

Product specification

Heatline *Stab-in Electric Heater*

1.1. General

- A. Provide a stab-in electric heater unit to meet the performance and configuration as indicated in the schedule and detail drawings. The stab-in electric heater unit shall be of the Heatline type as manufactured by VES Andover Ltd, a company covered by BS EN ISO 9001:2008.

1.2. Unit Construction

- A. The unit shall be provided pre-assembled comprising of a rigidly constructed single skinned galvanised sheet steel terminal box, electric element heater battery, and integrated control system.
- B. Access for maintenance shall be via a removable controls package and heater element assembly.
- C. The unit terminal box shall be provided in high quality galvanised steel.
- D. The unit shall be designed for duct installation.

1.3. Heater battery

- A. The unit shall be fitted with electric element heating as indicated in the schedule and detail drawings.
- B. The electric heater battery shall be suitable for single or three-phase supply with thyristor control as indicated in the schedule and detail drawings.
- C. The electric heater battery shall consist of a number of elements of a number of elements sized to suit the steps and phases as indicated in the schedule and detail drawings. The elements shall consist of a tubular incolloy shroud containing compressed magnesium oxide powder packed around a nickel chromium resistance wire. The elements shall be evenly spread across the open area of the duct.
- D. Where multiple elements are required to achieve the steps and phases as indicated in the schedule, elements shall be linked by copper bus bar or terminated with electrical connectors.
- E. The electric heater battery shall be fitted as standard with 130°C non-adjustable thermal safety cut-out, with manual reset.
- F. All electric heaters shall be 1500V flash tested, and resistance tested for correct component assembly. Test certificates shall be available on request.

1.4. Controls

- A. The unit shall be supplied with a fitted controls package as standard
- B. The controls package shall include as standard volt-free fan run and trip indication, 1 or 3 phase thyristor heat control, and fan control up to 4A 230V @ 50Hz.
- C. The controls package shall include as standard a lockable door isolator.
- D. The controls package shall include as standard an independent safety circuit, including thermal and airflow pressure safety cut out switches.
- E. The controls package shall be available with optional LCD room control unit or inputs responding to 0-10Vdc control signal from remote source to control temperature.
- F. The room control unit shall include as standard a built-in room sensor, temperature adjustment, on/off/auto/DC control, time clock setup and fan run-on timer adjustment, fault display, commissioning and control parameters and a tamper proof case design with PIN code access.

Heatline *Duct Mounted Electric Heater*

1.1. General

- A. Provide a duct mounted electric heater unit to meet the performance and configuration as indicated in the schedule and detail drawings of the Heatline type as manufactured by VES Andover Ltd a company covered by BS EN ISO 9001:2008.

1.2. Unit Construction

- A. The unit shall be provided pre-assembled comprising of a rigidly constructed single skinned galvanised sheet steel case, electric element heater battery, and integrated control system.
- B. Square spigots shall be fitted with 30mm flanges as indicated in the schedule and detail drawings.
- C. Circular spigots shall be fitted with rubber gasket seals as indicated in the schedule and detail drawings.
- D. The unit casework shall incorporate high quality leak resistant neoprene gaskets on service doors and panels.
- E. Access for maintenance shall be via a removable controls package and heater element assembly.
- F. Plantroom unit casework and spigots shall be provided in high quality galvanised steel.
- G. Weatherproof units shall be supplied powdercoated signal grey RAL7004 as standard. Alternative colour according to schedule.
- H. Weatherproof units shall be supplied with a weather lid.
- I. The unit shall be designed for duct mounting.

1.3. Heater battery

- A. The unit shall be fitted with electric element heating as indicated in the schedule and detail drawings.
- B. The electric heater battery shall be suitable for single or three-phase supply with thyristor control as indicated in the schedule and detail

drawings.

