ZEHNDER PUMPEN GMBH

HomeBox Eco

PRESSURE BOOSTING SYSTEM

Consistent water pressure for domestic and garden use

NEW

EFFICIENT SOLUTION FOR CONSISTENT WATER SUPPLY

Die HomeBox Eco

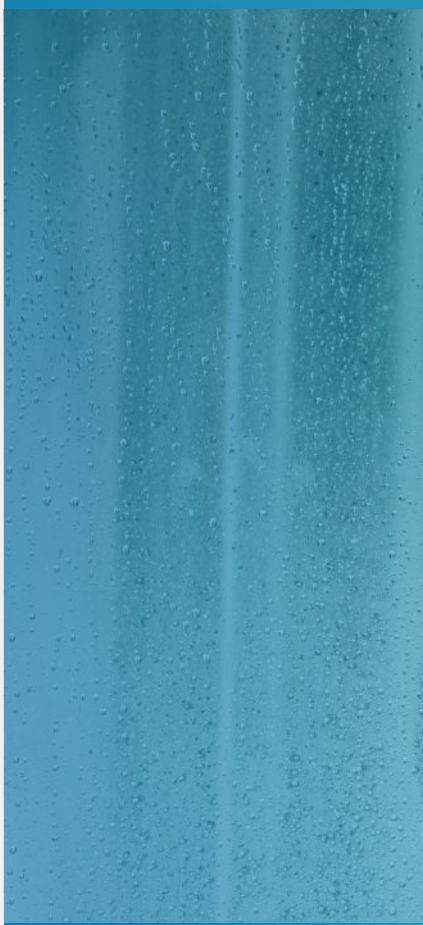
In many buildings, insufficient water pressure can occur — for example, in showers, garden irrigation systems, or when operating common household appliances.
The HomeBox Eco from Zehnder Pumpen ensures a reliable water supply and optimizes pressure throughout the entire piping system.

Depending on the intended application, the HomeBox Eco is available in **two versions:**

- **HomeBox Eco N – non-self-priming,** for direct connection to drinking water systems
  HomeBox Eco S – self-priming, ideal for garden irrigation and indirect connection to drinking water systems

The **multistage centrifugal pump with integrated frequency control** automatically adjusts the flow rate to the current water demand. This reduces energy consumption and allows for **quiet, efficient operation.**
The sound-absorbing housing limits noise emissions to a maximum of 50 dB(A).
In addition, an integrated expansion vessel minimizes pressure surges and ensures even pressure distribution.

The HomeBox Eco offers a **compact, reliable, and convenient solution** for stable water supply in **single- and multi-family homes** as well as for **outdoor applications**.



HOMEBOX ECO
OVERVIEW OF BENEFITS

ENERGY-EFFICIENT IE5 MOTOR

Efficient and powerful – The permanent magnet motor ensures low energy consumption and a long service life.

ONE SYSTEM – TWO APPLICATIONS

Flexible use – available as a self-priming version for wells and cisterns, or as a non-self-priming version for connection to the drinking water network.

WHISPER-QUIET OPERATION

Max. 50 dB(A) – Thanks to the sound-absorbing housing, the pump operates exceptionally quietly and is ideal for use in residential areas.

EASY INSTALLATION

Plug & Pump – Connect, switch on, and you're ready to go!
The HomeBox Eco is immediately operational.

USER-FRIENDLY OPERATION

All settings are intuitive and quick to adjust – no complicated menus or apps required.

INTEGRATED SENSOR TECHNOLOGY

Automatic adjustment – The intelligent control system adapts to water demand, ensuring efficient operation.

COMPACT ALL-IN-ONE DESIGN

Space-saving & convenient – All key components such as sensors, check valves, and the expansion vessel are fully integrated.

SUITABLE FOR WARM WATER

Versatile in use – Also approved for warm water applications and WRAS-certified.

PROTECTIVE FUNCTIONS

Safe & durable – With integrated overflow protection, dry-run protection, and thermal winding protection for maximum reliability.

INTEGRATED FROST PROTECTION

The HomeBox Eco activates automatically below 3 °C to prevent frost damage. However, when used in frost-prone areas, it must be switched off and drained if frost is expected.

