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JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN		
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE	
				4321			
1. Jnet NETWORK IDENTIFICATION							
0	Unit type	LcPt/LcPn	Unit type				
19	Software Version number						
1	Unit number				0.1 - 899.8		
2. TEMPERATURES							
Note: From v0.00.7 temperatures can be displayed on the maintenance unit in degrees Celsius or Fahrenheit. The choice is made on item 122. All setpoint ranges in this document are shown in celsius.							
20	Estimated cabinet temperature (calculated from Air on and Air off temperatures)						
33	Cabinet temperature ratio (Item 20 calculated as value between Air off and Air on using this ratio)			xxCC xxCO xxOC xxOO	20 - 80 20 - 80 0 - 80 0 - 80	50 50 40 60	
21	Air on temperature						
36	Air on sensor selection	OFF AO.En	Disabled Enabled		0 - 1	AO.En	
22 (405)	Air off temperature Note: From v0.01.0 the data shown here is calculated as set by item 408 using up to 3 sensors as selected by item 37.						
37 (409)	Air off sensor selection	Up to v0.00.9					
		OFF AO.En	Disabled Enabled				
		v0.01.0 on					
		0	none	none selected		0 - 7	S 1 - -
		1	S 1 - -	Sensor 1			
2	S - 2 -	Sensor 2					
3	S - - 3	Sensor 3					
4	S 1 2 -	Sensor 1 & 2					
5	S 1 - 3	Sensor 1 & 3					
6	S - 2 3	Sensor 2 & 3					
7	S 1 2 3	Sensor 1, 2 & 3					
23	Evaporator temperature						
38	Evaporator sensor selection	OFF EP.En	Disabled Enabled		0 - 1	EP.En	
24	Suction line temperature						
39	Suction line sensor selection	OFF SP.En	Disabled Enabled		0 - 1	SP.En	
25	Superheat (Evaporator temp - suction line temp)						
401	Air off 1 temperature (v0.01.0 on)						
402	Air off 2 temperature (v0.01.0 on)						
403	Air off 3 temperature (v0.01.0 on)						

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN		
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408	Overall air off calculation method (v0.01.0 on)	0 1 2 3 4 5 6	none Lo.rd Nd.rd Hi.rd A.All A.Lo A.Hi	Lowest air off reading Middle air off reading Highest air off reading Average air off Average of lowest 2 Average of highest 2		1 - 6	Nd.rd
141	Termination sensor temperature						
147	Termination sensor selection	OFF ts.En				0 - 1	OFF
131	Fan control sensor temperature						
130	Fan control sensor enabled	OFF E.S.En		OFF Enabled		0 - 1	OFF
102	Temperature sensor type selection (v0.00.8 on) LCPT ONLY	5000 2000		JTL sensor (5K) Elm sensor (2K)		0 - 1	5000
247	Site temperature (from broadcast) (v0.01.0 on)						
248	Site humidity (from broadcast) (v0.01.0 on)						
122	Temperature display unit choice (v0.00.7 on)	CELS FAhr		Celsius Fahrenheit		0 - 1	CELS
3. TEMPERATURE ALARMS							
26	Average cabinet temperature error						
32	Cabinet overtemperature alarm tolerance	0.0		Disable Ht alarm	xxCC xxCO xxOC xxOO	0 - 20 0 - 20 0 - 20 0 - 20	10 10 5 10
27	Average Air off temperature error						
431	Average Air off temperature 1 error (v0.01.3 on)						
432	Average Air off temperature 2 error (v0.01.3 on)						
433	Average Air off temperature 3 error (v0.01.3 on)						
34	Air off over temperature tolerance	0.0		Disable Ht alarm	xxCX xxOX	0 - 30 0 - 30	15 10
47	Period over which averages are taken				xxCx xxOx	00:30 - 03:00	01:30 01:00

