

COMPACT VENTILATION UNITS LG 350 & LG 450



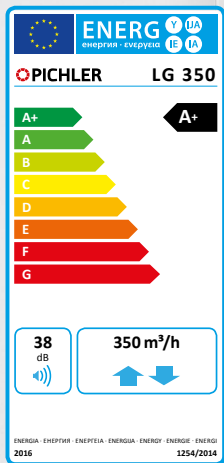
Z-51.3-428



EN 13141-7:2011



EU-Regulation
1253/2014



For details – see the brochure



**COMFORT
VENTILATION**



 **PICHLER**

Systematic Ventilation.

Product description

The compact ventilation unit LG 350 and LG 450 comprise a compact thermally insulated EPP housing without thermal bridges, of galvanized sheet steel, externally powder-coated in RAL 9003. They have a highly efficient heat recovery system with an air/air counterflow heat exchanger made of recyclable plastic, with automatic 100 % bypass and energy-saving radial fans driven by the latest EC motor

technology. The integrated air flow rate measurement guarantees balanced operation on the supply and extract air sides. An expansion option to implement constant pressure control is also optionally available. The standard air filters used are of filter class ODA ISO ePM1 70 % for the outdoor air and of filter class ETA ISO Coarse 80 % for the extract air. The operation is simple and intuitive via the MINI or TOUCH (optional)

operating control unit and with connection to the Internet (LAN connection) via the Pichler app. The unit can be optionally expanded by adding CO₂, humidity and indoor temperature sensors, which allows for demand-controlled ventilation operation. The compact ventilation units LG 350 and LG 450 are suitable for floor or wall mounting (removable adjustable foot brackets) in frost-free rooms.

Area of application

The compact ventilation unit LG 350 and LG 450 are used for the controlled mechanical supply and extract air ventilation of larger residential houses,

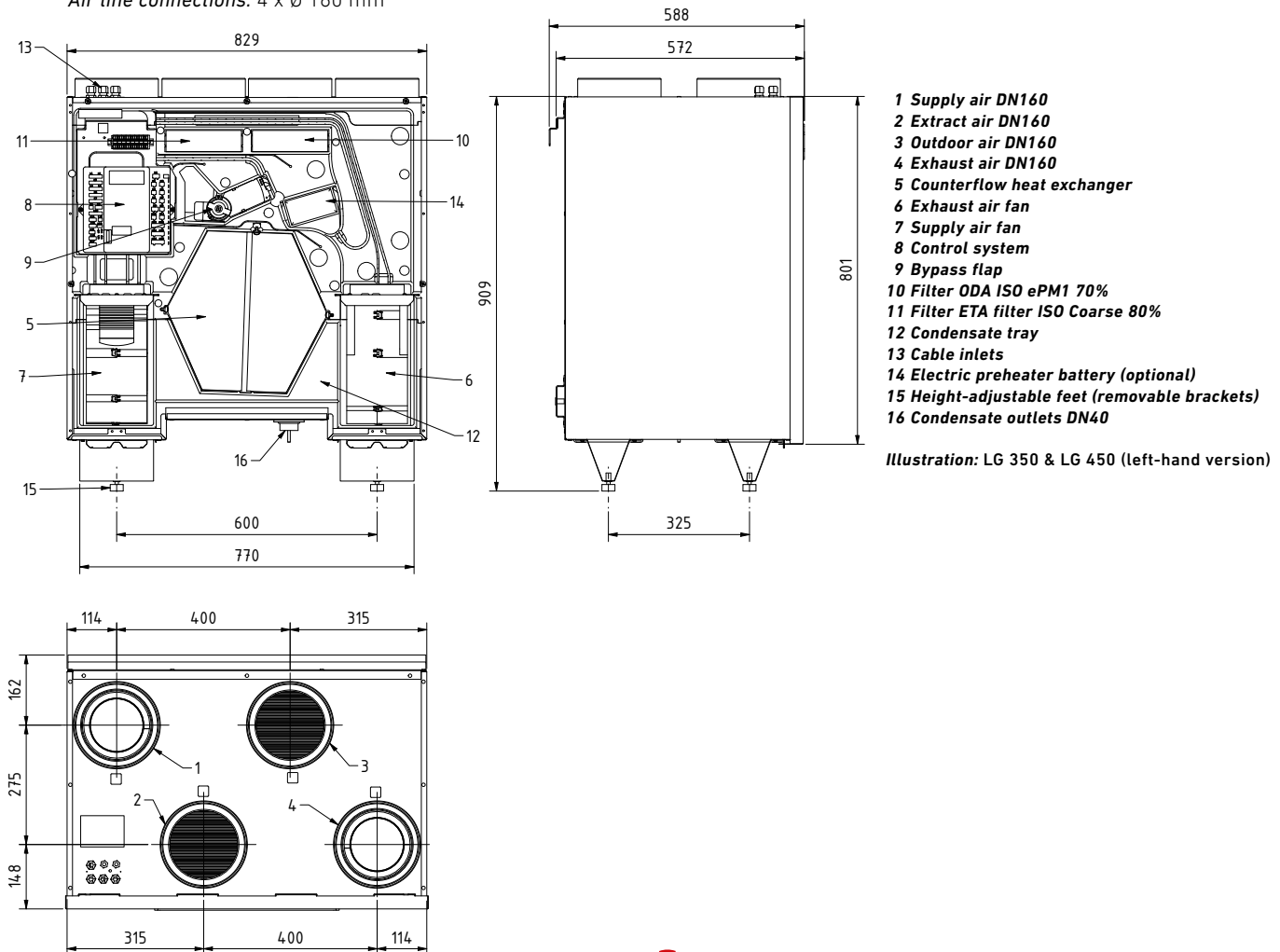
offices and similar applications. The range of use extends fundamentally to living spaces from approx. 100 m² to approx. 350 m² in passive or low

energy structures, with an adjustable air volume flow of up to 350 m³/h (LG 350) or 450 m³/h (LG 450).

