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SE-333 75 Reftele  
www.esbe.eu



ESBE System Units  
**CIRCULATION UNIT DN20,  
GRB300**

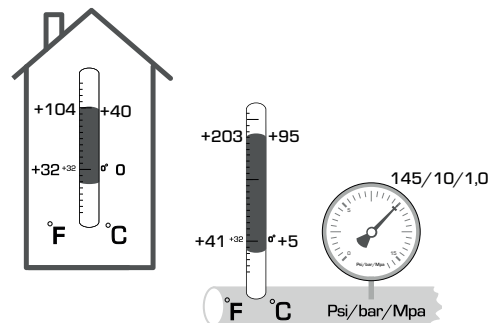


Series GRB301

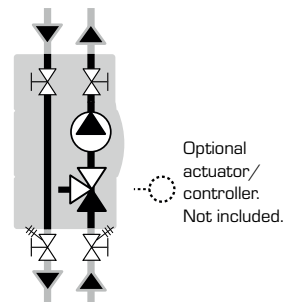


PED 2014/68/EU, article 4.3  
EnEV 2014

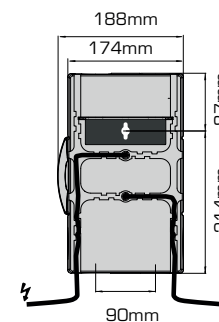
SI 2016 No. 1105



**Function**



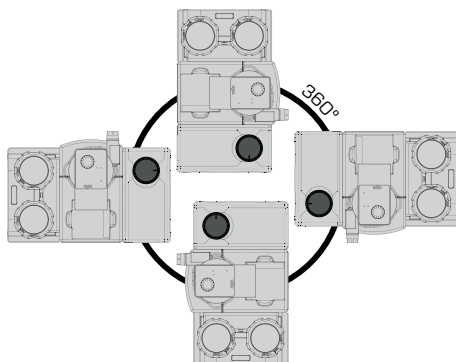
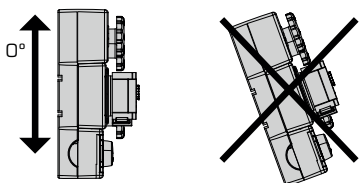
**Cabling • Dimensions**



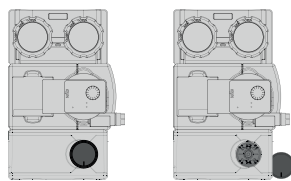
Mtrl.nr: 98140500 • Ritn.nr: 7919 • vers. B • Rev. 2023-06-27



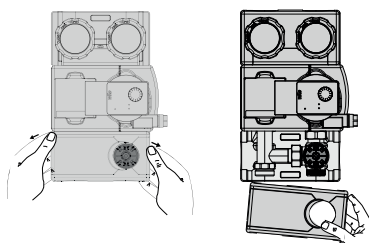
**Mounting position**



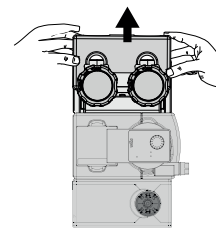
**Remove knob**



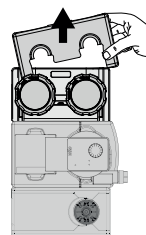
**Disassembly insulation**



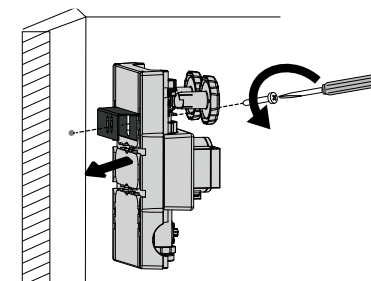
**Pull up insulation 7mm**



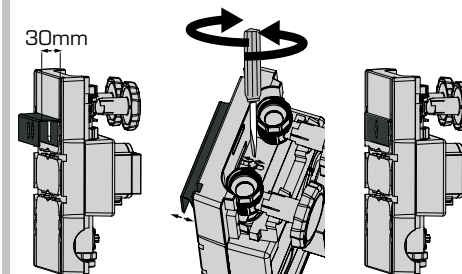
**Remove**



**Assembling on wall**



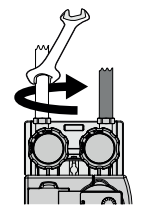
**Adjust wallbracket**



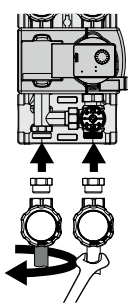
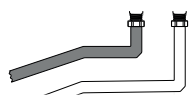
4

