



# Air Source Heat Pumps

Innovative Heating Solutions  
for a Sustainable Future

[www.ebac.com](http://www.ebac.com)





# The next generation of home heating

**As the UK moves towards a greener future, the demand for energy-efficient and sustainable heating solutions is increasing rapidly.**

At Ebac, we're proud to introduce a high-quality air source heat pump solution that has been designed with energy and cost efficiency at the forefront.

Our commitment to innovation and sustainability has been at the core of our business for over 50 years. We believe that by designing and developing cutting-edge products and technology, we can help improve the lives of British homeowners while also contributing to a more sustainable future.

Our air source heat pumps are designed with the highest quality components and rigorously tested to ensure maximum efficiency, reliability and longevity.

Our products are created in Britain specifically for British homes, and we are proud that we are able to offer exceptional product and after-sales support from the very people that design and manufacture the product at our site in County Durham.

Commitment to innovation, sustainability and quality will continue to drive Ebac in the years to come, and we look forward to working with installers to help create a more sustainable future for all.



**John Elliott MBE DL.**  
Founder and Chairman of Ebac





# Air Source Heat Pump

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9kW 5kW



## White Grey

Ebac 9kW: **H1D09WG-GB**    Ebac 5kW: **H1A05WG-GB**

9kW 5kW



## Graphite

Ebac 9kW: **H1D09GB-GB**    Ebac 5kW: **H1A05GB-GB**



# Features & Benefits



## High efficiency performance

Extra large coils to improve performance and efficiency and high performance fan to maximise air flow.



## Leading control system

An easy to use control system provides convenient diagnostics and is compatible with a variety of major smart thermostats, including Homely.



## Patent-pending defrost system

An innovative new defrost system from Ebac helps customers save over £1,300 in running costs.



## Quiet

Durable and robust steel casing, combined with the optimized design, ensures a quiet and unobtrusive operation.



## Aesthetically different

With a sleek and unobtrusive design that offers a fresh take on the look of the traditional heat pump.



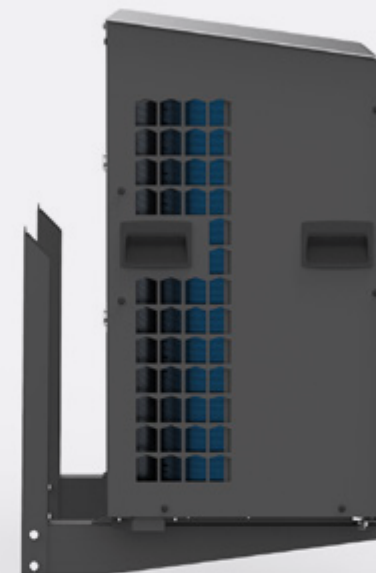
## 5kW & 9kW outputs available

A range of outputs to suit different needs, with options available in both 5kw & 9kw.



## Designed for the UK

Designed and manufactured in the UK for the British climate.



## Easy installation

Providing the convenience of floor or wall mounting with optional brackets. In addition, installers can benefit from product training and first-class technical support.



## Market leading 7-year warranty

7-year manufacturer's Parts & Labour warranty ensures reliable and efficient heating for years to come.