Layout sketch (standing or wall-mounted installation, left-hand version)

Dimensions: (W x H x D) 829 x 950 x 571 mm

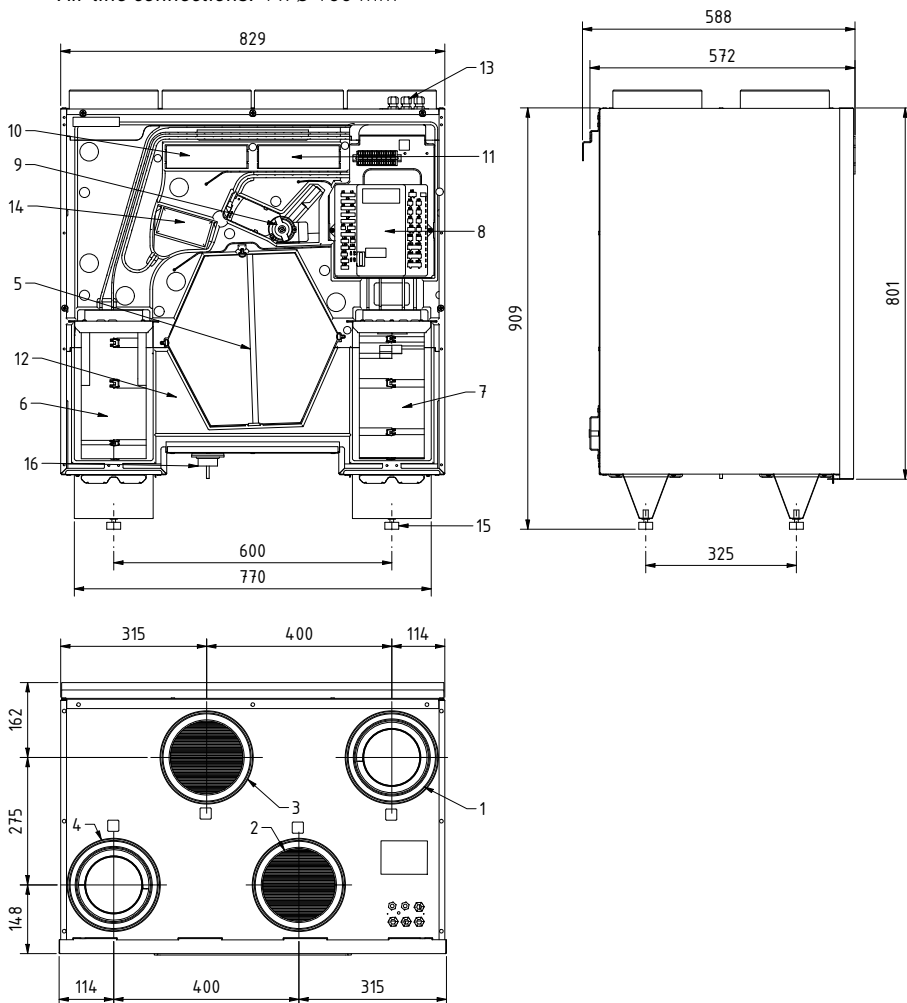
Air line connections: 4 x Ø 160 mm



Layout sketch (standing or wall-mounted installation, right-hand version)

Dimensions: (W x H x D) 829 x 950 x 571 mm

Air line connections: 4 x Ø 160 mm



- 1 Supply air DN160
- 2 Extract air DN160
- 3 Outdoor air DN160
- 4 Exhaust air DN160
- 5 Counterflow heat exchanger
- 6 Exhaust air fan
- 7 Supply air fan
- 8 Control system
- 9 Bypass flap
- 10 Filter ODA ISO ePM1 70%
- 11 Filter ETA filter ISO Coarse 80%
- 12 Condensate tray
- 13 Cable inlets
- 14 Electric preheater battery (optional)
- 15 Height-adjustable feet (removable brackets)
- 16 Condensate outlets DN40





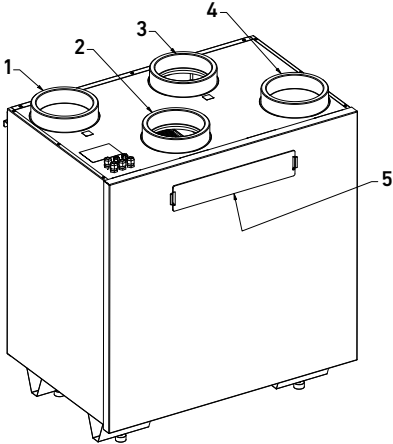
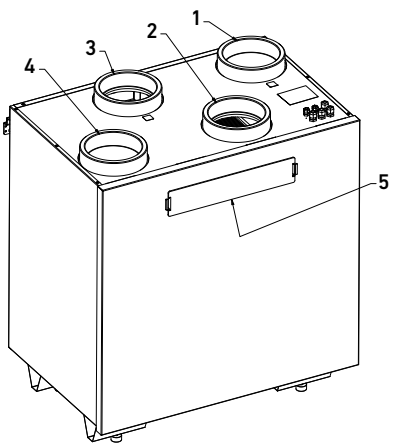
Illustration: LG 350 & LG 450 (right-hand version)



Versions





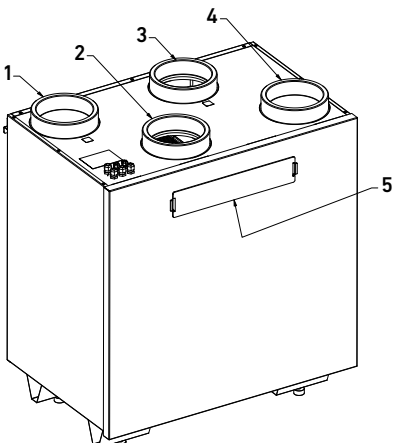
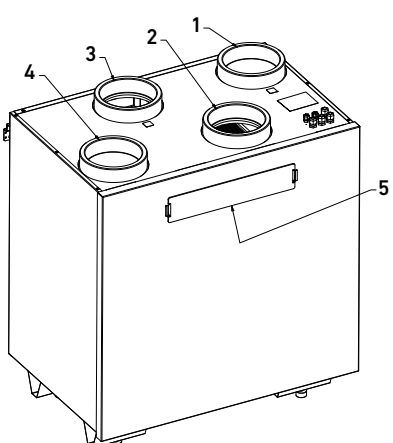
LG 350

| Standing or wall-mounted LG 350 | Left-hand version | Right-hand version |
|--|-------------------|--------------------|
| Item no. without a preheater battery | 08LG350L | 08LG350R |
| Item no. with an integrated preheater battery | 08LG350LV | 08LG350RV |
| Item no. with enthalpy exchanger | 08LG350LF | 08LG350RF |
| Item no. with enthalpy exchanger and an integrated preheater battery | 08LG350LFV | 08LG350RFV |

| | | |
|---|---|---|
|  1 Supply air  2 Extract air  3 Outdoor air  4 Exhaust air 5 Filter revision |  |  |
|---|---|---|