CONSISTENT WATER PRESSURE

even when multiple outlets are in use simultaneously

The **HomeBox Eco** ensures a **reliable water supply** and maintains largely constant pressure – even when **multiple tapping points are used simultaneously.** Thanks to automatic speed control, the pump performance dynamically adapts to current demand. As a result, **pressure fluctuations are significantly reduced**, even when the **shower, washing machine**, and other consumers are **running at the same time.**

A compact solution for efficient pressure boosting in single- and multi-family homes.

Whisper-quiet in operation

barely audible in everyday use

With a maximum of 50 dB(A) during normal operation, the HomeBox Eco is exceptionally quiet – comparable to a relaxed conversation or like gentle rustling leaves. Thanks to its sound-absorbing housing, the pump can be used indoors without causing any disturbing noise. Perfect for quiet environments.

MAXIMUM EFFICIENCY

IE5 Motor – Smart Use of Resources

The HomeBox Eco is equipped with a permanent magnet motor of the highest efficiency class (IE5). This "Ultra Premium Efficiency" classification enables exceptionally low energy losses and precise speed control via the integrated frequency inverter. The pump performance automatically adjusts to actual demand – for an energy-efficient, quiet, and at the same time powerful operation.

Why IE5?

- Up to 50% lower energy losses compared to conventional IE2 motors
- Up to 25% less energy consumption, depending on the application
- Reduced CO_2 emissions thanks to improved energy efficiency
- Lower operating costs through reduced power consumption and long service life
- Minimized maintenance due to optimized operating efficiency

The combination of modern drive technology, frequency control, and intelligent regulation makes the HomeBox Eco a reliable solution for future-proof water supply. The IE5 motor not only helps reduce operating costs but also supports sustainable resource planning in residential and commercial construction.

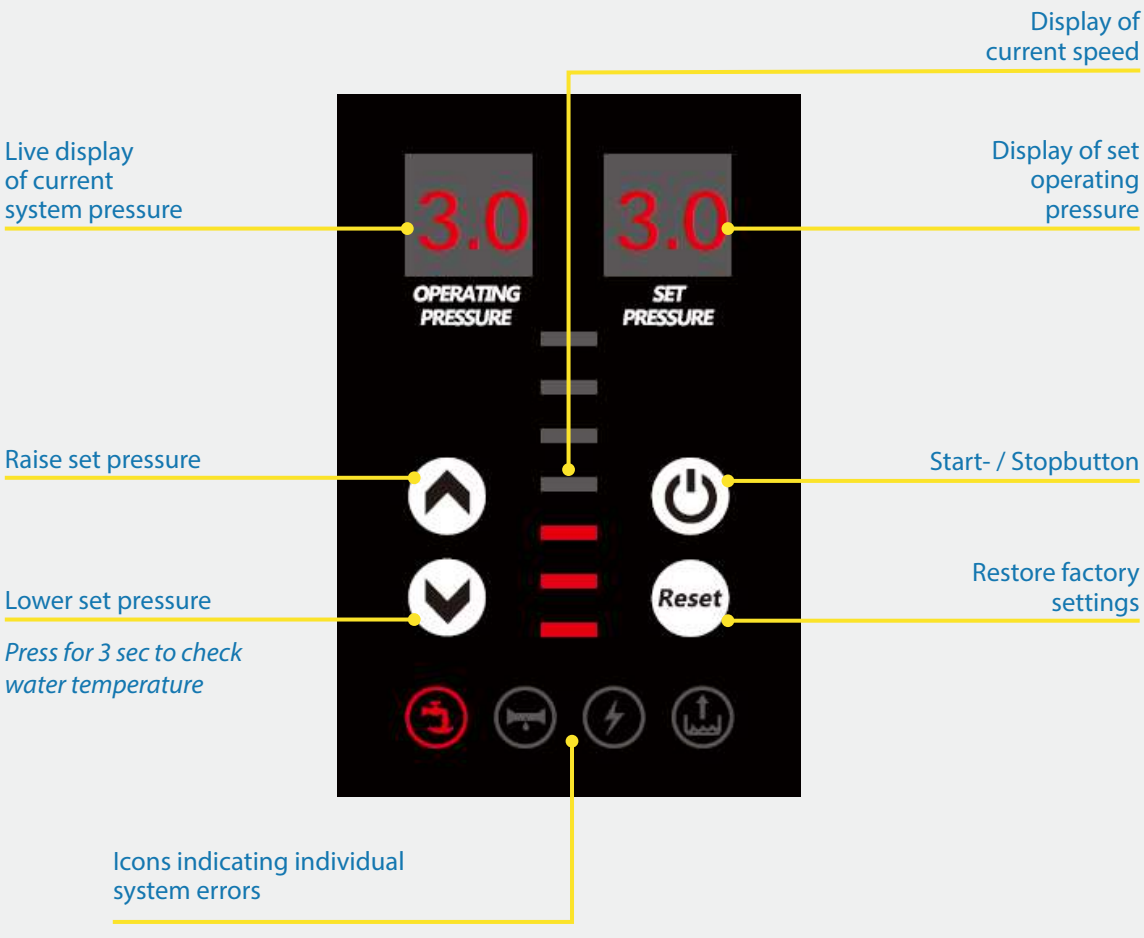
Top-tier efficiency – built in as standard.

