

# DH150/DH300/DH600

Owner installation manual (SD208050 issue 44)









# **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)

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# **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.

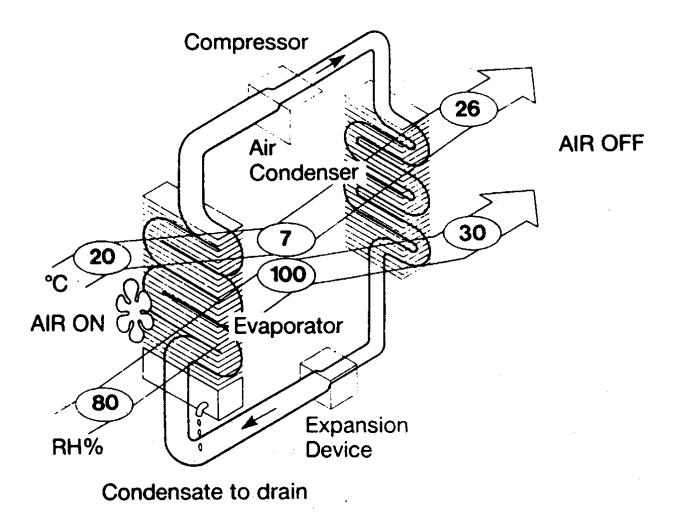
## 1.0 WHAT ARE THE CALOREX DEHUMIDIFIERS DESIGNED TO DO?

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.

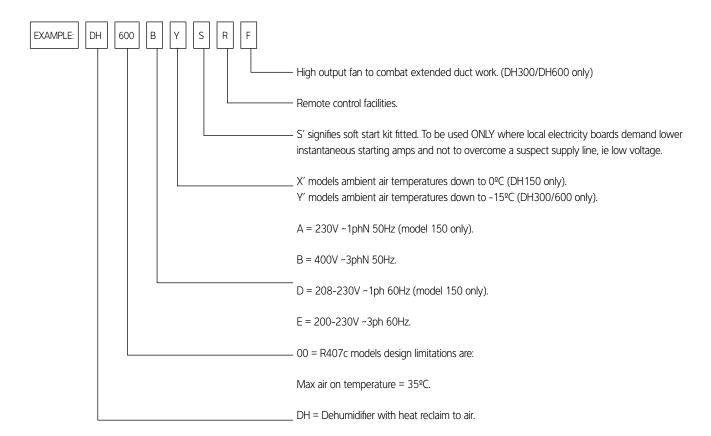
Warm, humid air is drawn in through the evaporator which extracts the latent heat and at the same time dehumidifies the air by cooling it below its dew

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.



## 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.

## 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.

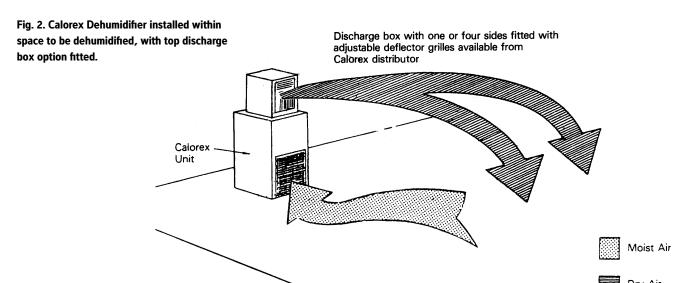
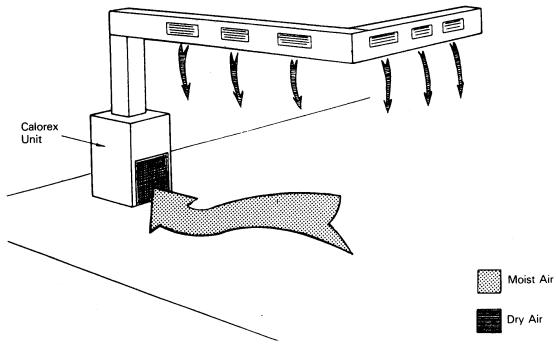


Fig. 3. Calorex Dehumidifier installed within space to be dehumidified, with discharge ducting fitted.



**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  $\pm$  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,

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

Model DH150 - minimum free area air inlet =  $0.35 \text{ m}^2$ .