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
4. TEMPERATURE CONTROL						
30	Cabinet temperature setpoint (up to v0.00.5)			xxCC xxCO xxOC xxOO	-30 to -15 -30 to -15 -5 to +10 -5 to +10	-20 -26 +1 +4
	Current Cabinet temperature setpoint (see items 123 to 127) (v0.00.6 on)					
123	Enable 2nd setpoint	oFF E.2SP	Disabled Enabled		0 - 1	oFF
124	Cabinet temperature setpoint - primary (target for item 20)			xxCC xxCO xxOC xxOO	-30 to -15 -30 to -15 -5 to +10 -5 to +10	-20 -26 +1 +4
125	Alternative cabinet temperature setpoint - secondary			xxCC xxCO xxOC xxOO	-30 to -15 -30 to -15 0 to 10 0 to 10	-20 -26 5 10
126	Selected setpoint in operation	Lo Hi	Main setpoint (item 124) Alternative setpoint (item 125)		0 - 1	Lo
31 (407)	Air off setpoint (starting point and lower limit for item 28)			xxCC xxCO xxOC xxOO	- 39 to -20 - 39 to -20 - 10 to +5 - 10 to +5	- 27 - 33 - 6 - 4
140	Temperature deadband				0.4 - 3.0	0.4
48	Max starts/hour (Anti-shortcycling timer when using liquid valve relay to control a condensing unit)	0 1 2 3	unLm 10.PH 15.PH 20.PH	Unlimited 10 starts per hour 15 starts per hour 20 starts per hour	0 - 3	unLm
28 (406)	Current Air off temperature setpoint (calculated by controller)					
29	Current Evaporator temperature setpoint (calculated by controller)					
240	Liquid line valve open percentage for last sample period (v0.00.9 on)					
241	Average liquid line valve open percentage over data logging interval period (v0.00.9 on)					

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN		
ITEM	DESCRIPTION	CODE		CODE MEANING	BIT	RANGE	ITEM 9 VALUE
5. INPUTS & OUTPUTS							
70	Operating mode	rEFr dEFr dF.rc dr.dn Li.Ho Pu.dn Sh.dn		Refrigeration Defrost Defrost recovery Drain down Liquid hold off Pump down Shutdown			
71	Inputs	IP-1 IP-2 Both	IP1- IP-2 IP12	Defrost input on Lighting override input on Both inputs on			
72	Defrost relay (function depends on item 75)	0 or oFF dt.on dc.on		Relay deenergised Defrost termination on Defrost control on			
73	Liquid solenoid relay	OFF LS.on		Off Demanding refig.			
74	FANS/Heater relays	0 or oFF Fn.on Hr.on		Off Fans on Heater on			
75	Defrost relay mode selection	d.tEr d.Con		Defrost termination Defrost control		up to v0.00.4	
						0 - 1	d.tEr
						v0.00.5 on	
						0 - 1	d.Con
106	Auxiliary output selection	0 1 2	nonE FAn.S Htr.S	Not used Fan control Heater		0 - 2	Not used

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
6. SUCTION PRESSURE OPTIMISATION						
200	Disable suction pressure optimisation for this unit when both air sensors are faulty	En.SO di.SO	Enable Disable		0 - 1	En.SO
201	Exclude evaporator from suction pressure optimisation (Data to network)	OFF in.SO	Off Inhibit from suction optimisation			
203	Related suction line from plant controls (Data from network)	0 or nonE Lt Ht SAt	Not selected Low temperature High temperature Satellite			
202	Raw network data for optimiser from plant (Binary data interpreted on item 203)					
211	Evaporator suction group - Required by Mark 2 optimisers (Data to network) (v0.01.0 on)	0 1 2 3	nonE Lt Ht SAt	Not selected Low temperature High temperature Satellite	0 - 3	nonE
70 212	Operating mode	rEFr dEFr dF.rc dr.dn Li.Ho Pu.dn Sh.dn	Refrigeration Defrost Defrost recovery Drain down Liquid hold off Pump down Shutdown			
217	Plant data to network (binary value interpreted on item 211) (v0.01.0 on)					