EASY OPERATION

Control at Your Fingertips

The **HomeBox Eco** is operated easily at the push of a button via its **intuitive LCD control panel.**
Clear menu navigation allows quick and easy adjustment of all essential settings – without the need for complex programming. **Smart water control made simple!**

PLUG & PLAY:



FREQUENCY CONTROL

for Maximum Efficiency and Longevity

The **HomeBox Eco** incorporates **advanced frequency control technology** that continuously adjusts the motor speed to match demand, ensuring **optimal energy efficiency and whisper-quiet operation**. Unlike **conventional pressure boosting systems** with simple **on/off operation**, the **integrated frequency inverter** regulates the **motor speed precisely as needed.**

ENERGY EFFICIENCY
By precisely adjusting the motor speed to the required flow rate, **up to 50% energy savings** can be achieved, as no excess power is consumed.

CONSTANT PRESSURE
The electronic control system ensures **accurate pressure regulation**, even with fluctuating water demand.

SOFT START AND STOP
Operation takes place without pressure surges or mechanical stress, **extending the service life of the motor, pump, and piping system.**

INTEGRATED PROTECTION FUNCTIONS
The frequency inverter provides **dry-run protection**, **overload protection, and voltage monitoring** to ensure safe operation.

QUIET OPERATION
Reduced speeds during partial load operation significantly lower noise emissions.

Thanks to this **intelligent control technology**, the **HomeBox Eco** offers a **highly efficient, low-wear, and cost-effective solution** for pressure boosting in residential and commercial applications.

