Electrical Installation Requirements

Care should be taken to separate the power and signal cables to prevent electrical interference and possible damage due to inadvertent connection.

The plant inputs are electrically isolated.

Model 110

A line voltage should be connected for input present. The terminal marked **C** should be connected to the supply neutral.

Model 112

An on board isolated 15Vac supply is present on the **'C'** terminal. This provides voltage for the alarm inputs. Inputs are energised via volt free contacts connecting 'C' to the appropriate 'IP' terminal. ON NO ACCOUNT MUST AN EXTERNAL SUPPLY BE USED FOR INPUTS.

CE Conformance

This unit conforms with the relevant EU standards when installed according to the JTL Installation Requirements for this product.

Inputs

C	COMMON
IP1	Channel 1 defrost input
IP2	Channel 2 defrost input
IP3	Channel 3 defrost input
IP4	Channel 4 defrost input
IP5	Channel 5 defrost input
IP6	Channel 6 defrost input
IP7	Channel 7 defrost input
IP8	Channel 8 defrost input

Note: See relevant connections diagram for wiring details

Use of Maintenance Unit

The monitor can be checked and the operation adjusted using a JTL portable maintenance unit which plugs into the monitor. Each item of information has an item number. The more important items are listed in the tables overleaf. Examples:

To read item 72 press: [ITEM] [7] [2] [ENTER]

To set item 65 to 1 press:

[ITEM] [6] [5] [ENTER] [SET] [1] [ENTER]

To correct errors press: [CANCEL]
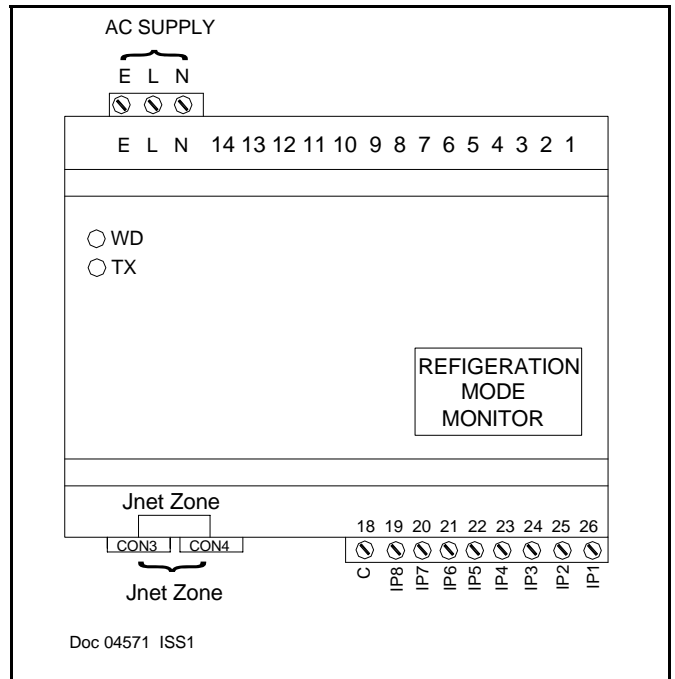
To select next or previous items press: [+] and [−]

JTL Jnet Communications

Note all network products must be connected in parallel without cross connections. The unit is designed to be connected in a "daisy-chain" fashion using CON3 & 4 RJ8 connectors.

Initial Commissioning

The monitor has a set of data built in to its program for use during commissioning. This can be accessed by setting item 9 to 1234. This loads into the monitor a standard set of data. Adjustments should then be made as necessary. The range over which the settings can be adjusted shown overleaf.

The unit number for the Jnet communications should be set on items 1c1, where 'c' is replaced by channel number 1-8.

Doc 04571 ISS1

Mode Monitoring

The monitor is designed to report the refrigeration mode from up to eight coldroom/cabinet controllers.

Defrost detection is via contact input (230v - FG110, volt free - FG112) from a controller or external time clock.

Jnet network defrosts and network shutdown is also supported.

Alarms

A Jnet network alarm is generated if defrost exceeds the period set in item 2c0, where 'c' is replaced by channel number 1 - 8.

	ADJUSTABLE PARAMETERS		
Item	Function	Range	Units
1c1	Unit number	0.1 to 899.7	
1c0	Enable channel alarms	0 - 1	
108	Defrost type	0-4 (0=none, 2=network, 3= contacted input)	
65	Invert contact inputs	0 - 1	
2c0	Max defrost time	0 - 120	mins
*where 'c' is replaced with channel number 1 -8			

	OTHER USEFUL ITEMS
Item	Function
72	Inputs physical value.
73*	Force inputs to read value 0 - 255 (0 = unforced)
2c3	Logical input value (adjusted from physical inputs by inversion/defrost mode as appropriate)
1c7	Mode (rEFr=Refrigeration, dEFr=Defrost, dF.rc=Defrost recovery, sh.dn=shutdown)
1c9	Alarms (sh.dn=shutdown, dF.or=defrost overrun)
Where 'c' is replaced with channel number 1 - 8. *Input 1 has value 1, input 2 value 2, input 3 value 4, input 4 value 8, input 5 value 16 etc. To force more than 1 input present then the value is the sum of the individual input values. eg. for input 1 and 5 present then set 17 (1 + 16).

Full operating manuals and item number information can be obtained from your supplier or JTL Systems.

Supply Requirements
FG110/FG112   230 V ac 48-62 Hz
FG110-24/FG112-24 24 V ac 48 -62 Hz
Supply 1 VA maximum
Inputs 2 mA maximum

CE This unit conforms with the relevant EU standards when fitted in accordance with its installation instructions.

Doc No. 04570 FG110-112.wpd Issue 1 Oct 2015
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