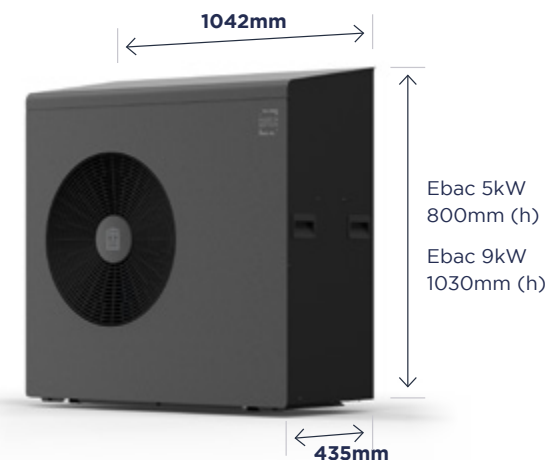
# Technical specification

		Ebac 5kW	Ebac 9kW
<b>OPERATING AMBIENT TEMPERATURE RANGE</b>		-20°C - +35°C	-20°C - +35°C
<b>SOUND DATA (EN 12102)</b>	Pressure Level at 1m (dBA)	55	51
	Power Level (dBA)	67	64
<b>WATER DATA</b>	Pipework Size (mm)	28	28
	Flow Rate Max / Min (l/min)	40/10	40/10
	Flow Temperature Max / Min (°C)	60/15	60/15
<b>DIMENSIONS</b>	Width (mm)	1042	1042
	Depth (mm)	435	435
	Height (mm)	800	1030
<b>WEIGHT (KG)</b>		90	115
<b>ELECTRICAL DATA</b>	Electrical Supply	220-240v, 50Hz	220-240v, 50Hz
	Phase	Single	Single
	Nominal Running Current (MAX)(A)	15	20
	Fuse Rating MCB Sizes (A)	25	32
<b>REFRIGERANT CHARGE (Kg/CO2)</b>	R32 (GWP: 677)	2.0 / 1.36	2.2 / 1.50

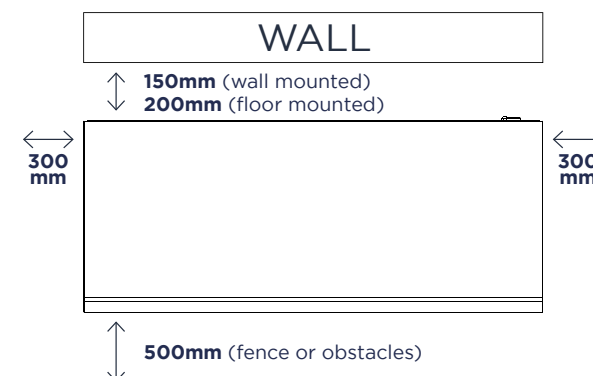
## SCOP

		Ebac 5kW	Ebac 9kW	
<b>Space Heating (According to EN14825)</b>	<b>Flow Temperature 35°C</b>	ERP Rating	A+++	A+++
		Seasonal Space Heating Efficiency	202	200
		SCOP	5.11	5.07
	<b>Flow Temperature 45°C</b>	ERP Rating	A+++	A+++
		Seasonal Space Heating Efficiency	186	186
		SCOP	4.73	4.71
	<b>Flow Temperature 55°C</b>	ERP Rating	A++	A++
		Seasonal Space Heating Efficiency	162	158
		SCOP	4.12	4.03

## Dimensions



## Distance from wall





# Hot Water Cylinder

For ultimate simplicity, we are also offering a Pre-Plumbed and Pre-Wired hot water cylinder.

- **Ebac controller pre wired and commissioned from factory simplifying installation requirements**
- **12mm Sensor Probe pocket for DHW sensor (Pre wired)**
- **6m circulating pump for heating circuit**
- **3 Port Full Bore DHW & CH Valve**
- **8m circulating pump for primary circuit**
- **Factory fitted immersion heater, for Legionella cycle**
- **G3 compliant cold feed pipe work, inc. Tundish, drain point, filling loop and 3 bar inlet control set**
- **Robokit/T&P insulation cover and potable expansion vessel supplied**
- **4 Bar pressure gauge**
- **Fill & Flush valve with servicing ports. Useful to fill and flush the system with cleaning chemicals or water treatment.**
- **28mm full bore , high gain, high flow coil reduces noise and improves recovery times.**

## Sizes from 150L to 225L

All fitted with 50L buffer providing hydraulic separation.