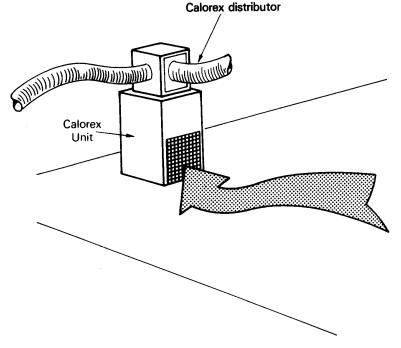
Model DH300 - minimum free area air inlet =  $0.57 \text{ m}^2$ .

Model DH600 - minimum free area air inlet =  $1.1 \text{ m}^2$ .

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.

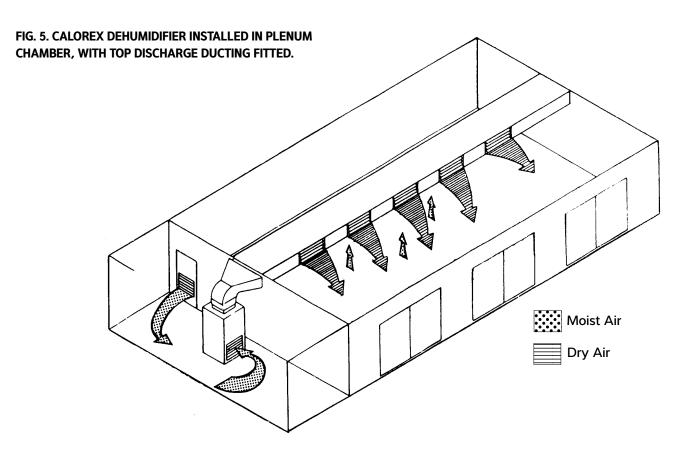
FIG. 4. CALOREX DEHUMIDIFIER
INSTALLED WITHIN SPACE TO BE
DEHUMIDIFIED, WITH TOP DISCHARGE
BOX OPTION AND FLEXIBLE DUCTING
FITTED.

Discharge box with up to four sides fitted with 8" or 12" duct spigots. Available from



Moist Air

Dry Air



#### 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 =  $\frac{3}{4}$ " BSPM stub.

DH600 = 1½" BSPM stub.

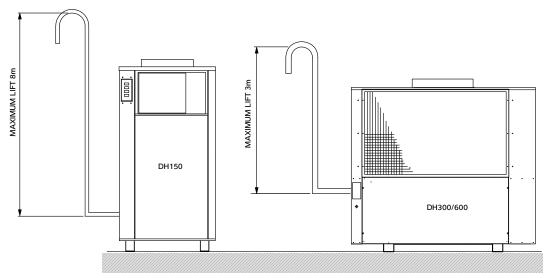


Fig. 6. Calorex Dehumidifier with Condensate Pump Option fitted.

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).

# 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.

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.

#### d. IMPORTANT:- Inconsistent Electrical Supply.

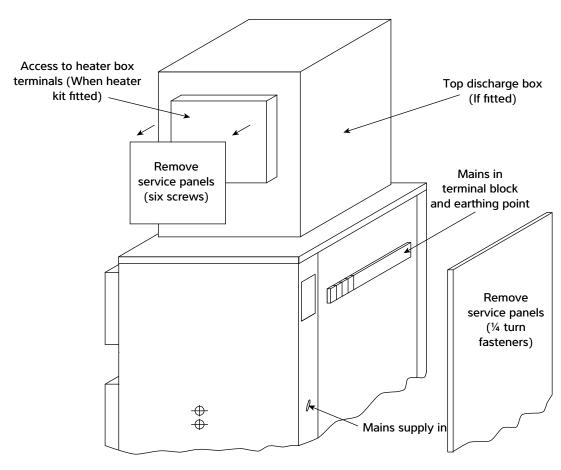
The following limits of operation list not be exceeded if Calorex dehumidifiers are to be guaranteed either in performance or warranty terms:

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

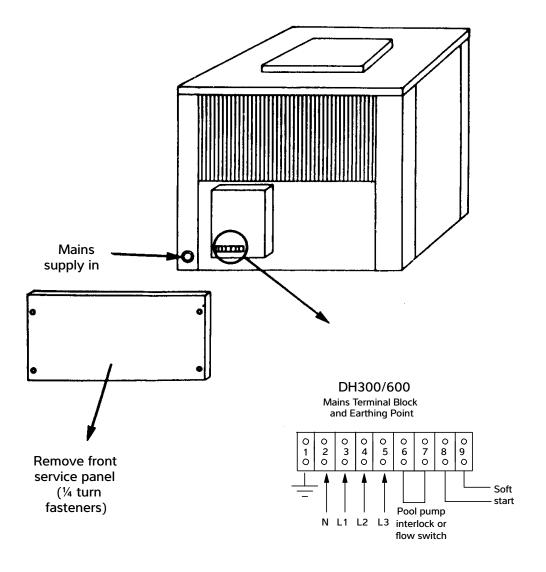
N.B. This voltage must be available at the dehumidifier whilst it is running under full load.

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

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



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



#### 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.

## **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)1621857171 or +44(0)1621850871.

# 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 0°C for DH150s, and above -15°C 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			

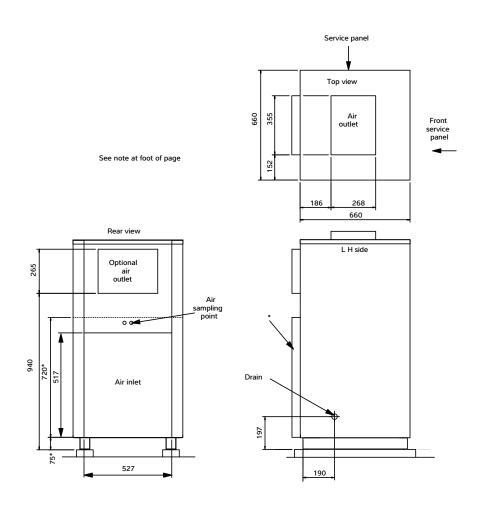
## **6.0 DEHUMIDIFIER TECHNICAL DATA SHEET**

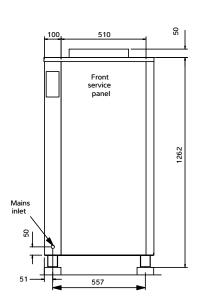
MODEL NUMBER	1Ø	DH150AX	N/A		/A
	3Ø	DH150BX	DH300BL(Y)	DH60	DOBY
PERFORMANCE DATA					
Dehumidification Rate	L/h	6.25	12.5	2	5
Output to Air Nett (DH model)	kW	5.5	15⋅5	2	5
Total Electrical Input (STD fan)	kW	2.3	6.7	10	)-0
Total Electrical Input ("F" Fan)	kW	N/A	7⋅3	10	)-4
ELECTRICAL DATA					
Supply 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	13	35
Starting Current Amps 3Ø "S"	amps	19	29	5	5
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		/A
Maximum Full Load Amps 3Ø	•	12	N/A		/A
•	amps		N/A		/A
Maximum Supply Fuse 1Ø	amps	50	N/A N/A		/A /A
Maximum Supply Fuse 3Ø	amps	16	IN/A	IN	A
AIR FLOW DATA	m³/h	2500	5000	00	00
Air Flow Nominal		2500	5000		00
Ducting Design Static Pressure STD	Pa	N/A	60		0
*Ducting Max Static Pressure	Pa	0-200	-		-
Ducting Max' Static Pressure "F" M/C	Pa	N/A	140	16	50
If Turning Hood with Heater fitted:					
Ducting Design Static Pressure STD M/C	Pa	N/A	N/A	(	)
* Ducting Max Static Pressure	Pa	0-170	-	•	-
Ducting Max Design Static Pressure "F"	Pa	N/A	N/A	8	0
WATER FLOW DATA					
Condensate Water Connection Size		3/4"Domestic Waste	11/2"BSPM	1½"E	SPM
PHYSICAL DATA					
Width (unpacked)	mm	660	980	17	30
Depth (unpacked)	mm	660	720	12	50
Height (unpacked)	mm	1313	1435	16	00
Weight (unpacked)	kg	130	220	49	97
MISC' DATA					
Hermetic System					
Refrigeration charge R407c (STD DH)	kg	2.5	9.5	1	4
Refrigeration charge R407c (DH300BLY)	kg	- <b>-</b>	10		
Sound Pressure at 3m	db(A)	58	66	6	3
NOTES:-	(-,)				

- NOTES:-
- 1) Performance data based on air at 20°C, 75%RH (Water at 26°C).
- 2) Weight and dimensions nett.
- 3) Allow 500mm clearance to service panels.
- 4) Minimum air temperature 0°C for "X" models and -15°C 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 2500m³/h

# 7.0 INSTALLATION DRAWINGS

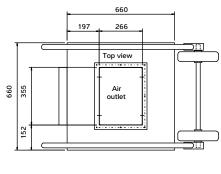
# DH150 DEHUMIDIFIER.

