

CONTENTS

1. Jnet NETWORK IDENTIFICATION	2
2. DEFROST CONTROL	2
2.1 OVERALL SETUP	2
2.2 OFF CYCLE DEFROST CONTROL	2
2.3 ELECTRIC DEFROST CONTROL	3
2.3.1 BROWN PHASE INFORMATION	3
2.3.2 BLACK PHASE INFORMATION	4
2.3.3 GREY PHASE INFORMATION	4
3. EVAPORATORS REQUIRING DEFROST (SORTED LIST)	5
4. EVAPORATOR COMMON INFORMATION	6
4.1 EVAPORATOR DATA	6
5. DISPLAY FUNCTIONS	7
6. DEFROST SYSTEM DATA	7
7. CLOCK CALENDAR	7
8. RESTORE FACTORY DEFAULTS	8
9. RESTORE PARAMETERS FROM NETWORK	8
10. SYSTEM ALARMS	8
11. DIAGNOSTIC & TEST FUNCTIONS	9
DISPLAY DATA	11
GRAPHIC DISPLAY	12

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
1. Jnet NETWORK IDENTIFICATION					
0	Unit type	dP31 dP32 dP34 dP37 dP41 dP42 dP44 dP47	Unit type		
19	Software version number				
1	Unit number			0.1 - 899.7	
2 DEFROST CONTROL					
2.1 OVERALL SETUP					
70	Mode	None Cord Pred	Disabled non-Predict Predict		
20	Strategy	0 None 1 cord 2 Pred	Disabled non-Predict Predict	0 - 2	Pred
39	Strategy as allowed by network (v0.00.7 on)	None Cord Pred	Disabled non-Predict Predict		
30	Current number of evaporators on defrost				
32	Current predicted unit number				
21	Maximum no of evaporators allowed on defrost simultaneously			UPTO V0.00.7	8
				0 - 12	
				FROM V0.00.8	
				0 - 24	
2.2 OFF CYCLE DEFROST CONTROL					
27	Maximum off cycle defrost duration (mins)			30 - 60	60
2.3 ELECTRIC DEFROST CONTROL					
24	Maximum no of evaporators per circuit allowed on defrost simultaneously			0 - 4	4
23	Maximum no of evaporators per phase allowed to defrost simultaneously			0 - 4	4
26	Maximum electric defrost duration (mins)			20 - 60	40
76	Electric defrost inhibit Broadcast plant data selection (v0.01.0 on)	0 1 - 8	Function disabled 1 - 8 plant input choice	1 - 8	0
78	Electric defrost inhibit broadcast timer selection (v0.00.4 on)	0 1 - 8	Function disabled Timer choice	1 - 8	0
79	Electric defrost inhibit state (V0.00.4 - v0.00.9) (dependent on item 78 being set 1-8)	OFF E.d.i.i	enabled disabled		

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
79	Electric defrost inhibit state (v0.01.0 on)	nonE E.d.I.t E.d.I.P	Not inhibited Electric defrost inhibited by timer Electric defrost inhibited by plant		
2.3.1 BROWN (RED) PHASE INFORMATION (up to v0.00.3)					
40	Current no of evaporators on brown phase defrosting				
41	Current no of evaporators on brown phase circuit 1 defrosting				
42	Current no of evaporators on brown phase circuit 2 defrosting				
43	Current no of evaporators on brown phase circuit 3 defrosting				
44	Current no of evaporators on brown phase circuit 4 defrosting				
45	Current no of evaporators on brown phase circuit 5 defrosting				
46	Current no of evaporators on brown phase circuit 6 defrosting				
47	Current no of evaporators on brown phase circuit 7 defrosting				
2.3.2 BLACK (YELLOW) PHASE INFORMATION (up to v0.00.3)					
50	Current no of evaporators on black phase defrosting				
51	Current no of evaporators on black phase circuit 1 defrosting				
52	Current no of evaporators on black phase circuit 2 defrosting				
53	Current no of evaporators on black phase circuit 3 defrosting				
54	Current no of evaporators on black phase circuit 4 defrosting				
55	Current no of evaporators on black phase circuit 5 defrosting				
56	Current no of evaporators on black phase circuit 6 defrosting				
57	Current no of evaporators on black phase circuit 7 defrosting				

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
2.3.3 GREY (BLUE) PHASE INFORMATION (up to v0.00.3)					
60	Current no of evaporators on grey phase defrosting				
61	Current no of evaporators on grey phase circuit 1 defrosting				
62	Current no of evaporators on grey phase circuit 2 defrosting				
63	Current no of evaporators on grey phase circuit 3 defrosting				
64	Current no of evaporators on grey phase circuit 4 defrosting				
65	Current no of evaporators on grey phase circuit 5 defrosting				
66	Current no of evaporators on grey phase circuit 6 defrosting				
67	Current no of evaporators on grey phase circuit 7 defrosting				

