

aroTHERM plus

Air source heat pump



Dimensions

Model	Width	Height	Depth
aroTHERM plus 3.5kW aroTHERM plus 5kW	1100mm	765mm	450mm
aroTHERM plus 7kW		965mm	
aroTHERM plus 10kW aroTHERM plus 12kW		1565mm	



Overview

The aroTHERM plus is our flagship air source heat pump range, available in a wide range of heat output sizes for many times types of property with 3.5, 5, 7, 10 and 12kW models available.

This heat pump continues to win awards around the world for its innovative use of the refrigerant R290, which gives it a Global Warming Potential (GWP) of just three. This refrigerant is already used in household appliances all over the world and offers many advantages over refrigerants traditionally used in heat pumps. Coupled with market leading technical features that improve efficiency and deliver higher flow temperatures, the aroTHERM plus is perfect for new and existing heating systems (including hybrid). It's also impressively quiet in operation and has been certified by Quiet Mark*, making it suitable for use even in densely built-up terraced housing estates.

Features & benefits



High performance ASHP range

With a flow temperature of up to 75°C, the aroTHERM plus can deliver more usable hot water with high hot water comfort levels whilst removing the need for direct electric immersion to sterilise the water, protecting from legionella.



Super quiet operation

From just three metres away, the acoustic pressure level is less than 30 dB(A) for easier planning and siting.



Higher energy-efficiency performance

With a SCoP of up to 5.03, the aroTHERM plus is extremely energy efficient, enabling high energy savings against certain fossil fuels.



R290 natural refrigerant with Low GWP

Already fulfilling the next NZEB requirements, the aroTHERM plus uses monobloc technology with a hermetically sealed refrigerant circuit.



Fully adaptable system approach

The aroTHERM plus can also be combined with photovoltaic systems and integrated into smart power grids (SG-ready), so your customers can enjoy the benefits of variable electricity tariffs.



Quality by design

Suitable for installations less than 150m away from the sea with salt resistant construction C5 class.

* Models 3.5, 5 and 12kW.



Technical data	Unit	3.5kW	5kW	7kW	10kW (230v)	12kW (230v)	10kW (400v)	12kW (400v)	
General									
Weight, ready for operation	kg	114		128		194		210	
Connection, heating circuit		G 1 1/4"							
Rated voltage		230 V (+10%/- 15%), 50 Hz, 1~/N/PE					400 V (+10%/-15%), 50 Hz,3~/N/PE		
Rated current, maximum	A	14.3		15.0		23.3		15	
Fuse size	A	16				25		16	
Fuse type		Characteristic C, slow-blow, singlepole switching							
RCD type		Type B rated to 20kHz or greater and with a minimum trigger point of 150mA above 1kHz							
eBUS (2-core communication cable)	mm ²	0.75							
Maximum length eBUS cable (polarity sensitive)	m	50							
IP rating		IP 15 B							
Fan power consumption	W	40				50			
Fan quantity		1				2			
Fan air flow, maximum	m ³ /h	2300				5100			
Heating pump, power consumption	W	2 - 50				3 - 87			
Heating circuit									
Heating water temperature, minimum/maximum	°C	20 - 75							
Basic length of the heating water pipe, maximum, between the outdoor unit and indoor unit	m	20							
Maximum static height difference between outdoor unit and the highest point in the heating system	m	18				13			
Minimum operating pressure	bar	3.0				2.5			
Maximum operating pressure	bar	20							
Minimum volume flow	l/h	400		540		995			
Maximum volume flow	l/h	860		1205		2065			
Water volume, in the outdoor unit	l	1.5		2.0		4.5			
Minimum open water volume	l	15		20		45			
Refrigerant circuit									
Fluid type		R290							
Fluid fill quantity	kg	0.6		0.9		1.3			
Refrigerant, Global Warming Potential (GWP)		3							
CO ₂ equivalent	t	0.0018		0.0027		0.0039			
Permissible operating pressure	bar	31.5							
Compressor type		Rotary piston				Scroll compressor			
Compressor oil type		Specific polyalkylene glycol (PAG)							
Compressor, control		Electronic							
Noise emissions, heating mode									
Sound power, EN 12102, EN 14511 LWA, A7/W35	dB(A)	48		49		51			
Sound power, EN 12102, EN 14511 LWA, A7/W55	dB(A)	48		49		51			
Efficiency									
Energy efficiency class 35°C	(A+++ to F)	A++				A+++			
Energy efficiency class 55°C	(A+++ to F)	A+				A++			
Combination with uniTOWER									
Energy efficiency class	(A+++ to F)	A+				A++			
Energy efficiency class, hot water	(A+ to F)	A				A			