

Installation and operating instructions



ER EC covers for ER EC flush-/surface-mounted exhaust air systems (according DIN 18017-3)



ER-A
ER-AK
ER-AH
ER-AB



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Preface

Please read the instructions carefully before installing and using for the first time. Follow the instructions. Pass these instructions on to the owner for safekeeping.

1 Scope of delivery

- Central screw
- Air filter
- Installation and operating instructions

ER-A

Article no. 0084.0361

- Standard cover: Lower and upper part of cover
- TimeStrip on title page of these instructions

ER-AK

Article no. 0084.0362

- Comfort cover: Lower and upper part of cover

ER-AH

Article no. 0084.0363

- Cover with humidity control
- Lower and upper part of cover

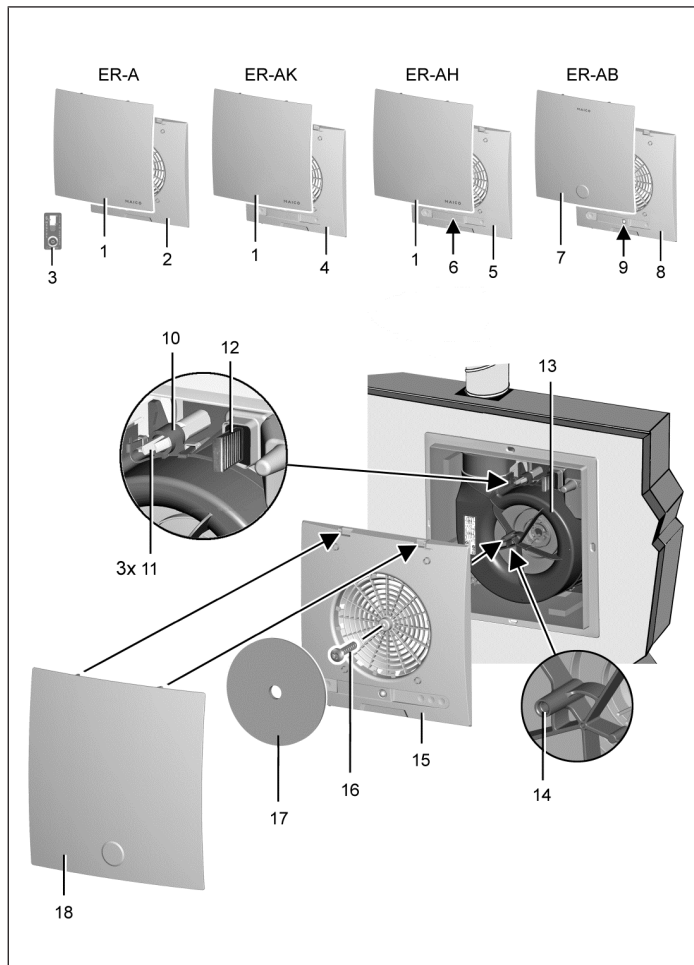
ER-AB

Article no. 0084.0364

- Cover with motion detector
- Lower and upper part of cover

i **For accessory components with more detailed information and order numbers:** System and accessory components [▶ 15]

2 Overview of ER EC system



Standard cover for ER-A

1 Cover – upper part	2 Cover – lower part
3 TimeStrip (→ Title page)	

ER-AK comfort cover

1 Cover – upper part	4 Cover – lower part with touch control unit
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Cover with ER AH humidity control

1 Cover – upper part	5 Cover – lower part with touch control unit
6 Humidity sensor (rear side cover)	

Cover with ER AB motion detector

7 Cover – upper part	8 Cover – lower part with touch control unit
9 Motion detector	

Overview figure

10	Accommodation mounts (3 pieces)	11	Locking hook (3 pieces)
12	Sealing plugs – motor board interface (ER-AK, ER-AH, ER-AB)	13	Fan insert with rating plate
14	Hole for central screw	15	Lower part of cover (2, 4, 5, or 8)
16	Central screw, self-tapping	17	Air filter
18	Upper part of cover (1 or 7)		

Specialist installer qualifications

Installation may only be carried out by **trained specialists** who have the necessary knowledge and experience in **ventilation engineering**. The unit must be connected in accordance with the national technical approval.

