Issue	Revision	Sheet	By	Date
0	Original Issue Pre-Production	1-9	WW	15/01/26
A	For Approval	1-9	WW	19/01/26
B	Approved	1-9	BS	05/03/26

NOTES:

ALL GLANDING IS CARRIED OUT IN THE BASE OF ENCLOSURE TO MAINTAIN INGRESS PROTECTION

INCOMING SUPPLY MUST HAVE EARTH CONDUCTOR AND BE BONDED TO EQUIPOTENTIAL STUD PROVIDED

TC2 TIMER USED TO TIME CONTROL HOT WATER SYSTEM. FACTORY SET TO PERMANENTLY ON. (TO BE ST BY USER)

TC1 TIMER USED FOR THERMAL DISINFECTION VIA DESTRAT PUMP AND WILL OVERRIDE TC2 TO TURN ON HEAT SOURCE.

TC1 IS FACTORY SET TO DISINFECT TWICE PER WEEK FOR 2 HOURS.

A SITE LEGONELLA RISK ASSESMENT MUST BE CARRIED OUT AND THE DISINFECTION PROGRAMME ALTERED TO MEET THE RECOMMENDATIONS OF THE ASSESSMENT.

*810367 IS OPTIONAL SMS MODULE AND SUPPLIED WITH INTERNAL ANTENNA.

PANEL MUST BE SITED IN A MOBILE SERVICE AREA.

FOR INSTALLATIONS BELOW GROUND OR IN BAD SERVICE AREAS, CONTACT ADVECO FOR OPTIONS.

Drawing Control Notes

Arrangement Drawing Panel/Kiosk	2
Wiring Schematic	3-7
Terminal Plan	8
Labels	2
Time Switch Guide	9
Enclosure	Std Manufacturer

Cable Colours

415VAC L1	Brown
415VAC L2	Black
415VAC L3	Grey
415VAC N	Blue
EQUIP	Grn/Ylw
240VAC L	Brown
240VAC N	Blue
110VAC L	Red
110VAC N	Blue
24VAC L	White
24VAC N	Orange
24VDC +	Blue
24VDC -	Blue

MISCELLANEOUS

Ammeters CT Circuits	White
4-20mA	Yellow
VFC	Red
IS	Blue
Telemetry	Pink
ELV	Violet

ADVECO HOT WATER SPECIALISTS

Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Project Control Sheet	A	WEP21463	1
Date	19/01/26					
Checked	WW					
Approved	BS	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR		T: 01252 551 540		of 9

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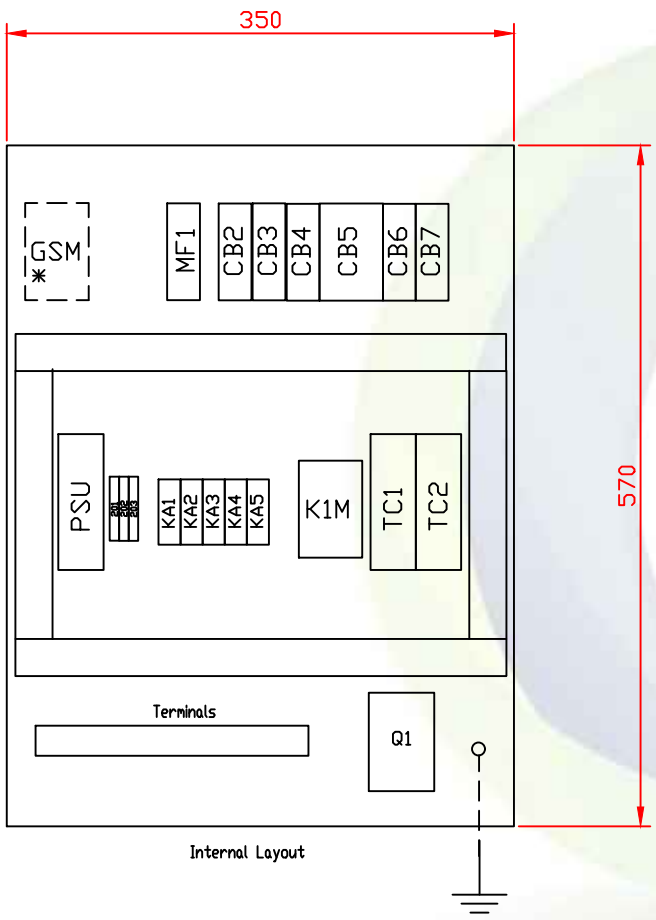
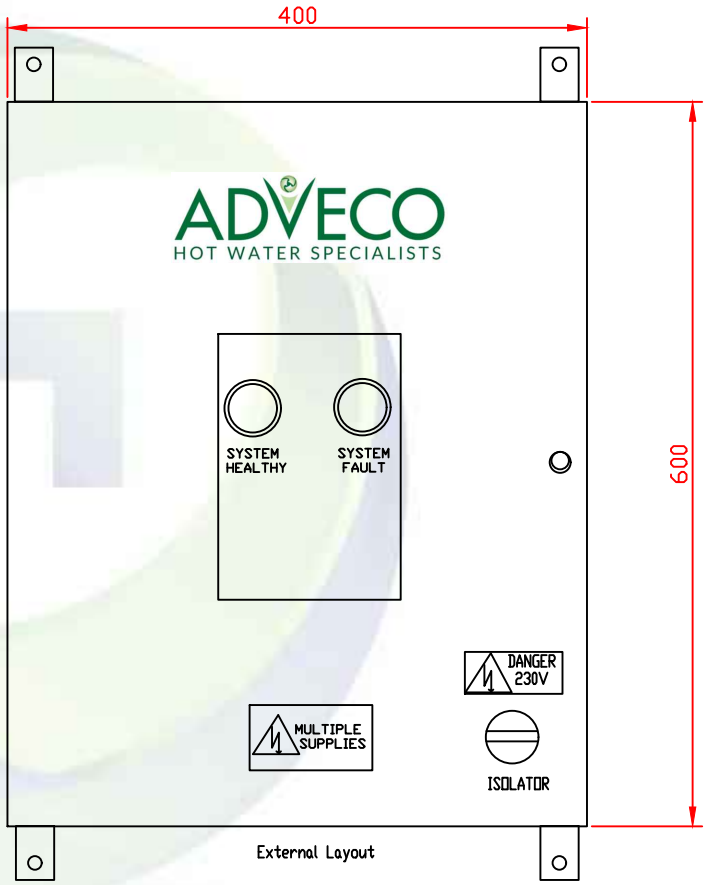
NOTE:-
1] Panel Depth 175mm
2] Panel Colour RAL 7035
3] Ingress Protection to IP65 Minimum, Provided All Entries Are Made in Base Of Panel.
4] Enclosure Must Be Mounted Using Brackets Provided



