

# Power-to-Heat 🗇

## Intelligent conversion of electrical Power-to-Heat

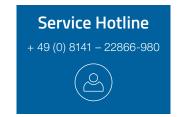


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# Description

ELWA P2H systems are built to convert electrical surplus energy to thermal energy, supporting the existing local heating system or district heating array and relieving the electric grid. By its variable power control, line extension costs can be mitigated or avoided, in small-scale like a building grid connection or in large-scale like for municipal utilities or large offgrid installations. Feed-in regulations can easily be fulfilled, especially in combination with CHP or renewable energy sources. Control power installations provide additional value and income.

#### **Advantages**

- > Additional earnings
- > Avoiding electrical grid extension
- > Reducing maintenance costs
- > Fast amortization
- > Auxiliary-/emergency-/pre-/post-heating
- > Easy installation
- > Smart extension of existing heating installations (only 1 sqm needed for heater)
- > Provision of grid quality services
- > Reduction of carbon footprint costs when used with renewable energies

#### **Technical Description**

- > Power range from < 100 kW to 1,67 MW
- > Intermediate sizes possible, or scalable to 5 MW
- > Almost stepless power control
- > Connection of 400 VAC or 690 VAC 50 Hz
- > Other voltages and 60 Hz available on request
- > Heater placed in heating area, switching cabinet adjacent or in separate room
- > Fully redundant (2n) or partly redundant (HotSpare) configuration optional
- > Flange diameter DN80, optional up to DN200, flange position selectable
- > Optional preparation for feed-in regulation requirements or control power
- > Low flow resistance, optional with pump and for temperatures > 110°C
- > Monitoring and/or parameterizing from remote optional

### Overview table

	P2H144	P2H288	P2H432	P2H796	P2H1008	P2H1667	
Pmax	144 kW	288 kW	432 kW	796 kW	1008 kW	1667 kW	
Medium	Water	Water	Water	Water	Water	Water	
Pressure	< 16 bar						
Temperature	110°C	110°C	110°C	110°C	110°C	110°C	max.
Voltage	400/690	400/690	400/690	400/690	690	690	VAC
Cabinet size	1-2 m	1-2 m	2-3 m	2-4 m	2-3 m	2-4 m	width