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
7.2 REAL TIME INITIATED DEFROST TIMES						
When a 12 hour schedule is selected (item 60) the defrosts repeat on a 12 hour cycle ie., if 08:00 is selected then a 2nd defrost occurs at 20:00 (and vice versa)						
Daylight saving operation added from v0.00.7. Time and defrost schedule can be automatically displayed as standard time or daylight saving (summer) time if desired. When daylight saving is operational the displayed schedule is automatically adjusted so that defrost still occur at the same "standard time".						
51	Defrost time 1	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	01:00 02:00 03:00 04:00
52	Defrost time 2	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	07:00 08:00 09:00 10:00
53	Defrost time 3	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	13:00 14:00 15:00 16:00
54	Defrost time 4	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	19:00 20:00 21:00 22:00
55	Defrost time 5	00:00 00:01 - 23:59	Defrost disabled Defrost enabled		00:00 - 23:59	00:00
56	Defrost time 6	00:00 00:01 - 23:59	Defrost disabled Defrost enabled		00:00 - 23:59	00:00
60	Defrost schedule selection	24 hr 12 hr	24 hour schedule 12 hour schedule		0 - 1	24 hr
43	Time next defrost is due					
7.3 SUCTION INITIATED DEFROST						
58	Defrost initiation temperature (suction line sensor)			xxCC xxCO xxOC xxOO	-5 - +20 -5 - +20 0 - 20 0 - 20	0 0 +15 +10
7.4 CONTACT INITIATED DEFROST						
65	Invert defrost input	no YES	Input=defrost No input=defrost		0 - 1	no
7.5 Jnet NETWORK INITIATED DEFROST						
46	Jnet Network initiated defrost command status	P.DEF F.DEF 0 or none	Defrost Forced defrost No command			
261 to 272	Defrost schedule (12 times starting at item 261 through to 272) (v0.00.9 on)					

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN		
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE	
				4321			
7.6 COORDINATED DEFROST INITIATION (v0.01.2 on)							
69	No of defrosts required per day (Note, when the defrost strategy is set to coordinated defrost this item sets the number of defrosts a day that are required.)	0	Function disabled		0 - 6	3	
		1 - 6 (up to v0.00.8) 1 - 12 (from v0.00.9)	No of defrosts		0 - 12	3	
216	Defrost requirement to defrost coordinator (v0.01.2 on)						
223	Defrost requirement priority (v0.01.2 on)				1 - 8	1	
211	Evaporator suction group (v0.01.0 on)	0 1 2 3	nonE Lt Ht SAT	Not selected Low temperature High temperature Satellite	0 - 3	nonE	
214 (414)	Defrost heater choice (v0.01.0 on)	0	rEd	Electric red phase	up to v0.01.1	rEd	
		1	YELL	Electric yellow phase	0 - 3		
		2	bLuE	Electric blue phase	from v0.01.2		
		3	3 - Ph	Electric 3 phase	0 - 6		
213	Electric circuit choice (depends on item 214) (v0.01.0 on)	4	GAS.2	2 pipe gas	up to v0.01.1	None	
		5	GAS.3	3 pipe gas			
		6	oFF.C	Off cycle			
		0	nonE	None			0 - 7
		1	cct1	Circuit 1			
		2	cct2	Circuit 2			
		3	cct3	Circuit 3			
4	cct4	Circuit 4	v0.01.2 on				
5	cct5	Circuit 5					
6	cct6	Circuit 6					
7	cct7	Circuit 7	1 - 7	1			
46 (215)	Jnet network initiated defrost command status	P.dEF F.dEF nonE	Defrost Forced defrost No command				
217	Evaporator data to plant (v0.01.0 on)						
219	Jnet network defrost arrangement (v0.01.0 on)	nonE cord dEF.S PrEd	None Defrost co-ordinator present on network Timed defrost scheduler present on network Predict co-ordinator present on network				
220	Defrost coordinator status (v0.01.0 on)	oFF cord	No defrost coordinator Defrost coordinator present on network				

