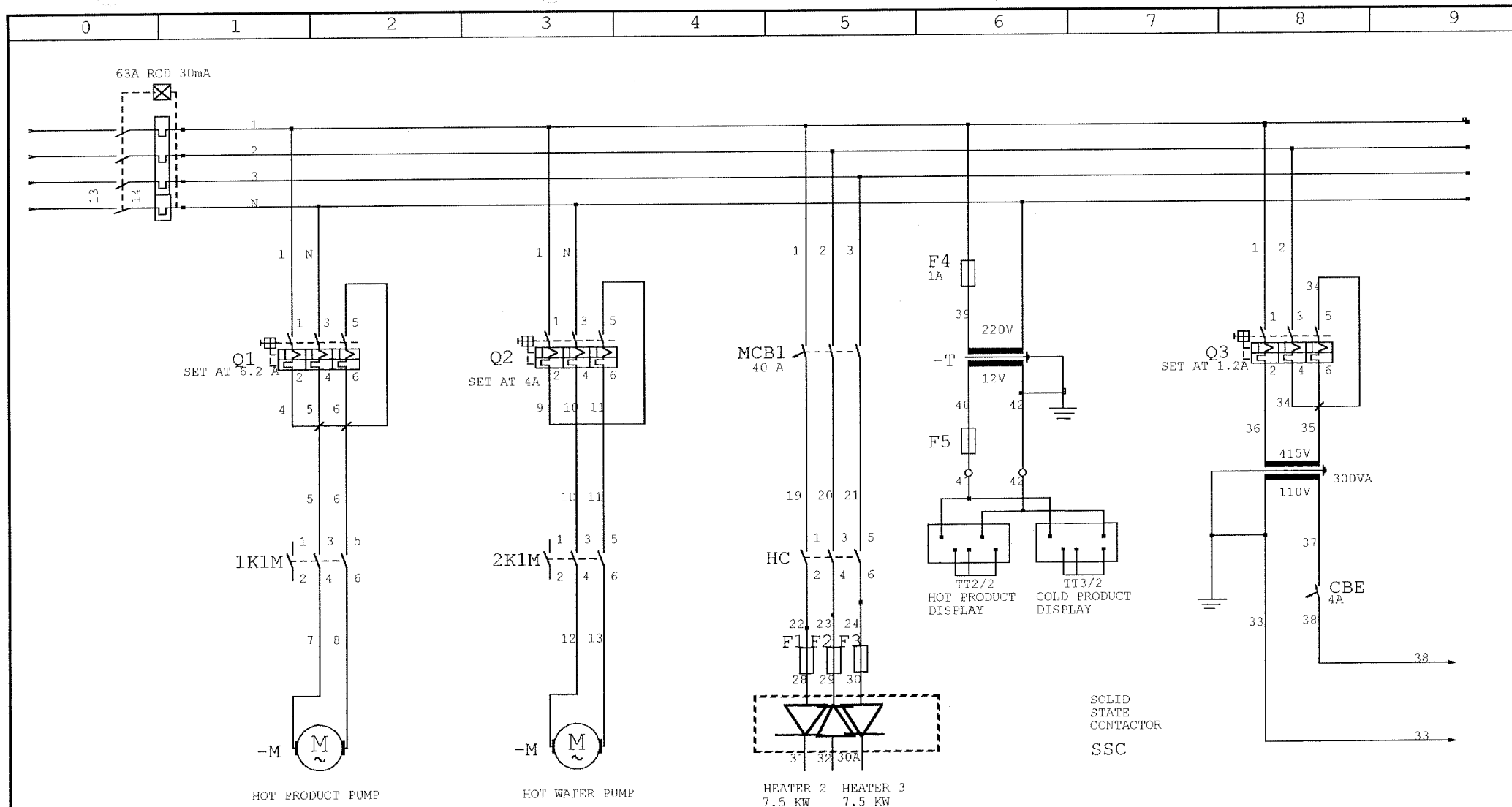


CHARLES WAIT ( process plant ) LTD



DRAWING DISTRIBUTION		
COPIES	NAME OR LOCATION OF COPY	DATE
1	ELECTRICAL FILES	18/1/01
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VOLTAGE 415V PLUS NEUTRAL PLUS EARTH		CONTROL VOLTAGE 110 V
CURRENT 30A		ISSUE B
WATTAGE 22KW		WORKS ORDER NUMBER 11.08 13234