**Other sizes available on request.**



**Factory fitted immersion heater, for Legionella cycle**

# 5kW

## Installers guide



WATER OUTLET TEMPERATURE (°C)		30		35		40		45		50		55		
		kWh	COP	kWh	COP	kWh	COP	kWh	COP	kWh	COP	kWh	COP	
MAX	AMBIENT TEMPERATURE (°C)	-15	3.60	2.20	3.89	2.50	3.89	2.41	3.61	2.39	-	-	-	-
		-10	5.00	2.97	5.00	2.92	5.00	2.88	5.00	2.84	3.89	2.81	3.89	2.70
		-7	5.72	2.91	5.56	2.88	5.56	2.84	5.56	2.80	4.72	2.70	4.50	2.62
		-5	5.92	3.15	5.72	3.05	5.65	2.97	5.62	2.88	4.80	2.78	4.75	2.72
		-3	6.30	3.48	6.05	3.30	5.91	3.18	5.86	3.04	5.03	2.95	5.00	2.91
		0	6.81	3.88	6.52	3.63	6.30	3.46	6.22	3.27	5.37	3.19	5.00	3.16
		2	7.00	4.11	6.67	3.78	6.39	3.58	6.28	3.34	5.44	3.27	5.00	3.26
		7	8.78	5.37	8.33	4.98	7.78	4.74	7.56	4.59	6.17	4.50	5.72	4.40
		12	9.44	5.30	8.89	4.92	8.22	4.72	7.94	4.55	6.61	4.48	5.89	4.39
		15	9.61	5.13	9.17	4.88	8.39	4.63	8.22	4.40	6.83	4.34	6.11	4.22
	20	9.72	5.61	9.33	5.36	8.50	5.11	8.33	4.94	7.11	4.75	6.22	4.64	
NOMINAL	AMBIENT TEMPERATURE (°C)	-15	3.60	2.20	3.89	2.50	3.89	2.41	3.61	2.39	-	-	-	-
		-10	5.00	2.97	5.00	2.92	5.00	2.88	5.00	2.84	3.89	2.81	3.89	2.70
		-7	5.00	3.04	5.00	3.00	5.00	2.93	5.00	2.87	5.00	2.83	4.17	2.65
		-5	5.00	3.32	5.00	3.28	5.00	3.17	5.00	3.10	5.00	2.97	4.35	2.73
		-3	5.00	3.69	5.00	3.66	5.00	3.51	5.00	3.42	5.00	3.19	4.70	2.90
		0	5.00	4.16	5.00	4.12	5.00	3.93	5.00	3.83	5.00	3.49	5.00	3.12
		2	5.00	4.42	5.00	4.39	5.00	4.17	5.00	4.04	5.00	3.61	5.00	3.20
		7	5.00	5.83	5.00	5.00	5.00	4.99	5.00	4.81	5.00	4.55	5.00	3.95
		12	5.00	6.53	5.00	6.20	5.00	5.57	5.00	5.34	5.00	4.58	5.00	4.25
		15	5.00	6.87	5.00	6.49	5.00	6.02	5.00	5.21	5.00	4.37	5.00	4.09
	20	5.00	8.45	5.00	8.09	5.00	7.23	5.00	5.80	5.00	4.52	5.00	4.21	
MIN	AMBIENT TEMPERATURE (°C)	-15	1.70	2.26	1.68	2.34	1.66	2.25	1.63	2.22	-	-	-	-
		-10	1.75	2.97	1.71	2.88	1.68	2.88	1.67	2.84	1.67	2.69	1.64	2.57
		-7	1.47	3.04	1.42	2.97	1.42	2.88	1.39	2.86	1.39	2.74	1.38	2.48
		-5	1.46	3.58	1.42	3.46	1.42	3.38	1.39	3.35	1.39	3.08	1.37	2.83
		-3	1.50	4.23	1.46	4.06	1.46	3.98	1.43	3.93	1.42	3.51	1.41	3.27
		0	1.55	4.99	1.50	4.76	1.53	4.68	1.50	4.61	1.46	4.03	1.45	3.78
		2	1.57	5.51	1.53	5.23	1.53	5.16	1.50	5.07	1.49	4.36	1.47	4.12
		7	1.51	6.73	1.43	6.23	1.42	5.98	1.42	5.76	1.40	5.05	1.39	4.40
		12	1.50	8.03	1.40	6.93	1.39	6.40	1.38	6.05	1.36	5.05	1.36	4.40
		15	1.58	7.89	1.49	6.82	1.48	6.29	1.44	5.93	1.44	4.84	1.42	4.21
	20	1.69	9.01	1.64	7.23	1.64	6.54	1.61	6.16	1.59	5.00	1.59	4.33	

