

BOSS™

Copperad®

UNIT HEATERS



OVER
100 YEARS
OF QUALITY

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1 | UNIT HEATERS

The BSS range of BOSS Copperad unit heaters are designed for installation in industrial or heavy commercial spaces; they are specifically intended for use in factories, warehouses, storage spaces, distribution centres, garage spaces etc. The unit heaters blow a powerful jet of air angled into the occupied space to provide local or overall heating of the work/storage area.

BOSS Copperad unit heaters consist of a powerful axial fan with EC motor which draws in space air, blows it across an optimised heat exchanger (coil) and discharges the air through a series of adjustable, angled louvre blades. The casing is powder coated steel and holds the motor/fan basket grille on the back and the coil towards the front with the pipe connections protruding through

the casing. The electrical box is located on the side of the unit and a number of hanging bracket options are available.

The EC fan is continuously controllable via a 0-10V signal allowing the fan to rotate and move air at a rate commensurate with the height at which the units are required to be mounted.

Horizontal unit heaters are intended for wall mounting and blow a jet horizontally through the angled discharge louvres towards the floor. Vertical units would normally hang from the ceiling on drop rods and blow a vertical jet downwards into the lower space.



2 | SUSTAINABLE HEATING AND DECARBONISATION

Lower water temperatures are often encountered in heating systems that incorporate renewable energy sources, such as condensing boilers, heat pumps or solar thermal systems.

With the drive for sustainability and reduced hot water temperatures, BOSS Copperad Unit Heaters provide a smart solution. Our unit heaters are designed to tackle lower water temperature challenges by using increased depth coils with 3 or 4 tube rows.

Complete with a powerful axial fan with an EC motor, these heaters draw in space air, which is then heated through an optimised heat exchanger (coil) before being released into the occupied area. Using lower primary water temperature enhances both energy efficiency and occupant comfort.

The integration of BOSS Copperad Unit Heaters into a low water temperature system represents a significant step towards sustainable practices, helping industries reduce their carbon footprint while providing a productive environment.

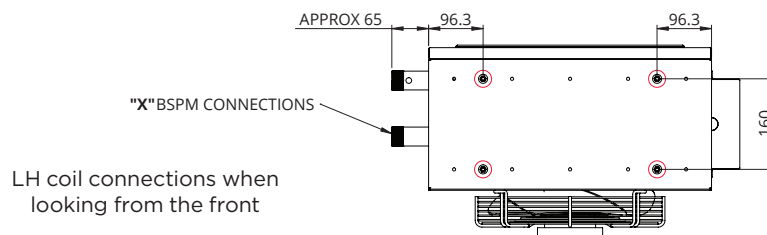
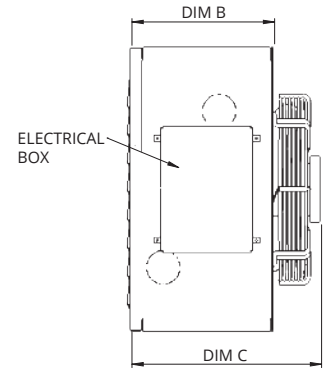
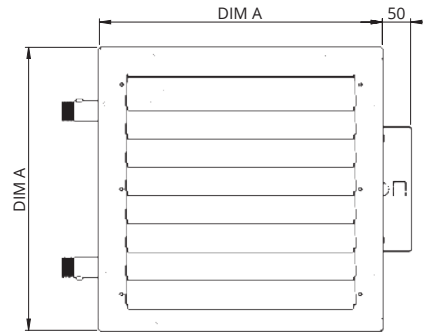
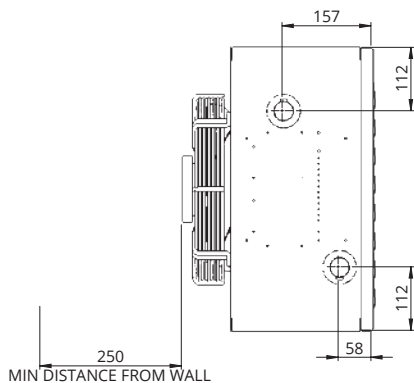
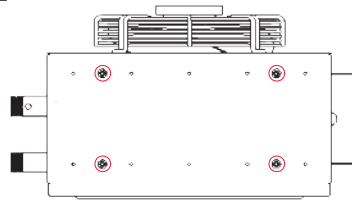


3 | DIMENSIONS

Industrial Unit Heater

All dimensions in mm

Model	DIM A	DIM B	DIM C	X BSPM
UH5	500	252	335	1"
UH6	600	262	360	1"
UH7	700	262	360	1 1/4"
UH8	800	290	395	1 1/4"



Unit weights are approximate as given in the table below, depending on bracketry arrangement and optional extras.

Unit Weights/Volumes

Unit size	UH5	UH6	UH7	UH8
Approx. dry weight (kg)	30	45	55	70
Int. vol. 2 row coil (l)	0.9	1.5	2.7	3.7
Int. vol. 3 row coil (l)	1.2	2.0	3.5	4.9
Int. vol. 4 row coil (l)	1.5	2.5	4.3	6.0

4 | PERFORMANCE DATA

The basic unit for low pressure hot water is supplied with a 2 row coil. This is suitable for conventional boiler temperatures whereby the hot water flow temperature is close to 80°C. Increasingly, hot water temperatures are being forced downwards and emitters are paired with condensing boilers and heat pumps. BOSS Copperad can offer enhanced depth coils of 3 or 4 tube rows to compensate

for the reduced hot water temperatures provided and maintain output levels. A 3 row coil could be used with conventional boiler flow temperatures to enhance output but will increase the leaving air temperature and buoyancy of the air. The 4 row coil should not be used with conventional boiler temperatures.

