

COMFORTABLE CLIMATE – for hotels, student flat, and even detached houses

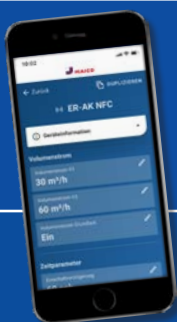


Centralised/Decentralised ventilation systems with heat recovery for small and large residential units

NEW

ER EC NFC

New covers with NFC for the ER EC, including a new app!



NEW

ROTATIONVENT RV 2

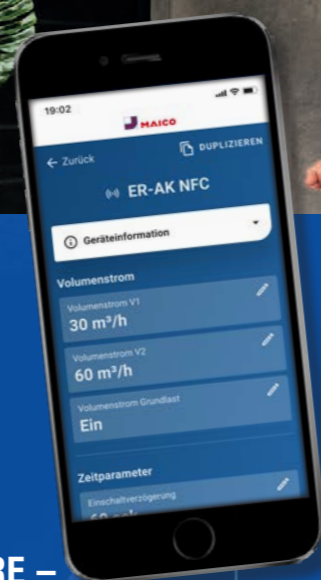
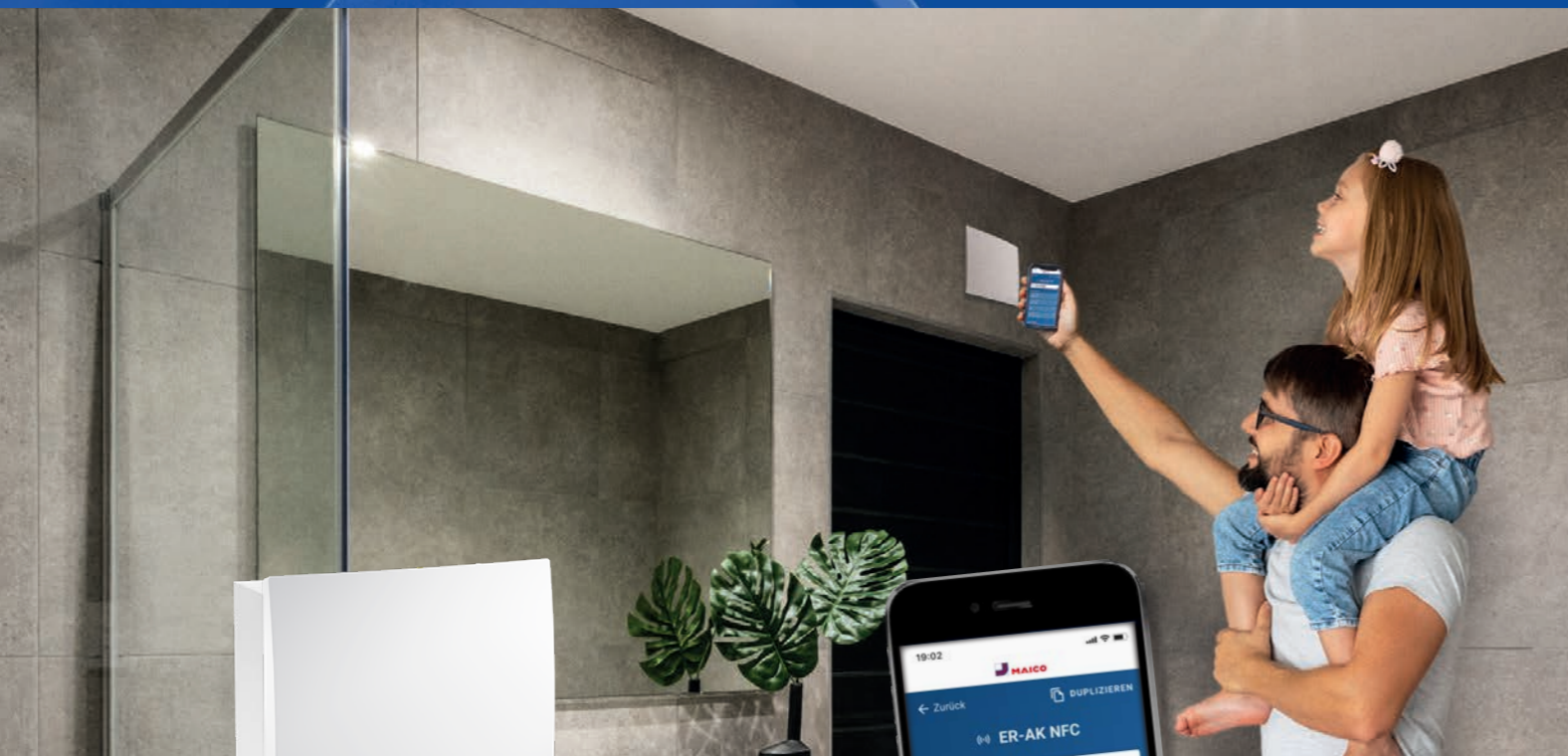
Extremely quiet ventilation system for integration into the exterior wall



NEW!

ER EC

The fan for interior rooms, bathrooms, and toilets – **NEW: Adjustable via NFC**



THE NEXT GENERATION OF VENTILATION CONTROL IS HERE –
MAICO presents new covers with NFC for the ER EC, including a new app!

HOUSING WITH FIRE PROTECTION

NEW

Installation inside (ER-UPB EC) and outside (ER-UPD EC) the shaft



Contents

Systems without heat recovery	ECA 100 ipro Decentralised ventilation of bathrooms and toilets with wall-mounted fans	4
	ER EC fans – NEW: Adjustable via NFC For decentralised ventilation of bathrooms and toilets in accordance with DIN 18017-3 / DIN 1946-6	6
	CENTRO Centralised ventilation of bathrooms and toilets in accordance with DIN 18017-3 / DIN 1946-6	8
	AKE/1 / AKE 100/1 / AKE 150/1 Automatic cellar dehumidification	10
	MAICOsmart Decentralised ventilation of flats in accordance with DIN 1946-6 with radio control	12
	Outdoor air vents and window valves Fresh air – completely unobtrusive. For high sound insulation requirements.	14
Systems with heat recovery	NEW: Rotationvent RV 2 Decentralised ventilation of flats with heat recovery	18
	NEW: CPP 60 Decentralised ventilation of flats with heat recovery	20
	PP 45 Decentralised ventilation of flats with heat recovery	22
	PPB 30 Decentralised ventilation of bathrooms, toilets, and kitchens with heat recovery	24
	WS 75 Powerbox Decentralised ventilation of small residential units as well as for medical practices, offices and commercial premises with heat recovery up to 60 m ²	26
	WS 75 Powerbox S Centralised ventilation of small residential units as well as for medical practices, offices and business premises with heat recovery up to 60 m ²	28
	WS 120 Trio Centralised ventilation of flats with heat recovery up to 100 m ²	30
	WS 160 Flat Centralised ventilation of flats with heat recovery up to 140 m ²	32
	WS 170 Centralised ventilation of flats with heat recovery up to 140 m ²	34
	WS 300 Flat Centralised ventilation of flats with heat recovery up to 300 m ²	36
	WS 320 Centralised ventilation of flats with heat recovery up to 300 m ²	38
	WS 470 Centralised ventilation of flats with heat recovery up to 450 m ²	40
	NEW: RLT systems Reliable air exchange in large buildings with many people	42
Planning	Useful tools PlanAir, planning information, quick design aids	44
	Duct systems MAICOFlex, MAICOAir, MAICOTherm	47

ECA 100 ipro

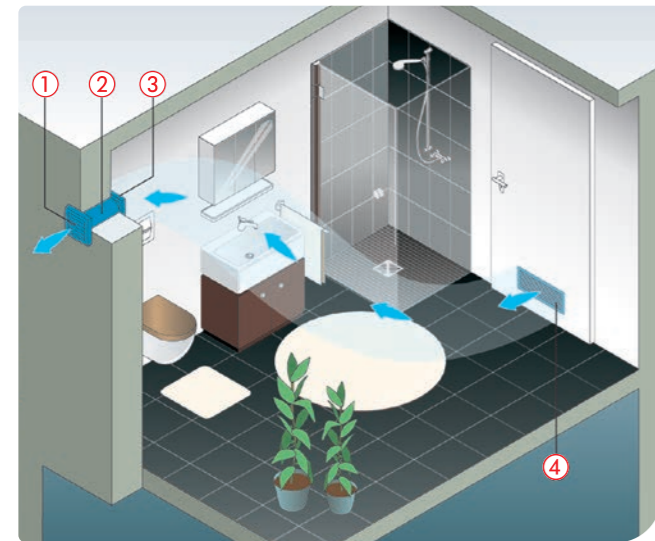
Decentralised ventilation of bathrooms and toilets with wall-mounted fans



The bathroom fan that **reliably and quietly removes odors and moisture.**

HOW IT WORKS

- ▶ Installation in exterior walls or ceilings
- ▶ Exhaust air ducting directly or via short DN 100 pipes to the exterior wall/roof
- ▶ Switching via light switch or integrated sensors for humidity or movement



Ventilation components for a bathroom or toilet (example)

- 1 ECA 100 ipro VZC
- 1 AP 100 shutter, 1 SG 100 external grille optional
- 1 wall sleeve WH 100
- 1 door ventilation grille MLK

- ① AP 100 shutter
- ② Wall sleeve WH 100
- ③ Small room fan ECA 100 ipro VZC
- ④ MLK 45 door ventilation grille



Variable and intelligent small room fans for bathrooms, toilets, or storage rooms



ECA

Decentralised ventilation of bathrooms and toilets with wall-mounted fans



ECA 100 ipro H ECA 150 ipro H



ECA piano

ECA 120

ECA 120 K

PLUG & PLAY REPLACEMENT OF OLD DEVICES LIKE ECA 11 / ECA 11-1 / ECA 100 IN 10 MINUTES



ECA 11



ECA 11-1



ECA 100



ECA 100 ipro

ECA Old appliances can be easily replaced with the convenient ECA 100 ipro.

- ▶ No new wall sleeve
- ▶ No additional electrical wiring for the same function
- ▶ No new external griller

THE EXCHANGE IS WORTH IT:

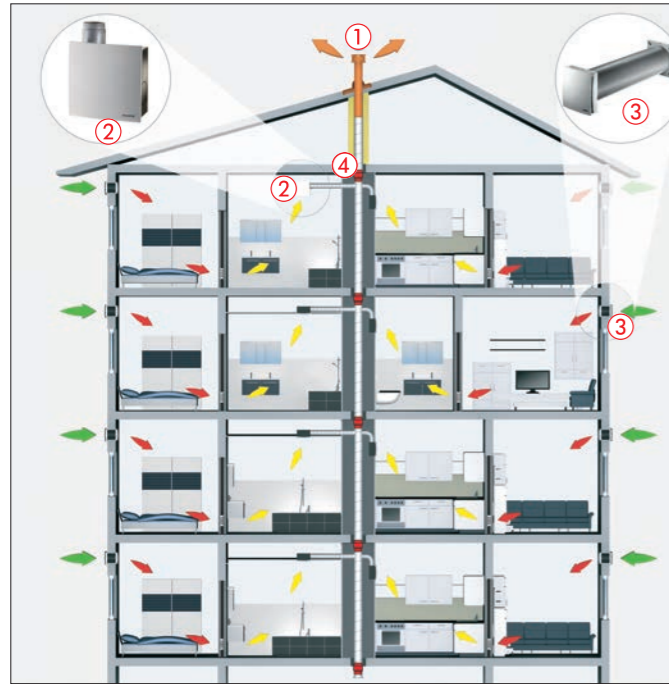
- ▶ Power consumption is cut in half
- ▶ ECA 100 ipro is significantly quieter (only 27 / 32 dB)
- ▶ More comfort thanks to two adjustable operating programs
- ▶ Optimized use thanks to start delay and overrun time
- ▶ No drafts thanks to electric shutter (optional)

Video tutorial:



ER EC FANS

For decentralised ventilation in accordance with DIN 18017-3 / DIN 1946-6



Exhaust air system with individual ventilation units for new construction of apartment buildings, homes, and hotels.

- ① Roofing tile DP + roof outlet DF
- ② ER EC single air extraction unit with ER-GH housing and Cover ER-AK, ER-AH, ER-AK NFC, ER-AH NFC, or ER-AB NFC
- ③ Outside air opening ALD 160 consists of 1x ALD 160 A + 1x RH 160 + 1x ALDS 125/160 1x ALD 160 AK
- ④ Fire protection ceiling barrier TS 18

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

HOW IT WORKS

Exhaust air

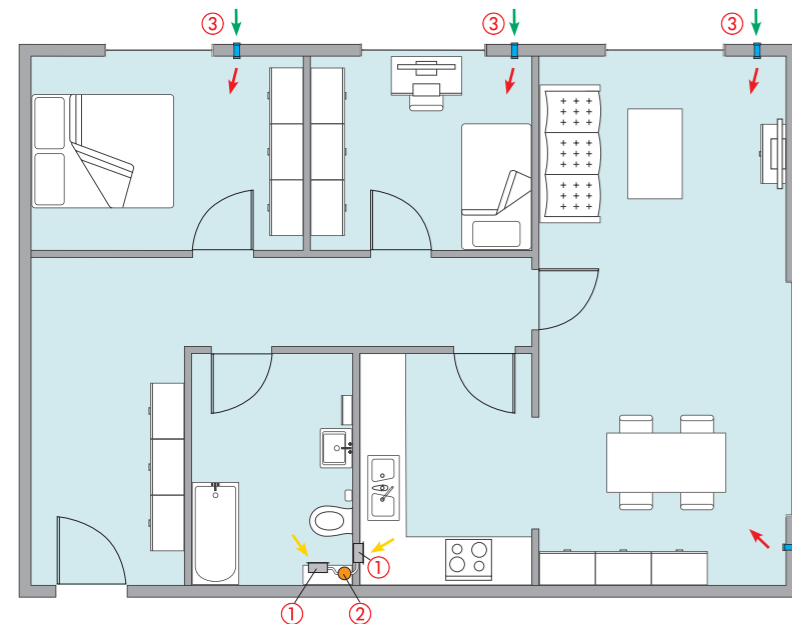
- ▶ Single air extraction units in bathrooms, toilets, and kitchens
- ▶ Exhaust air ducting via a shared exhaust air duct for several flats
- ▶ Fire protection in the exhaust air duct via fire protection barriers in the floor slabs

Supply air

- ▶ Fresh air supply via outside air openings in living areas (living rooms)

MAICO HIGHLIGHTS

- ▶ Ventilation units with energy-saving EC motor
- ▶ One universal fan insert
- ▶ Four different covers with integrated control for:
 - Five fan speeds
 - Adjustable overrun and interval times
 - Humidity or motion sensor
- ▶ Elegant, specially soundproofed ALDs



For exhaust air rooms

- ① ER EC fan insert with
 - Recessed-mounted housing ER GH
 - Cover: ER-AK, ER-AH, ER-AK NFC, ER-AH NFC, or ER-AB NFC
- Optional:
 - ER EC fan insert with
 - Surface-mounted housing ER GH AP
 - Cover ER-AK or ER-AH
- ② Centralised exhaust air duct

For supply air rooms

- ③ Outside air opening ALD 160 consists of 1x ALD 160 A + 1x RH 160 + 1x ALDS 125/160 1x ALD 160 AK together

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

NFC

The next generation of ventilation control is here – **NEW: Adjustable via NFC**



MAICO@NFC-App now available!



Apple App Store and the Apple App Store logo are trademarks of Apple Inc.



Google Play and the Google Play logo are trademarks of Google LLC.