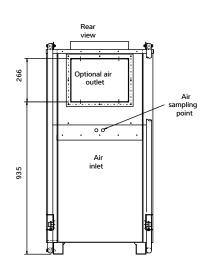


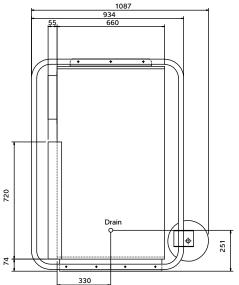


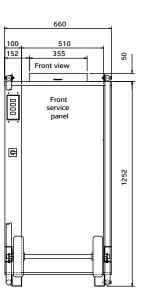
NOTE:- Dimensions marked \* refer to dimensions of inlet DUCT FLANGE KIT OPTION (50mm Deep).

# DH150 DEHUMIDIFIER - WHEELS AND HANDLES OPTION (DH150BX ONLY)







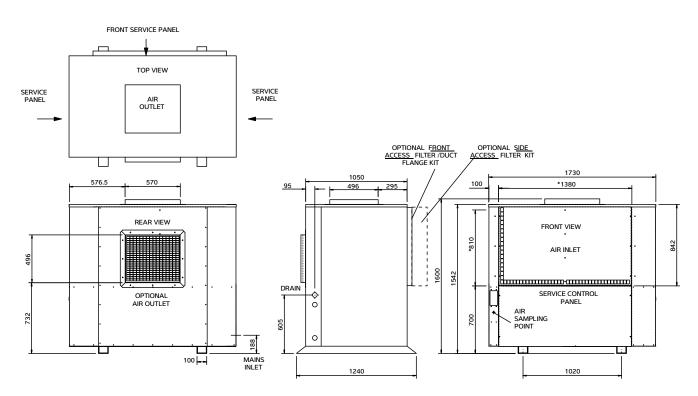


NOTE:- Dimensions marked \* refer to dimensions of inlet DUCT FLANGE KIT OPTION (50mm Deep).

# **DH300 DEHUMIDIFIER.** 369 AIR OFF SERVICE PANEL \*740 256 547 AIR OFF \*775 SERVICE PANEL 1435 Φ SERVICE PANEL 640 DRAIN 613 φ

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.

