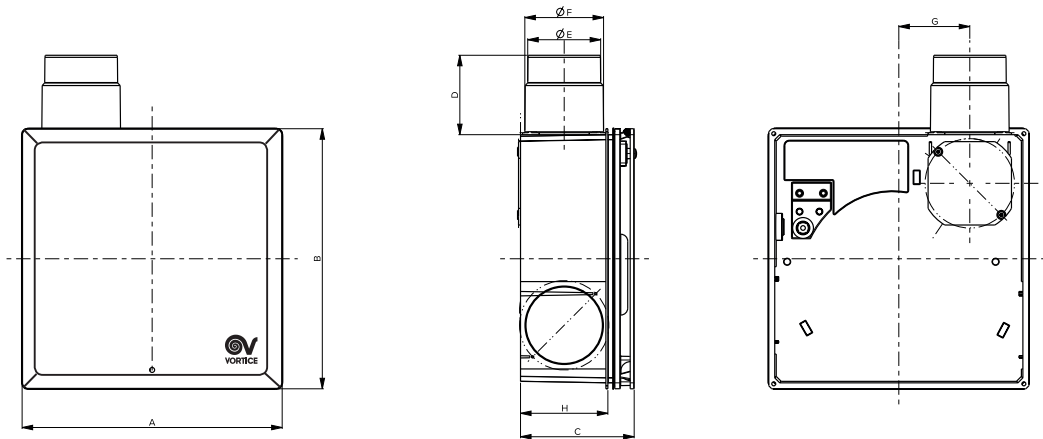
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DIMENSIONS



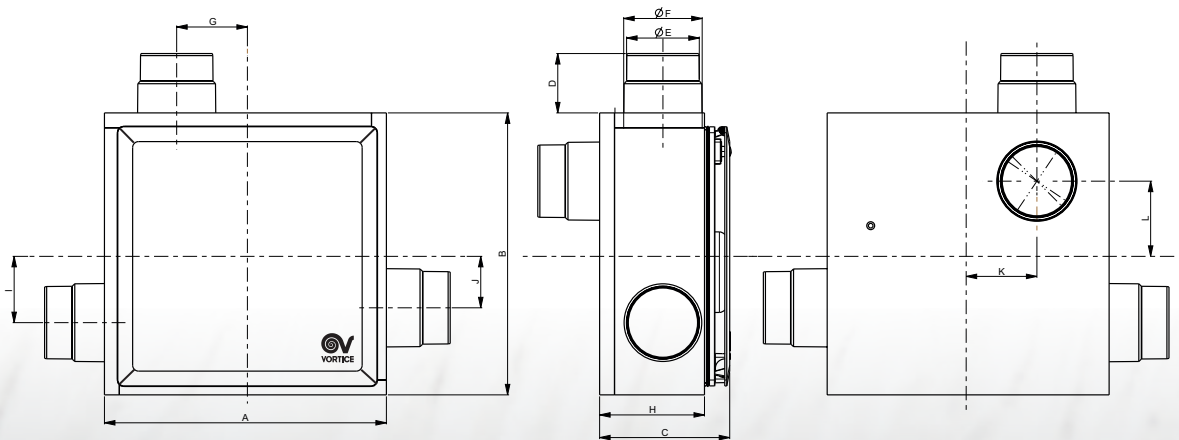
| MODELS | A | B | C | D | Ø E | Ø F | G | H |
|-------------------------|-----|-----|-------|----|-----|-----|------|----|
| Surface mounted version | 262 | 262 | 111,5 | 80 | 73 | 79 | 71.5 | 90 |

Dimensions (mm)



| MODELS | A | B | C | D | Ø E | Ø F | G | H |
|------------------|-----|-----|-----|----|-----|-----|------|----|
| Recessed version | 277 | 277 | 135 | 80 | 73 | 79 | 71.5 | 94 |

Dimensions (mm)

