

# POWRMATIC®

Delivering complete climate control solutions worldwide

A versatile suspended water-fed unit heater that is efficient and innovative, featuring a modern pattern design. It is equipped with energy-saving EC motor technology and designed to be compatible with heat pump systems.

**The WX range from Powrmatic.**



# WX Range

Hot Water Heat Emitter

Industrial and Commercial Low Temperature  
Hot Water Heating Systems



# WX Range - Hot Water Heat



The WX range of products is specifically designed to be fully compatible with ASHP (Air Source Heat Pump) systems. These innovative units have the ability to efficiently operate with lower flow and return temperatures, ensuring optimal performance and energy savings. By seamlessly integrating with ASHP systems, the WX range brings enhanced flexibility, allowing for effective heating that can significantly reduce carbon emissions.

**Compact.  
Efficient.  
Versatile.**

The WX Range from Powrmatic

The WX water heater is a revolutionary hot water system that is designed to deliver exceptional performance while providing reliable and energy-efficient hot water to residential and commercial properties. This innovative unit is equipped with advanced technologies that allow for efficient operation, including its energy-efficient combustion process and intelligent control system.

The WX heating unit is used for heating small, medium and large spaces. WX units are compact devices ready for commissioning and easy to assemble and use daily. You can connect up to 8 units within each system with advanced calendar option control.

All WX units are available with a three-speed energy efficient EC motor which gives guaranteed performance efficiency over conventional AC motors even at low speeds, complimented by smooth speed regulation.

The optimal shape of the fan and the use of an efficient EC motor provide up to 40% energy savings compared to traditional solutions.

#### Models Available

- WX1 / WX1.1 / WX2 / WX3 / WX4 / WX5

## Product Features

### Durability

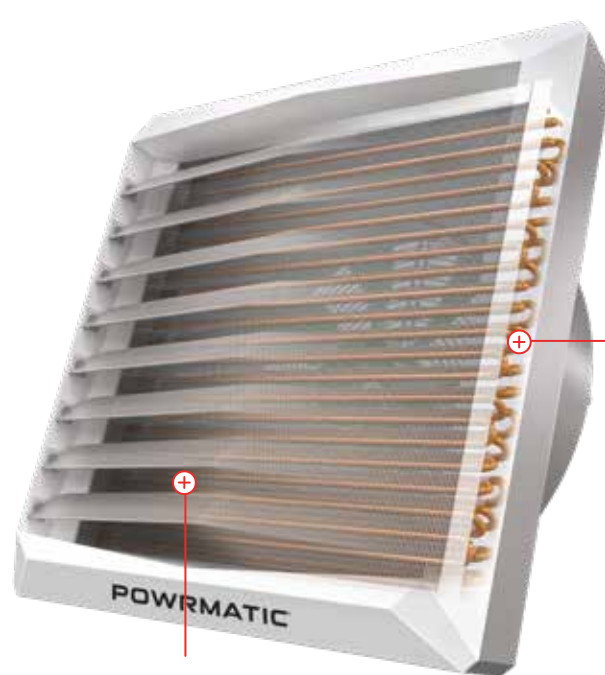
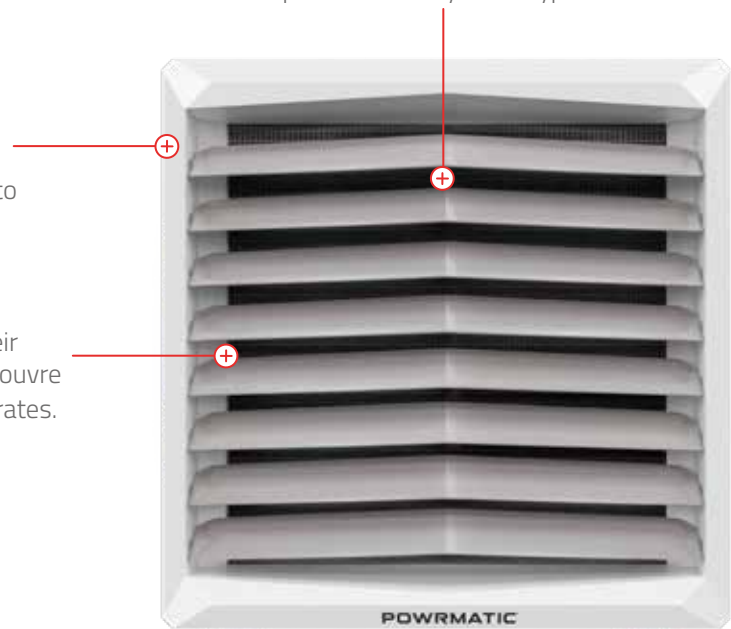
Made of the highest class ABS with an anti-UV pigment mixture, the casing is characterized by high mechanical strength, durability, and resistance to high temperatures. The material provides for unchangeable aesthetics, easy to clean surfaces and long-term durability.

