

## 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. Corrosion-protected housing completely powder coated, stainless steel housing trough with separate areas for steam generation and electrics. With VDE and GS 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
- 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, DVGW-certified, 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