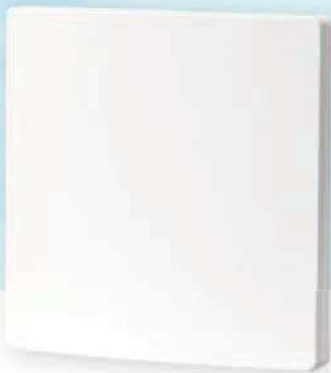


SINGLE AIR EXTRACTION UNITS FOR BATHROOMS, TOILETS AND KITCHENS

You can
breathe deeply.
Because we
bring you
FRESH AIR.

VENTILATION & HEAT RECOVERY

VARIO II



VENTILATION THE RIGHT WAY

AIR EXTRACTION FOR BATHROOMS, TOILETS AND KITCHENS

A BREATH OF FRESH AIR

in ventilation technology



VISIONS FOR THE FUTURE

Innovation means progress. Only visionaries can master the new challenges facing their products. Our focus is on saving energy and customer benefit.

As specialists in single room ventilation units and decentralised system solutions, we consistently incorporate the latest electronics and high quality components into our products to meet the most rigorous technical requirements. Our innovative capacity, which underscores the uniqueness of our technology,

is proven through numerous patents. High-end components and precision engineering guarantee a long service life and excellent reliability. **For more than 35 years, the Meltem name has stood for the highest quality** in ventilation technology.

This expertise enables us to supply proven, finely-tuned ventilation systems so you can create a healthy climate and make life within your home more comfortable.



VARIO II ClassicLine



We take “Made in Germany” literally: as a binding quality standard.

Health and well-being are dependent on good air. The Meltem VARIO II series supplies clean air in bathrooms, toilets and kitchens, eliminates unpleasant odours and protects against moisture damage. VARIO II units are powerful, easy to install and - apart from filter changes - maintenance-free. You can create the perfect unit by combining the surface-mount or flush-mount box and fan insert that meet your needs. Meltem has the perfect solution for every ventilation application and is the smart choice for environmentally-conscious homeowners looking to minimise energy usage. And indeed for anyone who simply loves fresh air.

QUALITY MADE IN GERMANY

Premium materials and precision engineering guarantee a long service life. The Meltem name is your guarantee of quality; decades of experience with single room ventilation units are incorporated into the VARIO II series. Of course, all units are **TÜV-tested and have building inspectorate approval.**

Benefits:

- **Protection against moisture damage and prevention of mould growth**
- **Several different control options**
- **High air flow rate due to steep pressure-volume flow rate characteristic**

VARIO II fan inserts

- Select from several different control options
- Energy-saving, low-noise and maintenance-free precision external rotor motor with overload protection
- Steep pressure-volume flow rate characteristic (see technical data) due to high-performance radial wheel with embedded steel disc
- Protection class II (protective earth conductor “PE” is not needed)
- 230 V AC – 50 Hz, RI-suppressed
- IP rating IP–X5 (suitable for installation in zone 1 to DIN VDE 0100 Part 701 in showers)

Functions / Adjustment ranges

Fan	Switch-on delay	Run-on time	Interval time	Humidity control	Circuit diagram
V-II 30					1
V-II 60					1
V-II 100					1
V-II 30-N	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 60-N	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 100-N	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 30-I		approx. 3 to 20 min	approx. 1 to 12 h		2
V-II 60-I		approx. 3 to 20 min	approx. 1 to 12 h		2
V-II 100-I		approx. 3 to 20 min	approx. 1 to 12 h		2
V-II 30-BM-N		approx. 3 to 20 min			8
V-II 60-BM-N		approx. 3 to 20 min			8
V-II 100-BM-N		approx. 3 to 20 min			8
V-II 30-BM-I		approx. 3 to 20 min	approx. 1 to 12 h		8
V-II 60-BM-I		approx. 3 to 20 min	approx. 1 to 12 h		8
V-II 100-BM-I		approx. 3 to 20 min	approx. 1 to 12 h		8
V-II 60-F		approx. 15 min		20 to 95 % RH* 75 % RH**	2
V-II 100-F		approx. 15 min		20 to 95 % RH* 75 % RH**	2
V-II 30/60					3 or 7
V-II 30/100					3 or 7
V-II 30/60-NZ	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 30/100-NZ	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 30/60-K	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 30/100-K	approx. 3 s to 2.5 min	approx. 3 to 20 min			2
V-II 30/60-KF	approx. 3 s to 2.5 min	approx. 3 to 20 min			5
V-II 30/100-KF	approx. 3 s to 2.5 min	approx. 3 to 20 min			5
V-II 30/60-KF-LX	approx. 3 s to 2.5 min	approx. 3 to 20 min			6
V-II 30/100-KF-LX	approx. 3 s to 2.5 min	approx. 3 to 20 min			6
V-II 30/60-KZ	approx. 3 s to 2.5 min	approx. 3 to 20 min			4
V-II 30/100-KZ	approx. 3 s to 2.5 min	approx. 3 to 20 min			4
V-II 30/60-F		approx. 15 min		20 to 95 % RH* 75 % RH**	2
V-II 30/100-F		approx. 15 min		20 to 95 % RH* 75 % RH**	2
V-II 30/60/100					9

For factory default setting, see “Functions” (page 5–13)

* Humidity control range ** Fixed switching point (see instructions for description of the functions)

Functions

You can combine the fan inserts with all the boxes from the VARIO II series.

All VARIO II ventilation units have building inspectorate approval (DIBt Z-51.1-309) and protection class IP-X5.

Single-stage fan inserts with filter holder, air filter and cover

without control

Designation:

Part no.: 2200	V-II 30
Part no.: 2210	V-II 60
Part no.: 2220	V-II 100

The fan starts as soon as the unit is switched on.
The fan stops as soon as the unit is switched off.

with run-on control ⁽¹⁾

Designation:

Part no.: 2205	V-II 30-N
Part no.: 2215	V-II 60-N
Part no.: 2225	V-II 100-N

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time.
Potentiometer for easy setting.

When the unit is switched on, the fan starts after a switch-on delay of 1 min*.

When the unit is switched off, the fan stops working after a 15 min* run-on time.

* Factory setting

Possible settings:

- *Infinitely-variable switch-on delay from 3 s to 2.5 min*
- *Infinitely-variable run-on time from 3 to 20 min*

⁽¹⁾ Ventilation to DIN 18017-3, also V-II 30-N for use in toilet rooms

Single-stage fan inserts with filter holder, air filter and cover

with interval and run-on control ⁽¹⁾

Designation:

Part no.: 2206	V-II 30-I
Part no.: 2216	V-II 60-I
Part no.: 2226	V-II 100-I

Integrated interval and run-on control. Potentiometer for easy setting.

The fan starts as soon as the unit is switched on.

When the unit is switched off, the fan stops working after a 15 min* run-on time. Interval mode starts after the last time the fan was switched off. The fan is out of use for the default interval time of approx. 1 h*. The fan then runs on for 15 min*.

* Factory setting

Possible settings:

- *Infinitely-variable run-on time from 3 to 20 min*
- *Infinitely-variable interval mode from 1 h to 12 h*

with motion detector and run-on control ⁽¹⁾

Designation:

Part no.: 2203	V-II 30-BM-N
Part no.: 2213	V-II 60-BM-N
Part no.: 2223	V-II 100-BM-N

Integrated run-on control for infinitely-variable adjustment of the run-on time.

Potentiometer for easy setting.

The motion detector registers people within the detection range and triggers a switching signal. The fan starts immediately. When the person leaves the detection range, the fan stops working after a 15 min* run-on time. If the motion detector registers a person before the run-on time has elapsed, the run-on time restarts when the person leaves the detection range.

* Factory setting

- **Motion detector**

Possible settings:

- *Infinitely-variable run-on time from 3 to 20 min*

⁽¹⁾ Ventilation to DIN 18017-3

Single-stage fan inserts with filter holder, air filter and cover

with motion detector, interval and run-on control ⁽¹⁾

Designation:

Part no.: 2204	V-II 30-BM-I
Part no.: 2214	V-II 60-BM-I
Part no.: 2224	V-II 100-BM-I

Integrated run-on control for infinitely-variable adjustment of the run-on time. Potentiometer for easy setting.