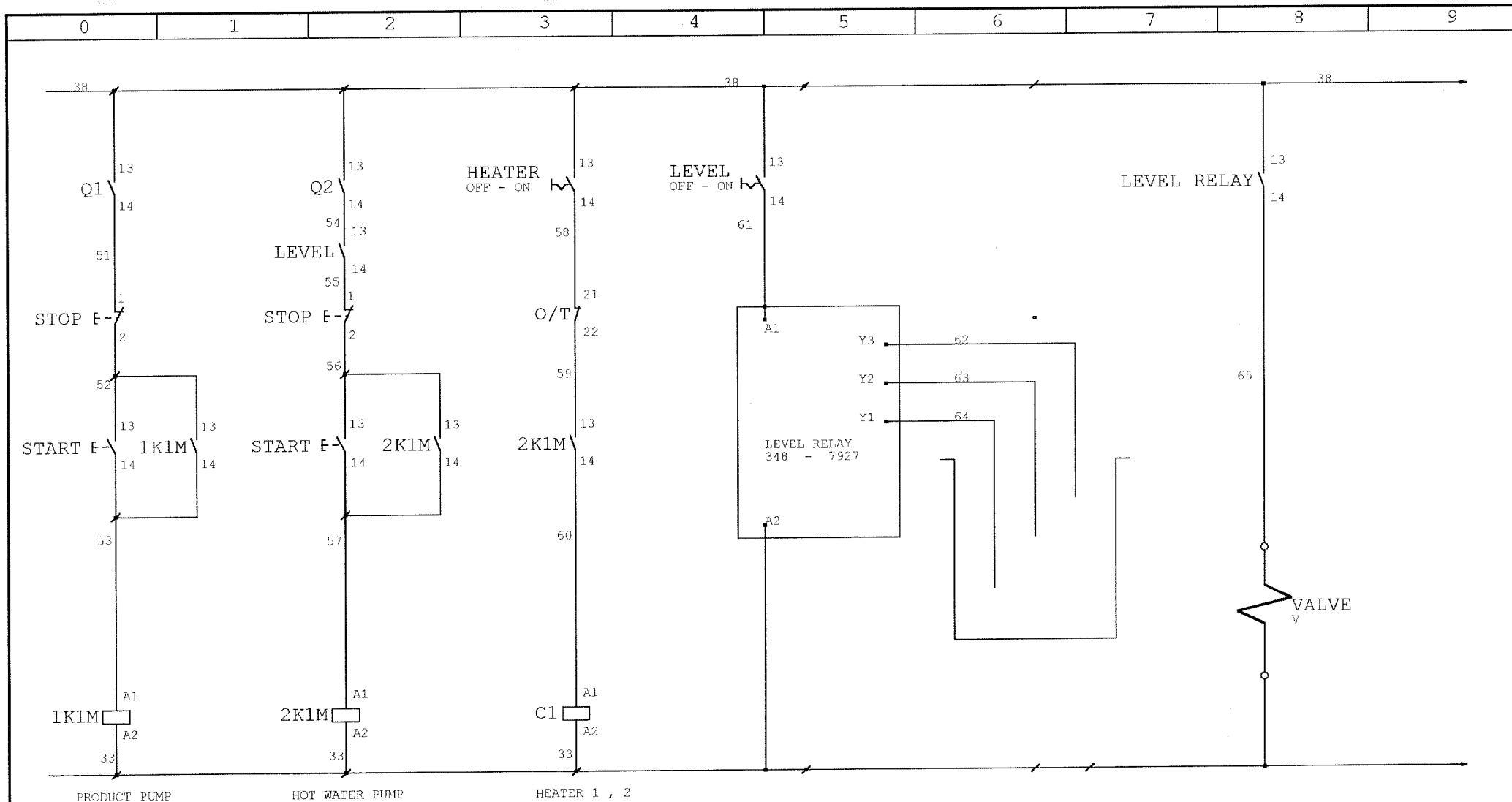


EACH HEATER CONNECTED VIA FLOATING STAR POINT  
NO NEUTRAL REQUIRED

NUMBERS USED 1 TO 42  
NUMBER NOT USED 43 TO 50

NOTE  
HEATER CONTROL CHANGED TO TWO CONTROL VIA SSR

				date	TITLE	TEL 01704 211273	CHARLES WAIT ( PP ) LTD	MACHINERY WORLD		JOB NUMBER 13234
				DRW BY	MALICE AND REED PASTEURISER	FAX 01704 225875	FYLDE ROAD			STOCK NUMBER
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rev.	change	date	name			replaced with	PR9 9XP ENGLAND	NTS		pages

