

**P APPARATUS, WIRING ETC.  
IN PIPE SYSTEMS OR PIPE NETWORKS**

**PH BOILERS, BURNERS ETC.**

**PHB BOILERS**

**PHB.1 Hot water boilers**

**PHB.12 Electric boilers for heating water**

**EPI**

Electric boiler for heating water in waterborne heating systems or in industrial processes. The power is divided into 30 stages which can be limited down to 1 power stage. The container is made of sheet steel, the boiler's immersion heaters are stainless steel SS 2353 ASIS 316 L with brass heads. The boiler can withstand a zero flow from a safety viewpoint.

Make: VÄRMEBARONEN

Type: EP 1400 (400 V)

**The boiler is supplied with the following functions/equipment**

- Time delay after voltage loss as recommended.
- 4 pcs. multi-pole power switches which are affected by adjustable thermal valve (standard) and pressure sensor at installed safety equipment (optional).
- Thermostat to maintain constant flow temperature.
- Over temperature protection.
- Min and max restriction of temperature.
- Control output (230V ~) for external circulation pump (with pump maintenance operation)
- Float switch and earth fault measurement. (PEC)
- External blocking connection, external stage/power control with alternatives  
0-5 V dc, 0-10 V dc, 4-20 mA.
- Connection for external display power/temperature with 0-10 V dc.
- Alarm indication in the front panel and connection for external alarm indication.
- Connection for external set temperature value 0-5 V dc, 0-10 V dc, 4-20 mA.
- 4 Internal ventilation fan(s).

**Accessories (option)**

- Safety equipment
- UTK 7/15/30, outdoor temperature compensation for variable flow temperature.
- GSM device for external alarm indication (buzzer alarm)
- Series control of 2 water connected electric boilers.
- Secondary control of boiler temperature from secondary circuit.
- Modbus/Bacnet

**Technical data:**

Max power:	1400 kW
Voltage:	400 3~ V
Enclosure protection class:	IP X1
Current at max power:	2021 A
Max fuse:	8 groups á 315 A
Power/stage:	46,6 kW
Current/stage:	67,3 A
Water volume:	610 l
Dimensions: WxDxH (incl. pipe/cable connections)	1638 x 1509 x 2154 mm
Lowest ceiling height (for immersion heater replacement)	2500 mm
Weight: (empty)	930 kg
Operating pressure:	6 bar
Operating temperature:	20-95°C
Connection flow/return: (rear)	DN 150 PN 16
Flow requirements: Recommended $\Delta t = 10^\circ\text{C}$	35,9 l/sec
Min /max flow	14,4 / 44,9 l/sec