



Drawing	: - TPC 400
Issue	: - 9
Date	: - 10/07/18

**DD700**  
**10550GR-US – 220V / 3PH / 60HZ**  
**INDUSTRIAL DEHUMIDIFIER**

**OWNER'S MANUAL**

**[www.eipl.co.uk](http://www.eipl.co.uk)**



Drawing	: - TPC 400
Issue	: - 9
Date	: - 10/07/18

## DD700

# PACKAGE CONTENTS

Item	Description	Quantity
10550GR-US	Dehumidifier	1
TPC400	Manual	1

## UNPACKING

Carefully remove the DD700 dehumidifier unit from its transit box and visually check for signs of transit damage. If there is evidence of damage DO NOT attempt to operate the unit, call your supplier for advice. Do not discard the packing, it will be useful when transporting the dehumidifier unit in the future.

## INTRODUCTION

Dehumidifiers remove moisture from the air that is circulating through the unit. The resulting reduction of relative humidity helps prevent rust, rot, mould, mildew and condensation within the room, or other enclosed spaces where the dehumidifier is used.

The DD700 is of the desiccant wheel type designed to dry air by passing a large volume of air, the “process” air through a slowly rotating Silica gel rotor. Silica gel is a hygroscopic material that absorbs moisture direct from the air. As the air passes through the rotor the humidity of the air is reduced, whilst the moisture content of the rotor is increased. A smaller volume of air, the reactivation air, is heated by an internal heater and passes through a portion of the rotor in the opposite direction. As this heated air passes through the rotor it will “reactivate” it by removing the moisture content from the silica gel material. The reactivation air will leave the humidifier as warm, moist air and must be vented to outside of the building.

Continuous circulation of the room air through the dehumidifier unit gradually reduces the relative humidity in the room.

The DD700 dehumidifier is a robust, compact unit designed to control the humidity in the enclosed space in which it is placed. The casing is fabricated from Steel then painted and has been designed for the exacting conditions which can prevail in offices, shops, houses, restaurants, public houses etc. It combines lightness and compactness with high reliability and strength.

The unit is thermally protected and will automatically switch off in excessive or abnormal conditions.

The dehumidifier has two separate filters. One in the “process” air inlet and one in the “reactivation” air inlet, used to clean the air entering the dehumidifier.



Drawing	: - TPC 400
Issue	: - 9
Date	: - 10/07/18

## SPECIFICATIONS

<b>MODEL:</b>	DD700
<b>HEIGHT:</b>	1020mm (40")
<b>WIDTH:</b>	711mm (28")
<b>DEPTH:</b>	584mm (23")
<b>WEIGHT:</b>	80Kg (176.4lbs)
<b>POWER SUPPLY:</b>	220V, 3 ph, 60Hz
<b>CURRENT:</b>	20A (max)
<b>POWER</b>	7.5 kW (max)
<b>F1 CONTROLS FUSE</b>	2A 250V 5x20 Cartridge fuse
<b>PROCESS AIRFLOW MAXIMUM:</b>	1500m <sup>3</sup> /hr (883 cfm)
<b>PROCESS AIRFLOW NOMINAL:</b>	700m <sup>3</sup> /hr (412 cfm)
<b>REGENERATION AIRFLOW NOMINAL:</b>	160m <sup>3</sup> /hr (94 cfm)
<b>PROCESS AIR OUTLET DIA:</b>	200mm (8")
<b>REGENERATION AIR OUTLET DIA:</b>	150mm (6")
<b>ROTOR WHEEL SPEED:</b>	13.6
<b>ROTOR SIZE DIA X DEPTH:</b>	350mm (13.8") x 100mm (4")
<b>HIGH EXTRACTION SETTING @ 27 °C 60% RH:</b>	109 l/day (231 ppd)
<b>HIGH EFFICIENCY SETTING @ 27 °C 60% RH:</b>	87 l/day (184 ppd)
<b>DEEP DRYING SETTING @ 27 °C 60% RH:</b>	97 l/day (205 ppd)
<b>TYPICAL DRY AIR OFF HIGH EXTRACTION SETTING (%RH)</b>	18
<b>TYPICAL DRY AIR OFF HIGH EFFICIENCY SETTING (%RH)</b>	18
<b>TYPICAL DRY AIR OFF DEEP DRYING SETTING (%RH)</b>	8
<b>MINIMUM OPERATING TEMPERATURE:</b>	-20 °C (-4 °F)
<b>MAXIMUM OPERATING TEMPERATURE</b>	40 °C (104 °F)











