

Please read these instructions carefully as they will enable you to get maximum efficiency and reliability from your new Calorex Dehumidifier.

# Technical Manual

## DH/TTW 75/110

(SD405452 Iss 15)

13/02/17

### 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 warranty).

### CONTENTS

SECTION 1.0 INSTALLATION INSTRUCTIONS/ USER CHECK LIST. ....	2
SECTION 2.0 CONTROL LAYOUT & LPHW OPERATION. ....	5
SECTION 3.0 MACHINE DIMENSIONS .....	6
SECTION 4.0 DATA SHEET.....	7
SECTION 5.0 WIRING DIAGRAMS.....	8
SECTION 5.1 FEATURES OF THE PRINTED CIRCUIT BOARD.....	10
SECTION 6.0 REFRIGERATION CIRCUIT .....	12
SECTION 7.0 PERFORMANCE GRAPHS .....	13
SECTION 8.0 SPARE PARTS LISTS .....	14
SECTION 9.0 OPTIONAL ITEMS, REMOTE CONTROLS. ....	23
SECTION 10.0 WARRANTY CONDITIONS .....	25



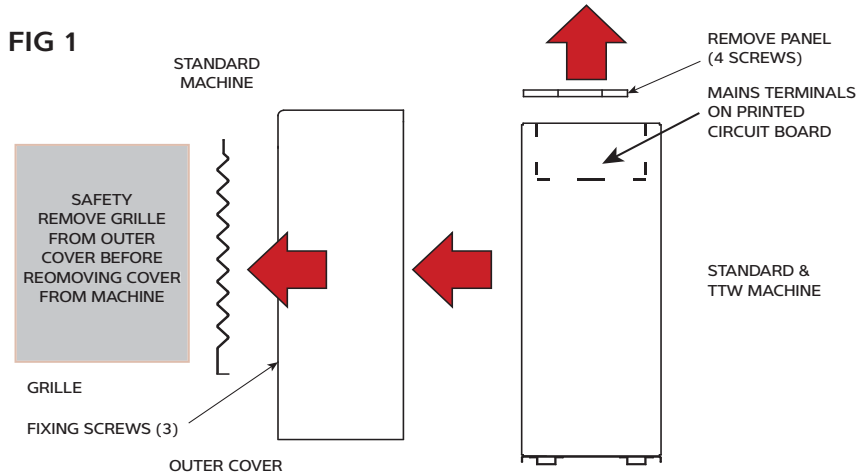
## SECTION 1.0 INSTALLATION INSTRUCTIONS/ USER CHECK LIST.

### HEALTH & SAFETY WARNING.

As the Heat Pump contains electrical and rotational equipment , it is recommended that **ONLY** competent persons carry out any work on this type of machine (see warranty). **ISOLATE ELECTRICALLY BEFORE ENTERING MACHINE OR REMOVING PANELS.**

**This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.**

**Children should be supervised to ensure that they do not play with the appliance.**



### INSTALLATION - MODEL DH75/110

1. Remove machine from packaging and set on a level surface. Check that machine is level both vertically and horizontally.
2. Remove covers as shown in FIG.1 relative to machine type installed.
3. The electrical supply to unit must be sized according to the data on serial number label paying special attention to I.E.E. regulations latest edition regarding the special conditions governing electrical supply to machines in potentially damp areas (DH75/110 are IP45).
4. The electrical supply should be connected to the terminals on the printed circuit board mounted inside the electrical box found in the top corner of the machine, see figs 1, 2 & 4.

Wires to be connected as follows :- Brown/Red to Live, Blue/Black - to Neutral, and Earth to stud provided.

5. The fan mode switch can be set to cycle fan, then when Hygrostat senses a demand, but should be set to continuous to promote good air circulation and reduce condensation. Note that on models fitted with LPHW and or remote Hygrostat the fans will start automatically whenever there is an air heating or dehumidification demand. During defrost the fans will stop. (Fan cycle not recommended for TTW machines with humidistat only).

Set Fan Speed switch to 'High' for maximum duty, 'Low' for minimum sound.

6. Locate drain, 15mm compression fitting, on side of unit and run it away to waste as preferred. A single hole is provided in the side of the unit. The drain is factory fitted to this hole. (In TTW machines there is an alternate position, see drawings).

### MODELS WITH LPHW FITTED

7. Connect water circuit piping to the 22mm stubs provided on the side of the machine as per diagram.
8. It is recommended that isolation valves are fitted to enable isolation of the machine in the event of service. The Circulating Pump must be sized to take into account the design flow rate of the machine plus the water system resistance (Flow Rate 9.6 L/min Pressure Drop 2.8 m hd)

FIG 2

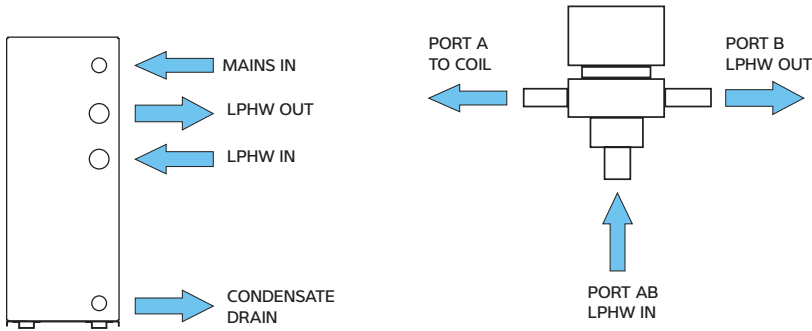
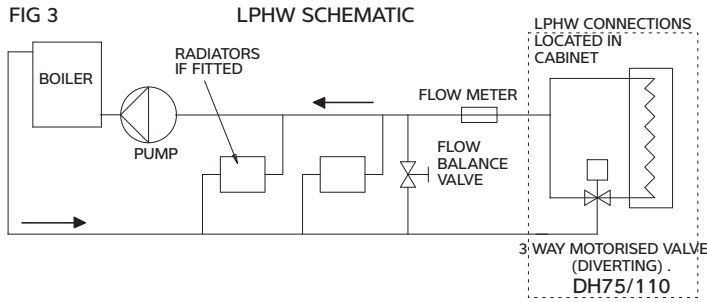
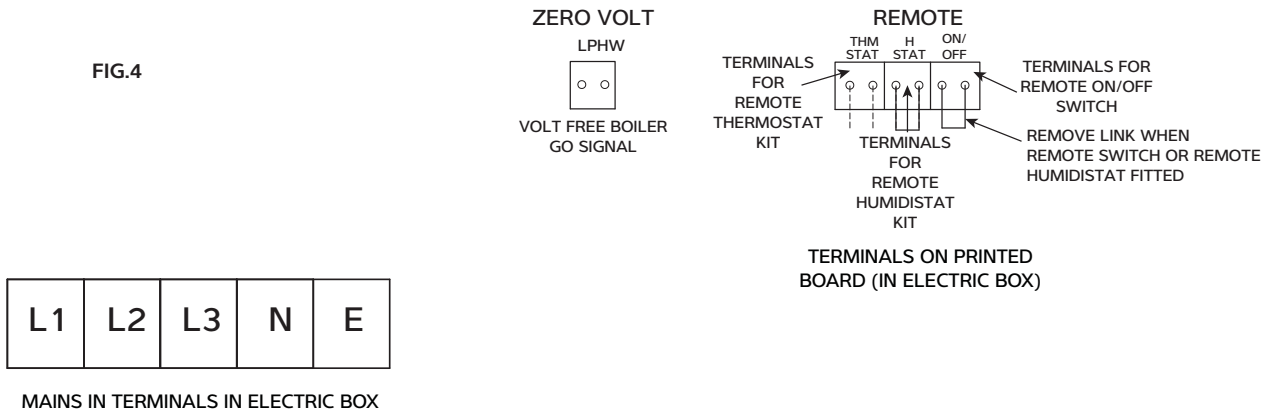


FIG.3



CONNECTIONS FOR REMOTE 12V AIR THERMOSTAT & OPTIONAL HYGROSTAT.

FIG.4



9. Connect remote Hygrostat as shown, ensure that knob on MACHINE HYGROSTAT is set FULLY ANTI CLOCKWISE.
10. When LPHW coil & valve are fitted, a remote air temperature thermostat must be connected as shown.

## USER CHECK LIST

### OPERATION

A normal hygrostat setting (50-60%) is marked on the console.

Minimum air temperature 5°C.

Note: The fan stops during defrost.

The fan will start automatically, as required, on machines fitted with LPHW and or remote Hygrostat (fan control switch set to cycle).

### OPERATING

a. Ensure air inlets/outlets and filters are kept clear and clean. Filters are located behind inlet grille.

b. Wipe clean with damp cloth or cleaning fluid suitable for painted surfaces.

Note: The Reply Paid Warranty Registration Card must be returned to ensure the correct warranty is given.

If you do not find a Registration Card with your machine, please contact Calorex Service Department or your dealer giving your name, address and serial number of your machine, a card will then be sent to you.

### FILTER CLEANING

The filter can be washed in warm, soapy water, rinsed and shaken dry before replacement. Frequency of cleaning depends on user although no more than two months should elapse between cleaning. The dehumidifier must not be run without a filter fitted.

### MACHINE NOT RUNNING AT ALL.

CHECK THE FOLLOWING.

1. Is supply switched on?
2. Is supply fuse healthy?
3. Turn Hygrostat knob fully anti-clockwise.
4. Check air inlet and outlet for obstructions and that the filter is not blocked.
5. Check fault lamp - if illuminated reset the HP and LP switches (see control panel layout on page 5).
6. If, after carrying out the above and waiting 30 mins, the machine does not start, telephone for service.

### MACHINE FAN ONLY RUNNING

7. Turn Hygrostat knob fully anti-clockwise.
8. Check air inlet and outlet for obstructions and that filter is not blocked.
9. Check that HP and LP switch are reset,(see control panel layout on page 5) if after 30 minutes the machine has not restarted, telephone for service.

### WATER LEAKING FROM BASE OF UNIT

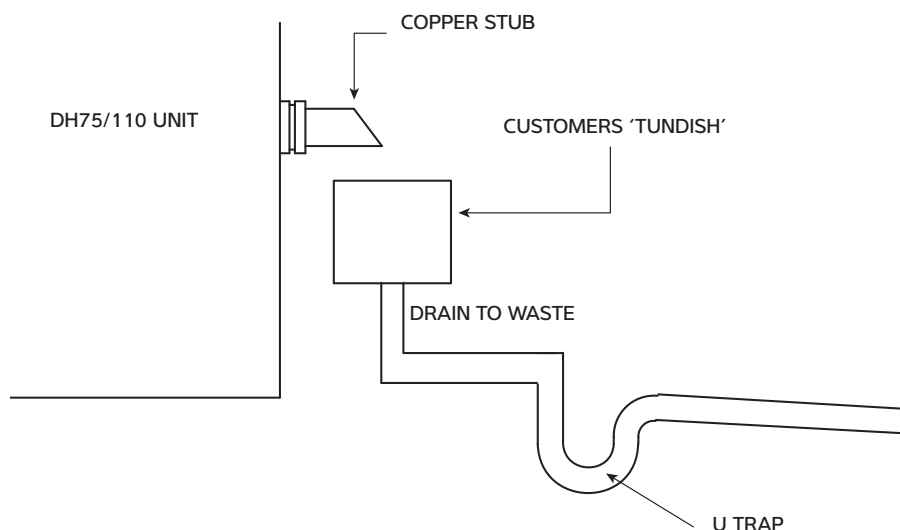
10. Check connection from machine to drain for blockages and clear accordingly. Check fall is adequate.