The motion detector registers people within the detection range and triggers a switching signal. The fan starts immediately. When the person leaves the detection range, the fan stops working after a 15 min* run-on time. If the motion detector registers a person before the run-on time has elapsed, the run-on time restarts when the person leaves the detection range. Interval mode starts after the last time the fan was switched off. The fan is out of use for the default interval time of approx. 1 h*. The fan then runs on for 15 min*.

* Factory setting

- **Motion detector**

Possible settings:

- *Infinitely-variable run-on time from 3 to 20 min*
- *Infinitely-variable interval mode from 1 h to 12 h*

with humidity control

Designation:

Part no.: 2217	V-II 60-F
Part no.: 2227	V-II 100-F

The humidity control has a fixed switching point of 75 % RH (relative humidity) or responds to a rapid rise in humidity. When the unit is switched on, the fan starts after the measured values have been recorded for approx. 50 s (60 or 100 m³/h). When the unit is switched off, the fan runs on for 15 min. The fan switches off if no increased humidity value is measured during this period. The humidity sensor has a measured control range from 20 % to 95 % RH and constantly monitors the room air humidity.

The humidity sensor starts the fan in the following situations:

- Rapid rise in humidity regardless of the current room air humidity
- The switching point of 75 % RH is exceeded.

The integrated tropics function adapts the humidity sensor to the atmosphere in the room which changes according to the time of year. The tropics function also incorporates a running time limiter which switches the fan off after 12 h uninterrupted service. Example of a rapid rise in humidity: The room humidity is 45 % RH. While the shower is in use, the fan starts due to the rapid rise in humidity, even if the 75 % RH switching point has not yet been reached.

- **Fan running at 60 or 100 m³/h**
- **Run-on time 15 min**
- **Measured control range from 20 % to 95 % RH**
- **Fixed switching point of 75 % RH**
- **Responds to a rapid rise in humidity regardless of the current room air humidity (RH)**
- **Running time limiter**

⁽¹⁾ Ventilation to DIN 18017-3

Two-stage fan inserts with filter holder, air filter and cover

without control ⁽¹⁾

Designation:

Part no.: 2230	V-II 30/60
Part no.: 2240	V-II 30/100

The fan runs continuously either in base load operation (30 m³/h) or in nominal load operation (60 or 100 m³/h). A switch is used to toggle between base load operation and nominal load operation.

- **Continuous base load operation 30 m³/h**
- **While the room is in use, nominal load operation at 60 or 100 m³/h**

with run-on control ⁽¹⁾

Designation:

Part no.: 2231	V-II 30/60-NZ
Part no.: 2241	V-II 30/100-NZ

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time. Potentiometer for easy setting.

The fan runs continuously in base load operation (30 m³/h).

When the unit is switched on, the fan runs in nominal load operation after a switch-on delay of approx. 1 min* (60 or 100 m³/h). When the unit is switched off, the fan runs on for 15 min* in nominal load operation. The fan then switches to base load operation.

* Factory setting

- **Continuous base load operation 30 m³/h**
- **Nominal load operation 60 or 100 m³/h**
- **Run-on time in nominal load operation 60 or 100 m³/h**

Possible settings:

- *Infinitely-variable switch-on delay from 3 s to 2.5 min*
- *Infinitely-variable run-on time from 3 to 20 min*

⁽¹⁾ Ventilation to DIN 18017-3

Two-stage fan inserts with filter holder, air filter and cover

with comfort control

Designation:

Part no.: 2232	V-II 30/60-K
Part no.: 2242	V-II 30/100-K

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time.
Potentiometer for easy setting.

When the unit is switched on, the fan runs in base load operation after a switch-on delay of approx. 1 min* (30 m³/h).
When the unit is switched off, the fan runs on for 15 min* in nominal load operation (60 or 100 m³/h).
The fan then switches off.

* Factory setting

- While the room is in use, base load operation 30 m³/h
- Run-on time in nominal load operation 60 or 100 m³/h

Possible settings:

- Infinitely-variable switch-on delay from 3 s to 2.5 min
- Infinitely-variable run-on time from 3 to 20 min

with comfort control and remote control input (potential-free 230 V AC)

Designation:

Part no.: 2233	V-II 30/60-KF
Part no.: 2243	V-II 30/100-KF

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time.
Potentiometer for easy setting.

When the unit is switched on, the fan runs in base load operation after a switch-on delay of approx. 1 min* (30 m³/h).
When the unit is switched off, the fan runs on for 15 min* in nominal load operation (60 or 100 m³/h).
The fan then switches off.

This control is also equipped with a remote control input (230 V AC, internal, switchable via potential-free contact) to allow base load operation to be switched on and off using a switch provided by the customer.

* Factory setting

- While the room is in use, base load operation 30 m³/h
- Run-on time in nominal load operation 60 or 100 m³/h
- Base load operation switched on and off via a switch provided by the customer

Possible settings:

- Infinitely-variable switch-on delay from 3 s to 2.5 min
- Infinitely-variable run-on time from 3 to 20 min

Two-stage fan inserts with filter holder, air filter and cover

with comfort control and remote control input (230 V AC)

Designation:

Part no.: 2233-1	V-II 30/60-KF-LX
Part no.: 2243-1	V-II 30/100-KF-LX

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time.
Potentiometer for easy setting.

When the unit is switched on, the fan runs in base load operation after a switch-on delay of approx. 1 min* (30 m³/h).
When the unit is switched off, the fan runs on for 15 min* in nominal load operation (60 or 100 m³/h).
The fan then switches off.

This control is also equipped with a remote control input (230 V AC, supplied externally) to allow base load operation to be switched on and off using a switch provided by the customer.

* Factory setting

- While the room is in use, base load operation 30 m³/h
- Run-on time in nominal load operation 60 or 100 m³/h
- Base load operation switched on and off via a switch provided by the customer

Possible settings:

- Infinitely-variable switch-on delay from 3 s to 2.5 min
- Infinitely-variable run-on time from 3 to 20 min

with comfort control and central control input (12/24 V AC/DC)

Designation:

Part no.: 2234	V-II 30/60-KZ
Part no.: 2244	V-II 30/100-KZ

Integrated run-on control for infinitely-variable adjustment of the switch-on delay and run-on time.
Potentiometer on the fan for easy setting.

When the unit is switched on, the fan runs in base load operation after a switch-on delay of approx. 1 min* (30 m³/h).
When the unit is switched off, the fan runs on for 15 min* in nominal load operation (60 or 100 m³/h).
The fan then switches off.

This control is also equipped with a central control input for a 12/24 V AC/DC control cable provided by the customer which is used to switch base load operation on and off from a central location.

* Factory setting

- While the room is in use, base load operation 30 m³/h
- Run-on time in nominal load operation 60 or 100 m³/h
- Base load operation switched on and off via a switch provided by the customer

Possible settings:

- Infinitely-variable switch-on delay from 3 s to 2.5 min
- Infinitely-variable run-on time from 3 to 20 min

Two-stage fan inserts with filter holder, filter and cover

with humidity control ⁽²⁾

Designation:

Part no.: 2235	V-II 30/60-F
Part no.: 2245	V-II 30/100-F

The humidity control has a fixed switching point of 75 % RH (relative humidity) or responds to a rapid rise in humidity. When the unit is switched on, the fan runs in base load operation (30 m³/h) after the measured values have been recorded for approx. 50 s. When the unit is switched off, the fan runs on for 15 min* in nominal load operation (60 or 100 m³/h). The fan switches off if no increased humidity value is measured during this period. The humidity sensor has a measured control range from 20 % to 95 % RH and constantly monitors the room air humidity. The humidity sensor switches the fan to base load operation in the following situations:

- Rapid rise in humidity regardless of the current room air humidity
- The switching point of 75 % RH is exceeded.