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
3. EVAPORATORS REQUIRING DEFROST (SORTED LIST)					
The data from the evaporators appears in this sorted list. This comprises the top 10 of the list requiring a defrost. The data is in blocks of 10 items starting with item 100 - 106. The next evaporator is item 110 - 116 up to items 190 - 196.					
1x0	Evaporator unit number				
1x2	Evaporator mode	nonE rEFr dEFr drdn Li.Ho dF.rc Pu.dn Sh.dn	None Refrigerating Defrost Drain down Liquid hold off Defrost recovery Pump down Shutdown		
1x7	Evaporator electrical distribution Panel no (from v0.00.4)	0 1 - 7	not used Panel no		
1x3	Evaporator electrical circuit number	nonE cct1 cct2 cct3 cct4 cct cct6 cct7 cct8 cct9 cc10 cc11 cc12 cc13 cc14 cc15 cc16 cc17 cc18 cc19 cc20 cc21 cc22 cc23 cc24 cc25 cc26 cc27 cc28 cc29 cc30 cc31	None Circuit 1 Circuit 2 Circuit 3 Circuit 4 Circuit 5 Circuit 6 Circuit 7 Circuit 8 Circuit 9 Circuit 10 Circuit 11 Circuit 12 Circuit 13 Circuit 14 Circuit 15 Circuit 16 Circuit 17 Circuit 18 Circuit 19 Circuit 20 Circuit 21 Circuit 22 Circuit 23 Circuit 24 Circuit 25 Circuit 26 Circuit 27 Circuit 28 Circuit 29 Circuit 30 Circuit 31	upto v0.00.3	
				none - cc7	
				from v0.00.4	
				none - cc15	
				from v0.00.6	
				none - cc31	
1x4	Defrost method	up to v0.00.2			
		rEd YELL bLuE 3-Ph GAS.2 GAS.3 oFF.C	Electric red phase Electric yellow phase Electric blue phase Electric 3 phase 2 pipe gas 3 pipe gas Off cycle		
		from v0.00.3			

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
		brn bLAc GrEy 3-Ph GAS.2 GAS.3 oFF.C	Electric brown phase Electric black phase Electric grey phase Electric 3 phase 2 pipe gas 3 pipe gas Off cycle		
1x6	Defrost requirement number				
4. EVAPORATOR COMMON INFORMATION					
200	Highest system number in use				
201	No of evaporators in use				
202	Current no of evaporators potentially requiring a defrost				
4.1 EVAPORATOR DATA					
The data from all the attached evaporators appears in the following data items. This data is unsorted and appears in the zone order of the network controller. The data is in blocks of 10 items starting at item 210 - 217 for the first associated evaporator the next evaporator is in items 220 - 227 up to the maximum of 72 evaporators on items 920 - 927					
xx0	Evaporator unit number				
xx6	Defrost requirement number				
xx2	Evaporator mode (current data from evaporator)	rEfr dEfr drdn Li.Ho Df.rc Pu.dn Sh.dn	Refrigerating Defrost Drain down Liquid hold off Defrost recovery Pump down Shut down		
xx3	Evaporator electricity circuit number (upto v0.00.3)	nonE cct1 cct2 cct3 cct4 cct4 cct6 cct7	None Circuit 1 Circuit 2 Circuit 3 Circuit 4 Circuit 5 Circuit 6 Circuit 7		
xx3	Distribution panel & circuit number (from v0.00.4)	dd.cc	where dd=distribution Panel no cc=circuit no		
xx4	Evaporator method	up to v0.00.2			
		rEd YELL bLuE 3-Ph GAS.2 GAS.3 oFF.C	Electric red phase Electric yellow phase Electric blue phase Electric 3 phase 2 pipe gas 3 pipe gas Off cycle		
		from v0.00.3			

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
		brn bLAc GrEy 3-Ph GAS.2 GAS.3 oFF.C	Electric brown phase Electric black phase Electric grey phase Electric 3 phase 2 pipe gas 3 pipe gas Off cycle		
xx5	Defrost command to evaporator	rEFr dEF F.dEF	Defrost not required Defrost Forced defrost		
xx7	Plant data (raw data as downloaded from network controller)				
5. DEFROST SYSTEM DATA The data for the defrost systems appears on the following items. The data are in blocks of 10 items starting at 218-219 for system 1. The next system is 228-229 to a maximum of 48 systems on items 688-689.					
xx8	Defrost time remaining (minutes)				
xx9	up to version 0.00.2 Defrost command (decimal value)				
xx9	from version v0.00.3 Force system on defrost Note all evaporators on the system will go on defrost	0 1 - 120	Run normally Duration of forced defrost required	0 - 120	0
6. DISPLAY FUNCTIONS					
33	Systems on defrost (repeats panel display)				
77	JTL numbering on systems on defrost display Note: Depends on unit no setting on item 1.	oFF J.no	System no. range 1- 48 System no. range x01 - x48	0 - 1	oFF
75	Backlight control (v0.01.2) on)	0 B.oFF 1 BL.on 2 BL.F.F 3 BL.n.F	Backlight off Backlight on Backlight off, flashes for alarm Backlight on, flashes for alarm	0 - 3	
7. CLOCK CALENDAR 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 etc		
4	Date			01:01 - 31:12	
5	Year			2012 - 2042	
18	Daylight saving enable	Stnd dAY.S	Standard time Daylight saving time	0 - 1	Stnd