Internal Layout



External Layout

* GSM– OPTIONAL. IF USED, INSTALL ON SITE.

ADVECO HOT WATER SPECIALISTS	Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
	Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 General Arrangement	A	WEP21463	2
	Date	19/01/26					
	Checked	WW					
	Approved	BS	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR		T: 01252 551 540		of 9

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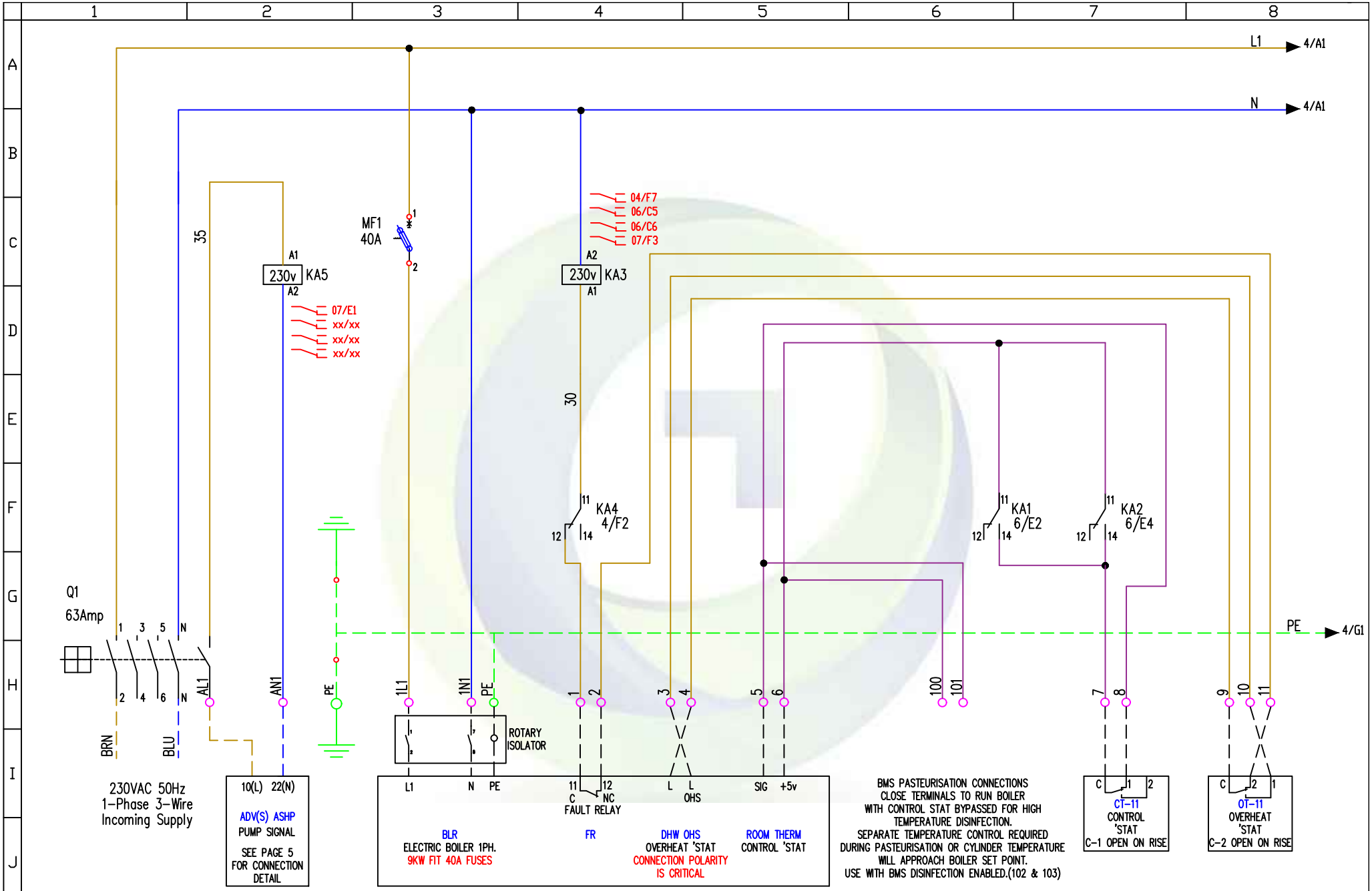

