SKE4-10 M

Steam humidifier

Heat elements

The SKE4-E10 M electric humidifier generates pure, sterile and odorless water vapor. Quick maintenance without tools, and warranty without consumables.

It is designed to maintain a very precise level of relative humidity for industrial and commercial applications, such as industrial processes, hospitals, laboratories, museums or offices.

**Maintenance:**
- Stainless steel vaporization chamber can be removed in less than 20 seconds without tools (the others components, such as heaters and hose steam remain fixed)
- Heat-deformable and self-cleaning heating elements for quick and easy maintenance
- Ergonomic design with rail-guided system that facilitates and speeds up the maintenance of the spray chamber
- Ecological: no plastic cylinder to replace
- Intelligent water level detection system combining three different technologies (patent pending)
- Electrical compartments of power, control and hydraulics, simplifying access to components
- Storage of the integrated access panels to the chassis, allowing maintenance without clutter

**Performance and Security:**
- Steam capacities from 5 to 120 kg / h
- AFEC® foam detection technology ensures safe and effective operation
- Independent programmable times for a mode customized operation and emptying
- All-silicone tubing to accept any type of water (city water, osmosis or deionized)
- Manual drain valve for draining the device during a power failure for use more secure
- Cooling system of drained water (water does not does not exceed 60ºC)
- Built-in disconnect switch for increased safety during maintenance and reduced installation cost

**Communications:**
- GTC integration with the communication interface BACnet MS / TP or Modbus
- Optional Ethernet module for BACnet IP or Modbus IP, Email Communications, and Web Services
- Optional Wifi key
- Firmware update by SD card, USB or BACnet SKE4 electric humidifier

**Spray chamber - Spray the water, not the money!**
The SKE4-10 M electric humidifier is equipped with a chamber of vaporization minimizing the time and costs of maintenance of the device while remaining ecological.

**Easy maintenance:**
Permanent vaporization chamber, light and steel stainless steel requiring no replacement Guided rail system for easy maintenance Self-supporting tank for easy maintenance No tools required This represents time savings of up to 70% when compared to other maintenance procedures similar products offered in the industry.

Disassembly of the spray chamber is done in 3 steps:
1. Disconnect the water supply
2. Unclip the two hooks
3. Slide tank with rail guided system

No tools required, resistors and hose steam remain attached to the device.

**Water Level Detection System (Patent Pending):**
To ensure superior reliability and safety maximum, the SKE4-10 M has a system of detections of intelligent water level:
- Automatic recalibration over the entire life of humidifier
- Redundancy guaranteeing a secure operation and uninterrupted even in case of malfunction
- Self-cleaning system avoids accumulation of deposits
- Two-level thermal protection inside and out the outside of the spray chamber (stops the humidifier in case of high temperatures)
- Send local or remote notification by email to the operator in case of a problem

**AFEC® Foam Level Detection System:**
The AFEC® system offers security and control effective energy of boiling water and steam.
The AFEC® system consists of:
- Measuring probe of the body of water
- Anti-foam detection probe
- Water temperature sensor
The AFEC® system is unique in that water level sensor cannot be triggered unnecessarily by the foam formed on the surface of the water boiling. This eliminates the possibility of damaging heating elements and optimizes the emptying cycles for save energy.

**Communication:**
The SKE4-10 M offers several communication features allowing better management of its maintenance, its operation and energy consumption:

- Independent time programmer for operation of the device and the drain cycle, configurable via the menu or the BACnet communication interface

**Optional Features:**
- Selectable BACnet MS/TP or Modbus Menus allowing access to more than 75 objects/registers for BMS and IoT integration (Internet of Things)
- Ethernet module - BACnet IP or Modbus IP - Web services to perform configuration of humidifiers, remote diagnostics and well other functions from any location
- Wi-Fi communication

**Smart controller:**
The SKE4 controller is configured specifically for your SKE4-10 M steam humidifier

- User-friendly interface consisting of a 128 x 64 LCD screen, menu-driven with 8 function buttons for a configuration and faster operation
- User access rights management system that allows the menu to display only available functions for the type of connected operator: end user, service technician, installer or integrator
- Quick setup menu that allows installation faster and easier by displaying only most used functions and configurations
- Firmware with on-site upgrade via SD card, USB or BACnet
- Simplified visualization and export of the log of logs and alarm log

**Options**
Steam diffusion system: To diffuse in a ventilation duct, the humidifier SKE4-10 M requires a water vapor diffusion system Multi-steam or steam ramp.

Ventilation box installation option SDU is ideal for dispensing steam directly into a room without ductwork or for a localized area. X-Stream™ Technology:

- Insulated steam diffuser (ramps and collector) at high efficiency with vapor diffusion nozzles (patent pending pending)
- Ramps and manifold built in 304 stainless steel to double wall with foam insulation Armacell UT / Solaflex Encapsulated™
- Special silicone vapor diffusion nozzles designed to eliminate any condensate ejection at starting or modulating the production of steam
- Energy loss reduced to 85%. Losses including steam consumption and condensate generated during the heat transfer
- More details, see documentation on X-Stream™

**External installation box:**
Robust design for all climates

- LCD screen accessible through a window so no need to open the door.
- Fully insulated and constructed from heavy duty steel
- The outer and inner surfaces are protected with a zinc primer and a polyurethane powder coating for better resistance against scratches and corrosion.
- Protection against frost or overheating
- Designed to be installed on a roof base, but can also be installed on a stand
- Connections can be made on the side or by the bottom of the device, thus allowing total flexibility for all configurations

**Humidisoft:**
Web application for design and system selection Humidification

- Ready to select your SKE4-10 M humidifier
- Neptronic has developed a Web application that allows save time when selecting humidifiers commercial, industrial or residential.

**Features:**
- Calculation of automatic humidification load
- Web application (online)
- Report Builder
- Display of the absorption distance
- Selection of steam diffuser
- Humidifier Options
- Project Management

**Easy to use:**
Once registered for an online account, you can start creating projects and create your own humidifier with all the options available and with ease.
## General Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Heater element</strong></td>
<td>Heaters</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>7,5 kW</td>
</tr>
<tr>
<td><strong>Steam output</strong></td>
<td>10 kg/h</td>
</tr>
<tr>
<td><strong>Electrical supply</strong></td>
<td>230 V(Ph+N) ou 3 x 400 V (3 Ph) to be indicates on the order</td>
</tr>
<tr>
<td><strong>Full load Current</strong></td>
<td>33 A (single phase) or 11 A (triphase)</td>
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## Dimensions and Weights:

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<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
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<tbody>
<tr>
<td><strong>Height</strong></td>
<td>813 mm</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>565 mm</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>384 mm</td>
</tr>
<tr>
<td><strong>Service Weight</strong></td>
<td>66 kg</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>45 kg</td>
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## Water and Drain Connections:

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Water Connection</strong></td>
<td>1/2&quot;</td>
</tr>
<tr>
<td><strong>Drain Outlet</strong></td>
<td>1 x DN15 + 1 x DN20</td>
</tr>
<tr>
<td><strong>Drain Outlet température</strong></td>
<td>60° max.</td>
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<tr>
<td><strong>Steam outlet</strong></td>
<td>1 x DN 35 mm</td>
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## Water Supply:

<table>
<thead>
<tr>
<th>Type</th>
<th>Details</th>
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<tbody>
<tr>
<td>All</td>
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