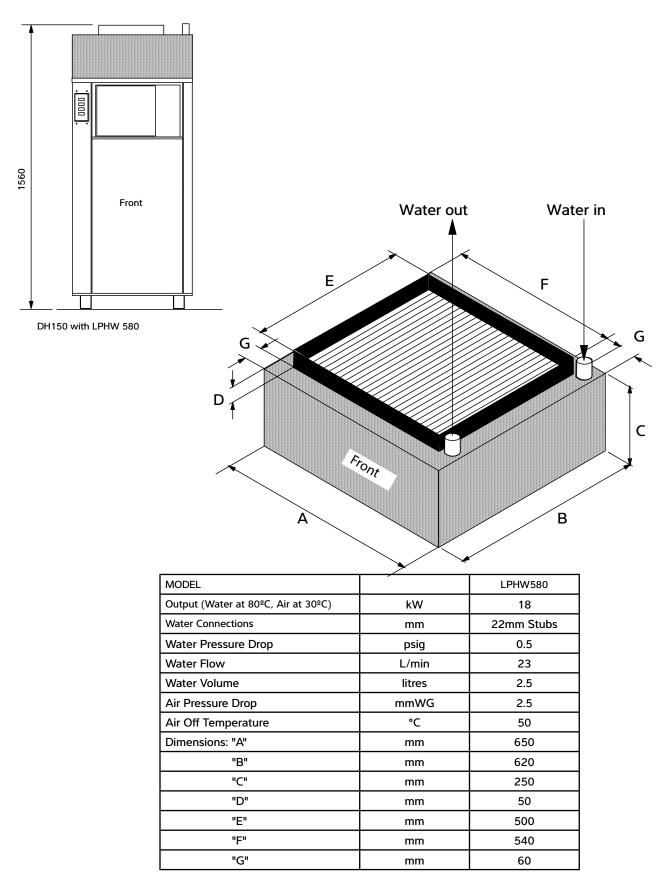
## **DH600 DEHUMIDIFIER.**



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

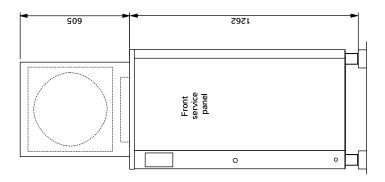
# 8.0 LOW PRESSURE HOT WATER (LPHW) HEATER BATTERY OPTION

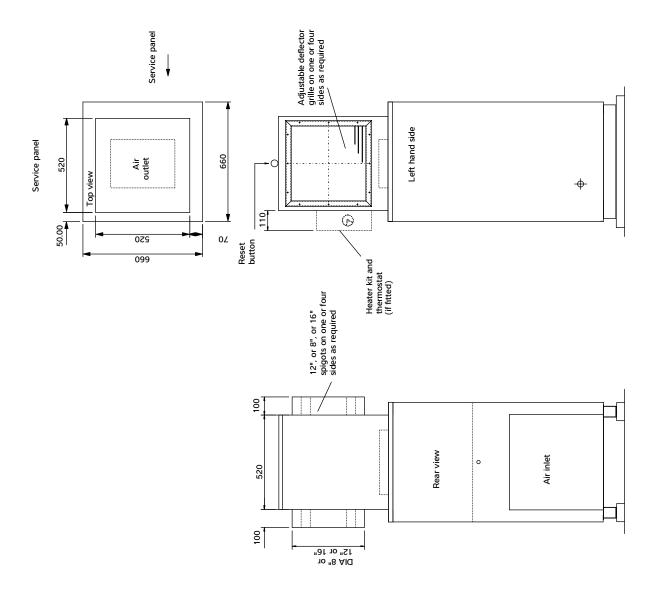
For use with Calorex DH150 Dehumidifier only - available from your Dantherm Ltd. Distributor.



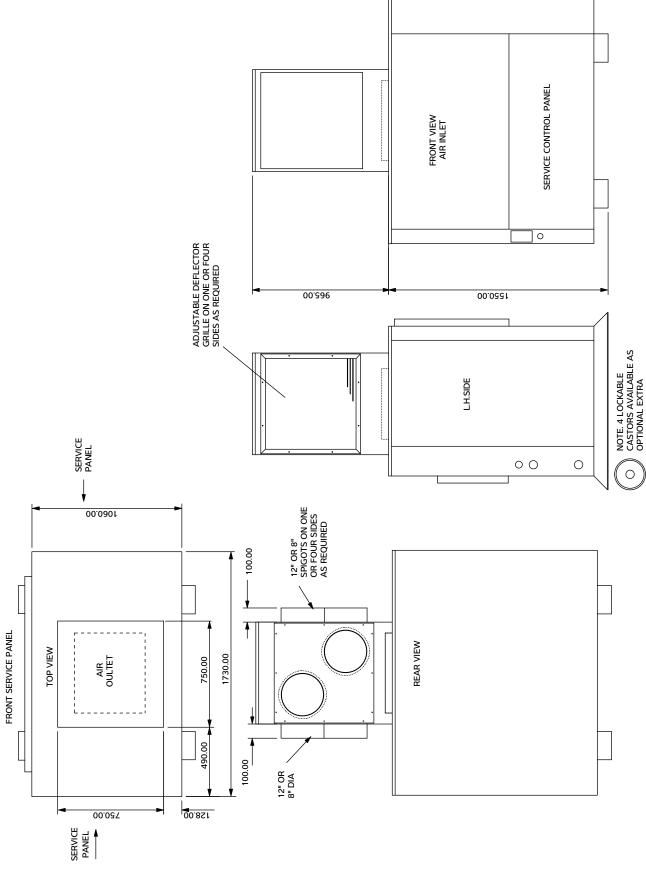
# 9.0 DH150 WITH TOP DISCHARGE BOX OPTION