MATERIAL PER RESIDENTIAL UNIT (example: three-room apartment)

VENTILATOR INSERT FOR KITCHEN AND BATHROOM	ITEM NO.	QUANTITY
Single-pipe ventilation unit ER EC 2.1	0084.0365	2



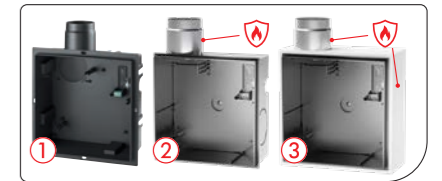
COVER WITH CONTROLS - without NFC	ITEM NO.	QUANTITY
ER-AK cover with comfort control for kitchen	0084.0362	1
ER-AH cover with humidity control for bathroom	0084.0363	1



NEW: COVER WITH NFC	ITEM NO.	QUANTITY
① Cover ER-AK NFC Comfort version	0084.0460	1
② ER-AH NFC cover with humidity sensor and smart time module	0084.0461	1
③ Cover ER-AB NFC with motion detector and smart time module	0084.0462	1



RECESSED-MOUNTED HOUSING FOR ER EC	ITEM NO.	QUANTITY
① Recessed-mounted housing ER GH	0084.0350	2
② NEW: Recessed-mounted housing with fire protection ER-UPD EC, can be installed outside the shaft	0093.1767	
③ NEW: Recessed-mounted housing with fire protection ER-UPB EC, can be installed inside the shaft	0093.1768	



Optional

SURFACE-MOUNTED HOUSING FOR ER EC	ITEM NO.	QUANTITY
① Surface-mounted housing ER GH AP	0084.0352	2
② Surface-mounted housing ER GH APB	0084.0353	2



INDIVIDUAL COMPONENTS FOR OUTDOOR OR SUPPLY AIR	ITEM NO.	QUANTITY
① Extension set ALD 160 A	0152.0095	4
② External grille ALD 160 AK	0059.0168	4
③ Shell sleeve RH 160	0059.0169	4



CENTRO

Centralised ventilation of bathrooms and toilets in accordance with DIN 18017-3/DIN 1946- 6



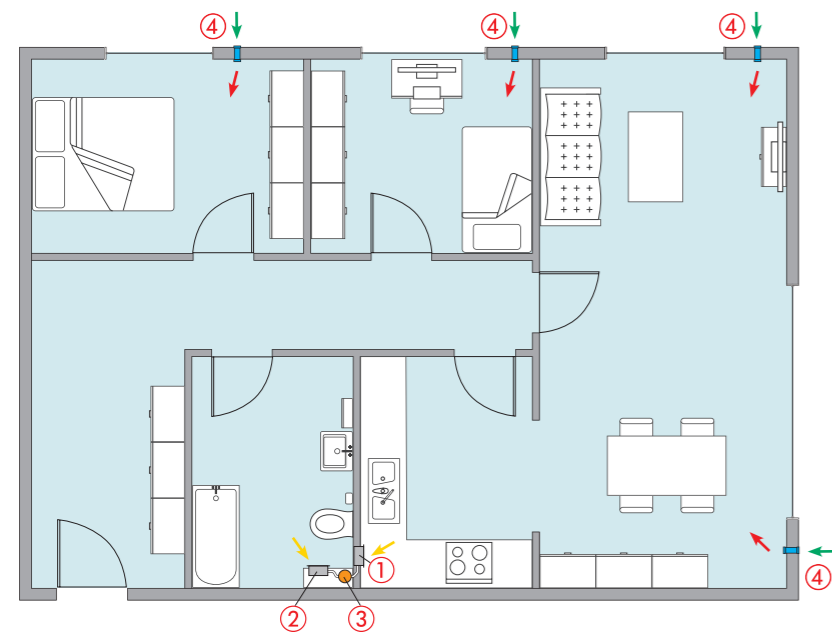
Energy-saving centralised ventilation system with centralised roof fan in accordance with DIN 18017-3

HOW IT WORKS

- ▶ Shared roof fan for all flats
- ▶ Exhaust air elements for basic and demand-controlled ventilation in bathrooms and toilets
- ▶ Demand-controlled ventilation switched via light switch or humidity sensor in the exhaust air element
- ▶ Fresh air supply via outside air openings in the flats

MAICO HIGHLIGHTS

- ▶ Energy-saving EC roof fan with integrated constant pressure control
- ▶ Elegant exhaust air elements for recessed or surface mounting; switchable from basic to demand-controlled ventilation, optionally humidity-controlled
- ▶ Easy adjustment of the system without measuring instruments or a PC
- ▶ No telephone sound attenuators required
- ▶ Integrated cold smoke barriers
- ▶ Elegant, specially soundproofed ALDs



VENTILATION COMPONENTS PER RESIDENTIAL UNIT

For exhaust air rooms:

- 1 CENTRO-E exhaust air elements in ER-UP/G flush-mounted housing
- 2 CENTRO-H exhaust air elements in ER-UP/G flush-mounted housing
- 3 Centralised exhaust air duct

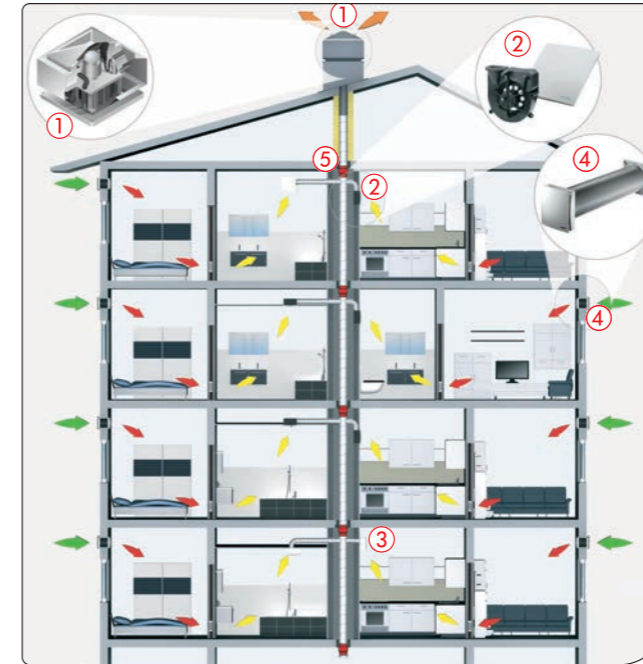
For supply air rooms

- 4 ALD 160 outside air openings for supply air rooms consist of 1x ALD 160 A + 1x RH 160 + 1x ALDS 125/160 + 1x ALD 160 AK

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

CENTRO

Centralised ventilation of bathrooms and toilets in accordance with DIN 18017-3/DIN 1946-6



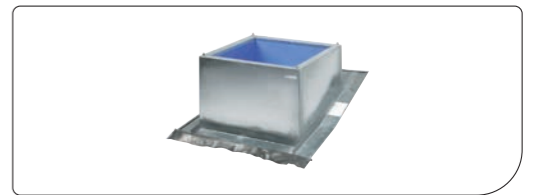
- 1 MDR-PG 18 radial roof fan with EC motor and integrated control
- 2 Centro exhaust air element in ER-UP/G Recessed-mounted housing
- 3 Centro exhaust air element in surface-mounted design
- 4 ALD outdoor air vent
- 5 TS 18 ceiling bulkhead

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

MATERIAL FOR ALL CONNECTED RESIDENTIAL UNITS TOGETHER

RADIAL ROOF FAN (FOR FOUR RESIDENTIAL UNITS)	ITEM NO.	QUANTITY
Centrifugal roof fan MDR-PG 18 with control	0087.0031	1

ROOF SOCKET FOR PITCHED ROOFS	ITEM NO.	QUANTITY
Roof socket for pitched roofs SDS 22	0093.1028	1



MATERIAL PER RESIDENTIAL UNIT (example: three-room apartment)

EXHAUST AIR ELEMENT FOR KITCHEN AND BATHROOM	ITEM NO.	QUANTITY
CENTRO-E (two-step)	0084.0183	1
CENTRO-H (two-step, humidity-controlled)	0084.0187	1

RECESSED-MOUNTED HOUSING FOR CENTRO	ITEM NO.	QUANTITY
Recessed-mounted housing ER-UP/G	0093.0995	2

INDIVIDUAL COMPONENTS FOR EXTERNAL OR SUPPLY AIR	ITEM NO.	QUANTITY
1 Extension set ALD 160 A	0152.0095	4
2 External grille ALD 160 AK	0059.0168	4
3 Shell sleeve RH 160	0059.0169	4



AKE/1 | AKE 100/1 | AKE 150/1

Automatic cellar dehumidification



Damp, mold, and musty odors in cellar rooms are a thing of the past.

HOW IT WORKS

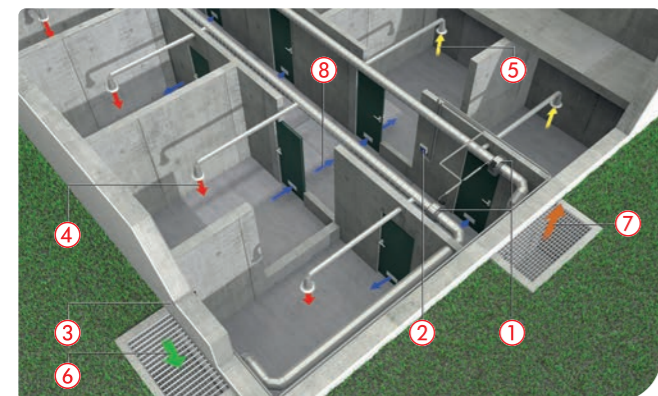
- ▶ Prevents moist outside air from flowing into the basement
- ▶ Automatic operation only when absolute humidity outside is lower than inside
- ▶ AKE/1 – Dehumidification in conjunction with powerful fan control
- ▶ AKE 100/1 up to approx. 30 m², AKE 150/1 up to approx. 70 m²



Application example

As stand-alone systems, the AKE 100/1 and AKE 150/1 ventilation systems are perfect for independent dehumidification of basements and utility rooms.

- ① AKE 100/1
Consisting of:
- Fan with sensor
- External shutter and sensor
- ② WH 100 wall sleeve
- ③ MLK 45 door ventilation grille



AKE application example

The AKE control system can be used to control a wide variety of fan types. Even an existing ventilation system can be converted into an automatic basement dehumidification system with all its advantages.

- ① Fan (e.g., ERR radial duct fan)
- ② Automatic basement dehumidification control AKE/1
- ③ External humidity sensor
- ④ Supply air
- ⑤ Exhaust air
- ⑥ Outside air
- ⑦ Exhaust air
- ⑧ Transfer air



Centrifugal duct fan ERR



MAICO's automatic basement dehumidification system ensures needs-based, fully automatic, and reliable ventilation of individual basement or utility rooms, as well as cellars in residential complexes, warehouses, or garages.

MAICO HIGHLIGHTS

- ▶ Intelligent dew point control and humidity sensors integrated into the device, no additional wiring required
- ▶ Additional fans without their own dew point control can be controlled, e.g., for larger rooms or to ensure supply air
- ▶ Frost protection function switches off at temperatures < 5°C

AKE/1 | AKE 100/1 | AKE 150/1

Automatic cellar dehumidification

STANDARD VERSION AKE 100/1

AUTOMATIC BASEMENT DEHUMIDIFICATION AKE 100/1	ITEM NO.
① Fan with	0084.0458
② External shutter and sensors	
③ WH 100 extendable wall sleeve	0059.1030



STANDARD VERSION AKE 150/1

AUTOMATIC BASEMENT DEHUMIDIFICATION AKE 150/1	ITEM NO.
① Fan with	0084.0459
② External shutter and sensors	
③ WH 150 extendable wall sleeve	0059.1050



AKE 100/1 WITH ACTIVE AIR SUPPLY

AUTOMATIC BASEMENT DEHUMIDIFICATION AKE 100/1	ITEM NO.
① Fan with	0084.0458
② External shutter and sensors	
③ WH 100 extendable wall sleeve	0059.1030



COMPONENTS ACTIVE AIR SUPPLY	ITEM NO.
④ SG 100 grille or	0059.1054
⑤ AE 10/1 electrical internal shutte	0151.0400
③ WH 100 Extendable wall sleeve	0059.1030
⑥ ECA 11 E duct-mounted fan, DN 100	0080.0460
⑦ SG 100 grille	0059.1054



AKE 150/1 WITH ACTIVE AIR SUPPLY

AUTOMATIC BASEMENT DEHUMIDIFICATION AKE 150/1	ITEM NO.
① Fan with	0084.0459
② External shutter and sensors	
③ WH 150 extendable wall sleeve	0059.1050



COMPONENTS ACTIVE AIR SUPPLY	ITEM NO.
④ SG 150/1 grille or	0059.0997
⑤ AE 15/1 internal electrical lock	0151.0401
③ WH 150 Wall sleeve WH 150, extendable	0059.1050
⑥ Duct-mounted fan, supply air fan, DN 150 ERV 150 or ERV 150 TC	0080.0986 0080.0987
⑦ External grille SG 150/1	0059.0997



MAICOsmart

Decentralised ventilation of flats in accordance with DIN 1946-6 with wireless control



Wibutler | Smart home-compatible ventilation



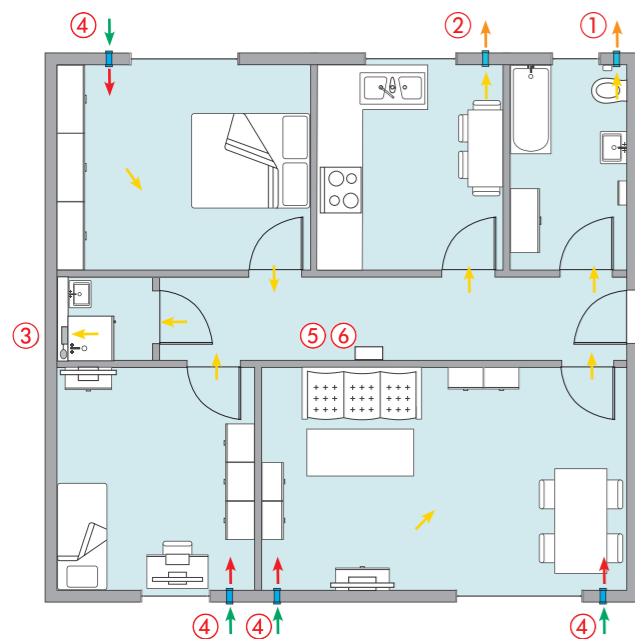
Radio-based ventilation system consisting of exhaust fans and outside air vents in accordance with DIN 1946-6

HOW IT WORKS

- ▶ Exhaust fans in bathroom, kitchen, and toilet
- ▶ Fresh air supply via external air inlets in living areas
- ▶ Three- to four-stage control of the ventilation system in accordance with DIN 1946-6 (moisture protection ventilation, reduced ventilation, nominal and intensive ventilation) with Wibutler app

MAICO HIGHLIGHTS

- ▶ Joint control of exhaust air fans in ventilation stages in accordance with DIN 1946-6
- ▶ Additional demand-based stage switching per room possible via additional radio switches or integrated humidity control
- ▶ Integration of ventilation units in accordance with DIN 18017-3 for windowless rooms possible



- ① ECA 100 ipro RCH exhaust fan with radio receiver and humidity control
- ② ECA 100 ipro RC exhaust fan with radio receiver
- ③ ER 100 RC single-pipe ventilation unit with radio receiver for systems in accordance with DIN 18017-3
- ④ ALD 160 Outside air opening consists of 1x ALD 160 A + 1x RH 160 + 1x ALDS 125/160 1x ALD 160 AK
- ⑤ Wibutler-Box with app control
- ⑥ Optional additional DS RC radio switch for individual exhaust fans

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

MAICOsmart

Decentralised ventilation of flats in accordance with DIN 1946-6 with radio control

MATERIAL PER RESIDENTIAL UNIT (example)

EXHAUST FAN	ITEM NO.	QUANTITY
ECA 100 ipro RCH exhaust air fan with radio receiver and humidity control	0084.0211	1
ECA 100 ipro RC exhaust fan with radio receiver	0084.0210	1

WALL SLEEVE Ø 100 mm	ITEM NO.	QUANTITY
Wall sleeve, extendable, WH 100	0059.1030	2

OUTER GRILLE	ITEM NO.	QUANTITY
External grille SG 100	0059.1054	2

EXHAUST FAN FOR SYSTEMS IN ACCORDANCE WITH 18017-3	ITEM NO.	QUANTITY
Single-pipe ventilation unit ER 100 RC with radio receiver	0084.0129	1
RECESSED-MOUNTED HOUSING		
Recessed-mounted housing ER-UP/G	0093.0995	1

INDIVIDUAL COMPONENTS FOR EXTERNAL OR SUPPLY AIR	ITEM NO.	QUANTITY
① Extension set ALD 160 A	0152.0095	4
② External grille ALD 160 AK	0059.0168	4
③ Shell sleeve RH 160	0059.0169	4

Optional	ITEM NO.	QUANTITY
Additional DS RC radio switch for individual exhaust fans	0157.0832	optional



Wibutler

MAICO HIGHLIGHTS

The radio-controlled ventilation system can be intelligently integrated into a smart network using the optional "wibutler" digital butler and controlled via an app.

The most important advantages at a glance:

- ▶ Connection of a wide variety of products via the central smart server
- ▶ Control, monitoring, and evaluation of multiple devices via the wibutler app
- ▶ Three different user accounts available for residents, administrators, and external managers
- ▶ Ventilation systems can be checked, adjusted, and maintained in a practical manner tailored to the target group
- ▶ No programming effort required for tradespeople



Apple App Store and the Apple App Store logo are trademarks of Apple Inc.

Google Play and the Google Play logo are trademarks of Google LLC.

OUTSIDE AIR OPENINGS (ALD)

For high sound insulation requirements



UP TO 45% PRICE REDUCTION!

