

<b>Model</b>	<b>MWH 900LTM-PC-S1</b>
Item No.	503-090-501
Nominal Heating Capacity (net) kW <sup>1</sup>	77.5
Heating Capacity Range (gross) kW <sup>2</sup>	13.3 ~ 91.9
Input Power kW <sup>1</sup>	23.1
COP <sup>1</sup>	3.35
Unit Controller	UC8
Design HEX differential °C	15
Water Flow rate l/min. <sup>1</sup>	87.5
Min./Max. Inlet Water temp. °C (Heating)	20 / 50
Min./Max. Operating Ambient Air temp. °C	- 10 / 45
Design Water Temperature (EWT/LWT) °C	30 / 45
Min. Water Volume in sys. for Space Htg litres	150
Min. Water Volume in sys. for 100% F/A litres	300
Water Volume in unit litres	8.8
Heat Exchanger	Thermoshell® (x2)
Max. Operating Water Pressure kPa	1000
Electronic Expansion Valves	2 / sys.
Refrigerant	R32
Refrigerant Charge kg	4.2 / sys.
Compressor type	Inverter (x2)
Compressor oil type	POE-46 (or equivalent)
Power supply <sup>4</sup>	3 ph. 400 V ac 50 Hz + N + E
Running current A/sys.	16 / 18 / 16
Max. Running Current A/sys	30 / 33 / 30
RCD type recommendation	type B, 30mA
Water connections	1 1/2" BSP male (x2)
Sound Power <sup>5</sup> (SWL) dB(A)	78
Sound Pressure Level @ 3m (SPL) dB(A)	62
Fan type	3 speed Axial 500mm (x4)
External static pressure available of fans Pa	5
Pump type	Integrated BLDC
Max. Head Delivery of pump m	12
Max. Ext'l Resistance of pump @nominal flow <sup>3</sup> kPa	63
Programmed Logic Controller	Schneider M172
Communication Options	BMS / Modbus / BACnet
Net weight (excl. water) kg	617

<sup>1</sup> Rating conditions: 7/6 °C db/wb outdoor ambient; EWT 30°C; LWT 45°C.

<sup>2</sup> Ranges at rating conditions: Min. speed [1 comp.] ~ max. 100% [2 comp.]

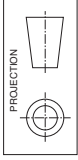
<sup>3</sup> Pressure drop at Water Flow rate and rating conditions above.

<sup>4</sup> Voltage range: 380–440V.

<sup>5</sup> Radiated. EN 12102-1:2017.