LG 450

| Standing or wall-mounted LG 450 | Left-hand version | Right-hand version |
|--|-------------------|--------------------|
| Item no. without a preheater battery | 08LG450L | 08LG450R |
| Item no. with an integrated preheater battery | 08LG450LV | 08LG450RV |
| Item no. with enthalpy exchanger | 08LG450LF | 08LG450RF |
| Item no. with enthalpy exchanger and an integrated preheater battery | 08LG450LFV | 08LG450RFV |

| | | |
|---|---|---|
|  1 Supply air  2 Extract air  3 Outdoor air  4 Exhaust air 5 Filter revision |  |  |
|---|---|---|



Overview energy efficiency classes

| | LG 350 (V) | LG 350 F (V) | LG 450 (V) | LG 450 F (V) |
|------------------------|------------|--------------|------------|--------------|
| Manual control | | | | |
| Clock control | | | | |
| Central demand control | | | | |
| Local demand control | | | | |
| | | | | |

Download the product fiches from: www.pichlerluft.at





Technical data

| Equipment type | LG 350 (V) | LG 350 F (V) | LG 450 (V) | LG 450 F (V) |
|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Heat exchanger | Standard | Enthalpy exchanger | Standard | Enthalpy exchanger |
| Air volume flow min. - max. (adjustable in steps of 5 m ³ /h) | 50 - 350 m ³ /h | 50 - 350 m ³ /h | 50 - 450 m ³ /h | 50 - 450 m ³ /h |

| Characteristic values in compliance with EN13141-7:2010 | | | | |
|---|------------------------|------------------------|------------------------|------------------------|
| Temperature ratio $\eta_{\theta,SU}^1$ | 93 % | 81 % | 91 % | 79 % |
| Temperature ratio $\eta_{\theta,EX}^1$ | 86 % | 75 % | 84 % | 71 % |
| Specific input power SIP ¹ | 0,18 Wh/m ³ | 0,16 Wh/m ³ | 0,22 Wh/m ³ | 0,21 Wh/m ³ |
| Specific input power SIP ² | 0,19 Wh/m ³ | 0,17 Wh/m ³ | 0,24 Wh/m ³ | 0,21 Wh/m ³ |
| External leakage | < 0,50 % | | < 0,40 % | |
| Internal leakage | < 0,50 % | | < 0,40 % | |

| Characteristic values in compliance with PHI criteria | | | | |
|---|----------------------------|------------------------|----------------------------|------------------------|
| Certified range of application | 71 - 277 m ³ /h | | 71 - 350 m ³ /h | |
| Heat provision level $\eta_{\theta,HR}$ Application range in compliance with PHI | 90 % | 85 % | 89 % | 81 % |
| Moisture recovery | - | 76 % | - | 76 % |
| Power efficiency η_{elec} | 0,22 Wh/m ³ | 0,22 Wh/m ³ | 0,25 Wh/m ³ | 0,24 Wh/m ³ |
| Power consumption in standby operation | 3 W | | | |

| Classification of air filters in accordance with EN ISO 16890 | |
|--|----------------|
|  (Filter ODA (Outdoor air)) | ISO ePM1 70% |
|  Filter ETA (Extract air) | ISO Coarse 80% |

| Operating conditions | |
|---|---------------|
| Permissible ambient temperature (place of installation) | +5 to +35 °C |
| Permissible operating temperature (outside air) | -15 to +35 °C |

| Electrical system | |
|------------------------|-------------------------------|
| Electrical connection | 230 V / 1 ~ / 50 Hz / 16 A |
| IP classification | IP40 with connected air ducts |
| Max. power without VHR | 180 W |
| Max. power with VHR | 2050 W |

| Materials | |
|--------------------|--|
| Inner part | EPP and galvanised sheet steel |
| Housing | Galvanised sheet steel and powder-coated in RAL 9003 |
| Heat exchanger | Polystyrene with flame protection grid |
| Enthalpy exchanger | Polymer membrane |

| Housing | |
|-------------------------------------|---|
| Air duct connections | 4 x Ø 160 mm (for steel nipples safe or EPP sleeve DN160) |
| Condensate drainage | AG 1 1/4" |
| Dimensions (W x H x D) | 829 x 950 x 571 mm |
| Weight without optional accessories | approx. 56 kg |

¹with 70 % of the max. volume flow

²according to the calculation basis in compliance with prEN13171-7: 2018 based on air temperature 20 °C



SOUND DATA

| LG 350 | | Pos. | Housing emission | | | Outdoor air connecting piece | | | Supply air connecting piece | | | Exhaust air connecting piece | | | Extract air connecting piece | | |
|-----------------|--------------------------------|----------------------|------------------|-----------|-----------|------------------------------|-----------|-----------|-----------------------------|-----------|-----------|------------------------------|-----------|-----------|------------------------------|-----------|-----------|
| | | m ³ /h | 245 | 277 | 350 | 245 | 277 | 350 | 245 | 277 | 350 | 245 | 277 | 350 | 245 | 277 | 350 |
| | | Pa | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 |
| Measuring point | 125 Hz | L _w in dB | 37 | 38 | 41 | 36 | 37 | 39 | 45 | 47 | 50 | 41 | 49 | 51 | 37 | 39 | 44 |
| | 250 Hz | | 46 | 49 | 50 | 43 | 43 | 41 | 55 | 55 | 57 | 51 | 54 | 56 | 43 | 43 | 43 |
| | 500 Hz | | 31 | 34 | 38 | 26 | 30 | 34 | 43 | 46 | 49 | 42 | 45 | 49 | 25 | 28 | 32 |
| | 1000 Hz | | 27 | 30 | 34 | 23 | 28 | 30 | 40 | 44 | 47 | 40 | 44 | 48 | 23 | 26 | 30 |
| | 2000 Hz | | 21 | 25 | 30 | 17 | 21 | 26 | 42 | 45 | 50 | 41 | 46 | 50 | 18 | 21 | 26 |
| | 4000 Hz | | < 15 | < 15 | 19 | < 15 | < 15 | < 15 | 33 | 38 | 44 | 32 | 38 | 44 | < 15 | < 15 | 17 |
| | 8000 Hz | | < 15 | < 15 | < 15 | < 15 | < 15 | < 15 | 23 | 29 | 36 | 21 | 28 | 37 | < 15 | < 15 | < 15 |
| | Total L _{WA} in dB(A) | | 38 | 41 | 45 | 34 | 36 | 37 | 49 | 52 | 56 | 47 | 51 | 55 | 33 | 36 | 38 |

