



ESBE AB
Bruksgatan 22
SE-333 75 Reftele
www.esbe.eu



ESBE System Units
CIRCULATION UNIT DN20, GRB300

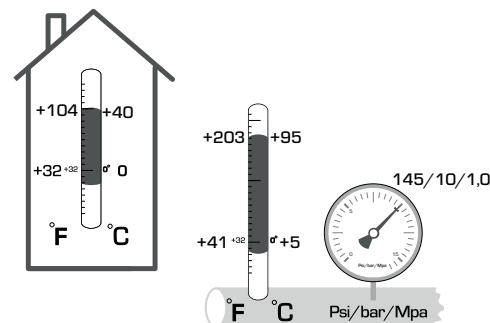


Series GRB301

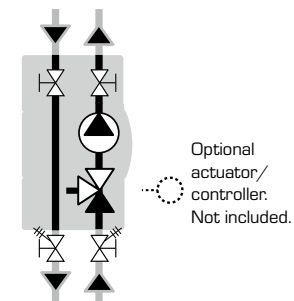


PED 2014/68/EU, article 4.3
EnEV 2014

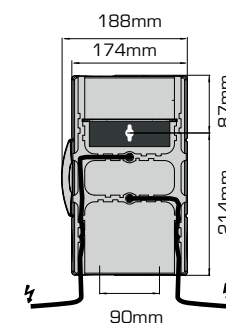
SI 2016 No. 1105



Function



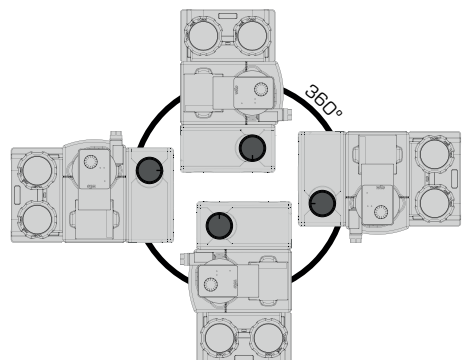
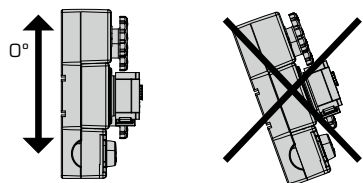
Cabling • Dimensions



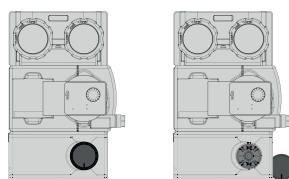
Mtrl.nr: 98141128 • Ritn.nr: 7958 vers. A Rev. 2022-12-19



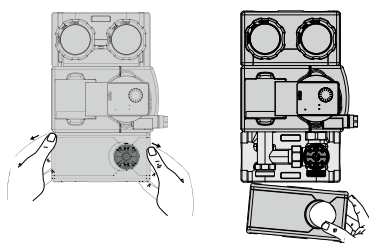
Mounting position



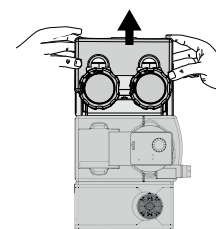
Remove knob



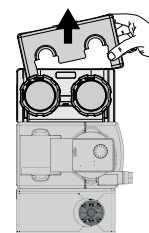
Disassembly insulation



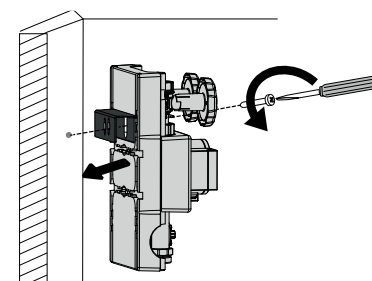
Pull up insulation 7mm



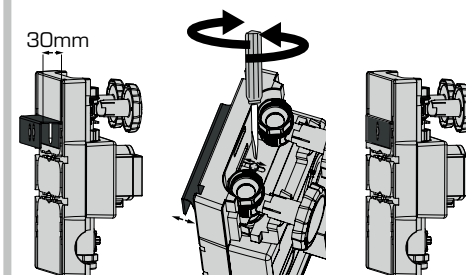
Remove



Assembling on wall



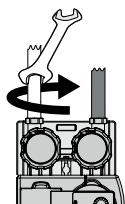
Adjust wallbracket



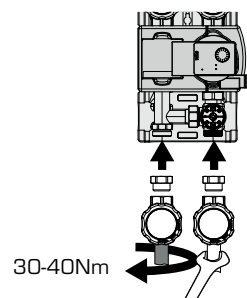
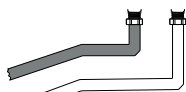
4

Fit supply pipes

c/c 90mm



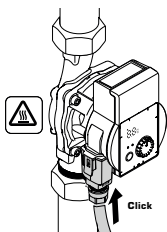
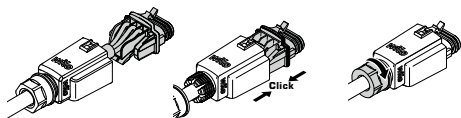
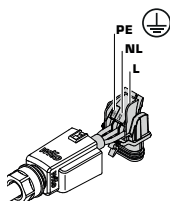
← Add ballvalves →