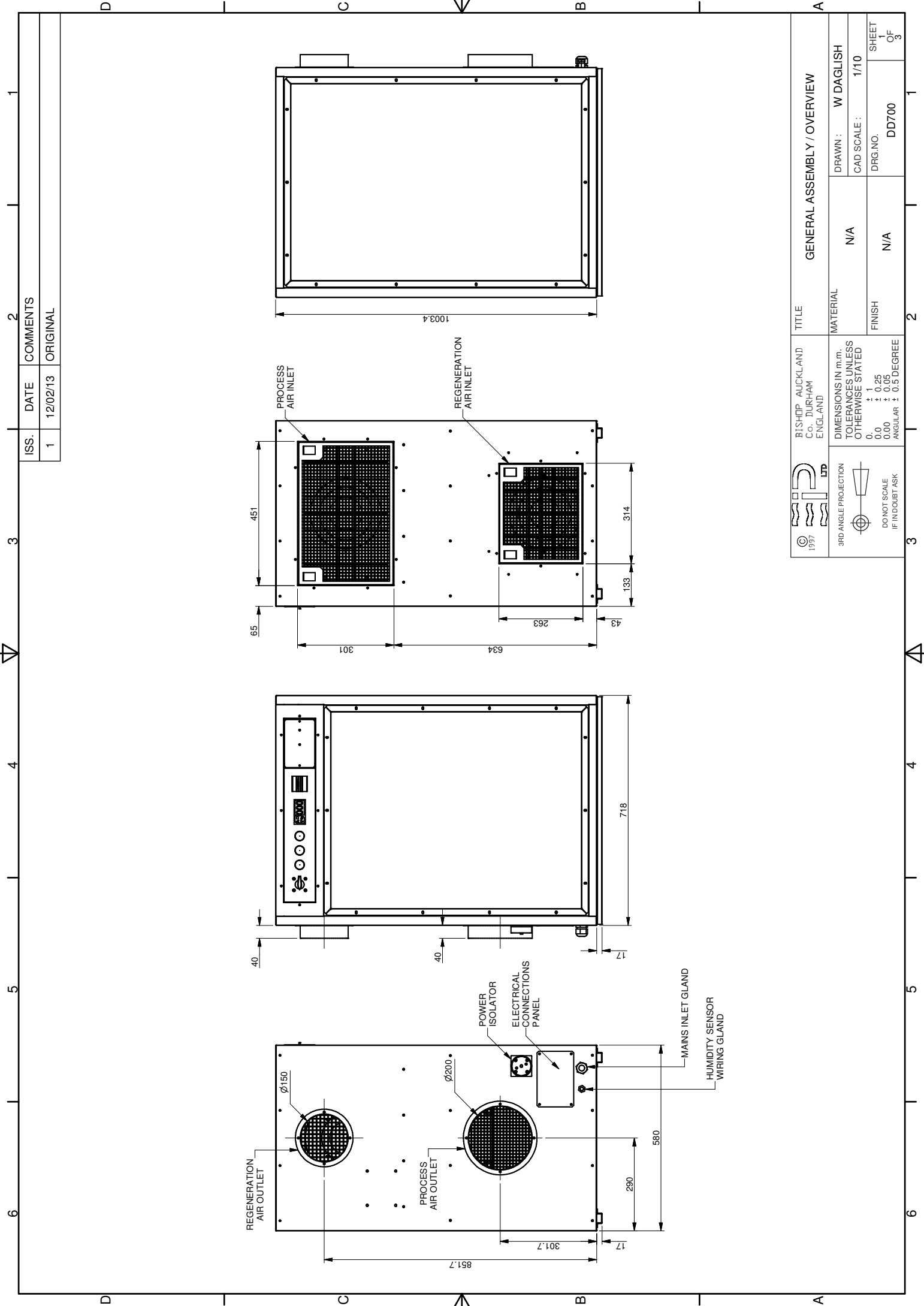




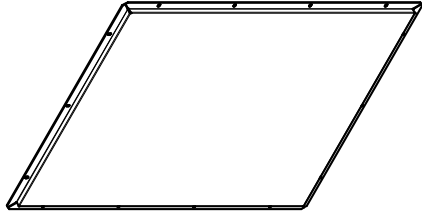
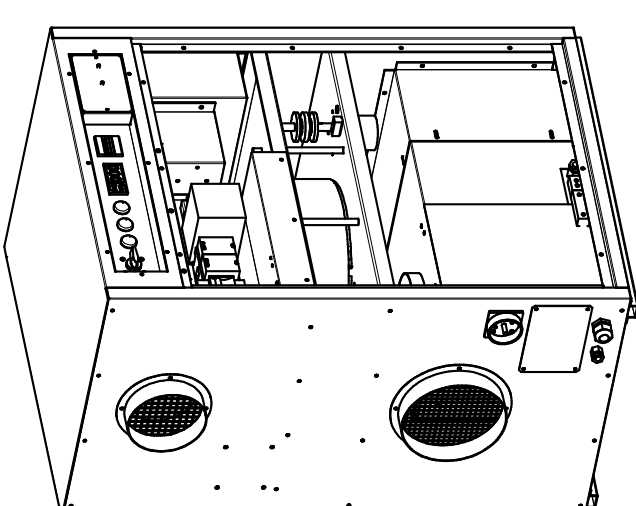
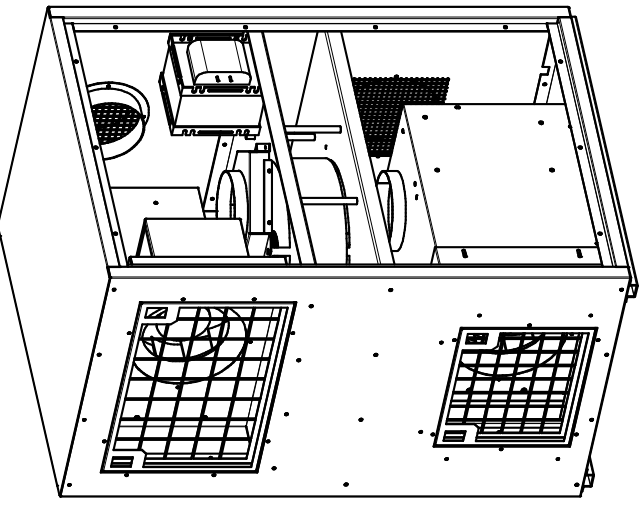