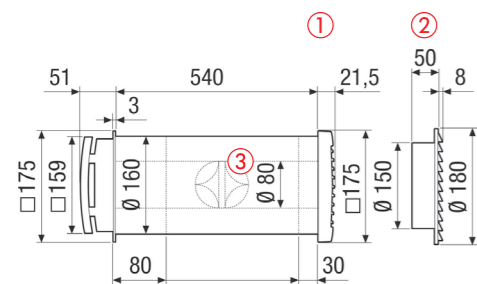
TECHNICAL FEATURES

- ▶ Soundproof wall valve for fresh air supply
- ▶ Rated element standard sound level difference $D_{n,w}$ up to 64 dB
- ▶ Reveal element with intake grille in the window reveal
- ▶ External grille on the outer wall
- ▶ Adjustable volume flow
- ▶ Max. volume flow at 10 Pa up to 30 m³/h
- ▶ Optimal effect when installed in the upper part of the wall to the left or right of the window at a height of 2.0–2.2 m
- ▶ External air filter prevents pollen, dust, and insects from entering
- ▶ Optional storm protection/wind pressure protection to prevent drafts, max. 30 m³/h even when the valve is open

AREAS OF APPLICATION / INSTALLATION OPTIONS

- ▶ For new buildings and renovations
- ▶ For detached houses, multi-storey residential buildings, and office buildings
- ▶ For increased sound insulation requirements e.g., in residential areas with elevated noise levels

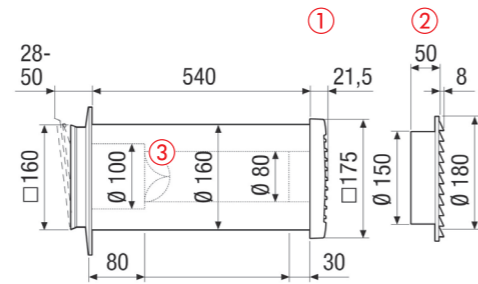
Dimensional drawing ALD 160 A with optional accessories 1-3



Shorten the shell sleeve to the wall thickness if necessary

- ① Square plastic outer grille ALD 160 AK
- ② Round stainless steel outer grille ALD 160 AE
- ③ Optional storm protection ALDS 125 / 160

Dimensional drawing ALD 160 ZLV with optional accessories 1-3



Shorten the shell sleeve to the wall thickness if necessary

- ① Square plastic outer grille ALD 160 AK
- ② Round stainless steel external grille ALD 160 AE
- ③ Optional storm protection ALDS ZLV 80 dB

SUBTLE DESIGN FOR OUTDOOR AIR VENTS

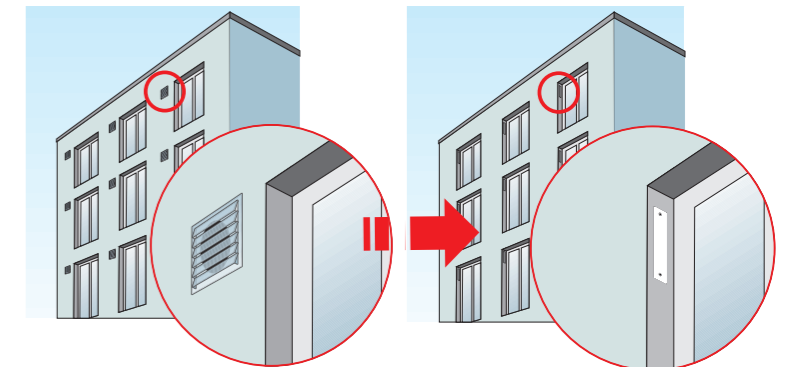
The stainless steel exterior grille blends almost invisibly into the exterior design

The window reveal grille is almost invisible on the facade of the house.

The stainless steel grille is attached to the installation frame with two hexagon socket screws and can be easily removed for inspection and cleaning. All the advantages of exterior wall air vents, such as high air flow, hygiene, and sound insulation, can be realized in combination with an almost invisible exterior appearance.

The MAICO external air vent solution with window reveal grille offers the following advantages:

- ▶ Very high sound insulation values
- ▶ Air filter insert as standard
- ▶ Easy retrofitting when installing a thermal insulation composite system
- ▶ Modular, variable installation options
- ▶ Architecturally unobtrusive exterior design



Facade with external grille

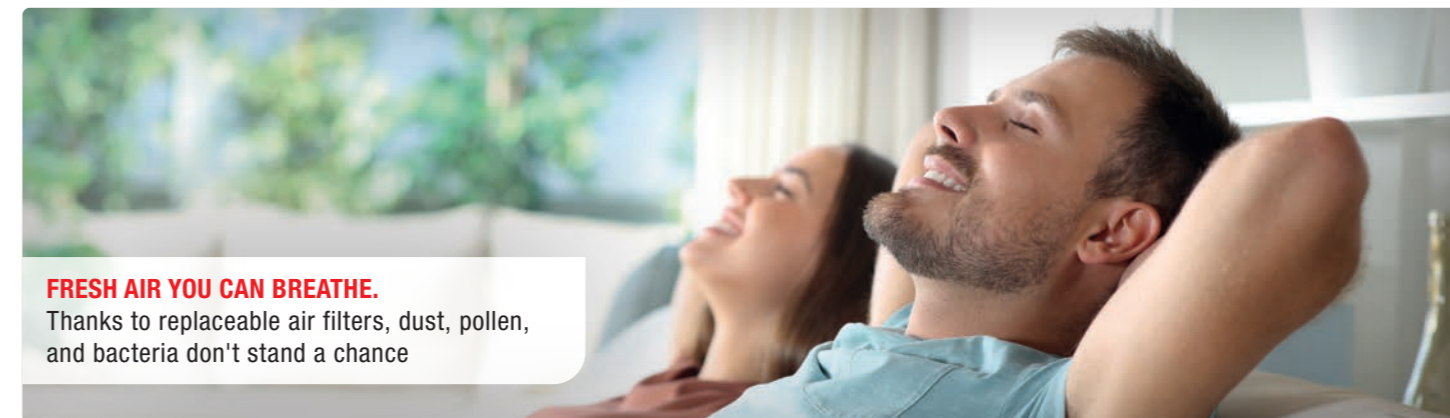
Facade with stainless steel cover in the window reveal

Installation situation – ALD with reveal element and stainless steel cover



① ALD 160 A extension set (item no. 0152.0095)

② Soffit element with stainless steel cover PP45 LE (item no. 0093.0179)



FRESH AIR YOU CAN BREATHE.

Thanks to replaceable air filters, dust, pollen, and bacteria don't stand a chance

WINDOW VALVES

Innovative fresh air solutions in an unobtrusive design



Window valves offer a discreet solution for controlled air supply. They improve indoor air quality, provide reliable protection against moisture damage, and bring fresh air into the house—without any annoying drafts and with guaranteed sound insulation.

AREAS OF APPLICATION / INSTALLATION OPTIONS

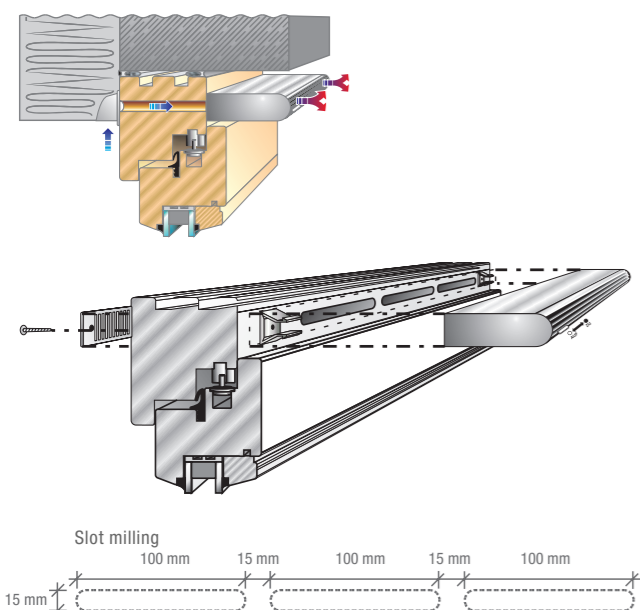
- ▶ For new construction and renovation
- ▶ For detached houses, multi-storey residential buildings, and office buildings
- ▶ Window valve for fresh air supply, installation on the upper frame for wood, plastic and metal windows
- ▶ For solid profiles. For hollow profiles in conjunction with air duct F 33-W
- ▶ Ideal for living rooms and bedrooms, as sound insulation and filters are already integrated
- ▶ Optimal effect when installed in the upper frame above radiators

TECHNICAL FEATURES AL-DB 450/ AL-DB 800

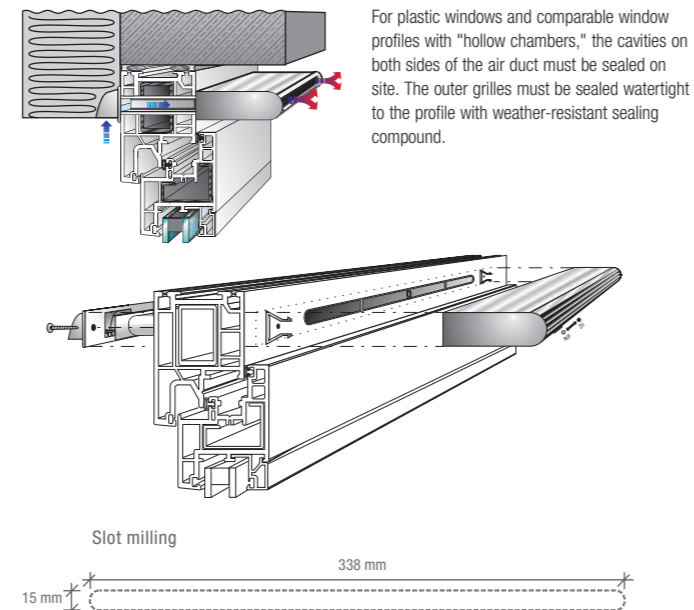
- ▶ With filter function and sound insulation
- ▶ Continuously and individually adjustable fresh air supply via sliding mechanism
- ▶ AL-DB 450 STS with storm protection to limit the air supply
- ▶ AL-DB 800 with high sound insulation value
- ▶ Outdoor air filter optionally replaceable with pollen filter
- ▶ Material: Extruded aluminum, standard colors white and gray

Installation situations

Installation in solid profiles (VP) such as wooden windows



Installation in hollow profiles (HP) such as plastic windows with air duct F 33-W



WINDOW VALVES

Innovative fresh air solutions in an unobtrusive design

Dimensions (mm) / Data / Product

**Rated element standard sound level difference $D_{n,w}$ according to DIN EN ISO 140-10
***Sound insulation value according to DIN 4109

Item description	Item number	Design	Sound rating $D_{n,w}$ **	Sound rating R_w, R ***	Length	Volume flow (m ³ /h)					Color
						2 Pa	4 Pa	8 Pa	10 Pa	20 Pa	
AL-DB 450-IS	0059.0224	Standard filter G2 (for pollen filter G3)	40 dB	3,4 dB	456 mm	9 6	14 9	20 14	22 16	31 21	white ¹
AL-DB 450-IS-G	0059.0264	Standard filter G2 (for pollen filter G3)	40 dB	3,4 dB	456 mm	9 6	14 9	20 14	22 16	31 21	gray ²
AL-DB 450-ISTS1 with storm protection	0059.0265 0059.0266	Standard filter G2	40 dB	3,4 dB	456 mm	9	14	20	22	30	white ¹ gray ²
AL-DB 800-I	0059.0267 0059.0268	Standard filter G2	42 dB	5,4 dB	806 mm	7	11	16	18	25	white ¹ gray ²

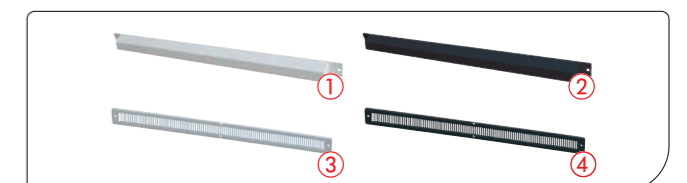
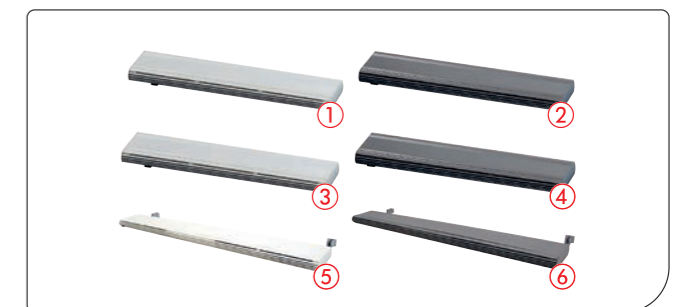
1 Color white, powder coating: similar to RAL 9010

2 Color gray, powder coating: similar to RAL 9006

WINDOW VALVE INNER PART	ITEM NO.
① AL-DB 450-IS	0059.0224
② AL-DB 450-IS-G	0059.0264
③ AL-DB 450-ISTS	0059.0265
④ AL-DB 450-ISTS-G	0059.0266
⑤ AL-DB 800-I	0059.0267
⑥ AL-DB 800-I-G	0059.0268

AIR DUCT	ITEM NO.
① F 33-W	0059.0294

OUTER GRILLE	ITEM NO.
① F 10-W	0059.0317
② F 10-S	0059.0318
③ F 12-W	0059.0319
④ F 12-S	0059.0321



ROTATIONVENT RV 2

Revolutionary, extremely quiet ventilation system for integration into the exterior wall



SOLID CONSTRUCTION



WOODEN FRAME CONSTRUCTION



SERIAL RENOVATION



MODULAR DESIGN

FUNCTION

- ▶ Wall-mounted unit with alternating exhaust and supply air operation for ventilating living spaces
- ▶ In exhaust air mode, up to 86% of the heat is stored and returned in supply air mode
- ▶ At least two units required
- ▶ Wet rooms and kitchens can be integrated into the ventilation system with exhaust air fans or PPB 30 K
- ▶ Central control with RLS 45 K control unit with various ventilation modes

MAICO HIGHLIGHTS

- ▶ Flexible installation options, e.g., around the window, in the window reveal, or in the exterior wall
- ▶ For use in serial renovation and modular timber construction
- ▶ For industrially prefabricated facade elements and modules
- ▶ No switching noise thanks to fan unit rotating around its own axis
- ▶ Discreet integration into interior design
- ▶ Heat recovery up to 86 %
- ▶ Integrated automatic shut-off damper
- ▶ Plug & Play: Quick and easy installation
- ▶ Tool-free filter replacement
- ▶ Energy efficiency class A (A+ with optional sensor technology)



- ① RV 2 horizontal rotary ventilation unit
- ② RV 2 vertical rotation ventilation unit
- ③ RV 2 vertical rotation vent in reveal

↔ Supply and exhaust air with direction change

↔ Outdoor and exhaust air with direction change

ROTATIONVENT RV 2

Revolutionary, extremely quiet ventilation system for integration into the exterior wall

FINAL ASSEMBLY SET	ITEM NO.
RV 2 Final Assembly Kit	0095.0665

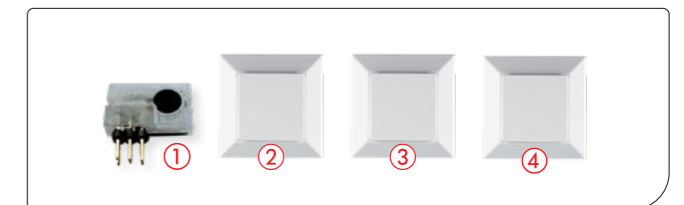
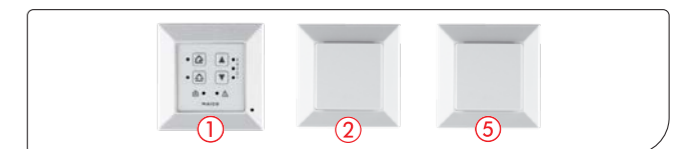
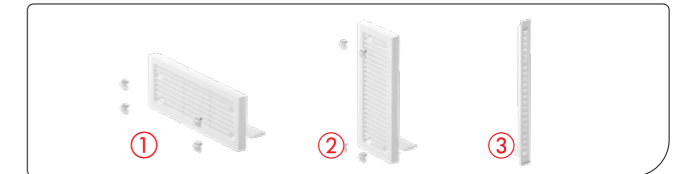
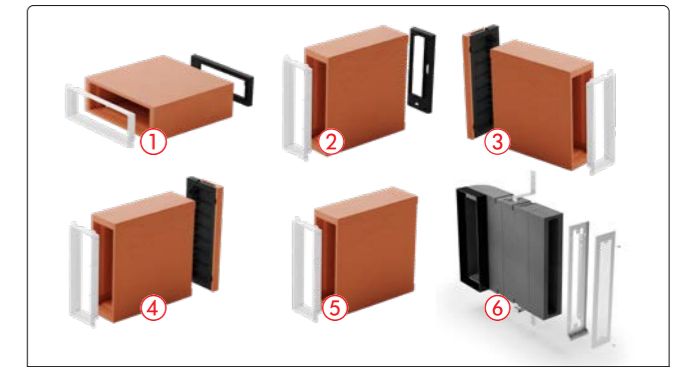
PRE-INSTALLATION SETS	ITEM NO.
① RV 2 VH Pre-installation set, horizontal	0092.0619
② RV 2 VV Pre-installation set vertical	0092.0620
③ RV 2 VLR Pre-installation set, right reveal	0092.0621
④ RV 2 VLL Pre-installation set, left reveal	0092.0622
⑤ RV 2 VS Pre-installation set for serial renovation	0092.0623
⑥ RV 2 VS 90E 90° deflection for Pre-installation set ⑤ RV 2 VS Serial Renovation	0092.0645

OPTIONAL	ITEM NO.
⑦ RV 2 VS M Mounting bracket Optional mounting brackets for the RV 2 VS 90 E and for RV 2 Pre-installation sets. (Contents: 4 pcs.)	0092.0646

EXTERNAL COVERS	ITEM NO.
① RV 2 AH External cover, horizontal	0092.0624
② RV 2 AV External Cover Vertical	0092.0626
③ RV 2 AL External cover, reveal for left and right version	0092.0628

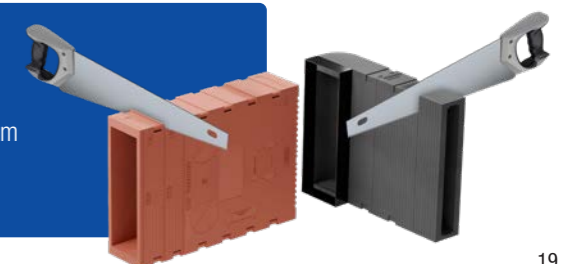
CONTROL	ITEM NO.
① RLS 45 K Room air control	0157.0360
② PP 45 EO EnOcean module	0157.0362
⑤ PP 45 LT Power module	0157.0361

SENSORS	ITEM NO.
① PP 45 HYI Humidity sensor	0157.0364
② PP 45 HY Humidity sensor	0157.0365
③ PP 45 CO2 CO ₂ sensor	0157.0366
④ PP 45 VOC VOC sensor	0157.0367



ENORMOUSLY FLEXIBLE

The mounting sleeve of the RV 2 (RV 2 VS) can be shortened individually from 500 to 365 mm. The deflection for serial renovation (RV 2 VS 90 E) can also be shortened from 450 mm to up to 220 mm. This means that even when used in serial renovation, it is possible to respond flexibly to the specific space requirements of exterior facades.



