



ERA master
Efficient. Reliable. Affordable.

Heat Pumps air-to-water **ERA** master

Premium air-to-water heat pump with R290 refrigerant for heating, cooling and domestic hot water, heating in commercial or industrial buildings, residential buildings, schools and healthcare facilities.



High
Energy
Efficiency



Quiet
Operation



Wi-Fi



Innovative
Design



Available
Technical
Support

erahp.eu

Main parameters and features

During development, great emphasis was placed on high efficiency, low noise, reliability, quick installation and easy implementation into the energy management system using MODBUS RTU.

With regard to the R290 refrigerant used, the **ERA^{master}** meets the legislative requirements with regard to F-GAS control and is environmentally friendly.

ERA^{master} commercial heat pump reaches a heating water outlet temperature of up to 75°C, operates down to an outdoor temperature of -25°C, and can therefore be installed in houses with both underfloor heating and radiators, e.g. as a replacement for old or non-ecological heat sources.

Seasonal heating factor (SCOP)

up to 5.1 at 35°C (average climate)

up to 5x
cheaper operation

than with electric heating.

až 5x
lower energy consumption

than with a gas boiler.

Unit heat outputs

50 and 100 kW

Cooling performance

35 and 70 kW

Unit 50 kW -

2 compressor blocks

100 kW unit -

4 compressor blocks

ERA^{master}

Commercial heat pump

High energy efficiency (ERP)

A+++

at 35°C

Intelligent algorithm for efficient heat pump control. Advanced defrost technology.

Quiet operations

acoustic pressure

58 db (A)

at a distance of 1m



sound power

75 db (A)

Refrigerant

R290

Natural gas with no impact on climate change.

GWP = 3

New compressor generation

Mitsubishi Electric

Specially developed twin rotary compressor for R290 refrigerant with optimized efficiency and noise reduction.



7" Touch display

Convenient, intuitive operation and setting of all parameters.

Control of up to two heating systems without the need for accessories.

Wireless internet connection via Wi-Fi network.

MODBUS RS485, RTU protocol
Easy integration into the energy management system.

PHOTOMATE EMS

(Energy Management System)

Enables efficient control of **ERA^{master}** heat pumps according to building needs, spot electricity prices, surpluses, battery storage, etc. The most efficient way to control a heat pump. Individual settings for each building and system.



ERA^{master}
50



ERA^{master}
100

Model →



Energy efficiency 35°C / 55°C

A+++ / A+++

A+++ / A+++

SCOP EN 14825 Average climate, 35/55°C

5,1 / 3,9

5,1 / 3,9

Power A7/W35 (kW)

13,60 ~ 50,00

27,24 ~ 100,00

Prated EN 14825 (35/55°C) (kW)

34 / 32

66 / 60

Maximum outlet temperature (°C)

75

75

Heating operating conditions (°C)

-25 ~ +43

-25 ~ +43

Cooling operating conditions (°C)

+10 ~ +43

+10 ~ +43

Connection dimensions (flange)

DN 50

DN 65

Sound pressure 1m according to EN 12102 dB(A)

58

60

Max. Power (kW)

22 (2x 11)

44 (2x 22)

Power supply (V)

400

400

Circuit breaker (A)

40

80

Refrigerant

R290

R290

Number of compressors

2

4

Refrigerant quantity (kg)

2,0 x 2

2,0 x 4

Dimensions width/depth/height (mm)