LTHW 2 row coil

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m3/s)	0.23	0.35	0.46	0.40	0.60	0.79	0.55	0.81	1.10	0.85	1.26	1.69
Output (kW)	6.6	8.2	9.2	12.4	15.1	17.2	17.1	20.8	24.0	26.6	32.4	37.0
Water flow (kg/s)	0.16	0.20	0.22	0.30	0.36	0.41	0.41	0.50	0.57	0.63	0.77	0.88
Water pressure drop (kPa)	5.2	7.7	9.3	23.4	33.5	42.2	8.7	12.5	15.6	24.2	34.4	44.0

Table 1. Performance of units fitted with the standard **2 row coil** and operating against conventional boiler flow and return temperatures of 80/70°C and an air temperature of 18°C.

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m3/s)	0.23	0.35	0.46	0.40	0.60	0.79	0.55	0.81	1.10	0.85	1.26	1.69
Output (kW)	6.8	8.3	9.4	12.7	15.5	17.5	17.5	21.3	24.5	27.2	33.1	37.8
Water flow (kg/s)	0.15	0.18	0.20	0.28	0.34	0.38	0.38	0.46	0.53	0.59	0.72	0.82
Water pressure drop (kPa)	4.6	6.7	7.6	20.5	29.3	36.9	7.6	10.9	13.5	21.5	30.8	38.4

Table 2. Performance of units fitted with the standard **2 row coil** and operating against conventional boiler flow and return temperatures of 82/71°C and an air temperature of 18°C.

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m3/s)	0.23	0.35	0.46	0.40	0.60	0.79	0.55	0.81	1.10	0.85	1.26	1.69
Output (kW)	5.3	6.5	7.3	10.5	12.8	14.4	14.3	17.2	19.7	22.7	27.5	31.3
Water flow (kg/s)	0.06	0.08	0.09	0.13	0.15	0.17	0.17	0.21	0.24	0.27	0.33	0.37
Water pressure drop (kPa)	1.0	1.5	1.8	5.1	7.2	8.9	1.8	2.5	3.2	5.3	7.5	9.1

Table 3. Performance of units fitted with the standard **2 row coil** and operating against conventional boiler flow and return temperatures of 80/60°C and an air temperature of 18°C.

LTHW 3 row coil

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m3/s)	0.22	0.33	0.44	0.38	0.57	0.75	0.53	0.77	1.05	0.81	1.20	1.61
Output (kW)	8.6	10.8	12.4	15.8	20.0	23.0	23.0	28.6	33.7	34.1	42.7	49.7
Water flow (kg/s)	0.21	0.26	0.30	0.38	0.48	0.55	0.55	0.68	0.80	0.81	1.02	1.19
Water pressure drop (kPa)	4.3	6.5	8.5	18.4	27.9	36.2	42.6	62.6	83.6	20.1	30.9	41.0

Table 4. Performance of units fitted with the **3 row coil** and operating against conventional boiler flow and return temperatures of 80/70°C and an air temperature of 18°C.

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m3/s)	0.22	0.33	0.44	0.38	0.57	0.75	0.53	0.77	1.05	0.81	1.20	1.61
Output (kW)	8.8	11.0	12.7	16.2	20.4	23.6	23.6	29.3	34.5	34.9	43.7	50.9
Water flow (kg/s)	0.19	0.24	0.28	0.35	0.44	0.51	0.51	0.64	0.75	0.76	0.95	1.10
Water pressure drop (kPa)	3.8	5.7	7.4	14.5	23.6	31.8	37.8	56.0	74.7	18.0	27.1	35.2

Table 5. Performance of units fitted with the **3 row coil** and operating against conventional boiler flow and return temperatures of 82/71°C and an air temperature of 18°C.

4 | PERFORMANCE DATA

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.22	0.33	0.44	0.38	0.57	0.75	0.53	0.77	1.05	0.81	1.20	1.61
Output (kW)	6.8	8.7	10.0	13.7	17.1	19.5	20.3	25.0	29.3	29.6	36.7	42.4
Water flow (kg/s)	0.08	0.10	0.12	0.16	0.20	0.23	0.24	0.30	0.35	0.35	0.44	0.51
Water pressure drop (kPa)	0.8	1.1	1.6	4.1	5.6	7.2	10.0	14.6	19.3	4.3	6.7	8.7

Table 6. Performance of units fitted with the **3 row coil** and operating against conventional boiler flow and return temperatures of 80/60°C and an air temperature of 18°C.

Size	UH5*			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.22	0.33	0.44	0.38	0.57	0.75	0.53	0.77	1.05	0.81	1.20	1.61
Output (kW)	3.4*	4.7*	5.6*	6.9	8.9	10.2	11.5	14.1	16.4	15.3	19.5	22.7
Water flow (kg/s)	0.05	0.07	0.09	0.08	0.11	0.12	0.14	0.17	0.20	0.18	0.23	0.27
Water pressure drop (kPa)	0.4	0.6	1.0	1.1	2.1	2.3	3.9	5.5	7.2	1.5	2.1	2.8

Table 7. Performance of units fitted with the **3 row coil** and operating against flow and return temperatures of 60/40°C and an air temperature of 18°C.