Remark: Tolerances for sound data ± 2 dB, measured in compliance with EN ISO 9614-2

| LG 450 | | Pos. | Housing emission | | | Outdoor air connecting piece | | | Supply air connecting piece | | | Exhaust air connecting piece | | | Extract air connecting piece | | |
|-----------------|--------------------------------|----------------------|------------------|-----------|-----------|------------------------------|-----------|-----------|-----------------------------|-----------|-----------|------------------------------|-----------|-----------|------------------------------|-----------|-----------|
| | | m ³ /h | 315 | 350 | 450 | 315 | 350 | 450 | 315 | 350 | 450 | 315 | 350 | 450 | 315 | 350 | 450 |
| | | Pa | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 | 50 | 100 | 100 |
| Measuring point | 125 Hz | L _w in dB | 41 | 43 | 44 | 39 | 44 | 47 | 49 | 51 | 51 | 51 | 52 | 60 | 44 | 44 | 47 |
| | 250 Hz | | 50 | 51 | 50 | 43 | 42 | 44 | 56 | 57 | 61 | 53 | 56 | 61 | 44 | 43 | 45 |
| | 500 Hz | | 37 | 40 | 52 | 32 | 35 | 43 | 48 | 50 | 70 | 48 | 49 | 64 | 31 | 33 | 41 |
| | 1000 Hz | | 32 | 33 | 40 | 30 | 32 | 36 | 45 | 48 | 52 | 46 | 48 | 55 | 30 | 31 | 36 |
| | 2000 Hz | | 27 | 30 | 35 | 25 | 28 | 32 | 48 | 50 | 55 | 48 | 51 | 56 | 25 | 27 | 32 |
| | 4000 Hz | | < 15 | 19 | 26 | < 15 | 16 | 22 | 40 | 44 | 51 | 41 | 44 | 52 | 16 | 19 | 24 |
| | 8000 Hz | | < 15 | < 15 | < 15 | < 15 | < 15 | < 15 | 32 | 37 | 46 | 33 | 38 | 47 | < 15 | < 15 | 17 |
| | Total L _{WA} in dB(A) | | 43 | 45 | 49 | 37 | 38 | 43 | 53 | 56 | 67 | 53 | 56 | 63 | 37 | 39 | 42 |

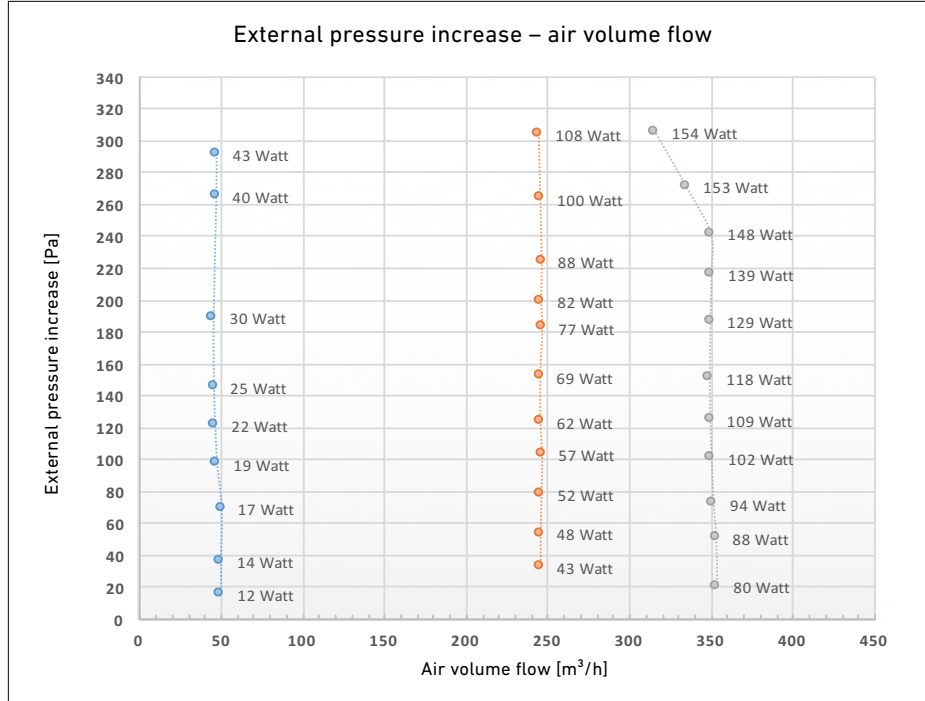
Remark: Tolerances for sound data ± 2 dB, measured in compliance with EN ISO 9614-2