The integrated tropics function adapts the humidity sensor to the atmosphere in the room which changes according to the time of year. The tropics function also incorporates a running time limiter which switches the fan off after 12 h uninterrupted service in base load operation.

Example of a rapid rise in humidity:

The room humidity is 45 % RH. While the shower is in use, the fan switches to base load operation due to the rapid rise in humidity, even if the 75 % RH switching point has not yet been reached.

* Factory setting

- **While the room is in use, base load operation 30 m³/h**
- **Run-on time of 15 min in nominal load operation 60 or 100 m³/h**
- **Humidity mode in base load operation 30 m³/h**

⁽²⁾ Ventilation to DIN 18017-3 in combination with option part no. 2250-01 V-II O/F-DG

Two-stage fan inserts with filter holder, air filter and cover

Additional options for two-stage air filter inserts with humidity control (V-II 30/60-F, V-II 30/100-F)

Designation:

Part no.: 2250-00	V-II O/F-ZU
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Central control input (timer) option:

An additional 24 V AC/DC central control input allows the fan to also be operated in base load operation (30 m³/h). All other functions are identical to those of types V-II 30/60-F, V-II 30/100-F.

Designation:

Part no.: 2250-01	V-II O/F-DG
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Continuous base load operation option:

In contrast to the standard fan, this type runs for 24 h in base load operation (30 m³/h). In humidity mode, the fan runs in nominal load operation (60 or 100 m³/h). The switch activates the time-delay relay. After the measured values have been recorded for approx. 50 s, the relay switches the fan to nominal load operation. When the fan is switched off, nominal load operation remains active for 15 min.

Designation:

Part no.: 2250-02	V-II O/F-BM
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Motion detector option:

In contrast to the standard fan, this fan is also equipped with a motion detector.

The motion detector switches the fan to base load operation (30 m³/h). When the unit is switched off, the fan runs on for 15 min in nominal load operation (60 or 100 m³/h). The fan switches off if no increased humidity value is measured during this period. All other humidity functions are identical to those of types V-II 30/60-F, V-II 30/100-F.

Designation:

Part no.: 2250-03	V-II O/F-FF
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Remote control input option:

This control is also equipped with a remote control input (230 V AC, internal, switchable via potential-free contact) to allow base load operation to be switched on and off using a switch provided by the customer. All other functions are identical to those of types V-II 30/60-F, V-II 30/100-F.

Three-stage fan inserts with filter holder, air filter and cover

Designation:

Part no.: 2248

V-II 30/60/100

The fan starts immediately when the desired air flow (30, 60 or 100 m³/h) is selected with the 3-way stepping switch. The fan stops immediately when the 3-way stepping switch is moved to the zero position.

Note for users

For the ventilation unit to remain functional, the air filter must be changed every 3 months and the regulating mat* should also be changed annually if it is dirty. Part no. 2670 VARIO II VF replacement filter includes a regulating mat.

Part number	Name of part	Contents	Size
2670	VARIO II VF replacement filter	Air filter, 5 x	16 x 20 cm
		Regulating mat, 1 x	13 x 20 cm

* Only for use with fan inserts with 60 m³/h and exhaust socket to the side (excluding part no. 2248 V-II CL-30/60/100).

Air filter replacement



VARIO II product range

Part no.	Picture	Type	Description
FLUSH-MOUNT INSTALLATION ACCESSORIES			
FLUSH-MOUNT BOXES			
FOR USE IN BUILDINGS WITH NO FIRE SAFETY REQUIREMENTS OR IN ASSOCIATION WITH VARIOUS CEILING PENETRATION SEALS			
2000	 U	V-II U	Flush-mount box for bathrooms, toilets and eat-in kitchens in association with various ceiling penetration seals or in buildings without fire safety requirements Installation dimensions (W/H/D): 233 x 233 x 104 mm
2001	 U-H	V-II U-ZR	Flush-mount box with second DN75 connection on right, for bathrooms, toilets and eat-in kitchens in association with various ceiling penetration seals or in buildings without fire safety requirements Installation dimensions (W/H/D): 233 x 233 x 104 mm
2002		V-II U-ZL	Flush-mount box with second DN75 connection on left, for bathrooms, toilets and eat-in kitchens in association with various ceiling penetration seals or in buildings without fire safety requirements Installation dimensions (W/H/D): 233 x 233 x 104 mm
2003		V-II U-H	Flush-mount box with rear DN75 connection, for bathrooms, toilets and eat-in kitchens in association with various ceiling penetration seals or in buildings without fire safety requirements Installation dimensions (W/H/D): 233 x 233 x 104 mm
FOR USE IN BATHROOMS AND TOILETS INSIDE AND OUTSIDE FIRE-RESISTANT SHAFTS			
2020	 UB	V-II UB	Flush-mount box for bathrooms and toilets in buildings with fire safety requirements inside and outside fire-resistant shafts Installation dimensions (W/H/D): 263 x 263 x 110 mm
2023	 UB-H	V-II UB-H	Flush-mount box with rear DN75 connection, for bathrooms and toilets in buildings with fire safety requirements inside and outside fire-resistant shafts Installation dimensions (W/H/D): 263 x 263 x 110 mm
FOR USE IN BATHROOMS/TOILETS AND EAT-IN KITCHENS INSIDE FIRE-RESISTANT SHAFTS WITH FIRE DAMPER			
2030	 UBK	V-II UBK	Flush-mount box for bathrooms, toilets and eat-in kitchens in buildings with fire safety requirements inside fire-resistant shafts Installation dimensions (W/H/D): 263 x 263 x 110 mm
2033	 UBK-H	V-II UBK-H	Flush-mount box with rear DN75 connection, for bathrooms, toilets and eat-in kitchens in buildings with fire safety requirements fire-resistant shafts Installation dimensions (W/H/D): 263 x 263 x 110 mm

Part no.	Picture	Type	Description
FLUSH-MOUNT INSTALLATION ACCESSORIES			
INSTALLATION ACCESSORIES FOR FLUSH-MOUNT BOX			
4452		MB-V	Universal mounting bracket for all flush-mount boxes, with fixing materials
4520		BR-25	ClassicLine blind frame, up to 20 mm adjustment range, dim. (W/H/D): 325 x 325 x 25 mm
SLIDE-IN CONNECTOR TO COMPENSATE FOR BOX SET TOO DEEP			
0110		ST 50/80	Slide-in connector, adjustment range 50–80 mm
0111		ST 70/110	Slide-in connector, adjustment range 70–110 mm
0112		ST 90/150	Slide-in connector, adjustment range 90–150 mm
0113		ST 110/180	Slide-in connector, adjustment range 110–180 mm
ACCESSORIES FOR TWO-ROOM EXTRACTION			
2040	U-LG	V-II U-LG	Flush-mount empty box, plastic, for two-room extraction, with intake kit, Installation dimensions (W/H/D): 233 x 233 x 104 mm
SURFACE-MOUNT INSTALLATION ACCESSORIES			
SURFACE-MOUNT BOXES			
FOR USE IN BATHROOMS/TOILETS OUTSIDE FIRE-RESISTANT SHAFTS			
2050	A	V-II A	Surface-mount box for bathrooms and toilets in buildings with fire safety requirements Installation dimensions (W/H/D): 263 x 263 x 144 mm
2065		V-II A-S	Surcharge for exhaust to the side
4803		AD-V 100/75	Adapter for round pipe DN 100 on box connecting piece DN 75
FOR USE IN BATHROOMS/TOILETS AND EAT-IN KITCHENS OUTSIDE FIRE-RESISTANT SHAFTS WITH FIRE DAMPER			
2051	AK	V-II AK	Surface-mount box for bathrooms, toilets and eat-in kitchens in buildings with fire safety requirements Installation dimensions (W/H/D): 263 x 263 x 144 mm
2065		V-II A-S	Surcharge for exhaust to the side
4803		AD-V 100/75	Adapter for round pipe DN 100 on box connecting piece DN 75