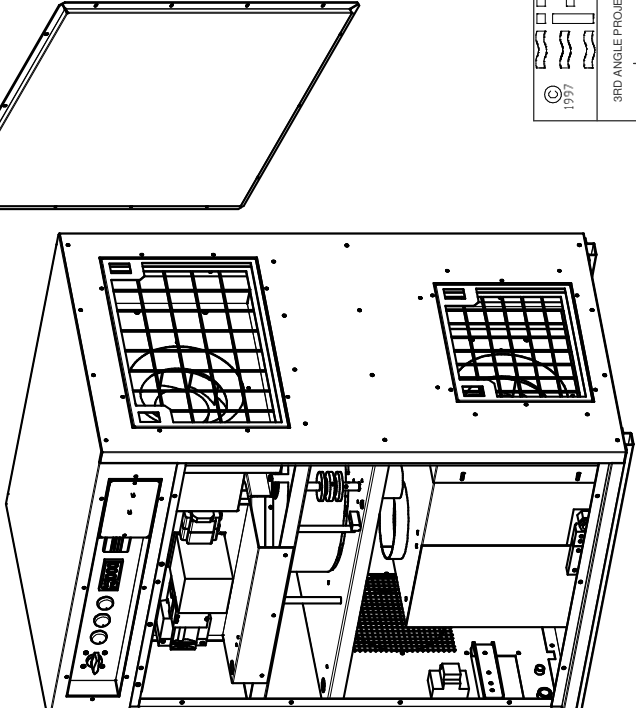
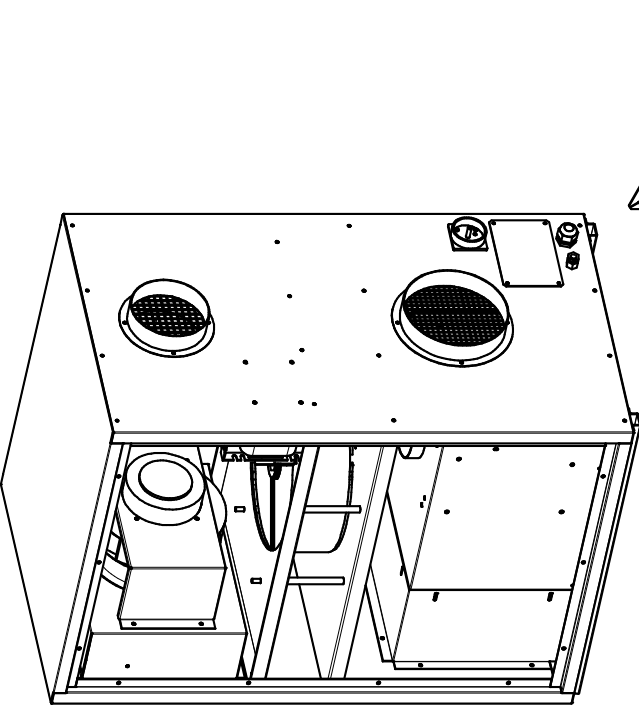
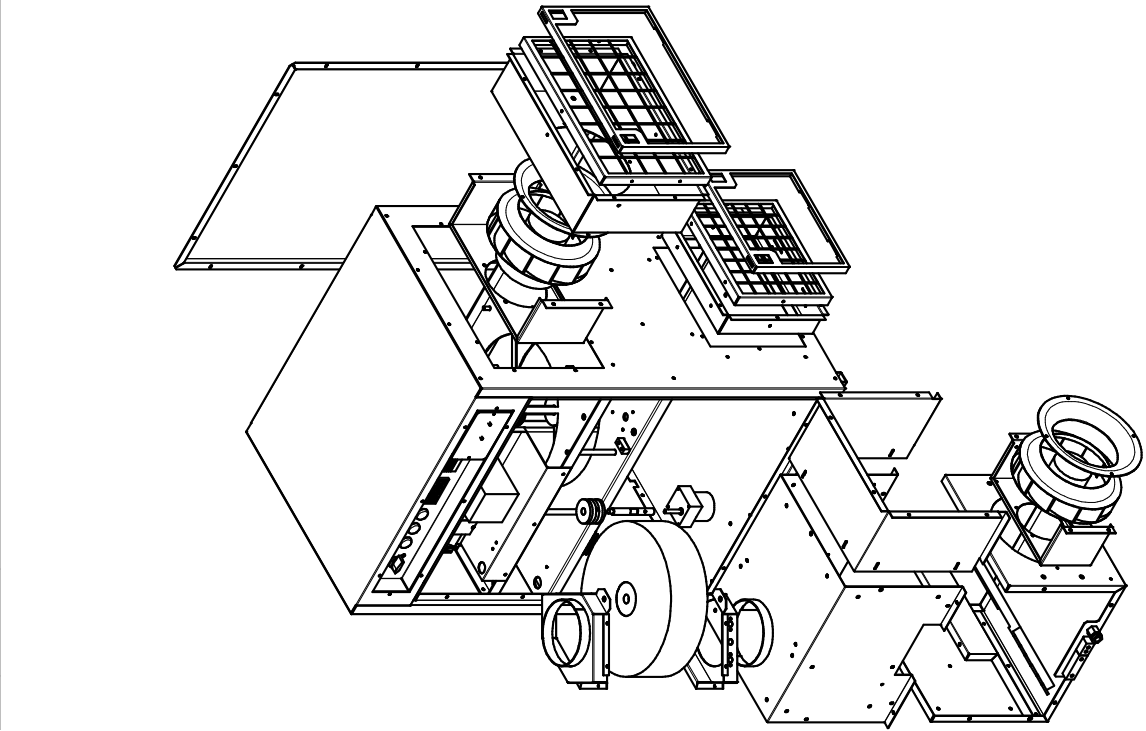