Fit supply pipes

c/c 90mm



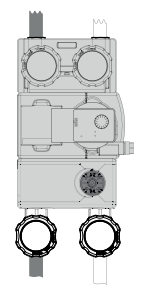
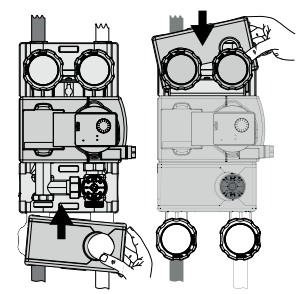
← Add ballvalves →



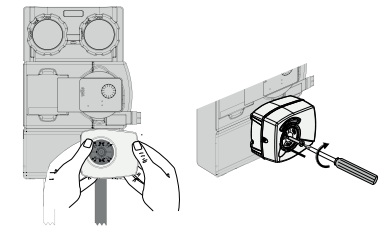
30-40Nm

5

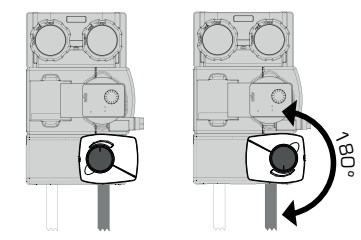
Assemble insulation



6

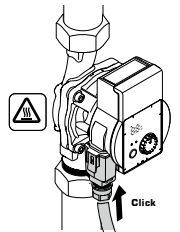
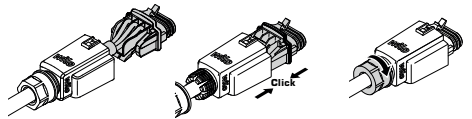
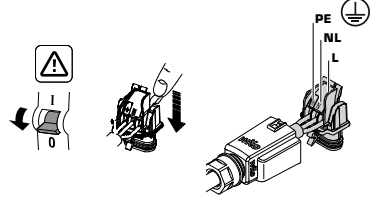


Mounting position actuator/controller



i

Electric installation



max 10 A

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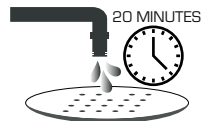
7

Commissioning

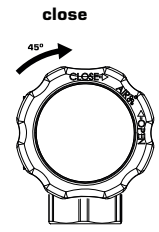
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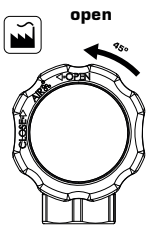
2



1

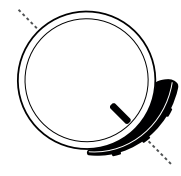
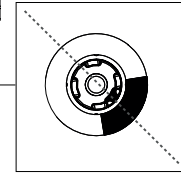
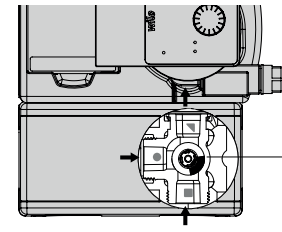


2

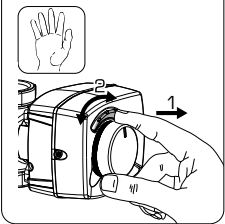


i

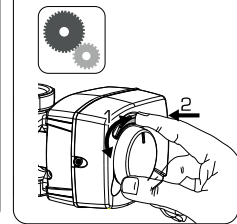
Commissioning actuator/controller



A



B



http://www.esbe.eu/global/en/products/rotary-valves



## Display

### Fault signal LED

### LED display

- Display of the setpoint H of the delivery head (differential pressure) in m.
- Display of selected constant speed (c1 = I, c2 = II, c3 = III).
- Display of the current power consumption in W, alternating with the current flow rate in m<sup>3</sup>/h.
- Display of warning and fault signals.

### Function key/Press

- Start pump venting function.
- Activate pump manual restart.

### Operating button/Turn

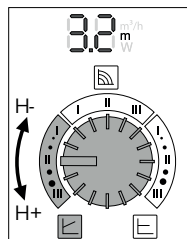
- Select application/control mode.
- Set setpoint H of the delivery head (differential pressure).
- Select constant rotation speed.

