calorex

DH150/DH300/DH600

Owner installation manual (SD208050 issue 44)

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park,
Darlington Road, Northallerton, DL6 2NQ

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

HEALTH AND SAFETY WARNING

As the dehumidifier embodies electrical and rotational equipment, ONLY competent persons should carry out any work on this type of machine.

(SEE GUARANTEE)

Contents

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

HEALTH AND SAFETY WARNING

This appliance can be used by children from eight years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children should not play with the appliance. Cleaning and maintenance shall not be made by children without supervision.

Disconnect from the mains supply and wait three minutes before removing panels and commencing work on this machine.

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

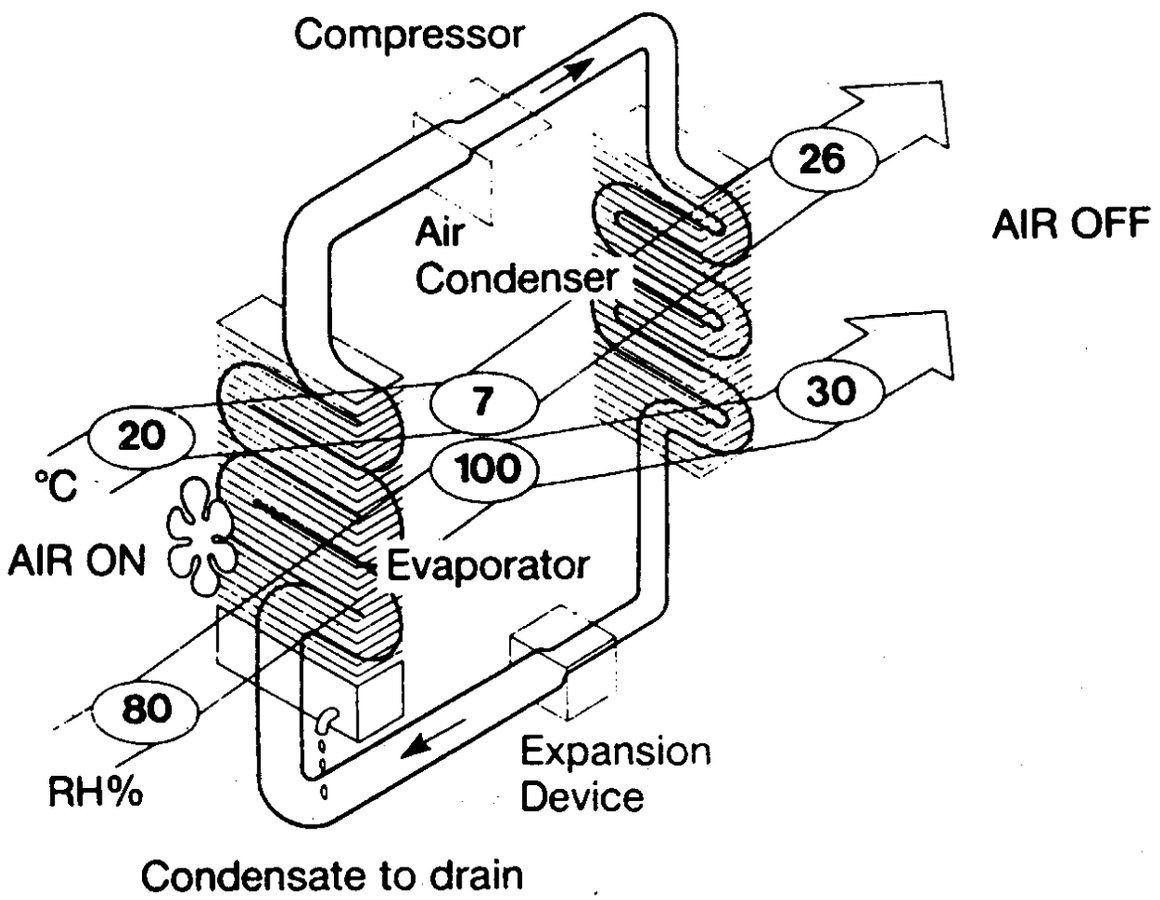
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

1.0 WHAT ARE THE CALOREX DEHUMIDIFIERS DESIGNED TO DO?

Models **DH150, DH300 & DH600** are designed to remove moisture from the air and reject the latent heat of the dehumidification process back into the air.

Warm, humid air is drawn in through the evaporator which extracts the latent heat and at the same time dehumidifies the air by cooling it below its dew point temperature. The condensed moisture forms on the evaporator coil and is then drained to waste. The extracted heat is then upgraded to a much higher temperature by the compressor and passes into the condenser coil. The cool, drier air then passes over the condenser, collects the heat and passes back into the room as warm, dry air.

Fig. 1.



Puravent

Get In Touch

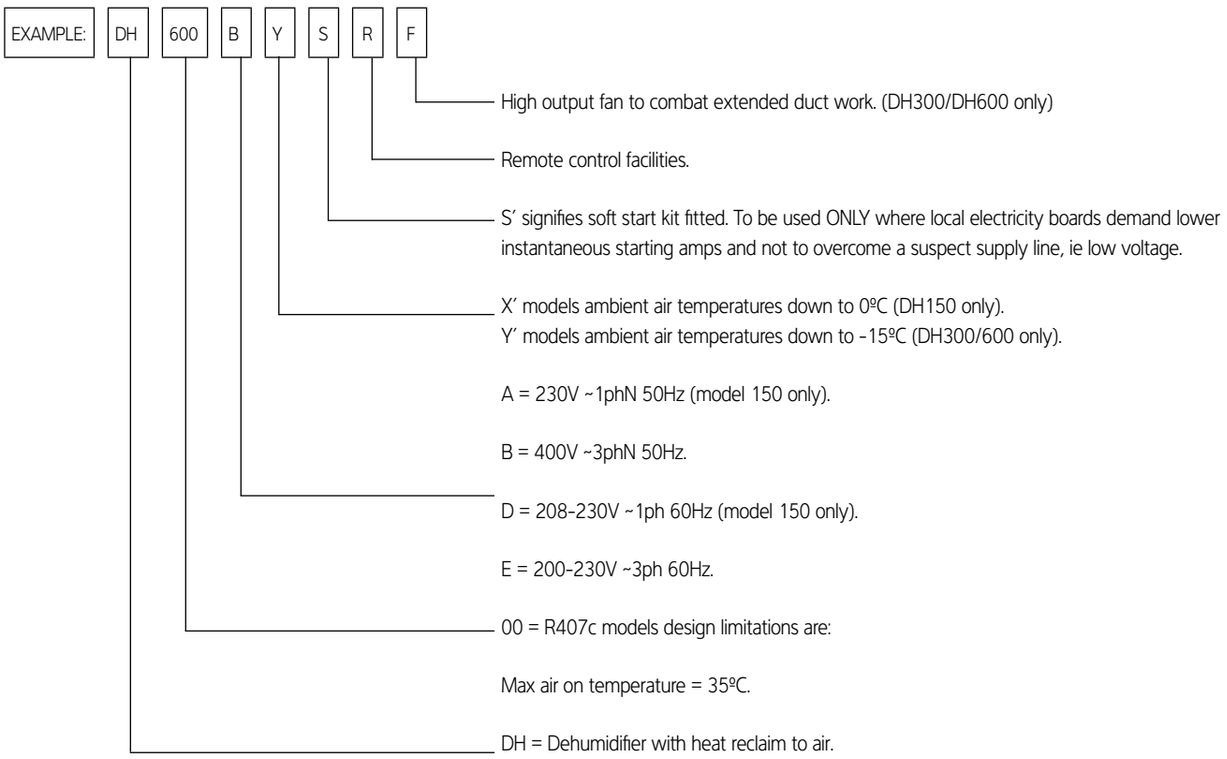
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

2.0 ORDERING PROCEDURE (MODEL DESIGNATION)



3.0 INSTALLATION

Great care should be exercised in following the installation procedure to ensure that your Calorex dehumidifier performs as it was designed.

3.1 SITING

a. Ensure dehumidifier on site is as ordered, i.e. model, electrical supply and factory fitted options.

b. Inspect unit for damage, in particular inspect the evaporator (finned side) to ensure that it is undamaged. (Minor indentations in the fins do not affect performance). If severely damaged, endorse delivery note in presence of the driver and send a recorded delivery letter to transport company giving details.

c. Protect unit if installation is delayed.

d. Provide a firm level base capable of supporting operational weight of unit; spread load if on timber floor.

e. Ensure water cannot collect under unit, recommend units are installed on plinths 100mm above finished floor level and to also aid condensate drainage.

f. Allow adequate clearance to service panels on unit; recommend 500mm minimum (see installation drawings).

g. All Calorex dehumidifiers are by design as quiet as is practicable, however, due consideration should be given to siting in order to fully exploit this feature, i.e. orientate inlet/outlet parallel to occupied premises.

h. Ensure loose debris will not block air inlet filters or grilles.

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

SITING CONT'

IMPORTANT:

As dehumidifier units are handling air at dehumidified space temperatures, they must be sited in a similar environment, or insulated plenum. They must not be sited in colder areas, i.e. subject to ambient air.

3.2 DUCTING

(SEE FIGS 3, 4, 5 AND 6)

In order that moisture can be removed and humidity control can be effected within the required area, it is essential that correct air movement and distribution is achieved. The Calorex unit must extract the humid air generated and discharge the drier air to areas which are subject to condensation problems (windows, etc.) and or comfort zones, etc.

This can often be achieved by use of ducting and correct application of grilles/ louvres to effect air distribution and movement to these areas.

NOTE:- dehumidifier unit and ducting will be at higher temperature and will require insulation if exposed to lower air temperatures, for instance, if the ducting were to pass through an un-heated loft space.

Fig. 2. Calorex Dehumidifier installed within space to be dehumidified, with top discharge box option fitted.

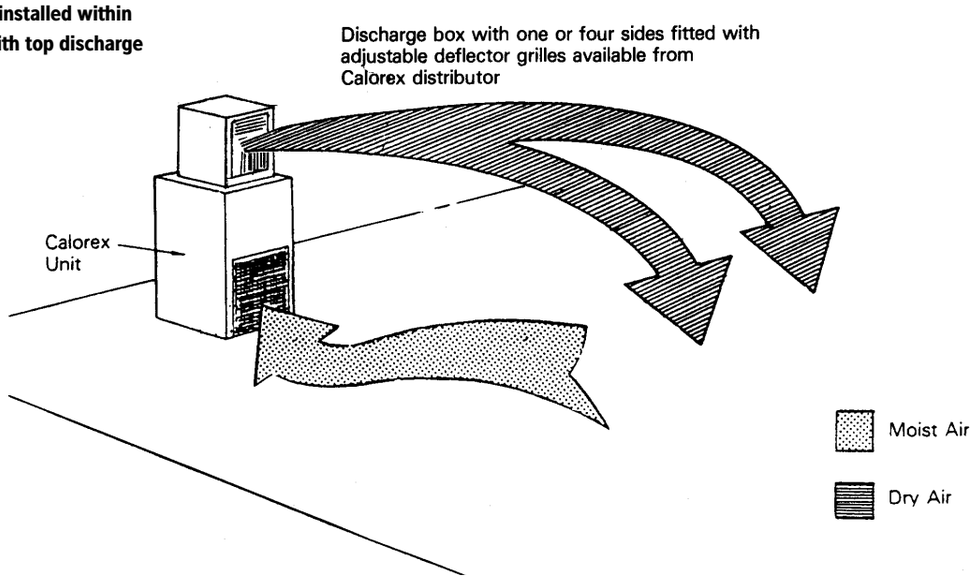
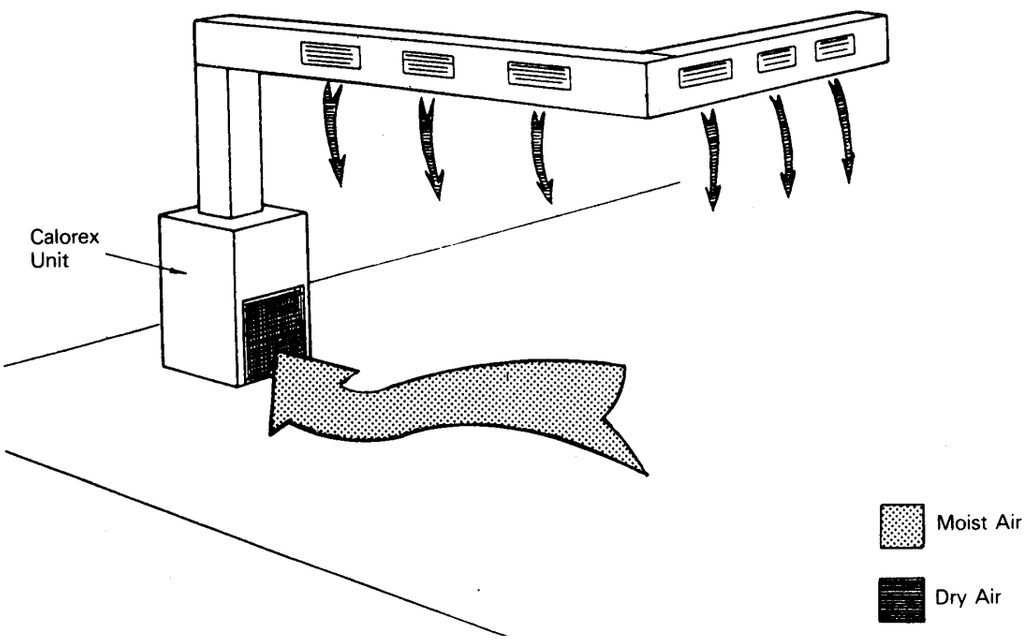


Fig. 3. Calorex Dehumidifier installed within space to be dehumidified, with discharge ducting fitted.



Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

Exhaust from Wet Area - Humid Air - Should be taken from as low as practicable to inlet of dehumidifier unit. In many instances siting of dehumidifier unit in hall or in adjacent rooms can eliminate use of ductwork to inlet.

Inlet/Return - Dry Air - Frequently requires overhead ducting with suitable grilles to give balance and direction of air flow.

The quantity of air flow handled by each dehumidifier unit is given on the data sheet together with the maximum pressure available from the fan to overcome total ducting resistance to air flow, i.e. inlet, discharge ducting, grilles, filters and where, installed air heater batteries.

Note:-

a. The humidity sensing tube situated by the air inlet is to be encompassed by or extended to any inlet air ducting.
Refer to installation drawings.

b. All units have discharge ducting spigots as standard.

c. Inlet ducting spigots and or inlet air filters are available from stockists. *Do not drill into unit to fit spigots or filters.*

d. Final connections to dehumidifier spigots must be made with flexible ducting (rubber or canvas) to eliminate transmission of vibration down any ducting fitted.

e. Before any discharge ducting is attached remove the damper plate (if fitted) from dehumidifier outlet or fan grille.

f. After completion of installation including all grilles, ductwork, etc., ensure that the air flow through the dehumidifier is as specified in the data sheet ± 10%. If airflow is high, adjust the main system damper to obtain correct airflow. If airflow is low or high, unit will not function correctly.

g. TABLE 1. Required Free Areas to provide air flow to and from dehumidifiers when installed in an enclosed area or where required to pass air through a wall, etc.

Free area is the available area through which air can pass, through a grille or louvres.

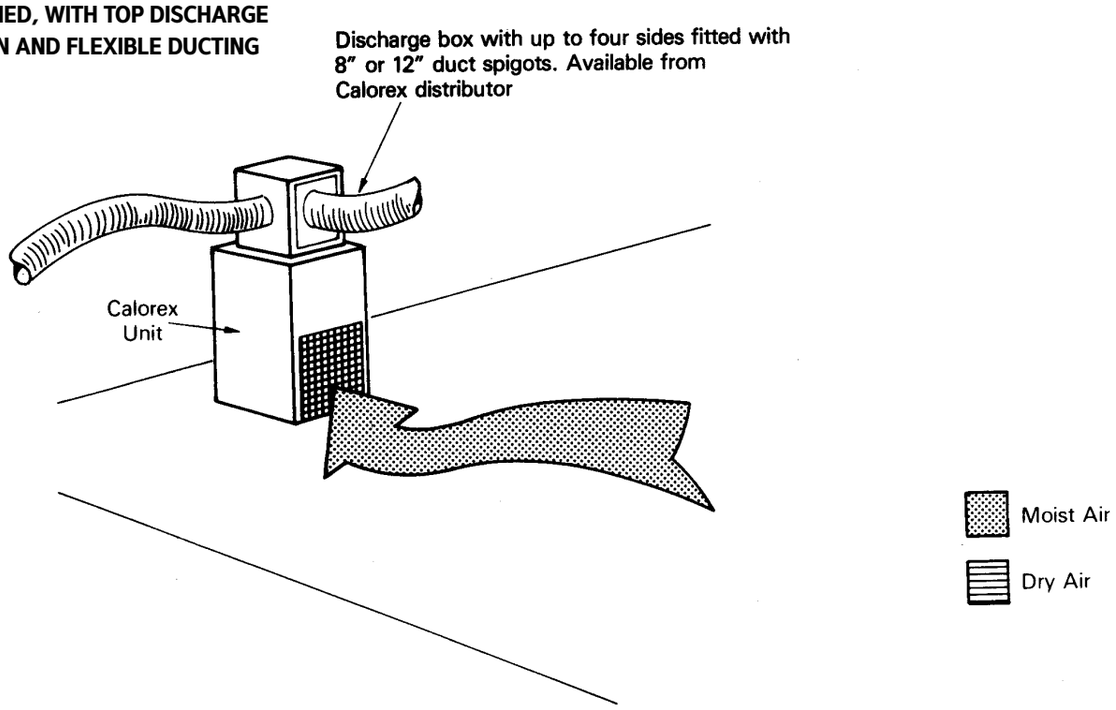
Model DH150 - minimum free area air inlet = 0·35 m^2.

Model DH300 - minimum free area air inlet = 0·57 m^2.

Model DH600 - minimum free area air inlet = 1·1 m^2.

Note: If multiple units are installed in an enclosed area then the inlet free areas required for each unit can be added together to form one inlet aperture. BUT discharge from each unit must be kept separate and must not be incorporated into one common duct system, unless back draft flaps are installed in outlet duct of each dehumidifier.

FIG. 4. CALOREX DEHUMIDIFIER INSTALLED WITHIN SPACE TO BE DEHUMIDIFIED, WITH TOP DISCHARGE BOX OPTION AND FLEXIBLE DUCTING FITTED.



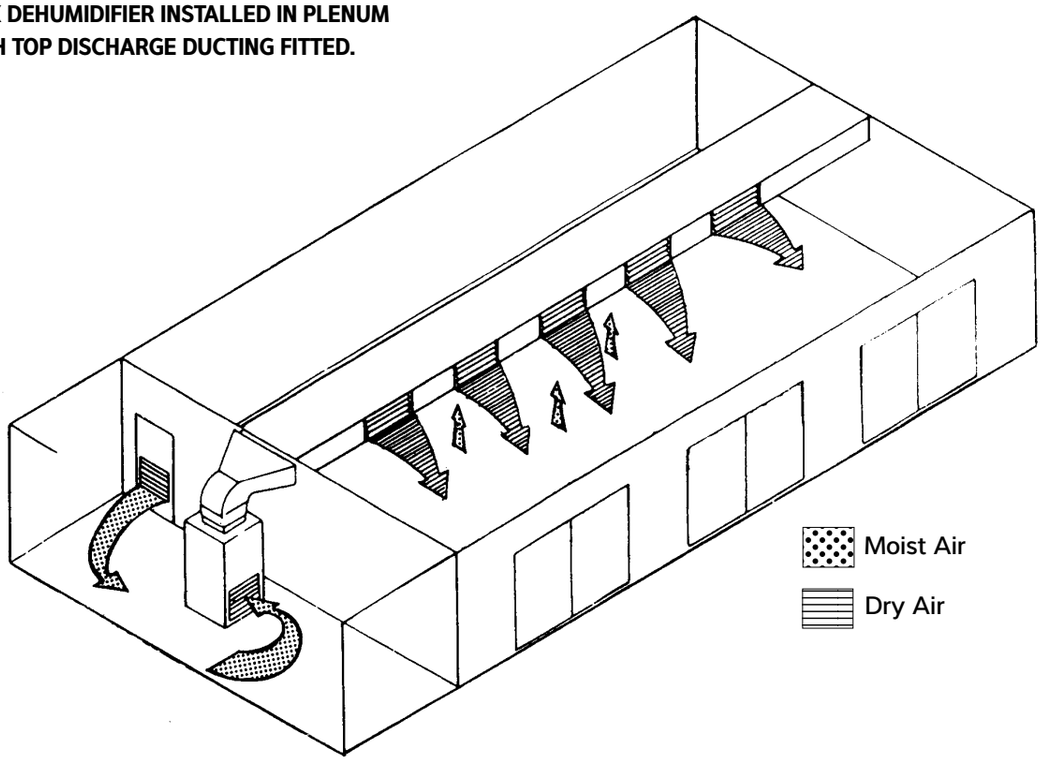
Get In Touch

Call: 01729 824108
Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

FIG. 5. CALOREX DEHUMIDIFIER INSTALLED IN PLENUM CHAMBER, WITH TOP DISCHARGE DUCTING FITTED.



3.3 PLUMBING

a. The condensate drain at the base of the unit collects the condensation from the evaporator fins. It is therefore necessary to ensure that the Calorex dehumidifier is placed on a level plinth so that the condensate water can run away and not overflow the edges of the drip tray inside the dehumidifier.

Calorex dehumidifiers have condensate water outlet connections as follows:
DH150 = 22mm push fit domestic waste system.
DH300 = ¾" BSPM stub.
DH600 = 1½" BSPM stub.

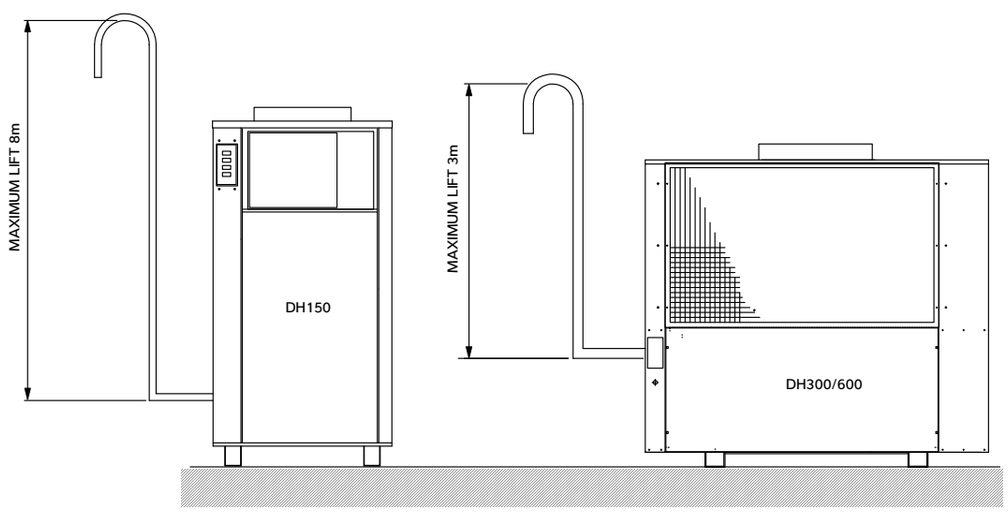


Fig. 6. Calorex Dehumidifier with Condensate Pump Option fitted.
For applications where the condensate cannot be run to waste due to the dehumidifier being lower than the waste pipe outlet, a condensate pump option can be supplied. (Located internally on the DH150, DH300 and DH600 models).

Get In Touch
Call: 01729 824108
Email: info@puravent.co.uk

Our Address
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

3.4 ELECTRICAL (MACHINE WIRING AND SUPPLY)

a. To be in accordance with I.E.E. standards, latest issue, or local codes of practice as applicable.

b. Protected supply to incorporate fuses or motor rated circuit breakers to specified rating, (see Data Sheet). H.R.C. fuses are recommended. An isolator which disconnects all poles must be fitted adjacent to the dehumidifier.

c. All units must be correctly earthed/grounded. An earth leakage trip of the current operating type is recommended to be fitted to all electrics. (If a heater box is fitted, the same R.C.D. (residual current device) must feed both supplies.

d. IMPORTANT:- Inconsistent Electrical Supply.