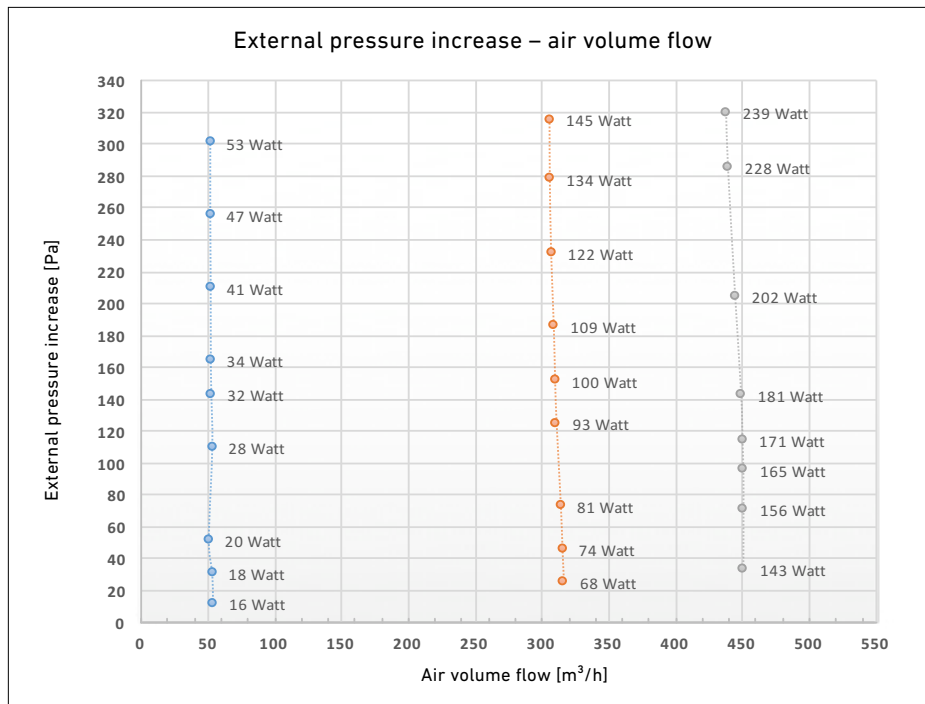
Characteristic curve – external pressure increase – air volume flow rate

The characteristic curves shown are applicable to unit type with outdoor air (filter ODA ISO ePM1 70%) and extract air filter (filter ETA ISO Coarse 80%) and with an electrical pre-heater

battery. The total power specified takes the power consumption for the two fans in the supply air and exhaust air as well as the power consumption of the controller into consideration.



LG 350 V compact ventilation unit



LG 450 V compact ventilation unit



Technical specifications LG 350 (V)

PASSIVE HOUSE CERTIFIED IN ACCORDANCE WITH PHI CRITERIA

Degree of heat provision: $\eta_{\text{eff. t, WRG}} = 90 \%$

Comfort criterion: $T_{\text{SUP}} = +16,5 \text{ °C}$ bei $T_{\text{ODA}} = -10 \text{ °C}$

Flow efficiency: $\eta_{\text{elec.}} = 0,22 \text{ Wh/m}^3$



INSPECTED ACCORDING TO DIN EN 13141-7:2011

Technical specifications LG 350 F (V) with moisture recovery

PASSIVE HOUSE CERTIFIED IN ACCORDANCE WITH PHI CRITERIA

Degree of heat provision: $\eta_{\text{eff. t, WRG}} = 85 \%$

Average moisture ratio: $\eta_x = 0,76$

Comfort criterion: $T_{\text{SUP}} = +16,5 \text{ °C}$ bei $T_{\text{ODA}} = -10 \text{ °C}$

Flow efficiency: $\eta_{\text{elec.}} = 0,22 \text{ Wh/m}^3$



INSPECTED ACCORDING TO DIN EN 13141-7:2011

Technical specifications LG 450 (V)

PASSIVE HOUSE CERTIFIED IN ACCORDANCE WITH PHI CRITERIA

Degree of heat provision: $\eta_{\text{eff. t, WRG}} = 89 \%$

Comfort criterion: $T_{\text{SUP}} = +16,5 \text{ °C}$ bei $T_{\text{ODA}} = -10 \text{ °C}$

Flow efficiency: $\eta_{\text{elec.}} = 0,25 \text{ Wh/m}^3$



INSPECTED ACCORDING TO DIN EN 13141-7:2011

Technical specifications LG 450 F (V) with moisture recovery

PASSIVE HOUSE CERTIFIED IN ACCORDANCE WITH PHI CRITERIA

Degree of heat provision: $\eta_{\text{eff. t, WRG}} = 81 \%$

Average moisture ratio: $\eta_x = 0,76$

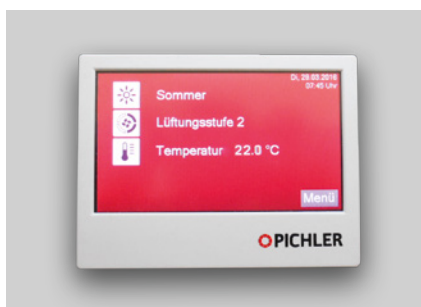
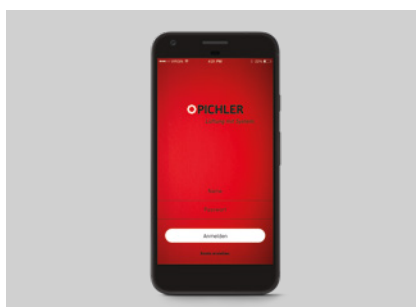
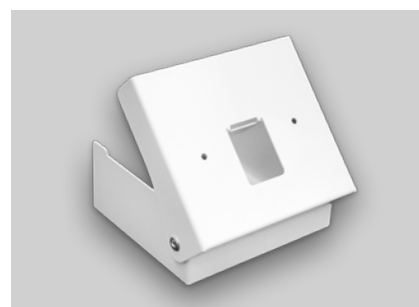
Comfort criterion: $T_{\text{SUP}} = +16,5 \text{ °C}$ bei $T_{\text{ODA}} = -10 \text{ °C}$

Flow efficiency: $\eta_{\text{elec.}} = 0,24 \text{ Wh/m}^3$



INSPECTED ACCORDING TO DIN EN 13141-7:2011



**TOUCH operating control unit****Pichler-App****Swiveling console**

Operation

BYPASS FOR HEAT EXCHANGER

The 100% bypass is controlled based on the measured exhaust air and outdoor temperatures. In this way, the heat exchanger is bypassed in summer and the cool outdoor air can be blown directly into the living area, or via an existing ground collector.

CONTROLLER

Scalable expansion of the control system is possible, from low-cost to high-end. Further options include connections to an external building control system using Modbus RTU and sensors to monitor room air quality.

Ventilation unit settings are made via a control unit. A MINI operating unit as a compact flush operating unit or optional a TOUCH operating unit as a surface-mounted version can be chosen to control and operate the ventilation unit.

