

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS

RL280

CONTENTS

1. Jnet NETWORK IDENTIFICATION.....	1
1.1 UNIT NUMBERS.....	1
2. TEMPERATURES.....	2
3. CHANNEL TEMPERATURE DATA.....	3
4. CHANNEL ALARM DATA.....	4
5. CHANNEL DEFROST DATA.....	4
6. MODBUS COMMUNICATIONS.....	5
7. CLOCK CALENDER.....	5
8. DISPLAY FUNCTIONS.....	5
9. RESTORE FACTORY DEFAULT DATA.....	5
10. RESTORE PARAMETERS FROM NETWORK.....	6
11. DIAGNOSTIC & TEST FUNCTIONS.....	6
DISPLAY MESSAGES.....	7
GRAPHICAL DISPLAY DATA.....	8

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS				RL280	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
1. Jnet NETWORK IDENTIFICATION					
0	Unit type	r280	Unit type		
19	Software Version number				
1.1 UNIT NUMBERS					
211	Channel 1			0 - 899.7	
221	Channel 2				
231	Channel 3				
241	Channel 4				
251	Channel 5				
261	Channel 6				
271	Channel 7				
281	Channel 8				
291	Channel 9				
301	Channel 10				
311	Channel 11				
321	Channel 12				
331	Channel 13				
341	Channel 14				
351	Channel 15				

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS				RL280	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
2. TEMPERATURES					
101	Channel 1				
102	Channel 2				
103	Channel 3				
104	Channel 4				
105	Channel 5				
106	Channel 6				
107	Channel 7				
108	Channel 8				
109	Channel 9				
110	Channel 10				
111	Channel 11				
112	Channel 12				
113	Channel 13				
114	Channel 14				
115	Channel 15				

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS

RL280

ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
3. CHANNEL TEMPERATURE DATA					
A general form of item numbers is shown below.					
The "x" shown in each item number should be replaced by the channel number (1 - 9).					
This sequence covers item numbers 210-299 and 610 - 699. For channels 10 - 15 the item nos are 300 - 359 and 700 - 759.					
2x0 3x0	Channel Selection	0 1 3 5	OFF on A.Off A.On	Channel off Channel on Channel Air off Channel Air on	0 - 5 oFF
6x0 7x0	LAE Device No	0		Not used	0 - 99
6x1 7x1	LAE Type	1009 1010 1021 1022		WUBC2 WUBC3 WUBC3 WUMC3	
2x7 3x7	Mode	0 rEFr dEF d.rEc L.C.FL		Unknown Refrigerating Defrosting Recovering from defrost Communication fault	
2x3 3x3	Setpoint				-50.0 to 50.0 -10.0
6x3 7x3	LAE Setpoint				
2x2 3x2	Air Temperature				
6x4 7x4	Evaporator Temperature				
6x5 7x5	Food Probe Temperature				
6x6 7x6	Condenser Temperature				
6x7 7x7	Sensor 3 selection	up to V0.00.1			
		0 1	Cond Fd.Pr	Condenser Food probe	0 - 1 Cond
		V0.00.2			
		0 1 2	nonE Fd.Pr Cond	No sensor Food Probe Condenser	0 - 2 nonE

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS				RL280	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
4. CHANNEL ALARM DATA					
A general form of item numbers is shown below. The "x" shown in each item number should be replaced by the channel number (1 - 9). This sequence covers item numbers 210-299 and 610 - 699. For channels 10 - 15 the item nos are 300 - 359 and 700 - 759.					
2x4 3x4	Average temperature during refrigeration				
2x5 3x5	Period over which averages taken			00:02 - 04:00	01:00
2x8 3x8	Over temperature tolerance			0.0 to 99.9	10.0
2x9 3x9	Under temperature tolerance			0.0 to -99.9	-10.0
6x2 7x2	LAE status flags	Graphical See display data			
2x6 3x6	LAE alarm flags	Graphical See display data			
6x8 6x8	Alarm state 1	Graphical See display data	bit 2 LAE comms failure other bits unused		
6x9 6x9	Alarm state 2	Graphical See display data	bit 1 LAE critical sensor fault bit 2 LAE door open alarm bit 3 High temperature alarm bit 4 Low temperature alarm bit 5 LAE sensor 1 fault bit 6 LAE sensor 2 fault bit 7 LAE sensor 3 fault bit 8 LAE condenser clean due		
5. CHANNEL DEFROST DATA					
A general form of item numbers is shown below. The "x" shown in each item number should be replaced by the channel number (1 - 9). This sequence covers item numbers 210-293 and 410 - 493. For channels 10 - 15 the item nos are 300 - 359 and 500 - 653.					
2x7 3x7	Mode	0 rEFr dEF d.rEc L.C.FL	Unknown Refrigerating Defrosting Recovering from defrost Communication fault		
4x0 5x0	Duration of last defrost				
4x1 5x1	Time since end of last defrost				
4x2 5x2	Duration of current defrost				
4x3 5x3	Time since start of the last defrost				