11. Check that machine is level both vertically and horizontally.

12. Check that "tun dish", if fitted, is not blocked (see below).

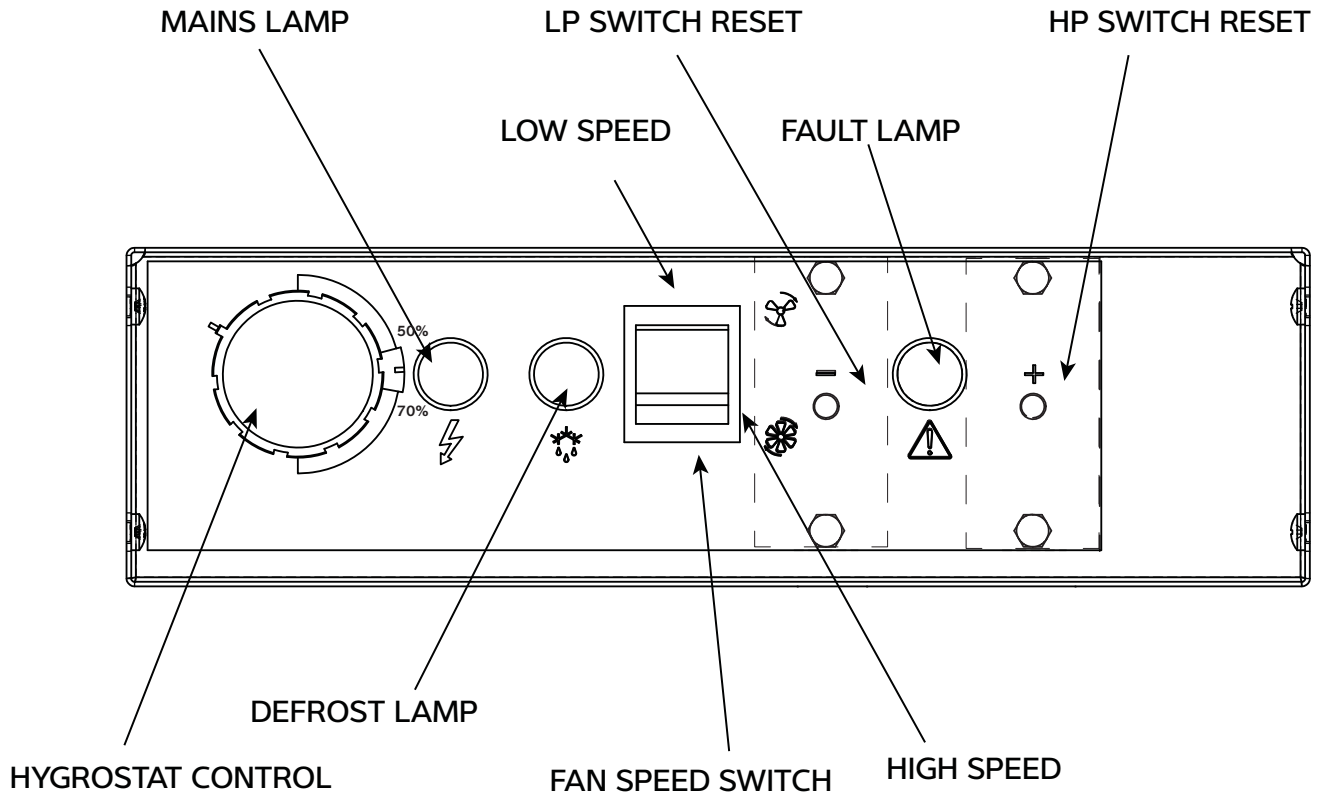
The user check list should be carried out before initiating a service call. Do not attempt to interfere with any internal control settings as these have been factory calibrated and sealed.

If in doubt or if advice is required, contact Calorex Service Department. Telephone (01621)857171 or 856611.



## SECTION 2.0 CONTROL LAYOUT & LPHW OPERATION.

### SECTION 2.1 CONTROL LAYOUT



### SECTION 2.2 LPHW OPERATION

The 3 way, motorised, diverting valve fitted to machines with the LPHW option is operated by a remote 12V AC air temperature thermostat (available from Calorex).

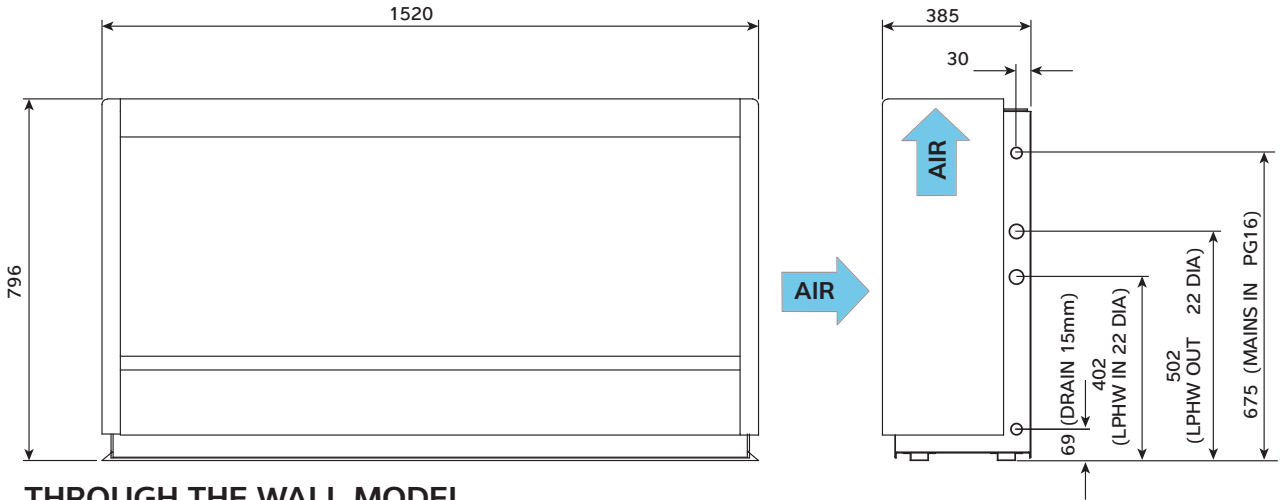
When the valve is energised the flow is through the LPHW coil.

When the valve is unenergised the flow is diverted.

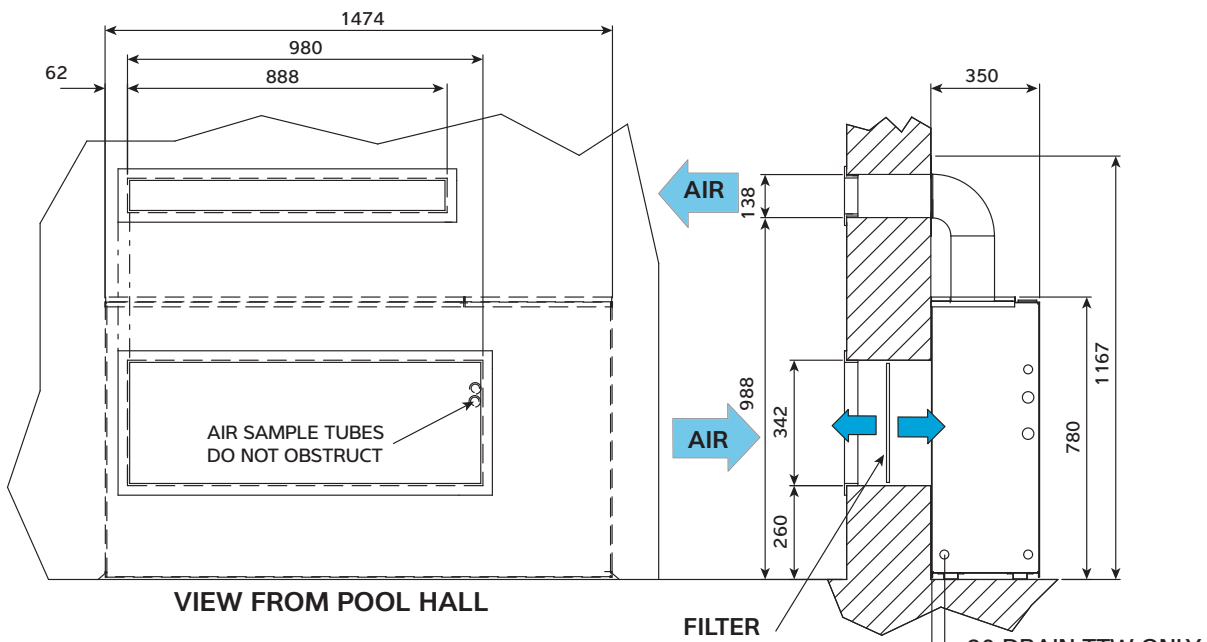
NOTE :- When the fan switch is set to cycle and the fan is not running, a demand on the LPHW valve will cause the fan to automatically start.

## SECTION 3.0 MACHINE DIMENSIONS

### STANDARD MACHINE WITH COVER



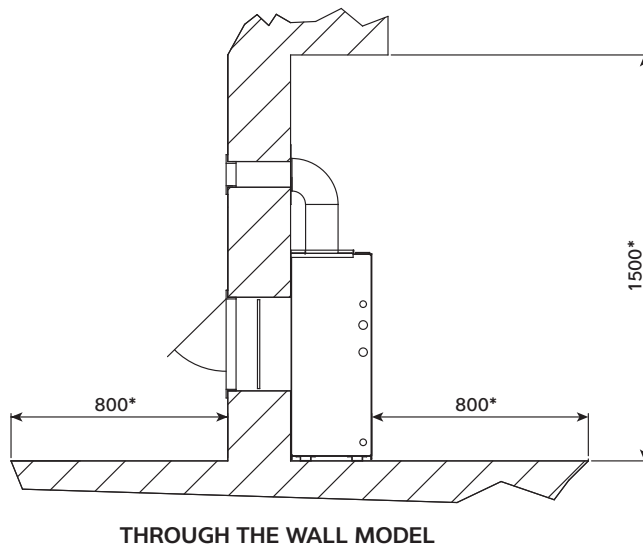
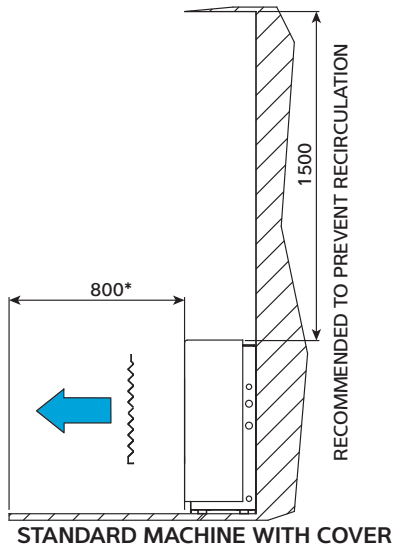
### THROUGH THE WALL MODEL