VARIO II product range





Part no.	Picture	Type	Description
CLASSICLINE FAN INSERTS WITH INTAKE KIT			
FOR USE WITH ONE POWER LEVEL			
2200		V-II 30	ClassicLine fan insert with intake kit, air flow 30 m³/h
2205		V-II 30-N	ClassicLine fan insert with intake kit, air flow 30 m³/h, with run-on control – infinitely variable
2206		V-II 30-I	ClassicLine fan insert with intake kit, air flow 30 m³/h, with interval and run-on control – infinitely variable
2203		V-II 30-BM-N	ClassicLine fan insert with intake kit, air flow 30 m³/h, with motion detector with run-on control – infinitely variable
2204		V-II 30-BM-I	ClassicLine fan insert with intake kit, air flow 30 m³/h, with motion detector with interval and run-on control – infinitely variable
2210		V-II 60	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h
2215		V-II 60-N	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h, with run-on control – infinitely variable
2216		V-II 60-I	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h, with interval and run-on control – infinitely variable
2213		V-II 60-BM-N	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h, with motion detector with run-on control – infinitely variable
2214		V-II 60-BM-I	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h, with motion detector with interval and run-on control – infinitely variable
2217		V-II 60-F	ClassicLine fan insert with intake kit and regulating mat, air flow 60 m³/h, with humidity control
2220		V-II 100	ClassicLine fan insert with intake kit, air flow 100 m³/h
2225		V-II 100-N	ClassicLine fan insert with intake kit, air flow 100 m³/h, with run-on control – infinitely variable
2226		V-II 100-I	ClassicLine fan insert with intake kit, air flow 100 m³/h, with interval and run-on control – infinitely variable
2223		V-II 100-BM-N	ClassicLine fan insert with intake kit, air flow 100 m³/h, with motion detector with run-on control – infinitely variable
2224		V-II 100-BM-I	ClassicLine fan insert with intake kit, air flow 100 m³/h, with motion detector with interval and run-on control – infinitely variable
2227		V-II 100-F	ClassicLine fan insert with intake kit, air flow 100 m³/h, with humidity control

Intake kit = Filter holder plus filter and intake cover

Part no.	Picture	Type	Description
CLASSICLINE FAN INSERTS WITH INTAKE KIT			
FOR USE WITH TWO POWER LEVELS			
2230		V-II 30/60	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h
2231		V-II 30/60-NZ	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with run-on control – infinitely variable
2232		V-II 30/60-K	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with comfort control – infinitely variable
2233		V-II 30/60-KF	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with comfort control – infinitely variable + remote control input
2233-1		V-II 30/60-KF-LX	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with comfort control – infinitely variable + 230 V AC control input
2234		V-II 30/60-KZ	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with comfort control – infinitely variable + 24 V AC/DC control input
2235		V-II 30/60-F	ClassicLine fan insert with intake kit and regulating mat, air flow: base load 30 m ³ /h / nominal load 60 m ³ /h, with humidity control
2250-00		V-II O/F-ZU	Option: central control input (timer)
2250-01		V-II O/F-DG	Option: continuous base load operation
2250-02		V-II O/F-BM	Option: motion detector
2250-03	V-II O/F-FF	Option: remote control input	
2240		V-II 30/100	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h
2241		V-II 30/100-NZ	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with run-on control – infinitely variable
2242		V-II 30/100-K	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with comfort control – infinitely variable
2243		V-II 30/100-KF	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with comfort control – infinitely variable + remote control input
2243-1		V-II 30/100-KF-LX	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with comfort control – infinitely variable + 230 V AC control input
2244		V-II 30/100-KZ	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with comfort control – infinitely variable + 24 V AC/DC control input
2245		V-II 30/100-F	ClassicLine fan insert with intake kit, air flow: base load 30 m ³ /h / nominal load 100 m ³ /h, with humidity control
2250-00		V-II O/F-ZU	Option: central control input (timer)
2250-01	V-II O/F-DG	Option: continuous base load operation	
2250-02	V-II O/F-BM	Option: motion detector	
2250-03	V-II O/F-FF	Option: remote control input	
FOR USE WITH THREE POWER LEVELS			
2248		V-II 30/60/100	ClassicLine fan insert with intake kit, air flow 30 m ³ /h / 60 m ³ /h / 100 m ³ /h, switched using 3-stage switch (e.g. Busch-Jaeger item 2710-U - not supplied)

Intake kit = Filter holder plus filter and intake cover

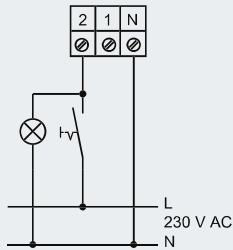
VARIO II product range

Part no.	Picture	Type	Description
ACCESSORIES			
EXTERNAL WALL AIR VENT VS-160			
4430		VS-160	External wall air vent with round wall duct and very flat interior cover with silencer, wind protection grille and air filter (G2) Pipe dim.: (ø x D) 160 x 500 mm Interior cover dim.: 180 x 180 x 35 mm
CONTROL DEVICES FOR SWITCH BOX INSTALLATION			
0157		ISU	Interval and run-on control – infinitely variable
0159		NR-E	Run-on control – infinitely variable
REPLACEMENT FILTERS FOR VARIO II			
2670		V-II VF	ClassicLine replacement filter, dim.: 16 x 20 cm, filter class G2, 5 per pack, with regulating mat, dim.: 13 x 20 cm, 1 x

Circuit diagrams

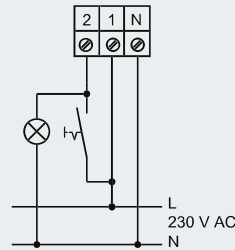
V-II 30, 60, 100

1



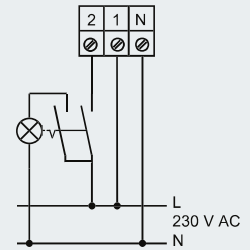
V-II 30-N (-I), 60-N (-I) (-F),
100-N (-I) (-F), 30/60-K (-F, -NZ),
30/100-K (-F, -NZ)

2



V-II 30/60, 30/100

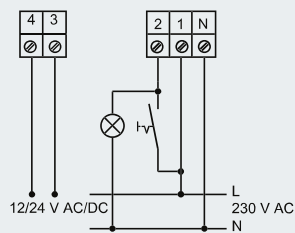
3



Note: Use a 2-pole switch.

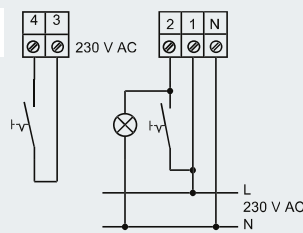
V-II 30/60-KZ, 30/100-KZ

4



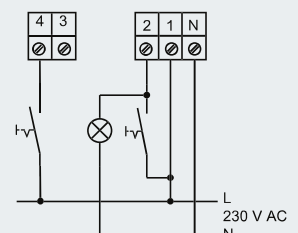
V-II 30/60-KF, 30/100-KF

5



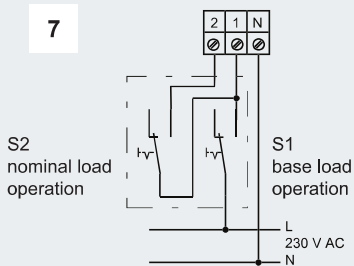
V-II 30/60-KF-LX, 30/100-KF-LX

6



V-II 30/60, 30/100,
switchable base load operation

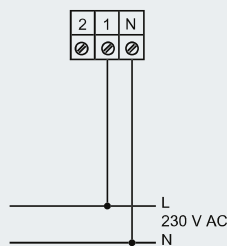
7



Note: Use a double toggle switch.

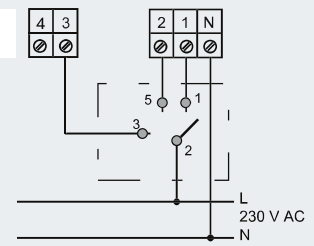
V-II 30-BM-N (-I), 60-BM-N (-I),
100-BM-N (-I)

8



V-II 30/60/100

9



Attention: All wiring and modification work is to be carried out in accordance with VDE 0105 part 1 (by approved electricians). Incorrect wiring will result in damage to the controls and will invalidate all warranty claims. Subject to technical modifications.