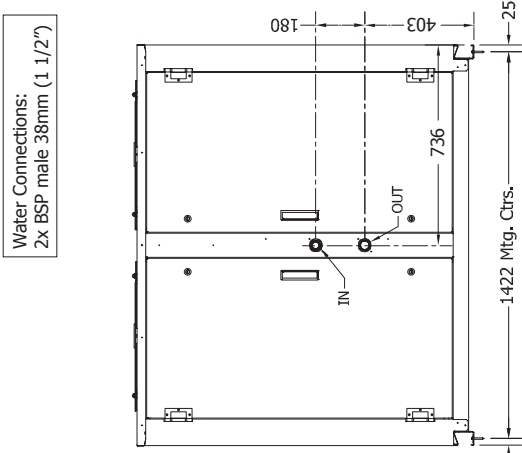
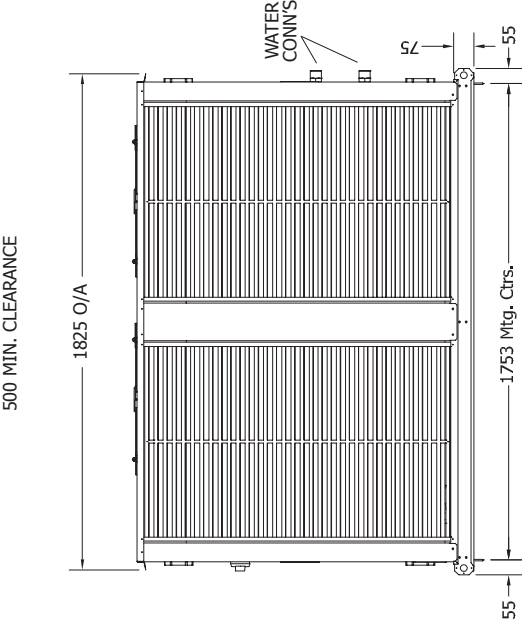
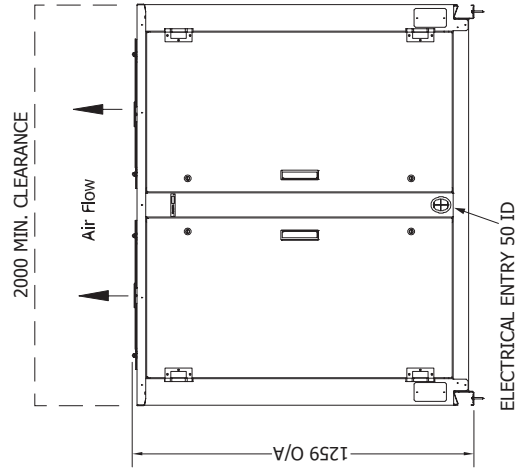
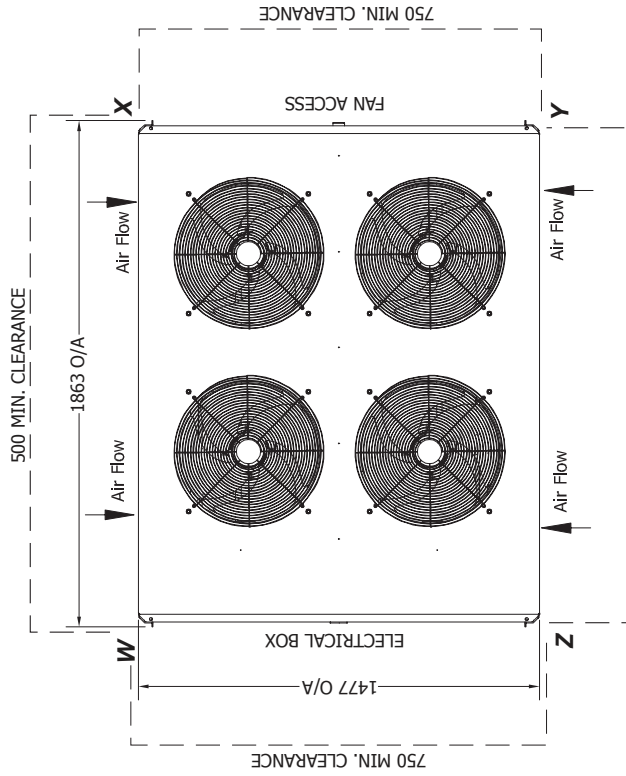
# MWH 900LT