30-40Nm

i

Electric installation

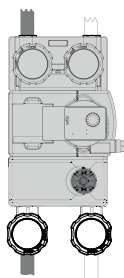
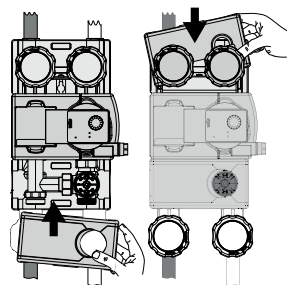


max 10 A

i www.esbe.eu

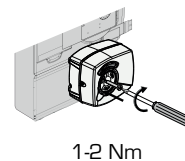
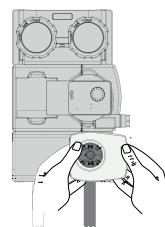
5

Assemble insulation



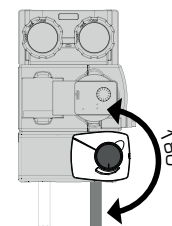
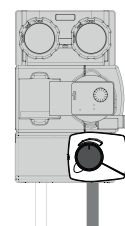
6

Assemble actuator/controller



1-2 Nm

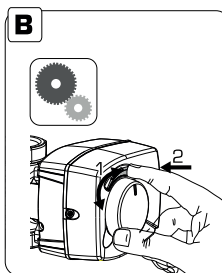
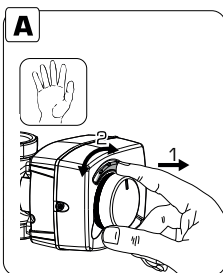
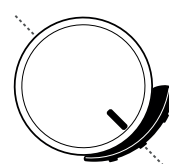
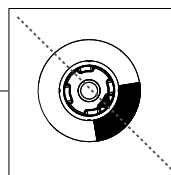
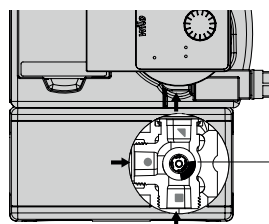
Mounting position actuator/controller



90°

i

Commissioning actuator/controller


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

i

Commissioning

Preparation

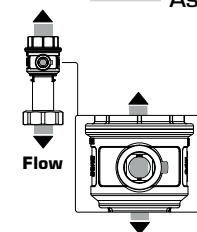
1



2

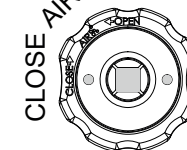


Assemble removed knob



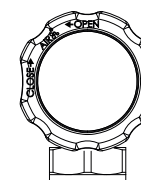
Flow

CLOSE AIR OPEN

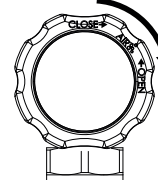


Open/Close Shut off valve

Open



Closed





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 m³/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.

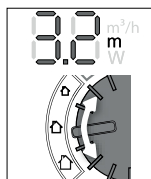


Recommended pump settings

Variable differential pressure (Δp-v)



0.0 m³/h
m W



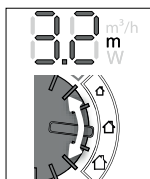
5 sec

0.0 m³/h
m W

Constant differential pressure (Δp-c)



2.0 m³/h
m W



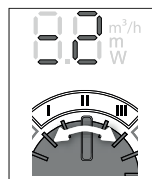
5 sec

2.0 m³/h
m W

Constant speed I II III:



0.0 m³/h
m W

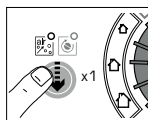
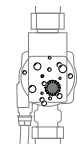