### SERVICE REQUIREMENTS

\*DIMENSIONS MARKED THUS ARE RECOMMENDED FOR SERVICE ACCESS

MACHINE AND DUCT MUST BE SEALED TO WALL & ALL CAVITIES BRIDGED TO PREVENT RECIRCULATION



## SECTION 4.0 DATA SHEET.

MODEL		DH75AX	DH110AX	DH110BX	TTW75AX	TTW110AX	TTW110BX
<b>DUTY</b>							
DEHUMIDIFICATION	L/hr	3,6	4,5	4,5	3,6	4,5	4,5
AIR HEATING (SENSIBLE) DEHUMIDIFIER ONLY	kW	4,7	6,4	6,4	4,7	6,4	6,4
AIR HEATING (SENSIBLE) DEHUMIDIFIER & LPHW	kW	11,3	12,2	12,2	11,3	12,2	12,2
AIR HEATING (SENSIBLE) LPHW ONLY	kW	8,9	8,9	8,9	8,9	8,9	8,9
<b>NOMINAL POWER CONSUMED</b>							
FAN ONLY	kW	0,16	0,16	0,16	0,16	0,16	0,16
COMPRESSOR AND FAN	kW	1,46	2,12	1,94	1,46	2,12	1,94
<b>ELECTRICAL DATA</b>							
ELECTRICAL SUPPLY		230V ~1N 50Hz	230V ~1N 50Hz	400V ~3N 50Hz	230V ~1N 50Hz	230V ~1N 50Hz	400V ~3N 50Hz
MAX FUSE RATING	AMP	13	16	10	13	16	10
NOMINAL RUNNING AMPS	AMP	6,4	9,3	4,2	6,4	9,3	4,2
FULL LOAD AMPS (MIN SUPPLY CAPACITY)	AMP	7,8	10,6	5,0	7,8	10,6	5,0
COMPRESSOR LRA	AMP	55	66	30	55	66	30
<b>AIR DATA</b>							
AIR FLOW (NOMINAL) HIGH SPEED	m <sup>3</sup> /h	925	1007	1007	925	1007	1007
LOW SPEED	m <sup>3</sup> /h	750	812	812	750	812	812
<b>WATER DATA</b>							
LPHW FLOW RATE	L/min	9,6	9,6	9,6	9,6	9,6	9,6
LPHW PRESSURE DROP	m hd	2,80	2,80	2,80	2,80	2,80	2,80
LPHW COIL VOLUME	L	0,63	0,63	0,63	0,63	0,63	0,63
<b>GENERAL DATA</b>							
<b>HERMETIC SYSTEM</b>							
REFRIGERANT CHARGE	kg	R407c	2	2	2	2	2
SOUND PRESSURE LEVEL @ 1m	dB(A)	53	53	53	53	53	53
<b>DIMENSIONS</b>							
WIDTH (UNPACKED)	mm	1520	1520	1520	1474	1474	1474
DEPTH (UNPACKED)	mm	385	385	385	350	350	350
HEIGHT (UNPACKED)	mm	796	796	796	1167	1167	1167
WEIGHT (UNPACKED) STD/ LPHW	kg	143/147	144/148	144/148	143/147	144/148	143/147
WIDTH (PACKED)	mm	1575	1575	1575	1575	1575	1575
DEPTH (PACKED)	mm	420	420	420	420	420	420
HEIGHT (PACKED)	mm	932	932	932	932	932	932
WEIGHT (PACKED) STD/ LPHW	kg	163/167	164/168	164/168	163/167	164/168	163/167

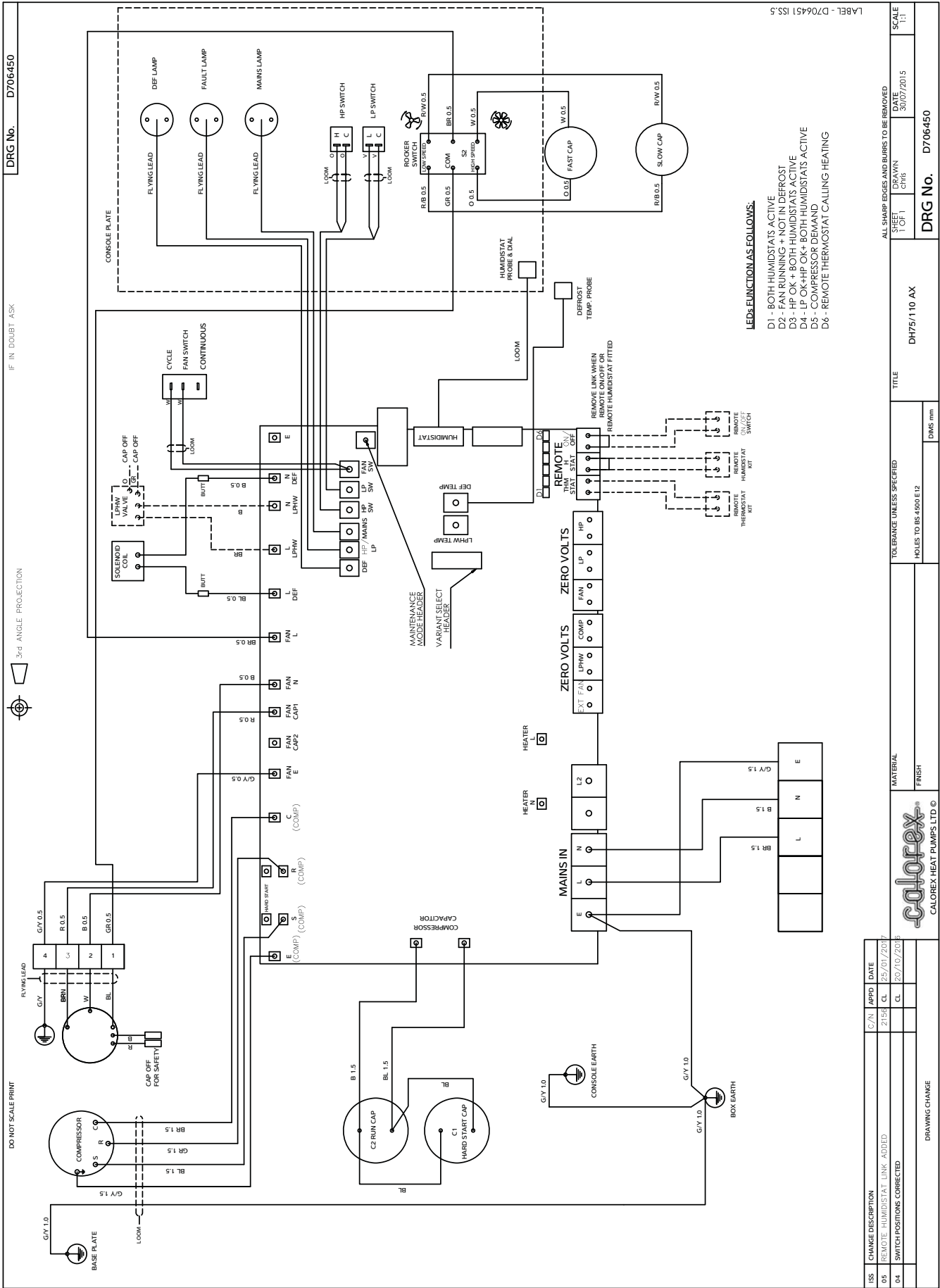
**NOTES:-**

- a) These performance figures are based on air @ 30°C and 60% RH & pool water @ 28°C, boiler water at 80°C.
- b) Hygrostat adjustable from 20% to 80%RH.
- c) Minimum air temperature on standard models 5°C, Maximum air temperature on standard models 40°C.
- d) R407c Global warming potential (GWP) 1774.



# SECTION 5.0 WIRING DIAGRAMS

DH/TTW 75/110 AX (240V ~ 1N 50Hz)



DRG No. D706450

IF IN DOUBT ASK

3/4 ANGLE PROJECTION

DO NOT SCALE PRINT

LEDS FUNCTION AS FOLLOWS:  
 D1 - BOTH HUMIDISTATS ACTIVE  
 D2 - FAN RUNNING + NOT IN DEFROST  
 D3 - HP OK + BOTH HUMIDISTATS ACTIVE  
 D4 - LP OK + HP OK + BOTH HUMIDISTATS ACTIVE  
 D5 - COMPRESSOR DEMAND  
 D6 - REMOTE THERMOSTAT CALLING HEATING

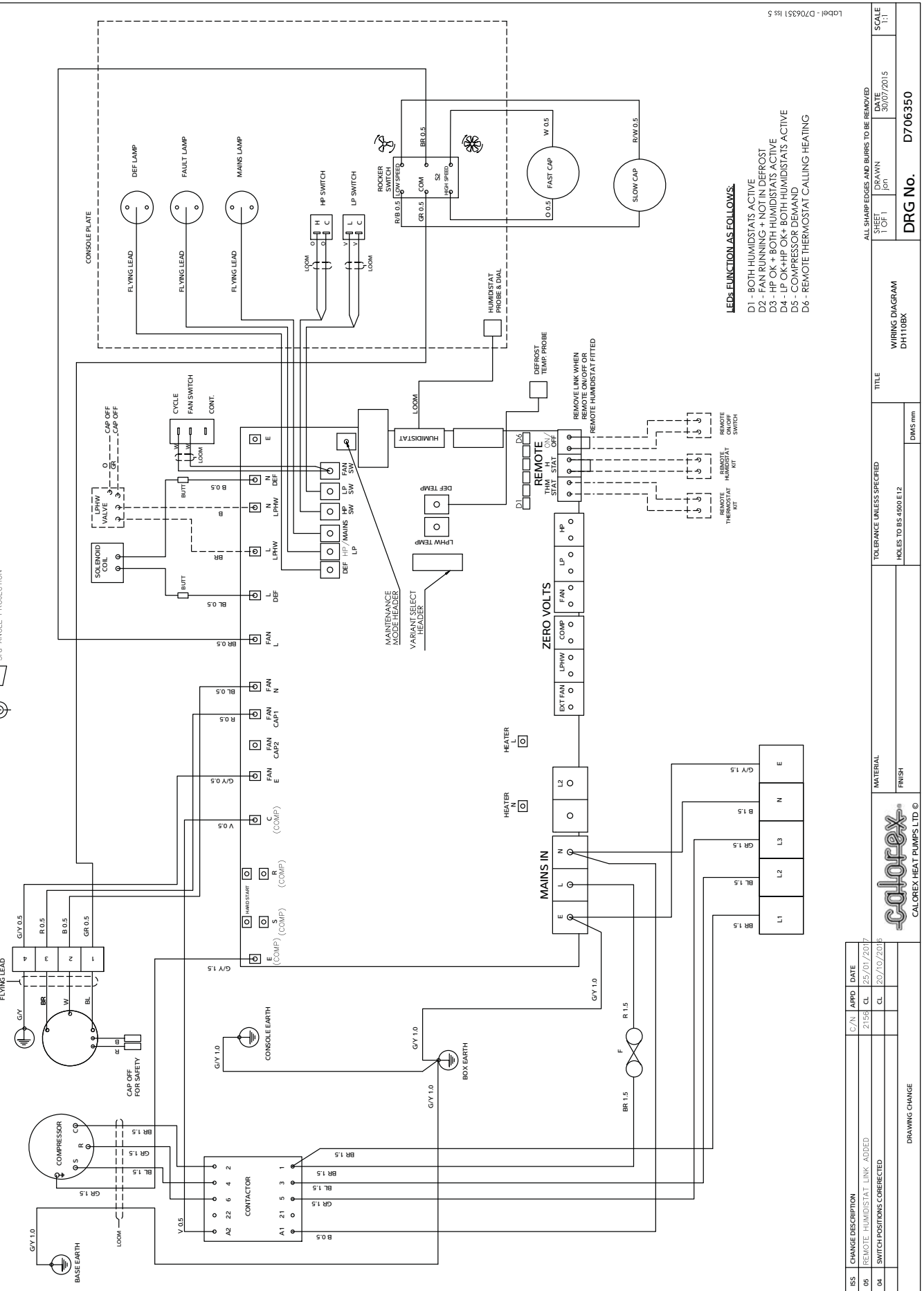
LABEL - D706451 ISS. 5

ISS	CHANGE DESCRIPTION	C/N	APPRO	DATE
05	REMOTE HUMIDISTAT LINK ADDED	2156	CL	25/01/2015
04	SWITCH POSITIONS CORRECTED		CL	20/10/2015

ALL SHARP EDGES AND BURRS TO BE REMOVED		DATE	
SHEET	1 OF 1	DRAWN	30/07/2015
TOLERANCE UNLESS SPECIFIED		SCALE	
HOLES TO BS 4300 E12		1:1	
DIM5 mm		DRG No. D706450	
TITLE		DH75/110 AX	





- LEDs FUNCTION AS FOLLOWS:**
- D1 - BOTH HUMIDISTATS ACTIVE
  - D2 - FAN RUNNING + NOT IN DEFROST
  - D3 - HP OK + BOTH HUMIDISTATS ACTIVE
  - D4 - LP OK+HP OK+ BOTH HUMIDISTATS ACTIVE
  - D5 - COMPRESSOR DEMAND
  - D6 - REMOTE THERMOSTAT CALLING HEATING