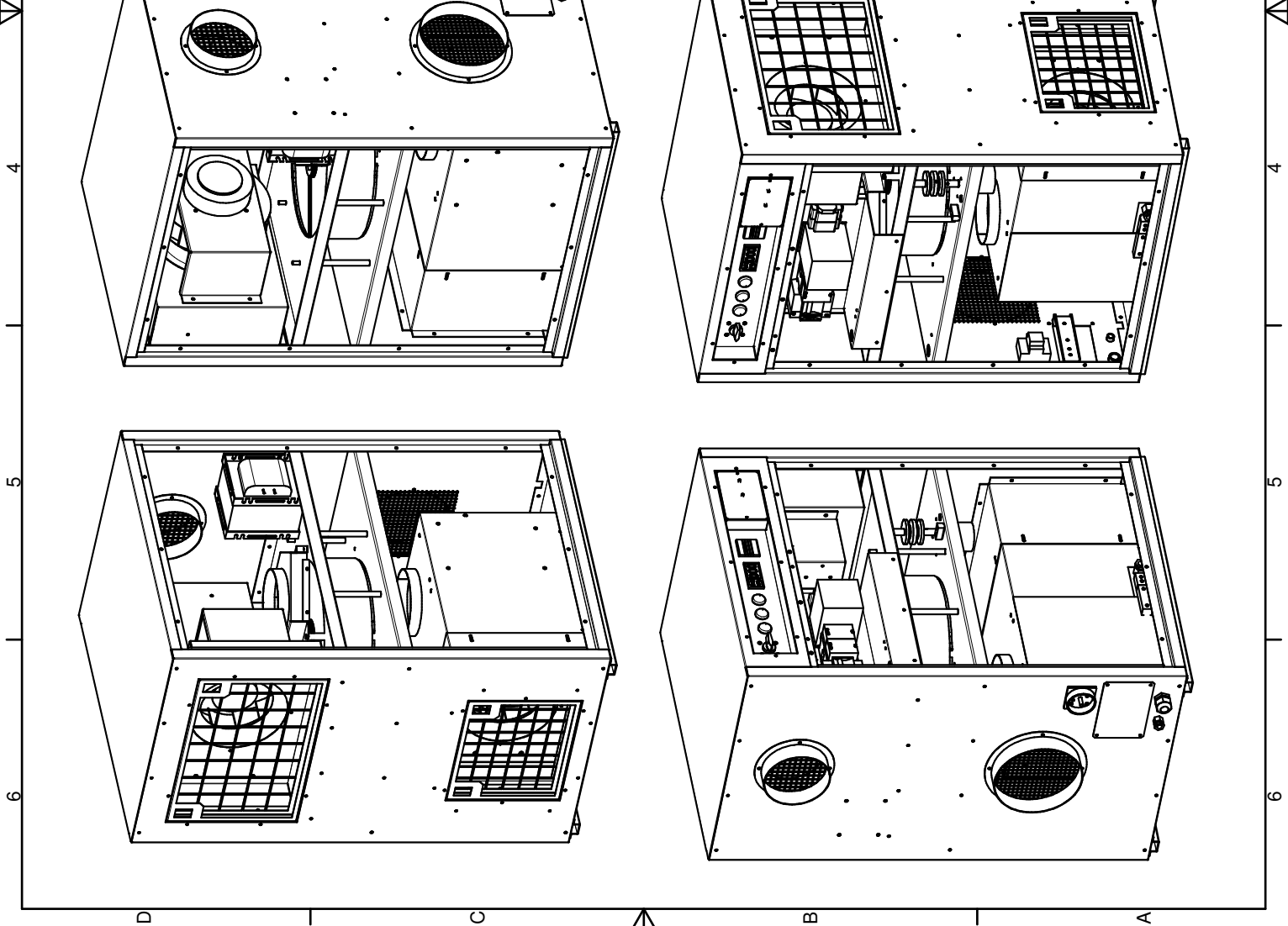


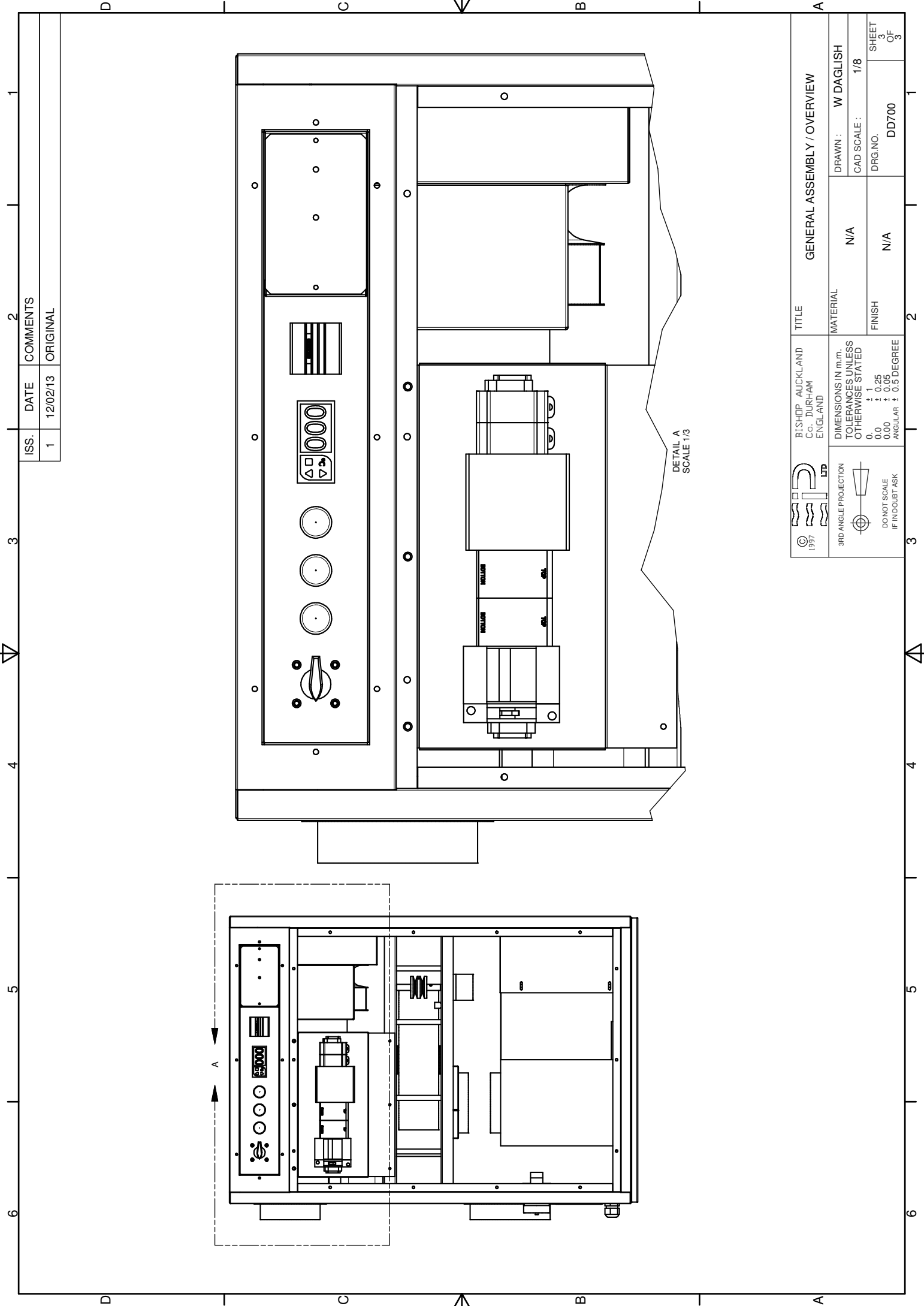
ISS.	DATE	COMMENTS
1	12/02/13	ORIGINAL



BISHOP AUCKLAND Co. DURHAM ENGLAND		GENERAL ASSEMBLY / OVERVIEW	
DIMENSIONS IN m.m. TOLERANCES UNLESS OTHERWISE STATED		MATERIAL	N/A
0	+ 1	FINISH	N/A
0.0	+ 0.25	DRG.NO.	DD700
0.00	+ 0.05	CAD SCALE:	1/10
ANGULAR	+ 0.5 DEGREE	SHEET	3
		OF	3

© 1997  
3RD ANGLE PROJECTION  
DO NOT SCALE  
IF IN DOUBT ASK





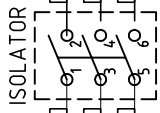
ISS.	DATE	COMMENTS
1	12/02/13	ORIGINAL

BISHOP AUCKLAND Co. DURHAM ENGLAND		GENERAL ASSEMBLY / OVERVIEW	
 3RD ANGLE PROJECTION DO NOT SCALE IF IN DOUBT ASK	DIMENSIONS IN m.m. TOLERANCES UNLESS OTHERWISE STATED	MATERIAL	TITLE
	0 ± 1 0.0 ± 0.25 0.00 ± 0.05 ANGULAR ± 0.5 DEGREE	N/A	N/A
		FINISH	DRAWN : W DAGLISH
			CAD SCALE : 1/8
			DRG.NO. DD700
			SHEET 1 OF 3