COMPACT DESIGN – FITS ANYWHERE

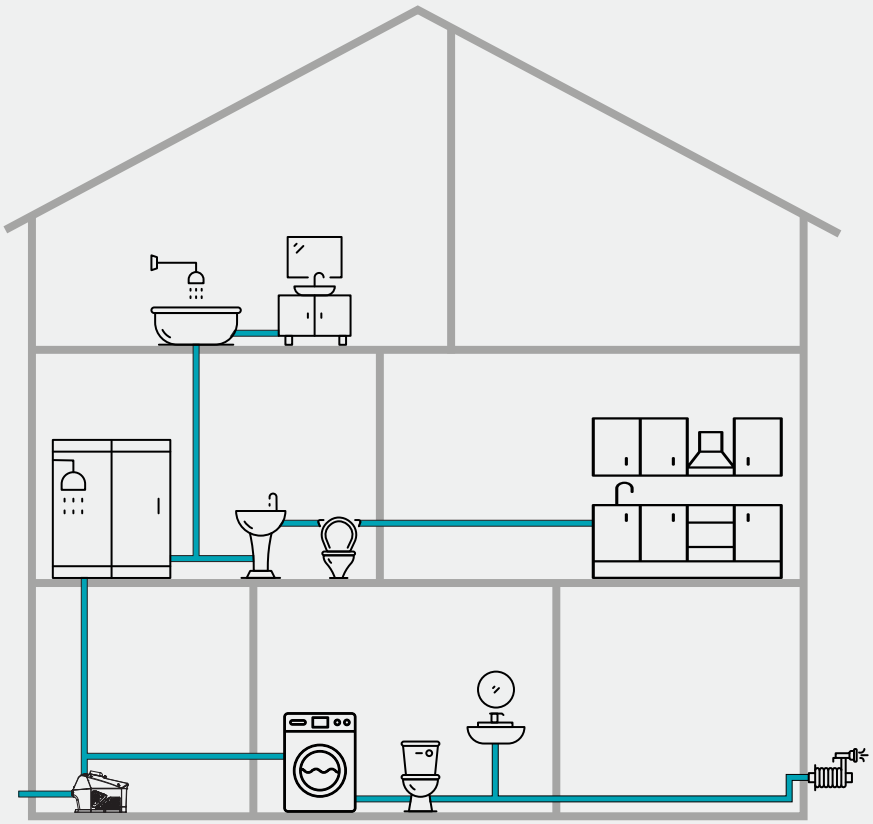
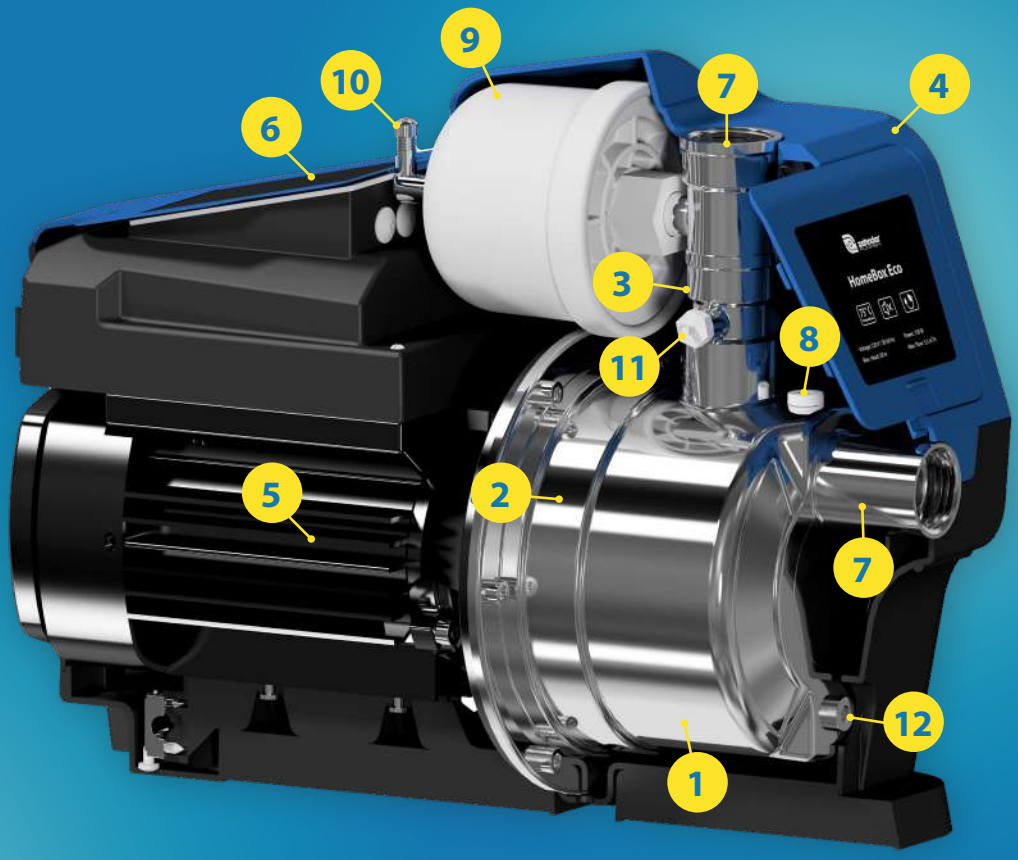


Fig.: Constant water pressure at all tapping points in and around the house.