ADVECO HOT WATER SPECIALISTS	Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
	Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Wiring Schematic	A	WEP21463	3
	Date	19/01/26					
	Checked	WW					
	Approved	BS	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR		T: 01252 551 540		of 9

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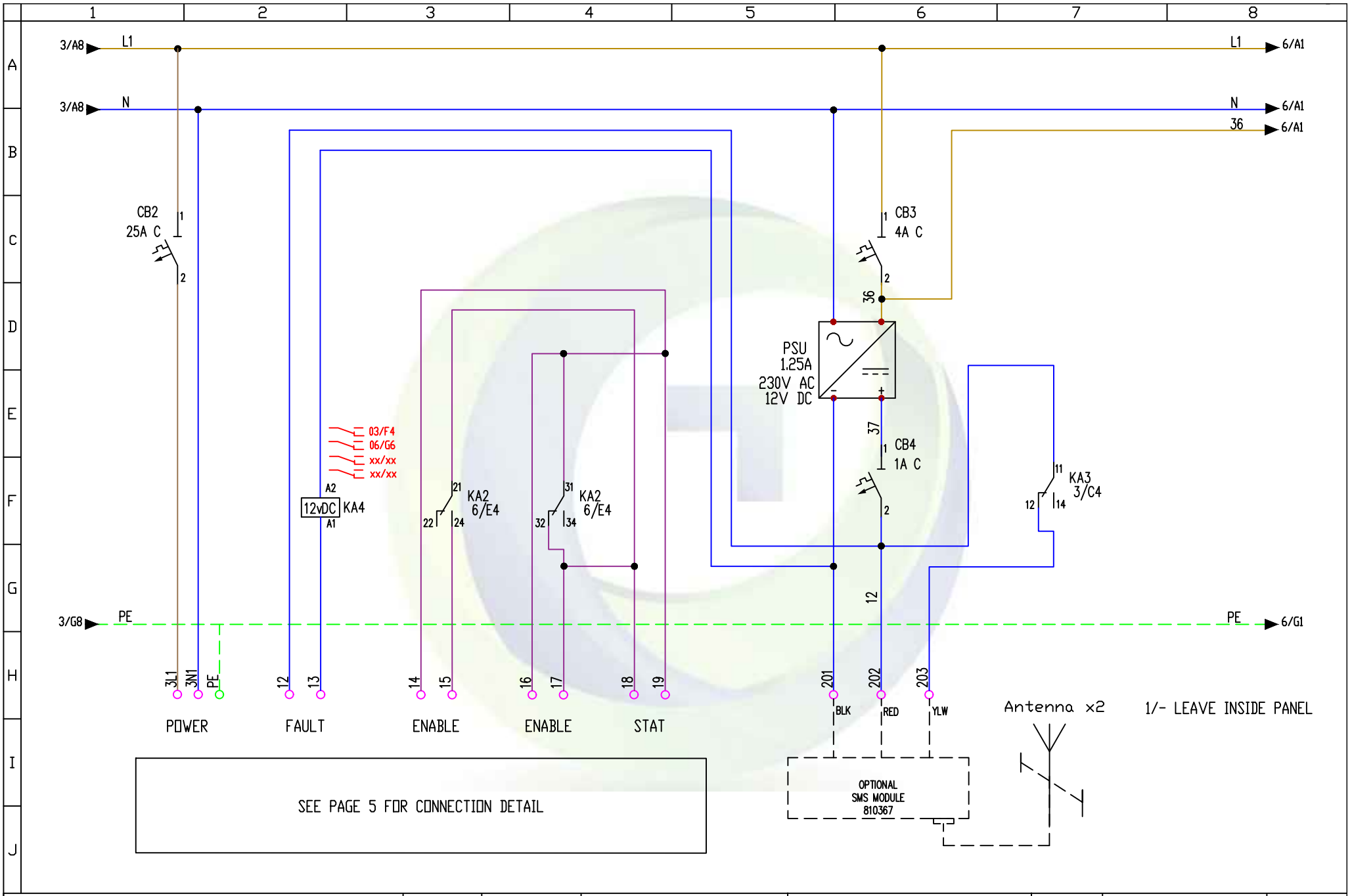