CE mark: All controls fulfil the requirements of the following EC directives:
EC Low Voltage Directive 73/23/EEC,
EC Electromagnetic Compatibility Directive 89/336/EEC.



Technical data

Flush-mount units

Technical data / VARIO II flush-mount installation								
	Installation position	Exhaust socket	Air flow in m ³ /h	Power in W	P(el) in W/m ³	Pressure difference stat. (Pa)	Sound power level L _{WA} /dB(A)	Sound pressure level L _{pA} /dB(A)
Units with exhaust to the side								
U-V30	Wall	Top	29.4	6.2	0.21	49	30	26
UB-V30	Wall	Top	29.4	6.2	0.21	49	29	25
UBK-V30	Wall	Top	21.4	6.4	0.30	60	37	33
U-V60	Wall	Top	63.6	16.9	0.27	247	44.5	40.5
UB-V60	Wall	Top	63.6	16.9	0.27	247	43.5	39.5
UBK-V60	Wall	Top	62.8	17.5	0.27	177	45	41
U-V100	Wall	Top	100	27.7	0.28	168	51.5	47.5
UBK-V100	Wall	Top	100	27.7	0.29	168	51.5	47.5
Units with exhaust to the rear								
U-H V30	Wall	Top left	29.6	6.1	0.21	48	31	27
U-H V30	Wall	Top left	29.6	6.1	0.21	48	31	27
UBK-H-V30	Wall	Top left	21.8	6.2	0.28	63	38	34
UB-H-V60	Wall	Top left	65.4	17.3	0.27	184	45	41
U-H V60	Wall	Top left	65.4	17.3	0.27	184	45.5	41.5
UBK-H-V60	Wall	Top left	62.5	17.4	0.28	181	45	41
U-H V100	Wall	Top left	96.9	27.4	0.28	121	53.5	49.5
UB-H-V100	Wall	Top left	96.9	27.4	0.28	121	53.5	49.5
UBK-H-V100	Wall	Top left	96.9	27.4	0.29	121	54	50

Surface-mount units

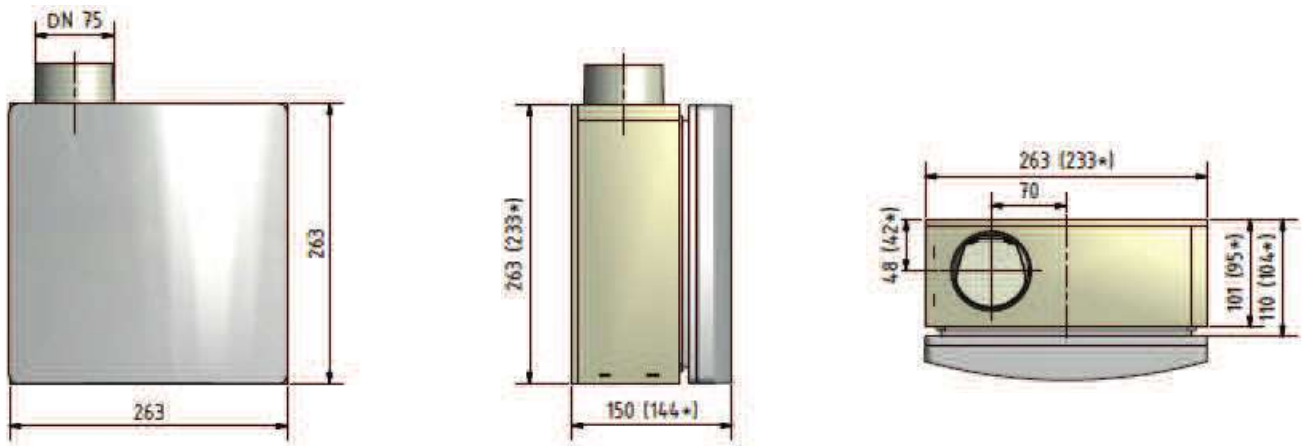
Technical data / VARIO II surface-mount installation								
	Installation position	Exhaust socket	Air flow in m ³ /h	Power in W	P(el) in W/m ³	Pressure difference stat. (Pa)	Sound power level L _{WA} /dB(A)	Sound pressure level L _{pA} /dB(A)
Units with exhaust to the side								
A-V30	Wall	Top left	29.6	6.1	0.21	48	33	29
AK-V30	Wall	Top left	21.8	6.2	0.28	63	41	37
A-V60	Wall	Top left	65.4	17.3	0.27	184	51.5	47.5
AK-V60	Wall	Top left	62.5	17.4	0.28	181	55.5	51.5
A-V100	Wall	Top left	96.9	27.4	0.28	121	55.5	51.5
AK-V100	Wall	Top left	96.9	27.4	0.28	121	58	54

Technical data

Flush-mount units

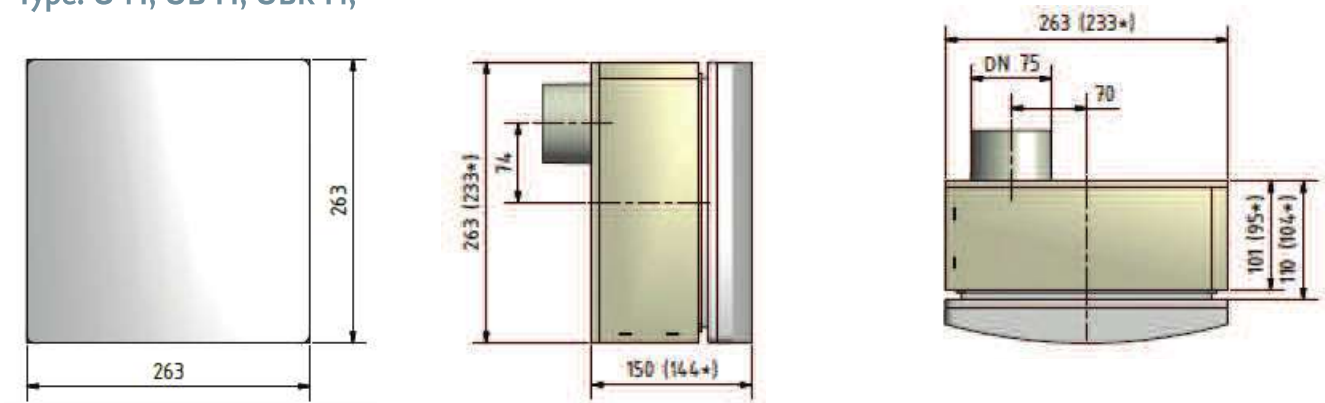
VARIO II flush-mount box installation dimensions