POINT LOADS (kg)			
W	X	Y	Z
160	148	148	161

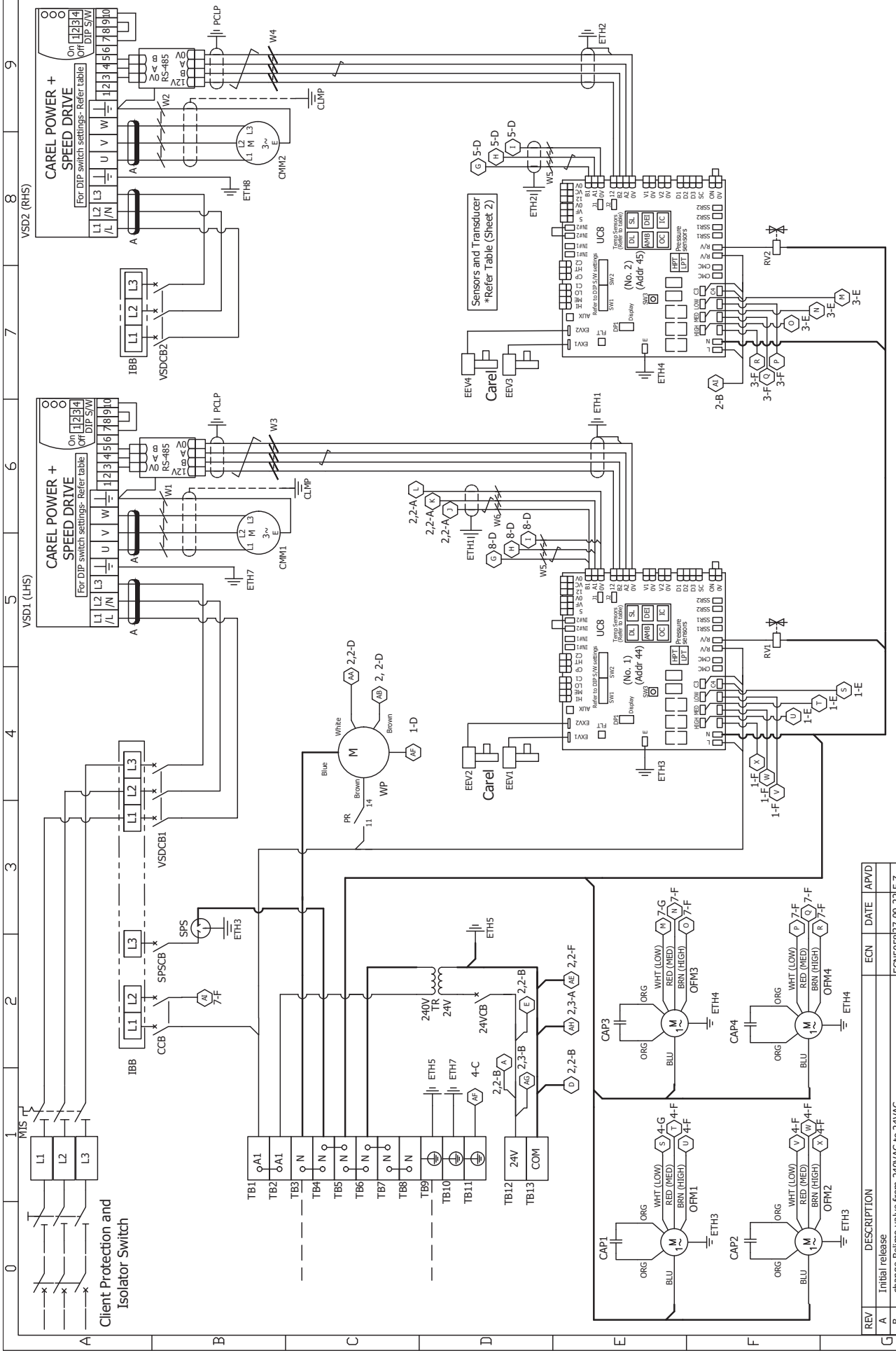


Not to Scale

Note: If multiple units are to be placed side-by-side then allow at least 1m between coil faces.



**NOTE**  
Specifications are subject to change without notice due to the manufacturer's ongoing research and development programme.



REV	DESCRIPTION	ECN	DATE	APVD
A	Initial release			
B	change Belimo valve from 240V/AC to 24VAC	ECN5058	27-09-22	F.Z.

Client Wiring	DO NOT SCALE - ASK
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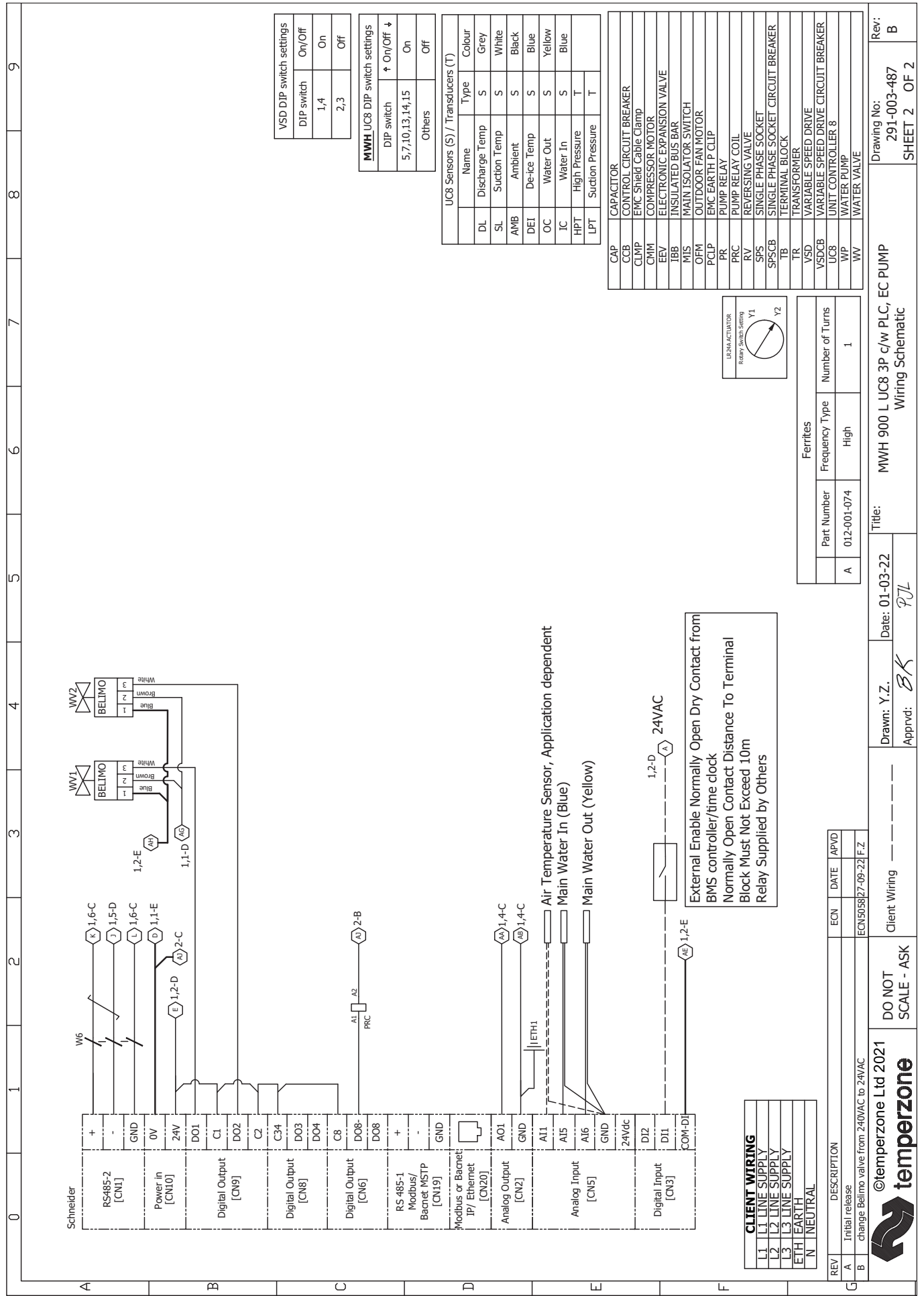
Drawn: Y.Z.	Date: 01-03-22	Title: MWH 900 L UC8 3P c/w PLC, EC PUMP
Apprvd: BK		Wiring Schematic