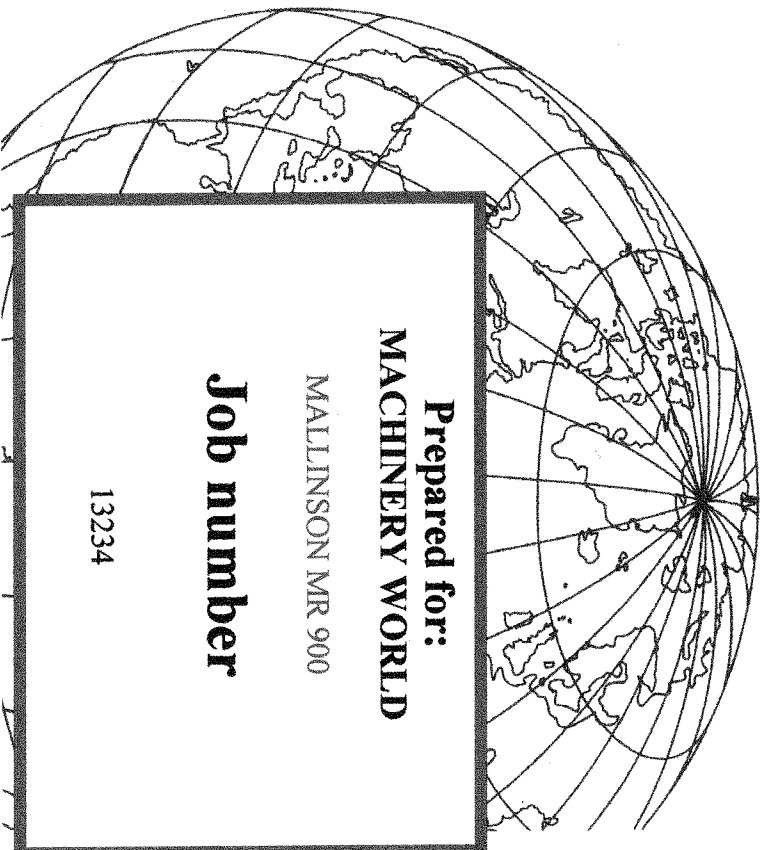


NUMBERS USED 51 TO 65  
NUMBERS NOT USED 66 TO 100

				date		TITLE	TEL 01704 211273	CHARLES WAIT ( PP ) LTD	MACHINERY WORLD	JOB NUMBER13234
				DRW BY		MALICE AND REED PASTUERISER	FAX 01704 225875	FYLDE ROAD		STOCK NUMBER
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rev.	change	date	name			replaced with		PR9 9XP	NTS	page 2
								ENGLAND		pages