### Adjustable Louvres

An innovative louvre mount solution allows for their individual adjustment and stable positioning. The louvre vane profile assures minimum air flow resistance rates.

### Design Excellence

Precisely designed casing form ensures optimal exchanger surface exposure at the same time hiding all of the structural elements. The light and clean casing lines combined with a universal color palette provide for harmonious adaptation to every room type.

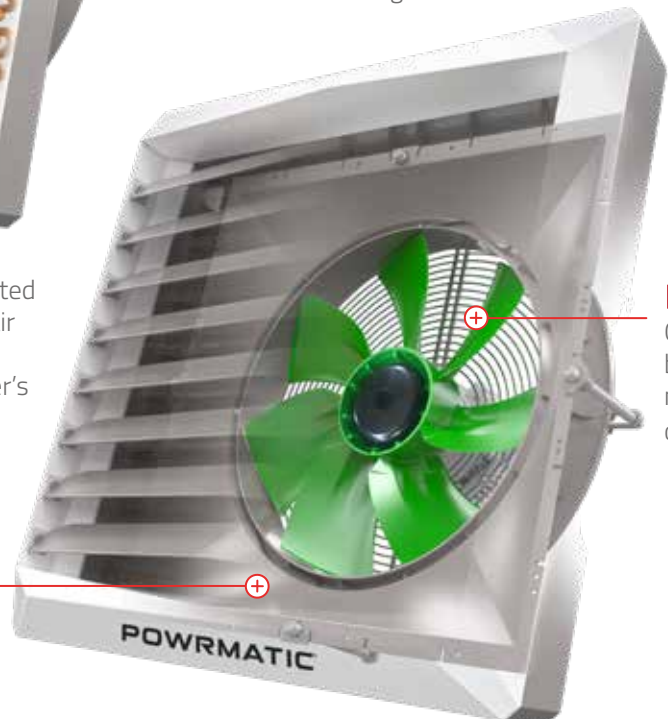


### Heat Exchanger

1, 2 and 3-row heaters featuring increased heat exchange surfaces guarantee optimal match of the heating power to the requirements of the facility; Enhanced heat transfer surface and ability to work with low temperatures agents; All exchangers are tested to guarantee 100% verification of tightness.

### Maximum Air Output

Our ideally matching fan casing and a dedicated diffuser provide for an equal distribution of air speed in the exchanger to secure small flow resistance rates and full use of the exchanger's power output



### Efficient Performance

Optimized profile and increased blade surfaces provide for low maintenance costs and quiet operation.

### Energy Saving EC Motors

EC motors guarantee maximum unit efficiency even at reduced speed. Stepless rotation regulation is now available for EC motors allowing the unit to adapt to any requirements.

# Technical Specification

Model		WX-1-EC	WX-1.1-EC	WX-2-EC	WX-3-EC	WX-4-EC	WX-5-EC
Parameter	Unit	EC	EC	EC	EC	EC	EC
Number of heater rows	-	2	3	1	2	3	4
Maximum air output	m <sup>3</sup> /h	2100	2000	5300	4850	5700	5300
Horizontal Throw (Max)	m	14	14	23	22	25	23
Vertical Throw (Max)	m	8	8	12	11	12	12
Heating Output	kW	3-20	4-27	5-30	8-50	13-75	10-90
Noise Level (Hi/Med/Low)*	dB(A)	50/40/27		54/39/38		54/49/43	
Maximum temperature of the heating medium	°	130					100
Maximum working pressure	MPa	1,6					
Water capacity	l (litre)	1,12	1.48	1,25	2,16	3,10	4.13
Connection pipes diameter	BSP	¾					
Device weight (without water)	kg	14	15	21	21,5	24,5	26.5
Power supply voltage	V/Hz	1 ~ 230/50					
Motor power	kW	0.095		0.25		0.37	
Electrical Consumption **	W	13-91		41-202	45-226	55-355	
Rated current	A	0.51		1.3		1,7	
Rated motor rotational speed	rpm	1200		1430		1400	
Motor protection level	IP	54					
Casing color palette		Front: RAL 9016 Traffic White, rear + console: RAL 7036 Platinum Gray, fan (EC): RAL 6038 Green					

## Notes

- \* Reference conditions - Room Volume 1500m<sup>3</sup>. Measurement taken at a distance of 5m
- \*\* EC motor power for the above specified fan outputs
- All reference made in the above table are at max speed/performance setting
- For full output data, please see installation manual