The following limits of operation list not be exceeded if Calorex dehumidifiers are to be guaranteed either in performance or warranty terms:

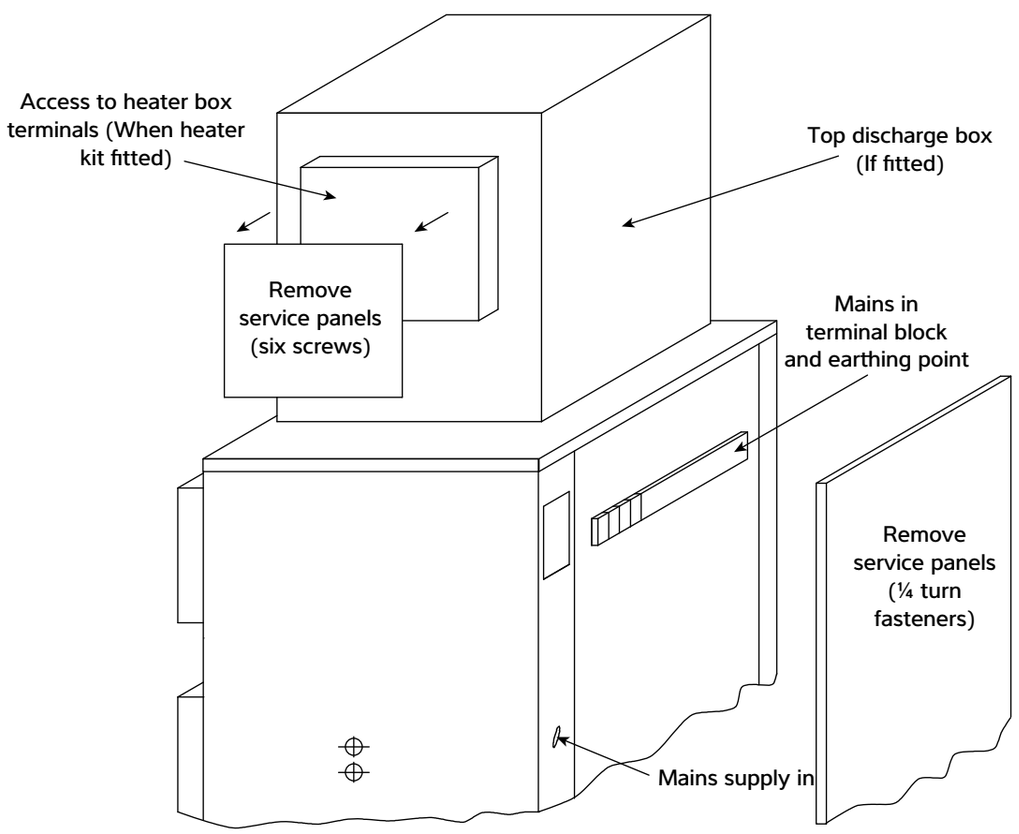
Voltage	Minimum	Maximum
Single phase machines (A)	207V	353V
Three phase machines (B)	360V	440V
Frequency	47.5Hz	52.5Hz

N.B. This voltage must be available at the dehumidifier whilst it is running under full load.

The dehumidifier should be installed in accordance with EMC2004/108/EC.

Note: DH300 & DH600 dehumidifiers are fitted with a phase protection relay and will not run if the phases are not connected in correct order (phase sequence) or if the supply voltage is 15% less than the nominal voltage. (415V for 3~N 50Hz). The lamp on the phase rotation relay, situated in the electric box, is illuminated when the phases are correctly connected and the voltage is sufficient.

FIG.7. DH150, LOCATION OF MACHINE SUPPLY TERMINAL BLOCKS



Get In Touch

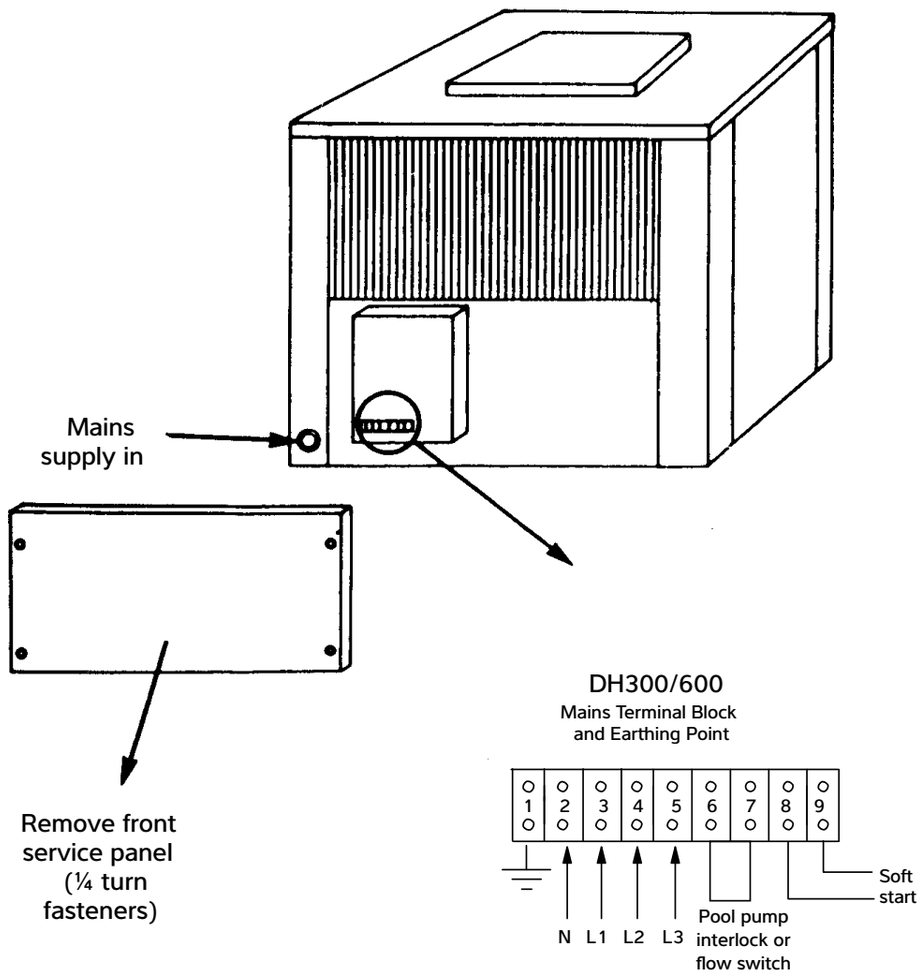
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

FIG.8. DH300/600, LOCATION OF MACHINE SUPPLY TERMINAL BLOCKS



Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park,
Darlington Road, Northallerton, DL6 2NQ

4.0 CONTROLS AND INDICATION LAMPS

External Control Console.

a. MAINS LAMP - RED - Illuminates whenever the electrical supply to the dehumidifier is on.

b. FAULT LAMP - AMBER - Illuminates if the internal limit switches detect a problem, or if the external interlock facility is open circuit.

c. DEFROST - WHITE - Illuminates whenever the dehumidifier is in defrost mode, this will happen at lower air temperatures and is **not a fault** condition, the dehumidifier will revert to normal run automatically when the defrost cycle is complete.

d. ON/OFF SWITCH - This will only be found on DH150 models and should always be used if for some reason the dehumidifier is not required to be running or prior to isolating the dehumidifier from the mains electrical supply.

e. STANDBY SWITCH - This will only be found on DH300/600 models and **must** always be used if for some reason the dehumidifier is not required to be running or prior to isolating the dehumidifier from the mains electrical supply.

IMPORTANT - On initial start up or if the **mains** electrical supply has been **interrupted** for any length of time (greater than 1 hour), then the standby switch must be set to "standby" **before** the mains electrical supply is reinstated, the dehumidifier must be left in this condition **for 12 hours before normal run is selected on the standby switch.**

Internal Controls.

f. An adjustable internal humidistat effects control of humidity. Range 20/80%. A normal setting is 60% for achieving comfortable conditions and minimising condensation. (20% setting will remove more moisture from the dehumidified space than a 80% setting).

g. An adjustable thermostat effects control of the air temperature and should be set to the **maximum** desired air temperature for the dehumidified space.

h. Fan mode switch. This gives the user the option of having the fan cycle under control of the humidistat (with the compressor), or the fan can run continuously which will promote better air circulation which again helps to reduce condensation by preventing stagnant air pockets.

i. If the Turning Hood Top Box Heater assembly option is fitted, then the adjustable air temperature thermostat control, located on the side of the Top Box Heater assembly should be set to the desired **minimum** air temperature required.

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

5.0 DEHUMIDIFIER MALFUNCTION

WARNING : ISOLATE DEHUMIDIFIER ELECTRICALLY BEFORE ENTERING OR REMOVING PANELS.

The user check list should be carried out by a competent electrician before initiating a service call.
Do not attempt to interfere with any internal control settings as these have been factory calibrated and sealed.
If in doubt or if advice is required contact the Dantherm Group UK Service Department : Phone +44(0)1621 857171 or +44(0)1621 856611. Fax +44(0)1621 850871.

Any sign of abnormal operation, such as water dripping should be reported immediately to an installer or Dantherm Ltd.

USER CHECK LIST			
FAN AND COMPRESSOR BOTH OFF			
LAMP TYPE	LAMP COLOUR	LAMP STATE	ACTION
MAINS	RED	OFF	Check that the electrical supply and supply fuse (or MCB) to the dehumidifier are healthy and switched on.
FAULT	AMBER	OFF	
DEFROST	WHITE	OFF	Check that the on/off rocker switch is "ON" (DH150 only).
ON/OFF	RED	OFF	
MAINS	RED	ON	Check control MCB is on (DH300/600 three phase machines only)
FAULT	AMBER	OFF	
DEFROST	WHITE	OFF	
ON/OFF	RED	OFF	
FAN ON, COMPRESSOR OFF			
LAMP TYPE	LAMP COLOUR	LAMP STATE	ACTION
MAINS	RED	ON	Check humidistat is calling for the dehumidifier to run and that the air temperature thermostat is not exceeded.
FAULT	AMBER	OFF	
DEFROST	WHITE	OFF	Check internal fuses/overloads. Check "Standby" switch "ON" (if fitted).
ON/OFF	RED	ON	
LAMP TYPE	LAMP COLOUR	LAMP STATE	ACTION
MAINS	RED	ON	Check air flows are not restricted. Re-set HP switch on DH300 & DH600.
FAULT	AMBER	ON	Check thermal cut out on soft start and heater hood if fitted.
DEFROST	WHITE	OFF	Check fan for correct rotation (DH300/600).
ON/OFF	RED	ON	
LAMP TYPE	LAMP COLOUR.	LAMP STATE.	ACTION
MAINS	RED	ON	Check that the air temperature is above 0ºC for DH150s, and above -15ºC for DH300/600.
FAULT	AMBER	OFF	
DEFROST	WHITE	ON	Note :- It is acceptable for the dehumidifier to cycle on the defrost light once per hour at low air temperatures.
ON/OFF	RED	ON	