# WITH OR WITHOUT 9KW HEATER OPTION.





## 10.0 DH600 WITH TOP DISCHARGE BOX OPTION



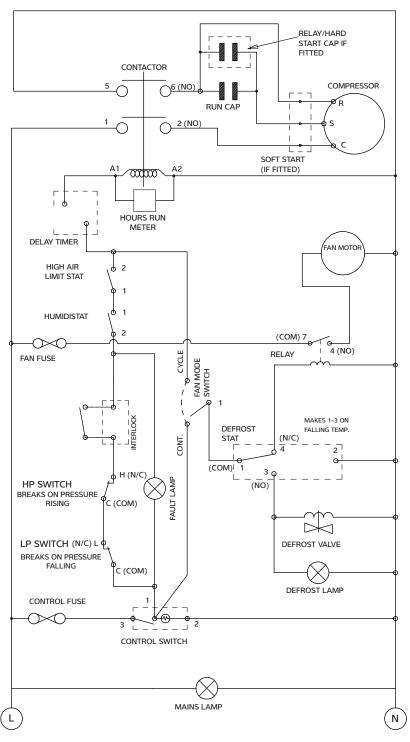
## 11.0 ELECTRICAL CIRCUIT DIAGRAMS

# 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

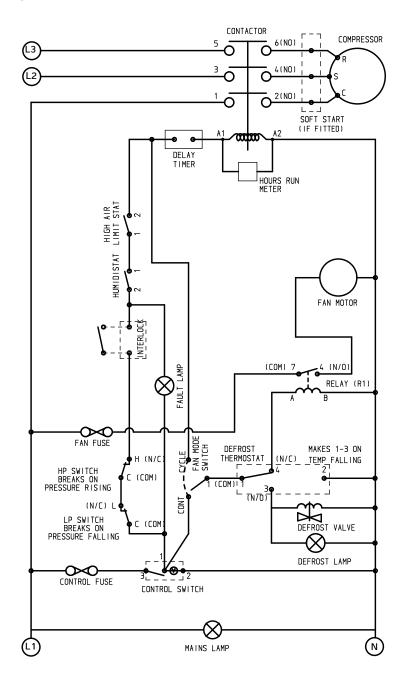


# ELECTRICAL CIRCUIT DIAGRAM DH150BX STANDARD MACHINE THREE PHASE 400V 50Hz (~3N)

**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.

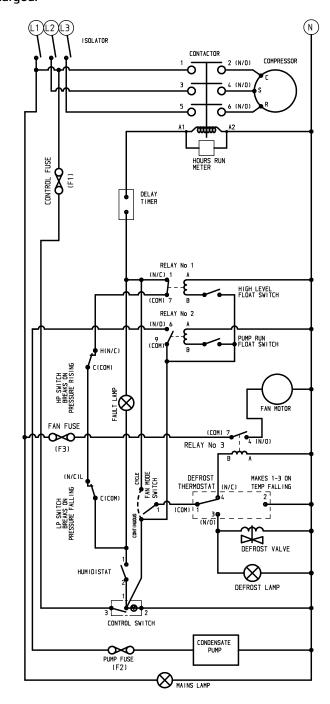


# ELECTRICAL CIRCUIT DIAGRAM DH150BX WHEELS AND HANDLES VERSION THREE PHASE 400V 50Hz (~3N)

**Fuse Values** 

	Control	Pump	Fan
	(F1)	(F2)	(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.



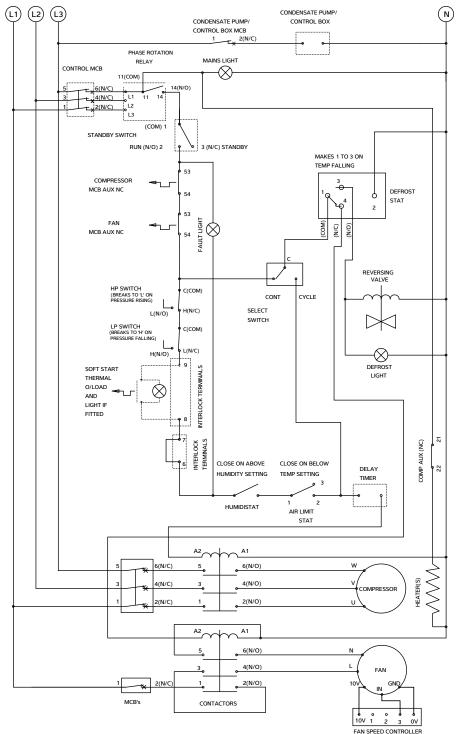
## ELECTRICAL CIRCUIT DIAGRAM DH300BY THREE PHASE 400V 50Hz (~3N)