Type: U, UB, UBK



VARIO II flush-mount box installation dimensions

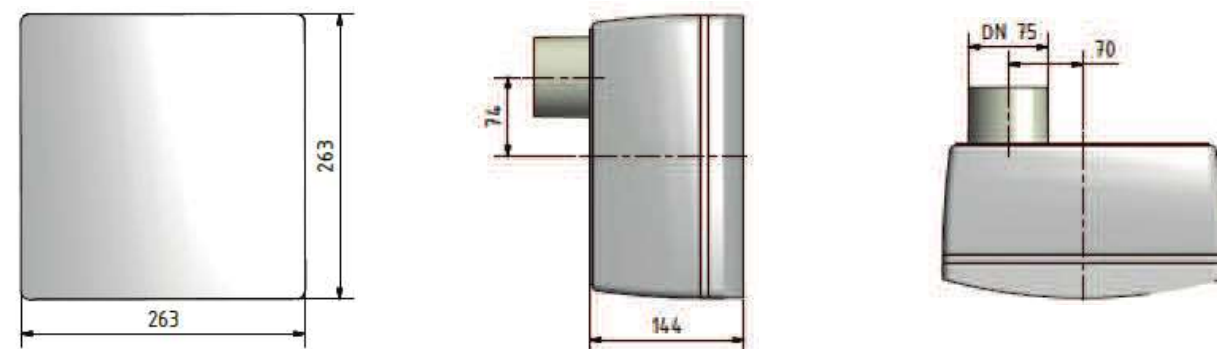
Type: U-H, UB-H, UBK-H,



Surface-mount units

VARIO II surface-mount box installation dimensions

Type: A, AK

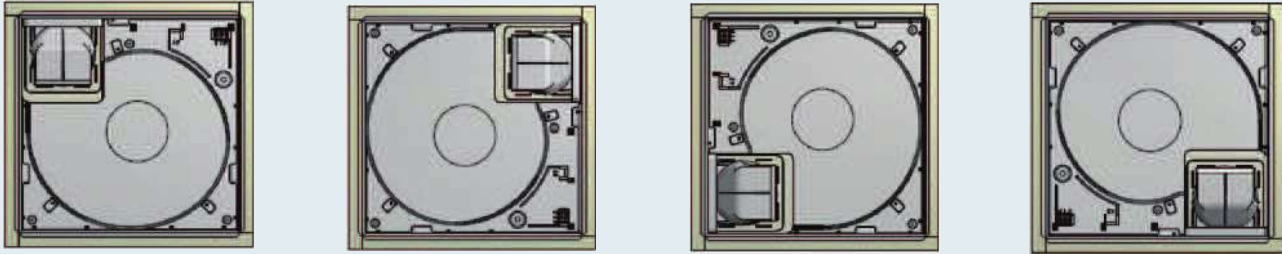


* Dimensions for box without fire protection casing

Installation positions

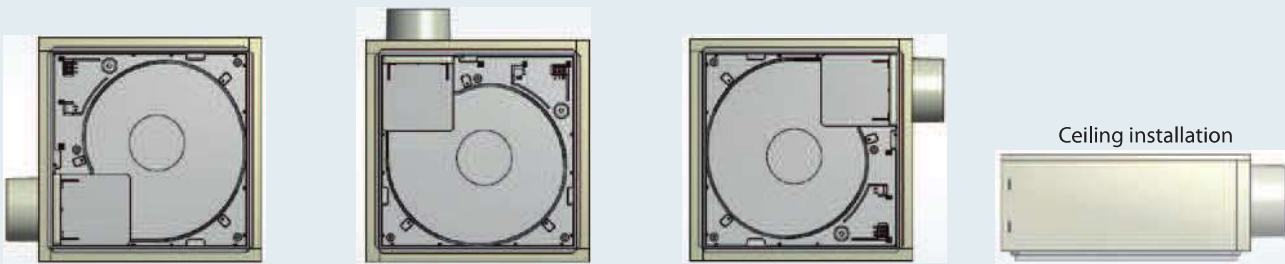
Installation position for flush-mount/surface-mount box with exhaust socket to rear

Type: A, AK, U-H, UB-H, ÜBK-H



Installation position for flush-mount box with exhaust socket to the side

Type: U, UB, ÜBK



Dimensions of the main pipe

Pipe diameter for a simultaneity factor of 100 %.

The ducting schemes represent the minimum nominal pipe diameters and were determined in accordance with DIN 18017 part 3, August 2007-07 edition; the calculations were based on a height between floors of 2.75 m and a length of exhaust pipe from the last fan connection of up to 2 m. **Attention:** If different products are used, the riser ducts **MUST** be recalculated on the basis of the available pressure difference.

60 m³/h

Total number of floors	DN 100	DN 125	DN 140	DN 160	DN 180	DN 200
18						
17						
16						
15						
14						
13						
12						
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						

60 m³/h

Total number of floors	DN 100	DN 125	DN 140	DN 160	DN 180	DN 200
18						
17						
16						
15						
14						
13						
12						
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						

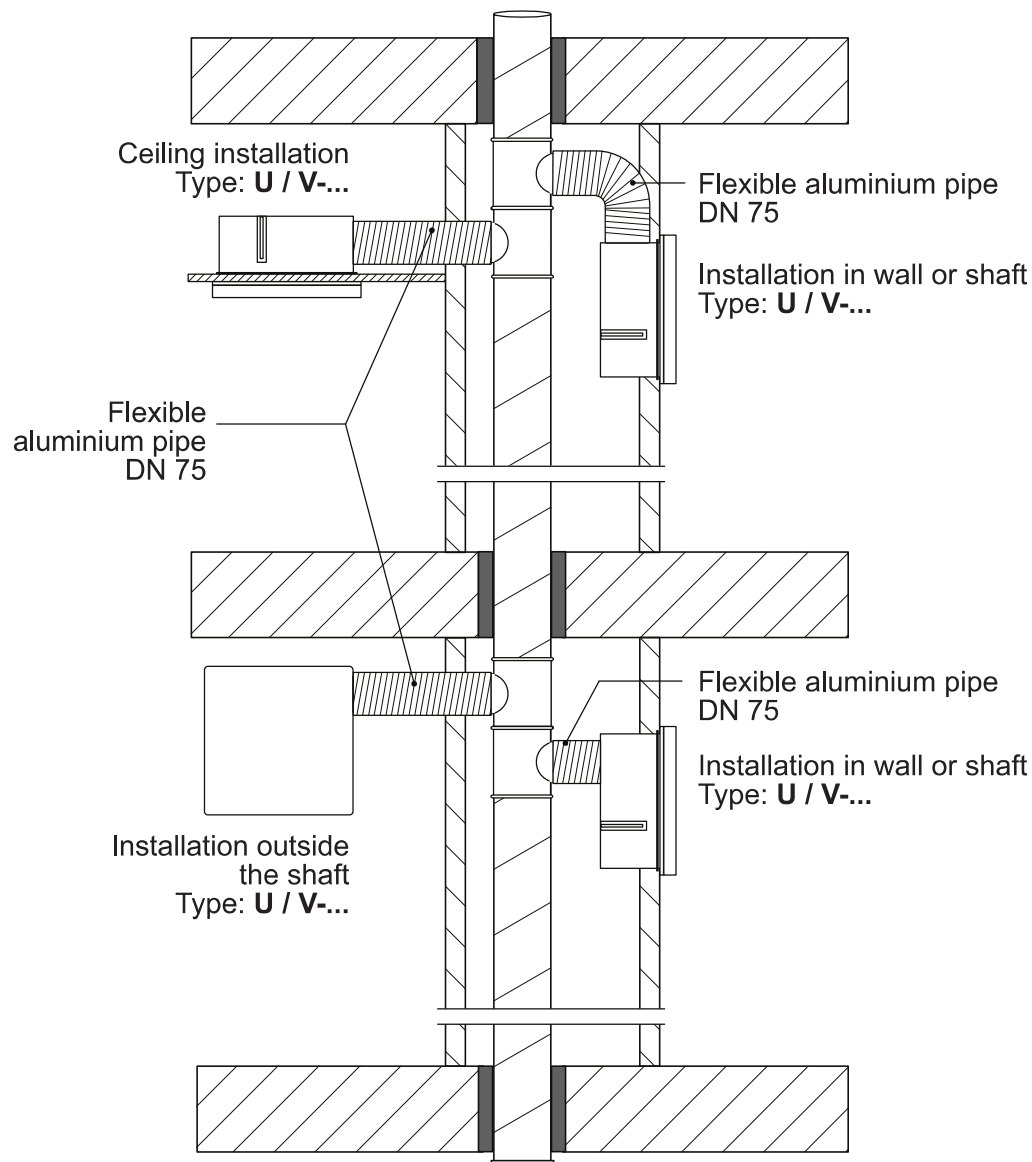
100 m³/h

Total number of floors	DN 100	DN 125	DN 140	DN 160	DN 180	DN 200
18						
17						
16						
15						
14						
13						
12						
11						
10						
9						
8						
7						
6						
5						
4						
3						
2						
1						