BS	CHANGE DESCRIPTION	C/N	APPD	DATE
05	REMOTE HUMIDISTAT LINK ADDED	2158	CL	25/01/2017
04	SWITCH POSITIONS CORRECTED	CL	CL	20/10/2016

MATERIAL	FINISH

TOLERANCE UNLESS SPECIFIED	Holes to BS 4800 E12	DIMS mm

TITLE	WIRING DIAGRAM	DRG No.	D706350
	DH110BX		

ALL SHARP EDGES AND BURRS TO BE REMOVED	SCALE	DATE	30/07/2015
	1:1		

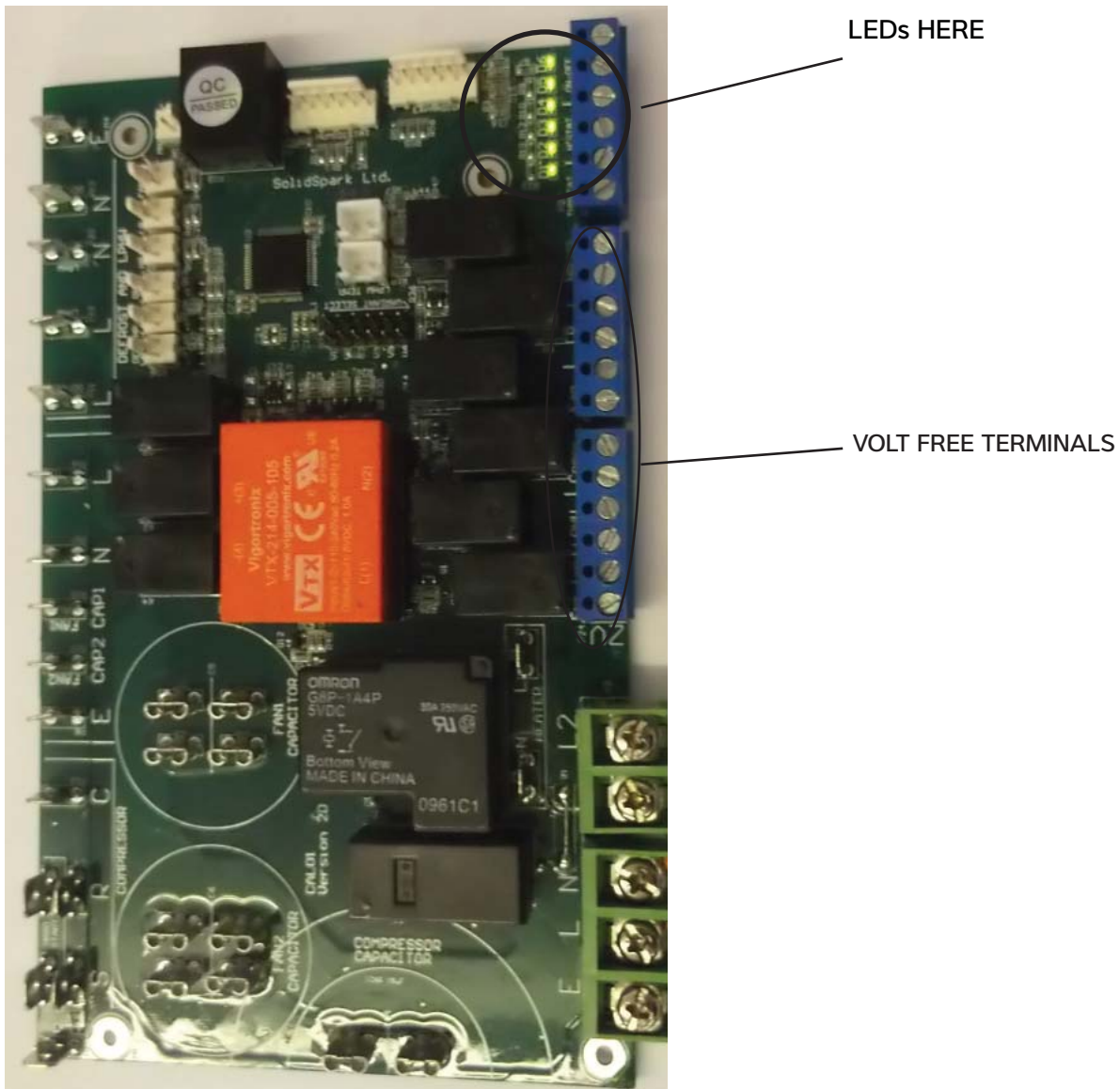
Label - D706351 ISS 5



DRAWING CHANGE

## SECTION 5.1 FEATURES OF THE PRINTED CIRCUIT BOARD

The Printed board, mounted in the Electric Box has six small LEDs in the top right hand corner. These illuminate to show different states and marked D1 to D6.



LED D1 is lit if the humidistat is calling for dehumidification and the remote humidistat switch is closed.

**BOTH HUMIDSTATS ACTIVE.**

LED D2 is lit if the fan should be running.

**FAN RUNNING + NOT IN DEFROST**

LED D3 is lit when the HP switch is closed, the machine is calling for dehumidification and the remote humidistat switch is closed.

**HP OK + BOTH HUMIDSTATS ACTIVE.**

LED D4 is lit when the LP and HP switches are closed, the machine is calling for dehumidification and the remote humidistat switch is closed.

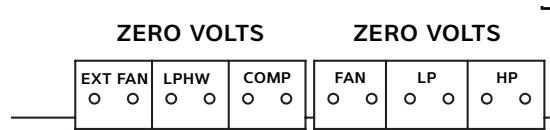
**LP OK+HP OK+ BOTH HUMIDSTATS ACTIVE.**

D5 is lit if the dehumidifier is asking for the compressor to be running.

D6 is lit if the Remote room thermostat is calling for heating.

## VOLT FREE TERMINALS

Six pairs of Volt Free terminals are present on the printed circuit board. Five of them can be used to connect the 75/110 to a BMS system or to lamps to monitor the status of the dehumidifier. The Maximum Inductive Load for these connections is 3A.



Compressor running.

Zero volt connection is closed when the compressor is running.

Fan running.

Zero volt connection is closed when the fan is running.

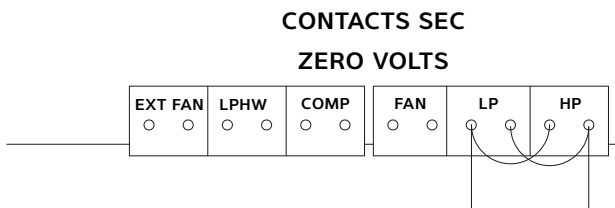
LP Fault.

Zero volt connection is closed when the Low Pressure switch is open.

HP Fault.

Zero volt connection is closed when the High Pressure switch is open.

If a volt free common fault is required for the LP and HP switches, they can be linked in parallel. See diagram below.



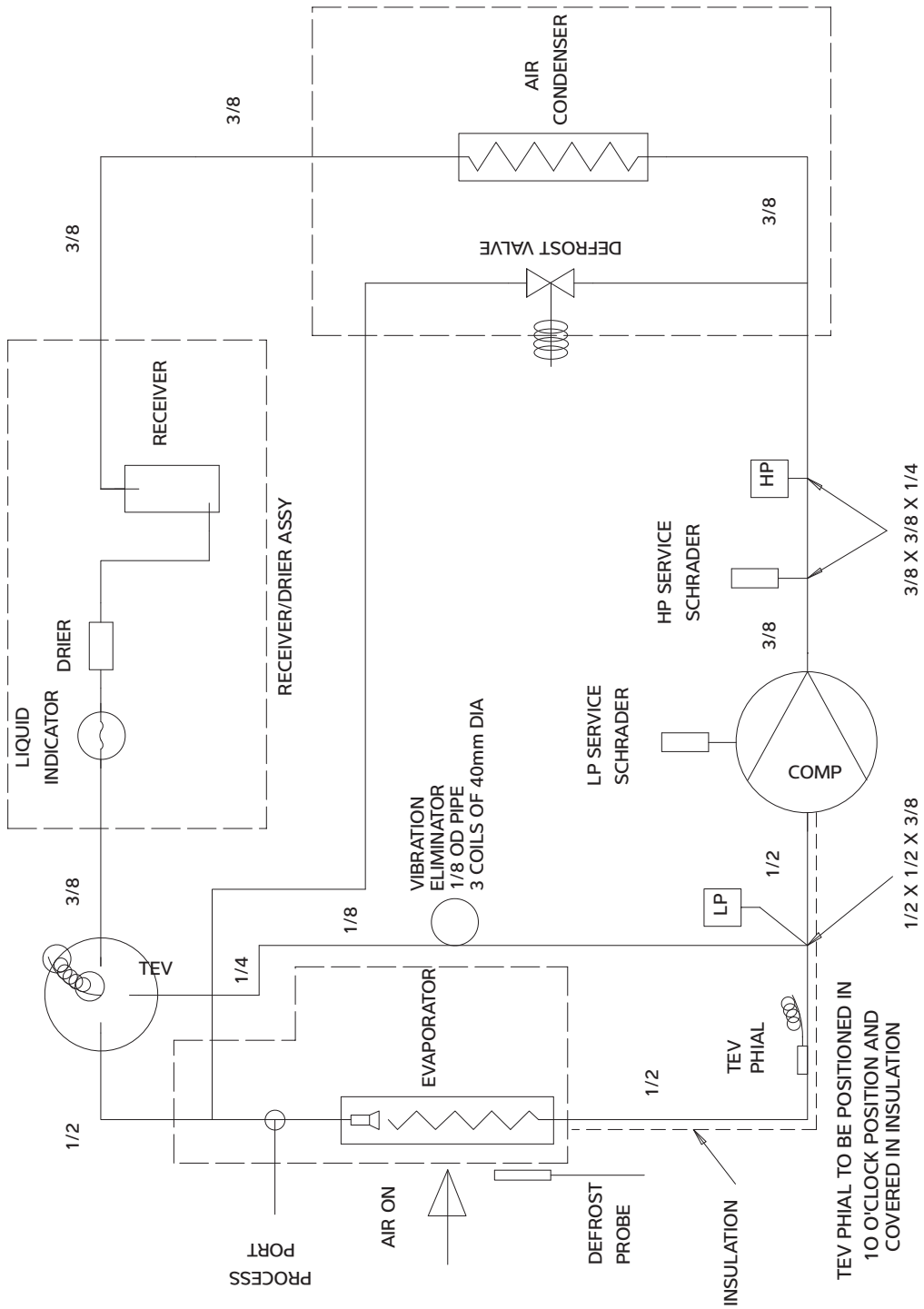
LPHW

When the Dehumidifier is fitted with an LPHW valve the Zero volt connection is closed when heating is required. Also known as the Boiler Go Signal.