Connection to a building automation via integrated Modbus RTU interface. Optionally, a gateway for the KNX bus system is also available.

MINI CONTROL UNIT

The MINI control unit is used to control the ventilation unit. It is easy to operate and enables the configuration of ventilation levels, switching between summer and winter mode, setting of basic volume flow, etc. In addition, the control unit displays operating status and any faults that may occur. The USB interface on the operating unit is fitted as standard. Installation is on a flush-mounted box (not included in delivery).

TOUCH CONTROL UNIT

The control unit with a 4.3" colour-touch-display is used to control the ventilation unit. Operation is simple and intuitive. The most important settings and readings are very easy to make. The user-friendly handling provides for automatic or manual setting of the ventilation levels. In Automatic mode, the system is controlled by programmable time programmes, closed-loop humidity or CO₂ controls and works in a fully

automated fashion, whereas in manual mode ventilation levels may, for instance, be individually increased (boost ventilation). Further functions are the changeover function between summer and winter operation as well as the setting for the volume flows. The operating mode, temperatures, a required filter change and possible faults are displayed in plain text. The control unit also has an integrated temperature sensor, which can be used as a room temperature sensor when needed. Installation is on a flush-mounted box (not included in delivery).

Advantages of controlling:

- Easy display of current operating settings
- Individually adjustable air volumes
- Time and weekly programs (TOUCH only)

| Item | Item number |
|---|----------------|
| STANDARD: operating control unit MINI for LG 350 and 450 | 08LGMINI350450 |
| OPTIONAL: operating control unit TOUCH for LG 350 and LG 450 | 08LG350450T |
| OPTIONAL: Swivel bracket for attaching the TOUCH or MINI control unit directly to the ventilation unit | 40LG350BG142 |

EASY OPERATION WITH THE PICHLER APP

User-friendly: the compact ventilation unit can be operated easily with our free smartphone app for Android and iOS, whether you are at home or out and about.

REMOTE ACCESS / PICHLER CONNECT

Operational safety: Remote access facilitates a prompt response with minimal effort for the Pichler customer service in the event of a malfunction.





CO₂ sensor



Room temperature, humidity and CO₂ sensor with Modbus communication



External dual pressure sensor set

Accessories

SPARE FILTER

Will ensure perfect hygiene and air quality given regular replacement, also proper functionality and efficient operation of the equipment.

| Item | Item number |
|---|--------------|
| Filter ETA ISO Coarse 80% (Extract air) | 40LG0500000A |
| Filter ODA ISO ePM1 70% (Outdoor air) | 40LG0500001A |

EXTERNAL DUAL PRESSURE SENSOR SET

Pressure sensors for external mounting including a connection kit. Serves to ensure constant pressure control of the ventilation unit.

| Item | Item number |
|---|-------------------|
| External dual pressure sensor set with Modbus communication | 08LGD RUCKDUALSET |

DEMAND-ORIENTED VENTILATION CONTROL

CO₂, humidity and room temperature sensors for demand-oriented ventilation control. The ventilation unit will automatically increase or reduce the air volumes depending on the quality of the air in the room. The sensor in the surface-mounted housing is suitable for wall mounting.

Colour: white

Dimensions: W x H x D = 85 x 85 x 35 mm

Ambient temperature: 10-50°C

Measuring range: 0-2000 ppm

Sensor supply voltage: 24V AC/DC

Control signal: 0-10 V

| Item | Item number |
|------------------------|-------------|
| CO ₂ sensor | 07RCO248330 |

Colour: white

Dimensions: W x H x D = 85 x 85 x 35 mm

Ambient temperature: 0-60° C (no condensation)

Measuring range: 0-100% RH

Sensor supply voltage: 24V AC/DC

Control signal: 0-10 V

| Item | Item number |
|-----------------|-------------|
| Humidity sensor | 07RHF49360 |

Type of room temperature sensor: NTC 10k

Dimensions: W x H x D = 85 x 85 x 35 mm

| Item | Artikelnummer |
|-------------------------|---------------|
| Room temperature sensor | 07RTF49357 |

Colour: white

Dimensions: W x H x D = 70 x 70 x 30 mm

Measuring range: 400-2000 ppm, accuracy: ±(30 ppm + 3 %)

Measuring range temperature: 0-45°C, accuracy: ±3 %

Measuring range: 11-89 % RH, accuracy: ±3 %

Sensor supply voltage: 12-24 VDC

| Item | Item number |
|---|----------------|
| Room temperature, humidity and CO ₂ sensor with Modbus communication (Modbus-Cable not included in delivery) | 07RTRHCO248401 |

WIRELESS ROOM TEMPERATURE, HUMIDITY AND/OR CO₂ SENSORS WITH MODBUS/MIWI COMMUNICATION FOR DEMAND-BASED VENTILATION CONTROL

The Modbus/MIWI gateway is a receiver for wireless sensors and communicates via 0-10V output or via Modbus. The receiver is delivered in an external box for connection to the ventilation unit. The receiver should be installed outside the ventilation unit. This provides the best signal reception from the wireless sensors. The measurements of the wireless sensors are sent to the receiver via MiWi. Under normal circumstances, the range is approx. 20 m, which can be extended by setting up repeaters. The sensor and network number can be easily set with the DIP switch under the lid. If a 0-10V signal is used, only one sensor's signal can be received. Up to 6 wireless sensors can be connected via Modbus.