Get In Touch
Call: 01729 824108
Email: info@puravent.co.uk

Our Address
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

6.0 DEHUMIDIFIER TECHNICAL DATA SHEET

MODEL NUMBER	1Ø	DH150AX	N/A	N/A	
	3Ø	DH150BX	DH300BL(Y)	DH600BY	
PERFORMANCE DATA					
Dehumidification Rate	L/h	6·25	12·5	25	
Output to Air Nett (DH model)	kW	5·5	15·5	25	
Total Electrical Input (STD fan)	kW	2·3	6·7	10·0	
Total Electrical Input ("F" Fan)	kW	N/A	7·3	10·4	
ELECTRICAL DATA					
Supply Details 1Ø		230V~1N 50Hz	N/A	N/A	
Supply Details 3Ø		|---------- 400V ~3N 50Hz ----------|			
Fan Option Type				STD	"F"
Maximum Supply Fuse 1Ø	amps	32	N/A	N/A	N/A
Maximum Supply Fuse 3Ø	amps	16	32	35	35
Maximum Running Amps 1Ø	amps	23.3	N/A	N/A	N/A
Maximum Running Amps 3Ø	amps	10.2	19.4	26	27
Starting Current Amps 1Ø STD	amps	62	N/A	N/A	
Starting Current Amps 1Ø "S"	amps	28	N/A	N/A	
Starting Current Amps 3Ø STD	amps	30.5	66	135	
Starting Current Amps 3Ø "S"	amps	19	29	55	
AIR HEATER OPTION					
If Turning Hood with Heater Fitted					
Separate Supply for heaters					
Maximum Power Output	kW	9	N/A	N/A	
Maximum Full Load Amps 1Ø	amps	36	N/A	N/A	
Maximum Full Load Amps 3Ø	amps	12	N/A	N/A	
Maximum Supply Fuse 1Ø	amps	50	N/A	N/A	
Maximum Supply Fuse 3Ø	amps	16	N/A	N/A	
AIR FLOW DATA					
Air Flow Nominal	m^3/h	2500	5000	9000	
Ducting Design Static Pressure STD	Pa	N/A	60	80	
*Ducting Max Static Pressure	Pa	0-200	-	-	
Ducting Max' Static Pressure "F" M/C	Pa	N/A	140	160	
If Turning Hood with Heater fitted:					
Ducting Design Static Pressure STD M/C	Pa	N/A	N/A	0	
* Ducting Max Static Pressure	Pa	0-170	-	-	
Ducting Max Design Static Pressure "F"	Pa	N/A	N/A	80	
WATER FLOW DATA					
Condensate Water Connection Size		¾"Domestic Waste	1½"BSPM	1½"BSPM	
PHYSICAL DATA					
Width (unpacked)	mm	660	980	1730	
Depth (unpacked)	mm	660	720	1250	
Height (unpacked)	mm	1313	1435	1600	
Weight (unpacked)	kg	130	220	497	
MISC' DATA					
Hermetic System					
Refrigeration charge R407c (STD DH)	kg	2·5	9.5	14	
Refrigeration charge R407c (DH300BLY)	kg		10		
Sound Pressure at 3m	db(A)	58	66	63	

NOTES:-

1) Performance data based on air at 20ºC, 75%RH (Water at 26ºC).
2) Weight and dimensions nett.
3) Allow 500mm clearance to service panels.
4) Minimum air temperature 0ºC for "X" models and -15ºC for "Y" models.
5) Dantherm Ltd. reserves the right to change or modify models without prior notice.
6) R407c Global Warming Potential (GWP) 1774
*DH150 features a Control Flow fan at 2500m^3/h

Get In Touch

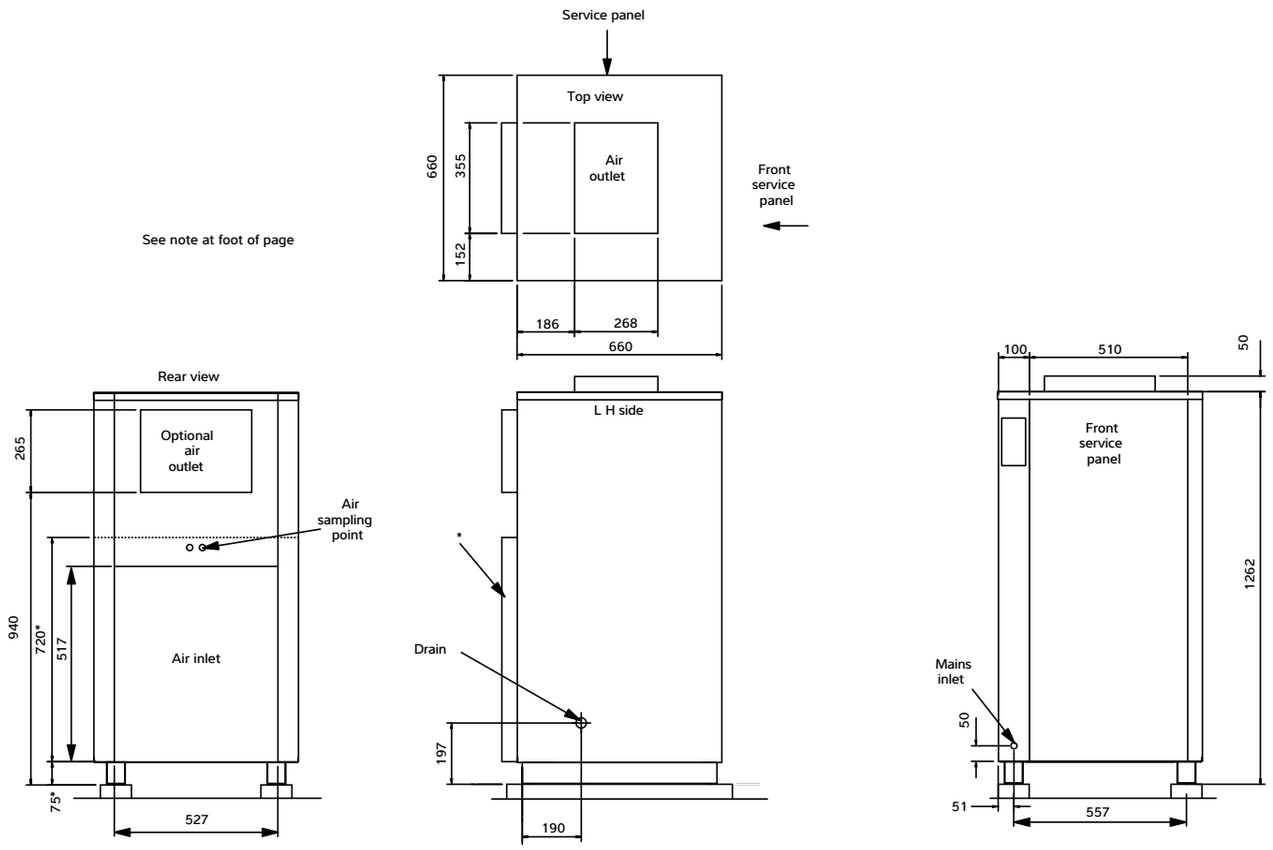
Call: 01729 824108
Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

7.0 INSTALLATION DRAWINGS

DH150 DEHUMIDIFIER.



NOTE:- Dimensions marked * refer to dimensions of inlet DUCT FLANGE KIT OPTION (50mm Deep).

Puravent

Get In Touch

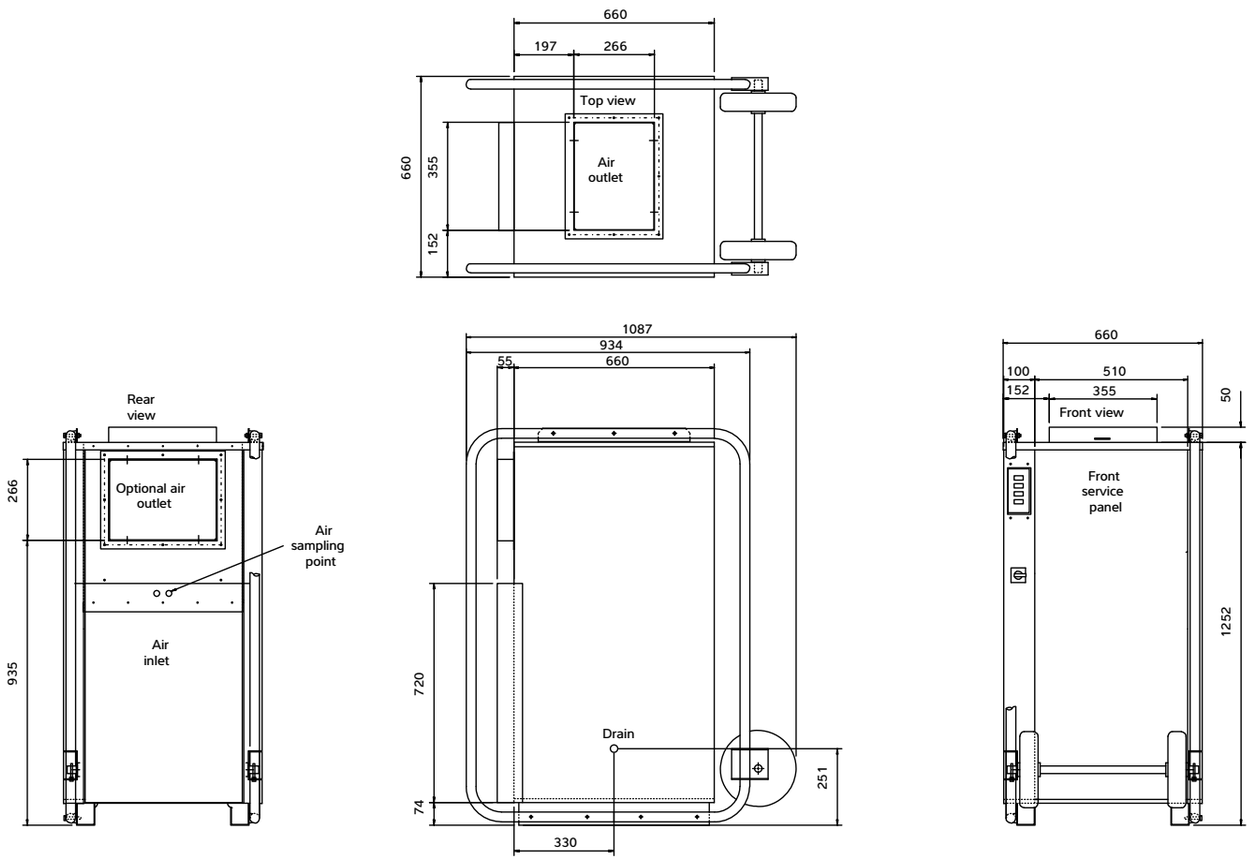
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

DH150 DEHUMIDIFIER - WHEELS AND HANDLES OPTION (DH150BX ONLY)



NOTE:- Dimensions marked * refer to dimensions of inlet DUCT FLANGE KIT OPTION (50mm Deep).

Get In Touch

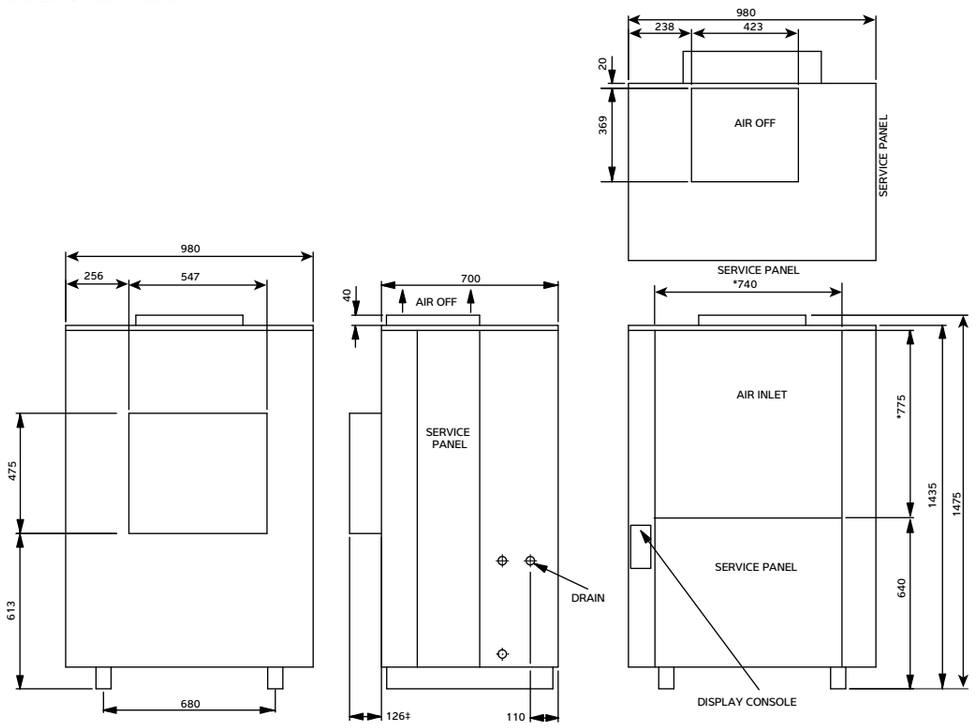
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