- C. The electric heater battery shall consist of a number of elements sized to suit the steps and phases as indicated in the schedule and detail drawings. The elements shall consist of a tubular incolloy shroud containing compressed magnesium oxide powder packed around a nickel chromium resistance wire. The elements shall be evenly spread across the open area of the duct.
- D. Where multiple elements are required to achieve the steps and phases as indicated in the schedule, elements shall be linked by copper bus bar or terminated with electrical connectors.
- E. The electric heater battery shall be fitted as standard with 130°C non-adjustable thermal safety cutout, with manual reset.
- F. All electric heaters shall be 1500V flash tested, and resistance tested for correct component assembly. Test certificates shall be available on request.

1.4. Controls

- A. The unit shall be supplied with a fitted controls package as standard
- B. The controls package shall include as standard volt-free fan run and trip indication, 1 or 3 phase thyristor heat control, and fan control up to 4A 230V @ 50Hz.
- C. The controls package shall include as standard a lockable door isolator.
- D. The controls package shall include as standard an independent safety circuit, including thermal and airflow pressure safety cut out switches.
- E. The controls package shall be available with optional LCD room control unit or inputs responding to 0-10Vdc control signal from remote source to control temperature.
- F. The room control unit shall include as standard a built-in room sensor, temperature adjustment, on/off/auto control, time clock setup and fan run-on timer adjustment, fault display, commissioning and control parameters and a tamper proof case design with PIN code access.

Heatline *Duct Mounted LPHW Heater*

1.1. General

- A. Provide a duct mounted LPHW heater unit to meet the performance and configuration as indicated in the schedule and detail drawings. The duct mounted LPHW heater unit shall be of the Heatline type as manufactured by VES Andover Ltd, a company covered by BS EN ISO 9001:2008.

1.2. Unit Construction

- A. The unit shall be provided pre-assembled comprising of a rigidly constructed single skinned galvanised sheet steel case, LPHW coil, and integrated control system.
- B. The unit shall have square or circular duct spigots as indicated in the schedule and detail drawings.
- C. Square spigots shall be fitted with 30mm flanges as indicated in the schedule and detail drawings.
- D. Circular spigots shall be fitted with rubber gasket seals as indicated in the schedule and detail drawings.
- E. The unit casework shall incorporate high quality leak resistant neoprene gaskets on service doors and panels.
- F. Access for maintenance shall be via a removable controls package and coil assembly.
- G. Plantroom unit casework and spigots shall be provided naturally finished in high quality galvanised steel.
- H. Weatherproof units shall be supplied powdercoated single grey RAL7004 as standard. Alternative colour according to schedule.
- I. The unit shall be designed for duct mounting.

1.3. Heater battery

- A. The unit shall be fitted with a LPHW coil heater as indicated in the schedule and detail drawings.
- B. The hot water heater battery shall comprise of copper tubes and aluminium fins, with galvanised sheet steel casework. The flow and return pipe connections shall be handed as indicated in the schedule and detail drawings.
- C. The hot water heater battery shall be available with alternative fin coatings by special order, as indicated in the schedule.
- D. The hot water heater battery shall be fitted with a pre-wired valve and actuator.
- E. Hot water heater battery shall be fitted with a pre-wired freeze protection capillary thermostat laced over the coil air off face.

1.4. Controls

- A. The unit shall be supplied with a fitted controls package as standard
- B. The controls package shall include as standard volt-free fan run and trip indication, valve and actuator heat control, and fan control up to 4A 230V @ 50Hz.
- C. The controls package shall include as standard a lockable door isolator.
- D. The controls package shall include as standard an independent safety circuit, including an airflow pressure safety cut out switch.
- E. The controls package shall be available with optional LCD room control unit or inputs responding to 0-10Vdc control signal from remote source to control temperature.
- F. The room control unit shall include as standard a built-in room sensor, temperature adjustment, on/off/auto control, time clock setup and fan run-on timer adjustment, fault display, commissioning and control parameters and a tamper proof case design with PIN code access.

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