ECH_2O

Domestic hot water heat pump

Efficiency › Energy savings › Comfort

Energy efficiency	
L A	XL A
300 L Model	500 L Model

The combination of

two proven technologies

System configuration
The Daikin domestic hot water heat pump consists of 2 units: a heat pump outdoor unit equipped with inverter technology and a hot water storage tank.

Guaranteed comfort

EKHHP300A2V3

EKHHP500A2V3

Available in the 300 litre or 500 litre model, our ECH$_2$O domestic hot water heat pump is designed to provide your perfect climate.

Designed to meet all of your needs

Energy efficiency

Operating at the highest level of energy efficiency, this model limits electricity use and maximises your cost savings.

Fresh hot water

The structure of the thermal store ensures optimal water hygiene and eliminates the risk of bacteria or legionella. Rest assured that your hot water is fresh and safe.

Solar ready

Take advantage of solar power. Easily connect your hot water storage to self-draining solar collectors on your roof.

Maintenance-free

Smart settings provide you with maximum comfort and the maintenance-free tank lets you relax.

Built-in user interface

This intuitive interface allows you to quickly programme your domestic hot water heat pump to suit your habits.

Increased energy efficiency

and savings

Our new ECH$_2$O domestic hot water heat pump is the ideal combination of Daikin's signature heat pump technology and a high performance hot water storage tank that increases energy efficiency and creates substantial savings.

Maximum efficiency

The hot water storage tank is optimally designed to maximise the efficiency of hot water production:

› Multiple layers of polyurethane foam fully insulate the water heater.
› Stainless steel heat exchanger, with a capacity of 29 litres, runs the entire length of the tank.
› Provides hot water at all levels.

Energy savings

Combining a heat pump and a hot water storage tank, creates substantial savings for you:

› Reduces the electricity required to produce domestic hot water by up to 70% (compared to a traditional hot water heater).
› Nearly instantaneous production of hot water, without requiring additional electric power for the water disinfection cycle.

This new ECH$_2$O domestic hot water heat pump consumes **up to 3 times less electricity** than a traditional electric hot water heater.

Future proof:

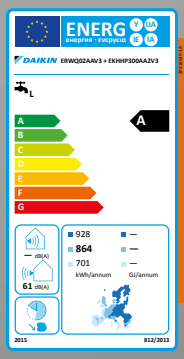
connect to solar energy for greater savings

Easily connect your hot water storage to drain-back solar collectors installed on your roof.
Every domestic hot water heat pump comes with factory-installed solar piping outlets.

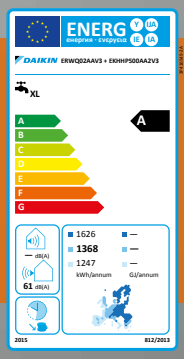
A drain-back system:

› Provides excellent heat-exchange performance.
› Is simple to install and easy to maintain.

Tip: If your configuration does not allow for the installation of self-draining solar collectors, a 500L domestic hot water tank can be combined with pressurised solar panels.



300 L model



500 L model

Class A efficiency labels

According to the EU eco-design guidelines, Daikin's domestic hot water heat pump is classified with an "A" label, the highest energy efficiency available.

SG Ready
Smart Heat Pumps

A smart product

Your Daikin domestic hot water heat pump is "Smart Grid Ready".
It is designed to use computer technology to maximise the production, distribution and use of electricity. Your domestic hot water heat pump communicates with your "intelligent" electric meter and automatically determines the least expensive times for producing the energy required to meet your hot water needs.