Only a **qualified electrician** is permitted to work on the electrics. You are deemed a qualified electrician if you are familiar with the relevant standards and guidelines, can competently and safely connect units to an electrical power supply in line with the Wiring diagram and are able to recognise and avoid risks and dangers associated with electricity on the basis of your technical training and experience.

3 Intended use

ER EC fans are used to extract air from interior bathrooms and toilets rooms, storage rooms or open plan kitchens (with outside windows), for example in multi-storey residential buildings, retirement homes or hotel complexes.

Installation in a ventilation shaft, in the wall, front wall or a suspended ceiling is permissible.

The fans can be used as standalone units or for toilet seat air extraction (according to DIN 18017-3).

The fans are only intended for domestic use and similar purposes.

4 Safety instructions and warnings**⚠ DANGER**

Indicates a possibly hazardous situation which will result in death or serious injuries if not avoided.

⚠ WARNING

Indicates a possibly hazardous situation which could result in death or serious injuries if not avoided.

⚠ CAUTION

Indicates a possibly hazardous situation, which could result in minor to moderate injuries.

NOTICE

Indicates a possible situation, which could cause damage to the product or its surroundings.

5 General safety instructions

The unit must not be used in the following situations under any circumstances:

⚠ DANGER Risk of combustion/fire from flammable materials, liquids or gases in the vicinity of the unit.

Do not place any flammable materials, liquids or gases near the unit, which may ignite in the event of heat or sparks and catch fire.

⚠ DANGER Explosion hazard due to gases and dust.

Explosive gases and dust may ignite and cause serious explosions or fire.

Never use unit in an explosive atmosphere (risk of explosion).

⚠ DANGER Explosion hazard due to explosive substances in the lab extraction units.

Explosive substances in lab extraction units may ignite and cause serious explosions or fire.

Aggressive substances may damage the unit.

Never use unit in combination with a lab extraction unit (risk of explosion).

⚠ WARNING Risk to health from chemicals or aggressive gases/vapours.

Chemicals or aggressive gases/vapours may harm health, especially if they are distributed throughout the rooms by the unit.

Never use unit to distribute chemicals or aggressive gases/vapours.

NOTICE Damage to unit due to steam-saturated or greasy air or adhering solid particles.

Steam-saturated or greasy air or solid particles which may adhere to the unit, can soil the unit and reduce the efficiency.

Never use unit to convey these substances.

NOTICE Damage to unit due to grease and oil vapours from range hoods.

Grease and oil vapours from range hoods may contaminate the unit and air ducts and reduce efficiency.

Never use unit to convey these substances.

NOTICE Damage to the unit when continuously conveying steam-saturated air.

Never use unit to convey steam-saturated air

NOTICE Damage to the unit due to imbalance of the impeller when conveying solid particles.

Never use unit to convey solid particles that could adhere to the unit.

NOTICE Unit damage during the construction phase, caused by soiling of the unit and air ducts.

Unit operation is not permitted during the construction phase.

Do not operate unit during the construction phase.

NOTICE Damage to unit in the event of moisture ingress.

IP X5 (protection against water jets).

Never use unit outdoors.

6 Safety instructions regarding installation, operation, cleaning and maintenance

⚠ DANGER Risks for children and people with reduced physical, sensory or mental capabilities or a lack of knowledge.

Unit may only be installed, commissioned, cleaned and maintained by persons who can safely recognise and avoid the risks associated with this work.

⚠ DANGER Danger of electric shock from operating the unit when not fully mounted.

Electric components are a potential source of electric shock.

If the unit is open, all off the supply circuits must be switched off (mains fuse off), secured against being accidentally switched back on and a visible warning sign must be attached.

Only operate the unit when it is completely installed.

⚠ DANGER Danger if the relevant regulations for electrical installations are not observed.

Before removing the housing cover or removing the fan insert and before installing the electrics, switch off all supply circuits, switch of mains fuse and secure it against being accidentally switched back on again. Attach a warning sign in a clearly visible place.

Be sure to observe the relevant regulations for electrical installation; e.g. DIN EN 50110-1. In Germany, particularly observe VDE 0100, with the corresponding sections.

Unit may be energized even when at a standstill and may switch on automatically due to sensors (time delay, humidity etc.). Maintenance and fault finding only permissible when carried out by qualified electricians.

The degree of protection stated on the rating plate is only guaranteed if installation is undertaken correctly and if the connecting cable is correctly guided through the stepped grommet (The grommet must completely enclose the cable sheathing). The fan insert must also be engaged and the housing cover installed.