Modbus/MiWi gateway



Wireless room temperature and humidity sensor with/without CO₂ for surface installation



MODBUS/KNX-Gateway

Accessories

MODBUS/MIWI GATEWAY

- *Dimensions:* W x H x D = 138 x 64 x 30 mm
- *Number of controllable wireless sensors via Modbus output:* up to 32
- *Number of controllable radio sensors via 0-10V output:* 1
- *Number of 0-10V outputs:* 4
- *Additional interface:* MiWi Mesh 868MHz
- *IP protection class:* IP 20
- *Supply voltage:* 15 – 24 VDC
- *Ambient temperature during operation:* 0 – 40 °C

| Item | Item number |
|---------------------|---------------|
| Modbus/MiWi gateway | 07GATEWAYMIWI |

WIRELESS ROOM TEMPERATURE AND HUMIDITY SENSOR FOR SURFACE INSTALLATION

- *Dimensions:* W x H x D = 85 x 85 x 30 mm
- *Supply voltage:* Battery 3 x 1.5V alkaline AA
- *Battery life:* up to 4 years
- *Temperature sensor accuracy:* 2%
Measurement range: 0 – 40 °C
- *Humidity sensor accuracy:* 4%
Measurement range: 0 – 80 % RF
- *IP protection class:* IP 20
- *Ambient temperature during operation:* 0 – 40 °C

| Item | Item number |
|---|-------------|
| Wireless room temperature, humidity and CO ₂ sensor for surface installation | 07MIWIRTRH |

WIRELESS ROOM TEMPERATURE, HUMIDITY AND CO₂ SENSOR FOR SURFACE INSTALLATION

- *Dimensions:* W x H x D = 85 x 85 x 30 mm
- *Supply voltage:* Battery 3 x 1.5V alkaline AA
- *Battery life:* up to 2 years
- *Temperature sensor accuracy:* 2%
Measurement range: 0 – 40 °C
- *Humidity sensor accuracy:* 4%
Measurement range: 0 – 80% RH
- *CO₂ sensor accuracy:* 0 – 2000 ppm
Measurement range: 0 – 10 000 ppm
- *IP protection class:* IP 22
- *Ambient temperature during operation:* 0 – 40 °C

| Item | Item number |
|---|---------------|
| Wireless room temperature, humidity and CO ₂ sensor for surface mounting | 07MIWIRTRHC02 |

MODBUS/KNX GATEWAY

The Modbus/KNX gateway allows for the connection of the compact ventilation unit LG 350 to a KNX bus system. In this process, the gateway serves as a connective link between the two bus systems. It is provided with a Modbus RTU and TCP interface and is always the master on the Modbus. On the KNX side, however, it responds like a common KNX TP-1 unit. This makes it possible to centrally control and monitor the ventilation unit by a KNX system. The configuration is implemented via the IP or USB interface.

- *Dimensions:* W x H x L = 88 x 56 x 90 mm
- *Mounting:* top hat rail or wall
- *Permissible ambient temperature:* 0 – 60 °C
- *Permissible humidity:* 5 – 95% non-condensing
- *Protection class:* IP20
- *Voltage:* 24V AC/DC
- *Interfaces:* Ethernet, EIA-485, KNX-TP1

| Item | Item number |
|--------------------|----------------|
| Modbus/KNX-Gateway | 08KNXGA350450A |





External electric re-heating battery



Hot water heater battery

Accessories

UNITS FOR INSTALLATION INTO THE AIR SUPPLY DUCT

| LG 350 | |
|---|------------------|
| Item | Item number |
| Combination register (cold water coil) for duct installation Ø 160 mm | 01CWK160 |
| Hot water heating coil for duct installation Ø 160 mm | 01VBC160 |
| DN15 KVS 0.63 three-way valve with LR24ASR actuator | 07R3015P6LR24ASR |
| External electric re-heating battery | 08CV16121MTXL |

| LG 450 | |
|---|------------------|
| Item | Item number |
| Combination register (cold water coil) for duct installation Ø 200 mm | 01CWK200 |
| Hot water heating coil for duct installation Ø 200 mm | 01VBC200 |
| DN15 KVS 1.00 three-way valve with LR24ASR actuator | 07R30151SLR24ASR |
| External electric re-heating battery | 08CV16121MTXL |

EXTERNAL CABLE TEMPERATURE SENSOR

NTC thermistor sensor with metal sleeve required for operation of the cold water coil, hot water heating coil, or electric re-heating battery.

| Item | Item number |
|-----------------------------------|-------------|
| NTC thermistor sensor, length 2 m | 40LG041920 |

CONDENSATE SIPHON

DN40 condensate siphon with vertical connection 5/4", water odour seal (60 mm) and mechanical odour seal.

| Item | Item number |
|-------------------------------|-------------|
| Condensate siphon DN40 x 5/4" | 40LG030620 |

BUTTERFLY VALVES

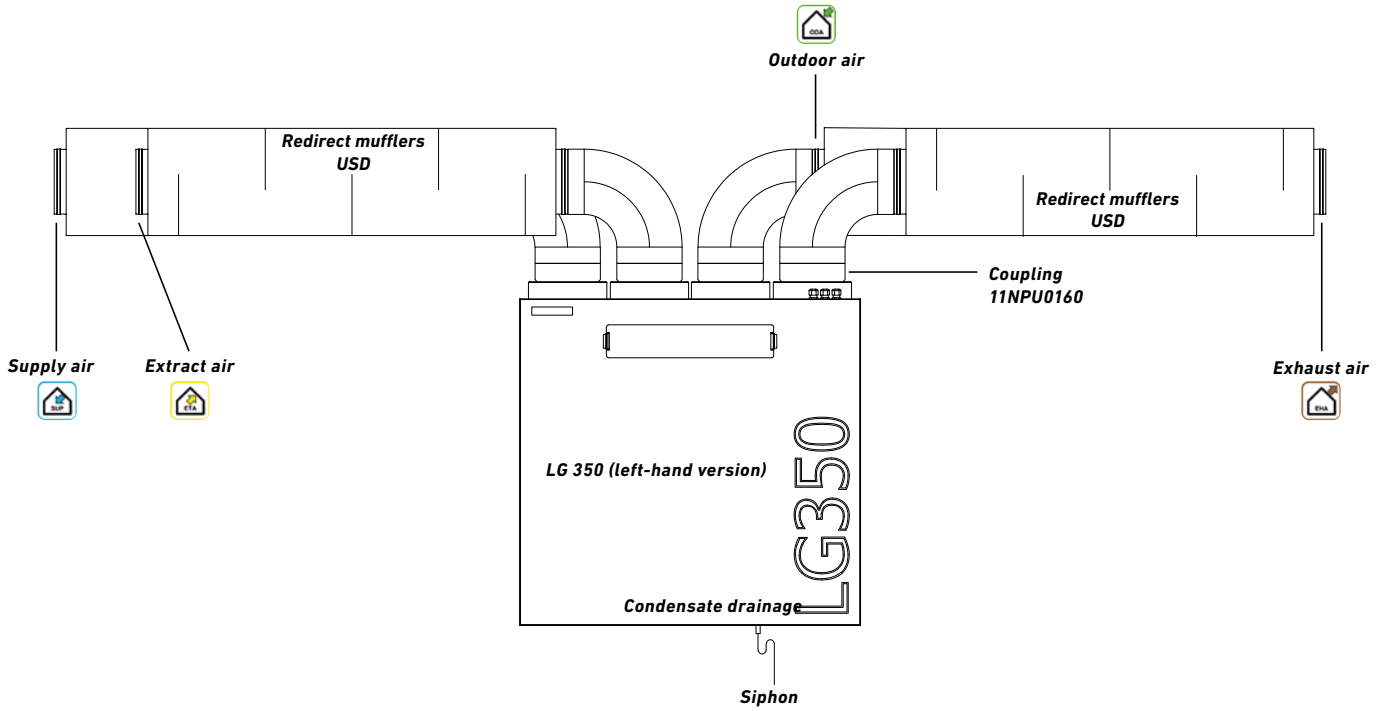
Butterfly valve. Made from galvanized sheet steel with double-lip sealing.