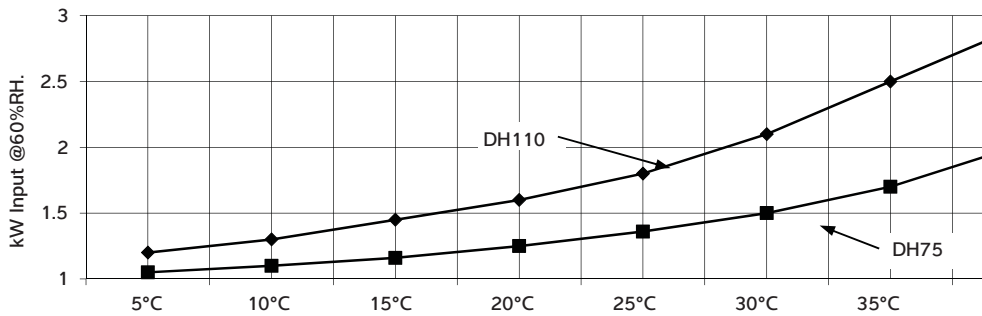
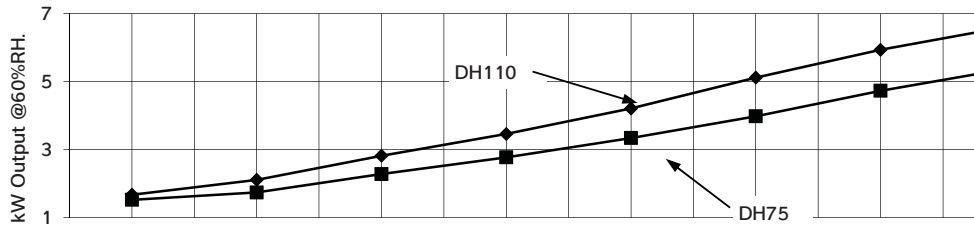
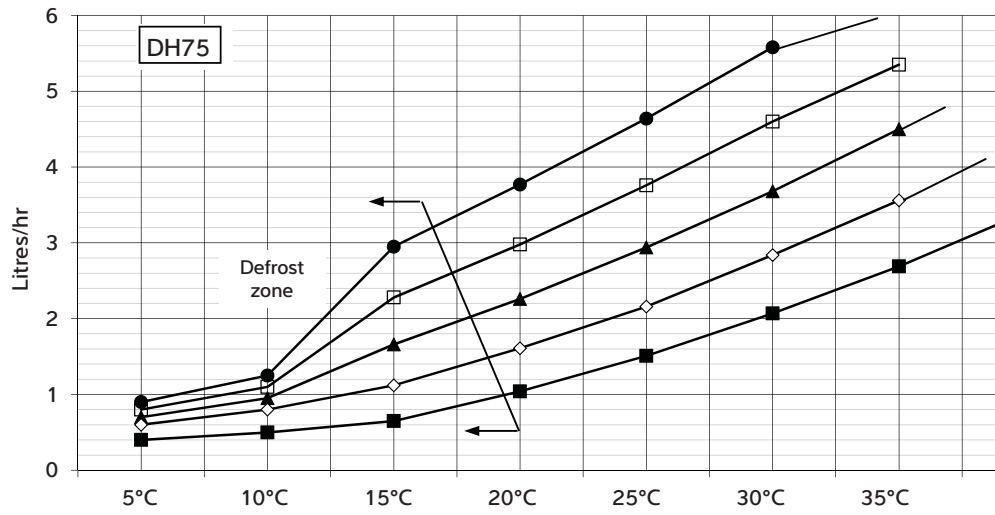
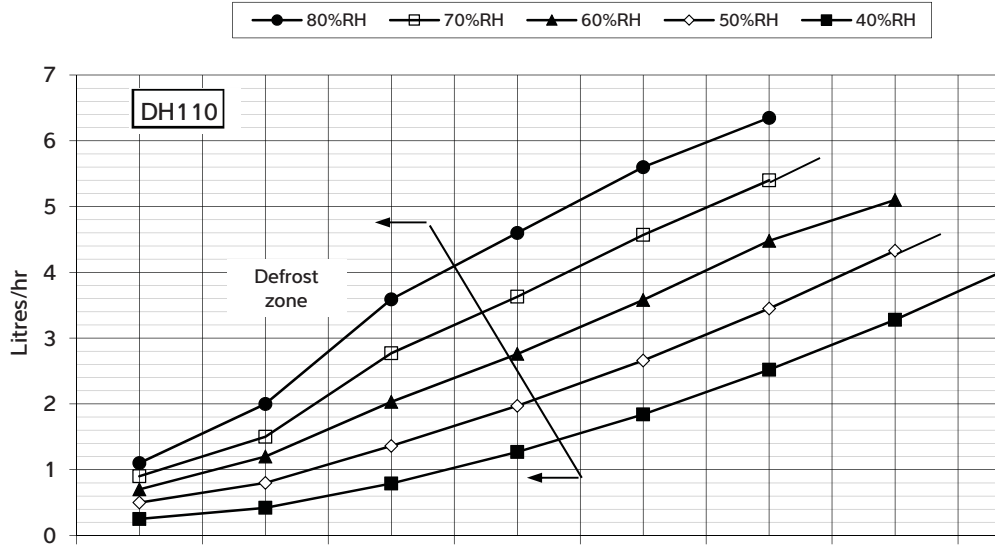
External fan.

Not used on this type of dehumidifier.

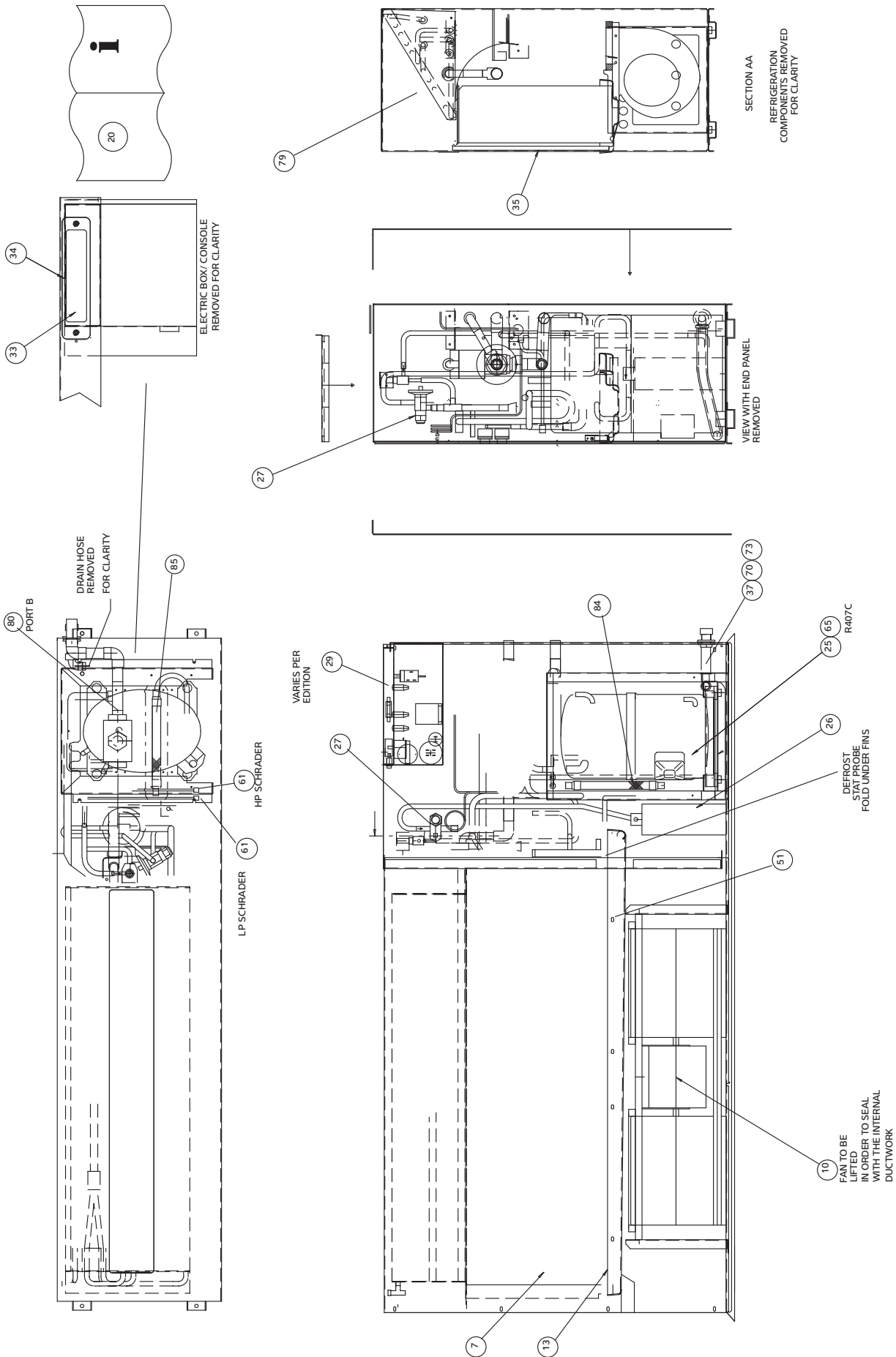
# SECTION 6.0 REFRIGERATION CIRCUIT



## SECTION 7.0 PERFORMANCE GRAPHS (FANS AT FULL SPEED)



# SECTION 8.0 SPARE PARTS LISTS



TWTW MACHINES :- SPARE PARTS FOR TWTW MACHINES ARE AS SHOWN.  
NOTE THAT COMPRESSOR IS POSITIONED WITH ELECTRICAL CONNECTIONS IN OPPOSITE CORNER TO THAT SHOWN.

**DH75/TTW75AX ASSEMBLY LESS LPHW (A391301) ISSUE 17**

ITEM No.	PART No	DESCRIPTION	QUAN	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD401251	COMPRESSOR, H79B17UABKA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404106	ELECTRIC BOX ASSY DH75AX	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET, CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES D229650 X 4)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT FOR NO. 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER BULKHEAD 15MM BRASS	1	off
73	SD111150	CLIP	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA 5/8 ANTI VIBRATION	1	off

**DH75/TTW75AX ASSEMBLY WITH LPHW (A391302) ISSUE 17**

ITEM NO.	PART No.	DESCRIPTION	QUANTITY	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD401251	COMPRESSOR, H79B17UABKA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404106	ELECTRIC BOX ASSY DH75AX (PCB)	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES D229650 X 4)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT FOR NO. 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER BULKHEAD 15MM BRASS	1	off
73	SD111150	CLIP	1	off
79	SD398501	COIL LPHW DH75/110	1	off
80	SD323903	MOTORISED VALVE 3 PORT	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA 5/8 ANTI VIBRATION	1	off



**DH110/TTW110AX LESS LPHW (A391501)**

ITEM	Part No	DESCRIPTION	QUANTITY	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD286252	COMPRESSOR BRISTOL, H79B22UABHA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404104	ELECTRIC BOX ASSY DH110AX (PCB)	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES D229650 X 4)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT NO. 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER BULKHEAD 15MM BRASS	1	off
73	SD111150	CLIP	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA, 5/8 ANTI VIBRATION	1	off

**DH110/TTW110AX WITH LPHW (A391502)**

ITEM NO.	PART No.	DESCRIPTION	QUANTITY	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD286252	COMPRESSOR BRISTOL, H79B22UABHA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404104	ELECTRIC BOX ASSY DH110AX (PCB)	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES D229650 X 4)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT NO. 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER BULKHEAD 15MM BRASS	1	off
73	SD111150	CLIP	1	off
79	SD398501	COIL LPHW DH75/110	1	off
80	SD323903	MOTORISED VALVE 3 PORT	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA, 5/8 ANTI VIBRATION	1	off