\* Performance data includes defrost

# 9kW

## Installers guide



WATER OUTLET TEMPERATURE (°C)		30		35		40		45		50		55		
		kWh	COP	kWh	COP	kWh	COP	kWh	COP	kWh	COP	kWh	COP	
MAX	AMBIENT TEMPERATURE (°C)	-15	6.80	2.42	7.00	2.48	7.00	2.39	6.50	2.37	0.00	0.00	0.00	0.00
		-10	9.00	2.75	9.00	2.70	9.00	2.67	9.00	2.63	7.00	2.60	7.00	2.50
		-7	10.30	2.83	10.00	2.80	10.00	2.76	10.00	2.72	8.50	2.62	8.10	2.54
		-5	10.60	3.10	10.40	3.00	10.30	2.92	10.30	2.84	9.00	2.74	9.00	2.68
		-3	11.40	3.37	10.90	3.18	10.70	3.08	10.70	2.96	9.10	2.84	9.00	2.80
		0	12.00	3.64	11.50	3.42	11.20	3.38	11.00	3.12	9.50	3.05	9.00	2.99
		2	12.60	3.91	12.00	3.60	11.50	3.41	11.30	3.18	9.80	3.11	9.00	3.10
		7	15.80	4.93	15.00	4.57	14.00	4.35	13.60	4.21	11.10	4.13	10.30	4.04
		12	17.00	4.95	16.00	4.60	14.80	4.41	14.30	4.25	11.90	4.19	10.60	4.10
		15	17.30	5.08	16.50	4.83	15.10	4.58	14.80	4.36	12.30	4.30	11.00	4.18
20	17.50	5.45	16.80	5.20	15.30	4.96	15.00	4.80	12.80	4.61	11.20	4.50		
NOMINAL	AMBIENT TEMPERATURE (°C)	-15	6.80	2.42	7.00	2.48	7.00	2.39	6.50	2.37	-	-	-	-
		-10	9.00	2.75	9.00	2.70	9.00	2.67	9.00	2.63	7.00	2.60	7.00	2.50
		-7	9.00	2.95	9.00	2.91	9.00	2.84	9.00	2.79	9.00	2.75	7.50	2.57
		-5	9.00	3.24	9.00	3.23	9.00	3.14	9.00	3.08	9.00	2.94	9.00	2.67
		-3	9.00	3.49	9.00	3.52	9.00	3.38	9.00	3.35	9.00	3.07	9.00	2.82
		0	9.00	3.90	9.00	3.86	9.00	3.71	9.00	3.62	9.00	3.29	9.00	2.96
		2	9.00	4.21	9.00	4.18	9.00	3.97	9.00	3.85	9.00	3.44	9.00	3.05
		7	9.00	5.35	9.00	4.99	9.00	4.68	9.00	4.41	9.00	4.17	9.00	3.62
		12	9.00	6.10	9.00	5.79	9.00	5.21	9.00	4.99	9.00	4.28	9.00	3.97
		15	9.00	6.80	9.00	6.43	9.00	5.96	9.00	5.16	9.00	4.33	9.00	4.05
20	9.00	8.20	9.00	7.85	9.00	7.02	9.00	5.63	9.00	4.39	9.00	4.09		
MIN	AMBIENT TEMPERATURE (°C)	-15	3.25	2.41	3.02	2.32	2.98	2.23	2.94	2.20	-	-	-	-
		-10	3.15	2.75	3.07	2.67	3.03	2.67	3.00	2.63	3.00	2.49	2.95	2.38
		-7	2.64	2.95	2.55	2.88	2.55	2.80	2.50	2.78	2.50	2.66	2.48	2.41
		-5	2.63	3.45	2.55	3.34	2.55	3.26	2.50	3.23	2.49	2.97	2.47	2.73
		-3	2.71	4.06	2.62	3.89	2.62	3.82	2.57	3.77	2.56	3.37	2.54	3.13
		0	2.84	4.77	2.75	4.54	2.75	4.47	2.70	4.40	2.69	3.85	2.66	3.61
		2	2.83	5.25	2.75	4.98	2.75	4.91	2.70	4.83	2.68	4.15	2.65	3.92
		7	2.71	6.17	2.58	5.72	2.55	5.49	2.55	5.28	2.52	4.63	2.50	4.04
		12	2.70	7.50	2.52	6.48	2.50	5.98	2.48	5.65	2.45	4.72	2.45	4.11
		15	2.85	7.81	2.69	6.75	2.67	6.23	2.60	5.87	2.60	4.79	2.55	4.17
20	3.04	8.75	2.95	7.02	2.95	6.35	2.90	5.98	2.87	4.85	2.86	4.20		