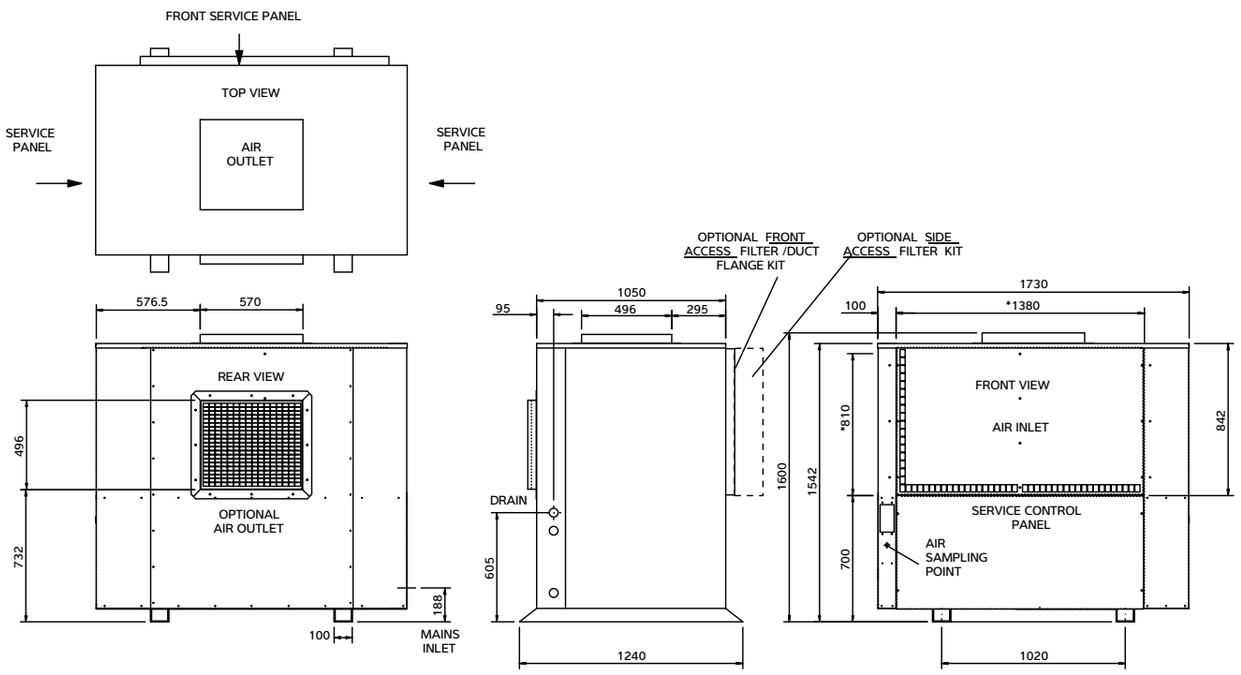
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

DH300 DEHUMIDIFIER.



NOTES :- Dimensions marked * refer to dimensi ons of INLET DUCT FLANGE KIT OPTION (50mm Deep).
‡ When the condensate pump is fitted service access may be necessary.

DH600 DEHUMIDIFIER.



NOTE: Dimensions marked * refer to dimensions of inlet DUCT FLANGE KIT OPTION (50mm DEEP)
Dimensions are the same for FRONT ACCESS FILTER KIT.

THE ALTERNATIVE SIDE ACCESS FILTER KIT IS 157mm DEEP.

Get In Touch

Call: 01729 824108

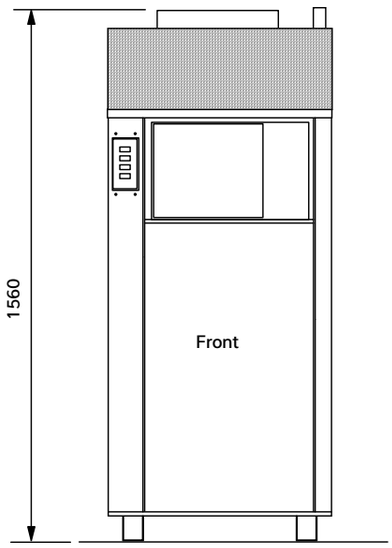
Email: info@puravent.co.uk

Our Address

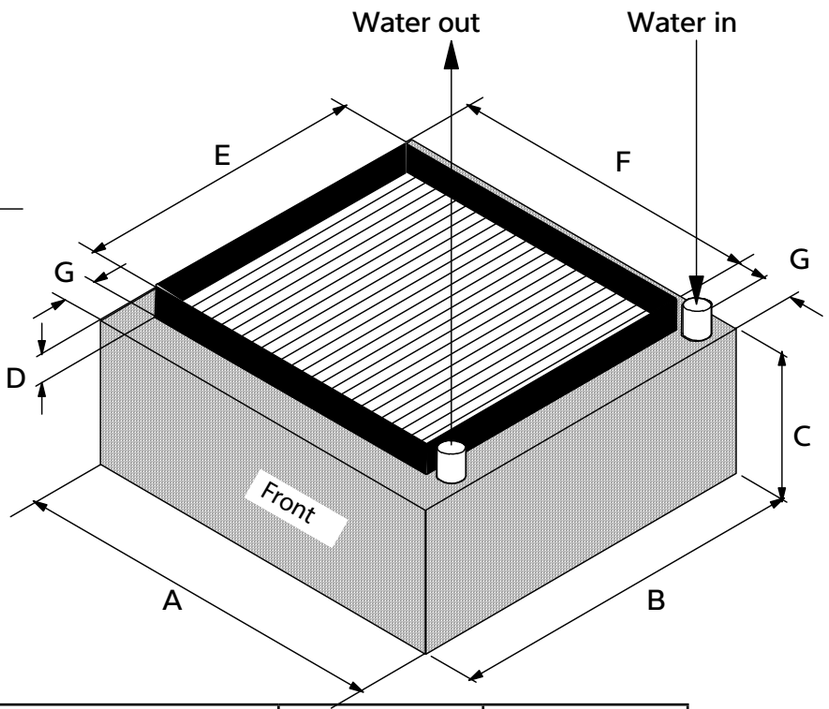
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

8.0 LOW PRESSURE HOT WATER (LPHW) HEATER BATTERY OPTION

For use with Calorex DH150 Dehumidifier only - available from your Dantherm Ltd. Distributor.



DH150 with LPHW 580



MODEL		LPHW580
Output (Water at 80ºC, Air at 30ºC)	kW	18
Water Connections	mm	22mm Stubs
Water Pressure Drop	psig	0.5
Water Flow	L/min	23
Water Volume	litres	2.5
Air Pressure Drop	mmWG	2.5
Air Off Temperature	°C	50
Dimensions: "A"	mm	650
"B"	mm	620
"C"	mm	250
"D"	mm	50
"E"	mm	500
"F"	mm	540
"G"	mm	60

Puravent

Get In Touch

Call: 01729 824108

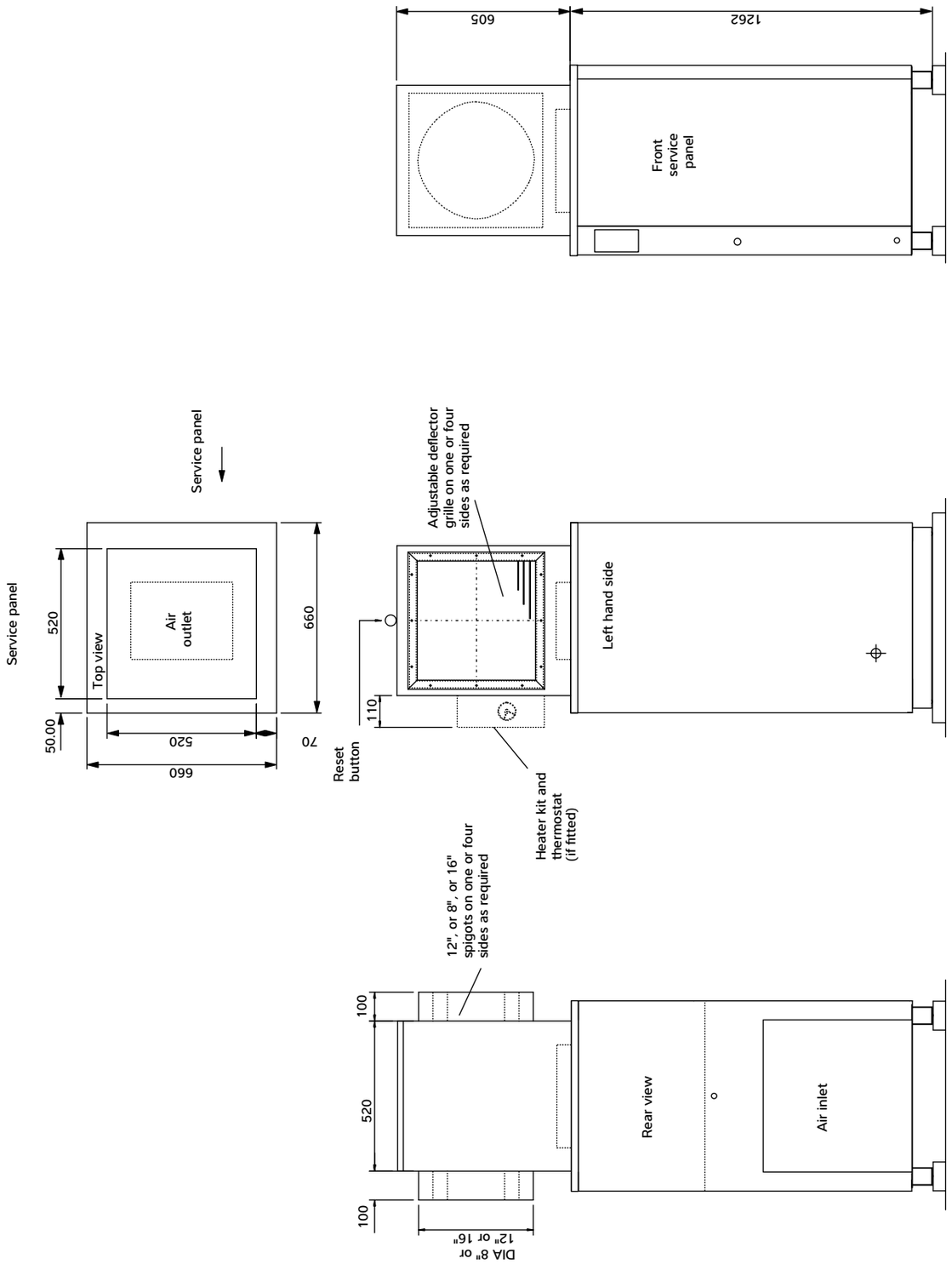
Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

9.0 DH150 WITH TOP DISCHARGE BOX OPTION

WITH OR WITHOUT 9KW HEATER OPTION.