Fire protection

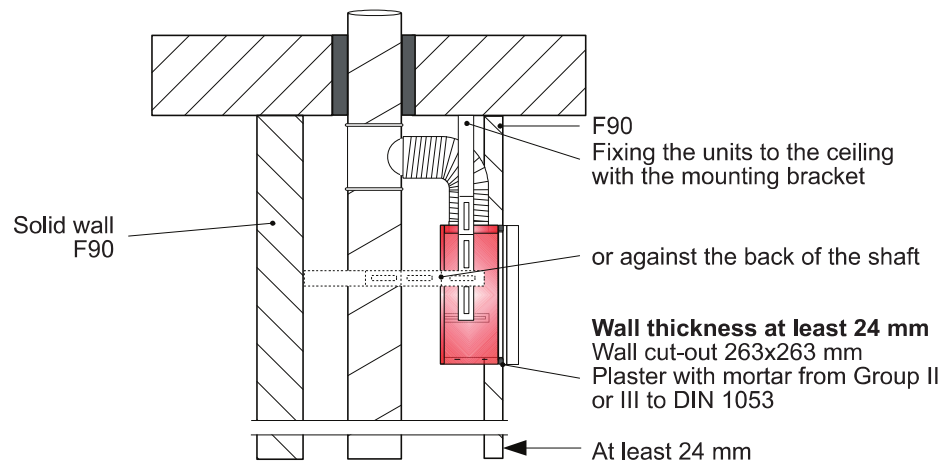
Installation in buildings with no fire resistance requirements
or in combination with a ceiling penetration seal

Single air extraction unit from the "VARIO II" series / Example installations for unit types U
and U-H

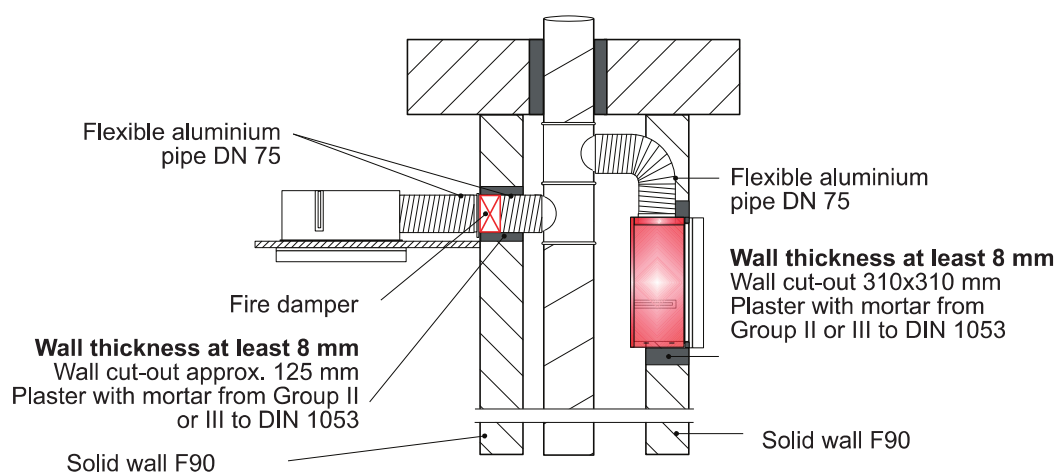


Installation instructions for buildings with fire resistance requirements

- Wall thickness at least 24 mm
The wall of the fire-resistant shaft or ventilation pipe must always be at least 24 mm thick and the mounting bracket MB-V part no. 4452 should be used.

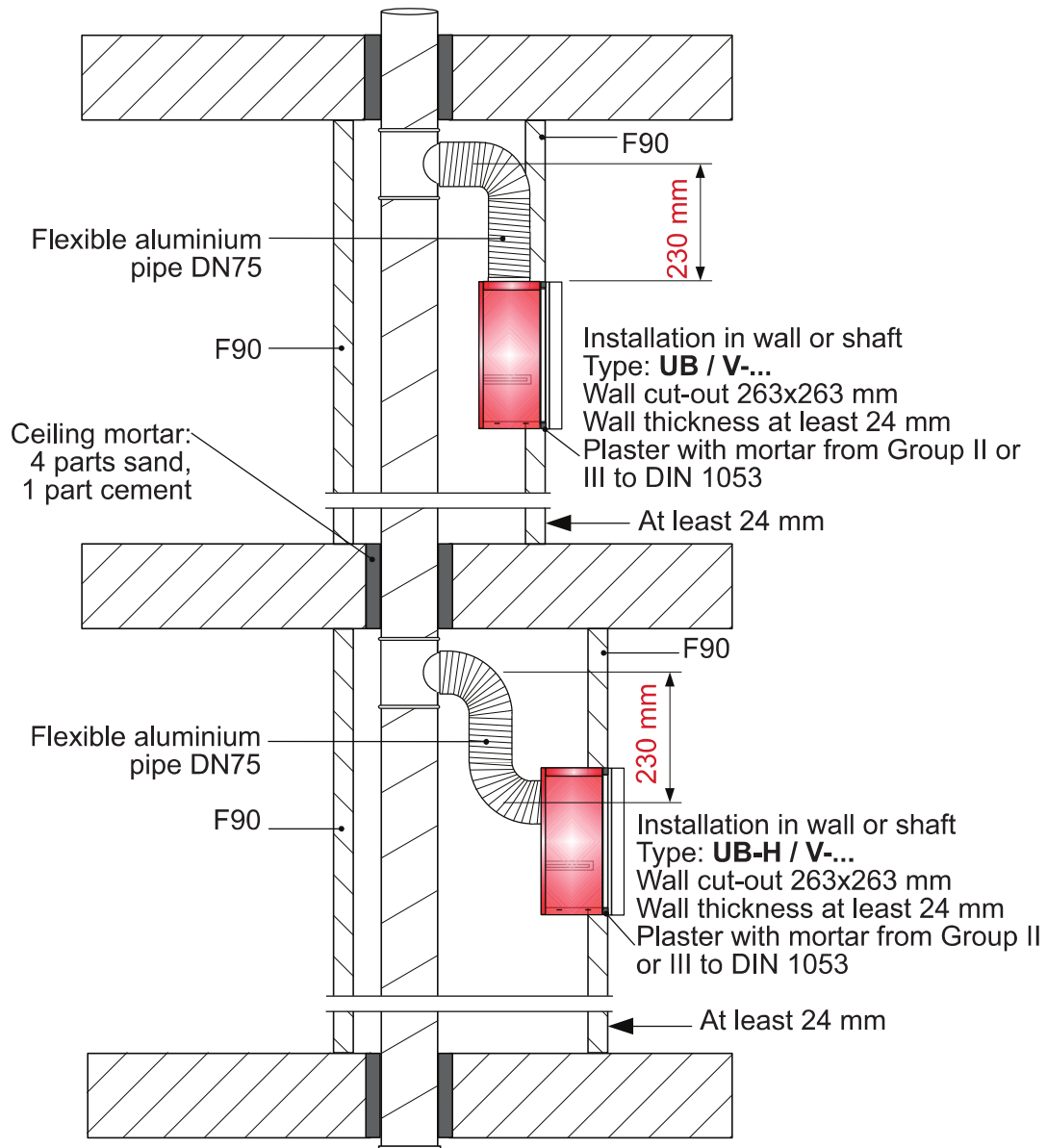


- If the wall thickness is 80 mm or more, the box can be fixed in the wall without the mounting bracket