A closer look at

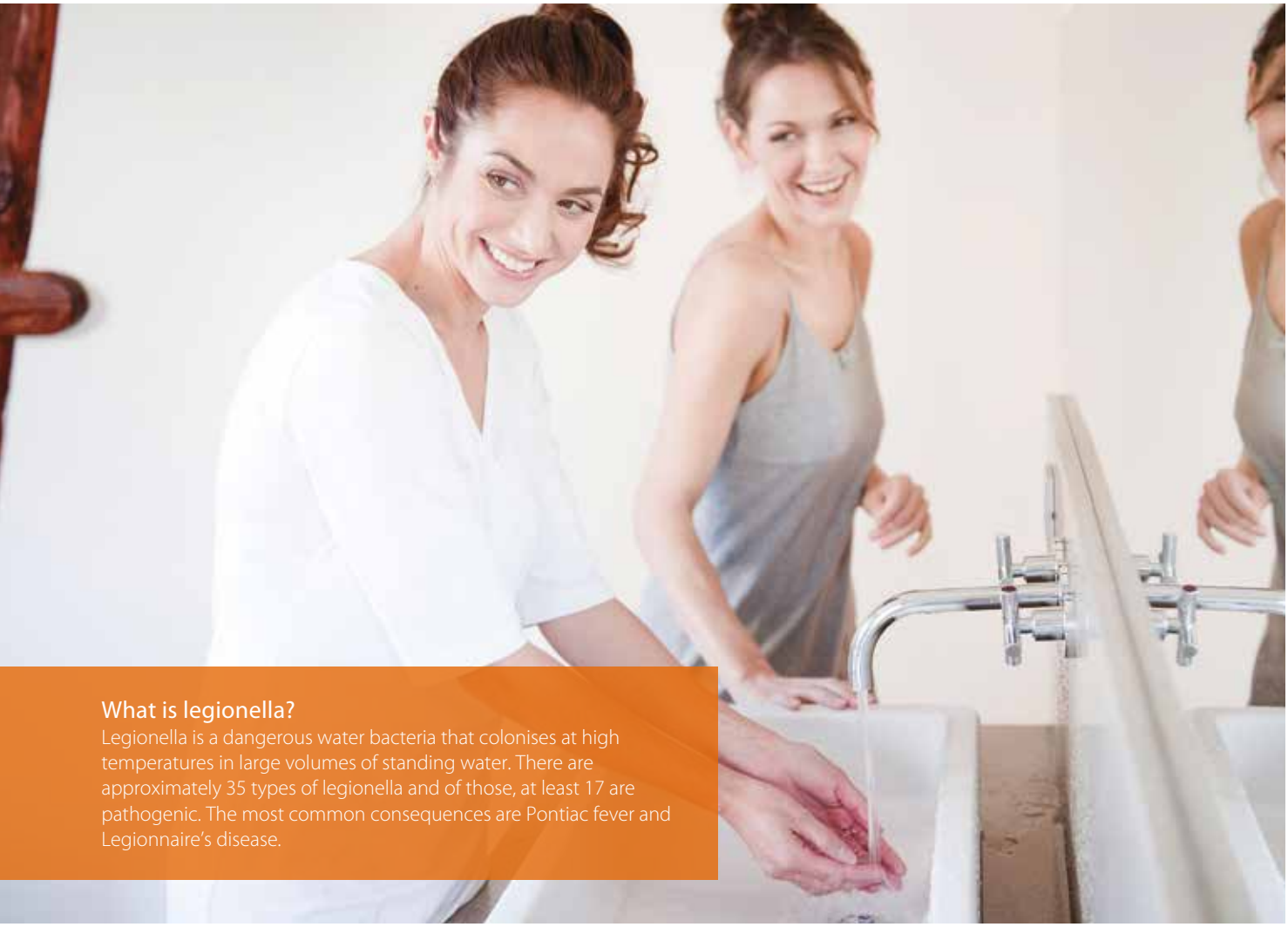
fresh hot water production

Unlike traditional hot water heaters, your hot water does not stay in the storage tank; it is heated instantly as it passes through the tank.

Safe hot water

Eliminating prolonged hot water storage significantly increases the safety and quality of your hot water. Our ECH_2O domestic hot water heat pump is designed with an anti-legionella thermal store, so that your hot water is fresh and healthy.

- Unit design ensures that deposits of sludge, rust, sediments and legionella are not possible.
- Engineered piping system and nearly instantaneous hot water production eliminates large volumes of standing hot water.
- Stainless steel heat exchanger eliminates the risk of calcium deposits.



What is legionella?

Legionella is a dangerous water bacteria that colonises at high temperatures in large volumes of standing water. There are approximately 35 types of legionella and of those, at least 17 are pathogenic. The most common consequences are Pontiac fever and Legionnaire's disease.

Trouble-free installation and maintenance-free tank

The compact design of the heat pump and hot water storage without an expansion vessel allows for easy installation and maintenance in all spaces.

