

Heatline

DUCT MOUNTED HEATER BATTERY WITH INTEGRAL CONTROLS

- Integrated controls
- Modulating heater control
- Optional versatile LCD room unit
with built in sensor and timers
- Easy installation
- Suitable for circular (HLC),
square ducts (HLD) and
stab-in (HLS) in various sizes
- Extensive built-in safety features



VES HEATER BATTERIES

*part of a complete range of innovative,
flexible products from the HVAC experts*

1. ROOF MOUNTED HEATER
BATTERIES

MODEL HLD - WEATHER PROOF / 400/W/CP



Better air for the built environment

Heatline DUCT MOUNTED HEATER BATTERY

Why choose VES

VES has been supplying products for the HVAC industry for over 40 years, and have the in-depth knowledge and resources to provide solutions to all ventilation related requirements. We are a substantial British manufacturing company with over 200 employees, several factories plus a regional base in the north of England, and sales engineers located throughout the UK.

Complete range of products

The product range encompasses all types of ventilation products, including those required for commercial, industrial, public and domestic buildings. The emphasis is on low energy products and sophisticated controls to meet the requirements of the Building Regulations.

The range extends from a small bathroom extract fan up to a mighty central station air handling unit.

There are specialist heat recovery units, high temperature fans for kitchen hood extract; duct, wall, ceiling and roof units; low noise products and silencers; fitted controls.

High quality, flexible solutions

VES operate a quality assurance system to ISO 9001, monitored by the BSI. The air movement products are tested in-house to BS 848 Part 1, and submitted for external testing and approval when necessary.

VES specialise in bespoke designs for ventilation units, and whatever the issue, be it space, noise, temperature etc, can provide a design solution to meet the requirements of the project.

Superior customer service

From the moment we receive your enquiry to delivery and beyond, we have the people in place to give excellent customer service. The VES after sales service covers the whole of the UK and is among the best in the industry.

Experience and expertise

VES employ a range of experts in disciplines including air movement, noise control, air conditioning, controls, electrics and product refurbishment, and we have key staff who have worked at VES for many years.

Manufactured in the UK

VES has over 12000m² of manufacturing and stores space, and has state of the art sheet metalworking equipment, plus a large powder coating plant. VES also has a substantial controls department, and makes components such as dampers and electric heaters in-house. This not only provides employment for local people, but also many suppliers around the UK.

Introduction

The VES HEATLINE Duct Mounted Heater Battery brings new versatility to existing and new ventilation installations.

Intelligent control options can synchronise with a BMS or LCD room unit. Coupled with a Thyristor or Valve and Actuator, this is the ideal solution to accurately heat individual spaces. HEATLINE is simple to install, commission and maintain.

- Electric and LPHW options.
- Thyristor control for electric heating.
- Pre-fitted Valve and actuator for modulating output with LPHW.
- Integrated controls for response to BMS.
- Optional versatile LCD room unit with built in sensor and timers for independent self control.
- Easy installation to existing or new ductwork systems.
- Suitable for circular (HLC) square ducts (HLD) and stab-in (HLS) options in various sizes.
- Extensive built-in safety features.
- Single or three phase supply options.
- Plantroom and weatherproof configurations.



Better air for the built environment

Heatline Features and Benefits

Performance

Maximise efficiency and save on energy.



Energy Efficient

Heating individual rooms avoids the requirement to waste energy heating an entire building.



Sensors

Sensors available for energy efficient demand heating.



LPHW Modulating Heater Control

Fitted four port valve for modulating temperature output to accurately heat individual spaces.



EHB Modulating Heater Control

Single or three phase Thyristor for modulating temperature output to accurately heat individual spaces.

Simple Installation and Maintenance

Simple connection and pre-installed features save on site costs and reduce lead times. Carefully designed maintenance features minimise downtime and total cost of ownership.



Inbuilt Controls

Fitted and pre wired integral controls with fitted isolator to reduce on site wiring. Can interface with a BMS or LCD room unit.



Cable Gland Entry

Supplied with cable entry gland for simple and efficient site wiring.