CPP 60

Innovative single-room ventilation unit with heat recovery, centrifugal fan, and constant volume flow



PushPull unit with integrated centrifugal fan, resulting in very low sensitivity to pressure fluctuations.

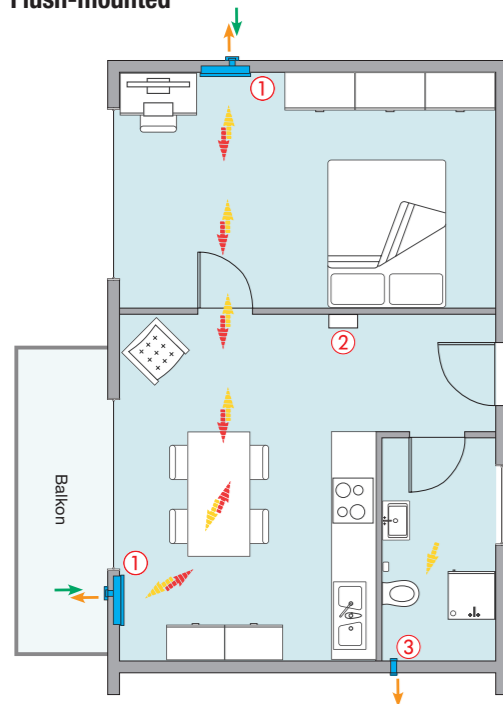
FUNCTION

- ▶ Wall-mounted device with alternating exhaust and supply air operation for ventilating living spaces
- ▶ In exhaust air mode, up to 83.5% of the heat is stored and returned in supply air mode
- ▶ Wet rooms and kitchens can be integrated into the ventilation system with exhaust air fans or PPB 30 K
- ▶ Central control with RLS 45 K control panel with various ventilation modes

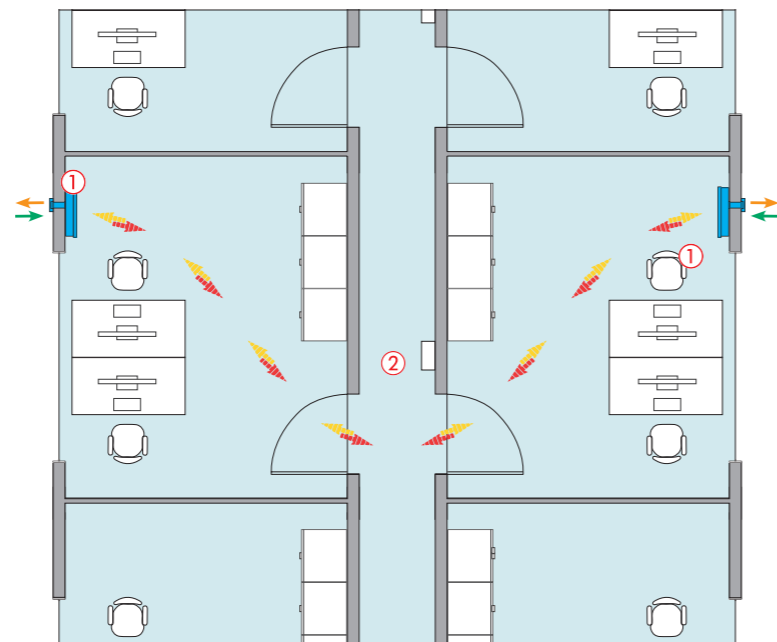
MAICO HIGHLIGHTS

- ▶ Constant volume flow and high pressure stability
- ▶ Easy installation (core hole drilling 140 mm)
- ▶ Surface-mounted and flush-mounted versions
- ▶ No switching noise, therefore pleasantly quiet

Flush-mounted



Surface-mounted



- ① CPP 60 ventilation unit
- ② RLS 45 K control unit
- ③ ECA 100 ipro

- ① CPP 60 ventilation unit
- ② RLS 45 K control unit

↔ Supply and exhaust air with direction ■ Outside air ■ Exhaust air

CPP 60

Innovative single-room ventilation unit with heat recovery, centrifugal fan, and constant volume flow

MATERIAL PER RESIDENTIAL UNIT

FINAL ASSEMBLY KIT	ITEM NO.
CPP 60	0095.0667

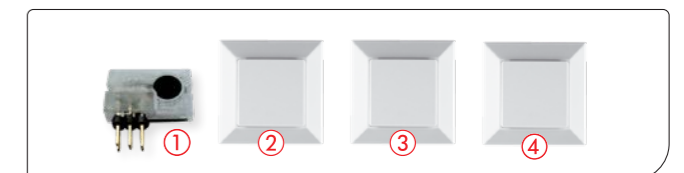
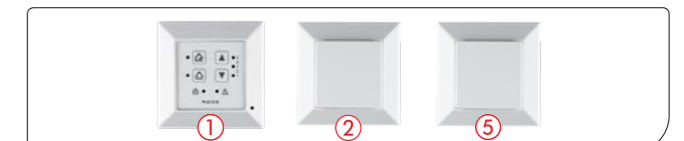
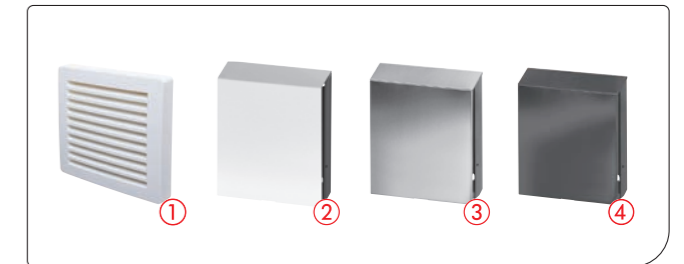
PRE-INSTALLATION SET RECESSED- MOUNTED optional	ITEM NO.
CPP 60 VSUP	0093.1764

WALL SLEEVE Ø 125 mm	ITEM NO.
① WW 90 two thermally insulated wall sleeves, integrated condensate drainage channels, length: 500 mm	0095.0664
② W 90 one thermally insulated wall sleeve, integrated condensate drain channel, length: 500 mm	on request

EXTERIOR COVERINGS	ITEM NO.
① PP 45 AK External cover Plastic, traffic white	0093.0176
② PP 45 AW Aluminum, white powder-coated RAL 9010	0093.0178
③ PP 45 AE External cover stainless steel, brushed	0093.0177
④ PP 45 AS External cover aluminum, anthracite powder-coated RAL 7016	0093.0612

CONTROL	ITEM NO.
① RLS 45 K Room air control	0157.0360
② PP 45 EO EnOcean module	0157.0362
⑤ PP 45 LT Power Supply Unit	0157.0361

SENSORS	ITEM NO.
① PP 45 HYI Humidity sensor	0157.0364
② PP 45 HY Humidity sensor	0157.0365
③ PP 45 CO2 CO ₂ sensor	0157.0366
④ PP 45 VOC VOC sensor	0157.0367



PLUG & PLAY – SUITABLE FOR NEW BUILDS AND RENOVATION

PP 45

Decentralised wall-mounted ventilation unit with heat recovery for living spaces



PushPull 45
MAICO



Wall sleeve only Ø 160 mm



HOW IT WORKS

- ▶ Wall-mounted unit with alternating exhaust and supply air operation for ventilating living spaces
- ▶ In exhaust air mode, storage of > 84% of the heat, heat recovery in supply air mode
- ▶ At least two units required
- ▶ Wet rooms and kitchens can be integrated into the ventilation system with exhaust air fans or PPB 30 K
- ▶ Central control with RLS 45 K control unit with various ventilation modes

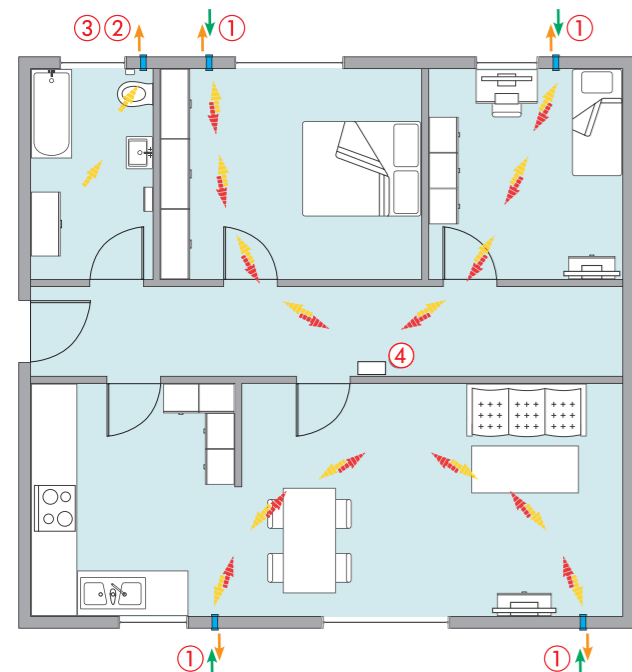
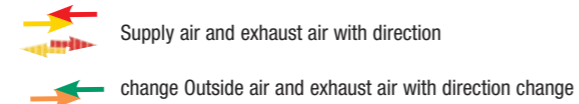
MAICO HIGHLIGHTS

- ▶ Quietest device in its class
- ▶ Efficiency class A+
- ▶ > 84% heat recovery
- ▶ Flow-optimized External covers direct airflow away from the facade and protect it from dirt
- ▶ Diameter only 160 mm
- ▶ Odd number of devices possible
- ▶ Pitched roof ducting optional

SHELL KIT FOR PP 45
→ The solution for quick and easy installation

- ▶ Masonry block with built-in shell sleeve
- ▶ For wall thicknesses of 365 / 425 / 490 mm
- ▶ Easy to cut to size with a handsaw
- ▶ Shell sleeve already has an integrated outward slope of 1°
- ▶ Sound decoupling by means of integrated sound insulation mat
- ▶ With cable routing pocket

- ① PushPull 45 ventilation unit in continuous operation with heat recovery
- ② ECA 100 ipro
- ③ PPB 30 ventilation unit in continuous operation with optional heat recovery
- ④ RLS 45 K control unit



PP 45

Decentralised wall-mounted ventilation unit with heat recovery for living spaces

MATERIAL PER RESIDENTIAL UNIT (example)

FINAL ASSEMBLY KIT	ITEM NO.	QUANTITY
Comfort version PP 45 K with electrical internal shutte	0095.0241	4

ROOFING SLEEVE Ø 160 mm	ITEM NO.	QUANTITY
① Shell sleeve 540 mm, RH 160	0059.0169	1

Optional:	ITEM NO.	QUANTITY
② Shell sleeve 800 mm, RH 160 L	0059.0236	optional
③ Sound-absorbing element PP 45 SE	0093.0308	optional

OVERVIEW OF ACCESSORIES:

OPTIONAL ACCESSORIES FOR PP 45	ITEM NO.	QUANTITY
① PP 45 RS shell kit	0093.1751	optional
② Masonry block MS 160 depth 490 mm can be shortened	0058.0168	optional

INDIVIDUAL COMPONENTS FOR EXTERNAL AND EXHAUST AIR	ITEM NO.	QUANTITY
① External cover, white plastic PP 45 AK	0093.0176	4

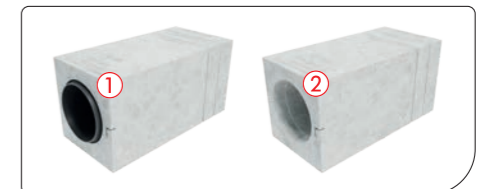
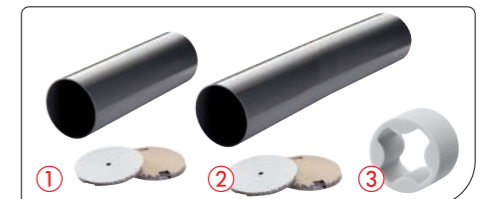
Optional:	ITEM NO.	QUANTITY
② Brushed stainless steel external cover, PP 45 AE	0093.0177	optional
③ External cover plastic, PP 45 AKR	0093.1635	optional
④ Soffit element PP 45 LE with stainless steel cover	0093.0179	optional
⑤ Soffit element extension, PP 45 LEV	0093.1483	optional

ROOM AIR CONTROL	ITEM NO.	QUANTITY
Comfort version RLS 45 K Control unit for up to six ventilation units	0157.0360	1

EXHAUST FAN FOR BATHROOMS	ITEM NO.	QUANTITY
Exhaust fan ECA 100 ipro H	0093.0995	1

WALL SLEEVE	ITEM NO.	QUANTITY
① Wall sleeve WH 100	0059.1030	1

CLOSING SHUTTER	ITEM NO.	QUANTITY
② Closure flap AP 100	0059.1058	1



Optional ER EC exhaust fan for interior bathrooms

See page 6

Optional PPB 30 single-room ventilation unit with heat recovery for bathrooms

See page 24

PPB 30

Decentralised ventilation of bathrooms, toilets, and kitchens with heat recovery



Decentralised balanced supply and exhaust air unit for wall installation with heat recovery for bathrooms, toilets, and kitchens

FUNCTION

- ▶ Balanced supply/exhaust air operation with heat recovery
- ▶ When switched via switch or humidity sensor, exhaust air operation in accordance with DIN 1946-6 Table 7
- ▶ Can be used as a stand-alone solution or in combination with PP45
- ▶ Control via RLS 45

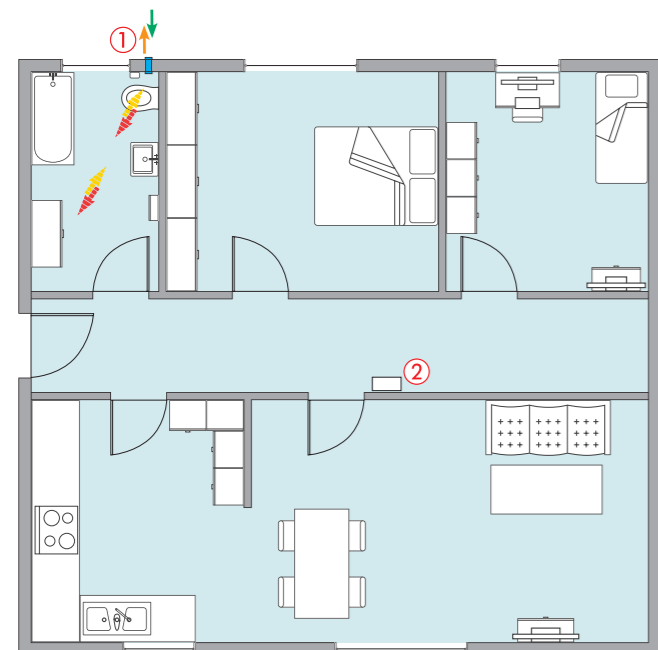
MAICO HIGHLIGHTS

- ▶ Diameter only 160 mm
- ▶ > 73% heat recovery
- ▶ Flow-optimized External covers direct airflow away from the facade and protect it from dirt
- ▶ Quietest ventilation operation in this device class

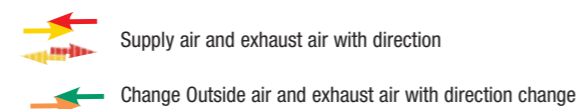
SHELL KIT FOR PP 45

→ The solution for quick and easy installation

- ▶ Masonry block with built-in shell sleeve
- ▶ For wall thicknesses of 365 / 425 / 490 mm
- ▶ Easy to cut to size with a handsaw
- ▶ Shell sleeve already has an integrated outward slope of 1°
- ▶ Sound decoupling by means of integrated sound insulation mat
- ▶ With cable routing pocket



- ① PushPull 30 ventilation unit in continuous operation with heat recovery
- ② RLS 45 K control unit



PPB 30

Decentralised ventilation of bathrooms, toilets, and kitchens with heat recovery

MATERIAL PER BATHROOM / TOILET / KITCHEN (example)

FINAL INSTALLATION KIT	ITEM NO.	QUANTITY
Comfort version PPB 30 K	0095.0246	1

ROUGH CONSTRUCTION SLEEVE Ø 160 mm	ITEM NO.	QUANTITY
Shell sleeve 540 mm, RH 160	0059.0169	1