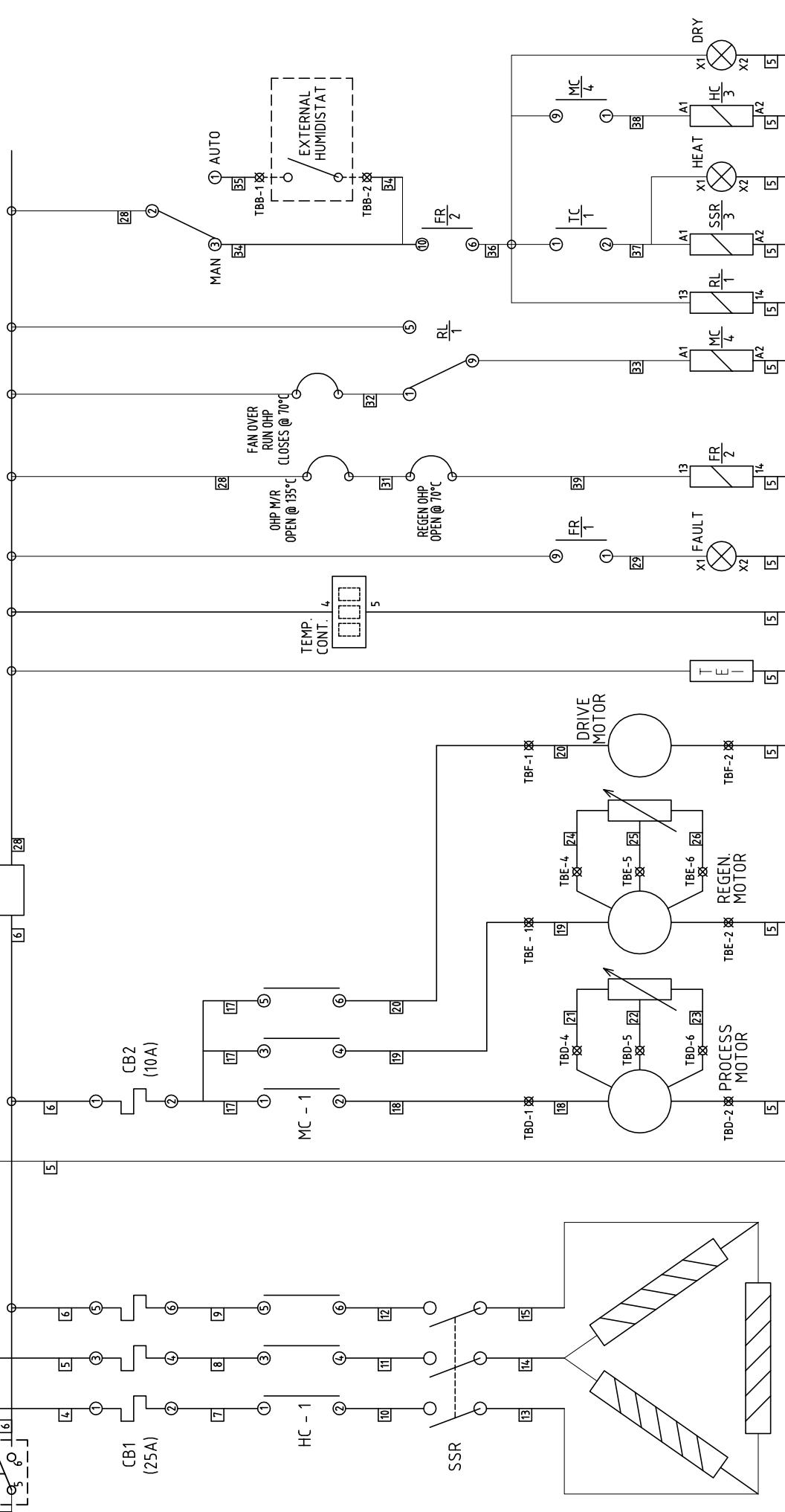
DETAIL A  
SCALE 1/3



220  
3PH  
60Hz



FUSE  
F1  
2A



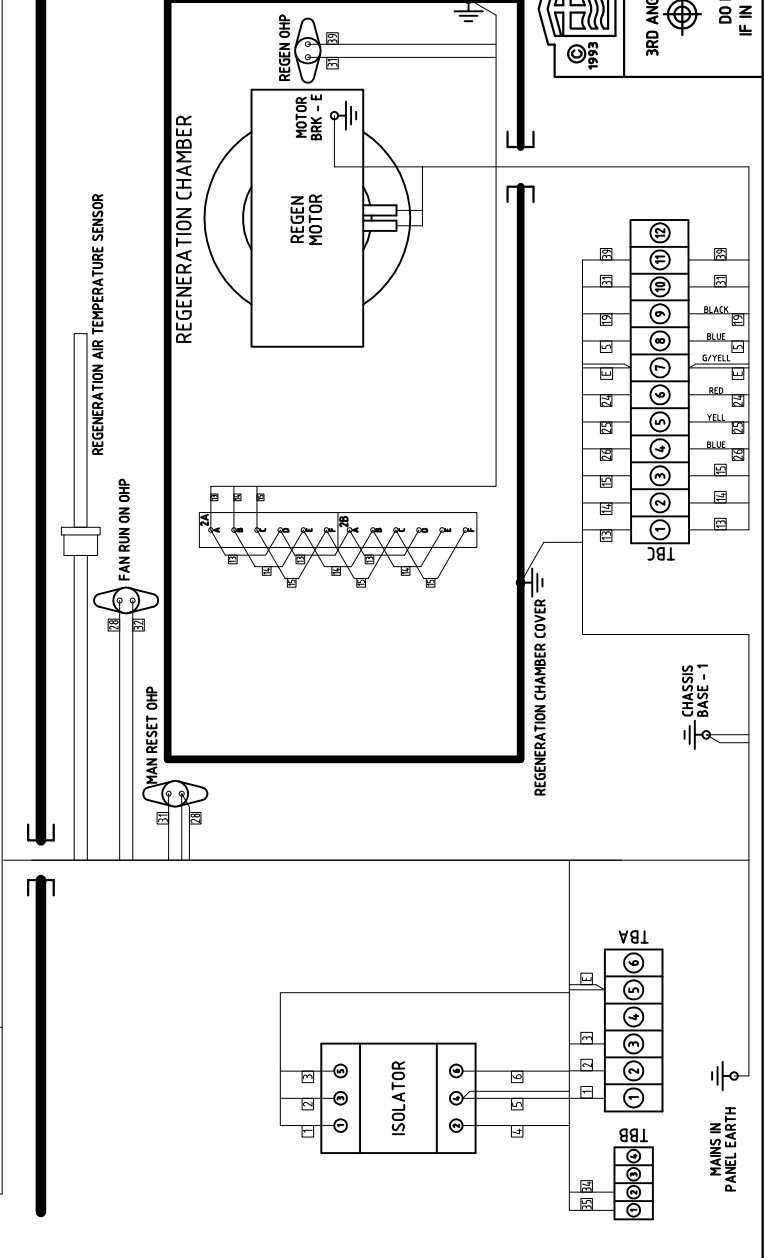
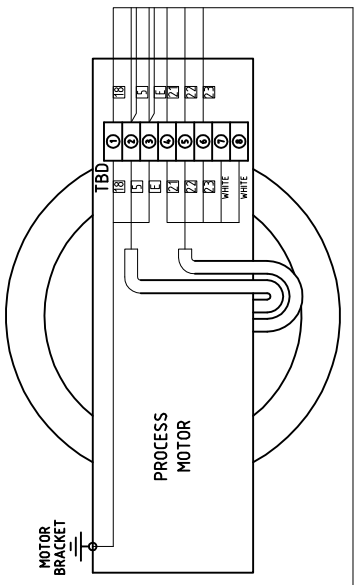
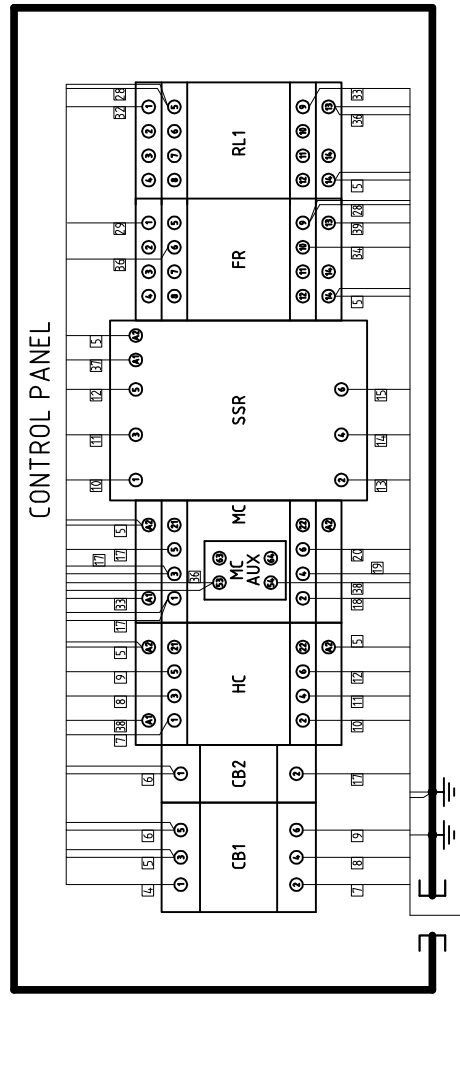
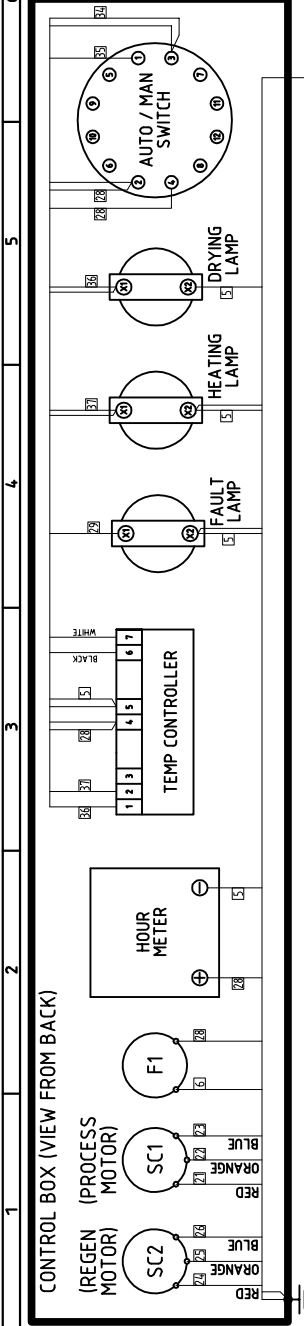
HEATERS (1 SET)  
4KW TOTAL

ISSUE	DATE	AMENDMENTS
1	30/11/12	ORIGINAL
2	13/02/13	PROTOTYPE ISSUES CORRECTED - WDA
3	13/03/12	HEATERS PREVIOUSLY WIRED STAR - WDA
4	13/02/14	REGEN OHP ADDED - WDA
5	28/04/14	OHP'S CORRECTED - WDA



TITLE	DD700 - 220V/60Hz 3PH - WIRING SCHEMATIC	
MATERIAL	N/A	DRAWN: W DAGLISH