⚠ WARNING Risk to health if filters are not replaced or if there are no air filters.

Heavily soiled or moist air filters can accumulate harmful substances (mould, germs, etc.). This may also happen if the unit is shut down for an extended period. If the air filter is missing, the unit and air ducts become soiled.

Never operate the unit without air filters.

Only use original filters.

Regularly change air filter when a filter change is indicated (LED or TimeStrip).

If the unit has not been used for a long time, always replace the air filters.

⚠ WARNING Risk of injury when working at heights.

Use appropriate climbing aids (ladders).

Stability should be ensured, if necessary have the ladders steadied by a 2nd person.

Ensure that you are standing securely and cannot lose your balance and that there is no one under the unit.

⚠ WARNING Risk of injury and risk to health from parts which may affect the ventilation system which are added or modified at a later date.

Parts (range hood, air-ventilated fireplace etc.) which are added or modified at a later date may result in health risks and operation which is not permitted. Parts may only be added or modified at a later date if system compatibility is established/ensured by a planning office. If using an exhaust air range hood or air-ventilated fireplace, this must be accepted by a regional master chimney sweep.

⚠ WARNING Risk of injury and health risk in the event of changes or modifications or if components which are not permitted are used.

The unit may only be operated with original components. Changes and modifications to the units are not permitted and release the manufacturer from any guarantee obligations and liability, e. g. **if the housing is drilled at a point which is not permitted.**

⚠ CAUTION Exercise caution when handling packaging materials.

Observe applicable safety and accident prevention requirements.
Store packaging material out of the reach of children (risk of suffocation).

7 System and product information

7.1 Certificates of approval

Certificates of approval on request.

7.2 ER EC covers

i **For ER EC cover components:** Overview of ER EC system [► 4].

- All covers with exhaust air filter. Trouble-free filter change without tools.
- It is possible to rotate the cover by $\pm 5^\circ$ to compensate for housings which have been fitted at an angle.
- ER-AH and ER-AB are barrier-free products. In automatic mode, they switch the fan automatically on and off.

ER-A cover

- Standard model
- Air volume 30 m³/h, 60 m³/h
- Filter change indicator via TimeStrip (→ title page).

i **The TimeStrip for the ER-A standard cover is visibly attached to a location of your choice (e.g. next to the unit) after the filter change interval has elapsed, it can be disposed of in the domestic waste. Do not affix the TimeStrip under the cover. New TimeStrips are included in the scope of delivery of the exchange air filter.**

ER-AK cover

- Comfort version with time module.
- With operating parameters that can be set. Setting via touch operating elements.
- Air volume 30 m³/h, 60 m³/h according to factory setting. Further volumetric flows that can be set:
Base load 20, 30 or 40 m³/h, 60 m³/h or 100 m³/h, full load 20 m³/h, 30 m³/h, 40 m³/h, 60 m³/h or 100 m³/h.
- Start delay, overrun time and interval mode can be set.
- Filter change is indicated by LED.

ER-AH cover

- Model with humidity control and time module (like ER AK).
- Barrier-free product. In automatic mode the units switch on automatically when the humidity value limit is exceeded and switch off again after the humidity has been reduced.
- Filter change is indicated by LED.

ER-AB cover

- Model with motion detector and time module (like ER AK).
- Barrier-free product. In automatic mode the units switch on automatically without a start delay if motion is detected. If no further motion is detected, the units switch off after 2 minutes plus the overrun time.
- Filter change is indicated by LED.