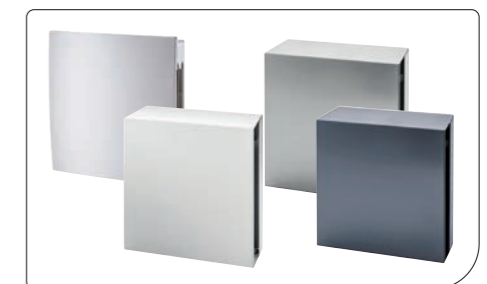
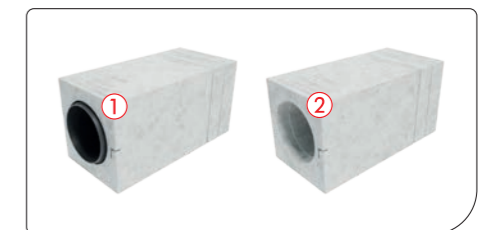
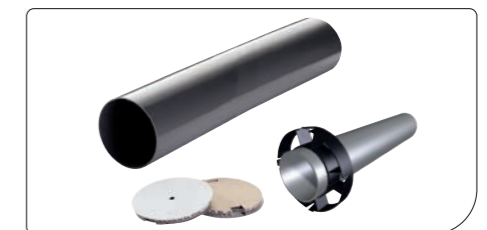
Optional:	ITEM NO.	QUANTITY
Shell sleeve 800 mm, RH 160 L	0059.0236	optional
Extension kit for the inner fluid channel in shell sleeve 800 mm, PPB 30 VS	0093.1522	optional

OVERVIEW OF ACCESSORIES:

OPTIONAL ACCESSORIES FOR PPB 30	ITEM NO.	QUANTITY
① PP 45 RS shell kit	0093.1751	optional
② Masonry block MS 160 depth 490 mm can be shortened	0058.0168	optional

INDIVIDUAL COMPONENTS FOR EXTERNAL AND EXHAUST AIR	ITEM NO.	QUANTITY
Outdoor cover, plastic, traffic white PPB 30 AK	0093.1498	1
External cover, aluminium, white powder-coated RAL 9010, PPB 30 AW	0093.1500	optional
External cover, anthracite powder-coated aluminum RAL 7016, PPB 30 AS	0093.0613	optional
Brushed stainless steel External cover, PPB 30 AE	0093.1499	optional

ROOM AIR CONTROL	ITEM NO.	QUANTITY
Comfort version RLS 45 K	0157.0360	1



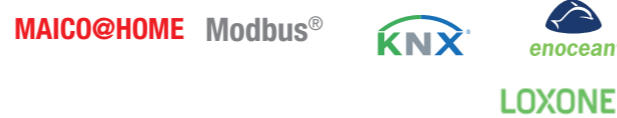
Complete ventilation system for flats:

PPB 30 units for exhaust air rooms and PP 45 units for supply air rooms are optimally balanced and controlled via a common control system.

PP 45 components see page 22

WS 75 Powerbox

Decentralised ventilation for small residential units as well as for medical practices, offices and commercial premises up to approx. 60 m²



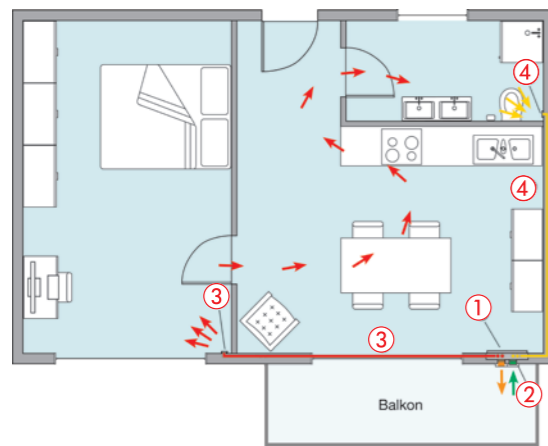
HOW IT WORKS

- ▶ Fully automatic, demand-driven operation via humidity sensor
 - VOC and CO₂sensors available as accessories
 - Air quality display via LED
- ▶ Innovative glass control element
- ▶ Operation via the MAICO@home app is possible via the integrated Wi-Fi module
- ▶ Very quiet ventilation thanks to extremely soundproof and heat-insulated housing design
- ▶ Easy installation, plug & play
- ▶ No condensate drain necessary thanks to enthalpy heat exchanger

MAICO HIGHLIGHTS

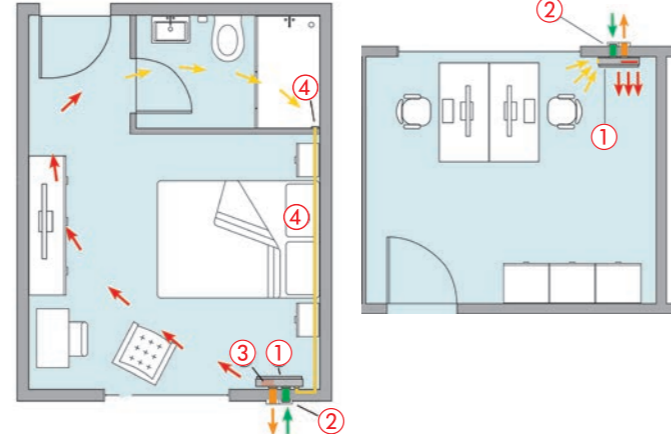
- ▶ EC fans with constant volume flow: No adjustment of volume flows necessary
- ▶ High energy efficiency thanks to EC direct current motors, energy efficiency class A
- ▶ Fully automatic frost protection with continuous ventilation thanks to innovative frost protection circuit
- ▶ With filter change indicator, easy filter replacement
- ▶ Device housing made of powder-coated sheet steel, painted, color traffic white, sheet metal and glass RAL 9016
- ▶ Flush-mounted device cover made of full-surface glass
- ▶ Flexible arrangement (vertical and horizontal installation possible)

Flush-mounted: Two-room apartment



- ① Ventilation unit
- ② External and exhaust air hood
- ③ Supply air duct with valve
- ④ Exhaust air duct with valve hood

Surface-mounted: Hotel room / room in a care facility



- ① Ventilation unit
- ② External and exhaust air hood
- ③ Supply air
- ④ Exhaust air duct with valve hood

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

WS 75 Powerbox

Decentralised ventilation for small residential units as well as for medical practices, offices and commercial premises up to approx. 60 m²

MATERIAL PER RESIDENTIAL UNIT (example)

SURFACE-MOUNTED VARIANT		ITEM NO.
①	Shell installation kit	WS75 RSAP 0093.1615
②	Ventilation unit incl. control element	WS 75 Powerbox H 0095.0646

③	Device cover	WS 75 APA 0093.1617
④	Glass insert with printed motif on request	

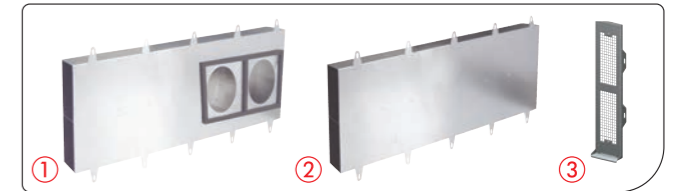
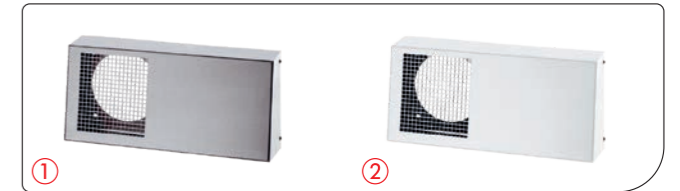
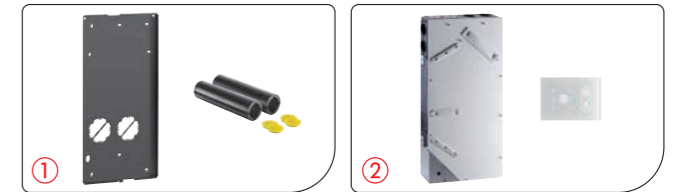
FLUSH-MOUNTED VERSION / OR AS A PRE-WALL INSTALLATION		ITEM NO.
①	Shell installation kit	WS75 RSUP 0093.1616
②	Ventilation unit incl. control element	WS 75 Powerbox H 0095.0646

③	Device cover	WS 75 UPA 0093.1618
④	Glass insert with printed motif on request	
⑤	Full-mounting glass device cover	WS 75 UPGA 0093.1619

FACADE FINISH / EXTERIOR COVER		ITEM NO.
①	Facade finish (brushed stainless steel)	Duo KWS E 0093.1440
②	Facade finish (stainless steel, white powder-coated RAL 9010)	Duo KWS W 0093.1441

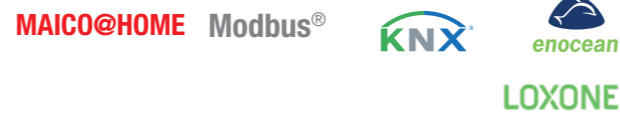
①	Soffit element	Duo LE 0093.0087
②	Soffit element extension	Duo LEV 0093.0089
③	Cover for soffit element	Duo AE 0093.0088

ACCESSORIES FOR 75 FLUSH MOUNTING		ITEM NO.
①	Disc valve, metal for exhaust air	TFA 12 0151.0370
②	Disc valve, metal for supply air	TFZ 12 0151.0365
③	Mounting frame for TFA/TFZ	EBR-D 12 0092.0494
④	Deflection piece	MA-U2-75 0059.2117
⑤	Flexible duct DN 75	MF-F75 0055.0096



WS 75 POWERBOX S

Centralised ventilation for small residential units as well as for medical practices, offices and business premises up to approx. 60 m²



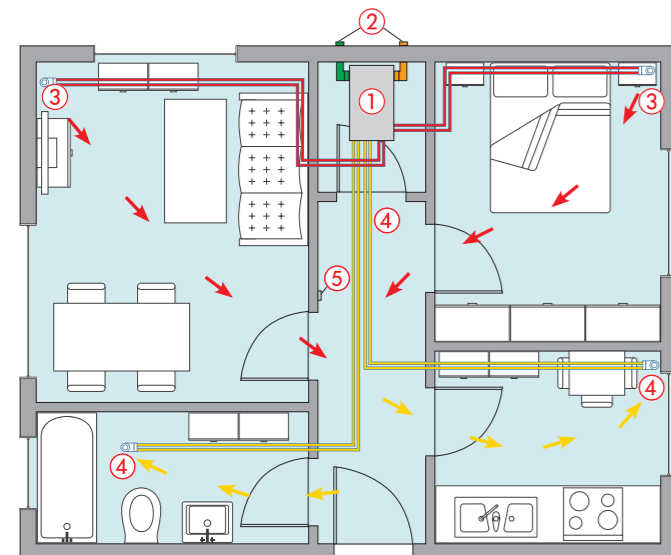
FUNCTION

- ▶ Fully automatic, demand-driven operation via humidity sensor
 - VOC and CO₂sensors available as accessories
 - Air quality display via LED
- ▶ Innovative glass control element
- ▶ Operation via the MAICO@home app is possible via the integrated Wi-Fi module
- ▶ Very quiet ventilation thanks to extremely soundproof and heat-insulated housing design
- ▶ Easy installation, plug & play
- ▶ No condensate drain necessary thanks to enthalpy heat exchanger

MAICO HIGHLIGHTS

- ▶ EC fans with constant volume flow: No adjustment of volume flows necessary
- ▶ High energy efficiency thanks to EC DC motors, energy efficiency class A
- ▶ Fully automatic frost protection with continuous ventilation thanks to innovative frost protection circuit
- ▶ With filter change indicator, easy filter replacement
- ▶ Flexible arrangement (vertical and horizontal installation possible)

Ceiling installation in storage room



- ① Ventilation unit
- ② External and exhaust air hood
- ③ Supply air duct with valve
- ④ Exhaust air duct with valve
- ⑤ Control element

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

WS 75 POWERBOX S

Centralised ventilation for small residential units as well as for medical practices, offices and commercial premises up to approx. 60 m²

MATERIAL PER RESIDENTIAL UNIT (example)

VARIANT / DEVICE INSTALLATION IN STORAGE ROOM OR IN SUSPENDED CEILINGS	ITEM NO.	ITEM NO.
Ventilation unit including control element, installation on flush-mounted standard box, control via cable	WS 75 Powerbox S	0095.0645



Accessories for supply and exhaust air	ITEM NO.	QUANTITY
① Plastic disc valve for exhaust air TK 12	0151.0198	1
② Plastic disc valve for exhaust air TFZ 12	0151.0417	2
③ 90° elbow MA-U2-75 deflection piece	0059.2117	4
④ Flexible duct DN 75 MF-F 75	0055.0096	2
⑤ Exhaust air valve with grease filter DAE 125 E	0044.0430	1
⑥ Mounting clamp MF-S 75	0018.0470	15



INDIVIDUAL COMPONENTS FOR EXTERNAL AND EXHAUST AIR DUCTS WITH INSULATED DN 125 PIPE	ITEM NO.	QUANTITY
① Outside air wall connection KW-AL 16/2 E	0152.0104	1
② Outgoing air wall connection KW-FL 16/2 E	0152.0106	1
③ L-pipe, insulated, MT-R 125 (length = 2 m)	0059.0981	1
④ Elbow, insulated, MT-B 125 90/45	0059.0983	2
⑤ Connector, MT-V 125	0059.0985	2
⑥ Ventilation duct coupling, MT-Üa 125	0059.0987	2



WS 120 TRIO

Centralised ventilation of flats with heat recovery up to approx. 100 m²

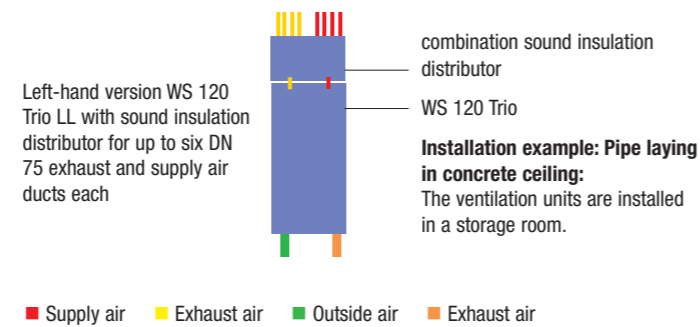
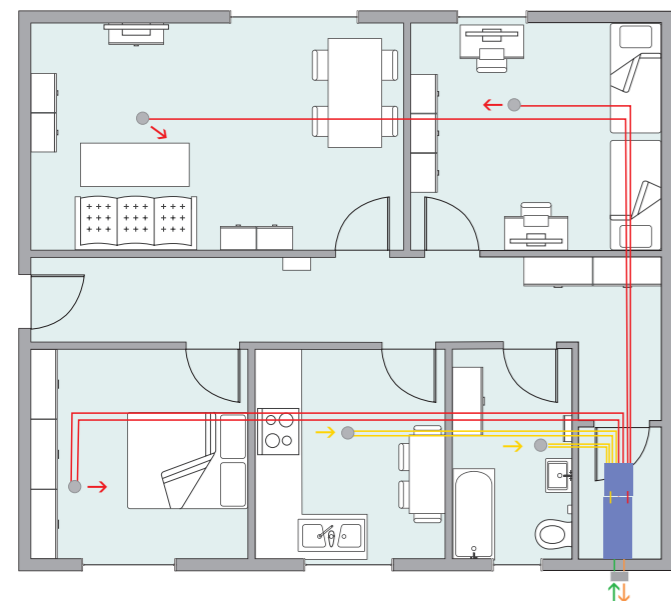


HOW IT WORKS

- ▶ The device can be installed in any position, in suspended ceilings, in pre-walls, or on sloping roofs
- ▶ Four variants enable optimal connection conditions for ventilation ducts
- ▶ Optional WS 120 Trio variants are equipped with preheating coils and provide greater comfort
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

MAICO HIGHLIGHTS

- ▶ Height only 21 cm
- ▶ Dimensions W x H x D: 600 x 210 x 1070 mm
- ▶ Enthalpy heat exchanger prevents dry indoor air
- ▶ No condensation, no condensate drain required
- ▶ Integrated humidity control
- ▶ Very quiet operation
- ▶ Connection piece can be mounted in various positions

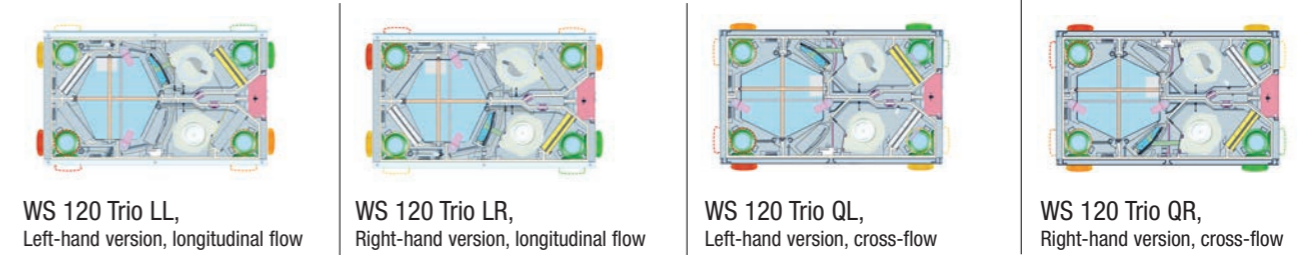


WS 120 TRIO

Centralised ventilation of flats with heat recovery up to approx. 100 m²

If necessary, other positions can be selected for the connections, or the unit can be rotated into the appropriate position. The illustrations show the units from above. The inspection side is at the bottom.

