

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 inputs are electrically isolated. A line voltage should be connected for signal present. The terminal marked **N** should be connected to the supply neutral.

NOTE: The line voltage MUST BE on the same phase as the unit supply.

CE Conformance

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

Inputs and Temperatures

Inputs

I1 Defrost channel 1
I2 Defrost channel 2
I3 Defrost channel 3
I4 Defrost channel 4
I5 Not used

Temperatures

+1-A1 Channel 1
+2-A2 Channel 2
+3-A3 Channel 3
+4-A4 Channel 4

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 112 press: **ITEM** **1** **1** **2** **ENTER**

To set item 113 to -20.0 press:

ITEM **1** **1** **3** **ENTER** **SET** **-** **2** **0** **0** **ENTER**

To correct errors press: **CANCEL**

To select next or previous items press: **+** and **-**

JTL Network Communications

JTL network connections are available as screw terminal or RJ connections for use with JNet cables.

All JTL network products must be connected in parallel without cross connections.

Initial Commissioning

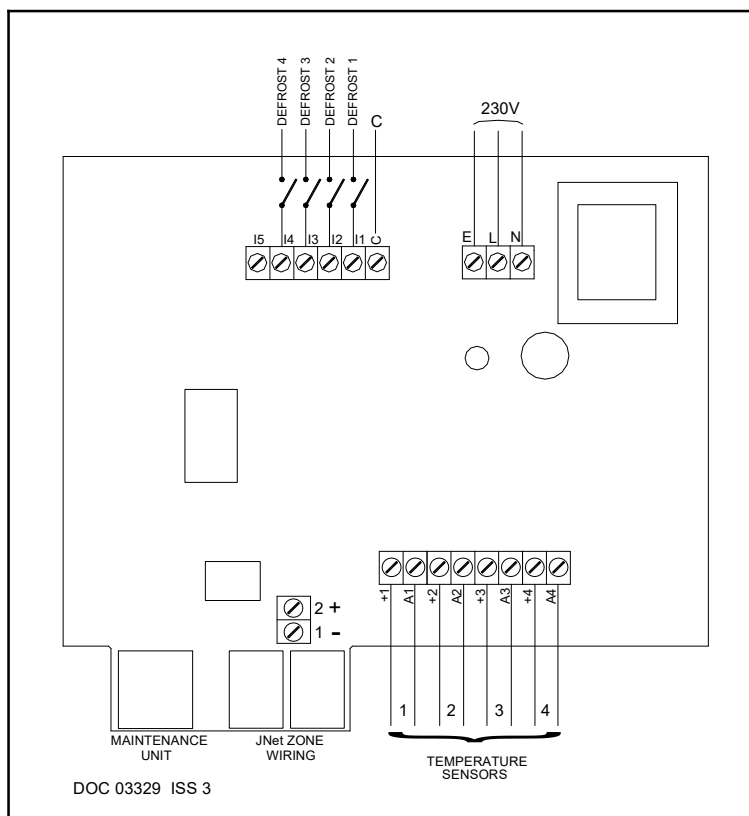
The monitor has a set of data built in to its program for use during commissioning. This can be accessed by setting item 9 to 1234. This will load into the monitor a standard set of data. Adjustments should then be made as necessary. The range over which the settings can be adjusted is shown overleaf.

The monitor communicates on a JTL network. The unit numbers for the 4 channels should be set on items 111, 121, 131 and 141.

Temperature offset and Sensor Location

A fixed temperature offset can be programmed on items 116, 126, 136, 146. The range is between -5.0 and +5.0 K and applies to the temperature that is displayed and used in the alarm logic.

In the channel Enable setting on items 110, 120, 130 and 140 it is possible to be more specific regarding the sensor location. A value of 1 sets the sensor as enabled, a value of 3 sets the sensor as enabled and located in the "Air Off" position, and the value of 5 indicates the sensor is enabled and located in the "Air On" position. This assists reporting on remote monitoring software.



Defrost

The defrost sequence can be initiated in 2 ways, by command from the JTL communications network, or by contact input.

Defrost is terminated on time.

Alarms

The air temperature is monitored continually. The temperature is averaged over the period set on item 50. If the average temperature exceeds the alarm level or falls below the level under temperature then an alarm is given, on the JTL alarm system.

High and low air temperature alarms are **NOT** cancelled during defrost or defrost recovery.

Network Shutdown

This monitor supports the JTL Network shutdown facility. When this facility is enabled and a channel shutdown command is received over the JTL Network, the channel alarms are disabled. The temperature alarm sequence is initialised.

Item Numbers

The TA230 monitor is a 4 channel unit. Items 0-99 are common. Items 110-119 and items 210-219 are for channel 1, items 120-129 and 220-229 are for channel 2, items 130 - 139 and 230 - 239 are for channel 3 and items 140 - 149 and 240 - 249 are for channel 4.

ADJUSTABLE PARAMETERS			
Item	Function	Range	Units
108	Defrost strategy	0=none 2=network 4=input	min
79	Temperature sensor type selection	0=std, 1=Hot, 2=2K0, 3=2K2	
50	Alarm delay time	0 - 120	
65	Invert defrost inputs	0=no 1=yes	K
110,120,130,140	Enable channel	0=dis 1=En 3=ch.Air Off 5=ch.Air On	
111,121,131,141	Channel unit number	0.1 to 899.8	°C
113,123,133,143	Temperature setpoint	-50.0 to +50.0	
114,124,134,144	Over temperature tolerance	0.0 to 99.9	K
115,125,135,145	Under temperature tolerance	0.0 to -99.9	K
116,126,136,146	Temperature offset	-5.0 to +5.0	K
210,220,230,240	Maximum defrost time	0 - 120	min

OTHER USEFUL ITEMS	
Item	Function
21,22,23,24	Temperature (without offset)
112,122,132,142	Temperature (including offset)
117,127,137,147	Operating mode
211,221,231,241	Network defrost command state
213,223,233,243	Defrost input state

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

Supply Requirements

230 V ac 48-52Hz

Supply 3 VA maximum

Inputs 2 mA maximum



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

Applicable Documentation

Item Numbers	Doc No. 03342
Firmware Variations	Doc No. 03337
Connection Diagram	Doc No. 03331
Evaporator Manual	Doc No. 01923
Installation Requirements	Doc No. 03308
Datasheet	Doc No. 03305