\* Performance data includes defrost





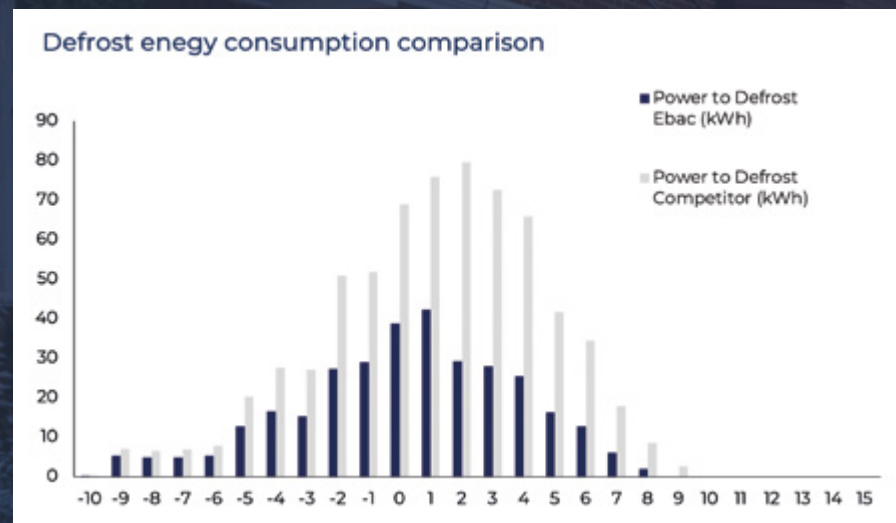
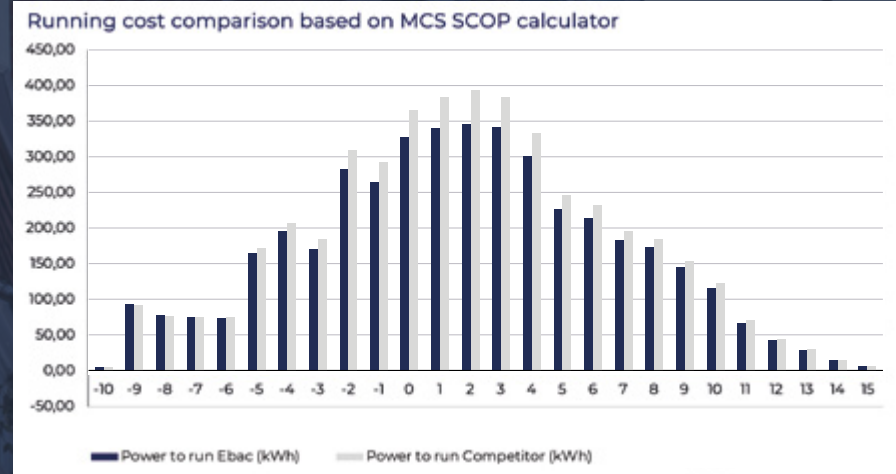
# Patent-pending defrost system