*UH5 at 60/45°C

LTHW 4 row coil

Size	UH5*			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.21	0.31	0.42	0.36	0.54	0.71	0.51	0.73	1.00	0.77	1.14	1.53
Output (kW)	2.0*	5.3*	6.6*	7.8	10.4	12.3	13.4	16.8	19.8	21.4	27.0	31.6
Water flow (kg/s)	0.03	0.08	0.11	0.09	0.12	0.15	0.16	0.20	0.24	0.26	0.32	0.38
Water pressure drop (kPa)	0.1	0.6	1.0	0.9	1.6	2.4	3.2	4.6	6.2	9.2	14.1	18.4

Table 8. Performance of units fitted with the **4 row coil** and operating against flow and return temperatures of 60/40°C and an air temperature of 18°C.

*UH5 at 60/45°C

Size	UH5*			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.21	0.31	0.42	0.36	0.54	0.71	0.51	0.73	1.00	0.77	1.14	1.53
Output (kW)	4.0*	5.1*	6.0*	5.9	7.7	9.1	9.5	11.8	14.1	14.9	18.8	22.1
Water flow (kg/s)	0.19	0.24	0.29	0.14	0.18	0.22	0.23	0.28	0.34	0.36	0.45	0.53
Water pressure drop (kPa)	2.7	3.9	5.6	2.2	3.3	4.8	6.0	8.8	12.0	18.0	26.6	35.3

Table 9. Performance of units fitted with the **4 row coil** and operating against flow and return temperatures of 45/35°C and an air temperature of 18°C.

*UH5 at 45/40°C

The tables above give guidance regarding rates of heat output etc. at specific fluid conditions, please contact BSS if outputs at other conditions are required.

4 | PERFORMANCE DATA

Heat exchangers are available for use with steam (horizontal units only). The maximum steam pressure that should be considered is 6 bar gauge and this may necessitate the use of pressure reducing equipment.

A special heat exchanger is also available for MTHW application up to 130°C. This has reduced surface area to limit the leaving air temperature and again is only suitable for horizontal units.

Steam - 1 row coil

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.24	0.36	0.48	0.42	0.63	83.00	0.38	0.85	1.16	0.89	1.32	1.77
Output (kW)	7.5	8.8	9.6	13.2	15.3	16.8	20.1	23.6	26.5	29.6	34.5	38.3
Steam consumption (kg/h)	12.3	14.4	15.7	21.6	25.1	27.5	32.9	38.6	43.3	48.4	56.4	62.6

Table 10. Performance of units fitted with the **1 row steam coil** and operating against air at 18°C and steam at 1 bar gauge pressure.

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.24	0.36	0.48	0.42	0.63	83.00	0.38	0.85	1.16	0.89	1.32	1.77
Output (kW)	9.0	10.5	11.6	15.8	18.4	20.3	24.4	28.6	31.8	35.8	41.7	46.0
Steam consumption (kg/h)	15.1	17.6	19.5	26.6	31.0	34.1	41.0	48.1	53.5	60.2	70.0	77.3

Table 11. Performance of units fitted with the **1 row steam coil** and operating against air at 18°C and steam at 3 bar gauge pressure.

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.24	0.36	0.48	0.42	0.63	83.00	0.38	0.85	1.16	0.89	1.32	1.77
Output (kW)	10.4	12.1	13.2	18.1	21.1	23.1	27.8	32.5	36.4	40.8	47.8	52.7
Steam consumption (kg/h)	17.9	20.9	22.7	31.2	36.3	39.8	47.9	56.0	62.7	70.2	82.4	90.8

Table 12. Performance of units fitted with the **1 row steam coil** operating against air at 18°C and steam at 5 bar gauge pressure.

MTHW - 2 row coil

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Airflow (m ³ /s)	0.24	0.36	0.48	0.42	0.63	0.83	0.57	0.85	1.16	0.89	1.32	1.77
Output (kW)	7.6	9.0	10.1	14.1	16.9	18.8	19.5	23.3	26.5	30.3	36.1	40.6
Water flow (kg/s)	0.09	0.11	0.12	0.17	0.20	0.22	0.23	0.28	0.32	0.36	0.43	0.48
Water pressure drop (kPa)	1.7	2.7	3.0	7.7	10.4	12.6	2.8	3.9	5.0	8.1	11.1	13.6

Table 13. Performance of units fitted with the **2 row MTHW coil** and operating against flow and return temperatures of 120/100°C. Air temperature is 18°C.

5 MOUNTING HEIGHT/COVERAGE

Unit heaters are intended to be mounted outside the occupied area of the conditioned space and to blow a jet of warm air into the area(s) where it is required. The performance and comfort levels achieved are a function of the positions in which the units are installed and in particular their heights above floor level. Higher fan speeds generate greater volumes of airflow and higher momentum jets which will cover greater areas. Smaller units are more suited to mounting in limited areas with reasonably low mounting heights while the larger

units lend themselves to greater mounting heights covering greater floor areas. If units are selected with excess airflow then there will be greater than necessary levels of draught and noise.

The figures shown in the table below are for guidance/indication only and should not be considered inflexible. If the application falls close to the range indicated then satisfactory operation will result.

Recommended Mounting Heights

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Minimum height (m)	2.0	2.5	2.5	2.5	2.5	3.0	2.5	3.0	3.0	2.5	3.0	3.5
Maximum height (m)	3.0	3.5	3.5	3.5	4.5	4.5	3.5	5.0	5.5	4.0	5.0	6.0
Throw (m)	7	9	13	10	13	19	13	16	25	15	18	27
Coverage (mxm)	6	7	12	9	12	18	11	13	23	12	15	25

Throw represents the range of effectiveness of horizontal units mounted against a wall and blowing downwards at a 30 to 45° angle. If horizontal units are mounted along opposite walls it is helpful to stagger their positions to maximise and homogenise the field of effect. Coverage represents the corresponding area of effect for vertical units blowing downwards.