## Pipeline Dimensions

Model	WX-1-EC		WX-1.1-EC		WX-2-EC		WX-3-EC		WX-4-EC		WX-5-EC	
Number of heaters connected to the main line	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]	Max water flow [m <sup>3</sup> /h]	Pipeline diameter ["]
1	0.9	¾	1.4	¾	1.3	¾	2.2	¾	3.3	¾	5.0	¾
2	1.8	¾	2.7	1	2.6	¾	4.4	1	6.6	1¼	9.9	1½
3	2.7	1	4.1	1	3.9	1	6.6	1¼	9.9	1½	14.9	1½
4	3.6	1	5.4	1	5.2	1	8.8	1¼	13.2	1½	19.8	2
5	4.5	1	6.8	1¼	6.5	1¼	11.0	1½	16.5	2	24.8	2
6	5.4	1	8.1	1¼	7.8	1¼	13.2	1½	19.8	2	29.7	2½
7	6.3	1¼	9.5	1¼	9.1	1¼	15.4	2	23.1	2½	34.7	2½
8	7.2	1¼	10.8	1½	10.4	1½	17.6	2	26.4	2½	39.6	2½
9	8.1	1¼	12.2	1½	11.7	1½	19.8	2	29.7	2½	44.6	3
10	9.0	1¼	13.5	1½	13.0	1½	22.0	2½	33.0	3	49.5	3

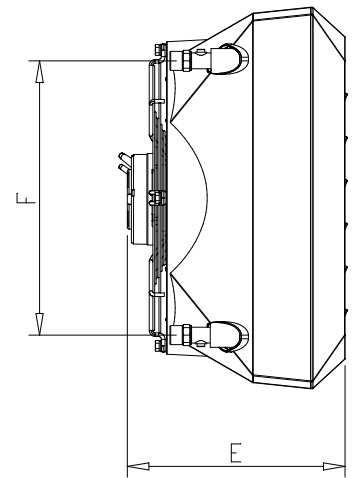
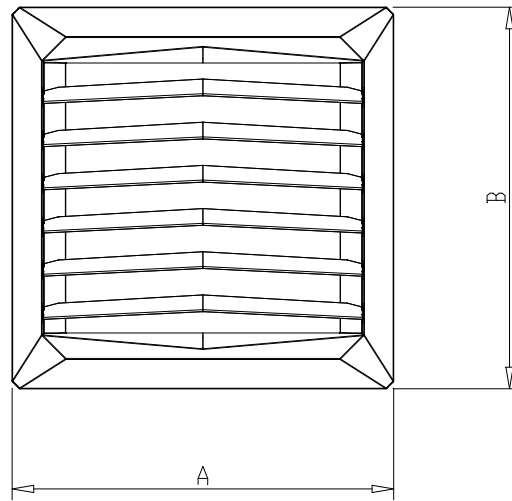
## Notes

- Pipeline diameters selected for max. flow rate of up to 2.5m/s

# Dimensions

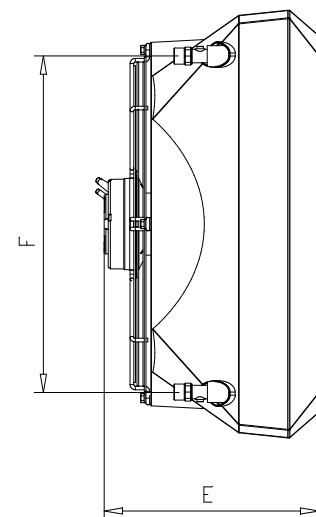
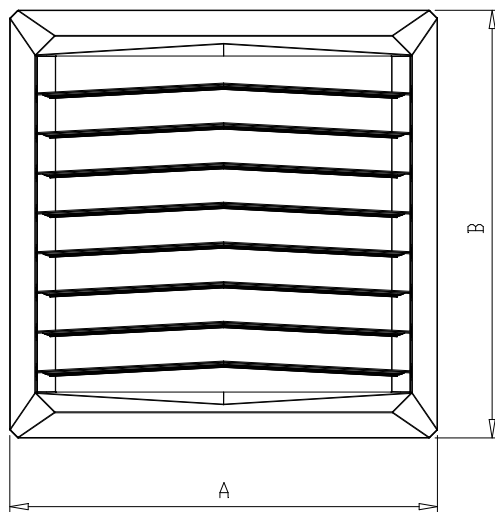
## WX-1-EC / WX-1.1-EC

