

EHPN

High pressure
humidifiers



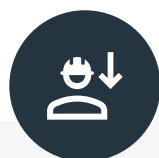
Energy saving

Energy-efficient adiabatic
humidifier



Distribution

Rack with configurable
number of nozzles



Minimal maintenance

Works with demineralised water



Germ-free

Guaranteed by VDI6022-1 certification



Variable speed management

Equipped with an EVCO inverter installed in the
electrical compartment and physically separated
from the hydraulic unit

Versatile use

The humidifiers in the EHPN series deliver steam into the room using a customisable distribution system, or directly into an AHU, using distribution racks with a configurable number of branches and nozzles. Several AHUs can be served by a single humidifier by connecting the hydraulic unit to multiple distribution racks. Each rack has its own controller connected to the AHU humidity sensor. Depending on the production requirement of each rack, the precision control of the hydraulic unit keeps the pressure of the fluid constant (8 MPa), producing mist with a particle size of around 15 μm , irrespective of the number of nozzles.



Humidity distributed into an AHU or the
room



Stainless steel pumping system



Number of nozzles customisable
(4 l/h or 8 l/h)



EVCO controller with an EPCOLOR interface on
the hydraulic unit and an EVCO controller with
an EV3 interface on the distribution rack



Constant 8MPa (80 bar) pressure
irrespective of number of nozzles



Pump control with instant viewing of
operational parameters



Tiny particles produced ($\sim 15 \mu\text{m}$)

Ideal for the following applications



Residential and
commercial
environments



Textile and
paper industry



Food industry



Biomedical
industry



Greenhouses,
botanical
gardens and
farms



Electronic and
automotive
industry

EHPN models and technical features



EHPN	060M2DW	120M2DW	180M2DW	240M2DW	300M2DW
SPRAY PRODUCTION					
Production capacity [kg/h]	60	120	180	240	300
Maximum pressure [MPa/bar]	8/80	8/80	8/80	8/80	8/80
SPRAY DISTRIBUTION					
Maximum number of nozzles (4 l/h) [n]	15	30	44	60	74
Maximum number of nozzles (8 l/h) [n]	7	15	22	30	37
ELECTRICAL PROPERTIES					
Power consumption [kW]	1.5				
Power supply [Vac, Hz]	230, 50/60				
Phases [n]	1				
WATER PROPERTIES					
Inlet water quality	Complies with microbiological standards for drinking water established by German standard (TrinkwV) and demineralised (completely or partially) water from drinking water. A VDI 6022 non return valve must be installed if non-demineralised water is used				
Inlet water conductivity [µS*cm]	0...100				
Inlet water hardness [°f]	0...5				
Inlet water pressure [MPa/bar]	0.02...14/0.2...10				
Inlet water connection	M 3/4" GAS				
Water drain external dimensions	M 1/4" GAS				
GENERAL CHARACTERISTICS					
Dimensions main unit [mm]	515x600x335				
Weight main unit [kg]	50				
Operating conditions [°C, RH]	1... 40, max. 80% non-condensing				
Storage conditions [°C, RH]	10... 70, max. 95% non-condensing				
Main unit protection	IP20				
Distribution rack protection	IP40				
REGULATION					
Type of controller	Built-in with advanced EPcolor user interface on the main unit and simplified EV3 user interface on the distribution rack				
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

EHPN models and technical features



EHPN	420M2DW	540M2DW	660M2DW	840M2DW
SPRAY PRODUCTION				
Production capacity [kg/h]	420	540	660	840
Maximum pressure [MPa/bar]	8/80	8/80	8/80	8/80
SPRAY DISTRIBUTION				
Maximum number of nozzles (4 l/h) [n]	104	134	164	210
Maximum number of nozzles (8 l/h) [n]	52	67	82	105
ELECTRICAL PROPERTIES				
Power consumption [kW]	1.5	2.2		
Power supply [Vac, Hz]	230, 50/60			
Phases [n]	1			
WATER PROPERTIES				
Inlet water quality	Complies with microbiological standards for drinking water established by German standard (TrinkwV) and demineralised (completely or partially) water from drinking water. A VDI 6022 non return valve must be installed if non-demineralised water is used			
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Inlet water hardness [°f]	0...5			
Inlet water pressure [MPa/bar]	0.02...14/0.2...10			
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