

CIRCULATION UNIT FIXED TEMPERATURE

INSULATION

With all electrical components on the outside and the plumbing parts on the inside the insulation can truly work as intended, fulfilling the German Energy Saving Ordinance EnEV2014.



MADE IN SWEDEN

ESBE design and quality always assures our customers to expect only the best. Pre-assembled and leak proof tested.



HIGH EFFICIENCY CIRCULATION PUMP

The circulation unit is always delivered with ErP ready circulation pump, already today meeting the higher demands of the second step taking effect across Europe 2015.



THERMOSTATIC TEMPERATURE CONTROL

- Adjustable constant temperature reachable from outside.
- Anti-scald function to protect the floor or other building materials.

OPERATION

The ESBE series GFA is a circulation unit with an adjustable constant outlet temperature used to keep the flow temperature at the set level regardless of pressure drop or flow volume. Equipped with High Efficiency circulation pump and a tailor-made insulation you can be sure that ESBE delivers the best circulation unit for both your economy as well as for the environment.

When designing the circulation unit product line the focus at ESBE has been to simplify assembly. This goes through the whole product from mounting brackets, insulation to packaging design.

KEY BENEFITS

- Easy installation; everything is ready and assembled out of the box. All connections have been leak proof tested. Just connect the four pipes and connect the power to the circulation pump and you are ready.
- Easy commissioning; all groups are equipped with an A-class pump which is easy to set at the right mode and include a venting function to push air out to the venting valve of the system.
- Easy maintenance; shut off valves for all service and maintenance without draining the heating system.
- Reliable function and elegant look ; ESBE Quality and ESBE Design behind. Made in Sweden
- Pre-assembled, tightness-tested and heat-insulated assembly
- ErP-Ready high efficiency circulation pump and insulation that truly work as intended, fulfilling the German EnEV2014 directive. Taking our green footprint seriously.
- Integrated gravity brake.

VERSIONS



ESBE Series GFA100
Circulation unit intended for fixed temperature operation.

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PRODUCT ASSORTMENT

ESBE Circulation unit - Fixed temperature

Art. No. _____ 6102 01 00

Reference _____ GFA111

DN _____ 25

Power range

at 2150 l/h with Δt 20 K _____ 50 kW ¹⁾

with Δt 10 K _____ 25 kW ¹⁾

with Δt 5 K _____ 12 kW ¹⁾

¹⁾ system pressure losses: 0 kPa

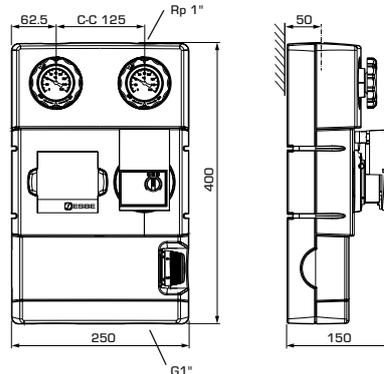
at 1600 l/h with Δt 20 K _____ 35 kW ²⁾

with Δt 10 K _____ 18 kW ²⁾

with Δt 5 K _____ 9 kW ²⁾

²⁾ system pressure losses: 15 kPa

Weight _____ 5.4 kg



RELATED ACCESSORIES

See separate data sheet for further detailed information.

ESBE Manifold

Manifold for 2 or 3 circulation units. With or without integrated separator function.

Ref. GMA121 _____ Art. No. 6600 01 00

Ref. GMA131 _____ Art. No. 6600 02 00

Ref. GMA221 _____ Art. No. 6600 03 00

Ref. GMA231 _____ Art. No. 6600 04 00



ESBE Manifold connection, Fixed temperature unit

Connections between manifold and circulation unit (2 connections/package).

Ref. KGT111 _____ Art. No. 6610 01 00



TECHNICAL DATA

Visit esbe.eu for further detailed information.

The circulation unit, in general:

Pressure class: _____ PN 6

Media temperature: _____ max. (continuously) +110°C

_____ when ambient temperature is max. 50°C

_____ min. 0°C

Working pressure: _____ 0.6 MPa (6 bar)

Connections: _____ External thread, ISO 228/1

_____ Internal thread, EN 10226-1

Insulation: _____ EPP λ 0.036 W/mK

Material, in contact with water:

Components of: _____ Brass, Iron

Sealings material of: _____ PTFE, Aramid fibre, EPDM

Conformities and certificates:

PED 97/23/EC, article 3.3

LVD 2006/95/EC

EMC 2004/108/EC

RoHS 2011/65/EC



ErP 2009/125/EC

ErP 2015



ErEV2014

The integrated thermostatic mixing valve:

Temperature range: _____ 20–43°C

Max. media temperature: _____ continuously 95°C

_____ temporarily 100°C

Min. media temperature: _____ 0°C

Temperature stability: _____ $\pm 3^\circ\text{C}$

The integrated circulation pump:

Power supply: _____ 230 \pm 10% VAC, 50/60 Hz

Power consumption: _____ 3–45 W

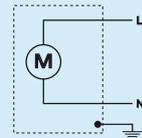
Enclosure rating: _____ IP X4D

Protection class: _____ F

Characteristics: _____ See diagram below

Circulation pump wiring:

The circulation pump should be preceded by a multi-pole contact breaker in the fixed installation.



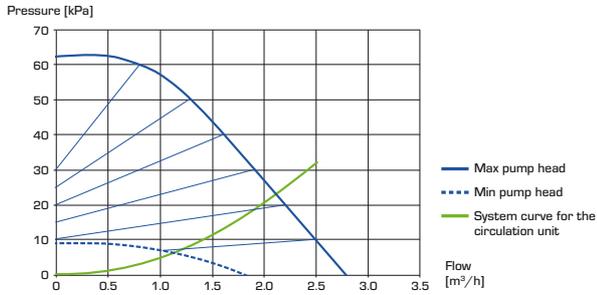
SERVICE AND MAINTENANCE

The circulation unit does not require any specific maintenance under normal conditions.

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CHARACTERISTICS

The flowrate for the integrated circulation pump and system curve for the circulation unit.



INSTALLATION EXAMPLES