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air



MATERIAL PER RESIDENTIAL UNIT (example)

Ventilation unit with heat recovery incl. Trio control panel with energy-efficient EC motors	ITEM NO.	QUANTITY
WS 120 Trio LL	0095.0655	1
WS 120 Trio LLV	0095.0656	1
WS 120 Trio LR	0095.0657	1
WS 120 Trio LRV	0095.0658	1
WS 120 Trio QL	0095.0659	1
WS 120 Trio QL V	0095.0660	1
WS 120 Trio QR	0095.0661	1
WS 120 Trio QRV	0095.0662	1

- Maximum 120 m³/h at 300 Pa

Combined sound insulation distributor	ITEM NO.	QUANTITY
KSDV 2-125/12-75	0092.0586	1



Sound insulation distributor for supply and exhaust air. Facilitates installation in confined spaces.

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR Flexible duct DN 90	ITEM NO.	QUANTITY
① Flexible duct MF-F 75 (roll = 50 m)	0055.0096	1
② MF-FDR 75 sealing rings (set = 10 pieces)	0175.0262	1
③ Deflection piece MA-U2-75	0059.2117	5



The MAICOFlex pipe system – the optimal installation solution in terms of speed.

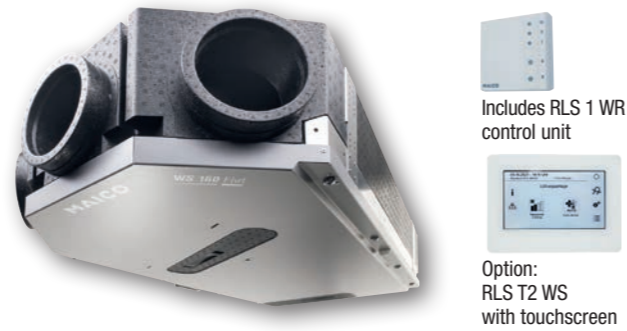
ADDITIONAL INDIVIDUAL COMPONENTS	ITEM NO.	QUANTITY
① Disc valve for ventilation TK 12	0151.0198	4
② Exhaust air valve with grease filter for kitchen DAE 125 E	0044.0430	1
③ Outside air wall connection KW-AL 16/2E	0152.0104	1
④ Exhaust air wall connection KW-FL 16/2E	0152.0106	1



MAICO accessories – matching individual components.

WS 160 FLAT

Centralised ventilation of flats with heat recovery up to approx. 140 m²

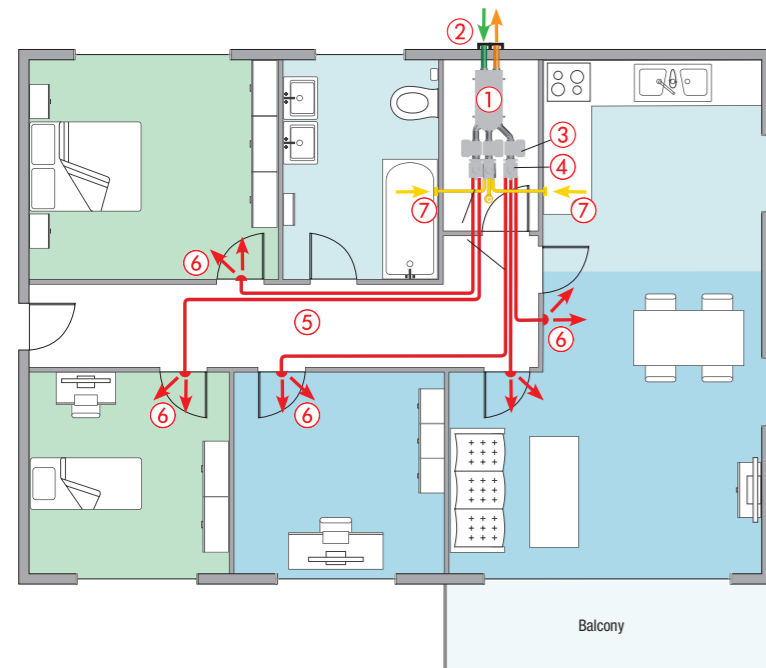


HOW IT WORKS

- ▶ The device can be installed in any position, in suspended ceilings, in pre-walls, or on sloping roofs
- ▶ Distribution of supply and exhaust air via flexible MaicoFlex or MaicoAir pipes
- ▶ Outdoor/exhaust air via insulated MaicoTherm pipes
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

MAICO HIGHLIGHTS

- ▶ Height only 23 cm
- ▶ Enthalpy heat exchanger prevents dry indoor air
- ▶ No condensation, no condensate drain required
- ▶ Can be installed in any position Left/right version in one device
- ▶ Integrated humidity control
- ▶ Optional bypass, frost protection heating, zone control



Air ducting with patented zone control for supply air / Zone 1 ■ Zone 2 ■

Variant with patented zone control WS 160 Flat KBZET

Different ventilation intensities can be set for different rooms at different times, e.g., during the day and at night.

Variant without zone control WS 160 Flat ET

Preset ventilation intensities remain constant throughout the day in the various rooms.

- ① Ventilation unit WS 160 Flat KBZET
- ② KWH combination wall connection with MT-R thermo tube for outside and exhaust air
- ③ Sound absorber box SB
- ④ Air distributor MF-VK 90-7 for supply and exhaust air
- ⑤ Flexible duct MF-F 90
- ⑥ Supply air valve ZWVQ 10 with valve adapter
- ⑦ Exhaust air valve TK 10 with valve adapter

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air

WS 160 FLAT

Centralised ventilation of flats with heat recovery up to approx. 140 m²

MATERIAL PER RESIDENTIAL UNIT (example)

Complete kit consisting of:

VENTILATION UNIT WITH HEAT RECOVERY incl. control unit	ITEM NO.	QUANTITY	QUANTITY
① WS 160 FLAT KBZET WITH ZONE CONTROL Bypass, preheating coil, enthalpy	0095.0094	1	
② WS 160 FLAT ET WITHOUT ZONE CONTROL Basic unit with standard equipment	0095.0090		1

- Max. 160 m³/h against 220 Pa
- Dimensions W x H x D: 582 x 230 x 1260 mm



INDIVIDUAL COMPONENTS FOR OUTDOOR AND EXHAUST AIR DUCTS WITH INSULATED DN 125 PIPE	ITEM NO.	QUANTITY	QUANTITY
① L-pipe, insulated, MT-R 125 (piece = 2 m)	0059.0981	1	1
② Elbow, insulated, MT-B 125 90/45	0059.0983	1	1
③ Connector, MT-V 125	0059.0985	13	8
④ Plug connector SVR 125	0055.0183	4	4
⑤ Ventilation duct coupling MT-Ü125	0059.0986	4	4
⑥ Combination wall connector for outside/exhaust air, righthand version, KWH 16/2 R	0152.0122	1	1



MAICOTherm

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR FLEXIBLE DUCT DN 90	ITEM NO.	QUANTITY	QUANTITY
① Flexible duct MF-F 90 (roll = 50 m)	0055.0095	1	1
② Air distributor MF-VK 90-7 1 x 125 / 7 x DN 90	0059.0994	3	2
③ Insertion sleeve MF-FSM 90	0059.0975	1	1
④ Sealing rings MF-FDR 90 (set = 10 pieces)	0175.0263	1	1
⑤ Valve adapter MA-AD1-90	0059.2123	7	7
⑥ Deflection piece MA-U1-90	0059.2119	1	1



MAICOFlex

OTHER INDIVIDUAL COMPONENTS	ITEM NO.	QUANTITY	QUANTITY
① Sound absorber box SB 12/16	0059.0995	3	2
② Supply air valve ZWVQ 10	0152.0064	5	5
③ Exhaust air valve TK 10	0151.0192	3	3
④ Grease filter for kitchen FFE 10	0092.0506	1	1



MAICO accessories

WS 170

Centralised ventilation of flats with heat recovery up to approx. 140 m²

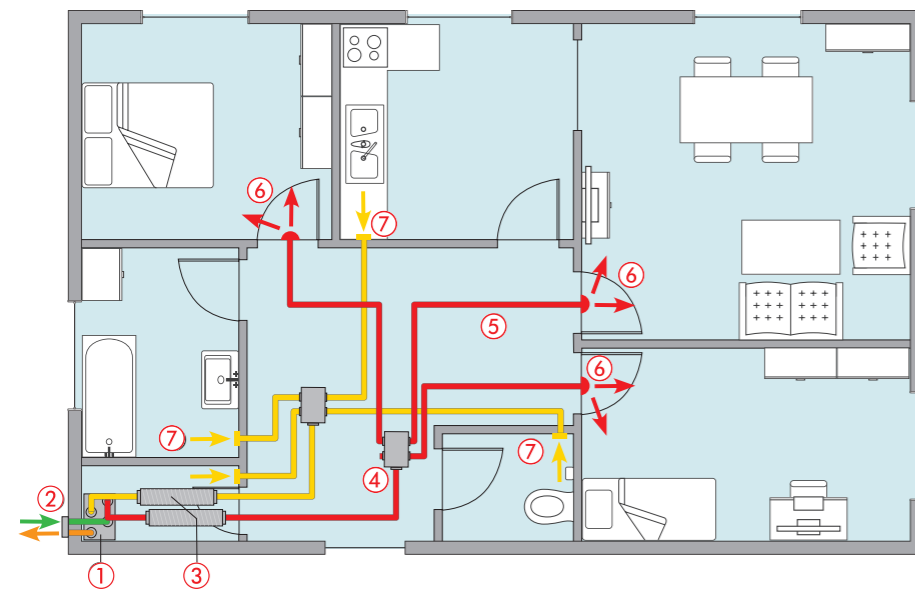


HOW IT WORKS

- ▶ Installation of the device in a storage room, kitchenette, or hallway cabinet
- ▶ Distribution of supply and exhaust air via flexible MaicoFlex or MaicoAir pipes
- ▶ Outdoor/exhaust air via insulated MaicoTherm pipes
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

MAICO HIGHLIGHTS

- ▶ Very energy-efficient, certified by the Passive House Institute
- ▶ Very quiet
- ▶ Integrated: humidity control
- ▶ Optional: Bypass, frost protection heating, enthalpy heat exchanger to prevent excessively dry air



- ① WS 170 R ventilation unit
 - ② KWH 16 L with connected MT-R thermo tube for outside and exhaust air
 - ③ Tubular sound absorber RSR 12-1
 - ④ Air distributor MF-V 90 for supply and exhaust air
 - ⑤ Flexible duct MF-F 90
 - ⑥ Supply air valve ZWVQ 10
 - ⑦ Exhaust air valve TK 10
- Supply air ■ Exhaust air ■ Outside air

WS 170

Centralised ventilation of flats with heat recovery up to approx. 140 m²

MATERIAL PER RESIDENTIAL UNIT (example)

Complete kit consisting of:

VENTILATION UNIT WITH HEAT RECOVERY including control panel	ITEM NO.	QUANTITY
① WS 170 R Supply and exhaust air connection on the right (standard version)	0095.0081	1
optional: WS 170 L Supply and exhaust air connection on the left	0095.0082	optional

- Max. 160 m³/h against 100 Pa
- Dimensions W x H x D: 595 x 820 x 375 mm



INDIVIDUAL COMPONENTS FOR EXTERNAL AND EXHAUST AIR DUCTS WITH INSULATED DN 125 PIPE	ITEM NO.	QUANTITY
① L-pipe, insulated, MT-R 125 (piece = 2 m)	0059.0981	6
② Elbow, insulated, MT-B 125 90/45	0059.0983	8
③ Connector, MT-V 125	0059.0985	16
④ Plug connector SVR 125	0055.0183	4
⑤ Ventilation duct coupling MT-Ü125	0059.0986	4



MAICOTherm – the ideal installation solution for tight installation situations.

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR Flexible duct DN 90	ITEM NO.	QUANTITY
① Flexible duct MF-F 90 (roll = 50 m)	0055.0095	1
② Air distributor MF-V90 1 x 125 / 4 x DN 90	0059.0968	2
③ Insertion sleeve MF-FSM 90	0059.0975	1
④ Sealing rings MF-FDR 90 (set = 10 pieces)	0175.0263	1
⑤ Valve adapter MF-A 90	0059.0963	7



The MAICOFlex pipe system – the optimal installation solution in terms of speed.

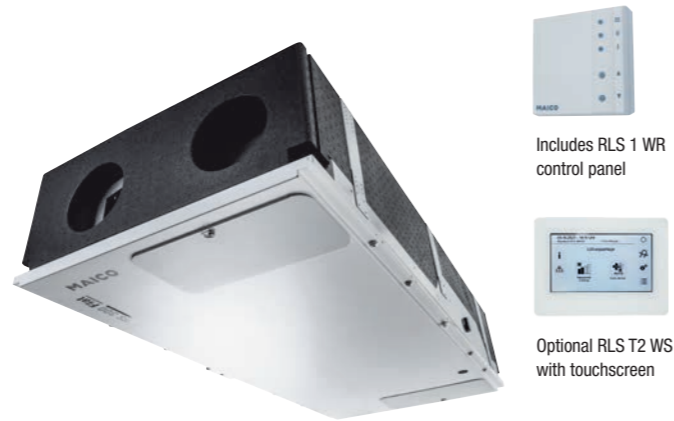
OTHER INDIVIDUAL COMPONENTS	ITEM NO.	QUANTITY
① Tubular sound absorber RSR 12-1	0092.0593	2
② Supply air valve ZWVQ 10	0152.0064	3
③ Exhaust air valve TK 10	0151.0192	4
④ Combination wall connection for exhaust air/ outdoor air, right-hand version, KWH 16/2 L	0152.0123	1
⑤ Grease filter for kitchen FFE 10	0092.0506	1



The MAICO-accessories – suitable individual components.

WS 300 FLAT

Centralised ventilation with heat recovery for flats and detached houses up to approx. 300 m²



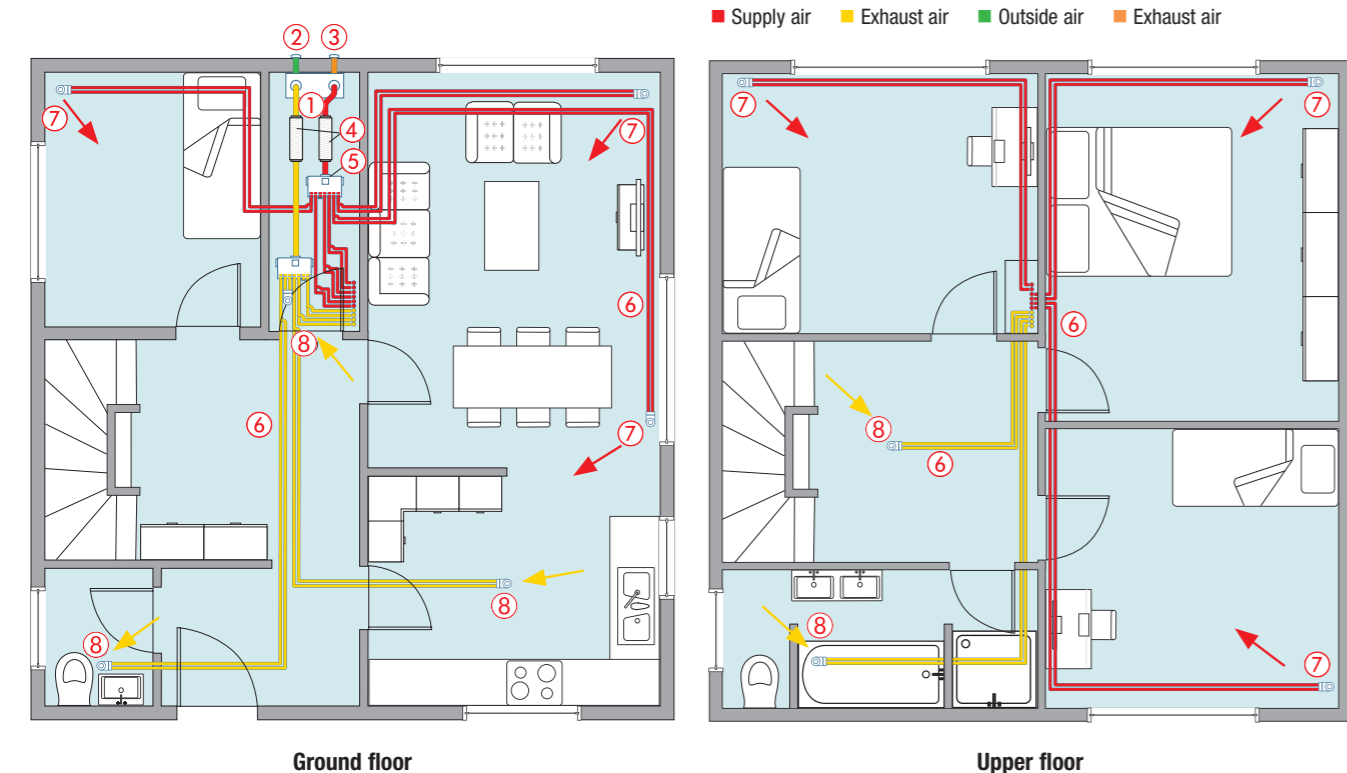
HOW IT WORKS

- ▶ Installation of the device in a storage room, basement, or heatinsulated attic
- ▶ Distribution of supply and exhaust air via flexible MAICOFlex or MaicoAir pipes
- ▶ Outdoor/exhaust air via MAICOTherm thermally insulated pipes
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

MAICO HIGHLIGHTS

- ▶ Energy-saving ventilation unit with EC fans
- ▶ The flat design is also ideal for retrofitting
- ▶ Flexible location selection thanks to enthalpy heat exchanger, as no condensate drain is necessary
- ▶ Energy efficiency class A
- ▶ Optional: bypass, frost protection heating

- ① WS 300 Flat KBR ventilation unit mounted vertically on the exterior wall
- ② Outside air wall connection
- ③ Exhaust air wall connection
- ④ Sound absorber
- ⑤ Air distributor
- ⑥ Pipe system
- ⑦ Supply air valve
- ⑧ Exhaust air valve



WS 300 FLAT

Centralised ventilation with heat recovery for flats and detached houses up to approx. 300 m²

MATERIAL PER RESIDENTIAL UNIT (example)

Complete kit consisting of:

VENTILATION UNIT WITH HEAT RECOVERY Includes control unit	ITEM NO.	QUANTITY
① WS 300 Flat KBR	0095.0144	1

- Max. 300 m³/h against 475 Pa
- Dimensions W x H x D: 700 x 300 x 1500 mm



INDIVIDUAL COMPONENTS FOR EXTERNAL AND EXHAUST AIR DUCTS WITH INSULATED DN 160 PIPE	ITEM NO.	QUANTITY
① Duct MT-R160 (piece = 2 m)	0059.0982	2
② Elbow MT-B125 90/45	0059.0983	5
③ Connector MT-V160	0059.0988	10
④ Duct coupling MT-Ü160/150	0059.0990	10
⑤ Connector SVR 160	0055.0185	4



MAICOTherm – the right installation solution for tight installation situations.