The HomeBox Eco impresses with its space-saving design and flexible installation options.
Whether in the basement, utility room, or under the sink – thanks to its compact size, it fits easily even in small spaces.

MAXIMUM EFFICIENCY IN A COMPACT FORM

TECHNOLOGY THAT DELIVERS



1 OPTIMIZED HYDRAULICS
High flow rate with low energy consumption. Efficient water guidance ensures smooth, trouble-free operation.

2 MULTISTAGE CENTRIFUGAL PUMP
Maintains consistent pressure across several open outlets.

3 INTELLIGENT SENSOR TECHNOLOGY
Automatic pressure control and dry-run protection.

4 SOUND-ABSORBING HOUSING
Reduces noise to a maximum of 50 dB(A) – ideal for residential use.

5 IE5-MOTOR
Energy-efficient with up to 25% lower power consumption and a long service life.

6 CONTROL UNIT (LCD DISPLAY)
Easy operation with a clear overview of all operating data.

7 NON-RETURN VALVES ON SUCTION AND PRESSURE SIDE -
for reliable system operation.

8 FILLING AND VENTING SCREW
simplifies hydraulic setup and startup.

9 MAINTENANCE-FRIENDLY EXPANSION TANK -
minimizes pressure shocks and stabilizes system performance.

10 AIR VALVE
Convenient access for checking diaphragm tank pressure.

11 BUILT-IN TEMPERATURE SENSOR
Activates frost protection below 3 °C and shuts down above 75 °C.

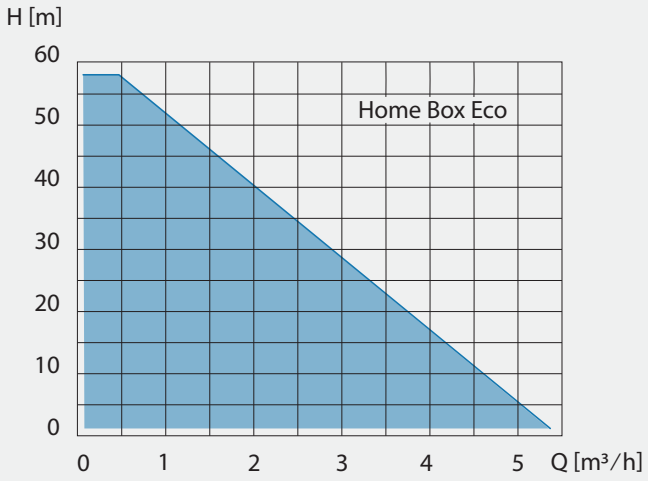
12 DRAIN SCREW FOR EASY MAINTENANCE
Allows quick draining for service work or frost protection.

