

CIRCULATION UNIT

DIRECT SUPPLY, SERIES GDA300



GDA311

PRODUCT DESCRIPTION

The ESBE series GDA300 is a direct supply circulation unit designed for applications, where the energy transport in the most efficient way is required. Equipped with two shut-off valves with thermometers, check valve, high class insulation shell and high efficiency circulation pump. You can be sure that ESBE delivers the best circulation unit for both your economy as well as for the environment. It is simply the most efficient direct supply unit available. When designing the circulation unit product line the focus at ESBE has been to simplify installation. This goes through the whole product from pre assembly, mounting brackets and insulation to packaging design.

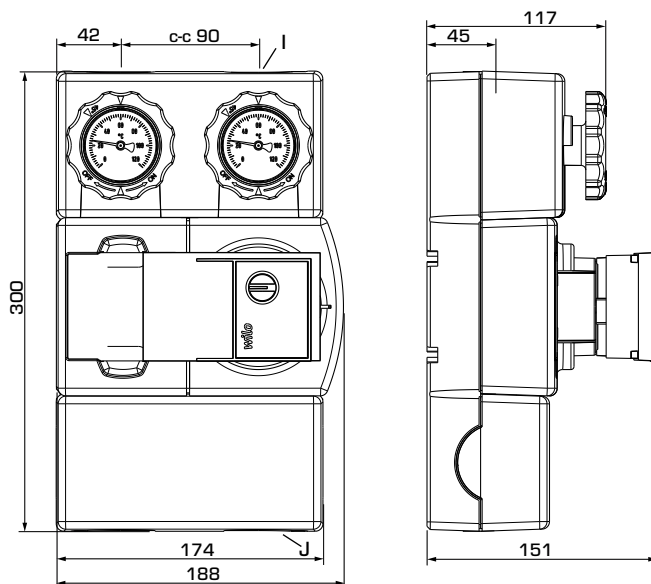
KEY BENEFITS

- High efficiency circulation pump
- High class insulation shell
- Pre tested and ready to use
- Compact design

SERVICE AND MAINTENANCE

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

PRODUCT ASSORTMENT



GDA311

SERIES GDA300

Art. No.	Reference	DN	Pump	Connections		Weight [kg]	Note
				I	J		
61003100	GDA311	20	Wilo 15/7,5	G 3/4"	G 1"	3,7	

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TECHNICAL DATA

 Visit esbe.eu for further detailed information.

The Circulation unit, in general:

Pressure class: _____ PN 6
 Media temperature: _____ max. +110°C
 _____ min. 0°C
 Ambient temperature: _____ max. +50°C
 _____ min. 0°C
 Working pressure: _____ 0,6 MPa (6 bar)
 Connections, _____ Internal thread (G), ISO 228/1
 _____ External thread (G), ISO 228/1
 Insulation: _____ EPP λ 0,036 W/mK
 Media: _____ Heating water (in accordance with VDI2035)
 _____ Water / Glycol mixtures, max. 50%
 [above 20% admixture, the pump data must be checked]
 _____ Water / Ethanol mixtures, max. 28%

Material, in contact with water:

Components of: _____ Steel, Cast iron, Brass
 Sealing material of: _____ PTFE, Aramid fibre, EPDM

EEI (Energy Efficiency Index),

Wilco circulation pump: _____ <0,21

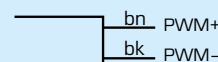
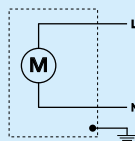
Conformities and certificates:

 LVD 2014/35/EU  ErP 2009/125/EU
 EMC 2014/30/EU  ErP 2015
 RoHS 2011/65/EU  ErEV 2014
 PED 2014/68/EU, article 4.3

The integrated circulation pump:

Type: _____ Wilo RSTG 15/7,5
 Power supply: _____ 230 \pm 10% V AC, 50/60 Hz
 Cable length: _____ 3m
 Power consumption: _____ 4-75 W
 Enclosure rating: _____ IP X4D
 Insulation class: _____ F
 EEI (Energy Efficiency Index): _____ <0,21

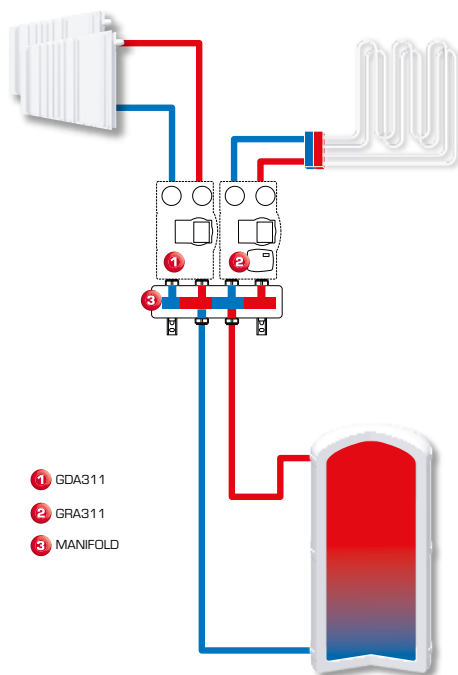
PUMP WIRING*



Pumpspeed could be controlled by PWM signal

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

INSTALLATION EXAMPLES



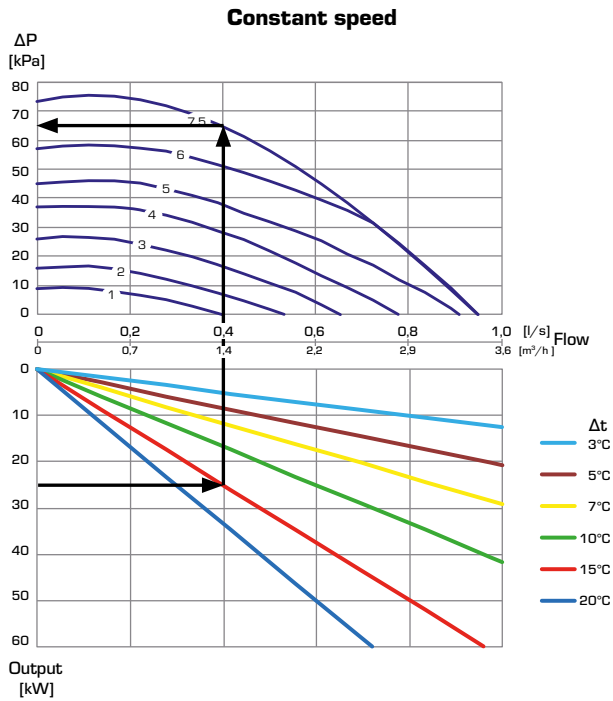
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DIMENSIONING, PUMP CAPACITY DIAGRAM

Example: Start with the heating demand of heating circuit (e.g. 25 kW) and move horizontally to the right in the diagram to the $\Delta t = 15^\circ\text{C}$ (temperature difference between flow and return of the heating circuit). Next go up and find working flow point and read the available pressure of the pump on the left - $\Delta p = 65 \text{ kPa}$.

SERIES GDA300 – available pressure



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