ADVECO HOT WATER SPECIALISTS	Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
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	Date	19/01/26					
	Checked	WW					
	Approved	BS	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR	T: 01252 551 540			of 9

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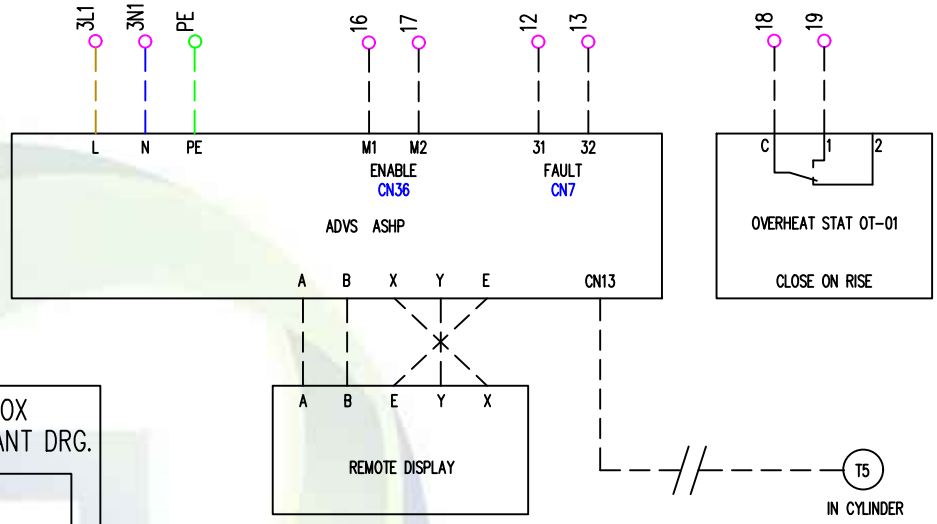
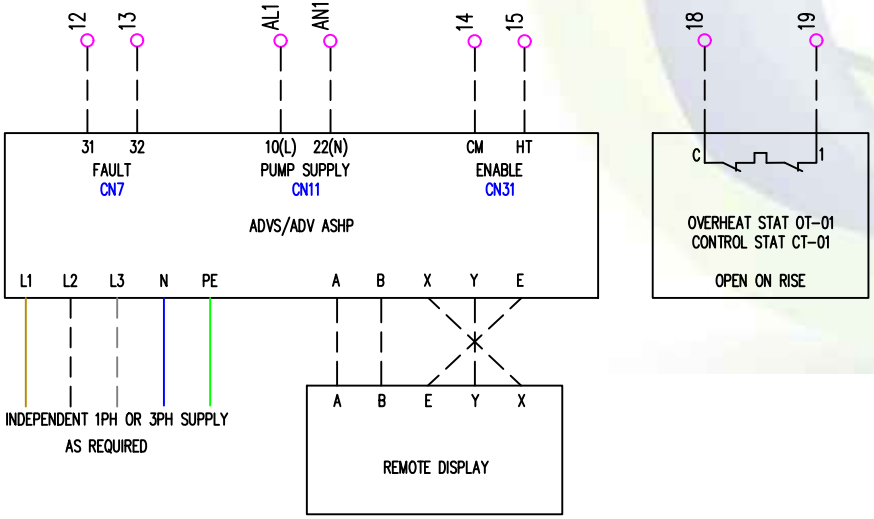
ADVS10W– POWERED FROM CONTROL PANEL/T5 DHW SENSOR

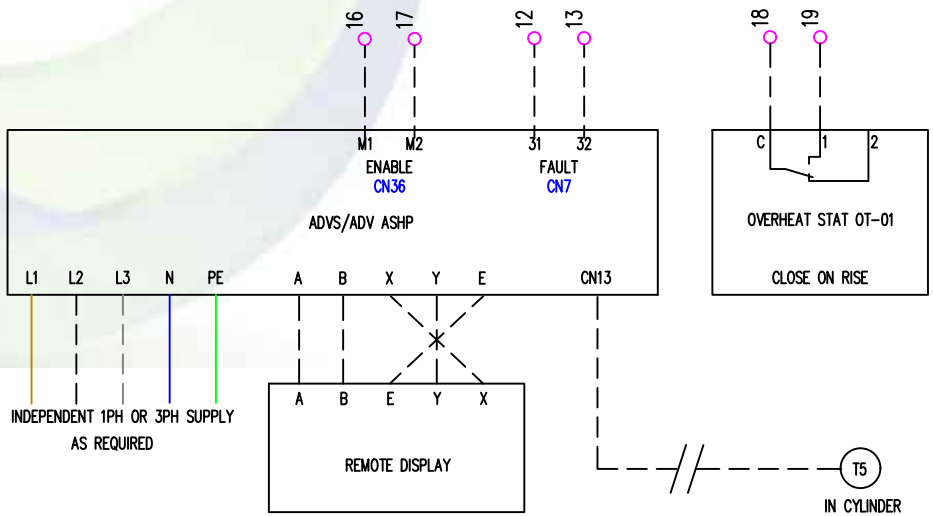


TICK BOX
FOR RELEVANT DRG.

