

Zephyr

Immersed
electrode humidifiers



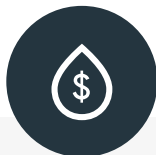
Versatile

Compact stand-alone unit suitable for many applications



Energy efficiency

Boilers, linear distributors and steam blowers available with reduced thermal transmittance



Saves water

The operation algorithm ensures only the amount of steam required is produced, optimising water consumption



Accurate

The new operation algorithm, together with a wide variety of boilers, ensures precision control, irrespective of the characteristics of the water



Washable boiler

20,000 hours of operation*

5 times less plastic at end of life

** This figure refers to the durability of the engineering plastic over time, when the right type of water is used and maintenance carried out correctly*



The overflow system protects against boiler overpressure and its value can be modified on request with an optional kit



Boiler circuit and polymeric parts of the linear steam distributors are in self-extinguishing material



Pump-driven draining system which breaks the limescale deposit into small pieces for easy ejection



No mechanical obstructions on the steam side and drain side



Automatic boiler cleaning system



Mechanical parts designed to simplify use and maintenance



Protection against water escaping on the steam side



Connection for RS-485 protocol for remote control in MODBUS mode

Ideal for the following applications



Residential and commercial environments



Turkish baths, fitness centres, beauty centres



Museums, art galleries, churches and archives



Bakeries



Data centres



Extruded linear distributor with reduced thermal transmittance

The surface is non-porous, waterproof engineering plastic prevents bacterial proliferation and complies with Method A and Method C of ISO846. It withstands sudden changes in temperature and chemicals, thus making it easy to sterilise.

Stainless steel linear distributor

Stainless steel is a very hygienic material as it is corrosion resistant and its surface is compact and non-porous, making removing bacteria during cleaning and sterilisation easier.



Steam blower for room

This steam blower, which delivers steam directly into the room, is made of engineering plastic which prevents bacterial contamination and withstands chemical attack. Thanks to its thermal insulation, it is also energy efficient. The blower can be fitted directly onto the humidifier or placed in the room, according to the manufacturer's instructions, using a special mobile support.



Wellness Series

- Can manage 3 different fragrances
- Controls fan for steam inlet and extraction
- Cubicle light management
- Cubicle sanitation management
- Pre-heating function for rapid steam production
- Humidity is programmed in time bands or set manually with a timer

OEM Series

- Solution with support and boiler available in different sizes + electronic controller and current transformer (both to be ordered separately)
- The space-saving design is ideal for proofers, ovens, CMV units and precision or close control air conditioners in data centres
- A highly adaptable solution, as OEMs can configure their own humidity production capacity and power supply voltage
- Electronic controller with an open frame board which can be housed in the electrical panel



EHKT models and technical features



EHKT	003M2	005M2	003T4	003T5	005T4	005T5	010T4	010T5	015T4	015T5
STEAM PRODUCTION										
Production capacity [kg/h]	3	5	3		5		10		15	
Maximum pressure [mm H ₂ O/Pa/bar]	165/1650/0.0165									
Pipe connection external diameter [mm]	38									
STEAM DISTRIBUTION										
Number of linear distributors that can be connected [n]	1									
Number of steam blowers that can be connected [n]	1									
ELECTRICAL PROPERTIES										
Power consumption [kW]	2.2	3.75	2.2		3.75		7.5		11.3	
Power supply [Vac, Hz]	230, 50/60		400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60
Phases [n]	1	1	3		3		3		3	
Current per phase [A]	9.6	16.3	3.2	2.8	5.4	4.7	10.8	9.4	16.3	14.2
WATER PROPERTIES										
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used									
Inlet water conductivity [μ S*cm]	70...1250									
Inlet water hardness [°f]	5...50									
Inlet water pressure [MPa/bar]	0.2...1/2...10									
Minimum instantaneous flow rate of inlet water [l/min]	1.2					2.2				
Inlet water connection	M 3/4" GAS									
Water drain external dimensions [mm]	40									
GENERAL CHARACTERISTICS										
Dimensions [mm]	412x766x248									
Operating conditions [°C, RH]	1...40, max. 80% non-condensing									
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing									
Degree of protection	IP20									
REGULATION										
Type of controller	Built-in with simplified EV3 user interface									
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA									
CONNECTIVITY										
RS-485 MODBUS	Built-in									

