

\* JUST ARRIVED \*

NEW
PRODUCT

Delivering complete climate control solutions worldwide

Efficient and versatile suspended water fed unit heater, combining innovative technical solutions with a modern pattern design built with energy saving EC motor technology.

The WX range from Powrmatic.

# WX Range

Hot Water Heat Emitter

Industrial and Commercial Low Temperature Hot Water Heating Systems

POWRMATIC

## WX Range - Hot Water Heat



## WX Installer Benefits











CONNECTIONS



START U

## Compact Efficient Versatile

The WX Range from Powrmatic

The Powrmatic WX water heating units are a new generation of devices combining innovative technical solutions with a modern pattern design. The precise and light casing resembles the beautiful diamond shape – ideal in its simplicity. The character of the device is emphasized by the composition of the selected materials and dynamically shaped air guide vanes.

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 calender option control.

All WX units are available with a three-speed energy efficient EC motor where gives performance efficiency is guaranteed, 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 / WX2 / WX3 / WX4

## Emitter



## **Product Features**

## Design Excellence

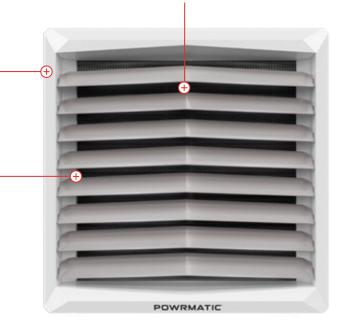
Precisely designed casing form ensures optimal exchanger surface exposure at the same time hiding all of the structural elements. The light and clean casing lines combined with a universal color palette provide for harmonious adaptation to every room type.

### 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 surfacesand long-term durability.

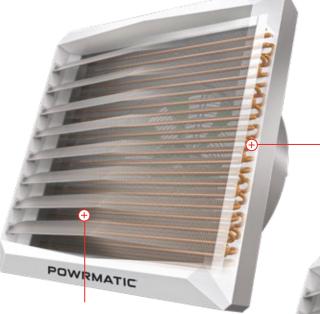


An innovative blade mount solution allows for their individual adjustment and stable positioning. The guide vane profile assures minimum air flow resistance rates.



## 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 equaldistribution of air speed in the exchanger to secure small flow resistance rates and full use of the exchanger's power output

### **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.



## Efficient Performance

blade surfaces providefor low maintenance costs and quiet operation.

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## **Technical Specification**

Model		WX-1-EC	WX-1-EC WX-2-EC		WX-4-EC
Parameter	Unit	EC	EC	EC	EC
Number of heater rows	-	2	1	2	3
Maximum air output	m³/h	2100	5300	4850	5700
Horizontal Range (Max)	m	14	23	22	25
Vertical Range (Max)	m	8	12	11	12
Heating power range	kW	3-20	5-30	8-50	13-75
Noise Level (Hi/Med/Low)*	dB(A)	50/40/27	54/39/38	54/39/38	54/49/43
Maximum temperature of the heating medium	o	130			
Maximum working pressure	MPa	1,6			
Water capacity	dm³	1,12	1,25	2,16	3,1
Connection pipes diameter	"	3/4			
Device weight (without water)	kg	14	21	21,5	24,5
Power supply voltage	V/Hz	1 ~ 230/50			
Motor power	W	95	25	25	37
Electrical Consumption **	W	91	202	226	355
Rated current	А	0,51 1,3 1,7			1,7
Rated motor rotational speed	rpm	1200	1430	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			

- \* 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/peformance setting

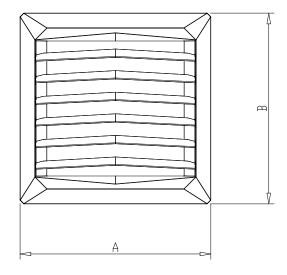
## **Pipeline Dimensions**

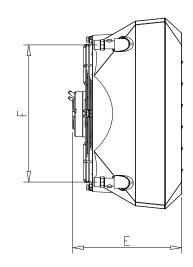
Model	WX-1-EC		WX-2-EC		WX-3-EC		WX-4-EC	
Number of heaters connected to the main line**	Max water flow [m³/h]	Pipeline diameter ["]						
1	0,9	3/4	1,3	3/4	2,2	3/4	3,3	3/4
2	1,8	3/4	2,6	3/4	4,4	1	6,6	1 1/4
3	2,7	1	3,9	1	6,6	1 1/4	9,9	1 1/2
4	3,6	1	5,2	1	8,8	1 1/4	13,2	1 1/2
5	4,5	1	6,5	1 1/4	11	1 1/2	16,5	2
6	5,4	1 1/4	7,8	1 1/4	13,2	1 1/2	19,8	2
7	6,3	1 1/4	9,1	1 1/4	15,4	2	23,1	2 1/2
8	7,2	1 1/4	10,4	1 1/2	17,6	2	26,4	2 1/2
9	8,1	1 1/4	11,7	1 1/2	19,8	2	29,7	2 1/2
10	9,0	1 1/4	13	1 1/2	22	2 1/2	33	3

## **Dimensions**

## WX-1-EC

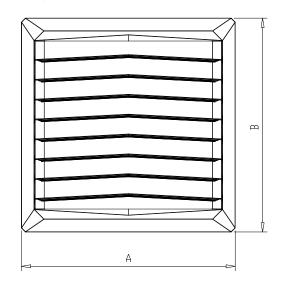
Dimension	mm		
А	530		
В	530		
С	310		
D	381		
E	300		
F	381		

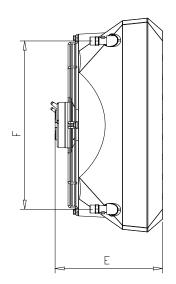




WX-2-EC / WX-3-EC / WX-4-EC

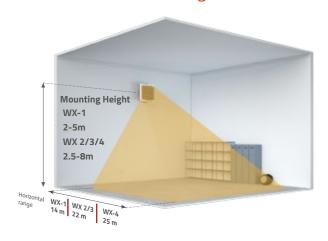
Dimension	mm
А	700
В	700
С	355
D	550
E	350
F	550



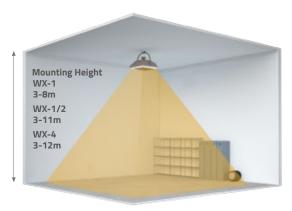


## **Mounting Guide**

Wall Mounting



## Ceiling Mounting







## **Controls**

Parmeters		Potentiometer with thermostat VR EC (0-10V)	HMI EC controller	
Motor support		E	С	
Power supply voltage	V/ph/ Hz	~230/1/50	~230/1/50	
Permissible load current	А		1A for 230VAC 0,02A for 0-10V	
Settings range	°C	530	540	
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	
Cooperation of controls and regulators with heating units				
All Models	pcs.	3	3	

## Potentiometer With Thermostat



**HMI EC Controller** 



## **Accessories**

Flex. connectiong hoses (set)				
Length	М	0,6-0,9		
Connectrion type	Gw/gw	3/4"		
Max. Fluid pressure	Мра	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)		



## **Installer Guide**

### 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

### 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

#### 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.





## **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.

## **Contact Us**

Powrmatic Limited Hort Bridge, Ilminster Somerset TA19 9PS

tel: **+44 (0) 1460 53535** fax: **+44 (0) 1460 52341** 

e-mail: info@powrmatic.co.uk







#keepingthenationwarm

Powrmatic Ireland 45 Broomhill Close Tallaght Dublin 24

tel: +353 (0) 1452 1533 fax: +353 (0) 1452 1764

e-mail: info@powrmatic.ie



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