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
7.7 DEFROST TERMINATION						
144 (413)	Termination method Selection	EuAP A.OFF tEr tot	Evaporator sensor Air off sensor Termination sensor Time only	xxCX xxOC	1 - 4	EuAP
				xx00	1 - 4	tot
141	Termination sensor temperature					
147	Termination sensor selection	OFF tS.En			0 - 1	OFF
50	Defrost termination temperature (the sensor used is item 144)			xxCC xxCO xxOC xx00	0 - 20 0 - 20 0 - 20 0 - 20	15 15 12 20
145	Minimum defrost duration (Defrost heater cycles on termination temperature (item 50) as required during this time)				00:00 - 00:30	00:10
57	Maximum defrost duration			xxCC xxCO xxOC xx00	00:05 - 00:40 00:05 - 00:40 00:05 - 00:59 00:05 - 00:59	00:20 00:20 00:20 00:40
59	Drain down duration				00:00 - 00:10	00:05
49	Liquid hold off duration (starts when drain down completed)				00:00 - 00:10	00:00
7.8 DEFROST FORCING FUNCTIONS						
Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
77	Forced defrost (When item 107 is set to Jnet network initiated defrost then forced defrost sends the command to the plant for action. It is NOT actioned locally)	OFF Fd.on	Off Forced defrost on		0 - 1	
78	Inhibit defrost	OFF no.dF	Off No defrosts		0 - 1	
79	Forced refrigeration	OFF Fr.on	Off Forced refrigeration		0 - 1	
222	Enable forced defrost requirement to defrost coordinator (v0.01.2 on)	oFF F.r.En	Disabled Enabled		0 - 1	0
221	Forced defrost requirement to defrost coordinator (requires item 222 set to 1) (v0.01.2 on)	0 - 63	Forced value			

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN		
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE	
				4321			
8. FAN CONTROL							
108	Fan control (106 must be set to FAn.S)	1	F.on	Fan runs always Fan off during defrost Fan controlled during defrost		up to v0.00.9	F.on
		2	F.oFF			1 - 2	
		3	F.c.d.d			v0.01.0 on	
						1 - 3	
146	Temperature to turn fan off during defrost. (v0.01.1 on) Depends on item 108				xxCx xxOx	-12.0 to -2.0 0.0 to 20.0	-7.0 10.0
109	Fan delay after defrost (v0.00.5 on)	00:00	Fans cycle on evap temperature			00:00 - 00:10	00:00
150	Temperature to bring fan on after defrost. (v0.01.0 on) Depends on item 108				xxCx xxOx	-20.0 to -10.0 -5.0 to 5.0	-15.0 0.0
130	Fan control sensor enabled	OFF E.S.En	OFF enabled			0 - 1	OFF
131	Fan control sensor temperature						
132	Fan control setpoint				xxCC	-30 to -15	-25.0
					xxCO	-30 to -15	-30.0
					xxOC	-5 to +8	0.0
					xxOO	-5 to +8	2.0

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
9. Jnet NETWORK LIGHTING CONTROL						
Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
110	Select Jnet network lighting control	OFF LC.on	off Lighting control function selected		0 - 1	LC.on
113	Lights and blinds	on L.OFF	Lights on and blinds up Lights off and blinds down			
111	Jnet network lighting unit network command	LU.Co nonE	Lighting off command No command			
112	Over ride input	OFF L.O.IP	No input Over ride input on			
118	Lighting contactor type selection (shown for lights-on state)	n.o n.c	normally open normally closed		0 - 1	n.c
119	Lights off during shutdown selection	OFF En.L.S	Off Lights off during shutdown		0 - 1	Off
120	Lighting override timer (time delay before lighting off/blinds close on network control)				00:30 - 02:00	02:00
116	Manual lights on	OFF P.on	OFF Lights on			
117	Manual lights off	OFF P.off	OFF Lights off			
114	Force lights on	OFF L.on	Off Lights on		0 - 1	
115	Force lights off	OFF L.OFF	Off Lights off		0 - 1	





JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
10. Jnet COMMAND FUNCTIONS						
62	Jnet network controlled Shutdown selection	oFF Sh.dn	Disabled Enabled		0 - 1	oFF
63	Jnet network command for shutdown	run or nonE Sh.dn FAn.S	No command Shutdown Fans only shutdown			
133	Enable plant to override temperature control and run refrigeration regardless of the temperature setpoint	Off nrc.E	Disabled Enabled		0 - 1	Off
134	Enable Jnet network command to cut off refrigeration in event of plant fault	Off	Disabled		0 - 1	Off
135	Display Jnet network commands	0 or nonE O.S.df PL.Ft P.C.Ft	No command Other associated systems on defrost Plant fault Plant comms fault			
11. DISPLAY FUNCTIONS						
129	Display type selection (v0.00.7 on)	2 3	Lcd.1 Lcd.8	LCD1-7 types LCD8 type		2 - 3 Lcd.1
122	Temperature display unit choice (v0.00.7 on)	CELS FAhr	Celsius Fahrenheit		0 - 1	CELS
136	Enable fans only operation from display switches	Off E.d.Fo	Disable Enable		0 - 1	Off
138	Enable Shutdown from display switches	OFF E.d.Sd	disable Enable		0 - 1	Off
121	Display switch 1 status	up to v0.00.6				
		OFF S1.IP	Off Position 1			
		v0.00.7 on				
		Si - - Si1 - Si- 2 Si12	OFF Position 1 Position 2 Both			
122	Display switch 2 status (up to v0.00.6)	OFF S2.IP	Off Position 2			