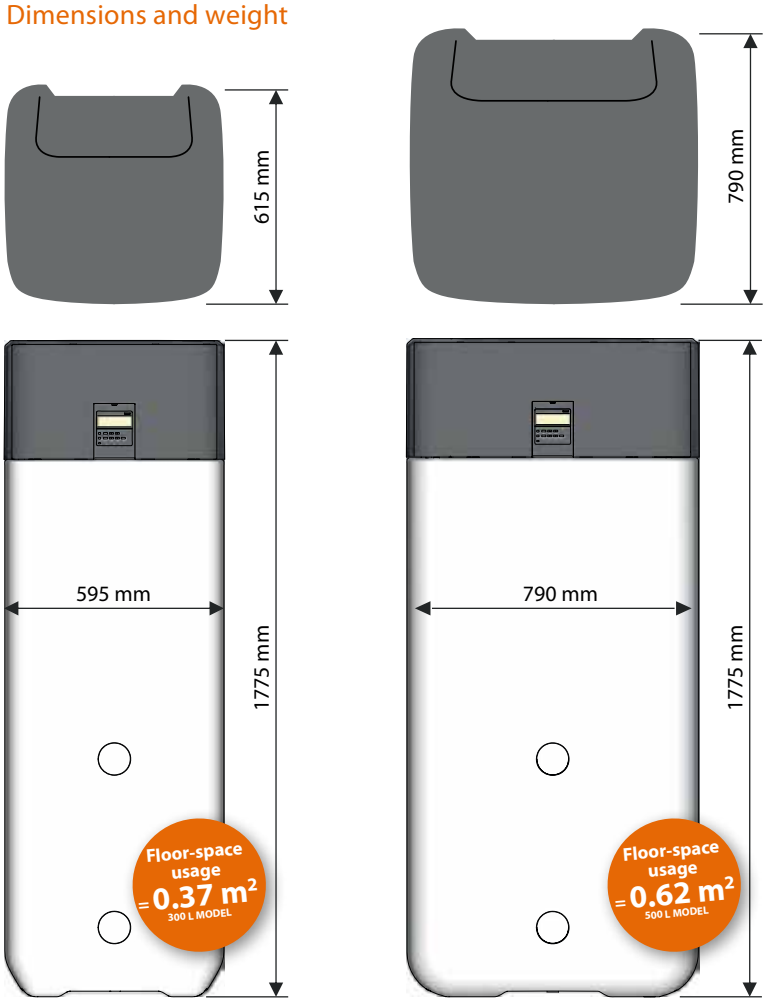
Easy installation

› Plate-based heat exchanger requires no expansion tank or expansion system.
› Both models are compact in size and require the same footprint as for a home refrigerator.
› All main components of the hot water storage tank (refrigerant connections, electric booster, water connections and user interface) are installed at the top of the tank for easy access.

Maintenance-free

› Use of polypropylene insulation guarantees durability and resistance to impact.
› A drainage outlet at the top prevents over-filling.
› Equipment wear is reduced without the long-term storage of hot water.

Dimensions and weight



70 kg
300 L Model

80 kg
500 L Model

EKHHP-A2V3 + ERWQ-AV3

EKHHP300A2V3

ERWQ-AV3

Indoor Unit				EKHHP	300AA2V3	500AA2V3
Casing	Colour				Traffic white (RAL9016) / Dark grey (RAL7011)	
Dimensions	Unit	HeightxWidthxDepth		mm	1,750x615x615	1,750x790x790
Weight	Unit			kg	70	80
Tank	Water volume			l	294	477
	Maximum water temperature			°C	85	
	Maximum water pressure			bar	0	
Operation range	Domestic hot water	Ambient	Min.~Max.	°CDB	2~35	
		Water side	Min.~Max.	°C	5~55	
Refrigerant	Type				R-410A	
	Charge			TCO_2eq	-	
	GWP				-	
Sound power level	Nom.			dBA	0	
Sound pressure level	Nom.			dBA	0	

Efficiency data			EKHHP + ERWQ	300AA2V3 + 02AAV3	500AA2V3 + 02AAV3
Power input	Domestic hot water	Min.	kW	0.004	
		Max.	kW	0.03	
COP				4.30	
Domestic hot water heating	General	Declared load profile		L	XL
	Average climate	ηwh (water heating efficiency)	%	119	123
		Water heating energy efficiency class		A	

Outdoor Unit				ERWQ	02AAV3
Dimensions	Unit	HeightxWidthxDepth		mm	550x765x285
Weight	Unit			kg	35
Compressor	Quantity				1
	Type				Hermetically sealed swing compressor
Operation range	Domestic hot water	Min.~Max.		°CDB	-15~35
Refrigerant	Type				R-410A
	GWP				2,087.5
	Charge			TCO_2eq	2.2
				kg	1.05
	Control				-
Sound pressure level	Heating	Nom.		dBA	47
	Cooling	Nom.		dBA	47
Power supply	Name/Phase/Frequency/Voltage			Hz/V	V3/1~/50/230

Daikin Europe N.V. Naamloze Vennootschap Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Responsible Editor)

FSC

ECPEN16-732 xxx · 02/16

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Daikin Europe N.V. participates in the Eurovent Certification programme for Liquid Chilling Packages (LCP), Air handling units (AHU) and Fan coil units (FCU), Check ongoing validity of certificate online: www.eurovent-certification.com or using: www.certiflash.com

The present publication supersedes ECPEN15-002. Printed on non-chlorinated paper.