7.3 Covers: Functions

	ER-A	ER-AK	ER-AH	ER-AB
Filter change indicator (6 months) with TimeStrip	•			
Filter change indicator (6 months) with LED		•	•	•
Control with time module		•	•	•
Control with fully automatic humidity control: Extraction takes place automatically if the specified switch-on humidity is exceeded.			•	
Control with motion detector. Full load level after motion is detected (range motion sensor is 5 m)				•
Barrier-free product, as it switches itself on and off automatically			•	•
Not speed controllable	•	•	•	•
Electrical plug connection for quick connection of the ER EC with ER GH housing and ER-AK, ER-AH or ER-AB with the ER EC fan insert.		•	•	•
Air volume – base load 30 m ³ /h for continuous operation	•	•	•	•
Air volume of the base load and full load levels can be set		•	•	•
Additional air volumes that can be set in base load: 20 m ³ /h, 40 m ³ /h, 60 m ³ /h or 100 m ³ /h and in full load: 20 m ³ /h, 30 m ³ /h or 100 m ³ /h		•	•***	•
Full load level on/off via light switch or separate switch. During manual operation (e.g. using light switch), the start delay and overrun time apply.	•	•	•	•
Full load operation (60 m ³ /h) with start delay of 60 seconds and overrun time of 15 minutes, non-adjustable	•			
Full load operation (60 m ³ /h), start delay can be set with 0, 30, 60* , 90 or 120 seconds		•	•	•**
Overrun time of the full load level can be set for 0, 3, 6, 15* , 24 or 30 minutes		•	•	•
Adjustable interval control for ventilating rooms that are not regularly used. Time interval can be set for 0* , 1, 2, 4, 6 or 12 hours, 10 min. operating time per interval		•	•	•
Interval control can be switched off.		•	•	•
Switching option: The base load can be switched on or off by an additional switch (Wiring diagram).	•	•	•	•

* Factory setting: Tolerance of time details max. ± 5 %

** For the ER-AB, the start delay only affects the light switch operation.

*** For ER-AH humidity control in full load 60 m³/h and 100 m³/h can be set.

8 Technical data

8.1 Environmental conditions and operating limits

- Permissible maximum temperature of air medium + 40 °C.

- The air supply to the home must be set up so that virtually no air can flow into the living areas from the kitchen, bathroom or WC.
- A room from which the air is to be extracted must be fitted with a non-closable, free supply air cross section of at least 150 cm², e.g. with Maico MLK door ventilation grille.
- ER EC units have resistance to interference in line with EN 55014-2 (depending on pulse type and an energy factor of 1000 to 4000 V). These values can be exceeded when operating with fluorescent tubes. In this case, additional interference suppression measures (L, C or RC modules, protection diodes, varistors) are required.

8.2 Regulations for operation with fireplaces

Sufficient supply air intake must be ensured during operation with **air-ventilated fireplaces**. The maximum permitted pressure difference per residential unit is 4 Pa.

The unit may only be installed in residential units with air-ventilated fireplaces under the following conditions:

- the evaluation criteria drawn up by the responsible, regional master chimney sweep are met;
- Parallel operation of air-ventilated fireplaces for liquid or gaseous fuels and air-extracting equipment can be prevented using safety devices or
- the extraction of exhaust gas from the air-ventilated fireplaces is monitored by special safety devices. The ventilation system or the fireplaces must be switched off if the equipment is triggered.

8.3 Technical data table

Rated voltage	230 V
Power frequency	50 Hz
Power consumption	
ER EC and ER-A	3/5 W*
ER-AK, ER-AH and ER-AB	2/2.5/ 3/5 /17W*
Degree of protection	IP X5
Sound pressure level L _{WA7}	19 until 52 dB(A)
Mains cable to ER EC, depending on switching variant for ER-A, ER-AK, ER-AH, ER-AB	3 x 1.5 mm ² or 5 x 1.5 mm ²
Weight	
ER GH housing	0.6 kg
ER EC fan insert	0.72 kg
ER-A.. cover	0.6 kg

* Specification according to DIN 18017-3 with an equivalent absorption area of $A_L = 10 \text{ m}^2$

For more technical data → rating plate.