ADVS/ADV– INDEPENDENT POWER SUPPLY/LLH/PUMP



ADVS/ADV– INDEPENDENT POWER SUPPLY/T5 DHW SENSOR



ADVECO HOT WATER SPECIALISTS	Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
	Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Wiring Schematic	A	WEP21463	5
	Date	19/01/26					
	Checked	WW					
	Approved	BS	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR		T: 01252 551 540		of 9

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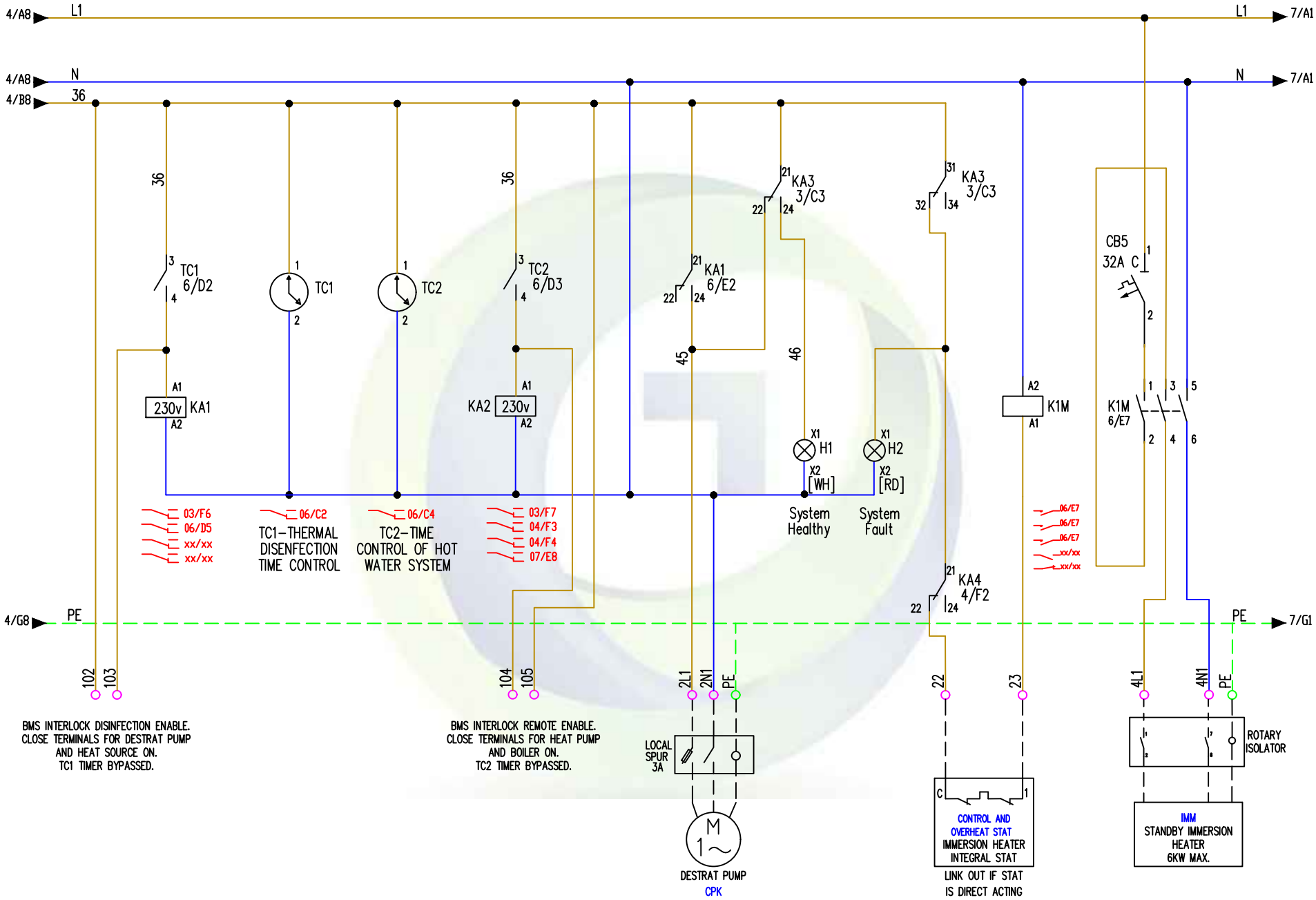

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	Date	19/01/26					
	Checked	BS					
	Approved	WW	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR T: 01252 551 540				of 9