## Ebac's defrost system saves up to £1,300 (\*£130 annual saving over ten years)

In cold weather conditions, ice can build up on the outdoor unit of the heat pump, which can reduce its efficiency and performance. In order to prevent this, air source heat pumps are equipped with a defrost system, which activates increased performance and energy when a pre-determined temperature condition is reached to remove any build-up.

After analysing the climate conditions in the UK and other brands of heat pumps, Ebac discovered a revolutionary approach to defrost operation something not currently used by any other heat pump manufacturer in the world. Using in-house design expertise, Ebac has enhanced the overall performance of their units at lower temperatures, reducing the need for the energy-intensive defrost system to operate as frequently.

This patent-pending system can potentially save consumers up to 15% of their annual running costs, which could amount to savings of £1,300, over 10 years.

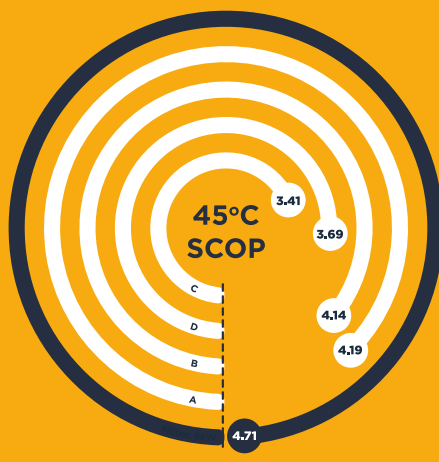




# Efficiency is key

**Ebac has a record of developing products that are more efficient than our competitors.**

We produce the most efficient domestic dehumidifiers because of our intelligent control system. Our water cooler hot tank is the most efficient on the market. The Ebac washing machine was named by **Which?**, the consumer advisory organisation, as the most efficient that they have ever tested. On heat pumps we have developed a unit that is more efficient than our competitors in UK winter conditions.



# Intuitive control system for ease of use

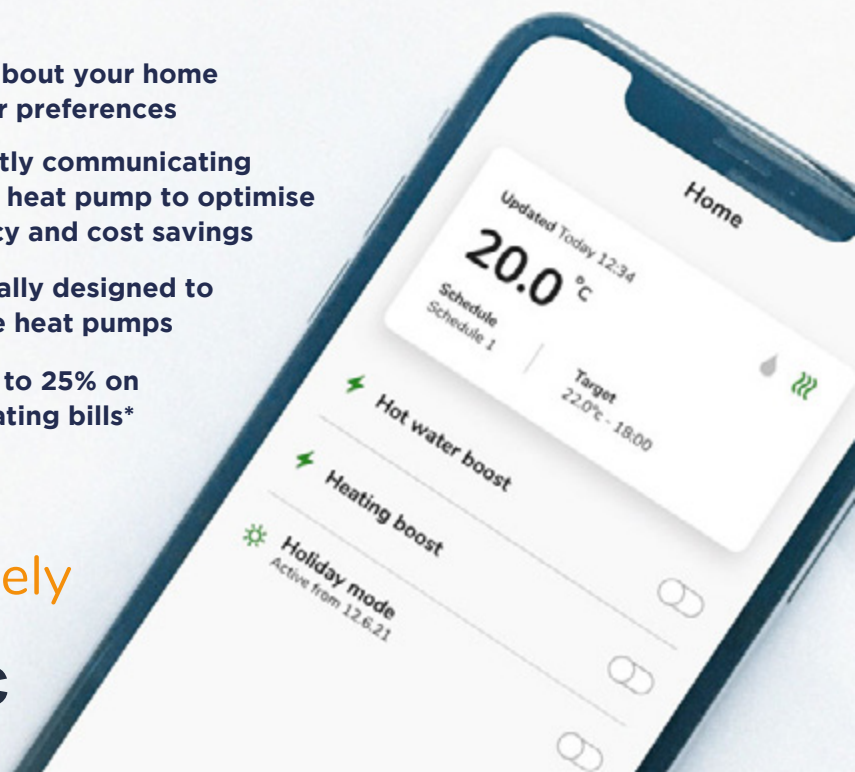
**Easy to use, intelligent and accurate.**