As mentioned, the figures in the above tables only

provide guidance and coverage/throw is affected by mounting height, leaving air temperature and any special outlet louvre arrangements. Ideal leaving air temperatures for unit heaters are in the range of 30 to 45°C. Leaving air temperature is calculated in line with the equation below:

$$LAT(^{\circ}C) = EAT(^{\circ}C) + [Output(kW)/Airflow(m^3/s)/1.2]$$

LAT = leaving air temperature, EAT = entering air temperature



6 NOISE DATA

Unit heaters are used to blow powerful jets of air from significant heights towards the floor. Accordingly, the high flowrates generate significant noise levels which are unsuitable for sensitive areas. When employed in typical factory/warehouse/storage facilities noise is rarely an issue and selection of units can be made on the basis of required outputs, mounting heights etc. Taking advantage of the controllability of EC motors the

blades of the unit heater fans can be rotated at any speed from locked rotor to maximum and the noise generated will increase accordingly. If the application would benefit from a lower noise level then units running at low or medium speed should be selected as there are significant differences in the noise levels at the various speeds, as shown below.

Noise Levels

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
dBA	41	47	57	41	50	60	43	52	62	48	54	66

Fa speeds are set to the following: Low 3v, Medium 5v and High 7v.

The sound pressure levels above are indicative and approximately equal to the free field levels 3m distant from the units. Actual sound pressure levels will depend on the reverberant nature of the installation.

FLA values are only ever shown for conventional AC motors. The current drawn and that measured for EC motors are not the same as the EC power factor is well below 1. EC motor data only ever shows power draw rather than current draw as the latter would be misleading.

7 ELECTRICAL DATA

All units are suitable for operation against a 230V/1Ph/50Hz supply. The power draw figures for the units at various speeds are shown below.

Unit Electrical Power Consumption

Size	UH5			UH6			UH7			UH8		
Speed	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
Power draw (W)	70	110	200	90	150	300	100	180	380	230	420	700

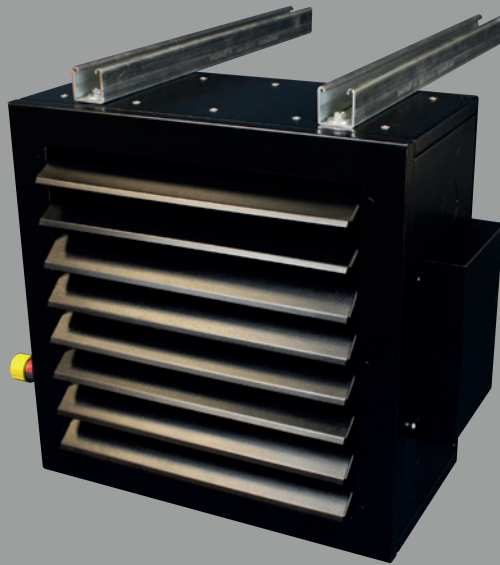
For all electrical data including wiring diagrams, please see the installation, operation and maintenance manual available on www.copperad.co.uk

8.1 CONFIGURATIONS

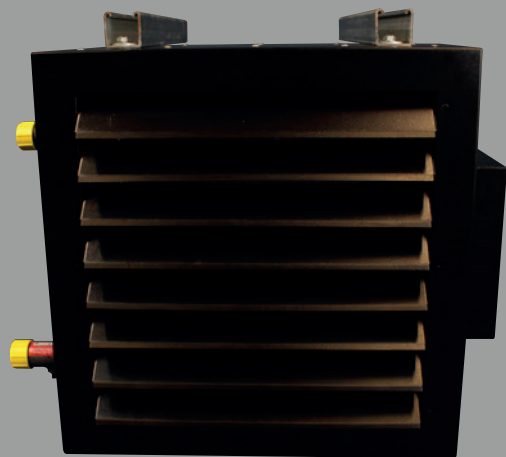
Horizontal Mounting

Suggested Horizontal Airflow Mounting - Channel Strut Mounting Provided By Other

Isometric view

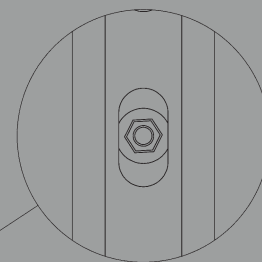
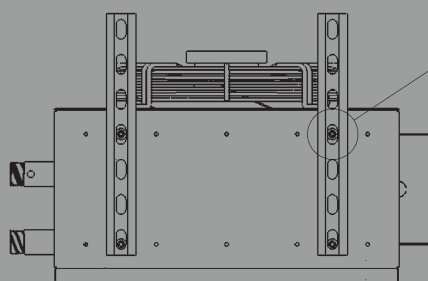


Front view



Top mounting shown. The same can be done to the bottom panel for bottom mounting

Top view



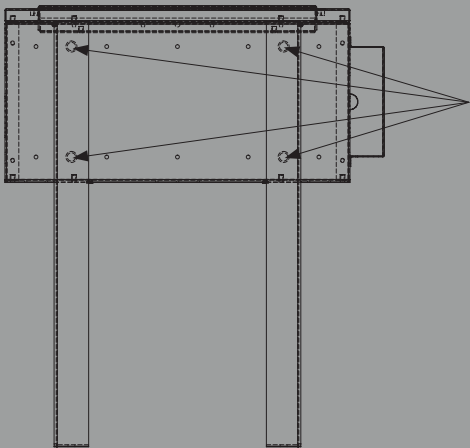
Use M8 bolts and washers to fix Unistrut to the hexserts. Please ensure the unit is fixed by all 4 hexsert