Dimension	mm
A	530
B	530
C	310
D	381
E	300
F	381



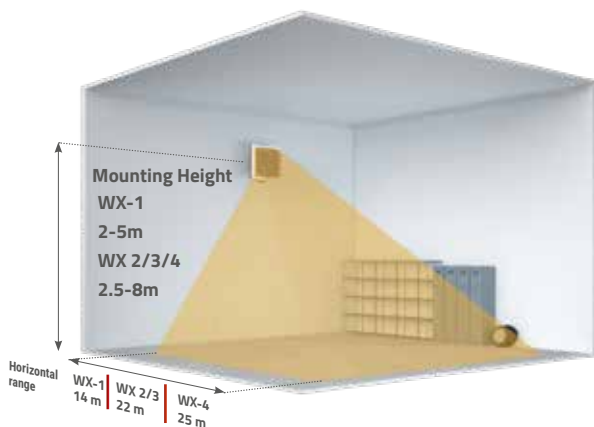
## WX-2-EC / WX-3-EC / WX-4-EC / WX-5-EC

Dimension	mm
A	700
B	700
C	355
D	550
E	350
F	550



# Mounting Guide

## Wall Mounting



## Ceiling Mounting





Woźniak  
Nowicki

**JUNGHEINRICH**

Wózek z wynajmu

33 / 332 - 60 - 70	
44 / 442 - 50 - 50	
55 / 552 - 40 - 40	
66 / 662 - 30 - 30	
77 / 772 - 20 - 20	
88 / 882 - 10 - 10	



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# Controls

Function		Potentiometer with thermostat VR EC (0-10V)	HMI EC controller
Motor Type		EC	
Power supply voltage	V/ph/Hz	~230/1/50	~230/1/50
Permissible load current	A		1A for 230VAC 0,02A for 0-10V
Settings range	°C	5..30	5..40
Work mode	---	manual	manual/automatic
Hourly-weekly calendar	---	No	Yes
Clock	---	No	Yes
Temperature measurement	---	Integrated in the device	
The possibility of connecting a separate temperature sensor	pcs.	1 or 4	1 or 4
Output signal	---	0-10V DC	
Protection rate	IP	30	20
<b>Maximum heater units per controller</b>			
All Models	pcs.	8	

## Potentiometer With Thermostat



## HMI EC Controller



# Accessories

Flex. connecting hoses (set)		
Length	M	0,6-0,9
Connection type	BSP	¾
Max. Fluid pressure	Mpa	1,6
Min. Working temperature for water	°C	5
Min. Working temperature for glycol	°C	-20
Max. Working temperature	°C	130
Set includes		Hose (2 pcs) Gasket (4 pcs)





## General

The following notes are provided as a guide, however installers and operators should fully acquaint themselves with the more detailed guidance provided in the relevant installation manual. For copies of such manuals please consult our technical department or visit our website - [www.powrmatic.co.uk](http://www.powrmatic.co.uk)

## Standards

WX Units must be installed, commissioned and operated with due regard to appropriate regulations, relevant Codes of Practice which may include but is not limited to BS6880 and any possible requirements of Local Authorities, Fire Officers and insurers as well as Powrmatic's installation manual.

## Position & Location

WX heat emitters are specifically design to operate in conjunction with a pumped hot water supply.

WX units can be mounted either horizontally using WX support brackets or vertically on suitably sized drop rods. It is important that all supporting structures have due regard to the relevant weight loadings and provide stability so as to protect the integrity of flow and return water connections.

Units should be sited so as to provide heat into the relevant working zones and where a general pattern of effective air circulation can be achieved. For specific siting recommendations please consult our technical department.

WX heat emitters are suitable for a wide variety of industrial, commercial, horticultural or poultry applications however if units are to be sited in areas of high humidity, where dust may be present or a corrosive atmosphere then please consult our technical department.

## Installation

Particular clearances may be necessary for the correct and safe function of the heat emitter as well as for maintenance purposes. Such clearances are confirmed in the relevant installation manual.

It is important that units are installed in such a way that they are level in both front to rear and side to side planes.

When connecting pipework installers should ensure that the direction of flow is correct. The installation of local isolating valves, service unions and strainers is recommended.

Where emitters are installed in the horizontal plane, that is for downward discharge then it is highly recommended that a valve and actuator be installed within the pipework so as to isolate the water flow when the fan is not operating, failure to do so will allow heat to rise and overheat the fan motor. For further advice please consult our technical department.

Electrical connections should comply with IEE regulations and include an isolator local to each emitter.

## Water Treatment

Water quality used with heat emitters can have a significant effect on both efficiency and reliability. It is recommended that installers consult and follow the advice within the Water Treatment and Conditioning of Commercial Heating System Guide available via the ICOM Energy website [www.icom.org.uk](http://www.icom.org.uk)

## Guarantee

Powrmatic WX units are provided with a guarantee. For United Kingdom sales the heater has the benefit of a 12 month parts only guarantee. All guarantees are subject to terms and conditions.



HUNTER ONE

2



POWRMATIC

# About Us

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

## Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

## Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

## Air Conditioning

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

## Engineered Products

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

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#keepingthenationwarm

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