FINISH	N/A	CAD SCALE: N/A
DIMENSIONS IN m.m.	TOLERANCES UNLESS OTHERWISE STATED	
0.0	± 1	
0.00	± 0.25	
0.05	± 0.05	
ANGULAR	± 0.5 DEGREE	
3RD ANGLE PROJECTION		
DO NOT SCALE	IF IN DOUBT ASK	
DRG.NO.	5020356	
SHEET	1 OF 1	

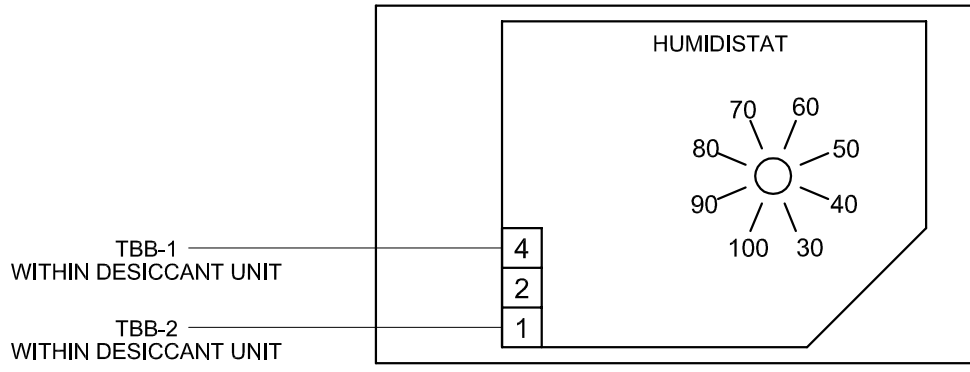
ISSUE	DATE	AMENDMENTS
7	09/07/14	WIRE NUMBERS CHANGED - WDA
8	10/11/14	NEUTRALS RE-ARRANGED TO HELP PRODUCTION - WDA
9	13/02/15	TEMP. CONT. / DRIVE MOTOR UPDATED - WDA
10	01/05/15	CONTROL BOX VIEW CHANGED - WDA
11	12/05/15	CONTROL BOX VIEW CHANGED - WDA
12	06/11/15	REGEN FAN T/B VIEW UPDATED - WDA