# 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



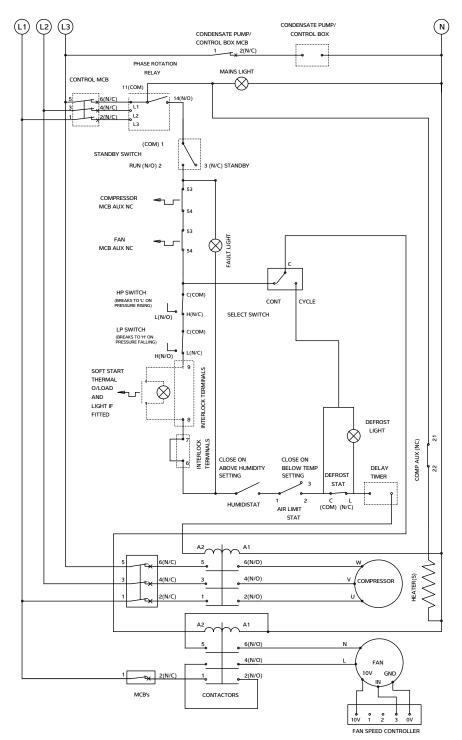
## ELECTRICAL CIRCUIT DIAGRAM DH300BL THREE PHASE 400V 50Hz (~3N)

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

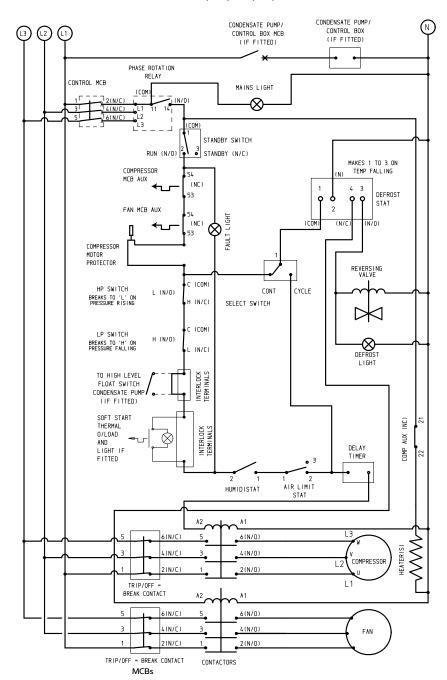


## ELECTRICAL CIRCUIT DIAGRAM DH600BY THREE PHASE 400V 50Hz (~3N)

#### **ELECTRICAL CIRCUIT DIAGRAM**

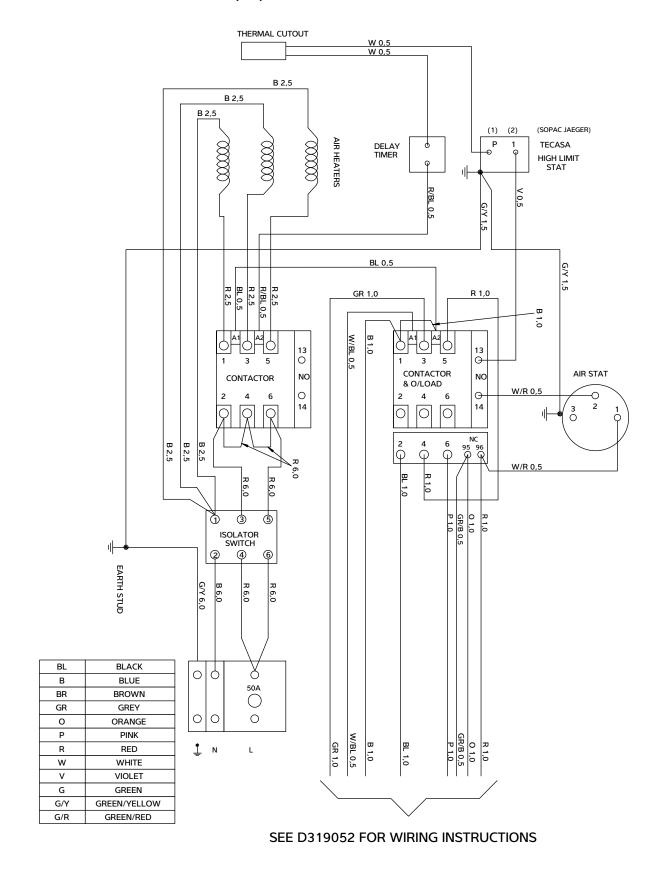
MCB CONTACTS / MCB ALARM CONTACTS / MCB AUX CONTACTS SHOWN WITH CIRCUIT BREAKER MANUALLY SWITCHED TO THE ON CONDITION.