8.1

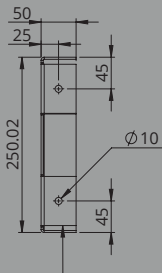
CONFIGURATIONS

Horizontal Mounting

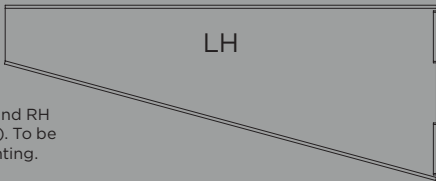
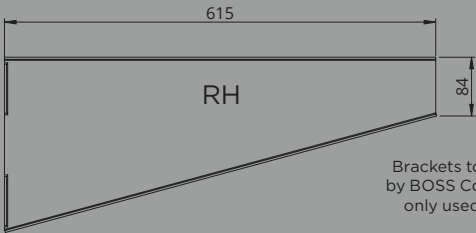
Suggested Horizontal Airflow Mounting - Angle Bracket



Angled bracket to be fixed by M8 bolts and washers. Ensure unit is fixed on all 4 hexserts



Fix to wall on this side. Ensure appropriate fixing used for the desired mounting wall



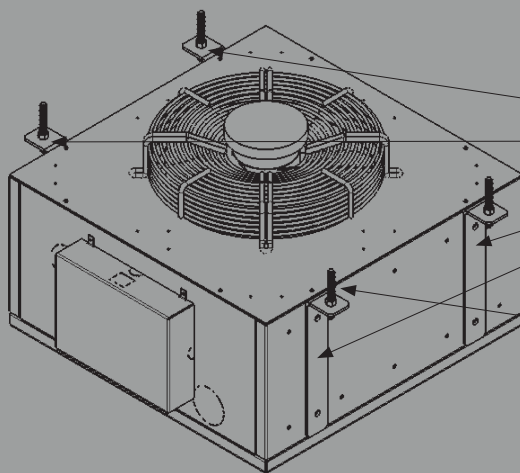
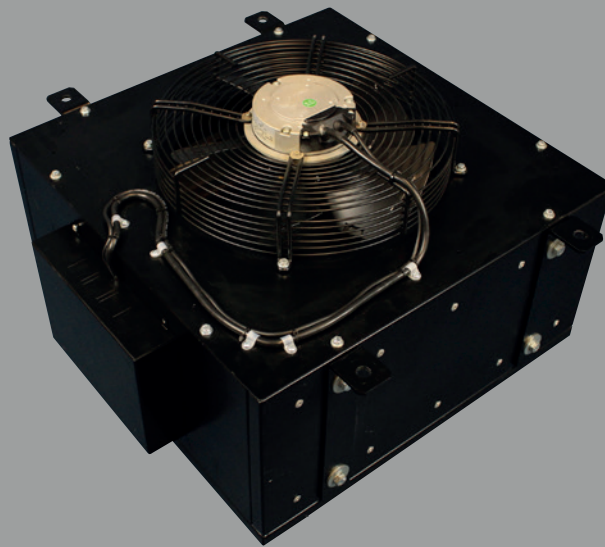
Brackets to be supplied LH and RH by BOSS Copperad (optional). To be only used for bottom mounting.

8.2 CONFIGURATIONS

Vertical Mounting

Suggested Vertical Airflow Mounting - Mounting Bracket

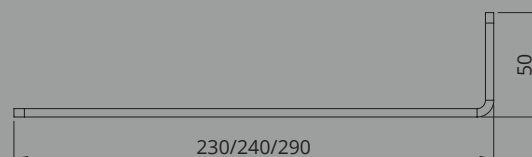
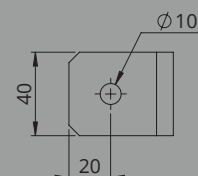
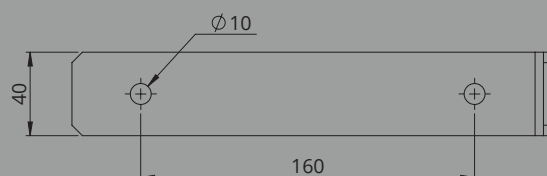
Brackets supplied as standard for vertical units.



4-of mounting brackets to be fixed to hexsert on top & bottom panel. Ensure brackets are fixed on all hexserts using M8 bolts and washers

Mounting brackets have M8 holes for fixing Unistrut or suspension rods

Suspension rods shown as example



8.2 CONFIGURATIONS

4 way louvre as standard

Suggested Vertical Airflow Mounting - Mounting Bracket



9 | CONTROLS

Unit heaters can be controlled according to a number of regimes. The control components/hardware required will depend upon this methodology and the options are listed below (note that control options shown can be combined if appropriate):

MANUAL CONTROL

Simple design: No energy-saving features, manual control for easy use.

As standard, you will get an RS3B and the below are optional controls:

- On/off rocker switch with change speed rocker switch (wall mounted).
- Option for IP-rated box or standard surface mounted switchplate.