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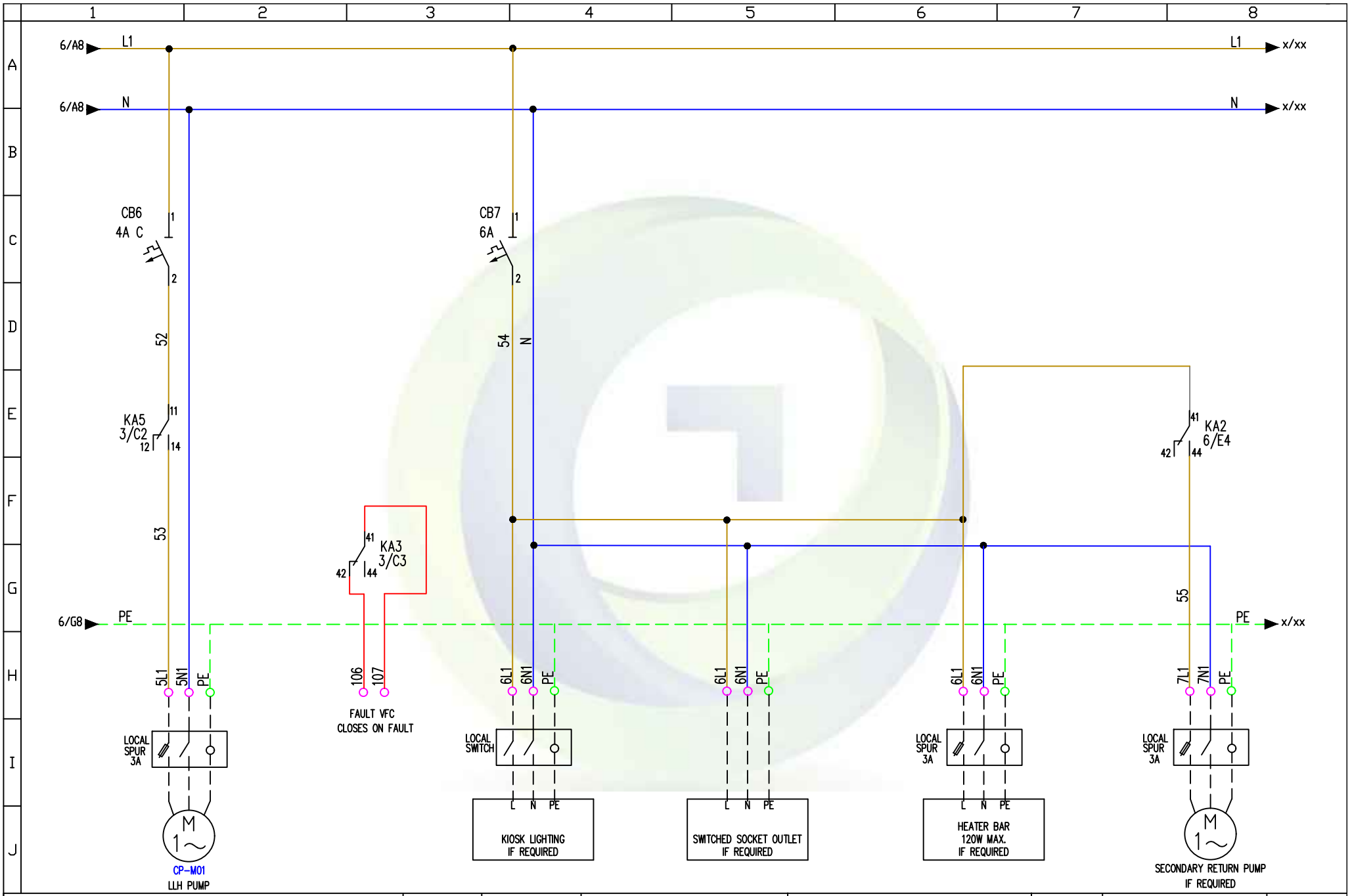

ADVECO
HOT WATER SPECIALISTS

Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Wiring Schematic	A	WEP21463	7
Date	19/01/26					
Checked	BS					
Approved	WW	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR	T: 01252 551 540			of 9