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.

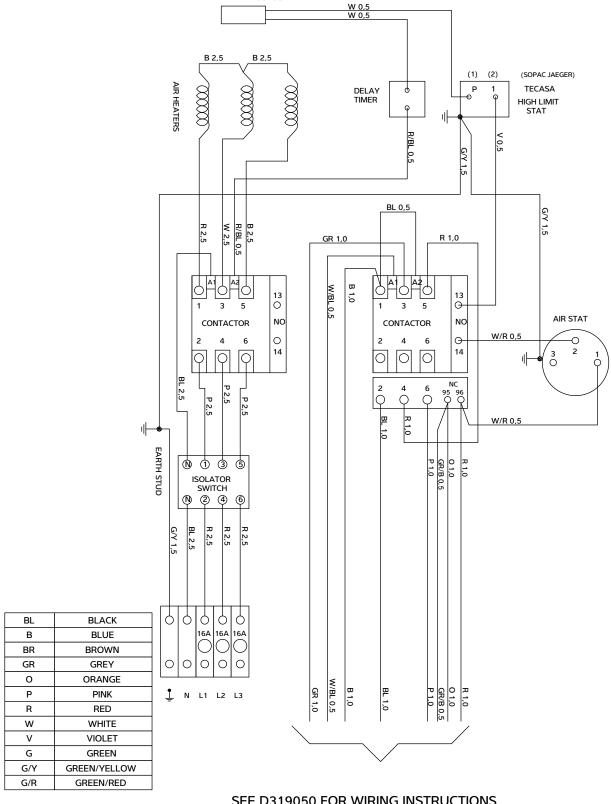


	DEVICE	DEVICE
DESCRIPTION	TRIPPING	SETTING
	CURRENT	VALUE
COMPRESSOR MCB	28.27A	23.6A
FAN MCB	3.36A	2.8A
'F' FAN MCB	3.62A	3.0A
CONTROL	3.0A	2.5A
PUMP CONTROL MCB	N/A	2.0A

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



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



THERMAL CUTOUT

SEE D319050 FOR WIRING INSTRUCTIONS

## 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.

## 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 Egas registered company. Certificate number REF 10.11570.

Dantherm Ltd. is an Fgas regi	stered company.	Certificate number REF10	11570.		
Plant Name				Serial Number	
Location of Plant					
Plant Operator <sup>1</sup>					
Operator Contact <sup>2</sup>					
Refrigerant Type				Refrigerant Quantity installed (kg)	
Plant manufacturer	Dantherm Lim	ited		Year of installation	
Refrigerant Additions					
Date		Engineer <sup>3</sup>	Amount	Reason for addition	
	Company	Name	Added kg		
Refrigerant Removals					
Date		Engineer	Amount	Reason for removal What done with recovered	
	Company	Name	Removed kg	refrigerant	
Name and Address of Recyc	ling or reclamat	ion facility		Certificate number if applicable	
Leak Tests					
Date	Engineer Test Result		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 D	l Detection System	(if fitted)			
Date		Engineer	Test Result	Comments	
	Company	Name			
	Company	Ivallie			

<sup>&</sup>lt;sup>1</sup>Name and address of company operating plant.

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.

<sup>&</sup>lt;sup>2</sup>Contact details of operator's nominated person responsible for FGas compliance.

<sup>&</sup>lt;sup>3</sup>Company and technician carrying out work, with details to provide evidence of compliance.

# danthermgroup.com

Dantherm Ltd.

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

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