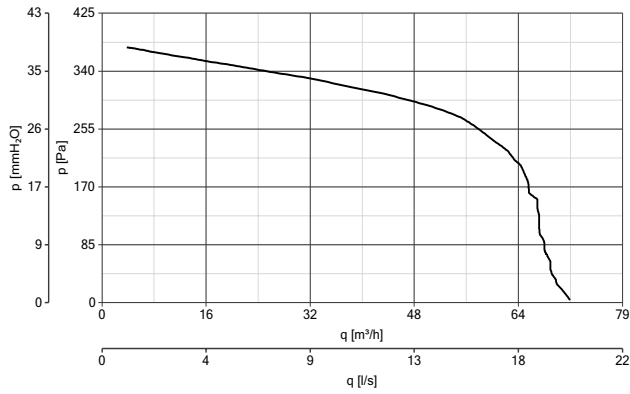


| MODELS | A | B | C | D | Ø E | Ø F | G | H | I | J | K | L |
|--------------------------------|-----|-----|-------|----|-----|-----|------|-----|----|----|------|----|
| Recessed Fireproof K90 version | 285 | 285 | 131.5 | 60 | 73 | 79 | 71.5 | 106 | 67 | 52 | 71.5 | 76 |

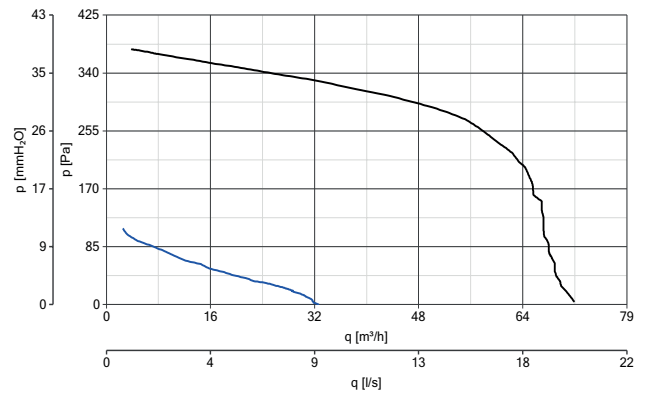
Dimensions (mm)