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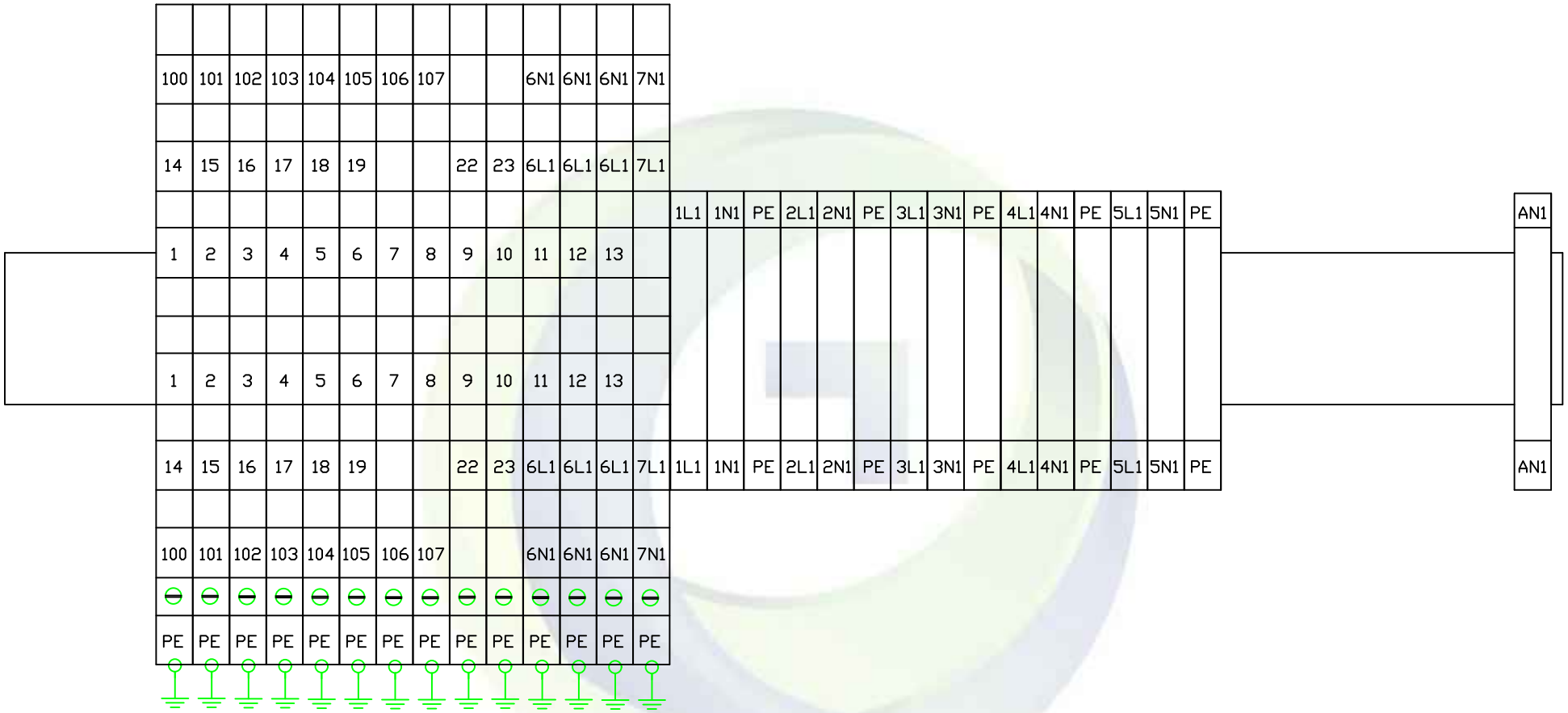

ADVECO HOT WATER SPECIALISTS	Scale	[Not to Scale]	Originator	Title	Issue	Drawing Number	Sheet
	Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Terminal Arrangement	A	WEP21463	8
	Date	19/01/26					
	Checked	BS					
	Approved	WW	Unit 7&8, Armstrong Mall, Southwood, Farnborough, Hants GU14 0NR T: 01252 551 540				of 9

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ADVECO HOT WATER SPECIALISTS

Installation/Operating Instructions for Din Rail Mounting Digital Time Switch Type: FOX.TSD-1

SPECIFICATIONS

No. of channels	1
Contact rating	16A, 230V AC 2A Inductive volt free switching
Min switching time	1 minute
Capacity	6 programme blocks
Voltage supply	24VDC, 24VAC, 110VAC, 230VAC
Mains frequency	50Hz
Possible settings	Clock time, time on / time off, days of week, block programme
Display	LCD figures 4mm High
Deviation	2.5 seconds per day
Reserve	100 hours
Manual switch	Yes
Mounting	DIN rail mounted
Connections	2.5mm² max
Size	Width 18mm (1 module), projection from DIN rail 55mm, height 90mm

IMPORTANT

This unit should be installed by a competent person in accordance with the IEE Wiring regulations. If in doubt consult a qualified electrician.

- Before connecting the timer to the supply, check that the supply voltage and frequency correspond to the rating plate (on side of timer).
- Do not overload. Refer to the Ampere rating (Amps) on the rating plate.
- Do not expose the timer to extremely high or low temperatures. Do not place the timer in direct sunlight.
- Do not allow the timer to come into contact with water.
- If the time switch is mounted near equipment where heat produced raises the local ambient temperature above 55°C, then a ½ module space (9mm) should be left between the time switch and the equipment.
- If used to operate a contactor, then a 1 module space should be left between timer and contactor.

INSTALLATION

- This timer is designed to be DIN rail mounted.
- Ensure that the supply voltage is connected to terminals 1 and 2.
- Terminals 3 and 4 are volt free contacts. Live in goes to terminal 3 and Live out goes to load.
- There is no neutral switching with the FOX.TSD-1, ensure that maximum loading is not exceeded.

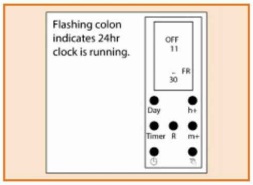
HOW TO OPERATE

When the timer is new or when it has not been used for some time it may need to be "charged". To do this, connect the power. The built-in rechargeable battery will begin to charge. When symbols appear in the display (after approx. 2 minutes), press the **"R"** reset button (use a pencil or pen). *Caution*: this will cancel all memory including timer settings. The timer will be 'clean for new commands. If a power failure should occur (or should the timer be disconnected from the power supply for a short time), the built-in rechargeable battery will then provide power to the clock and guarantee that the time and switching programmes are retained and not disturbed or lost.

