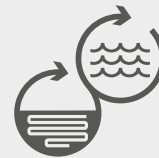


# HIGH-TEMPERATURE HEAT PUMPS

## for industrial applications



Water-to-water



High water temperatures:  
source side up to 45 °C,  
heating side up to 82 °C



Efficient heating and cooling



Reliable ON/OFF compressor



Online control and diagnostics

INDUSTRIAL APPLICATIONS | CASCADE SYSTEMS WITH OUTPUT OVER 1000 KW  
TOTAL COP UP TO 10 | HOT AND CHILLED WATER PRODUCTION



Czech (EU)  
product



A tradition  
since 1994



Exported into  
30 countries  
worldwide



**BBAV**

ISO 9001  
BUREAU VERITAS  
Certification



Model	Performance at B0W35	COP at B0W35	Performance at W10W35	COP at W10W35	Performance at W40W65	COP at W40W65	Max. outlet water temperature	Order number
	kW		kW		kW		°C	
<b>AQ 40 ZHX</b>	13.80	3.94	19.62	5.57	38.56	5.92	82	1AQ40ZHX-1
<b>AQ 50 ZHX</b>	18.58	4.19	26.10	5.82	51.30	6.19	82	1AQ50ZHX-1
<b>AQ 60 ZHX</b>	23.39	4.09	32.91	5.61	63.58	5.76	82	1AQ60ZHX-1
<b>AQ 75 ZHX</b>	28.24	4.13	39.47	5.67	76.31	5.86	82	1AQ75ZHX-1
<b>AQ 100.2 ZHX</b>	37.18	4.09	52.21	5.69	96.78	5.78	82	1AQ100.2ZHX-1

## KEY FEATURES

- High-temperature water-to-water heat pump
- Heating water temperature up to 82 °C
- Source water temperature up to 45 °C
- Wide range of industrial applications
- Control of up to 6 heating circuits and DHW heating
- Remote monitoring and supervision option
- ModBUS RTU communication protocol
- Very quiet operation



## Standard equipment

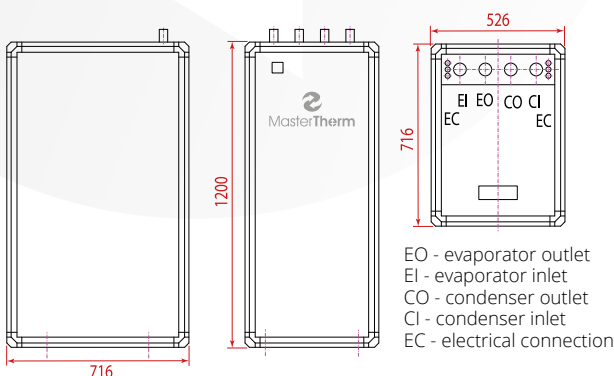
- Integrated circulation pumps**
- MasterLAN cascade control**
- pGDx touchscreen controller for room installation**
- Electronic expansion valve**
- Built-in electrical switchboard with circuit protection**

## Optional equipment

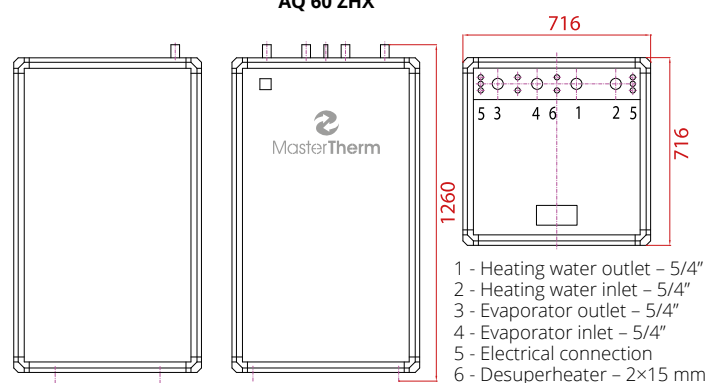
- Master Therm Online application** **1OICON**  
Online control and remote service access.
- Desuperheater for highly efficient DHW heating** **1ODESUP**  
Integrated device that uses heat from compressor superheated refrigerant vapour through a dedicated hydraulic circuit, increasing DHW heating efficiency. Operates in both heating and cooling modes.
- PLUS control expansion module** **1OEK**  
Increases the number of controlled heating circuits by up to 6.
- Integrated 3×65 A electricity meter** **1OEM65AMID**  
For local measurement of electricity consumption. MID certified.
- RAL colour finish for cabinet panels** **1OCO**  
Custom colour option for the indoor unit panels.

## DIMENSIONS AND CONNECTIONS

AQ 40 ZHX a AQ 50 ZHX



AQ 60 ZHX



# AQ ZHX



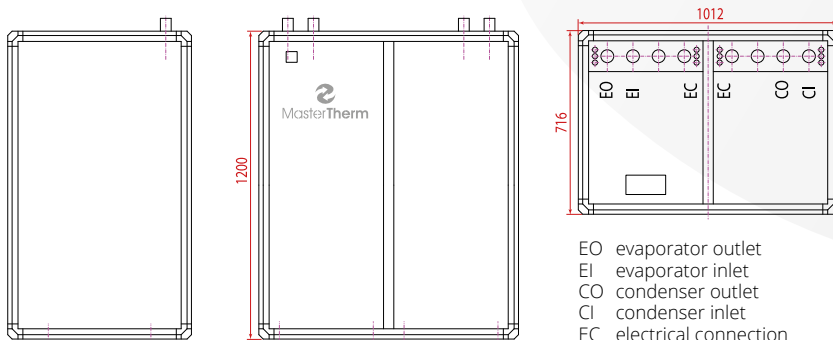
		<b>AQ 40 ZHX</b>	<b>AQ 50 ZHX</b>	<b>AQ 60 ZHX</b>	<b>AQ 75 ZHX</b>	<b>AQ 100.2 ZHX</b>
Power B0W35 <sup>1</sup>	kW	13.80	18.59	23.39	28.24	37.18
	COP	3.94	4.19	4.09	4.13	4.09
Power W10W35	kW	19.62	26.10	32.91	39.47	52.21
	COP	5.57	5.82	5.61	5.67	5.69
Power W40W65	kW	38.56	51.30	63.58	76.31	96.78
	COP	5.92	6.19	5.76	5.86	5.78
Refrigerant		R134a	R134a	R134a	R134a	R134a
Množství chladiva	kg	4.2	4.4	4.4	6.0	10.0
Electric circuit breaker <sup>2</sup>		3x 20 A"C"	3x 25 A"C"	3x 32 A"C"	3x 40 A"C"	3x 50 A"C"
Compressor	připojení	3x 400 V	3x 400 V	3x 400 V	3x 400 V	3x 400 V
Weight	kg	230	230	230	400	400
Mandatory leakage checks according to EP 517/2014		ne	ne	ne	ne	ano
Maximum heating water temperature	°C	82	82	82	82	82
Maximum source water temperature	°C	45	45	45	45	45

1 Performance data according to EN 14511. B0/W35 – brine 0 °C, water 35 °C.

2 Recommended electrical protection for 3 × 400 V power supply in the standard configuration, without auxiliary electric heater.

## DIMENSIONS AND CONNECTIONS

**AQ 75 ZHX a AQ 100.2 ZHX**



# COOLING AND HEAT RECOVERY PROJECTS

## IT4 Innovations Supercomputing Centre

Ostrava



## Na Homolce Hospital

Prague



## Bodycote

Liberec



## HVM Plasma

Prague



## POEX

Velké Meziříčí



**MORE PROJECTS AND DETAILED INFORMATION**



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member of Atrea group



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