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR	ITEM NO.	QUANTITY
① Air distributor box MF-BV75-160-12	0018.0528	2
② Flexible duct MA-FR75 (roll = 50 m)	0152.0091	4
③ Sealing rings MF-FDR75 (set = 10 pieces)	0175.0262	4
④ Deflection piece MA-U2-75	0059.2117	11



The MAICOFlex pipe system – the optimal installation solution in terms of speed.

OTHER INDIVIDUAL COMPONENTS	ITEM NO.	QUANTITY
① Tubular sound absorber RSR 16/50-1	0092.0603	2
② Supply air valve TFZ 12	0151.0417	7
③ Exhaust air valve TFA 12	0151.0412	5
④ KW-AL 20/2E outside air wall connection	0152.0108	1
⑤ Exhaust air wall connection KW-FL 20/2E	0152.0110	1
⑥ Exhaust air valve with grease filter DAE 125 E	0044.0430	1



The MAICO-accessories – matching individual components.

WS 320

Centralised ventilation of flats with heat recovery up to approx. 300 m²



MAICO@HOME Modbus® KNX enocean®

Centralised ventilation unit for flats and single-family homes up to approx. 300 m²

LOXONE

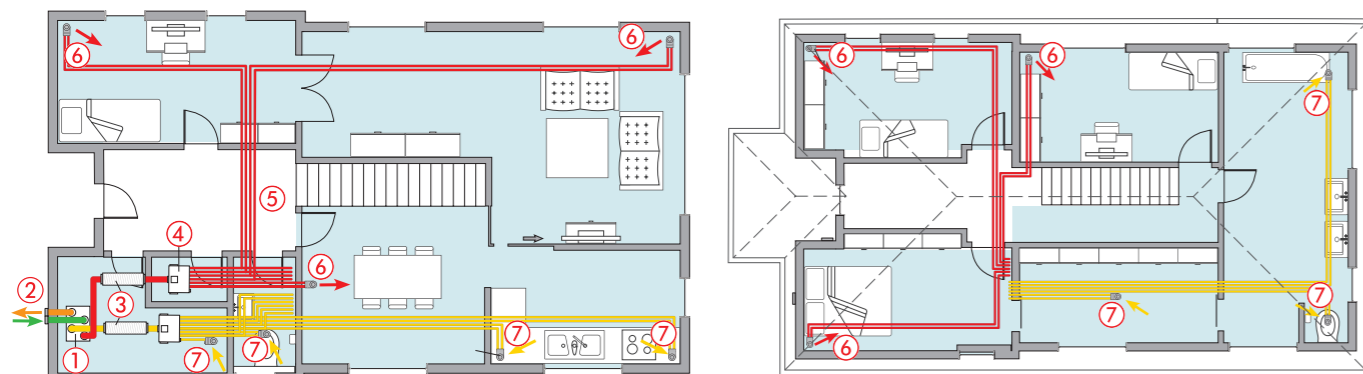
HOW IT WORKS

- ▶ Installation of the device in a storage room, basement, or insulated attic
- ▶ Distribution of supply and exhaust air via flexible MaicoFlex or MaicoAir ducts
- ▶ Outdoor/exhaust air via insulated MaicoTherm pipes
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

MAICO HIGHLIGHTS

- ▶ Highly energy-efficient, certified by the Passive House Institute
- ▶ Very quiet
- ▶ Integrated: humidity control
- ▶ Optional: bypass, frost protection heating, enthalpy heat exchanger to prevent excessively dry air

- ① WS 320 B ventilation unit
 - ② KW-AL, KW-FL external and exhaust air wall connectors with MT-R thermo tube for external and exhaust air
 - ③ Pipe silencer RSR 16/50-1
 - ④ MF-BV63-160-14 air distributor for supply and exhaust air
 - ⑤ Flexible duct MF-F63
 - ⑥ Supply air valve TFZ 12
 - ⑦ Exhaust air valve TFA 12
- Supply air ■ Exhaust air ■ Outside air ■ Exhaust air



WS 320

Centralised ventilation of flats with heat recovery up to approx. 300 m²

MATERIAL PER RESIDENTIAL UNIT (example)

Complete kit consisting of:

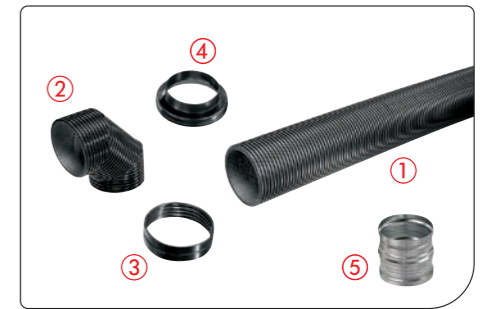
VENTILATION UNIT WITH HEAT RECOVERY Includes control unit	ITEM NO.	QUANTITY
WS 320 B	0095.0221	1

- Max. 320 m³/h against 450 Pa
- Dimensions W x H x D: 841 x 857 x 598 mm



INDIVIDUAL COMPONENTS FOR OUTDOOR AND EXHAUST AIR CONDUITS WITH INSULATED DN 160 PIPE	ITEM NO.	QUANTITY
---	----------	----------

① Duct MT-R160 (length = 2 m)	0059.0982	5
② Elbow MT-B160 90/45	0059.0984	8
③ Connector MT-V160	0059.0988	15
④ Duct coupling MT-Ü160/150	0059.0990	10
⑤ Connector SVR 160	0055.0185	4



MAICOTherm – the right installation solution for tight installation situations.

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR	ITEM NO.	QUANTITY
--	----------	----------

① Air distributor box MF-BV63-160-14	0018.0526	2
② Flexible duct MF-F63 (roll = 50 m)	0055.0097	5
③ Sealing rings MF-FDR63 (set = 10 pieces)	0175.0261	5
④ Deflection piece MA-U3-63	0059.2116	13



The MAICOFlex pipe system – the optimal installation solution in terms of speed.

OTHER INDIVIDUAL COMPONENTS	ITEM NO.	QUANTITY
-----------------------------	----------	----------

① Tubular sound absorber RSR 16/50-1	0092.0603	2
② Supply air valve TFZ 12	0151.0417	7
③ Exhaust air valve TFA 12	0151.0412	5
④ KW-AL 20/2E outside air wall connection	0152.0108	1
⑤ Exhaust air wall connection KW-FL 20/2E	0152.0110	1
⑥ Exhaust air valve with grease filter DAE 125 E	0044.0430	1



The MAICO-Accessories – matching individual components.

WS 470

Centralised ventilation of flats and single-family/two-family houses with heat recovery up to approx. 450 m²



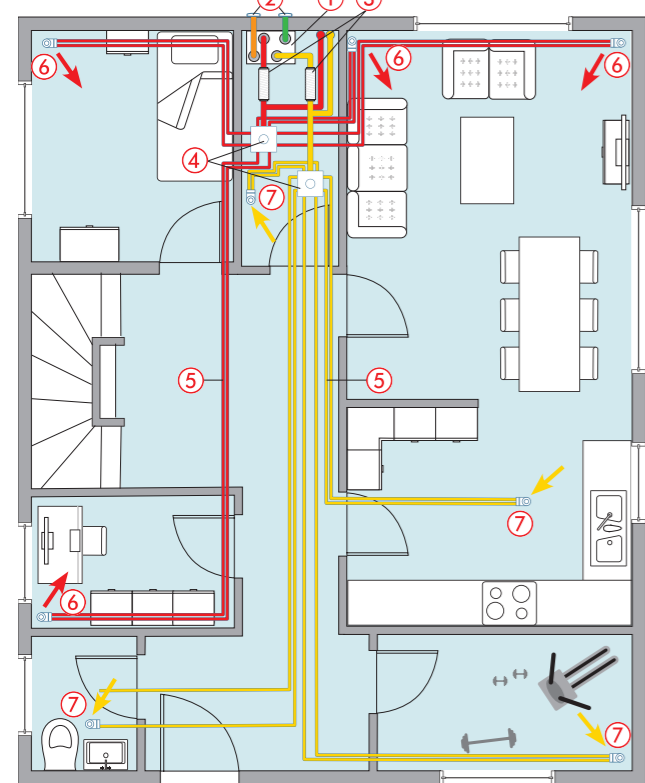
WS 470 for detached houses up to 450 m² living space



HOW IT WORKS

- ▶ The device can also be installed in a utility room, basement, or heat-insulated attic
- ▶ Distribution of supply and exhaust air via flexible MAICOFlex or MaicoAir pipes
- ▶ Outdoor/exhaust air via MAICOTherm thermally insulated pipes
- ▶ Control via four-stage switch, home network, app
- ▶ Optional: Control via touch panel, KNX

- ① WS 470 KB ventilation unit
- ② External and exhaust air connection with thermo pipe
- ③ Pipe silencer
- ④ Air distributor
- ⑤ Flexible duct
- ⑥ Supply air valve
- ⑦ Exhaust air valve

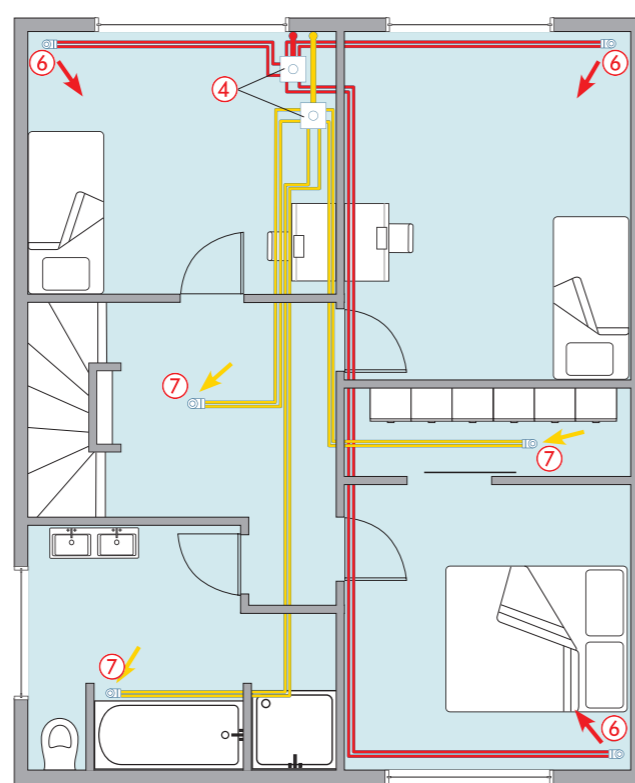


Ground floor

MAICO HIGHLIGHTS

- ▶ Highly energy-efficient device, certified by the Passive House Institute
- ▶ Particularly quiet ventilation operation
- ▶ Integrated humidity control
- ▶ Optional: bypass, frost protection heating, enthalpy heat exchanger to prevent excessively dry air

■ Supply air ■ Exhaust air ■ Outside air ■ Exhaust air



Upper floor

WS 470

Centralised ventilation of flats and single-family/two-family homes with heat recovery up to approx. 450 m²

MATERIAL PER RESIDENTIAL UNIT (example)

Complete kit consisting of:

VENTILATION UNIT WITH HEAT RECOVERY including control unit	ITEM NO.	QUANTITY
WS 470 KB with preheating register and bypass	0095.0231	1

- Max. 470 m³/h against 100 Pa
- Dimensions W x H x D: 841 x 857 x 598 mm



INDIVIDUAL COMPONENTS FOR OUTDOOR AND EXHAUST AIR DUCTS WITH INSULATED DN 160 PIPE

ITEM NO.	QUANTITY
① Duct MT-R160 (piece = 2 m)	0059.0982 4
② Elbow MT-B160 90/45	0059.0984 8
③ Connector MT-V160	0059.0988 17
④ Duct coupling MT-Ü160/150	0059.0990 10
⑤ Connector SVR 160	0055.0185 4



MAICOTherm – the ideal installation solution for tight installation situations.

INDIVIDUAL COMPONENTS FOR SUPPLY AND EXHAUST AIR

ITEM NO.	QUANTITY
① Plastic air distributor MA-FV 8-75	0059.2125 4
② Flexible duct MA-FR75 (roll = 50 m)	0152.0091 5
③ Deflection piece MA-U2-75	0059.2117 14



The MAICOFlex duct system – the optimal installation solution in terms of speed.

OTHER INDIVIDUAL COMPONENTS

ITEM NO.	QUANTITY
① Tubular sound absorber RSR 16/50-1	0092.0603 2
② Supply air valve TFZ 12	0151.0417 7
③ Exhaust air valve TFA 12	0151.0412 5
④ KW-AL 20/2E outside air wall connection	0152.0108 1
⑤ Exhaust air wall connection KW-FL 20/2E	0152.0110 1
⑥ Exhaust air valve with grease filter DAE 125 E	0044.0430 1



The MAICO-accessories – matching individual components.

VENTILATION SYSTEMS

From MAICO enable reliable air exchange in large buildings with many people

CENTRALISED COMPACT VENTILATION UNITS – up to 5.500 m³/h delivery volume



AREAS OF APPLICATION / INSTALLATION OPTIONS

- ▶ Retail stores, fitness and dance studios, etc.
- ▶ Residential construction
- ▶ Hall ventilation: warehouses, sports halls, event halls, etc.
- ▶ Daycare centers
- ▶ Offices

TECHNICAL FEATURES

- ▶ Heat recovery via seawater-resistant plate heat exchanger with efficiency of over 90 %
- ▶ Integrated bypass for night ventilation as standard
- ▶ Integrated control system with interfaces to building management systems (Modbus, BACnet)
- ▶ Energy-saving EC centrifugal fans with backward-curved impellers
- ▶ Volume flow control variants: via integrated sensors, demand-based volume flow control, constant duct pressure control
- ▶ Various temperature control modes for heating and cooling coils as well as cascade control
- ▶ Extensive range of accessories for air conditioning

CENTRALISED FLAT COMPACT VENTILATION UNITS – up to 2.700 m³/h delivery volume



AREAS OF APPLICATION / INSTALLATION OPTIONS

- ▶ Office and conference rooms
- ▶ Common rooms
- ▶ Classrooms
- ▶ Daycare centers
- ▶ Fitness and dance studios
- ▶ Retail stores, doctors' offices

TECHNICAL FEATURES

- ▶ Very flat design
- ▶ Modular system, expandable with heating and cooling coils and silencers
- ▶ Optional enthalpy heat exchanger for humidity recovery: This allows wall installation; no condensate drain required
- ▶ Integrated control with web server and interfaces for Modbus and BACnet
- ▶ Supply air on either the left or right side
- ▶ Optional rail system for moving the inspection openings below the unit for time-saving inspection
- ▶ Compliance with the highest hygiene requirements according to VDI 6022

VENTILATION SYSTEMS

From MAICO enable reliable air exchange in large buildings with many people

DECENTRALISED COMPACT VENTILATION UNITS – up to 1.000 m³/h delivery volume



AREAS OF APPLICATION / INSTALLATION OPTIONS

- ▶ Classrooms
- ▶ Daycare centers
- ▶ Fitness and dance studios
- ▶ Office and conference rooms
- ▶ Common rooms
- ▶ Sales rooms, doctors' offices, etc

TECHNICAL FEATURES

- ▶ Extremely quiet ventilation systems thanks to acoustic insulation material combined with special foam (flame retardant)
- ▶ Optimal air quality thanks to integrated CO2 sensor as standard: the amount of air required for hygiene is automatically adjusted to the desired air quality
- ▶ The device can be operated via the MAICO@HOME app using the integrated Ethernet interface and router connection
- ▶ Integrated shut-off dampers close when the device is not in operation, and an optional smoke detector provides additional safety
- ▶ Enthalpy heat exchanger with humidity recovery reduces air drying and prevents respiratory problems and infections
- ▶ Preheating coils provide frost protection in winter, and reheating coils ensure pleasant supply air temperatures
- ▶ In summer, the automatic bypass directs cooler outside air into the room

AIR HANDLING UNITS (AHU) – up to 150.000 m³/h delivery volume



Delivery volume up to
150.000 m³/h available.
Contact us!