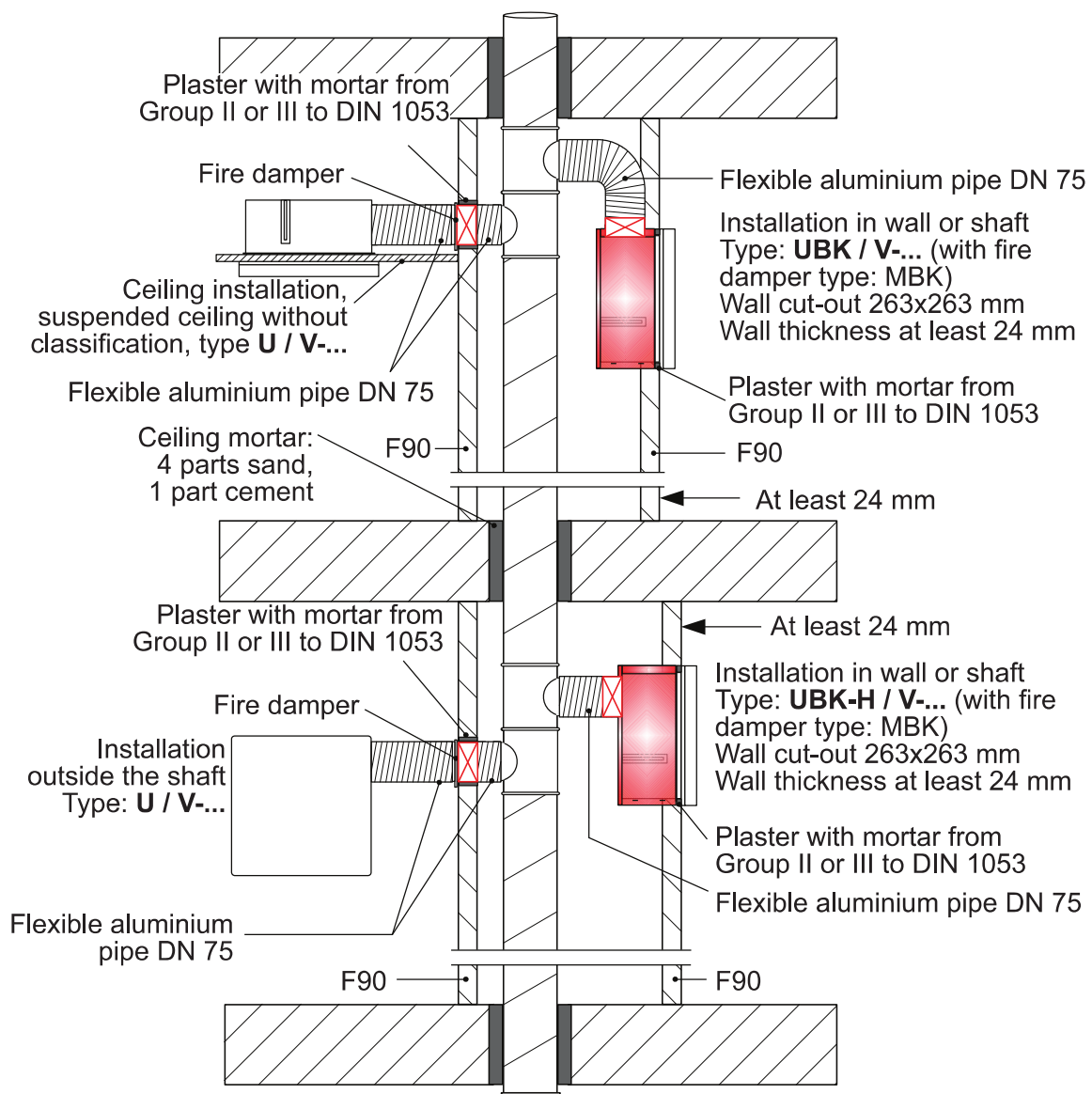
Installation in bathrooms and toilets in buildings with fire resistance requirements, in the fire-resistant shaft or in the ventilation duct with 230 mm height offset

Single air extraction unit from the “VARIO II” series / Example installations for unit types U and U-H with height offset



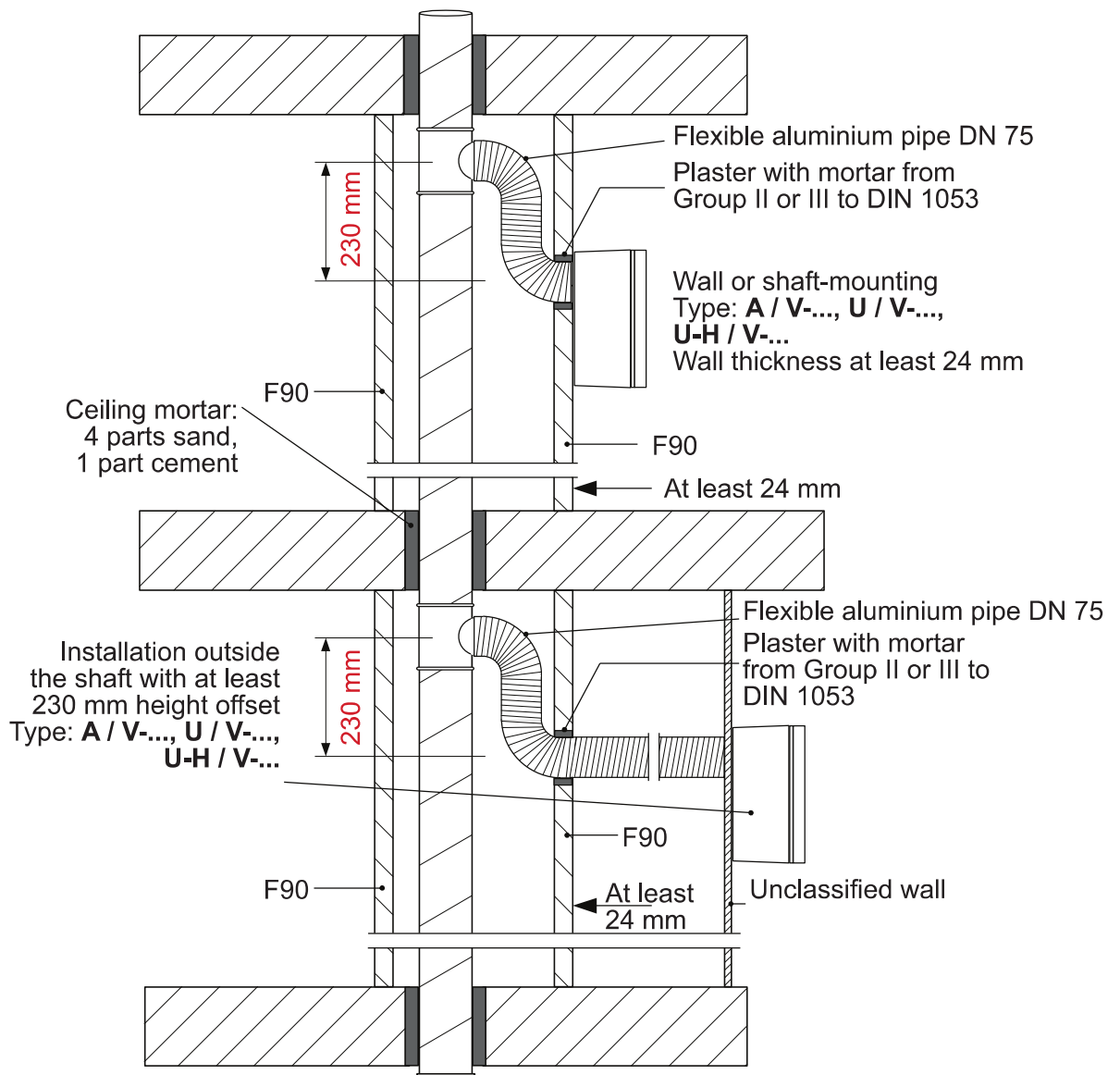
Installation in kitchens, kitchenettes, bathrooms and toilets in buildings with fire resistance requirements, inside and outside the fire-resistant shaft or ventilation duct

Single air extraction unit from the “VARIO II” series / Example installations for unit types U with fire damper provided by the customer, UBK and UBK-H with integrated fire damper



Installation in bathrooms and toilets in buildings with fire resistance requirements, outside the fire-resistant shaft or ventilation duct with 230 mm height offset

Single air extraction unit from the “VARIO II” series / Example installations for unit types A, U and U-H with height offset



Installation in kitchens, kitchenettes, bathrooms and toilets in buildings with fire resistance requirements, outside the fire-resistant shaft or ventilation duct

Single air extraction unit from the “VARIO II” series / Example installations for unit type AK with integrated fire damper