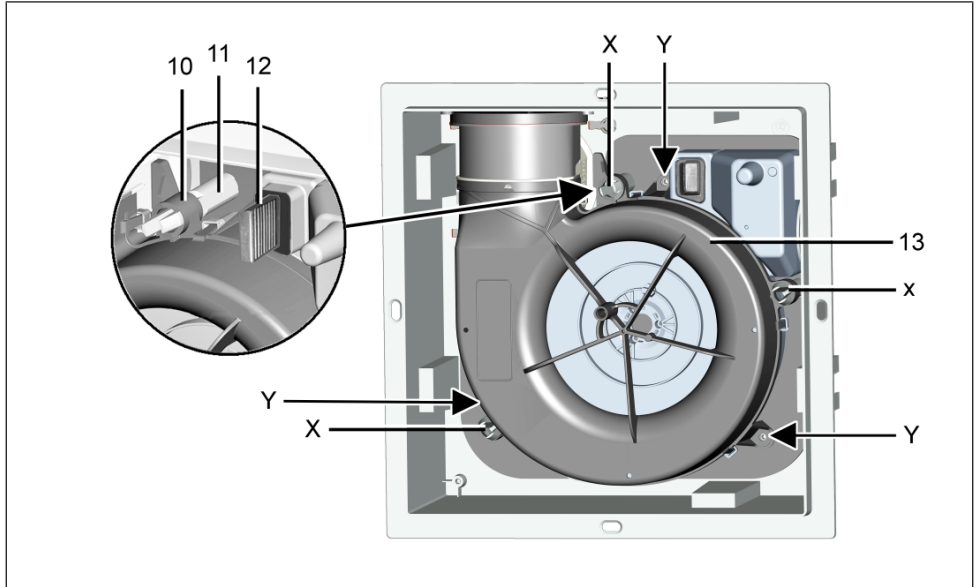
For characteristic curves → www.maico-ventilatoren.com

8.4 Storage

Only store unit horizontally in a suitable, dry room. Ambient temperature – 10 °C to + 60 °C.

Maico accepts no liability for corrosion damage caused by improper storage, e.g. storage in a damp environment.

9 Fan insert



10	Accommodation mount	11	Stud with locking hook
12	Sealing plug	13	Fan insert
X	Locking hook	Y	Fixing holes for alternative screw fixings

The fan insert is delivered separately. Installation takes place in the completion stage. **❗ Operation of the ER EC unit during the shell construction phase is not permissible.**

9.1 Installation of fan insert

1. Before accessing the connection terminals, shut down all supply circuits (switch off mains fuse), secure against being accidentally switched back on and position a visible warning sign.
2. Remove plaster protective cover and clean ER GH housing of construction soiling if necessary.
3. Check wiring diagram sticker for correctness of the ticked fan type.
4. Check ease of movement of shutter. When installed, it must close automatically.
5. Check that connection data matches the technical data on the unit (→ rating plate).

6. Plug the fan insert directly into the 3 studs with locking hooks. Make sure that the fan insert audibly clicks into all 3 snap-fit fasteners.
7. Check for firm seating of the fan insert. To do this, gently pull/press on the fan insert. It must not move.

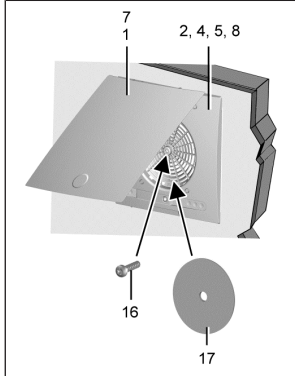
NOTICE Function will be impaired if fan insert is not inserted correctly.

Ensure proper insertion in the locking hooks. If the fan insert is not firmly seated, screw it to the housing at the 3 positions shown in the figure above. Suitable mounting material is to be provided by the customer.

9.2 Commissioning

1. Switch on mains fuse and remove warning sign.
2. Run function test.
3. Check that the unit is running smoothly.
4. During the shell phase, switch off mains fuse, secure against being accidentally switched back on and position a visible warning sign.

9.3 Removing fan insert



1, 7	Cover – upper part	2, 4, 5, 8	Cover – lower part
16	Central screw	17	Air filter

- Before removing the fan insert, switch off all supply circuits (switch off mains fuse), secure against being accidentally switched back on and position a visible warning sign.
- Remove the cover. To do so, swivel the upper part of the cover upwards, remove air filter, unscrew the central screw and carefully remove the entire upper part.
- Press the 3 locking hooks of the stud together and evenly pull the fan insert out of the housing in parallel.

i The degree of protection, according to the rating plate, is only ensured if properly installed (fan insert correctly engaged).

10 Installing the cover ER-A, ER-AK, ER-AH, ER-AB

i It is possible to rotate the cover by $\pm 5^\circ$ to compensate for housings which have been fitted at an angle.

- ER-AK, ER-AH, ER-AB:** Pull off the sealing plugs from the motor board interface (Fan insert [► 10]).
- Plug cover's flat cable with plug into interface connector. Ensure correct connection.