RS13R: Remote on/off and speed control, IP66 box



BOX2S: Remote on/off and speed control

LOCAL AUTOMATIC THERMOSTATIC CONTROL

Control:

- On/Off control remote thermostat (wall mounted)

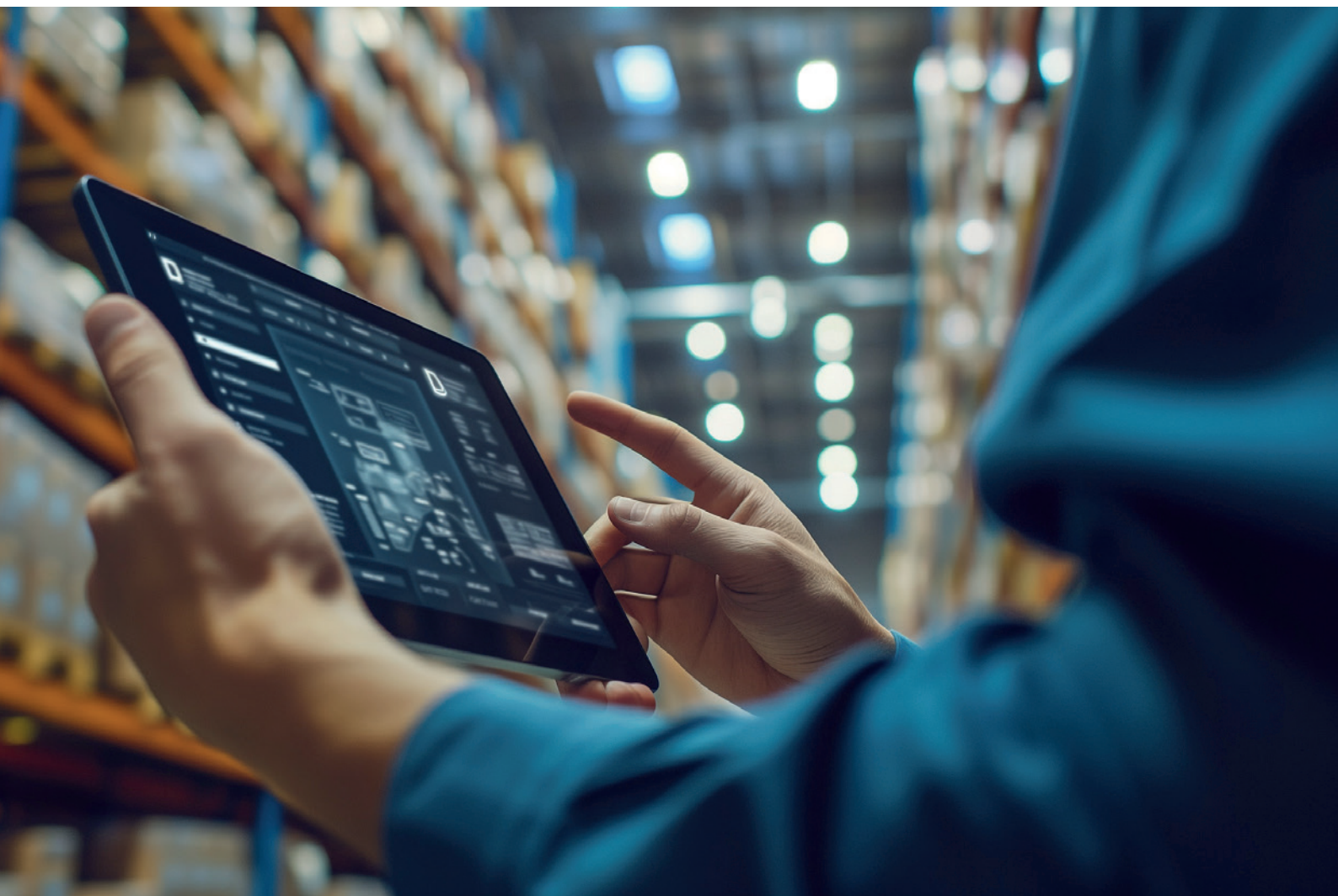


RT1: Remote thermostat

9 | CONTROLS

BMS (CENTRAL) CONTROL

- BMS can directly control the unit heater and modulate the waterside valve for heat output
 - Can be used if available and monitors appropriate conditions
 - Wall-mounted controller with BACNET can accept signals from BMS to control valves and unit
 - BMS fault signal provided from the unit as standard
 - Master/slave arrangements should be chosen when multiple unit heaters are used in a single zone. The master unit is linked to the controls and sends a two-wire signal to the slave units to control their operation.
- **Controls as standard**
 - 0-10V signal for On/off control & speed control
 - **Special (POA)**
 - 24v relay (optional)
 - 230v relay (optional)



9 | CONTROLS

AUTOMATIC WATERSIDE CONTROL - DELTA CONTROLLER

Recommended control: Delta Waterside Controller using a 2-port modulating valve. Waterside control modulates the heat output rate without affecting the dynamics.

Operation:

- Valve adjusts based on 0-10V signal from Delta controller
- Higher temperature (closer to setpoint) closes the valve, reducing heat output
- Optional fan stop signal when exceeding setpoint

Airside control reduces heat output and coverage, impacting on the energy efficiency of the unit heater.