PERFORMANCE CURVES

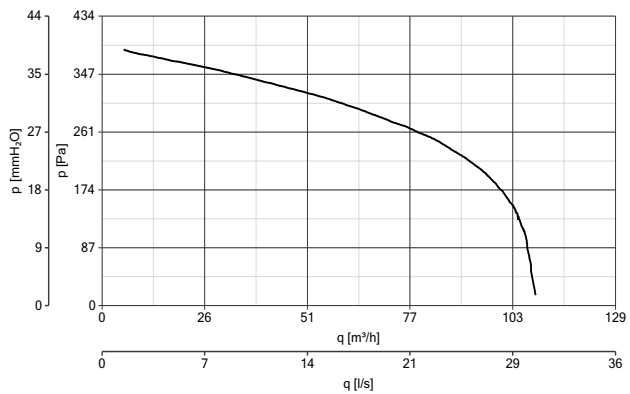
QE 60



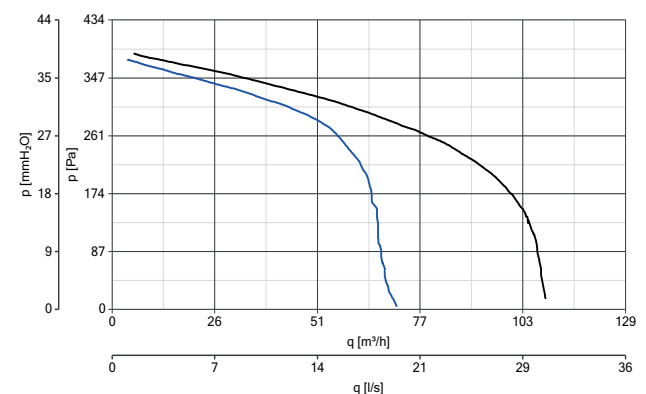
QE 60/35



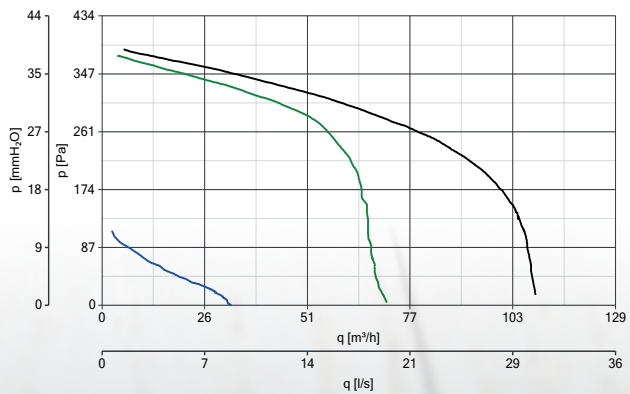
QE 100



QE 100/60



QE 100/60/35















— MAX speed
— MID speed
— MIN speed



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Residential centrifugal extractor fans

ACCESSORIES

| | CODE | NAME | DESCRIPTION |
|---|-------|----------|--|
|  | 24127 | QE - MH | Mounting holder for flush mounting in plasterboard systems |
|  | 24128 | QE - TEK | Toilet extraction kit for WC |
|  | 24094 | QE - UMB | Universal bracket for flush mounting in duct systems and false ceilings also for fireproof K90 casings |
|  | 24129 | QE - SRK | Second room kit (including second room spigot) |
|  | 24183 | QE - FBA | Plasterboard adapter |
|  | 21118 | QE - AD | Second room spigot |
|  | 24229 | QE - CFR | Plasterboard cover |
|  | 21101 | QE - SPF | Spacer frame |
|  | 21119 | SAWG | White door grille |
|  | 21120 | SABG | Brown door grille |
|  | 91018 | EAA30 BL | Automatic acoustic air inlet 30 m ³ /h |
|  | 91035 | EAA45 BL | Automatic acoustic air inlet 45 m ³ /h |

ACCESSORIES

| | CODE | NAME | DESCRIPTION |
|---|-------|----------|---|
|  | 21121 | AVR 100 | Fire damper, diameter 100 mm |
| | 21122 | AVR 125 | Fire damper, diameter 125 mm |
| | 21123 | AVR 140 | Fire damper, diameter 140 mm |
| | 21124 | AVR 160 | Fire damper, diameter 160 mm |
| | 21125 | AVR 180 | Fire damper, diameter 180 mm |
| | 21126 | AVR 200 | Fire damper, diameter 200 mm |
|  | 21127 | MDV 100 | Manual air supply valve for 100 mm duct |
|  | 21128 | ADV 100 | Automatic air supply valve for 100 mm duct |
|  | 21129 | MSDV 100 | Manual air supply valve for 100 mm duct, with sound insulation |
|  | 21130 | ASDV 100 | Automatic air supply valve for 100 mm duct, with sound insulation |
|  | 21132 | 3SS - D | 2 - 3 speeds switch for flush mounted installation, in a DIN Standard box |
|  | 21133 | 2SS - I | 2 speeds switch for flush mounted installation, in a UNI 503 Standard box |
|  | 21134 | 3SS - I | 3 speeds switch for flush mounted installation, in a UNI 503 Standard box |



VORT QUADRO EVO RANGE

Residential centrifugal extractor fans

APPLICATIONS



Example: Recessed Casings mounting cod. 11560 with Timer (T) motor fan cod. 11526;



Example: Recessed Casings mounting cod. 11560 with Timer Evo + HCS sensor (TP HCS) motor fan cod. 11543;

APPLICATIONS



Example: Recessed installation fireproof encasement K90, with fireproof class K90 backdraught shutter cod. 11566 with Timer EVO (TP) motor fan cod. 11533;



Example: External Casings mounting cod. 11561 with basic motor fan cod. 11521;

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