LPHW Coil Connection Enclosure

Coil connections, valve and actuator are fully enclosed within case work to help prevent damage during transit and installation.



LPHW Mounting Feet

Mounting feet supplied fitted on LPHW units.



Square Spigot Modules

Square spigot connections with 30mm MEZ flange fitted at both ends to enable easy connection to square ductwork.



Circular Spigot Modules

Circular spigot connections fitted at both ends. Spigots up to Ø560 have a double rubber gasket.

Robust Construction

Excellent build quality ensures an air tight performance.



Plantroom

Plantroom units are supplied natural galvanised finish. Powdercoat finish available.



Weatherproof

Weatherproof units are supplied powder coated to RAL7004. Other alternate powdercoat colours available.

Safety Features

Versatile location, handing and access options meet the widest range of project requirements.



Air Flow Safety Switch

Fitted Airflow pressure switch to shut off heater in the event of airflow failure.



Safety Cutout

Fitted thermal cutout safety device on electric unit to shut off heater battery.

Heatline

Electric
Refer to
page 5



Heatline

Stab-in
Refer to
page 5



Heatline

LPHW
Refer to
page 7



Heatline LPHW Plantroom



HLC Plantroom



HLD Plantroom

Weatherproof

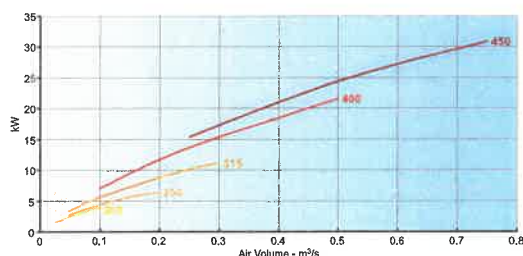


HLC Weatherproof



HLD Weatherproof

Air Volume against kW rating



PRODUCT & MODEL	DUCT SIZE	CONFIG.	HEATING	CONTROL OPTION
HLC		/	W	BMS
HLD		W		CP

Duct mounted modulating Low Pressure Hot Water (LPHW) heater complete with circular or square connections and fitted controls. Suitable for drop rod mounting and floor fixing.

Standard Features

- ▶ LPHW heater supplied with fitted and pre-wired valve and actuator, fully enclosed and protected.
- ▶ Factory fitted and pre-wired frost protection stat.
- ▶ Modulating LPHW control.
- ▶ Volt free run and trip indication.
- ▶ Fan control up to 4Amps 230 Vac @ 50Hz.
- ▶ Main isolating switch, lockable handle.
- ▶ Independent safety circuitry.
- ▶ Fitted interlock airflow pressure switch.
- ▶ Easy installation to new or existing ductwork system.
- ▶ 0-10 Vdc input signal for BMS control.

LCD Room Unit Features

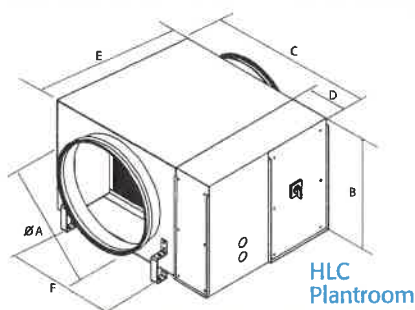
- ▶ LCD room unit with built in sensor & temperature adjustment.
- ▶ On/Off/Auto control with built in 7 day time clock.
- ▶ Adjustable commissioning and control parameters.

Heatline Circular Ducting (HLC) Heatline Rectangular Ducting (HLD)	Duct Size	Config	Heating	Control Option
HLC	200 to 450	NULL or /W	/W	/BMS or /CP
HLD	200 to 450	NULL or /W	/W	/BMS or /CP