- ER-A, ER-AK, ER-AH, ER-AB:** Screw cover to the fan insert with the central screw. If installing on a wall, ensure that the Maico name is on the bottom right.
- Insert air filter and fold down the upper part of the cover (upper part must audibly engage).
- Run function test: Test all unit functions (over-run time, interval, humidity control etc.).

i For ER-A, no setting functions. For ER-AK, ER-AH, ER-AB, the operating parameters can be changed.

11 Operating the unit

ER EC fans run at **30 m³/h in base load operation** (factory setting).

A light switch or separate switch can be used to switch to **full-load operation with 60 m³/h**.

The unit control is located in the cover: ER-AK, ER-AH and ER-AB have automatic functions with unit parameters that can be set: Covers: Functions [► 8].

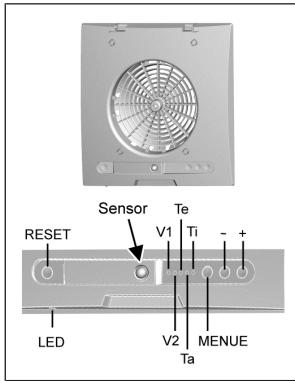
- ER-A: Standard model
 - ER-AK: Comfort model
 - ER-AH: Model with humidity control, barrier-free
 - ER-AB: Model with motion sensor, barrier-free
- For full load operation, a **start delay** of 60 seconds and an **overrun time** of 15 minutes are specified **at the factory**.

i Ensure sufficient supply air during operation.

i The factory settings correspond to DIN 18017-3. If the set parameters are changed when operating with cover ER-AK, ER-AH or ER-AB, function in accordance with DIN 18017-3 is not always ensured. The planer/installer is responsible for operation in accordance with standards.

i In the event of overload (blocking), the fan switches off automatically.

11.1 Settings with touch control unit ER-AK, ER-AH, ER-AB



RESET	Reset filter change interval
LED	Filter change display
Sensor	Humidity sensor (ER-AH) or motion sensor (ER-AB)
V1,V2 ...	Main menu with menu level V1, V2, Te, Ta or Ti
MENU	Select/save operating parameters (set values – menu level)
+ / -	Select menu level/operating parameters
V1	Volumetric flow, basic ventilation [m³/h]
V2	Volumetric flow, nominal ventilation [m³/h] (full load level)
Te	Start delay [in seconds]
Ta	Overrun time [in minutes]
Ti	Interval time [in hours], then air extraction duration 10 minutes.

11.1.1 Filter change function

The air filter must be changed every 6 months, regardless of the operating time.

i After filter change time has expired, the filter change LED blinks (red) every 5 sec.

Before resetting the filter change interval, push the <RESET> button for 2 seconds. As a confirmation, the filter change LED flashes 1x briefly. A new RESET is not possible for the next 6 months.

11.1.2 Changing setting parameters

	LEDs					
	1 flashes	1	2	3	4	5
V1		20	30	40	60*	100*
V2		20 (60)**	30 (100)*	40	60	100
Te	0	30	60	90	120	
Ta	0	3	6	15	24	30
Ti	0	1	2	4	6	12

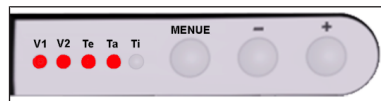
* Additional setting values for ER-AK, ER-AB

** Setting values for ER-AH

- **Main menu:** Menu levels V1, V2, Te, Ta and Ti
- **Submenus** (Parameter menus): LEDs 1 to 5 show the selected setting values.
- **Bold** = factory setting
- To select and save the setting value (parameter value), press the <MENU> button.

Operating concept

1. Press <MENU> button for 2 seconds.
⇒ Main menu V1 is selected, the 1st LED is lit up red.



2. With the button <+> or <->, select the menu level V1, V2, Te, Ta or Ti, display with LEDs (ascending/descending). The figure shows menu level Ta.
3. Press the button <MENU> to change parameter level (LED flashes briefly 2x).
⇒ The last set value is shown (the corresponding LED is lit up constantly*). Here, the parameters of the respective level are available to you. Example Ta: 0, 3, 6, **15**, 24 or 30 minutes (→ Table).
* To switch off the Te start delay, Ta overrun time or Ti interval time, push the <-> button until the **V1 LED flashes**.
4. Press <MENU> button for 2 seconds.
⇒ The setting is saved. **All 5 LEDs switch off**.