		<b>TITLE</b> DD700 - WIRING DIAGRAM - 220V / 60HZ	
LIMITED BISHOP AUCKLAND ENGLAND		<b>MATERIAL</b> N/A	
DIMENSIONS IN m.m. TOLERANCES UNLESS OTHERWISE STATED ± 1 0.0 ± 0.25 0.00 ± 0.05 ANGULAR ± 0.5 DEGREE		<b>FINISH</b> N/A	
3RD ANGLE PROJECTION DO NOT SCALE IF IN DOUBT ASK		<b>DRAWN:</b> W DAGLISH <b>CAD SCALE:</b> N/A	
1993		<b>DRG.NO.</b> 5010356	
		<b>SHEET</b> 1 OF 1	

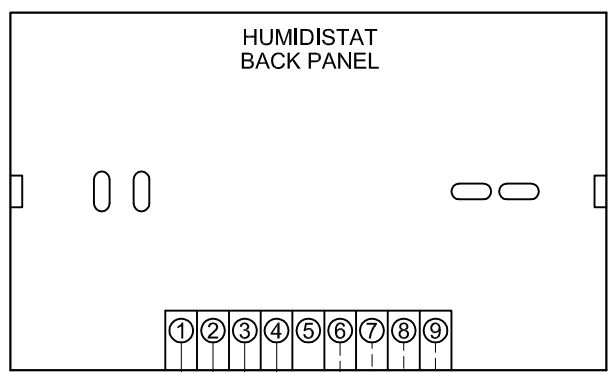
ISSUE	DATE	AMENDMENTS
1	26/02/16	ORIGINAL
2	23/03/16	DIGITAL STAT CORRECTED - WDA

**HUMIDISTAT 3035157**



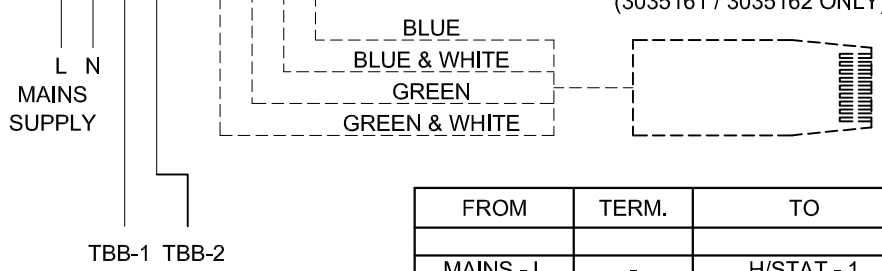
FROM	TERM.	TO	TERM.
H/STAT - 1	PLAIN	TBB-1	SOLDER
H/STAT - 4	PLAIN	TBB-2	SOLDER

- HUMIDISTAT 3035159 - 230V (INTERNAL SENSOR)
- HUMIDISTAT 3035160 - 115V (INTERNAL SENSOR)
- HUMIDISTAT 3035161 - 230V (EXTERNAL SENSOR)
- HUMIDISTAT 3035162 - 115V (EXTERNAL SENSOR)



**NOTE**  
ON ALL VERSIONS OF THIS HUMIDISTAT DIP SWITCH 3 MUST BE IN THE 'ON' POSITION. THE DIP SWITCH PANEL IS LOCATED IN THE TOP LEFT CORNER WITHIN THE FRONT PANEL OF THE HUMIDISTAT.

HUMIDISTAT SENSOR  
(3035161 / 3035162 ONLY)



FROM	TERM.	TO	TERM.
MAINS - L	-	H/STAT - 1	PLAIN
MAINS - N	-	H/STAT - 2	PLAIN
H/STAT - 3	PLAIN	TBB-1	SOLDER
H/STAT - 4	PLAIN	TBB-2	SOLDER
H/STAT - 6	PLAIN	SENSOR-GR/WH	-
H/STAT - 7	PLAIN	SENSOR-GR	-
H/STAT - 8	PLAIN	PLUG - BL/WH	-
H/STAT - 9	PLAIN	PLUG - BL	-

© 1993 **Ebac** LIMITED BISHOP AUCKLAND ENGLAND

TITLE **DESICCANT - REMOTE H/STAT WIRING**

3RD ANGLE PROJECTION  
  
 DO NOT SCALE  
 IF IN DOUBT ASK

DIMENSIONS IN m.m.  
 TOLERANCES UNLESS OTHERWISE STATED  
 0. ± 1  
 0.0 ± 0.25  
 0.00 ± 0.05  
 ANGULAR ± 0.5 DEGREE

MATERIAL **N/A**  
 FINISH **N/A**

DRAWN: W. DAGLISH  
 CAD SCALE: N/A  
 DRG.NO. **5010320**  
 SHEET 1 OF 1

