

# GAS FIRED HUMIDIFIER SYSTEM

## Condair model GHMC E range

**Specifiers Note:** Product(s) specified below is manufactured in ISO 9001 certified facilities.

### **Product specification**

1. CONDAIR GHMC Gas Fired Steam generating system using mains, softened or RO(reverse osmosis) water supply and Natural Gas energy source (Propane Gas source - option). Unit set for sea level operation (high altitude - option).
2. Packaged unit, wall (model E40 only) or floor (model E40, E80, E120, E160) mounted, requiring steam distributor[s] or short absorption manifold for mounting into AHU/duct[s] or Remote Mounted Blower Pack[s] [RMBP] for direct space applications [refer to schedule].
3. Unit[s] to be complete with:
  - a) Alphanumeric number display with keypad programming (code cross reference not acceptable).
  - b) Accepts a signal from BMS system or modulating humidistat.
  - c) True modulation control (time proportioning not acceptable)
  - d) Modulation control ensured by variable speed blower. (On/Off cycling of burners not acceptable)
  - e) Built in remote fault indication as standard
  - f) Microprocessor ignition control module
  - g) Fully integrated, enclosed cabinet, powder painted steel construction and air gap between cabinet and insulated humidifier tank ensures safe surface temperature (exposed wires, conduits, pipes or knobs not acceptable)
  - h) Vertical stainless steel humidifier tank for minimal space requirement
  - i) Stainless steel tank lid removable without tools and gasketed for leak tight closure. Stainless steel tank lid to cover full top surface
  - j) All tank surfaces insulated with minimum 25 mm (1") thick insulation to ensure safe surface temperature, high overall efficiency and fast unit response time
  - k) Automatic duty cycling of burners for equal usage
  - l) All Stainless Steel combustion chamber(s)/heat exchanger(s) with vertical surfaces to retard scale build-up (tubular heat exchanger not acceptable)
  - m) Gas system with combination gas valve(s), explosion proof premix combustion air blower(s), safety air proving switch(s), micro processor controlled ignition, flame sensing and fault indicator light(s), 100% premix infra-red burner(s), hot surface ignitor(s) and heat transfer efficiency maintained over all operating ranges
  - n) Low water safety shut down. Adjustable blow down setting for varying water conditions
  - o) Water level sensing system to be separate from water tank
  - p) Factory mounted blow-down assembly complete with integral overflow line and 305 mm (12") steam trap enclosed in cabinet (field installation of blow-down trap and drain valve not acceptable)

- q) The unit shall have a combustion efficiency of over 90%
- r) Auto tank drain on 3 day off cycle adjustable
- s) Removable Heat exchanger for easy maintenance
- t) Built in hour run meter (standard)
- u) Humidifier(s) supplied with adjustable leveling legs, and brackets for wall mounting (GHMC E40 only)
- v) Side wall or roof vented, forced draft combustion blower(s) capable of expelling flue gases without a supplementary external mechanical assistance
- w) Flue diameter 3" (E40) or 4" (E80,E120, E160). (5" or 7" not acceptable.)
- x) Humidifier requires zero clearance to combustibles on all sides
- y) Humidifier to be installed against a wall to minimize floor space required
- z) Service access space required on 2 sides only
- aa) Double fill valve to direct portion of the fill water to the float chamber to keep float chamber cool and minimise scale build up.
- bb) Room sealed design option will allow the humidifier to be installed in air handling units having areas of negative pressure. This will allow installation of the unit in the airflow of any system as air is taken from an environment at atmospheric pressure.
- cc) Humidifier to be BG (British Gas) Technology Certified - BG/EC-87/98/91
- dd) Optional accessories: refer to options schedule.

4. The Condair GHMC Humidifier(s) to be supplied by:

**JS Humidifiers plc**

Artex Avenue

Rustington

LITTLEHAMPTON

West Sussex

BN16 3LN UK

Telephone: 01903 850200

Fax: 01903 850345

email: [js@humidifiers.co.uk](mailto:js@humidifiers.co.uk)

web: [www.jshumidifiers.com](http://www.jshumidifiers.com)