Adjustment hints

- **Ti interval operation:** The unit is switched off during the interval time. Then, the unit runs for 10 minutes with nominal ventilation (full load level) V2 or in the set level 40 m³/h, 60 m³/h or 100 m³/h.
- Settings menu is automatically exited after 60 seconds without pushing buttons.

11.1.3 ER-AH automatic humidity function

i The control continuously checks the humidity during permanent base load. If the unit is operated without permanent base load, the unit starts at reduced speed (base load 20 m³/h) every 2 minutes for 30 seconds and measures the relative humidity.

i The start delay is deactivated with the automatic humidity function turned on.

Once the unit is installed, it adjusts to the room humidity prevailing at that time (relative humidity). This humidity value is saved as the first reference value. The reference value does not have to be specified manually.

If the relative humidity falls below the reference value during operation, the newly established reference value is saved. The lowest possible reference value is 45 % relative humidity.

If the room humidity rises quickly, the unit is adjusted upwards in a continuously variable manner (depending on the humidity) to match the humidity. The maximum flow rate at 100 % r. h. is 40 m³/h, 60 m³/h or 100 m³/h, depending on the setting of V2.

If the humidity falls below the reference value, overrun operation mode starts with the set overrun time. The current reference value is then saved.

If the humidity does not fall below the reference value within 60 minutes, the unit switches to the set overrun mode and then switches off.

In the case of **Light on**, the unit starts up. If the light is switched off, the unit continues to run until the remaining overrun time has passed. The automatic humidity function is then assigned maximum priority again and controls the unit as described above.

Notes

- ER EC units can also be operated using a light switch during operation with automatic humidity function.
- The interval operation is deactivated during the humidity operating mode.

- Overrun time:

- A set overrun time of 0 minutes is only valid for manual function with a light switch.
- For operation with automatic humidity function, the minimum overrun time is 3 minutes.
- For settings > 0 minutes, the overrun time is the same for manual (light switch) and humidity operating modes.

- Volumetric flows that can be set

V1: 20, 30, 40 m³/h

V2: 40, 60, 100 m³/h

see Changing setting parameters ▶ 12]

11.1.4 ER AB motion detector function

If a movement is detected/recognised, the unit switches to full load level automatically without a start delay.

If no movement is registered, the overrun delay starts. Then, the unit switches off.

12 Cleaning and maintenance

12.1 Maintaining the unit

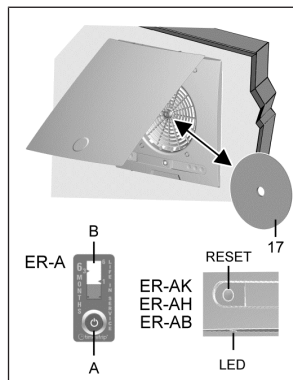
The unit is practically maintenance-free. Only the air filter needs replacing every 6 months at the latest, depending on the degree of soiling.

NOTICE The unit will be damaged if incorrect cleaning agent is used.

Do not use aggressive cleaning agents.

1. Clean cover with dry cloth only.
2. If the cover is very dirty, remove it and clean with water.

12.2 Filter change



A	Activation button	B	Bar indicator
17	Air filter		

Change the air filter when the following condition applies:

- ER-A: Bar indicator is filled completely (red).
- ER-AK, ER-AH, ER-AB: LED on the lower side of the housing flashes red.

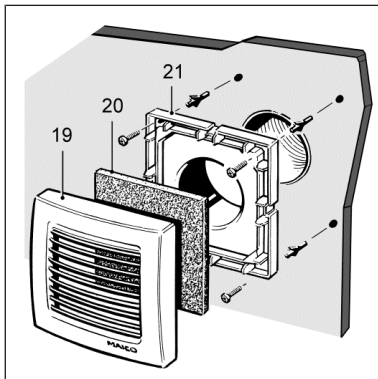
ER-A

1. Change air filter.
 2. Remove used TimeStrip.
 3. Stick on a new TimeStrip.
 4. Press activation button.
- ⇒ The red dye in the interior of the bar is released. The bar indicator first fills slightly. Within the next 6 months, the bar indicator will rise to the upper edge (indicator value 6).

ER-A, ER-AH, ER-AB

1. Change air filter.
 2. Press <RESET> button for 2 seconds.
- ⇒ The filter change interval is reset. The LED flashes briefly 1x.

12.3 Filter change, second room



19	Protective grille	20	Filter mat
21	Adapter		

i Filter change interval every 6 months, depending on the degree of soiling.