**Prepared for:**  
**MACHINERY WORLD**

MALLINSON MR 900

**Job number**

13234

**MW**  
**MACHINERY WORLD**

**ISSUE ONE**

**Charles Wait**  
**(process plant) Ltd**

**Fylde Road – Southport- England**  
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# UHF-RESEARCH PART 1 RESEARCH PART

1 SAFETY SECTION

2 OPERATING INSTRUCTIONS

3 WIRING DIAGRAMS

4 EQUIPMENT MANUALS

5

6

7

8

9

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11

12

13 CALIBRATION CERTIFICATES

14 RESERVED

15 SPARES PARTS

## **Section 1**

### *INTRODUCTION / FORWARD*

The purpose of this manual is to provide the operators of the equipment, supplied by Charles Wait (process plant) Ltd, with instructions, which will enable the equipment to be operated safely and efficiently.

All operating personnel should read this manual carefully and pay special attention to the safety warnings and cautions stated in the manual and the safety labelling placed on the equipment, before attempting to operate or service the equipment. Special attention should always be given to familiarising all personnel with the position of the emergency stop switches and other safety features before attempting to start the machine.

All equipment new supplied by Charles Wait (process plant) Ltd is constructed from high quality materials and great care is taken in its design and manufacture to reduce hazards, promote safety, reliability and output performance. It will give every satisfaction, provided it is operated, in Accordance with the information in this manual and normal safe working practices.

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### **The supply or machinery (safety) regulations 1992**

All Charles Wait (process plant) Ltd equipment new complies with the above regulations and is designed and manufactured in conformity with specified European harmonised standards and UK national standards satisfying essential Health and Safety requirements.



The appropriate conformity assessment procedure has been carried out and CE marking has been affixed to the machine. A copy of Conformance is supplied on completion of satisfactory installation.



# Charles Wait

## (process plant) Ltd

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### CONTROL PANEL CARE

#### **SAFETY INFORMATION**

All control panels contain devices that are dangerous and only skilled persons should access the enclosure.

Some control panels contain live terminals that are supplied from external sources.

It is essential that all supplies are isolated before working on the control panel.

Persons working on control panels should have a working knowledge of the IEE wiring regulations BS 7671 1997, Health and Safety at Work Act and the Electricity at Work regulations.

No special tools are required to service the panel.

#### **INSTALLATION GUIDANCE**

Check panel for transit damage.

Where panels have been in transit for long periods, it is advisable to check all terminals and fixings for tightness before installation.

#### **EXTERNAL WIRING**

All external wiring should be in accordance with the IEE wiring regulations, BS 7671 1997

Do not earth via conduit fittings.

#### **OPERATIONAL CHECKS**

Connect the main cable as shown on the wiring diagram.

Check the operation of the control circuit.

Perform insulation tests as appropriate, but DO NOT test thermister or PT100 circuits with high voltage.

Check overloads are set to their correct setting.

Inverters may require setting.

## **WORKING ON LIVE EQUIPMENT**

Working on live equipment must be authorised by the relevant authority on site.

## **ROUTINE INSPECTION**

### ***DISCONNECT ALL SUPPLIES***

***Check for:***

1. Overheating
2. Ingress of dirt or moisture
3. Check all screws and fixings are tight
4. Check all moving parts for ease of operation
5. Examine all wiring, particularly near metal parts, and check for insulation damage
6. Check all connections are tight
7. Check push buttons for normal operation
8. Check mechanical interlocks of motors are functioning correctly
9. Check door seals are free from damage
10. Check incoming and outgoing cables are securely fastened to the enclosure
11. Check all earth connections are tight and free from corrosion
12. Carry out insulation tests with caution
13. Check fuses are of the correct size and check for signs of overheating
14. Check door isolator functions correctly
15. Check overloads are set correctly
16. Check thermister units function correctly, if they are fitted
17. Check all indicators are functional
18. Should any wiring appear damaged replace it
19. Ensure all instruments are in calibration
20. Spares are available from Charles Wait (Process Plant) Ltd