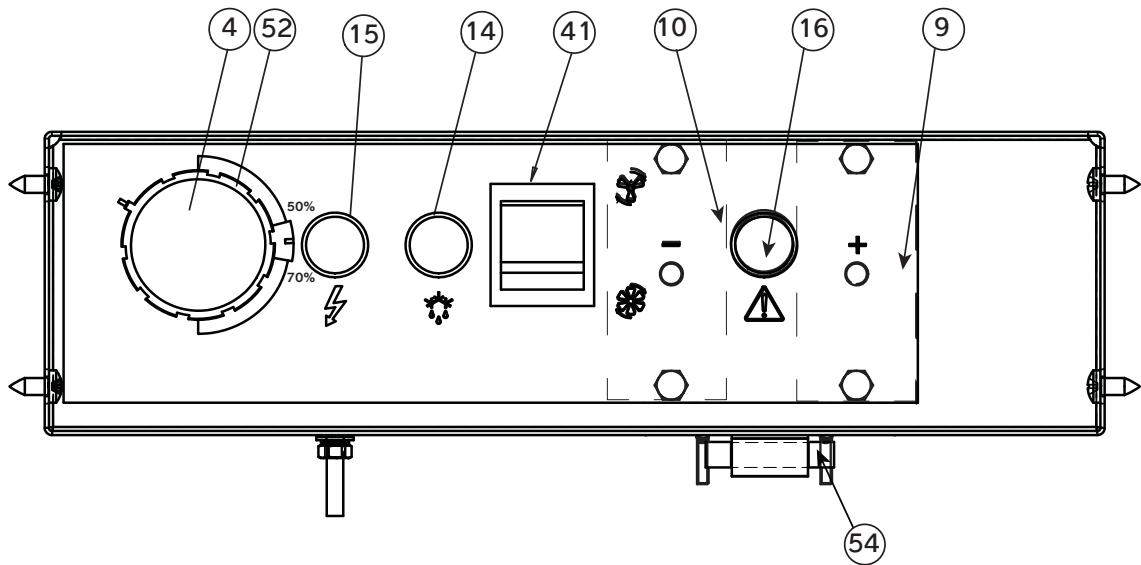
**DH110/TTW110BX LESS LPHW (A391601)**

ITEM NO.	PART No.	DESCRIPTION	QUANTITY	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD132856	COMPRESSOR BRISTOL, H79B22UDBEA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404105	ELECTRIC BOX ASSY DH75/110BX (PCB)	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES D229650 X 4)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT NO. 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER BULKHEAD 15MM BRASS	1	off
73	SD111150	CLIP	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA, 5/8 ANTI VIBRATION	1	off

**DH110/TTW110BX WITH LPHW(391602)**

ITEM	Part No	DESCRIPTION	QUANTITY	UNITS
7	SD338004	COIL ASSY DH75/110	1	off
10	SD378201	FAN ASSY	1	off
13	SD389101	DRIP TRAY DH75/110	1	off
20	SD405450	OWNER INSTRUCTIONS	1	off
25	SD132856	COMPRESSOR BRISTOL, H79B22UDBEA	1	off
26	SD149650	RECEIVER/DRIER	1	off
27	SD086851	TEV INE 2GA	1	off
29	SA404105	ELECTRIC BOX ASSY DH75/110BX (PCB)	1	off
33	SD393250	CONSOLE COVER	1	off
34	SD406150	GASKET, CONSOLE COVER	1	off
35	SD392350	FILTER (SPARE REQUIRES CLIP D229650 X 8)	1	off
37	SD111050	PIPE FLEXIBLE CLEAR PVC 16 BORE	1	m
51	SP144250	CLIP U NUT NO 8 SCREW	5	off
61	SD066350	SCHRADER VALVE	2	off
65	SP182554	REFRIGERANT R407C	2	kg
70	SD375850	COUPLER 15MM BRASS	1	off
73	SD111150	CLIP	1	off
79	SD398501	COIL LPHW DH75/110	1	off
80	SD323903	MOTORISED VALVE 3 PORT	1	off
84	SD406855	ANACONDA 1/2 ANTI VIBRATION	1	off
85	SD406853	ANACONDA, 5/8 ANTI VIBRATION	1	off

CONSOLE ASSEMBLY ALL DH/TTWS



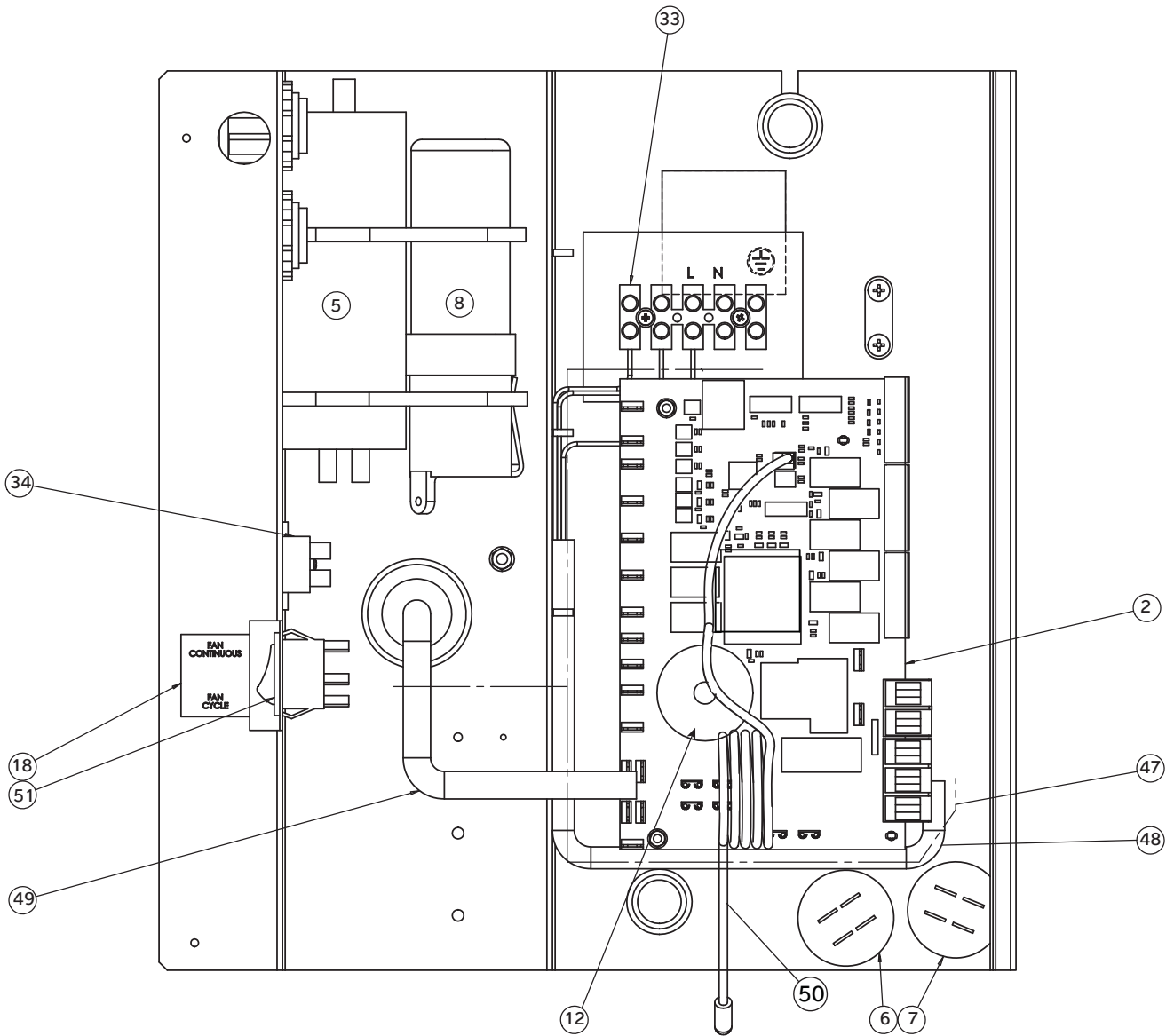
ASSY No SA404106 AT ISS 2 (11/08/2016). CONSOLE ITEMS FOR DH/TTW 75/110AX

ITEM NO.	PART NO.	DESCRIPTION	QTY.	Unit
4	SD698250	HUMIDISTAT PROBE	1	off
9	SD101350	HP SWITCH	1	off
10	SD384550	LP SWITCH	1	off
14	SD700350	LED LIGHT WHITE	1	off
15	SD700351	LED LIGHT RED	1	off
16	SD700352	LED LIGHT YELLOW	1	off
36	SD217151	SEALING GASKET	3	off
37	SP215050	SPIRENUT PLATED STEEL	3	off
41	SD387150	ROCKER SWITCH 2 POLE CHANGEOVER	1	off
52	SD041450	KNOB INDICATOR	1	off

CONSOLE ITEMS DH/TTW110BX

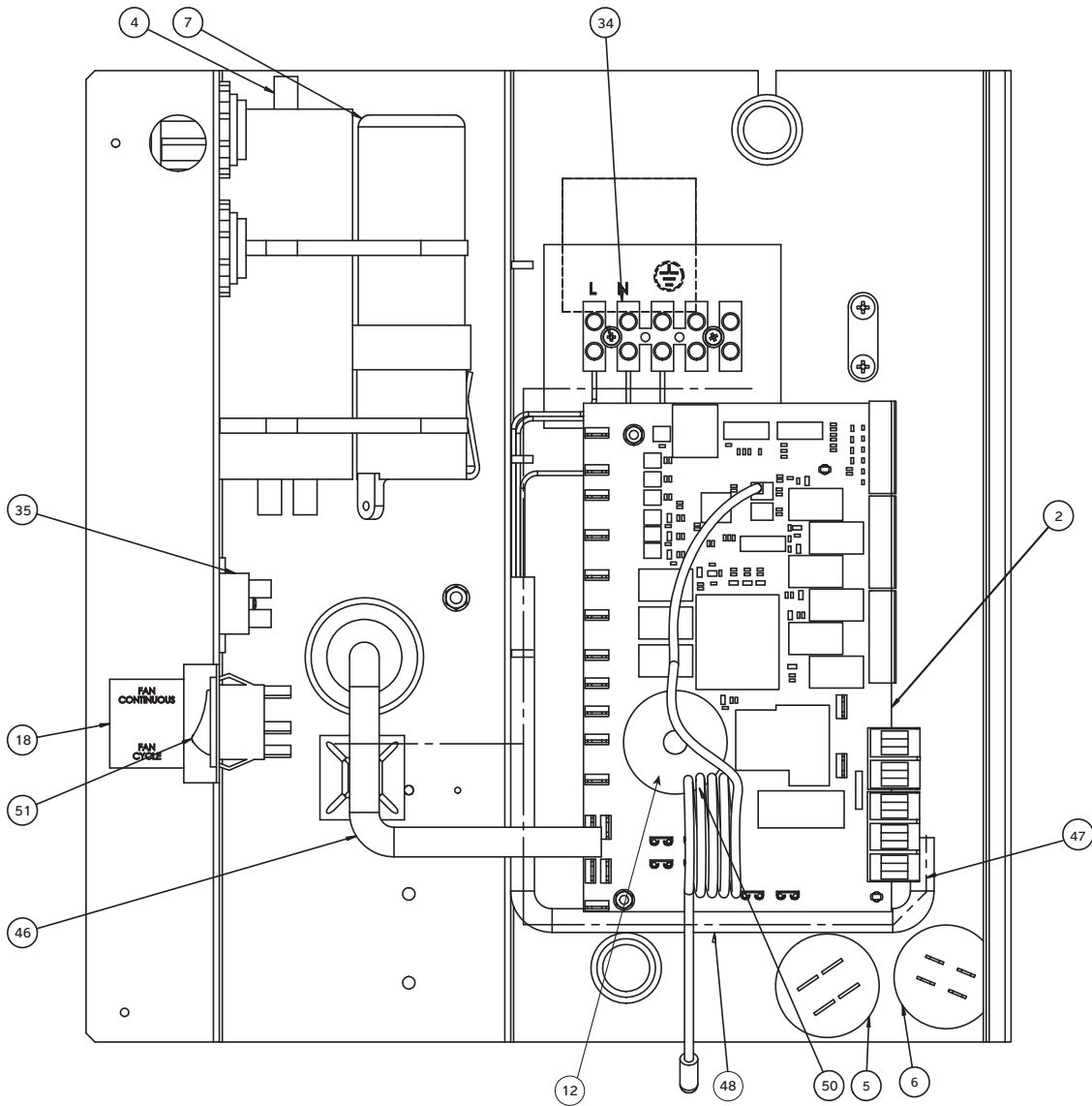
ITEM NO.	PART NO.	DESCRIPTION	QTY.	Unit
4	SD698250	HUMIDISTAT PROBE	1	off
9	SD101350	HP SWITCH	1	off
10	SD384550	LP SWITCH	1	off
14	SD700350	LED LIGHT WHITE	1	off
15	SD700351	LED LIGHT RED	1	off
16	SD700352	LED LIGHT YELLOW	1	off
36	SD217151	SEALING GASKET	3	off
37	SP215050	SPIRENUT PLATED STEEL	3	off
41	SD387150	ROCKER SWITCH 2 POLE CHANGEOVER	1	off
52	SD041450	KNOB INDICATOR	1	off
54	SD035350	FUSE QUICK ACTING 3A	1	off