Benefits:

- Proportional control for precise temperature regulation
- Energy savings compared to manual or staged heat control
- Package available: Valve, actuator, and Delta controller combined
- Multiple Unit Control: Manages multiple units in a zone through daisy-chaining or star wiring (up to 30m distance, no limit on the number of units)

Additional Features:

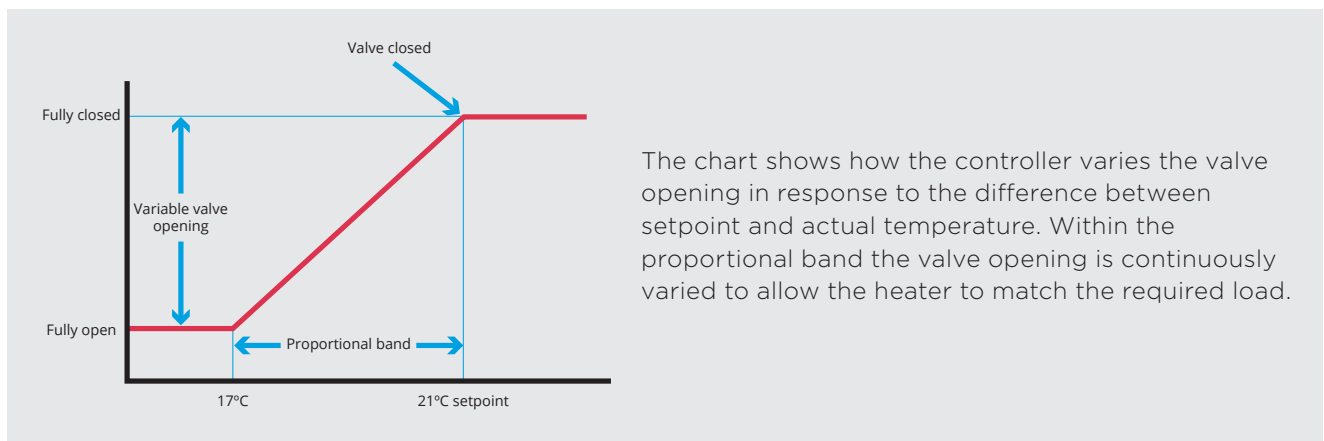
- Easy-to-use interface
- Master/slave control for multiple units
- Volt-free terminals for integration with other systems
- BACNET compatibility for building automation networks



Delta 3/4" Master pack with Controller, Control valve & actuator



Delta 3/4" Slave pack with Control valve & actuator only



10 | SPECIFICATION

Casing fabricated from heavy gauge mild steel, with textured powder coated paint finish in Black (RAL 9005).

White (RAL 9010) is available to order; other RAL colours are available at an additional cost.

Horizontal units have front facing louvres fully adjustable. Vertical units have downward facing fully adjustable louvres. Louvres are painted to match the casing.

Maximum working pressures are 16 bar for water units and 6 bar for steam units. Maximum operating temperatures are 90°C for LTHW units and 130°C for MPHWH units.

Motors:

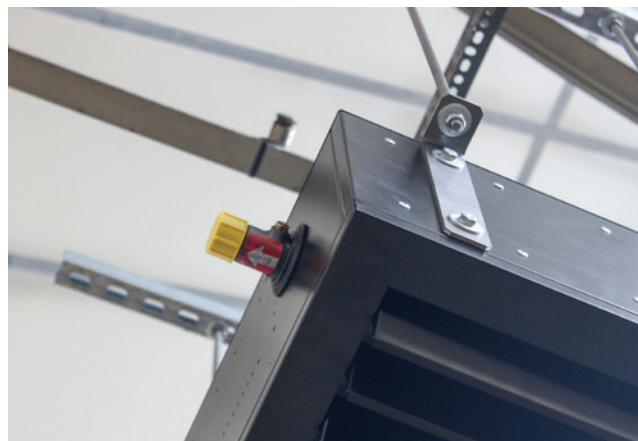
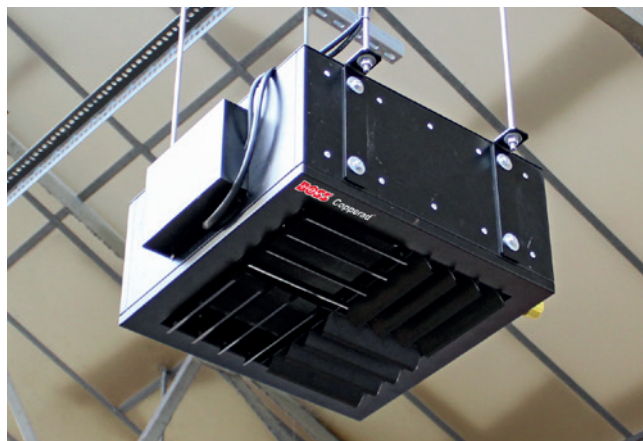
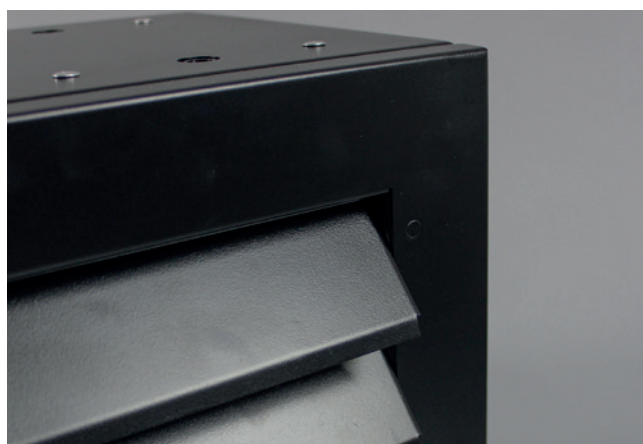
- EC type with sealed bearings for continuous operation up to 60°C
- 230V/1Ph/50Hz single-phase power supply
- Continuously controllable via 0-10V DC signal

Impellers:

- Steel with black paint finish
- Black basket guard attached to the rear of the unit

Heat Exchanger (coil):

- Copper tubes with aluminium fins
- Mild steel male BSP pipe connections
- Vent/drain points included on connections
- Pressure tested (air under water) to 22 bar



11 | BSS PRODUCT CODES

Part References explained:

Unit Heater Model	No. Rows	Configuration
UH5	1	S - Steam
UH6	2	H - Horizontal
UH7	2M - MTHW	V - Vertical
UH8	3	
	4	