| Item | Item number |
|--|---------------|
| Butterfly valve AKR Ø 160 mm with motor LF 230 | 02AKR160LF230 |
| Butterfly valve AKR Ø 200 mm with motor LF 230 | 02AKR200LF230 |

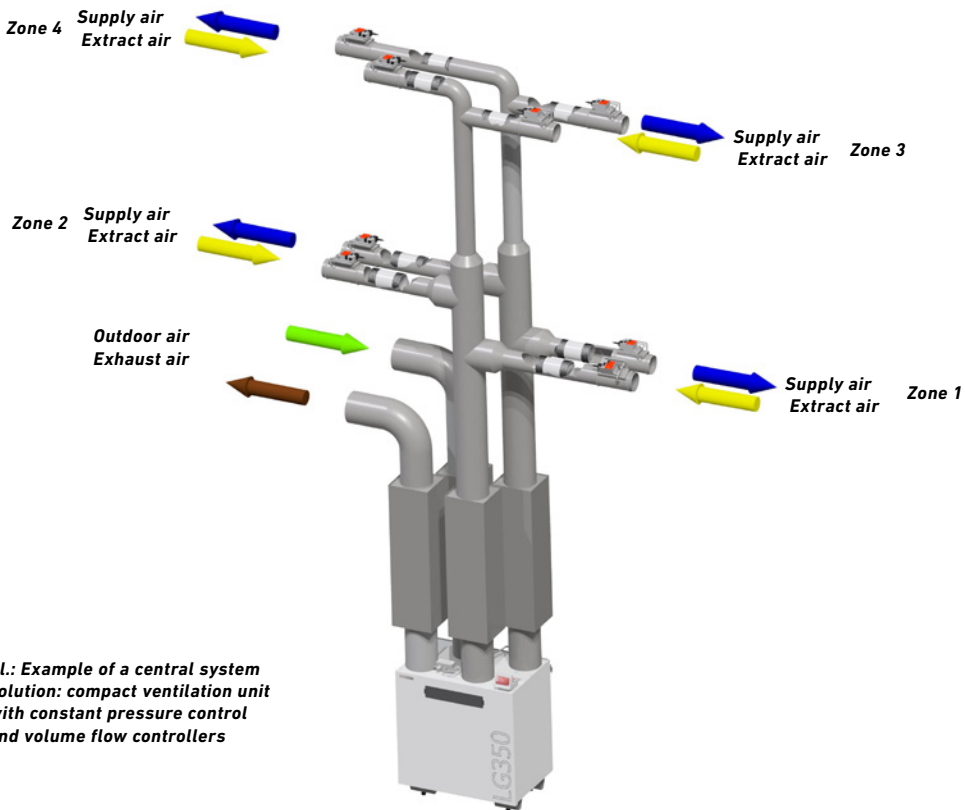
COMPLETE PROGRAM FOR AIR DISTRIBUTION SYSTEMS

We offer a complete program of air distribution systems, such as Komflex (round or oval). Details of our air distribution program can be found in the technical documentation.

Mounting example for wall-mounted installation in the basement



Example application of zone regulation



III.: Example of a central system solution: compact ventilation unit with constant pressure control and volume flow controllers



LG 350 & LG 450 at a glance!

Fans:

Energy-saving radial fans direct current (latest EC motor technology)

Counterflow heat exchanger:

High-efficiency heat recovery system with air/air-counterflow heat exchanger made from recyclable plastic with automatic 100% bypass

Air volume flow:

Up to 350 m³/h (LG 350) or 450 m³/h (LG 450) for external pressures to 250 Pa

Filters:

Filter ODA ISO ePM1 70% in the outdoor air, filter ETA ISO Coarse 80% in the extract air

Electrical preheater battery

for frost protection:

With stepless control, optional

Housing:

Made from galvanised steel sheeting, powder-coated in RAL 9003 with thermal insulation

Air connections:

Left-hand and right-hand unit versions. ODA/EHA/SUP/ETA: each Ø 160 mm

Installation position:

Standing or wall-mounted device (removable adjustable foot brackets)

Summer changeover:

Integrated 100% bypass flap

Electrical connection:

Supplied ready to plug in

Optional constant pressure control:

External dual pressure sensor set with Modbus communication

Operation:

Via the MINI or TOUCH (optional) operating control unit and with connection to the Internet (LAN connection) via the Pichler app.

Service – Maintenance – Initial startup

Can be combined with the LBE 250 A and LBE 500 A air humidification unit

OUR LG 350 & LG 450 COMPACT-VENTILATION UNITS HAVE BEEN EXTERNALLY TESTED BY

- TÜV SÜD München

OUR COMPACT VENTILATION UNITS LG 350 & LG 450 HAVE BEEN APPROVED BY

- DIBt – Deutsches Institut für Bautechnik (Z-51.3-428)

OUR COMPACT VENTILATION UNITS LG 350 & LG 450 HAVE BEEN CERTIFIED BY

- Passivhausinstitut Darmstadt

Note:

Our supplier range includes unit sizes up to 10.000 m³/h as well as a wide range of accessories.





ErP 2018

Fulfills the requirements of the Ecodesign Directive, in accordance with EU Regulation 1253/2014.



Your partner/installer:



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