The Ebac control system allows quick, hassle free configuration allowing for a quick commissioning and should a fault occur, simple diagnosis.

Compatible with a range of Smart home systems, such as Homely via Modbus Control, the Ebac controller can be configured to meet the needs and preferences of the consumer.

\* Based on real customer data. Compared with a heat pump set using widely recommended industry default weather compensation parameters. Savings relate to space heating only.

- ✓ Learns about your home and your preferences
- ✓ Constantly communicating with the heat pump to optimise efficiency and cost savings
- ✓ Specifically designed to optimise heat pumps
- ✓ Save up to 25% on your heating bills\*





# About Ebac

## Manufacturing innovative solutions for British homes for over 50 years.

Since 1972, Ebac has been developing air treatment products for customers all over the world. From commercial and residential applications to complex projects in critical climates around the Globe.

Working with major businesses such as the Government, the London Underground and in 1991, developing a ventilation system to support the British Army Field Hospital during the Gulf War. By choosing an Ebac home ventilation system you can be rest assured that you're installing one of the most efficient systems on the market.



**£26m**  
Turnover

**24/7**  
Production facilities

**225**  
Employees

**400,000 sq ft**  
Unit production capacity

**4.5/5 Stars**  
TrustPilot

**Vertically Integrated**  
Plastic moulding to finished goods

**50 Years**  
Continuous manufacturing

**92**  
Global patents



# Working in partnership with Ebac

Ebac have been manufacturing innovative air treatment solutions with focus on quality, performance and energy efficiency for over 50 years.



### Technical support

All of our products are designed and manufactured from our facility in County Durham meaning if you have any questions or queries, you can speak directly to the team who designed the product!

### Ongoing after-sales care

Whether your looking for technical support, a part replacement or just some advice - the UK customer care team is on hand to support from enquiry to after-care.

### Trusted manufacturer

With 50 years of manufacturing and air treatment experience, Ebac are experts in the control of excess moisture within homes across the UK.

### Leading customers

Ebac have advised major businesses such as the Government, London Underground & British Army in air treatment.

## Why Ebac

- 1 Leading British manufacturer
- 2 UK based technical and customer support teams
- 3 Industry leading product design
- 4 Responsive and collaborative working
- 5 Focused on quality and sustainability
- 6 Long-term customer relationships

## A global customer base

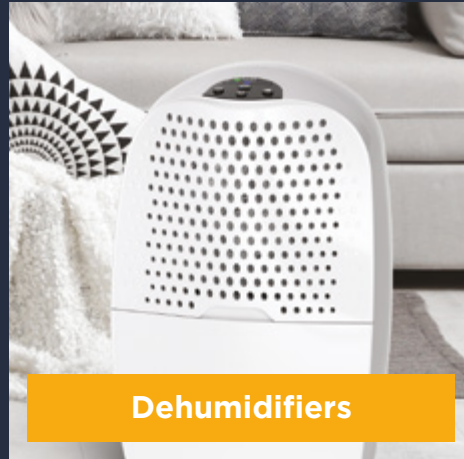




# Products we manufacture



Washing Machines



Dehumidifiers



Water Coolers



Air Source Heat Pumps



Mechanical Ventilation with Heat Recovery

Click to view our other great products



If you have any further questions please call our friendly team on **0345 805 0000** or go to **Ebac.com**