5 sec

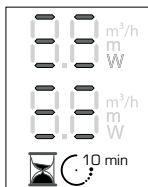
0.0 m³/h
m W



Venting



5 sec

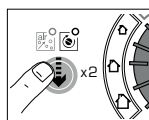


10 min

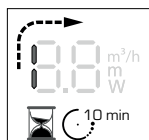
Manual restart



0.0 m³/h
m W



5 sec

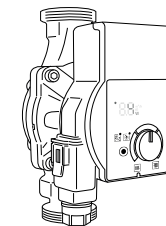


10 min



WILO - Faults, Causes and Remedies

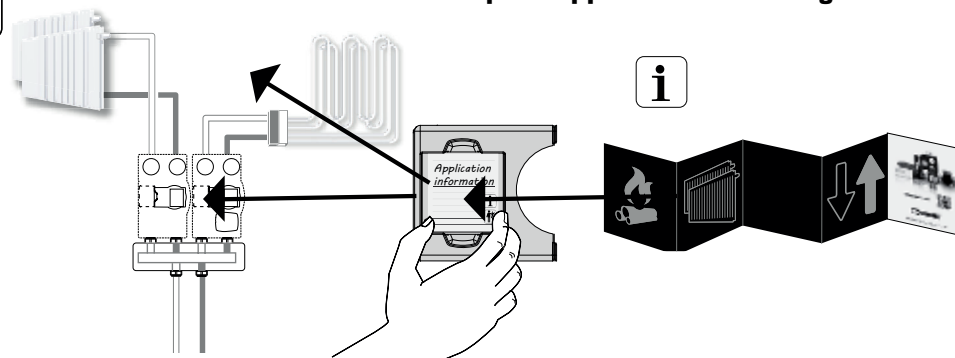
LED Indicator	Faults	Causes	Remedies
	Pump is not running although the power supply is switched on	Electrical fuse defective	Check fuses
		Pump has no voltage	Resolve the power interruption
	Pump making noises	Cavitation due to insufficient suction pressure	Increase the system pressure within the permissible 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 LED display . Fault signal LED 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 LED display . Fault signal LED 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



http://www.esbe.eu/global/en/products/circulation_units

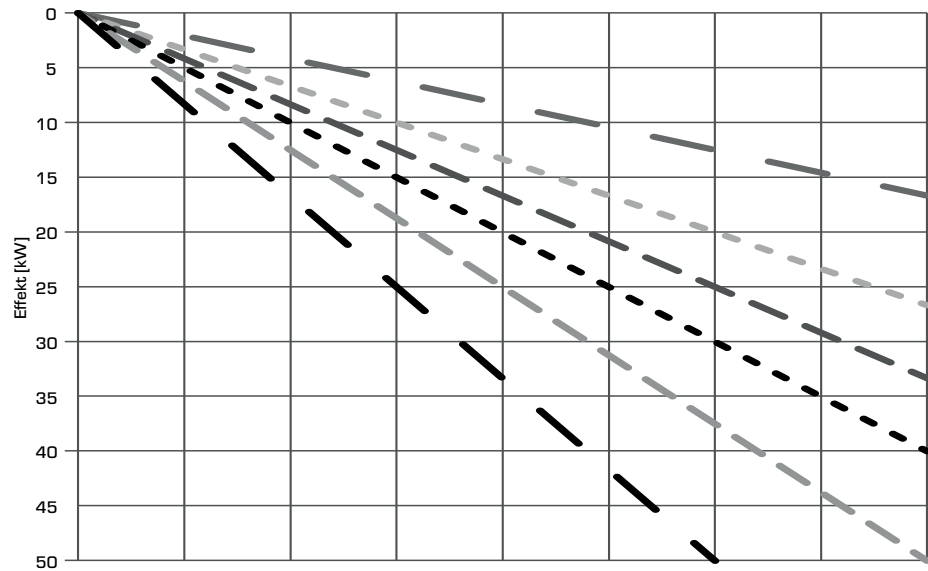
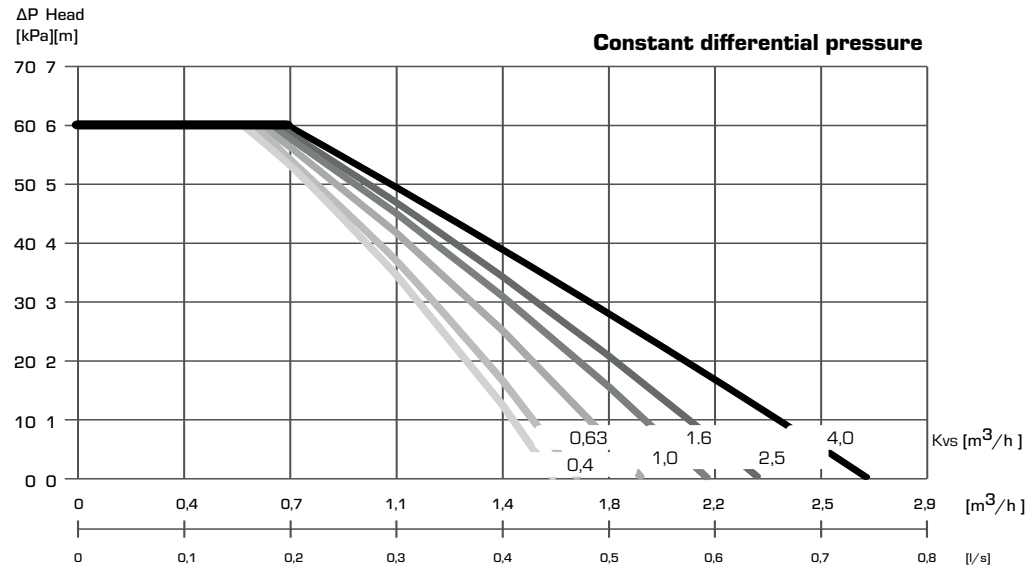
8

Expose application info using leaflet





Dimensioning, Pump Capacity diagram Series GRB301



Δt

— 5°C — 10°C — 15°C

- - 8°C - - 2°C — 20°C