## Recommended pump settings

Variable differential pressure (Δp-v)

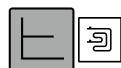


36 m<sup>3</sup>/h  
W

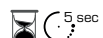
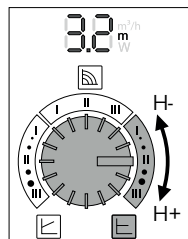


36 m<sup>3</sup>/h  
W  
08 m<sup>3</sup>/h  
W

Constant differential pressure (Δp-c)



29 m<sup>3</sup>/h  
W

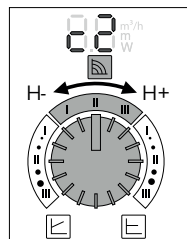


29 m<sup>3</sup>/h  
W  
10 m<sup>3</sup>/h  
W

Constant speed I II III:



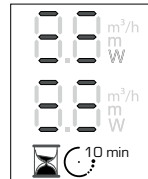
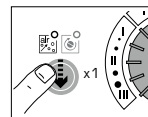
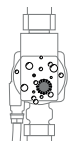
28 m<sup>3</sup>/h  
W



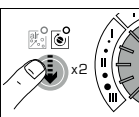
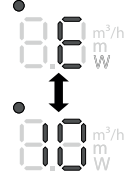
28 m<sup>3</sup>/h  
W  
09 m<sup>3</sup>/h  
W



## Venting

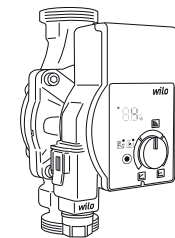


## Manual restart



## WILO - Faults, Causes and Remedies

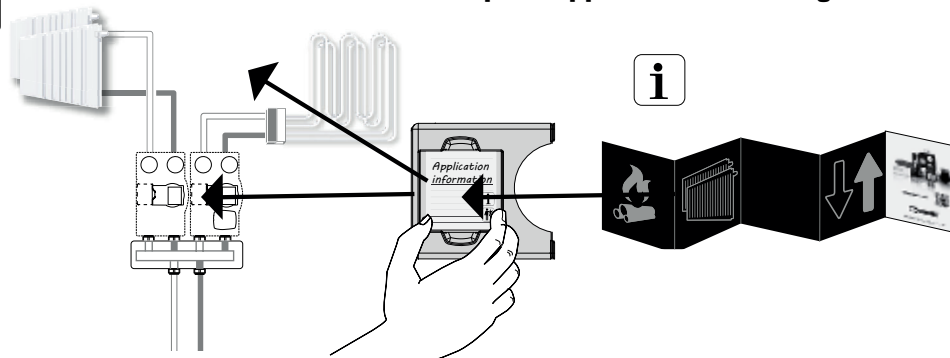
LED Indicator	Faults	Causes	Remedies
	Pump is not running although the power supply is switched on	Electrical fuse defective Pump has no voltage	Check fuses Resolve the power interruption
	Pump making noises	Cavitation due to insufficient suction pressure	Increase the system pressure within the permissible range Check the delivery head and set it to a lower head if necessary
	Building does not get warm	Thermal output of the heating surfaces is too low	Increase setpoint Set control mode to Δp-c
Warning signals is indicated by the <b>LED display</b> . <b>Fault signal LED</b> does not light up.			
E07	Generator operation	Water is flowing through the pump hydraulics, but pump has no mains voltage	Check mains voltage
E11	Dry run	Air in the pump	Check volumetric flow rate/ water pressure
E21	Overload	Sluggish motor; pump is operated outside of its specifications (e.g. high module temperature). The speed is lower than during normal operation.	Check the ambient conditions
Fault signals is indicated by the <b>LED display</b> . <b>Fault signal LED</b> lights up red.			
E04	Undervoltage	Power supply too low on mains side	Check mains voltage
E05	Overvoltage	Power supply too high on mains side	Check mains voltage
E10	Blocking	Rotor blocked	Activate manual restart or contact customer service
E23	Short-circuit	Motor current too high	Request customer service
E25	Contacting/ winding	Winding defective	Request customer service
E30	Excessive temperature of module	Module interior too warm	Check conditions of use
E36	Module defective	Electronics defective	Request customer service



<https://www.esbe.eu/group/products/circulation-units/grb300>



## Expose application info using leaflet





# Dimensioning, Pump Capacity diagram Series GRB301