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
8. RESTORE FACTORY DEFAULTS					
To set the factory defaults into the memory of the controller, first set the virtual bitswitches as shown, then 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.					
966	Virtual bitswitch setting	0 1	Co-ordinated defrost PREDICT defrost		
9	Set default values selected by bitswitch	1234	Set default		
	Note: Setting the virtual bitswitches alone has no effect	1066	Write to NVRAM without delay		
9. RESTORE PARAMETERS FROM NETWORK (from v0.00.4)					
To restore the data from the network first set 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.					
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	
10. SYSTEM ALARMS					
80	Group alarm 81 - 88 (see display data)	0 1 - 255	No alarms Check 81 - 88		
82	Unit disabled	CLr P.dIS	No fault Disabled		
83	Suction alarm	CLr Lt	No fault LT fault		
86	Electric defrost inhibited by plant (v0.01.0 on)	CLr E.d.I.P	Not inhibited Inhibited		
88	Unit number corrupted or not set	CLr Un.CF	Clear Fault		

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS

DP300 series DP400 series

ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
11. DIAGNOSTIC & TEST FUNCTIONS					
6	JTL Network communications speed	4.8	Kilo Baud		
7	Communications method	HALF	2 wire		
967	Latest unit no polled on zone (from v0.00.2)				
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)		
977	Transmit control line status for the operation of the Jnet network communications.	Hi Lo	Transmit Receive		
8	Virtual bitswitch Setting	0 1	Co-ordinated defrost PREDICT defrost		
99	Test digital displays	CLr SEt	Not active Test active	0 - 1	
968	Multicast data (v0.00.2 on)	binary value			
969	Broadcast timer data (v0.00.2 on)	binary value			
949	Broadcast plant data (v0.01.0 on)	binary value			
72	Pushbutton inputs (Note more than 1 pushbutton can be shown simultaneously)	P1 - - P- 2 - P- - 3	Pbutton 1 pressed Pbutton 2 pressed Pbutton 3 pressed		
10	Processor alarms (11 - 17) (see display data)	0 1 - 255	No alarms Check 11 - 17		
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		
15	PROM checksum fault	CLr Pr.Ft	No fault Fault		

JTL PREDICT DEFROST CO-ORDINATOR ITEM NUMBERS				DP300 series DP400 series	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
16	NVRAM fault	CLr n.Ft	No fault Fault		
17	Instruction TRAP fault	CLr tP.Ft	No fault Fault		

DISPLAY DATA		DP300 series DP400 series	
NORMAL DISPLAY			
999.9	Next unit to go on defrost		
-	Not selected		
ALARM TEXT (in descending priority order)			
FAIL	JTL Network communications failure		
oFF	Unit disabled		
OTHER TEXT			
JTL	Start-up text		
Func	Function mode		
data	Data mode		
Pr01	Highest priority unit requiring a defrost follows this text		
Pr02	2nd highest priority unit requiring a defrost follows this text		
Pr03	3rd highest priority unit requiring a defrost follows this text		
Pr04	4th highest priority unit requiring a defrost follows this text		
Pr05	5th highest priority unit requiring a defrost follows this text		
Pr06	6th highest priority unit requiring a defrost follows this text		
Pr07	7th highest priority unit requiring a defrost follows this text		
Pr08	8th highest priority unit requiring a defrost follows this text		
Pr09	9th highest priority unit requiring a defrost follows this text		
Pr10	10th highest priority unit requiring a defrost follows this text		

GRAPHICAL DISPLAY OF BIT DATA (FROM V0.01.2)

Graphical display of bit data used on items where the data was shown previously as a decimal value	bit	Graphic	Value	<u>Note:</u> Where the data is shown as a decimal value the meaning is the sum of the associated value e.g. bits 2 and 5 set would be displayed as 18 (16+2)
	None		0	
	1		1	
	2		2	
	3		4	
	4		8	
	5		16	
	6		32	
	7		34	
	8		128	