HOW TO SET 24 HOUR CLOCK

Present time and day

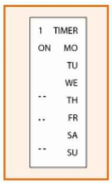
1. Keep ◷ button pressed during the entire "present time and day" setting procedure.
2. Set the present time using buttons **"h+"** (hour) and **"m+"** (minute). If you keep buttons **"h+"** and **"m+"** pressed for longer than a second the figures in the display will scroll continuously. Set the present day of the week using button **"Day"**.
3. Release ◷ button. The clock is now running. The flashing colon indicates this. Use a reliable time signal (e.g. telephone or radio) to set the clock accurately to the minute.



SWITCHING TIME(S)

You can set as many as six switching-on commands and an equal number of corresponding switching-off commands in the following manner:

1. Press **"Timer"** button once. The actual time will disappear from the display. This **TIMER ON** indication will be displayed instead, denoting a vacant "on" time in No. 1 programme.

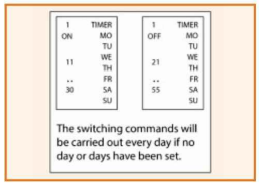


NOTE: Setting hours and minutes: When setting switch-on time and switch-off time be sure to set minutes as well as hours. E.g. if 08.00 is required set all 4 digits: "08." and ".00"

2. Set the required switching-on time using button **"h+"** and **"m+"**.
3. Set the day(s). See **"Day"** button selection (over) on which the switching-on command must be executed.
4. Depress button **"Timer"** once. TIMER OFF will be displayed.
5. Set the required switching-off time using button **"h+"** and **"m+"**.
6. Set the day(s) on which the switching-off command must be executed. (Default setting is every day).
7. Pressing the **"Timer"** button will move the timer to programme 2 ON.

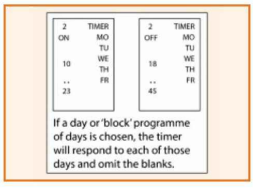
When the **2 TIMER ON** indication appears you can begin setting another switch-on command, if you wish. Six such programmes may be stored in this manner, following steps 2) to 6). After setting the required "on" and "off" times, press ◷ to revert to present time.

EXAMPLE



Note: Be sure that the desired day or days are chosen on both the "on" and the "off" displays.

EXAMPLE



"DAY" BUTTON SELECTIONS

Every day of the week
If you do not enter the day when setting a switching command, the switching will be carried out at the set time on every day of the week.
Only one day of the week
If you enter a particular day while setting a switching command (using button **"Day"**), the command will be carried out at the set time only on that specific day of the week.
Abbreviations MO = Monday, TU = Tuesday, WE = Wednesday, TH = Thursday, FR = Friday, SA = Saturday, SU = Sunday.
On a weekly combination (or 'block' programming) days
When pressing button **"Day"** several times, you will find by means if the display that three combinations of days are also possible:
MO TU WE TH FR = Monday to Friday
SA SU = Saturday to Sunday
MO TU WE TH FR SA = Monday to Saturday
If you enter these combinations of days instead of one individual day, the on/off command will be carried out at the set time on each of the corresponding days of the week. This programme will repeat itself week after week until the programme is changed or the timer is disconnected.

HOW TO CHECK, CHANGE OR DELETE SWITCHING COMMANDS

Checking
By pressing button **"Timer"** a number of times you can make switching-on and switching-off commands visible in the display: first set the commands are presented and then the free spaces.
Changing
You can change a switching command by making it appear on the display and pressing **"Day"**, **"h+"** and **"m+"** buttons accordingly.
Deleting
Delete a timer command period (an "on" and "off" time) by pressing the **"Timer"** button until the required program number on time is displayed in the window and pressing **"h+"** until -- is displayed immediately after 23. Do the same with **"m+"** until-- appears after 59. Repeat this sequence for the "off" mode. The deleted command then becomes available for reprogramming. Press button **"Timer"** after changing or deleting a command to save the new command.
Switching back to present time
After setting the switching commands you return to normal time reading by pressing ◷ button.
Is power being supplied to connecting load?
The word "ON" or "OFF" in the display, above the time reading, informs you about the actual switching condition.

OVERRIDE SWITCH

When in the "OFF" mode pressing the button marked ✎ will switch "ON" the power to the load connected to the timer. If the button is pressed again the power will switch off. If the button is not pressed again, power will remain on until the completion of the next on/off command when power will switch off. If not pressed again the power will remain off until the following "ON" command has been reached.

CE

Scale	[Not to Scale]	Originator	Title
Drawn	UTK	Adveco Ltd	Fusion Control Panel Type 810365 Time Switch Programme Guide
Date	19/01/26		
Checked	BS		
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Issue	Drawing Number	Sheet
A	WEP21463	9 of 9