Further information:



PLANNING INFORMATION

Planning notes for ER EC/ER single air extraction system

Individual and centralised ventilation systems in accordance with DIN 18017-3



Area	Permissible voltage	IP protection class for electrical consumables
0	12 V or DC 30 V	IP X7
1	230 V (fans)	IP X5
2	230	IP X4, (IP X5 if there is a risk of water jets)

PLANNING/DESIGN IN ACCORDANCE WITH DIN 1946-6

With individual and centralised ventilation systems that are approved by the building authorities for use in accordance with DIN 18017-3, both such systems and ventilation systems in accordance with DIN 1946-6 can be planned and implemented. However, please note the different requirements set by the respective standards. In particular, fire protection in accordance with DIN 18017-3 is only permissible if the relevant provisions of DIN 18017-3 and the ventilation system guideline are complied with.

PROTECTED AREAS IN SANITARY ROOMS IN ACCORDANCE WITH DIN VDE 0100-701

- ▶ Distances to be maintained - Protection areas in sanitary rooms according to DIN VDE 0100-701.
- ▶ Sanitary rooms are divided into 3 areas in which different requirements apply to the degree of protection for electrical appliances.
- ▶ If water jets occur in areas 1 and 2, select devices with protection class IP X5.
- ▶ All MAICO ER/ER EC devices have protection class IP X5.

QUICK DESIGN GUIDE

Quick design guide for flats and detached houses in accordance with DIN 1946-6

Design based on reduced ventilation with PP45 units and exhaust f

Apartment size in m ²	30	40	50	60	70	80	90	100	110	120	134	140
Required nominal ventilation according to 1946-6 Table 5 [m ³ /h]	54	64	75	85	96	106	115	125	134	144	156	161
Required nominal ventilation [m ³ /h]	52	62	72	82	91	100	110	118	127	136	144	152
Number of PP 45 with 30 m ³ /h in stage 3	4	4	6	6	6	6	8	8	8	10	10	10
Number of ECA / ER with 60 m ³ /h	1	1	1	2	2	2	2	2	3	3	3	3

Design based on reduced ventilation with PP45 units and exhaust fans

Apartment size in m ²	30	40	50	60	70	80	90	100	110	120	134	140
Required nominal ventilation according to 1946-6 Table 5 [m ³ /h]	38	45	52	60	67	74	81	88	94	101	107	113
Required nominal ventilation [m ³ /h]	36	43	49	56	62	69	75	81	87	93	98	104
Number of PP 45 with 30 m ³ /h in stage 3	2	4	4	4	4	4	6	6	6	6	6	8
Number of ECAs/ERs with 60 m ³ /h	1	1	1	2	2	2	2	2	3	3	3	3

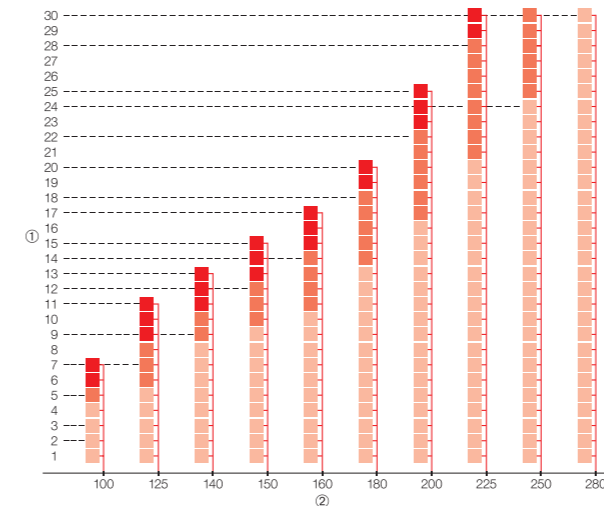
PP 45 Volume flows

1 stage = 15 m³/h 2 stage = 20 m³/h 3 stage = 30 m³/h 4 stage = 36 m³/h 5 stage = 42 m³/h

QUICK DESIGN GUIDE

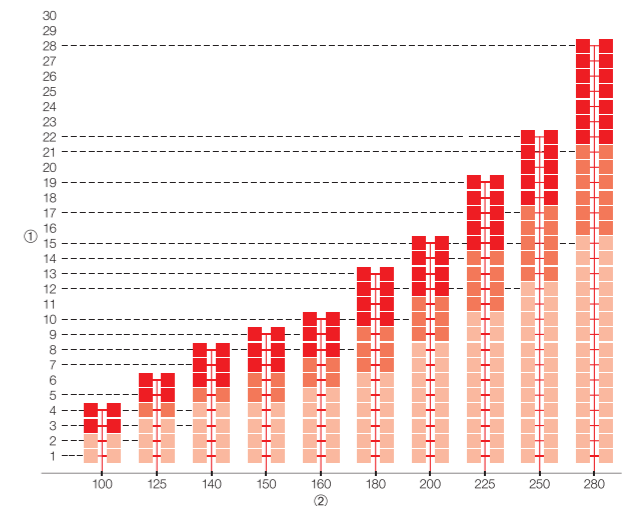
Quick design guide for individual and centralised ventilation systems in accordance with DIN 18017-3

ER EC 40 m³/h, one device per full floor



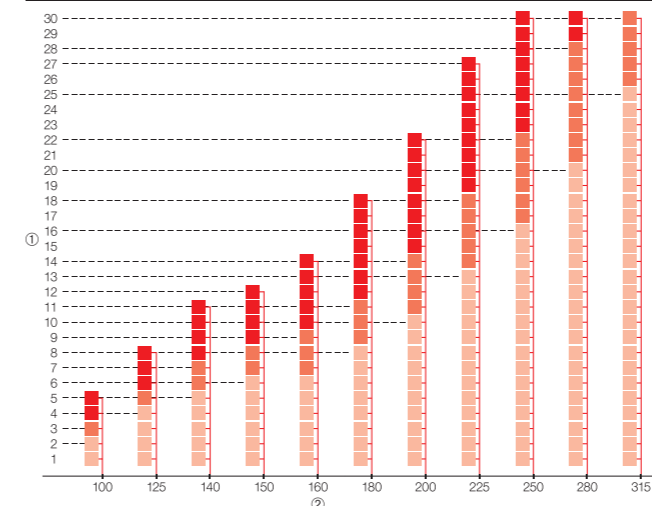
① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

ER EC 40 m³/h, two devices per full floor



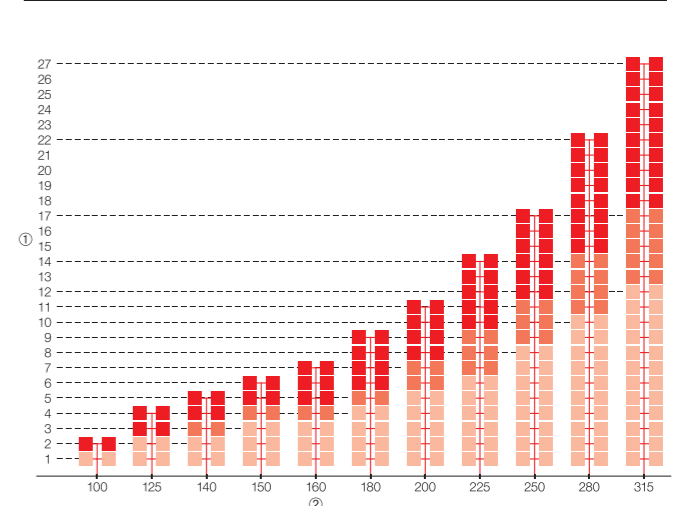
① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

ER EC 60 m³/h and ER 60 m³/h, one device per full floor



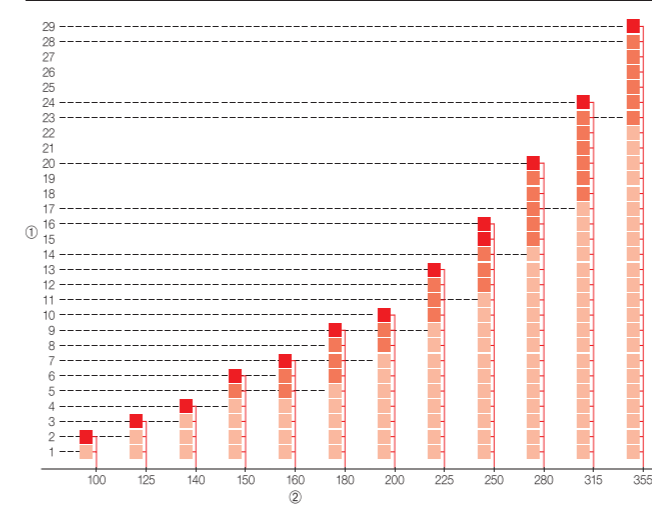
① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

ER EC 60 m³/h and ER 60 m³/h, two devices per full floor



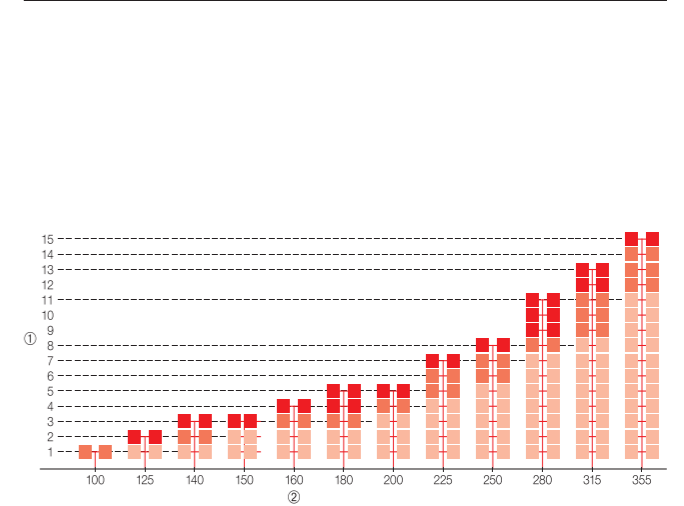
① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

ER EC 100 m³/h and ER 100 m³/h, one device per full floor



① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

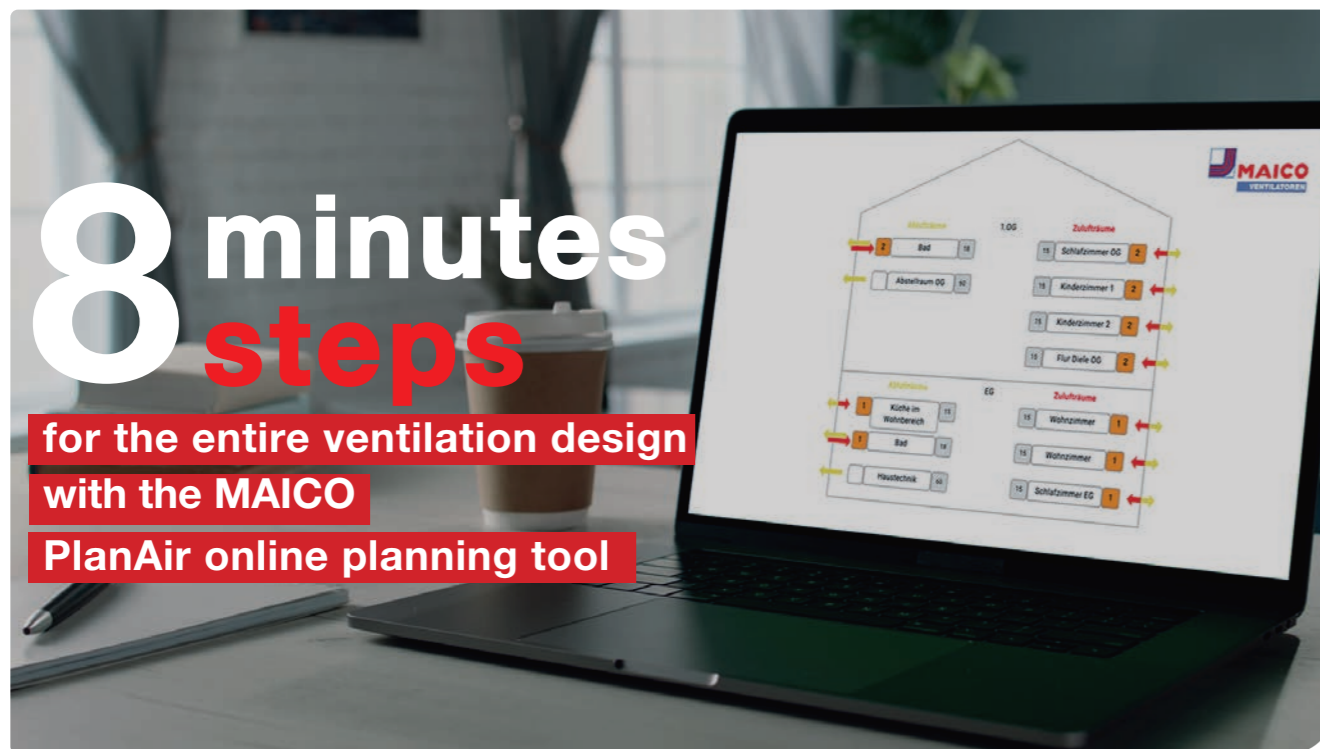
ER EC 100 m³/h and ER 100 m³/h, two devices per full floor



① Number of floors ② Main pipe diameter in mm ■ to 5 m/s ■ to 7 m/s ■ to 11 m/s

PlanAir

The online planning tool for ventilation systems



DESIGN TYPE:

- ▶ Centralised and decentralised ventilation with heat recovery
- ▶ Ventilation and exhaust air systems
- ▶ Generation of ventilation verification
- ▶ Calculation of volume flows
- ▶ Energy performance indicators for subsidies
- ▶ Parts list for ordering
- ▶ Documentation for you and your construction partners



Register now!
PlanAir online planning tool

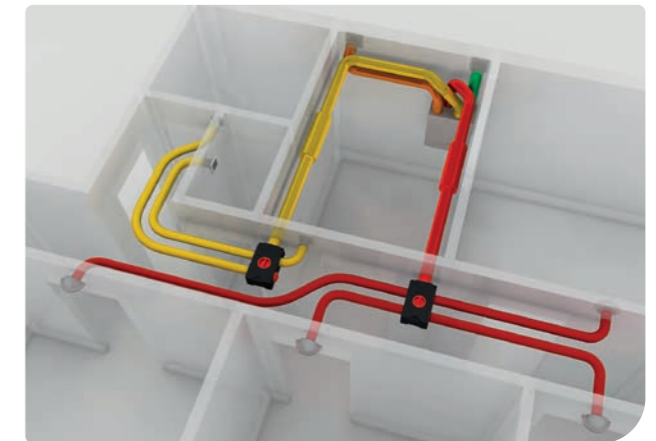
www.maico-ventilatoren.com

Systematically better ventilation

The right MAICO pipe system with a hygienically smooth inner surface for every requirement

MAICOFlex

- The practical all-round pipe system with the "click"
- ▶ Complete solution with distributors, pipes, adapters, and various installation accessories.
 - ▶ Available in nominal widths of 63, 75, and 90 mm.
 - ▶ Suitable for both new construction and renovation.



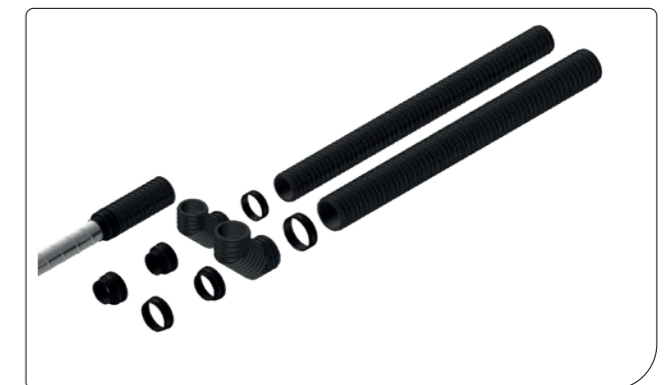
MAICOAir

- Very flat, compact design
- ▶ Use of fewer plug-in components for supply and exhaust air.
 - ▶ Self-explanatory components – quick, virtually tool-free installation.
 - ▶ Available in nominal widths of 63, 75, and 90 mm.
 - ▶ Can be partially combined with the MAICOFlex ventilation pipe system.
 - ▶ All distributors, deflectors, and adapters are supplied with clamps and sealing rings.



MAICOTherm

- The thermally insulated ventilation duct system where nothing is lost
- ▶ Particularly notable for its ease of installation and universal application.
 - ▶ Excellent heat and noise insulation properties.
 - ▶ Available in nominal widths of 125 and 160 mm.





Maico Elektroapparate-Fabrik GmbH
Steinbeisstraße 20 · 78056 Villingen-Schwenningen
Tel.: 0 77 20 / 694-0 · info@maico.de
www.maico-ventilatoren.com

Further information and contact details for our service staff can be found at www.maico-ventilatoren.com

