

## Tender specification

### Electrode steam humidifier **MiniSteam E**

Ready for connection compact steam humidifier system for fully automatic and intrinsically safe generation of mineral-free, odourless and sterile steam. Steam output 5 and 10 kg/h. Installation and maintenance friendly design, for wall mounting. Easy to mount with all commercially available mounting rail systems, manufacturer-specific systems are not required. Corrosion-protected housing completely powder coated, stainless steel housing trough with separate areas for steam generation and electrics. With VDE, GS and CSA C/US certification mark, CE and EAC compliant. Developed and manufactured in Germany. For direct connection to all standard tap water mains. No water treatment necessary.

#### Standard equipment scope:

- Integrated, smooth-running ventilation device for even distribution of steam in the room
- Separable plastic cylinder - durable, easily cleaned without chemicals and reusable
- Massive large area stainless steel electrodes – especially long service life, replaced quickly and without tools
- Integrated circuit breaker
- Powerful blowdown pump to extend the service life by pumping out hardeners
- Device components easily accessed from three sides with removable device cover
- Assembly material

Powerful control electronics for fastest possible steam delivery with optimal energy utilisation and low maintenance operating mode. Comprehensive operational reliability through continuous self-monitoring of all device functions. The control processes all established control signals.

#### Performance characteristics:

- Automatic system test incl. self-diagnosis checking all functions and device components
- Continuous or 1-step control selectable
- Integrated PI controller
- Display
- 4 function keys
- 10 symbols for displaying operating and service messages
- 2 potential-free remote signals, one of them freely programmable from 15 options
- Stand-by blowdown to prevent stationary cylinder water according to VDI 6022
- DVGW compliant dead leg flushing to prevent stationary tap water
- Self-adaption to the respective water quality
- Integrated communication protocol Modbus RTU
- Integrated galvanically insulated serial interface RS-485 (EIA-485)
- Switch between the operating modes "energy-optimised" and "load-optimised"
- Separate inputs for voltage, current and resistance signals
- Analogue output 0-10 V for simultaneous use of several devices

#### Please select option:

- Cylinder flushing system for significant extension of the service lives of cylinders by means of increased discharging of screenable scale deposits or hardeners
- Preventive device type AB in accordance with DIN EN 1717 for potable water protection allows a local backflow preventer to be dispensed with
- Galvanised electrodes for optimised service lives of electrodes with high chloride content of the feed water

- Integrated waste water cooling to limit waste water temperature to max. 60 °C, when using PVC waste water pipes or pumping equipment
- Up to 2 additional relais signal functions, freely parametrisable from 15 functions, for optimum integration in superordinate building technology

**Technical specifications:**

Steam output	.....	kg/h (max.)
Electrical connection	..... / ..... / .....	V / phases / (N)
Nominal power rating	.....	kW (max.)
Nominal current	.....	A (max.)
Control voltage	230V / N 50-60Hz	
Make	HygroMatik	
Type	MiniSteam E	

**Accessories**

Drain hose

Length ..... m