Drawing No: 291-003-487	Rev: B
SHEET 1	OF 2



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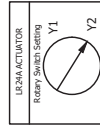


VSD DIP switch settings	
DIP switch	On/Off
1,4	On
2,3	Off

MWH UC8 DIP switch settings	
DIP switch	↑ On/Off ↓
5,7,10,13,14,15	On
Others	Off

UC8 Sensors (S) / Transducers (T)		
Name	Type	Colour
DL	Discharge Temp	Grey
SL	Suction Temp	White
AMB	Ambient	Black
DEI	De-ice Temp	Blue
OC	Water Out	Yellow
IC	Water In	Blue
HPT	High Pressure	T
LPT	Suction Pressure	T

CAP	CAPACITOR
CCB	CONTROL CIRCUIT BREAKER
CLMP	EMC Shield Cable Clamp
CMW	COMPRESSOR MOTOR
ERV	ELECTRONIC EXPANSION VALVE
IBB	INSULATED BUS BAR
MIS	MAIN ISOLATOR SWITCH
OFM	OUTDOOR FAN MOTOR
PCLP	EMC EARTH P CLIP
PR	PUMP RELAY
PRC	PUMP RELAY COIL
RV	REVERSING VALVE
SFS	SINGLE PHASE SOCKET
SPSCB	SINGLE PHASE SOCKET CIRCUIT BREAKER
TB	TERMINAL BLOCK
TR	TRANSFORMER
VSD	VARIABLE SPEED DRIVE
VSDCB	VARIABLE SPEED DRIVE CIRCUIT BREAKER
UC8	UNIT CONTROLLER 8
WP	WATER PUMP
WV	WATER VALVE



Ferrites		
Part Number	Frequency Type	Number of Turns
A	012-001-074	High
		1

Drawing No: 291-003-487  
 SHEET 2 OF 2  
 Rev: B  
 Title: MWH 900 L UC8 3P c/w PLC, EC PUMP Wiring Schematic  
 Date: 01-03-22  
 Drawn: Y.Z.  
 Apprvd: BK  
 Client Wiring  
 DO NOT SCALE - ASK  
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REV	DESCRIPTION	ECN	DATE	APVD
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CLIENT WIRING	
L1	L1 LINE SUPPLY
L2	L2 LINE SUPPLY
L3	L3 LINE SUPPLY
ETH	EARTH
N	NEUTRAL

External Enable Normally Open Dry Contact from BMS controller/time clock  
 Normally Open Contact Distance To Terminal Block Must Not Exceed 10m  
 Relay Supplied by Others