Unit Heater Model	No. Rows
UH5-1-S	UH5, 1 Row, Steam
UH5-2-H	UH5, 2 row, Horizontal
UH5-2M-H	UH5, MTHW, Horizontal
UH5-3-V	UH5, 3 Row, Vertical
UH5-3-H	UH5, 3 Row, Horizontal
UH5-4-H	UH5, 4 Row, Horizontal
UH5-4-V	UH5, 4 Row, Vertical

UNIT HEATERS

BSS Code	Part Ref	Description
50080004	UH5-1-S	UH5-1-S STEAM UNIT HEATER 1PH 1 ROW HORIZ BOSS COPPERAD V2
50080015	UH6-1-S	UH6-1-S STEAM UNIT HEATER 1PH 1 ROW HORIZ BOSS COPPERAD V2
50080026	UH7-1-S	UH7-1-S STEAM UNIT HEATER 1PH 1 ROW HORIZ BOSS COPPERAD V2
50080037	UH8-1-S	UH8-1-S STEAM UNIT HEATER 1PH 1 ROW HORIZ BOSS COPPERAD V2
50080048	UH5-2M-H	UH5-2M-H MTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080059	UH6-2M-H	UH6-2M-H MTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080070	UH7-2M-H	UH7-2M-H MTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080081	UH8-2M-H	UH8-2M-H MTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080092	UH5-2-H	UH5-2-H LTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080100	UH6-2-H	UH6-2-H LTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080111	UH7-2-H	UH7-2-H LTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080122	UH8-2-H	UH8-2-H LTHW UNIT HEATER 1PH 2 ROW HORIZ BOSS COPPERAD V2
50080133	UH5-2-V	UH5-2-V LTHW UNIT HEATER 1PH 2 ROW VERT BOSS COPPERAD V2
50080144	UH6-2-V	UH6-2-V LTHW UNIT HEATER 1PH 2 ROW VERT BOSS COPPERAD V2
50080155	UH7-2-V	UH7-2-V LTHW UNIT HEATER 1PH 2 ROW VERT BOSS COPPERAD V2
50080166	UH8-2-V	UH8-2-V LTHW UNIT HEATER 1PH 2 ROW VERT BOSS COPPERAD V2
50080177	UH5-3-H	UH5-3-H LTHW UNIT HEATER 1PH 3 ROW HORIZ BOSS COPPERAD V2
50080188	UH6-3-H	UH6-3-H LTHW UNIT HEATER 1PH 3 ROW HORIZ BOSS COPPERAD V2
50080199	UH7-3-H	UH7-3-H LTHW UNIT HEATER 1PH 3 ROW HORIZ BOSS COPPERAD V2
50080207	UH8-3-H	UH8-3-H LTHW UNIT HEATER 1PH 3 ROW HORIZ BOSS COPPERAD V2
50080218	UH5-3-V	UH5-3-V LTHW UNIT HEATER 1PH 3 ROW VERT BOSS COPPERAD V2
50080229	UH6-3-V	UH6-3-V LTHW UNIT HEATER 1PH 3 ROW VERT BOSS COPPERAD V2
50080240	UH7-3-V	UH7-3-V LTHW UNIT HEATER 1PH 3 ROW VERT BOSS COPPERAD V2
50080251	UH8-3-V	UH8-3-V LTHW UNIT HEATER 1PH 3 ROW VERT BOSS COPPERAD V2
50080262	UH5-4-H	UH5-4-H LTHW UNIT HEATER 1PH 4 ROW HORIZ BOSS COPPERAD V2
50080273	UH6-4-H	UH6-4-H LTHW UNIT HEATER 1PH 4 ROW HORIZ BOSS COPPERAD V2
50080284	UH7-4-H	UH7-4-H LTHW UNIT HEATER 1PH 4 ROW HORIZ BOSS COPPERAD V2
50080295	UH8-4-H	UH8-4-H LTHW UNIT HEATER 1PH 4 ROW HORIZ BOSS COPPERAD V2
50080303	UH5-4-V	UH5-4-V LTHW UNIT HEATER 1PH 4 ROW VERT BOSS COPPERAD V2
50080314	UH6-4-V	UH6-4-V LTHW UNIT HEATER 1PH 4 ROW VERT BOSS COPPERAD V2
50080325	UH7-4-V	UH7-4-V LTHW UNIT HEATER 1PH 4 ROW VERT BOSS COPPERAD V2
50080336	UH8-4-V	UH8-4-V LTHW UNIT HEATER 1PH 4 ROW VERT BOSS COPPERAD V2
50080506	UH-AB	UH-AB HORIZ UH ANGLE WALL BRKT PAIR BOSS COPPERAD V2
50080624	RS13R-B	RS13R-B REMOTE ON/OFF 3 SPEED SW WHITE BOX BOSS COPPERAD V2
50080635	RS13R-P	RS13R-P REMOTE ON/OFF 3 SPEED SW IP BOX BOSS COPPERAD V2
50080646	RT1	RT1 REMOTE ON/OFF THERMOSTAT BOSS COPPERAD V2
50080657	TRT1	TRT1 REMOTE T/PROOF ON/OFF THERMOSTAT BOSS COPPERAD V2
50080602	DELTA-3/4-MASTER	DELTA-3/4-MASTER KIT UH DELTA CONTROL 3/4 BOSS COPPERAD V2
50080613	DELTA-3/4-SLAVE	DELTA-3/4-SLAVE KIT UH DELTA CONTROL 3/4 BOSS COPPERAD V2



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