Duct Size	Air Volume m³/s	Maximum Air Off Temp. °C	Maximum Output kW	Water Flow Rate l/s	Water Pressure kPa	Air P.D Pa
200	0.025	49	1.6	0.04	0.9	1
	0.05	38.5	2.6	0.06	2.7	3
	0.08	32.5	3.4	0.08	4.3	6
	0.10	28	4	0.09	6.1	9
250	0.05	42.5	2.9	0.06	3.7	2
	0.10	32	4.5	0.10	8.5	5
	0.15	26	5.6	0.12	13.1	10
	0.20	21.5	6.4	0.14	17.1	18
315	0.05	53	3.5	0.08	1.5	2
	0.10	42	5.7	0.13	3.4	3
	0.18	34	8.2	0.18	7	5
	0.25	28	10.1	0.22	10.1	9
	0.30	25.5	11.1	0.25	12.2	12
400	0.10	54	7.1	0.16	3	1
	0.20	43	11.7	0.26	7.9	3
	0.35	35	16.9	0.38	15.8	5
	0.50	29	21.7	0.46	23.5	9
450	0.25	46	15.5	0.34	8.5	3
	0.50	35.5	24.5	0.54	20.1	5
	0.75	29	30.9	0.69	31.4	10

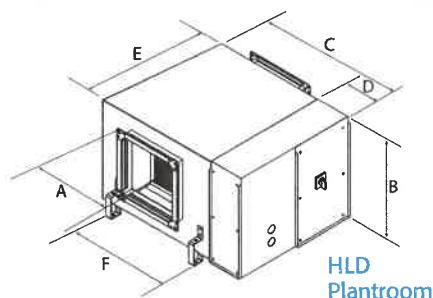
Based on air on temp. -5°C

LPHW Dimensions



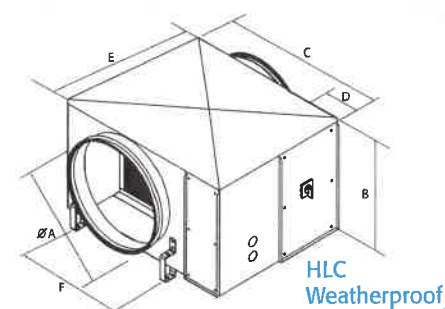
Plantroom Spigot Dimensions - mm (HLC)

A Duct Dia.	B Height	C Width	D Control Box	E Length	F Mounting Centres	Weight kg
197	230	650	180	585	300	17
247	290	650	180	585	350	19
312	365	770	180	585	415	23
397	540	900	180	585	500	32
447	565	1150	180	585	550	40



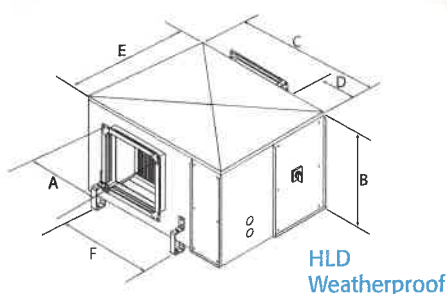
Plantroom Mez Dimensions - mm (HLD) (30mm MEZ)

A Duct Dia.	B Height	C Width	D Control Box	E Length	F Mounting Centres	Weight kg
200	230	650	180	665	300	17
250	290	650	180	665	350	19
315	365	770	180	665	415	23
400	540	900	180	665	500	32
450	565	1150	180	665	550	40



Weatherproof Spigot Dimensions - mm (HLC)

A Duct Dia.	B Height	C Width	D Control Box	E Length	F Mounting Centres	Weight kg
197	240	650	180	585	300	20
247	300	650	180	585	350	22
312	375	770	180	585	415	27
397	550	900	180	585	500	36
447	575	1150	180	585	550	45



Weatherproof Mez Large Dimensions - mm (HLD) (30mm MEZ)

A Duct Dia.	B Height	C Width	D Control Box	E Length	F Mounting Centres	Weight kg
200	240	650	180	665	300	20
250	300	650	180	665	350	22
315	375	770	180	665	415	27
400	550	900	180	665	500	36
450	575	1150	180	665	550	45



Product Specification

Duct Mounted LPHW Heater Heatline

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 mez 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 & coil assembly.
- G. Plantroom unit casework & spigots shall be provided naturally finished in high quality galvanised steel.
- H. Weatherproof units shall be supplied powdercoated signal 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 & 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 & 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 an 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 & fan run-on timer adjustment, fault display, commissioning & control parameters and a tamper proof case design with PIN code access.

Download specification from www.ves.co.uk/information-centre