1095 / 1315 / 2435

2190 / 1315 / 2435

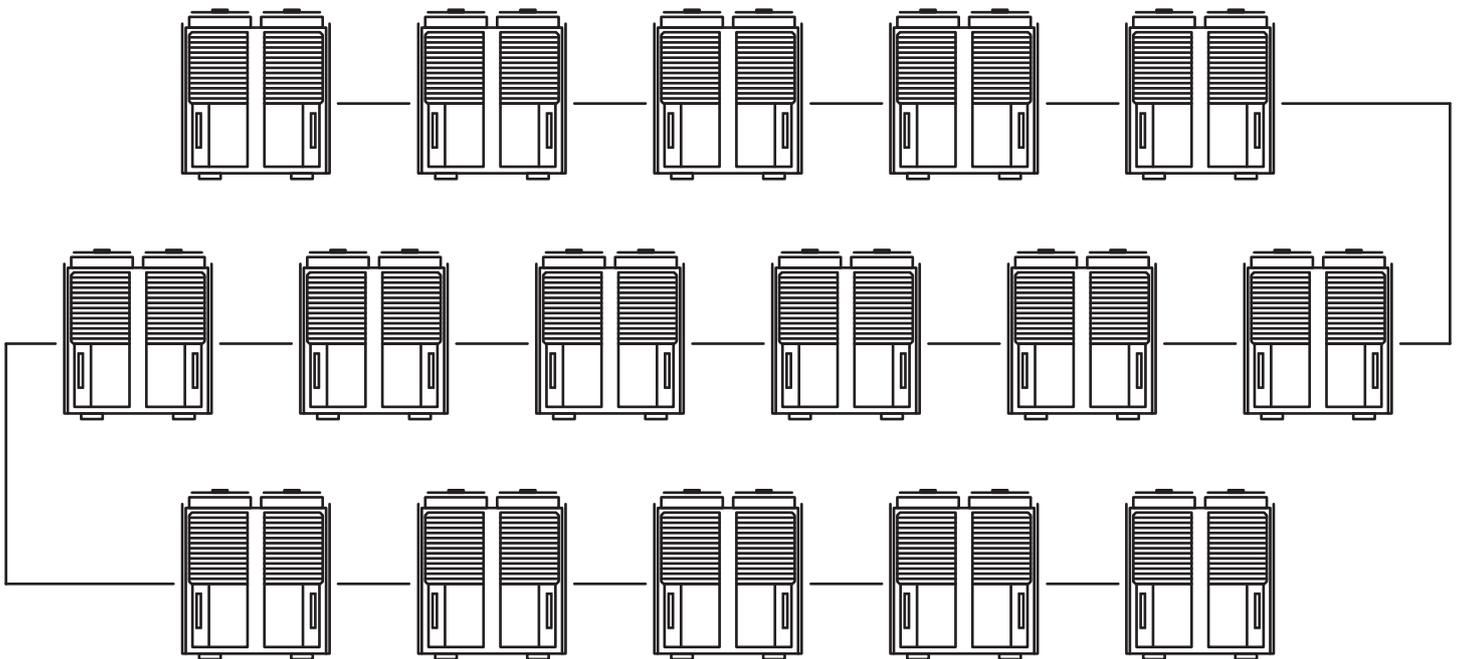
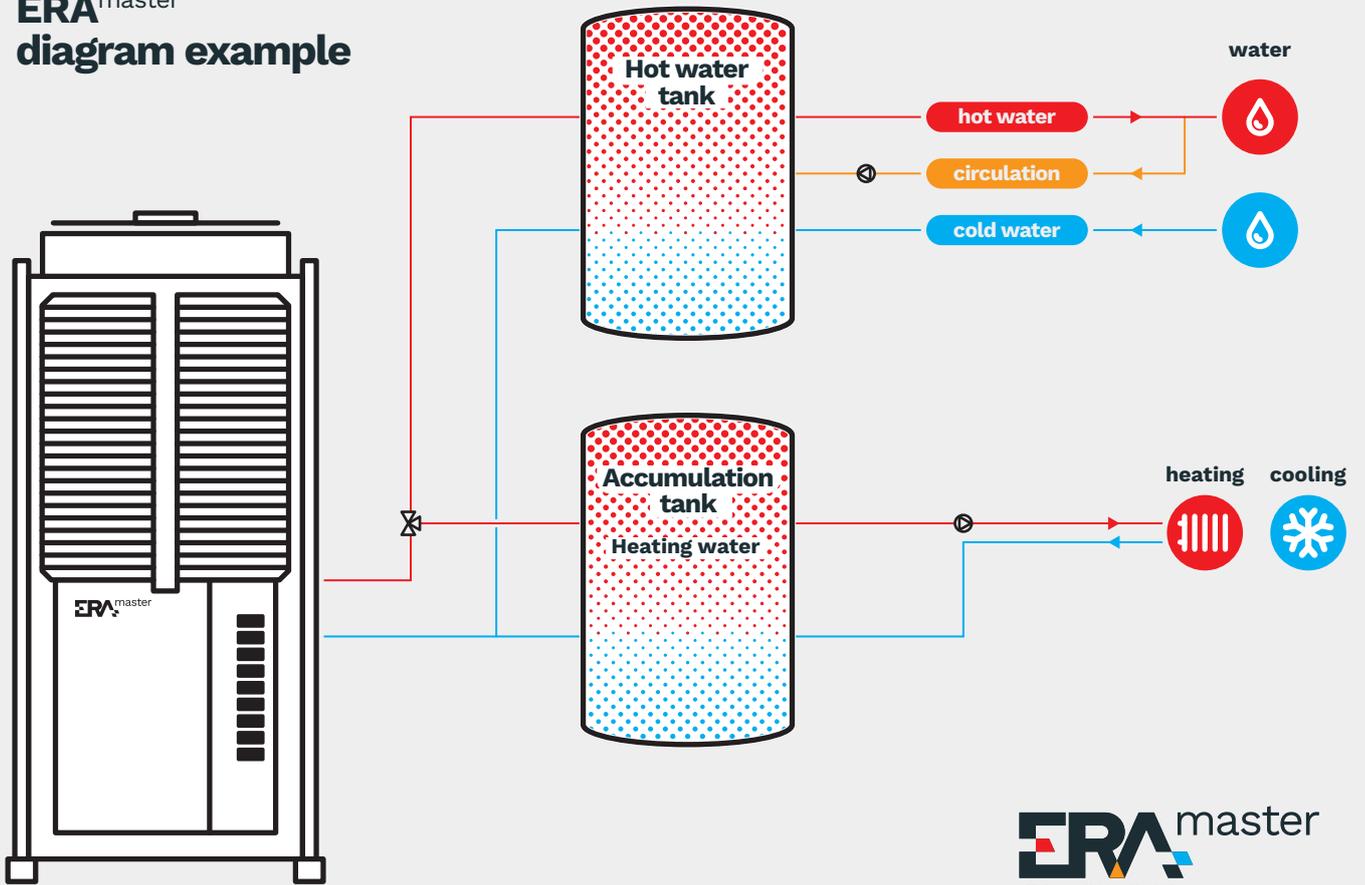
Weight without packaging (kg)

450

890

(preliminary)

ERA^{master}
diagram example



Cascade
up to 16 units

A cascade of heating capacity can be created

up to 1.600 kW

Max. cooling capacity of the cascade

up to 1.120 kW

PHOTOMATE s.r.o.
 Prokišova 356/7
 370 01 České Budějovice
 Czech Republic

erahp@photomate.eu
 photomate.eu



www.erahp.eu