The list of accessories is available on our website www.elsteam.it

EHKT models and technical features



EHKT	020T4	020T5	030T4	030T5	040T4	040T5	060T4	060T5
STEAM PRODUCTION								
Production capacity [kg/h]	20		30		40		60	
Maximum pressure [mm H ₂ O/Pa/bar]	200/2000/0.020							
Pipe connection external diameter [mm]	38							
STEAM DISTRIBUTION								
Number of linear distributors that can be connected [n]	1						2	
Number of steam blowers that can be connected [n]	2				-			
ELECTRICAL PROPERTIES								
Power consumption [kW]	15		22.5		30		45	
Power supply [Vac, Hz]	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60
Phases [n]	3	3	3	3	3	3	3	3
Current per phase [A]	21.7	18.8	32.5	28.2	43.3	37.7	65	56.5
WATER PROPERTIES								
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used							
Inlet water conductivity [μ S*cm]	70...1250							
Inlet water hardness [°f]	5...50							
Inlet water pressure [MPa/bar]	0.2...1/2...10							
Minimum instantaneous flow rate of inlet water [l/min]	3.5						2x3.5	
Inlet water connection	M 3/4" GAS							
Water drain external dimensions [mm]	40							
GENERAL CHARACTERISTICS								
Dimensions [mm]	522x893x380						928x900x375	
Operating conditions [°C, RH]	1...40, max. 80% non-condensing							
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing							
Degree of protection	IP20							
REGULATION								
Type of controller	Built-in with simplified EV3 user interface							
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA							
CONNECTIVITY								
RS-485 MODBUS	Built-in							

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EHKX models and technical features



EHKX	003M2	005M2	003T4	003T5	005T4	005T5	010T4	010T5	015T4	015T5
STEAM PRODUCTION										
Production capacity [kg/h]	3	5	3		5		10		15	
Maximum pressure [mm H ₂ O/Pa/bar]	165/1650/0.0165									
Pipe connection external diameter [mm]	38									
STEAM DISTRIBUTION										
Number of linear distributors that can be connected [n]	1									
Number of steam blowers that can be connected [n]	1									
ELECTRICAL PROPERTIES										
Power consumption [kW]	2.2	3.75	2.2		3.75		7.5		11.3	
Power supply [Vac, Hz]	230, 50/60		400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60
Phases [n]	1		3							
Current per phase [A]	9.6	16.3	3.2	2.8	5.4	4.7	10.8	9.4	16.3	14.2
WATER PROPERTIES										
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used									
Inlet water conductivity [μ S*cm]	70...1250									
Inlet water hardness [°f]	5...50									
Inlet water pressure [MPa/bar]	0.2...1/2...10									
Minimum instantaneous flow rate of inlet water [l/min]	1.2					2.2				
Inlet water connection	M 3/4" GAS									
Water drain external dimensions [mm]	40									
GENERAL CHARACTERISTICS										
Dimensions [mm]	412x766x248									
Operating conditions [°C, RH]	1...40, max. 80% non-condensing									
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing									
Degree of protection	IP20									
REGULATION										
Type of controller	Built-in with advanced EPcolor user interface									
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA									
CONNECTIVITY										
RS-485 MODBUS	Built-in									

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EHKX models and technical features



