Fresh water station eco 40

The eco 40 fresh water station is a powerful solution for central drinking water heating based on the flow principle. With innovative speed control and an energy-saving design, the eco 40 offers an inexpensive and efficient way to provide hot drinking water - exactly when it is needed.

Suitable for:

- **Inexpensive:** Affordable solution for efficient drinking water heating.
- **Simple control:** The speed-controlled regulation ensures a constant and precise hot water temperature.
- **Low weight:** Lightweight and easy to handle, perfect for flexible use.
- **Flow-through system:** Hot drinking water is heated directly only when needed, no storage necessary.
- **Innovative high-efficiency pump:** PWM-controlled for demand-based and energy-efficient supply.
- **Heat exchanger:** The stainless steel plate heat exchanger enables high dispensing capacities and low return temperatures.
- **EPP insulated housing:** Attractive housing provides insulation and thus contributes to efficiency.

Application: The eco 40 fresh water station is ideal for the central heating of drinking water in heating systems. The heating water is taken from the buffer tank and passed through the plate heat exchanger to heat the drinking water directly as required. A buffer tank is required to ensure the necessary heating water flow rate.

High-efficiency pump: The PWM-controlled high-efficiency pump in the eco 40 automatically adjusts the heating water flow rate according to demand. This ensures efficient use of energy and keeps the hot water temperature constant. Compared to conventional pumps, it operates quietly and economically, which reduces operating costs and extends service life.

Hot water preparation: The eco 40 heats drinking water only “just in time,” in other words, only when it is actually needed. This reduces energy costs and prevents unnecessary storage of hot water.

Control and sensors: Modern sensors and speed-controlled regulation ensure fast, precise, and constant adjustment of the domestic hot water temperature. The flow sensor, based on the vortex principle, ensures accurate measurement of the flow rate and hot water temperature.

	PRIMARY BUFFER STORAGE	SECONDARY DRINKING WATER
Pressure rating:	PN 6	PN 10
Max. temperature:	110°C	75°C
Connection dimensions:	DN 20	DN 20
Thread:	G¾" cap nut	G¾" cap nut
Connections:	HS + HR downwards, CW + DHW on the right side	
Dimensions (WxHxD):	320 x 570 x 155 mm	
Weight:	10,7 kg	

ORDER NO.	
1630006	with fully stainless steel brazed plate heat exchanger
1630011	with copper brazed plate heat exchanger

PERFORMANCE DATA	PI2*	PI1**
Hot water output:	91 kW	90 kW
Primary mass flow:	2151 kg/h (35,85 l/min)	2163 kg/h (36,1 l/min)
Supply temperature:	70 °C	60 °C
Return temperature:	34 °C	24 °C
CW/HW temperature:	10 °C / 60 °C	10 °C / 45 °C
Tap capacity:	26 l/min	37 l/min

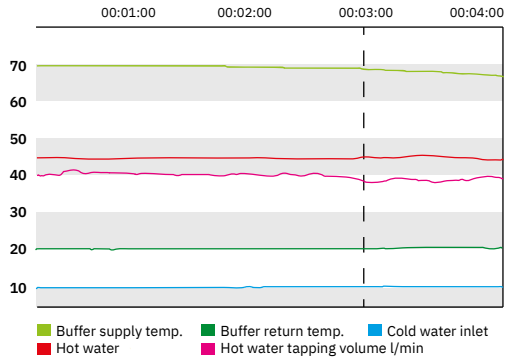
Attention! Normal operation guaranteed at 50-75 °C, install a pre-mixer if necessary

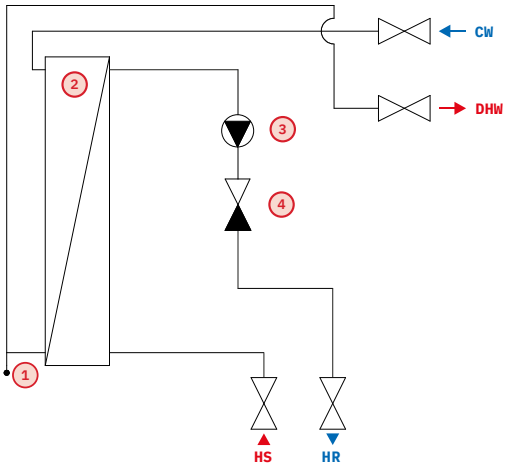
***PI2 = Performance indicator 2**
at a set hot water temperature of 60 °C
at a primary flow temperature of 70 °C
at a cold water temperature of 10 °C

****PI1 = Performance indicator 1**
at a set hot water temperature of 45 °C
at a primary flow temperature of 60 °C
at a cold water temperature of 10 °C

TECHNICAL DATA	
OPERATION	• Easy-to-read, illuminated LCD display with full text and graphics mode • Internationally understandable thanks to up to 6 languages included • Self-explanatory: The assigned commands are shown on the display directly above the respective input key • Quick and easy installation thanks to the integrated commissioning wizard
OPERATING MODE	Fresh water control without circulation Fresh water control with circulation (optional)
PLATE HEAT EXCHANGER	Stainless steel 1.4401, copper soldered
PIPING	Stainless steel 1.4401, 22x1 mm
PUMPS	Heating pump HE 15-60/130 PWM 1 Drinking water circulation pump HE-Z 15-7 RKC (only with module Z2)
SENSORS	Hot water temperature and volume flow: Sika VVX15 CW/ Buffer/ Circulation temperature: PT1000/B/2 plug-in sensor with cable
INSULATION	EPP, black
DELIVERY	Ready to plug in, wired and leak-tested, with operating instructions and mounting accessories in a box

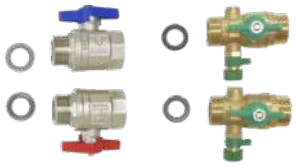
PERFORMANCE DIAGRAM: FULL LOAD





SCHEMATIC	
1	Vortex sensor DHW + flow
2	Plate heat exchanger
3	Heating pump
4	Backflow preventer
DHW	Domestic hot water
CW	Cold water
HS	Heating supply
HR	Heating return

OPTIONS



ORDER NO.

1630012 Module ball valve set eco 40

Ball valve set DN 25 G1"

(2x heating / 2x sanitary DVGW)

(Pump manufacturer may vary)

ORDER NO.

1630013 Module Z2- Circulation eco40

External drinking water circulation set

incl. safety valve ⚠

ORDER NO.

1000132 Module Pre-mixer

Pre-mixer set

for eco and FW-40 series

⚠ **Note:** When installing a domestic hot water heating system, the applicable standards, recognized technical rules, and local regulations must be observed! In particular, the hygiene regulations according to DVGW worksheet W 551 must be observed when operating a circulation system. Please check whether the use of a safety valve/expansion vessel in the circulation circuit is required for your specific system! The safety valve and the required blow-off pipe must be installed on site.