Puravent

Get In Touch

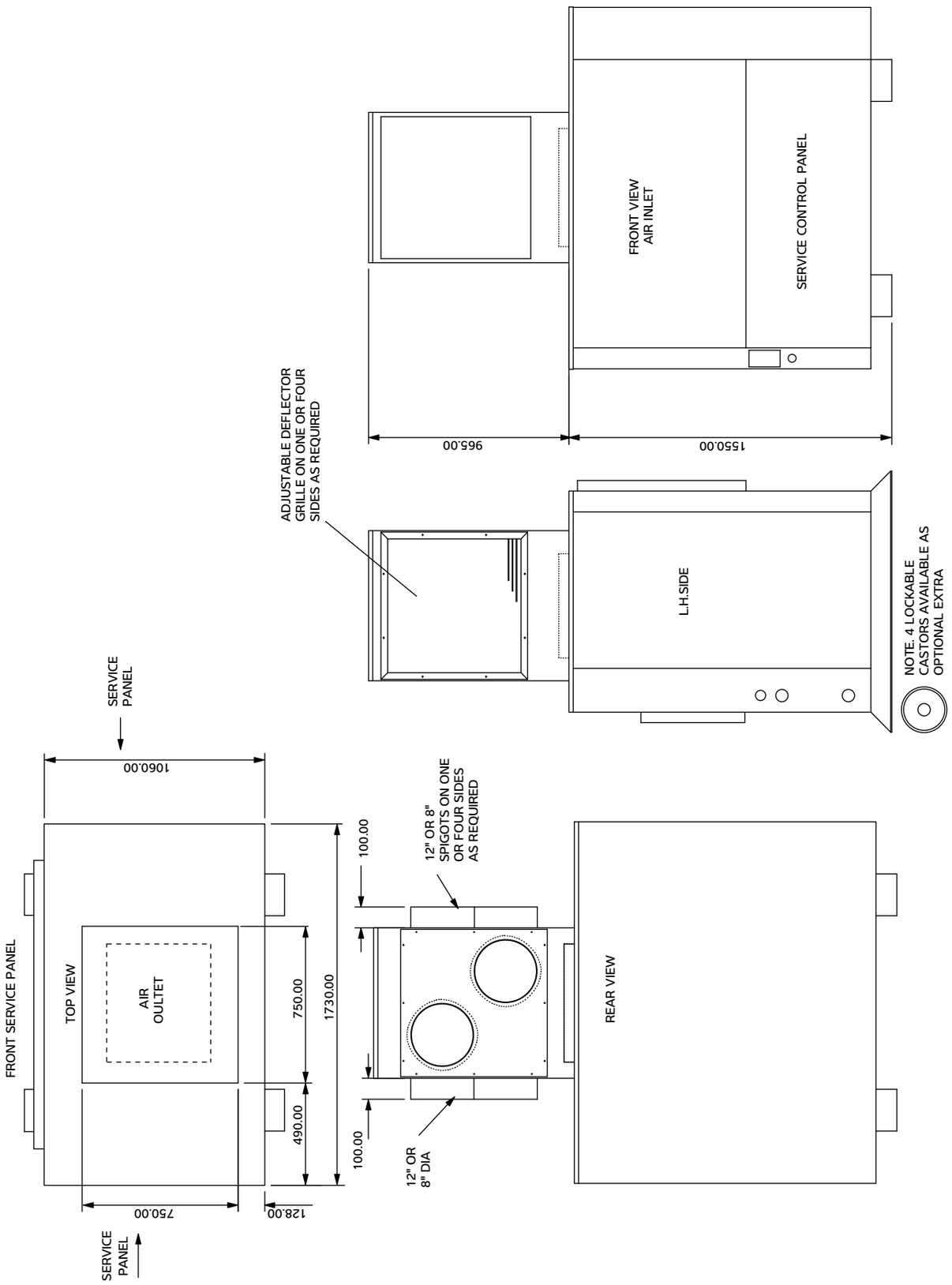
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

10.0 DH600 WITH TOP DISCHARGE BOX OPTION



Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park,
Darlington Road, Northallerton, DL6 2NQ

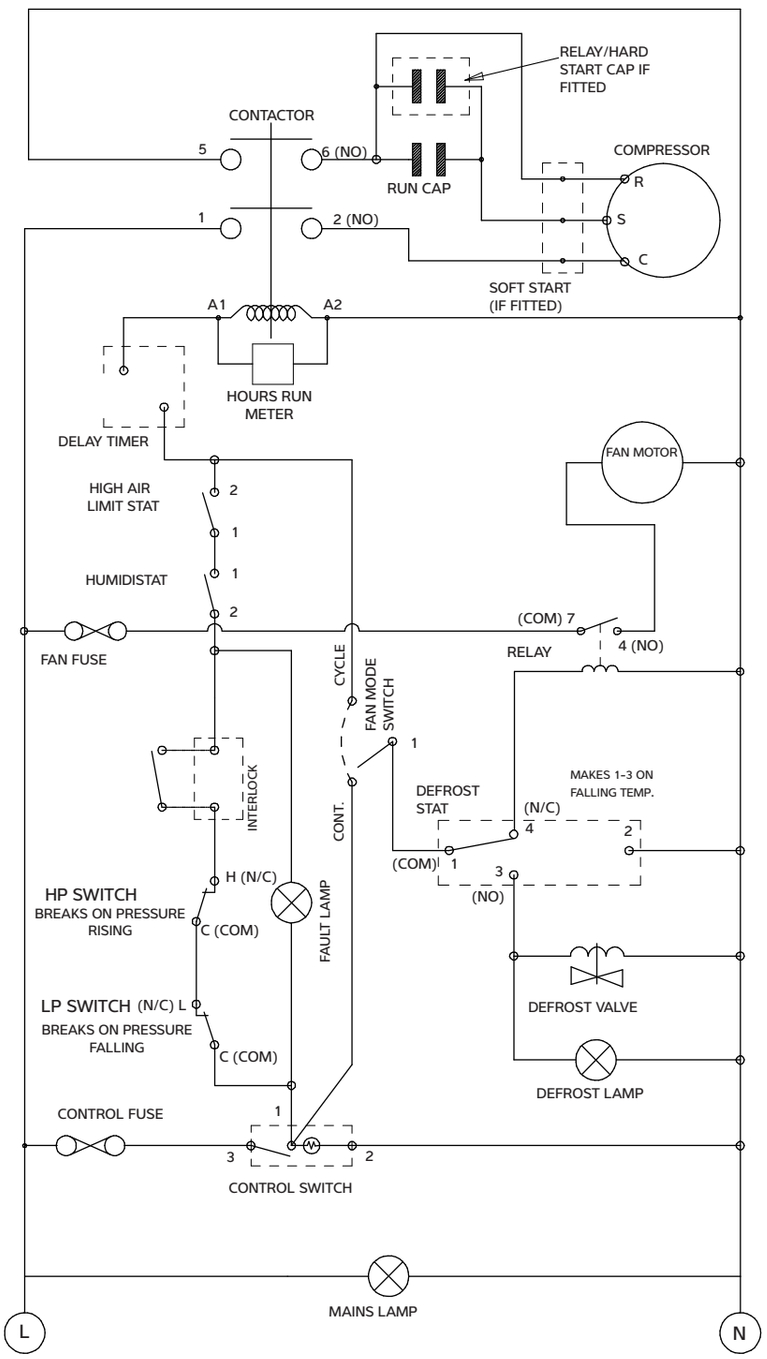
11.0 ELECTRICAL CIRCUIT DIAGRAMS

ELECTRICAL CIRCUIT DIAGRAM DH150AX SINGLE PHASE 230V 50Hz (~1N)

FUSE VALUES

	CONTROL	FAN
DH150AX	3A	10A

WHERE CONTACTS ARE MARKED (N/O OR N/C) ON CIRCUIT DIAGRAM, THEY ARE SHOWN IN DE-ENERGISED STATE WITH REFRIGERATION CIRCUIT FULLY CHARGED



Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

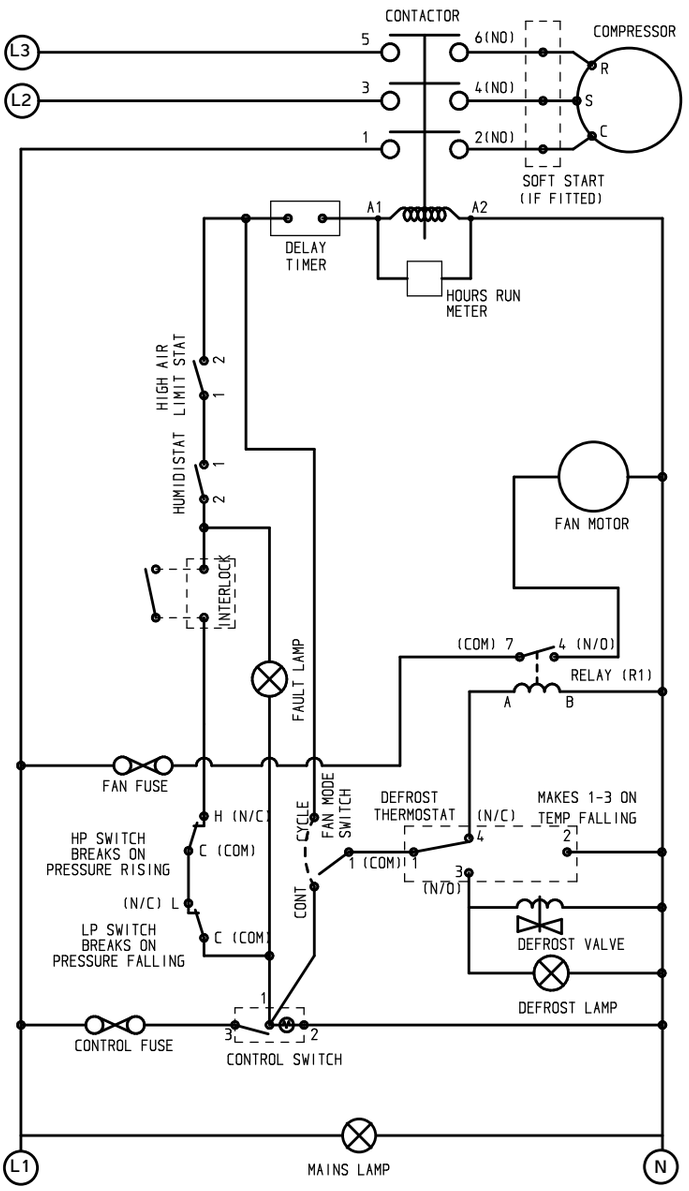
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

ELECTRICAL CIRCUIT DIAGRAM DH150BX STANDARD MACHINE THREE PHASE 400V 50Hz (~3N)

Fuse Values

	Control	Fan
DH150BX	3A	10A

Where contacts are marked N/O or N/C on the circuit diagram, they are shown in the de-energised state with the refrigeration circuit fully charged.



Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

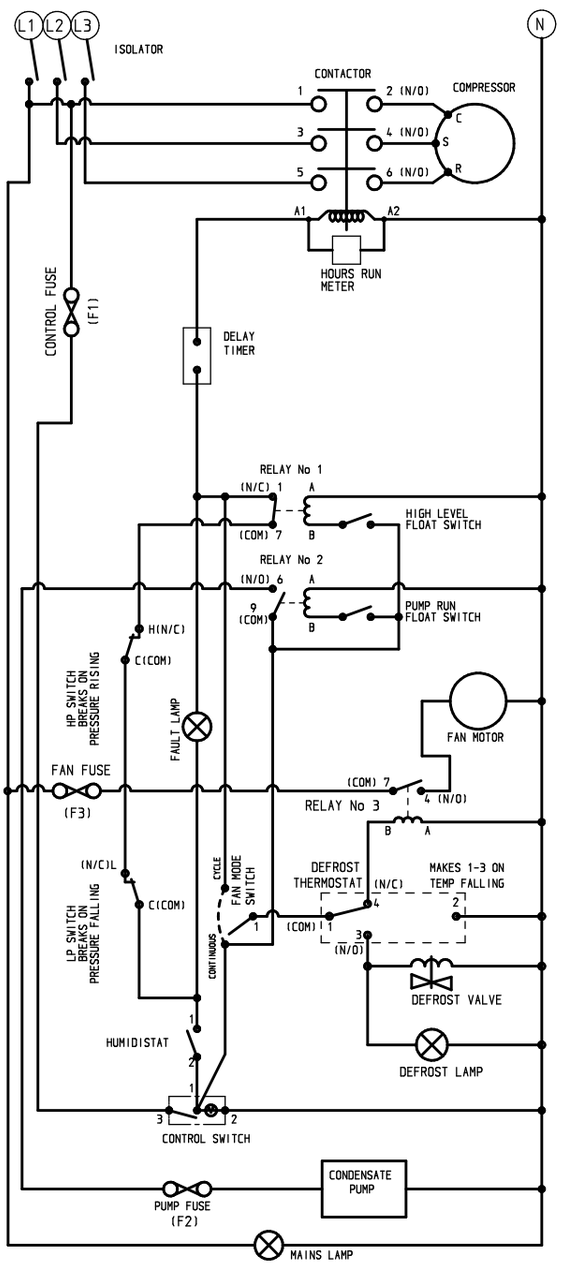
Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

ELECTRICAL CIRCUIT DIAGRAM DH150BX WHEELS AND HANDLES VERSION THREE PHASE 400V 50Hz (~3N)

Fuse Values

	Control (F1)	Pump (F2)	Fan (F3)
DH150BX	3A	1A	10A

Where contacts are marked N/O or N/C on the circuit diagram, they are shown in the de-energised state with the refrigeration circuit fully charged.



Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

ELECTRICAL CIRCUIT DIAGRAM DH300BY THREE PHASE 400V 50Hz (~3N)

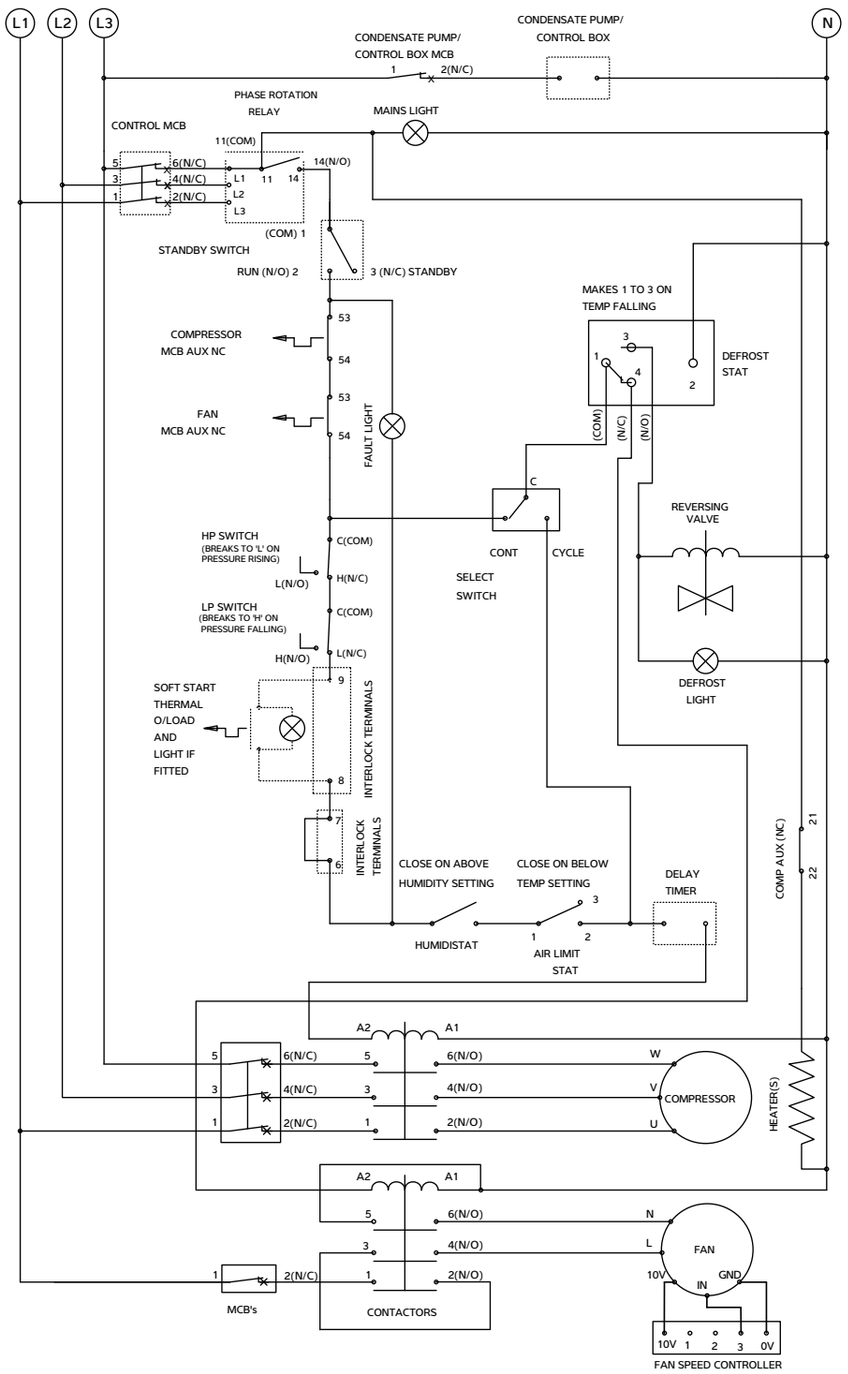
MCB SETTING VALUES

DESCRIPTION	COMPRESSOR	FAN	CONTROL	PUMP CONTROL
VALUE	11.9	20.0	2.5	2.0

MCB CONTACTS / MCB ALARM CONTACTS / MCB AUX CONTACTS SHOWN WITH CIRCUIT BREAKER MANUALLY SWITCHED TO THE ON CONDITION

ALL OTHER CONTACTS SHOWN IN DE-ENERGISED STATE BUT WITH REFRIGERATION CIRCUIT FULLY CHARGED

WHERE CONTACTS ARE MARKED (N/O) OR (N/C) ON CIRCUIT DIAGRAM ABOVE CONDITIONS APPLY



ELECTRICAL CIRCUIT DIAGRAM DH300BL THREE PHASE 400V 50Hz (~3N)

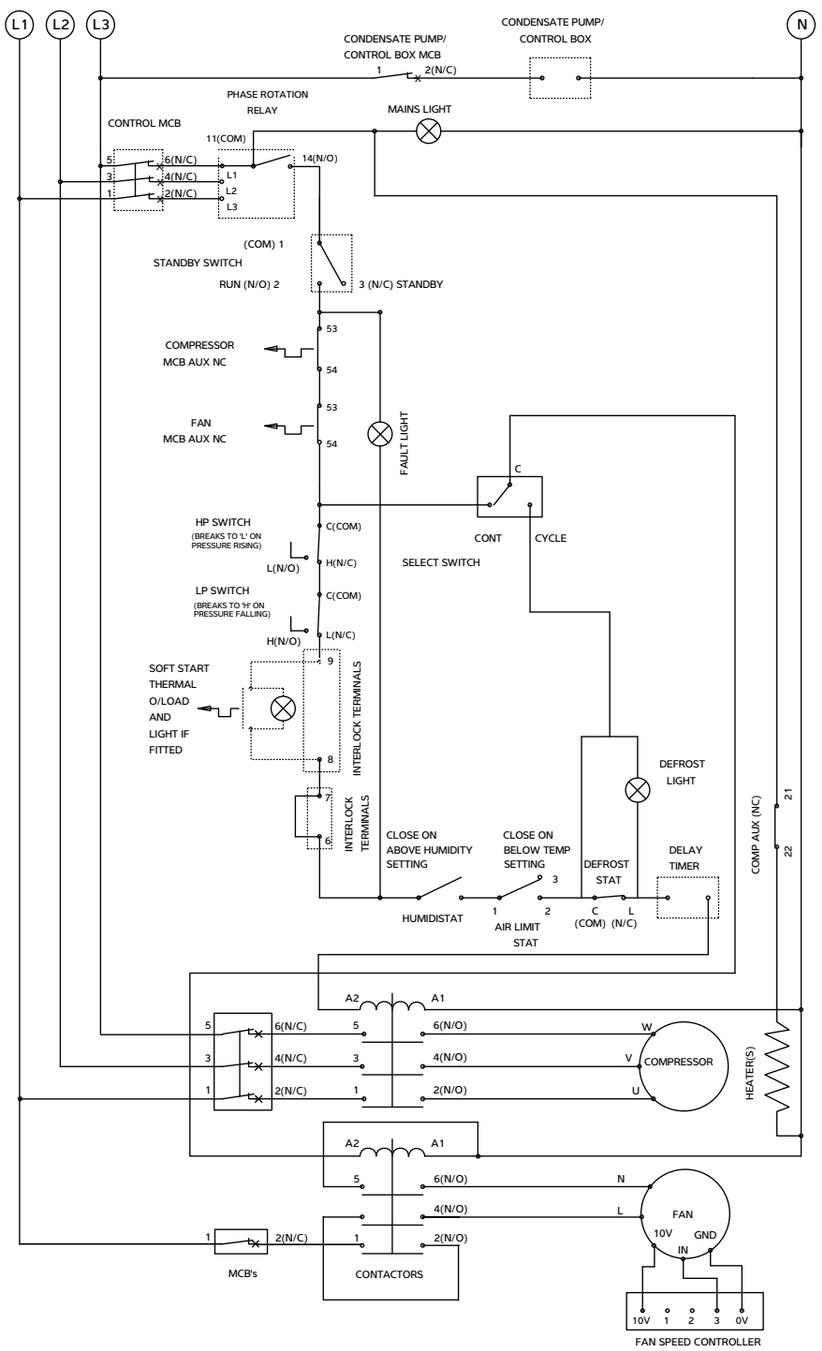
MCB SETTING VALUES

DESCRIPTION	COMPRESSOR	FAN	CONTROL	PUMP CONTROL
VALUE	11.9	20	2.5	2.0

MCB CONTACTS / MCB ALARM CONTACTS / MCB AUX CONTACTS SHOWN WITH CIRCUIT BREAKER MANUALLY SWITCHED TO THE ON CONDITION

ALL OTHER CONTACTS SHOWN IN DE-ENERGISED STATE BUT WITH REFRIGERATION CIRCUIT FULLY CHARGED

WHERE CONTACTS ARE MARKED (N/O) OR (N/C) ON CIRCUIT DIAGRAM ABOVE CONDITIONS APPLY



Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

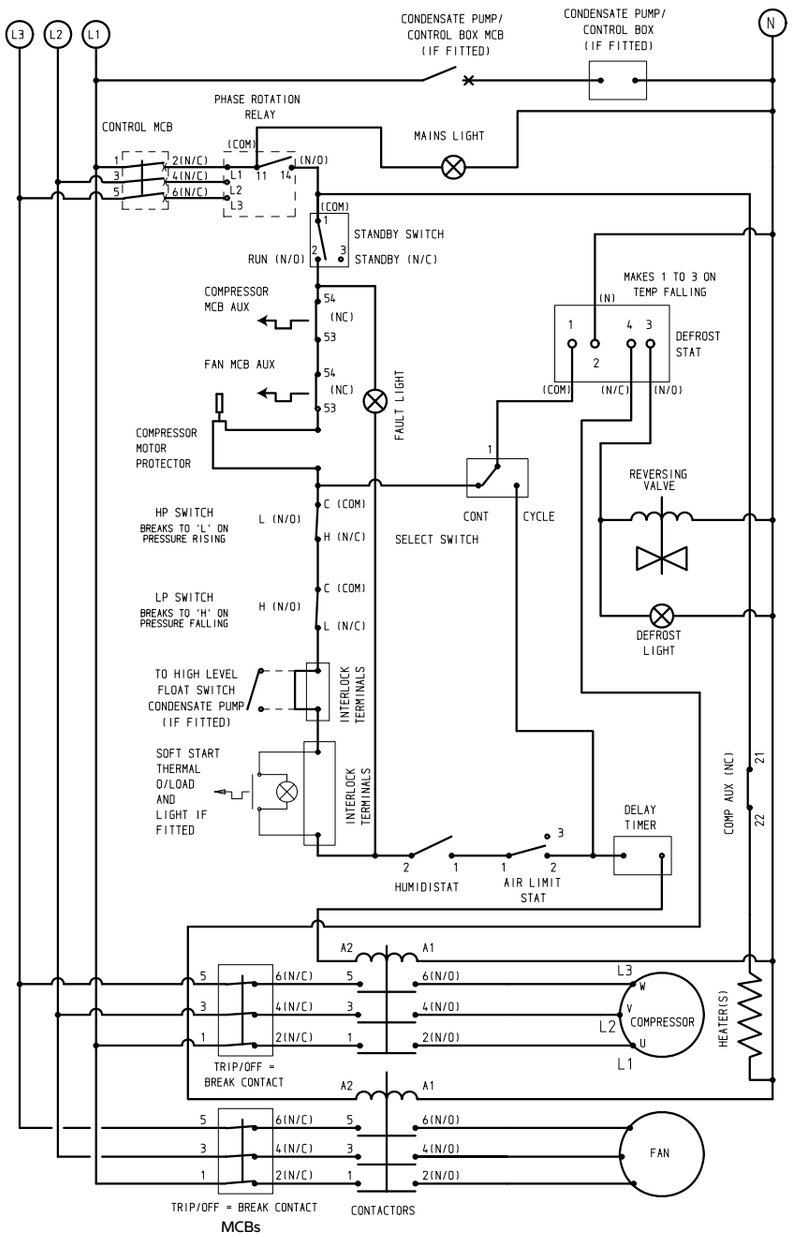
Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

ELECTRICAL CIRCUIT DIAGRAM DH600BY THREE PHASE 400V 50Hz (~3N)

ELECTRICAL CIRCUIT DIAGRAM

MCB CONTACTS / MCB ALARM CONTACTS / MCB AUX CONTACTS SHOWN WITH CIRCUIT BREAKER MANUALLY SWITCHED TO THE ON CONDITION.
ALL OTHER CONTACTS SHOWN IN DE-ENERGISED STATE BUT WITH REFRIGERATION CIRCUIT FULLY CHARGED.
WHERE CONTACTS ARE MARKED (N/O) OR (N/C) ON CIRCUIT DIAGRAM ABOVE CONDITIONS APPLY.