1. Pull the protective grille forwards.
2. Take out filter mat and replace it.
3. Insert new filter mat into protective grille, then press protective grille into correct position on adapter until it audibly engages.

i Filter mats ZRF: Pack of 5, filter class G2 in accordance with EN 779, art. no. 0093.0923

13 Fault rectification

i Fault finding and repairs only permissible when carried out by qualified electricians.

Fault	Cause → Measure
Fan performance inadequate.	Dirty filter. → Replace filter. Locking hook not engaged. → Engage fan insert correctly. Incorrect duct diameter. → Check diameter of the main duct. Supply air cross section is too small. → Increase the supply air cross section.
No fan overrun.	Connect the fan as per the wiring diagram.
Fan doesn't start up.	Check whether the fan insert is correctly inserted.
Fan is too loud.	Dirty filter. → Replace filter. Fan insert incorrectly installed. → Fit fan insert correctly.
The main duct is dimensioned too small.	Re-calculate pressure losses.
Additional consumers connected to terminal 4.	Damage to the unit if connected incorrectly. Do not connect additional consumers to terminal 4. The unit may only be connected according to the wiring diagrams (Wiring diagram).

If the fault persists or reoccurs: Disconnect the unit completely from the power supply. Let a qualified electrician determine the cause of the fault and eliminate it. If you have any question relating to troubleshooting: Service: +49 7720 6940.

14 Spare parts

i Spare parts may only be sourced from and fitted by a specialist installer.

Designation	Article no.
ABSK ER GH exhaust socket	E059.2046.0000
VM shutter UP plastic	E093.0608.0000
Air outlet element on side ER EC	E059.2053.0000
Air outlet element at rear ER EC	E059.2054.0000
Cover upper part A/AK/AH	E059.2047.9100
Cover upper part AB	E059.2047.9000

In case of questions, please contact:

Maico Elektroapparate-Fabrik GmbH
 Steinbeisstraße 20
 78056 Villingen-Schwenningen, Deutschland
 Tel. +49 7720 694 445
 Fax +49 7720 694 175
 E-mail: ersatzteilservice@maico.de

i Spare parts can be ordered at www.shop.maico-ventilatoren.com.



15 System and accessory components

Air filter

ZF EC+ replacement air filter for ER-A

Article no. 0093.0610

- 5x ZF EC+ replacement air filter (filter class G2)
- 5x filter change indicator (TimeStrip)

Large pack of ZF EC+ replacement air filters for ER-A

Article no. 0093.0611

- 100x ZF EC+ replacement air filters (filter class G2)
- 100x filter change indicator (TimeStrip)

ZF EC replacement air filter for ER-AK, ER-AH and ER-AB

Article no. 0093.0758

- 5x ZF EC replacement air filters (filter class G2)

Large pack of ZF EC replacement air filters for ER-AK, ER-AH and ER-AB

Article no. 0093.0759

- 100x ZF EC replacement air filters (filter class G2)

ZRF replacement air filter for ER-ZR second room connection set

Article no. 0093.0923

- 5x replacement air filters for internal grille ER-ZR second room extraction (filter class G2)

ZF ECD replacement permanent filter for ER-AK, ER-AH and ER-AB

Article no. 0093.1561

- 2x replacement permanent filters for covers of the ER EC fan unit (filter class G2)

ZF ECD+ replacement permanent filter for ER-A

Article no. 0093.1562

- 2x replacement permanent filters for covers of ER EC fan unit (filter class G2)
- 10x filter change indicator (TimeStrip)

16 Dismantling

i Dismantling may only be undertaken by a **qualified electrician**: Specialist installer qualifications [► 5].

17 Environmentally responsible disposal

The ventilation unit and the packaging contain parts that can be recycled, and should not end up in the domestic waste.

Dispose of the **packaging material** in an environmentally-friendly way, in compliance with the regulations valid in the country where you are.

Dispose of the **air filter** in an environmentally-friendly way, in compliance with the regulations valid in the country where you are.

At the end of its service life, dispose of the **unit** in an environmentally-friendly way, in compliance with the regulations valid in the country where you are.

Maico Elektroapparate-Fabrik GmbH
Steinbeisstr. 20
78056 Villingen-Schwenningen
Deutschland
Service +49 7720 6940
info@maico.de