ELECTRIC BOX ASSY DH75/TTW75AX



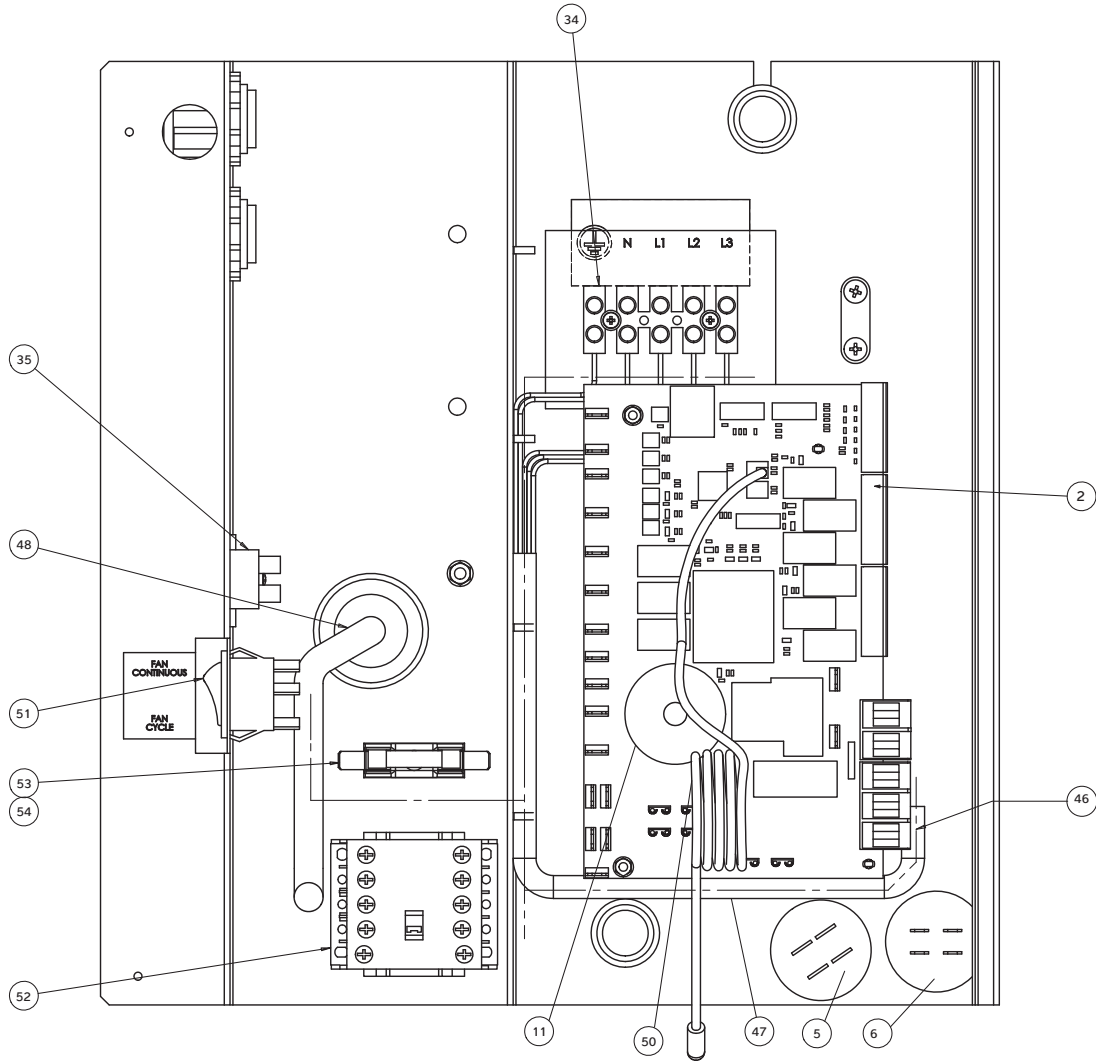
ASSY No SA404106 AT ISS 2 (11/08/2016). ELECTRIC BOX ASSY DH/TTW75AX				
ITEM NO.	PART NO.	DESCRIPTION	QTY.	Unit
2	SA695557	DEHUMIDIFIER PCB (OPTIONS)	1	off
5	SD251650	CAPACITOR 30 $\mu$ F	1	off
6	SD033150	CAPACITOR 10 $\mu$ F	1	off
7	SD033152	RUN CAP 11 $\mu$ F $\pm$ 5% 450V 50/60Hz	1	off
8	SD073150	HARD START CAP	1	off
12	SD325350	RUN/FAN CAPACITOR 4 $\mu$ F 450V 50/60Hz	1	off
18	SD189050	LABEL FAN CYCLE	1	off
33	SD072853	TERMINAL BLOCK 5 WAY 16A	1	off
34	SP098764	10A TERMINAL BLOCK 4 WAY	1	off
47	SA403104	LOOM ASSY DH75/110 AX	1	off
48	SD707202	COMPRESSOR LOOM DH75/110AX	1	off
49	SD707301	FAN/HP/LP SWITCH LEAD SET	1	off
50	SD698350	THERMISTOR PROBE	1	off
51	SD188950	ROCKER SWITCH 1POLE C/O 10A 240V	1	off

# ELECTRIC BOX ASSY DH110&TTW110AX



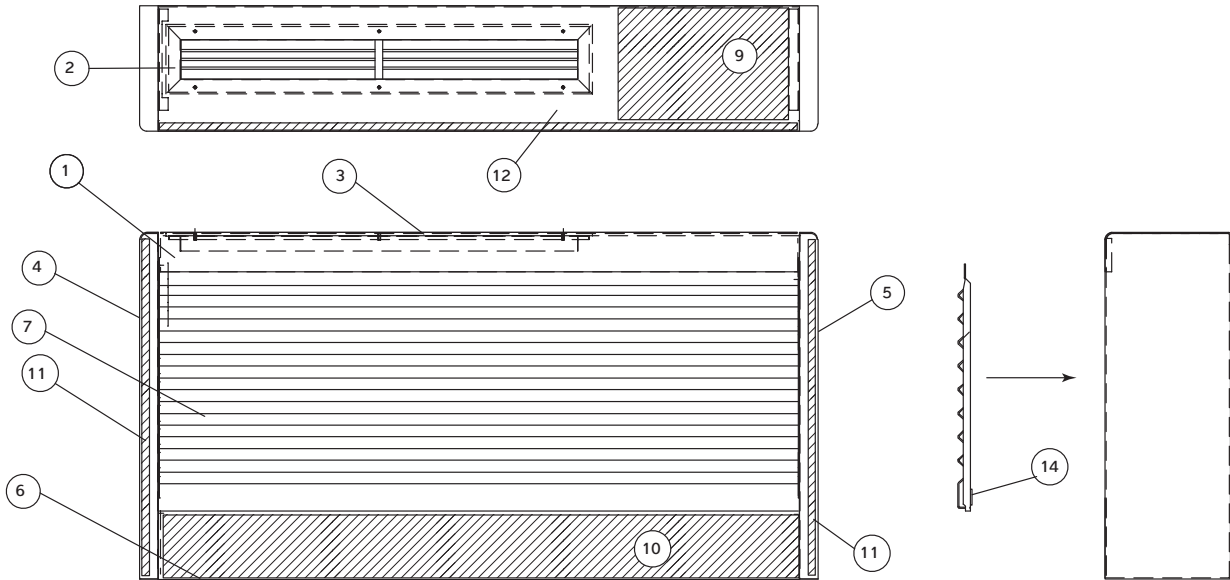
ASSY NO SA404104 AT ISS 2 (11/08/2016). ELECTRIC BOX ASSY DH/TTW110AX				
ITEM NO.	PART NO.	DESCRIPTION	QTY.	Unit
2	SA695557	DEHUMIDIFIER PCB (OPTIONS)	1	off
4	SD022550	CAPACITOR 35 $\mu$ F 440V 50/60Hz	1	off
5	SD033150	CAPACITOR 10 $\mu$ F	1	off
6	SD033153	RUN/FAN CAPACITOR 12 $\mu$ F 450V 50/60Hz	1	off
7	sd073150	HARD START CAPACITOR	1	off
11	SD325350	RUN/FAN CAPACITOR 4 $\mu$ F 450V 50/60Hz	1	off
18	SD189050	LABEL FAN CYCLE	1	off
34	SD072853	TERMINAL BLOCK 5 WAY 16A	1	off
35	SP098764	10A TERMINAL BLOCK 4 WAY	1	off
46	SD707301	FAN/HP/LP SWITCH LEAD SET	1	off
47	SA403104	LOOM ASSY DH75/110 AX	1	off
48	SD707202	COMPRESSOR LOOM DH75/110AX	1	off
50	SD698350	THERMISTOR PROBE	1	off
51	SD188950	ROCKER SWITCH 1 POLE C/O 10A 240V	1	off

ELECTRIC BOX ASSY DH110/TTW110BX



ASSY NO SA404105 AT ISS 2 (11/08/2016). ELECTRIC BOX ASSY DH/TTW110BX				
ITEM NO.	PART NO.	DESCRIPTION	QTY.	UNIT
2	SA695557	DEHUMIDIFIER PCB (OPTIONS)	1	off
5	SD033150	CAPACITOR 10 $\mu$ F	1	off
6	SD033153	RUN/FAN CAPACITOR 12 $\mu$ F 450V 50/60Hz	1	off
11	SD325350	RUN/FAN CAPACITOR 4 $\mu$ F 450V 50/60Hz	1	off
18	SD189050	LABEL FAN CYCLE	1	off
34	SD072853	TERMINAL BLOCK 5 WAY 16A	1	off
35	SP098764	10A TERMINAL BLOCK 4 WAY	1	off
46	SD707301	FAN/HP/LP SWITCH LEAD SET	1	off
47	SA403103	LOOM ASSY DH75/110 BX	1	off
48	SD707201	COMPRESSOR LOOM DH75/110BX	1	off
50	SD698350	THERMISTOR PROBE	1	off
51	SD188950	ROCKER SWITCH 1POLE C/O 10A 240V	1	off
52	SD392550	CONTACTOR 12A MINATURE	1	off
53	SD216550	FUSE HOLDER	1	off
54	SD035350	FUSE QUICK ACTING 3A	1	off

## COVER ASSY

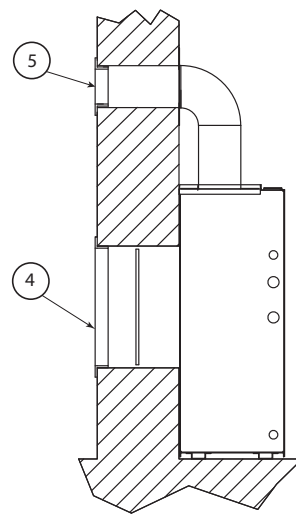
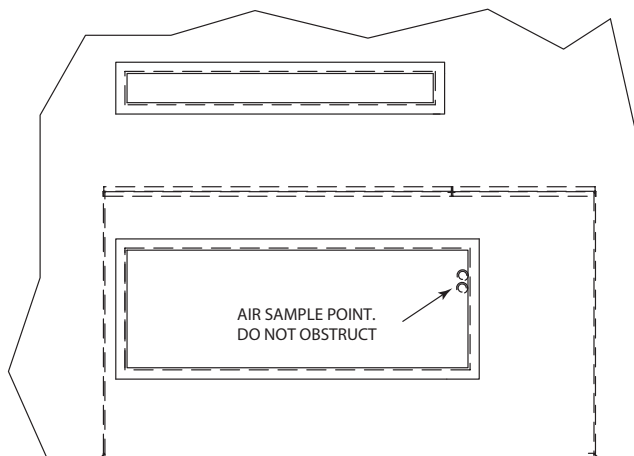