DESCRIPTION	DEVICE TRIPPING CURRENT	DEVICE SETTING VALUE
COMPRESSOR MCB	28.27A	23.6A
FAN MCB	3.36A	2.8A
'F' FAN MCB	3.62A	3.0A
CONTROL	3.0A	2.5A
PUMP CONTROL MCB	N/A	2.0A

Get In Touch

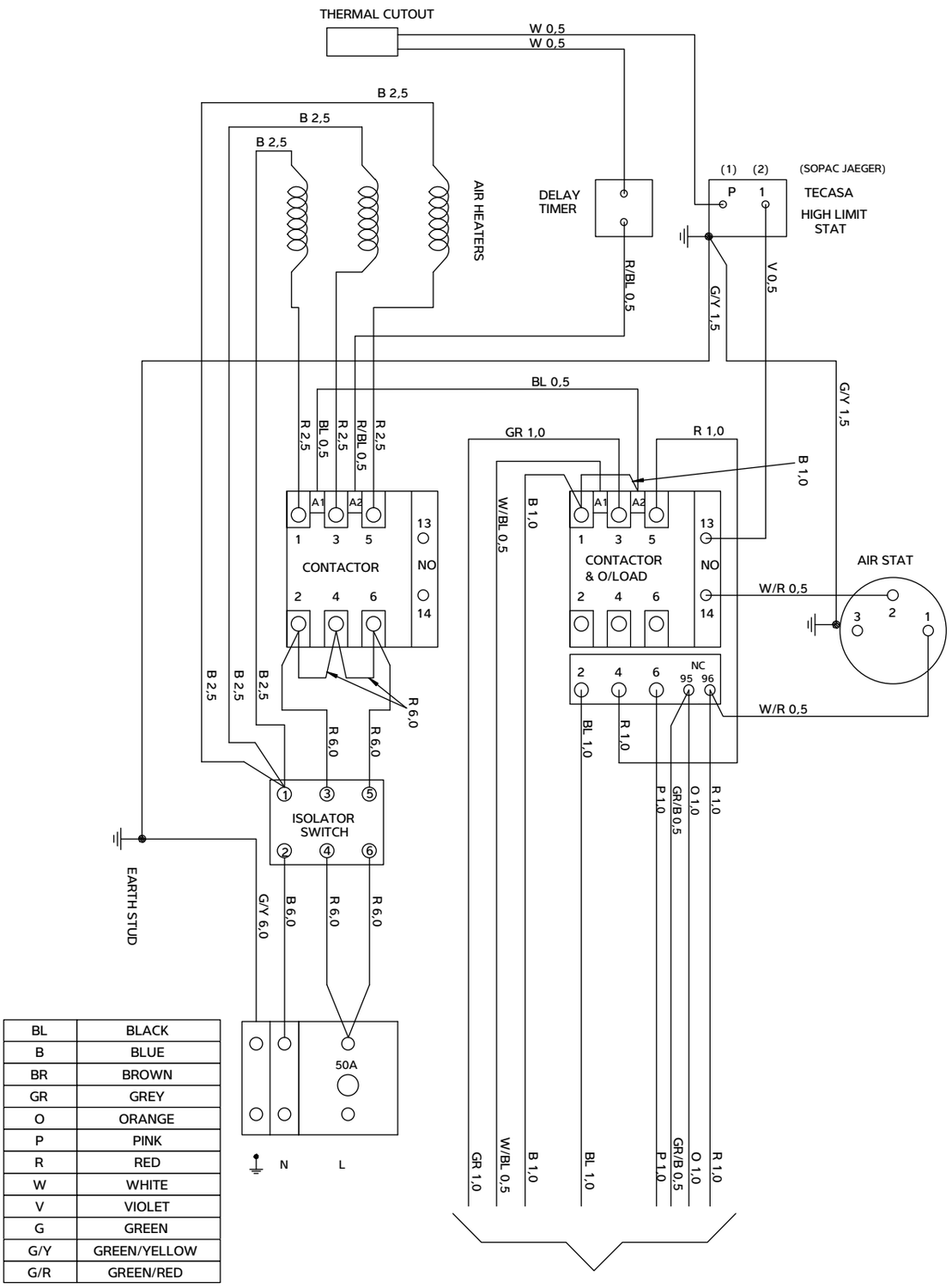
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

SINGLE PHASE HEATER BOX WIRING 230V 50Hz (~1N)



BL	BLACK
B	BLUE
BR	BROWN
GR	GREY
O	ORANGE
P	PINK
R	RED
W	WHITE
V	VIOLET
G	GREEN
G/Y	GREEN/YELLOW
G/R	GREEN/RED

SEE D319052 FOR WIRING INSTRUCTIONS

Get In Touch

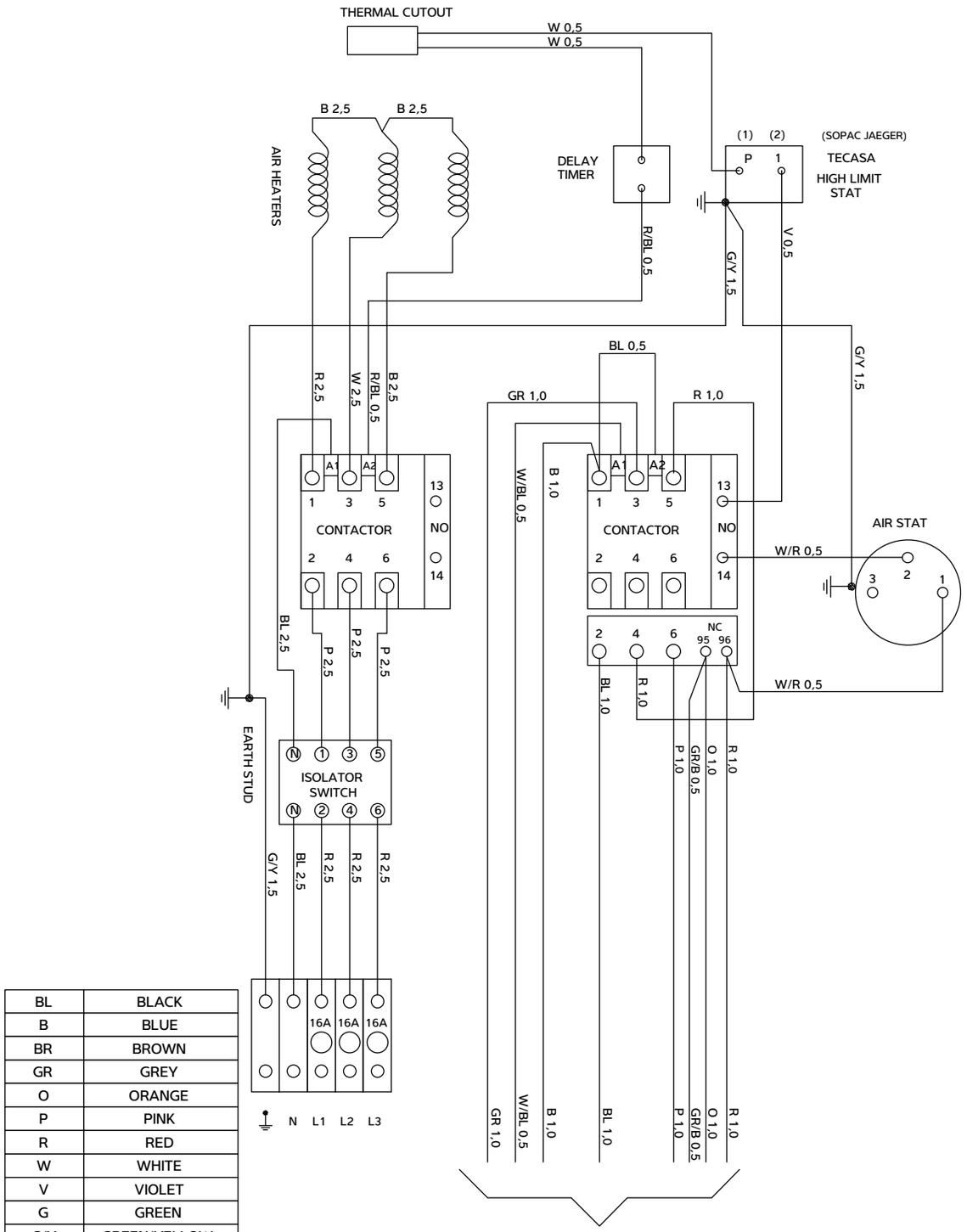
Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

THREE PHASE HEATER BOX WIRING 400V 50Hz (~3N)



BL	BLACK
B	BLUE
BR	BROWN
GR	GREY
O	ORANGE
P	PINK
R	RED
W	WHITE
V	VIOLET
G	GREEN
G/Y	GREEN/YELLOW
G/R	GREEN/RED

SEE D319050 FOR WIRING INSTRUCTIONS

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

12.0 WARRANTY CONDITIONS

The following exclusions apply to the Warranty given by Dantherm Ltd.

No claims will be accepted if :-

1. The dehumidifier is incorrectly sized for the application.

2. The dehumidifier is installed in any way that that is not in accordance with the current procedures as defined by Dantherm Ltd.

3. The dehumidifier has been worked upon or is adjusted by anyone other than a person authorised to do so by Dantherm Ltd.

4. The air flow through the machine is outside the specified limits.

5. The water flow through the machine is outside the specified limits.

6. The electrical supply is insufficient or in any way incorrect.

7. The dehumidifier has suffered frost damage.

8. The fan amps and duct pressure are outside the specified limits.

If in doubt or if advice is required please contact the Dantherm Group UK Service Department by calling 01621 856611 (option 4) or emailing service@dantherm.com

Note: The Reply Paid Warranty Registration Card must be returned, to ensure that the correct warranty is given. If you do not find a Registration Card with your heat pump please contact the Dantherm Group UK Service Department giving your name, address and serial number of your heat pump. A card will be sent to you for completion.

Please give **MODEL NUMBER** and **SERIAL NUMBER** of your heat pump when making technical or service enquiries. This will assist in correct diagnosis and ensure service can be provided with the minimum delay.

Puravent

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

13.0 MACHINE RECORD LOG

In order to comply with European F-Gas regulations, it is necessary for hermetically sealed systems with more than 6kg refrigerant to be leak tested annually. The operator of the unit is responsible for seeing that the test is carried out.
For machines affected see datasheet. A sample log sheet can be seen below.
Dantherm Ltd. is an Fgas registered company. Certificate number REF1011570.

General Information				
Plant Name				Serial Number
Location of Plant				
Plant Operator[1]				
Operator Contact[2]				
Refrigerant Type				Refrigerant Quantity installed (kg)
Plant manufacturer	Dantherm Limited			Year of installation

Refrigerant Additions				
Date	Engineer[3]		Amount Added kg	Reason for addition
	Company	Name		

Refrigerant Removals				
Date	Engineer		Amount Removed kg	Reason for removal What done with recovered refrigerant
	Company	Name		

Name and Address of Recycling or reclamation facility				Certificate number if applicable

Leak Tests				
Date	Engineer		Test Result	Follow up action required
	Company	Name		

Follow up Actions				
Date	Engineer		Related to test on	Actions taken
	Company	Name		

Testing of Automatic Leak Detection System (if fitted)				
Date	Engineer		Test Result	Comments
	Company	Name		

[1]Name and address of company operating plant.
[2]Contact details of operator's nominated person responsible for FGas compliance.
[3]Company and technician carrying out work, with details to provide evidence of compliance.
IMPORTANT The company carrying out refrigerant checking and removals, and the owner of the equipment need to keep records for FIVE YEARS.
When this machine is decommissioned the refrigerant gas is to be recovered in accordance with current environmental legislation.

Get In Touch

Call: 01729 824108
Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park, Darlington Road, Northallerton, DL6 2NQ

Get In Touch

Call: 01729 824108

Email: info@puravent.co.uk

Our Address

Puravent, Adremit Limited, 6 County Business Park,
Darlington Road, Northallerton, DL6 2NQ

Dantherm Ltd.
Unit 12, Galliford Road
Maldon CM9 4XD
United Kingdom
+44 (0)1621 856611
sales.uk@dantherm.com