EHKX	020T4	020T5	030T4	030T5	040T4	040T5	060T4	060T5	080T4	080T5	100T4	100T5
STEAM PRODUCTION												
Production capacity [kg/h]	20		30		40		60		80		100	
Maximum pressure [mm H ₂ O/Pa/bar]	200/2000/0.020											
Pipe connection external diameter [mm]	38											
STEAM DISTRIBUTION												
Number of linear distributors that can be connected [n]	1						2					
Number of steam blowers that can be connected [n]	2				-							
ELECTRICAL PROPERTIES												
Power consumption [kW]	15		22.5		30		45		60		75	
Power supply [Vac, Hz]	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60	400, 50/60	460, 50/60
Phases [n]	3											
Current per phase [A]	21.7	18.8	32.5	28.2	43.3	37.7	65	56.5	86.6	75.3	108.3	94.1
WATER PROPERTIES												
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used											
Inlet water conductivity [μ S*cm]	70...1250											
Inlet water hardness [°f]	5...50											
Inlet water pressure [MPa/bar]	0.2...1/2...10											
Minimum instantaneous flow rate of inlet water [l/min]	3.5						2x3.5					
Inlet water connection	M 3/4" GAS											
Water drain external dimensions [mm]	40											
GENERAL CHARACTERISTICS												
Dimensions [mm]	522x893x380						928x900x375					
Operating conditions [°C, RH]	1...40, max. 80% non-condensing											
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing											
Degree of protection	IP20											
REGULATION												
Type of controller	Built-in with advanced EPcolor user interface											
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA											
CONNECTIVITY												
RS-485 MODBUS	Built-in											

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EHW models and technical features



EHW	005M2	005T4	010T4	015T4
STEAM PRODUCTION				
Production capacity [kg/h]	5	5	10	15
Maximum pressure [mm H ₂ O/Pa/bar]	165/1650/0.0165			
Pipe connection external diameter [mm]	38			
STEAM DISTRIBUTION				
Number of linear distributors that can be connected [n]	1			
Number of steam blowers that can be connected [n]	1			
ELECTRICAL PROPERTIES				
Power consumption [kW]	3.75	3.75	7.5	11.3
Power supply [Vac, Hz]	230, 50/60	400, 50/60	400, 50/60	400, 50/60
Phases [n]	1	3		
Current per phase [A]	16.3	5.4	10.8	16.3
WATER PROPERTIES				
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used			
Inlet water conductivity [μ S*cm]	70...1250			
Inlet water hardness [°f]	5...50			
Inlet water pressure [MPa/bar]	0.2...1/2...10			
Minimum instantaneous flow rate of inlet water [l/min]	1.2			2.2
Inlet water connection	M 3/4" GAS			
Water drain external dimensions [mm]	40			
GENERAL CHARACTERISTICS				
Dimensions [mm]	412x766x248			
Operating conditions [°C, RH]	1...40, max. 80% non-condensing			
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing			
Degree of protection	IP20			
REGULATION				
Type of controller	Built-in with advanced EPcolor user interface			
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA			
CONNECTIVITY				
RS-485 MODBUS	Built-in			

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EHKW models and technical features



EHKX	020T4	030T4	040T4
STEAM PRODUCTION			
Production capacity [kg/h]	20	30	40
Maximum pressure [mm H ₂ O/Pa/bar]	200/2000/0.020		
Pipe connection external diameter [mm]	38		
STEAM DISTRIBUTION			
Number of linear distributors that can be connected [n]	1		
Number of steam blowers that can be connected [n]	2		-
ELECTRICAL PROPERTIES			
Power consumption [kW]	15	22.5	30
Power supply [Vac, Hz]	400, 50/60		
Phases [n]	3		
Current per phase [A]	21.7	32.5	43.3
WATER PROPERTIES			
Inlet water quality	Complies with microbiological standards for drinking water established by regulations in force where installed. Partially demineralised water may be used		
Inlet water conductivity [μ S*cm]	70...1250		
Inlet water hardness [°f]	5...50		
Inlet water pressure [MPa/bar]	0.2...1/2...10		
Minimum instantaneous flow rate of inlet water [l/min]	2.2		
Inlet water connection	M 3/4" GAS		
Water drain external dimensions [mm]	40		
GENERAL CHARACTERISTICS			
Dimensions [mm]	522x893x380		
Operating conditions [°C, RH]	1...40, max. 80% non-condensing		
Storage conditions [°C, RH]	-10...70, max. 95% non-condensing		
Degree of protection	IP20		
REGULATION			
Type of controller	Built-in with advanced EPcolor user interface		
Command signal	ON-OFF, proportional 0...10 V, transducer 0...10 V/4...20 mA		
CONNECTIVITY			
RS-485 MODBUS	Built-in		

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