OVERVIEW OF TECHNICAL SPECIFICATIONS – HOMEBOX ECO

Technical Data

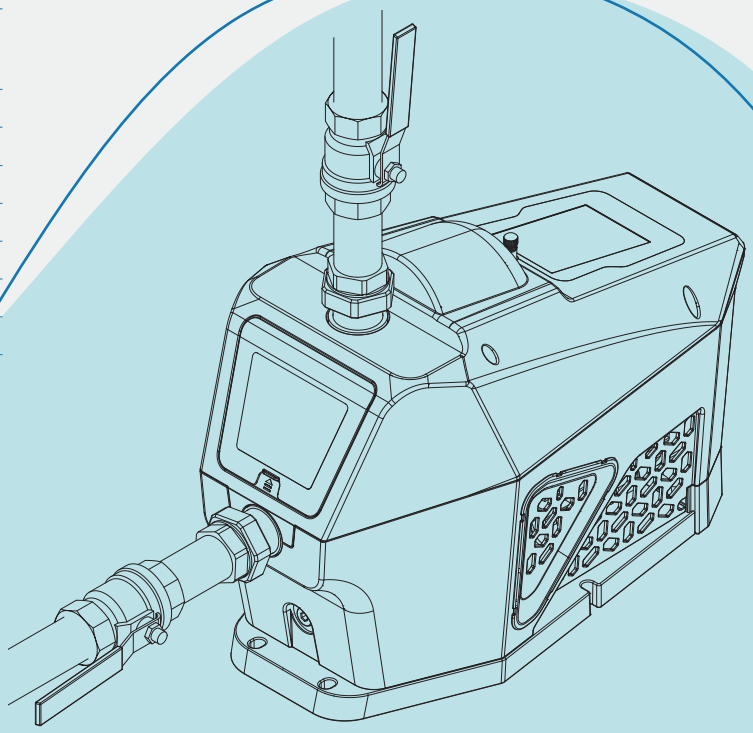
Product name	***HomeBox Eco N -*** *non-self-priming*
Article number	24711
Product name	***HomeBox Eco S -*** *self-priming*
Article number	24373
Discount group	F
Weight (kg)	8,64
Electrical characteristics	
Voltage (V)	230
Current (A)	3,1
Frequency (Hz)	50 / 60
Kondensator C (µF)	220
Input power P1 (W)	750
Output power P2 (W)	600
Speed (min-1)	Frequency-controlled
Protection class	IP 56
Power cable length (m)	1,35
Materials	
Impeller	PPO
Motor housing	Aluminium ADC12
Pump housing	Stainless steel 1.4301 (AISI 304)
Motor shaft	Stainless steel 1.4301 (AISI 304)
Motor seal	Mechanical seal
Pump seal	Carbon/Ceramic/NBR
Certification	WRAS
Hydraulic properties	
Max. operating pressure (bar)	10
Max. head (m)	56,0
Max. flow rate (m^3/h)	5,2
Max. media temperature (°C)	75

Characteristics

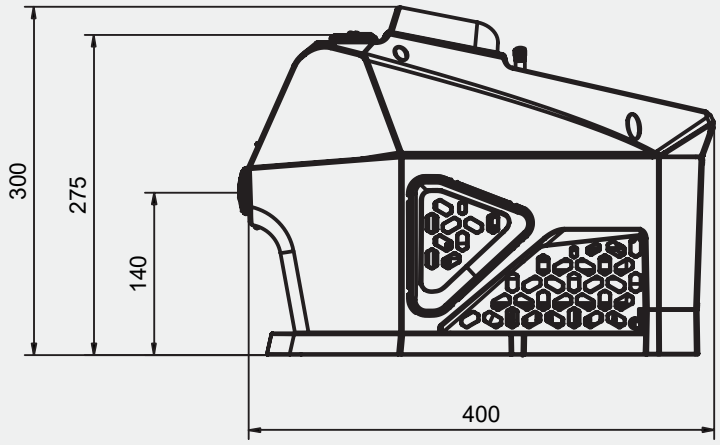


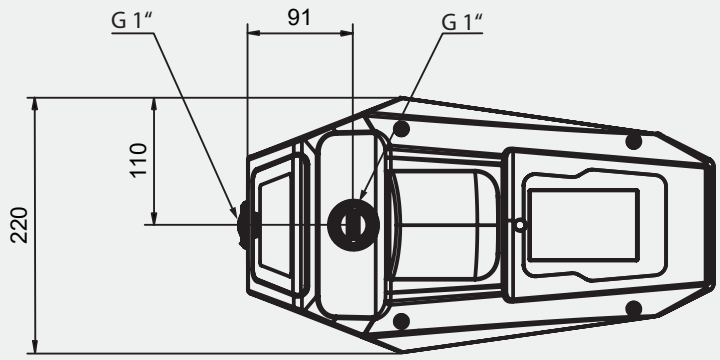
IE5-MOTOR –
ULTRA PREMIUM EFFICIENCY

The high-efficiency IE5 permanent magnet motor saves up to **25% energy** compared to conventional IE2 motors and **significantly reduces long-term operating costs.**



Dimensions





Compact Design for Flexible Installation – Thanks to its small dimensions, the **HomeBox Eco** can be installed in a space-saving manner in utility rooms, basements, or even under the sink.

Have technical questions? Feel free to contact our expert support team.

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As of 02/2026