ITEM NO	PART NO	DESCRIPTION	QUAN	UNITS
1	SD393501	FRONT COVER	1	off
	SA407801	FRONT COVER GRILLE & INSULATION	1	off

CONSISTS OF:

2	SD381851	GRILLE	1	off
3	D402601	TOP	1	off
4	D393350	SIDE LH	1	off
5	D393351	SIDE RH	1	off
6	D402701	BASE	1	off
7	D402801	INLET GRILLE	1	off
9	D405352	INSULATION TOP PANEL RH	1	off
10	D405353	INSULATION FRONT PANEL LOWER	1	off
11	D405354	INSULATION SIDE PANEL	2	off
12	D405355	INSULATION FRONT COVER GASKET	1	off
14	D405357	INSULATION GRILLE PANEL BASE	2	off

## TTW DUCT/ GRILLES



ITEM NO	PART NO	DESCRIPTION	QUAN	UNITS
4	SD381852	GRILLE INLET HINGED	1	off
5	SD381853	GRILLE OUTLET	1	off
14	D405357	INSULATION GRILLE PANEL BASE	2	off

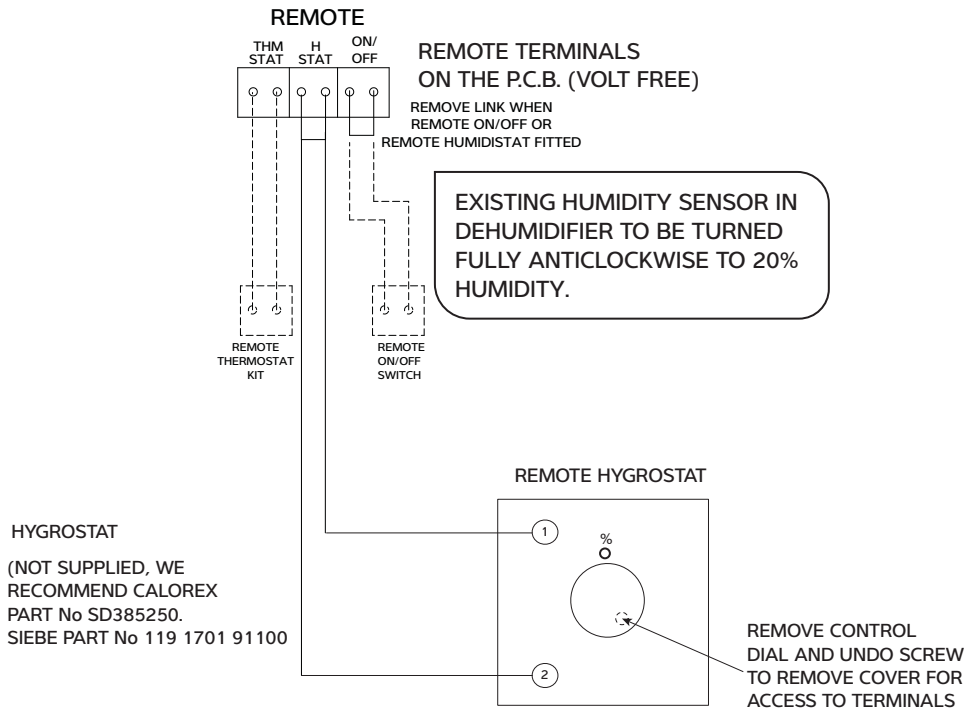
## SECTION 9.0 OPTIONAL ITEMS, REMOTE CONTROLS.

### REMOTE HYGROSTAT INSTALLATION INSTRUCTIONS.

Isolate machine from mains supply before commencing with installation.

Remove cover of unit for access to electric box. Connect to Remote terminals on Printed Circuit Board marked H STAT.

Terminate remote Hygrostat to unit with minimum 0.5mm<sup>2</sup> cable as shown below.

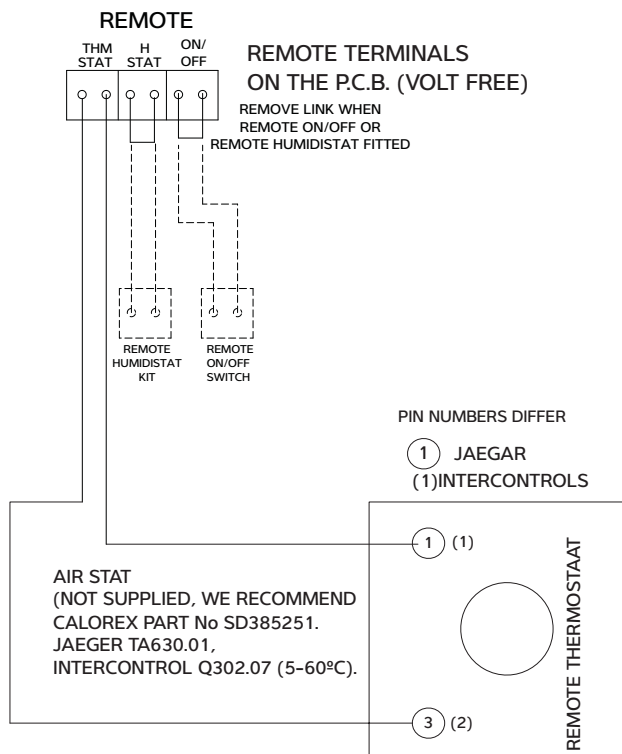


### REMOTE THERMOSTAT INSTALLATION -MUST BE FITTED TO LPHW VERSIONS

Isolate machine from mains supply before commencing with installation.

Remove cover of unit for access to electric box. Connect to Remote terminals on Printed Circuit Board marked THM STAT.

Terminate remote Thermostat to unit with minimum 0.5mm<sup>2</sup> cable as shown below.



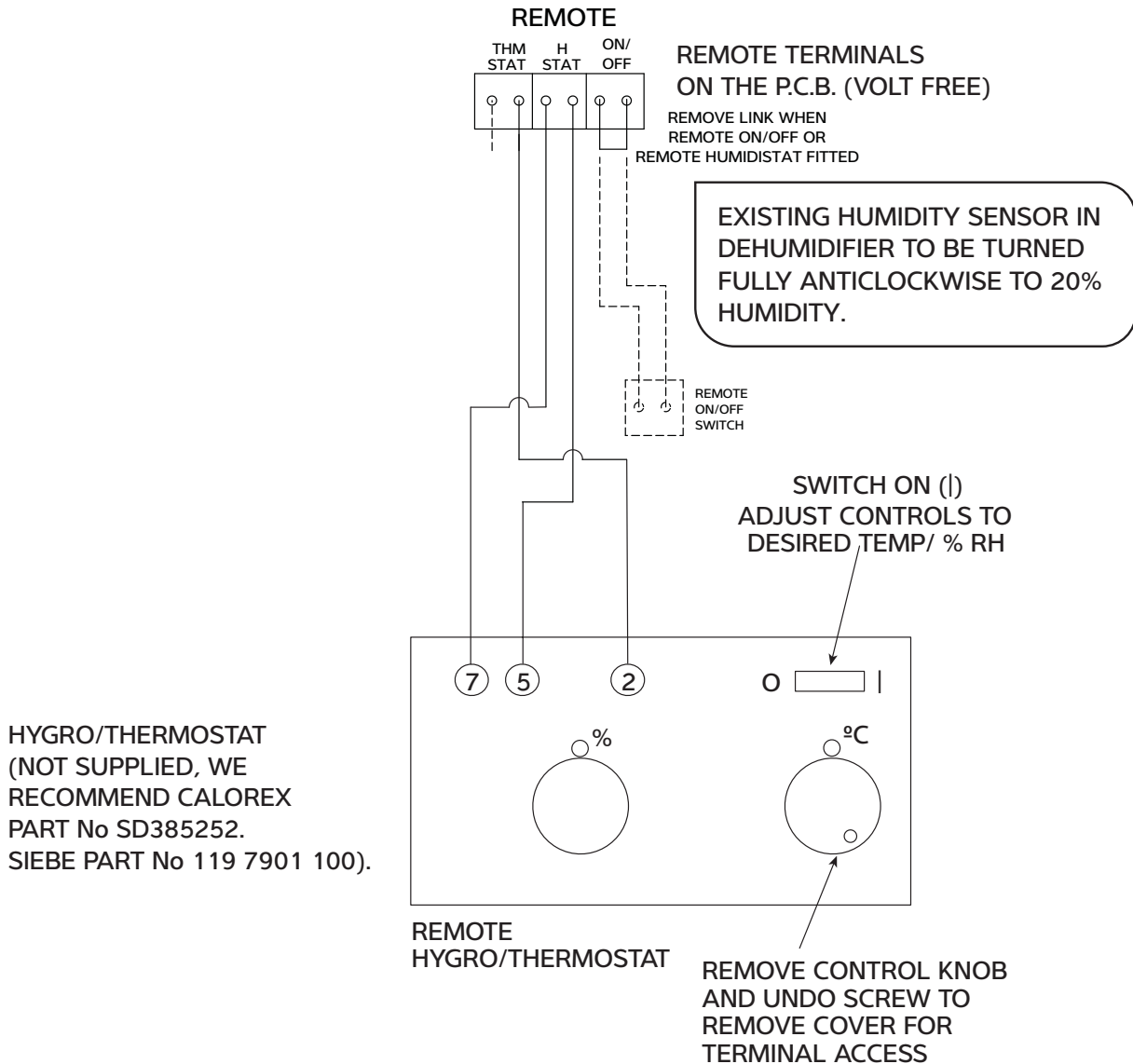


## REMOTE HYGRO/THERMOSTAT INSTALLATION INSTRUCTIONS.

Isolate machine from mains supply before commencing with installation.

Remove cover of unit for access to electric box. Connect to Remote terminals on Printed Circuit Board marked H STAT (both) and one marked THM STAT.

Terminate remote Hygro/Thermostat to unit with minimum 0.5mm<sup>2</sup> cable as shown below.



## REMOTE ON/OFF TERMINALS - (VOLT FREE)

Isolate machine from mains supply before commencing with installation.

Remove cover of unit for access to electric box. Connect to Remote terminals on Printed Circuit Board marked ON/OFF.

Connect the other ends of the leads to a switch or BMS system so that the dehumidifier can be controlled remotely.

Terminate remote on/off switch to unit with minimum 0.5mm<sup>2</sup> cable.

Maximum 3A Non Inductive Load.

## SECTION 10.0 WARRANTY CONDITIONS

The following exclusions apply to the Warranty given by Calorex Heat Pumps 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 is not in accordance with the current procedures as defined by Calorex Heat Pumps Ltd.
3. The dehumidifier has been worked upon or is adjusted by anyone other than a person authorised to do so by Calorex Heat Pumps 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. (LPHW units).
6. The electrical supply is insufficient or in any way incorrect.
7. The dehumidifier has suffered frost damage.

IF IN DOUBT PLEASE ASK

**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 Dehumidifier please contact the Calorex Service Department giving your name, address and serial number of your Dehumidifier. A card will be sent to you for completion.

Email [service@calorex.com](mailto:service@calorex.com)

Web Site <http://www.calorex.com>



PHONE 01621 857171

FAX 01621 850871

Please give MODEL NUMBER and SERIAL NUMBER of your Dehumidifier when making technical or service enquiries. This will assist in correct diagnosis and ensure service can provide with a minimum delay.