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS				RL280	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
6. MODBUS COMMUNICATIONS					
34	Delay between modbus requests (secs)			0 - 5	0
35	Delay before modbus retry requests (secs)			2 - 5	2
36	Inter-character timing multiplier		1 = Standard Modbus timing	1 - 10	4
7. CLOCK CALENDER					
Note, the time and date can be displayed as standard or daylight saving (summer) time. This choice is made on item 18. When daylight saving is chosen and the controller is connected to a JTL Network Controller supporting daylight saving operation, the change is made automatically to the current EU directive.					
2	Time of day			00:00 23:59	
3	Day of week	Sun - Sat	0 = Sunday 1 = Monday		
4	Date			0.1:01-31:12	
5	Year			2017 - 2048	
18	Daylight saving enable	Stnd dAY.S	Standard time Daylight saving time	0 - 1	Stnd
8. DISPLAY FUNCTIONS					
178	Temperature display unit choice	CELS FAhr	Celsius Fahrenheit		
189	Backlight control	0 1 2 3	B.oFF BL.on BL.F.F BL.n.F	Backlight off Backlight on Backlight off, flashes for alarm Backlight on, flashes for alarm	B.oFF
9. RESTORE FACTORY DEFAULT DATA					
966	Virtual bitswitch setting				
9	Set default values To set the factory defaults into the memory of the controller, set item 9 to the set default value of "1234". This should be done on initial commissioning of the unit or when the unit is being installed as a replacement part.	1234 1066	Set default values Write to NVRAM without delay		

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS

RL280









ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
10. RESTORE PARAMETERS FROM NETWORK					
<p>To restore the data from the network first set the virtual bitswitch on item 966 and the appropriate unit number on item 1. Then check item 965 to see if this facility is available on the network. The information on item 965 is received from a network broadcast every few minutes. If the restore parameter facility is available and operational then item 965 will be set to a non zero number e.g. 2. To request restore parameters set item 964 to 1234. Item 963 displays parameters restore progress. When all parameters are downloaded item 964 is cleared to 0.</p>					
965	Master database port	0 1 - 4	Not in use NC port no		
964	Set restore parameters from network	1234	Request restore		
963	Parameter restore progress	rdy dnl.r din.p dnl.c FAIL	Restore function possible Restore requested Restore in progress Restore complete Restore fault		
959	Requested template	0 1-9999	As commissioned Template number	0 - 9999	
11. DIAGNOSTIC & TEST FUNCTIONS					
6	JTL Network communications speed	4.8	kilo baud rate		
7	Communications method	HALF	2 wire		
8	Bitswitch setting				
954	Current zone no				
967	Latest unit no polled on zone				
973	Latest polling interval This time shows the polling interval between the last two successful network awake messages to this unit.	min:sec			
974	Time since last awake message	min:sec			
975	Network receive timer Each time a message is read correctly the timer is set to 10 it counts down. If the timer reaches 0 then the communications module is reset.	seconds	(counts down to 0)		
976	Network receive bad character counter. The counter counts down from a preset number. When the counter reaches 0 the communications module is reset.		(counts down to 0)		
99	Test digital displays	CLr SEt	Not active Test active	0 - 1	
10	Processor alarms (11 - 17)	Graphical	see display data		
11	Static RAM fault	CLr rA.Ft	No fault Fault		
12	Program/counter fault	CLr PC.Ft	No fault Fault		
13	Stack pointer fault	CLr SP.Ft	No fault Fault		
14	Background loop fault	CLr bL.Ft	No fault Fault		

JTL LAE MODBUS TEMPERATURE INTERFACE ITEM NUMBERS				RL280	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
15	PROM checksum fault	CLr Pr.Ft	No fault Fault		
16	NVRAM fault	CLr n.Ft	No fault Fault		
17	Instruction TRAP fault	CLr tP.Ft	No fault Fault		

DISPLAY MESSAGES		RL280
NORMAL DISPLAY		
R280	Unit type	
ALARM TEXT (in descending priority order)		
C-xx	Channel alarm present	
FAIL	JTL network communications failure	
OTHER TEXT		
JTL	Start-up message	

Graphical Display of Bit Data

Graphical display of bit data used on items where the data was shown previously as a decimal value.

Bit	Graphic
None	
1	
2	
3	
4	
5	
6	
7	
8	