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
12. CLOCK CALENDAR						
Note, from v0.00.7 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 (v0.00.7 on)	Sun - Sat	0 = Sunday 1 = Monday etc			
4	Date (v0.00.7 on)				01:01 - 31:12	
5	Year (v0.00.7 on)				1992 - 2022	
18	Daylight saving enable (v0.00.7 on)	Stnd dAY.S	Standard time Daylight saving time		0 - 1	Stnd
13. RESTORE FACTORY DEFAULTS						
To set the factory defaults into the memory of the controller, first set the 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.						
9	Set default values selected by Bitswitch Note: Setting the bitswitches alone has no effect.	1	Set default values up to v0.00.6	xxCC xxCO xxOC xxOO	Frozen food Ice cream Chiller Produce (off cycle)	
		1234	Set default values from v0.00.7			
		1066	Write to NVRAM without delay from v0.00.8			
					where C = CLOSED or ON O = OPEN or OFF x = Don't care	
					For unmarked switches C = dot visible O = dot not visible	

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
14. SYSTEM ALARMS						
80	Group alarm 81 - 88	0 1 - 255	No alarms Check 81 - 88			
81	Cabinet overtemperature	CLr C.Ht	No fault Fault			
82	Air off 1 overtemperature	CLr A.Ht or A1.Ht	No fault Fault			
83	Air on sensor fault	CLr AO.Pr	No fault Fault			
84	Air off 1 sensor fault	CLr AF.Pr or A1.Pr	No fault Fault			
85	Sensor power supply fault	CLr PS.Ft	No fault Fault			
87	Shutdown alarm	CLr Sh.dn	No fault Fault			
88	All sensors faulty, deselected or disconnected	CLr t.SEn	No fault Fault			
90	Group alarm 91 - 98	0 1 - 255	No alarms Check 91 - 98			
91	Termination sensor fault	CLr dt.Pr	No fault Fault			
92	Evaporator sensor fault	CLr EP.Pr	No fault Fault			
93	Suction line sensor fault	CLr SL.Pr	No fault Fault			
94	Expected defrosts have not been detected (Note, This alarm normally depends on the setting in item 69. When the defrost initiation strategy is set to coordinated defrost the alarm occurs 3 hours after the defrost requirement has been set when no defrost has occurred).	CLr dEF.F	No fault Fault			
96	Energy saving sensor fault	CLr E.S.Pr	No fault Fault			
250	Group alarms 251 - 258	0 1 - 255	No alarms Check 251 - 258			
251	Forced defrost activated	CLr F.dEF	No fault Forced defrost			
252	Network communications failure (v0.00.9 on)	CLr FAIL	No fault Comms failure			
253	Air off 2 overtemperature (v0.01.0 on)	CLr A2.Ht				
254	Air off 3 overtemperature (v0.01.0 on)	CLr A3.Ht				
255	Air off 1 sensor fault (v0.01.0 on)	CLr A1.Sn				
256	Air off 2 sensor fault (v0.01.0 on)	CLr A2.Sn				
257	Air off 3 sensor fault (v0.01.0 on)	CLr A3.Sn				

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
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				4321		
258	Backup defrost strategy in operation	CLr d.bAc	No fault Backup defrost			
15. DIAGNOSTIC & TEST FUNCTIONS						
44	Power off duration					
6	Communications speed (in kilo baud)	4.8 38.4	Baud rate Baud rate			
7	Communications (Half duplex)	HALF	2 wire			
973 (from v0.00.7) 204 (up to v0.00.6)	Latest polling interval This time shows the polling interval between the last two successful network awake messages to this unit.	min:sec				
974 (from v0.00.7) 205 (up to v0.00.6)	Time since last awake message	min:sec				
975 (from v0.00.7) 206 (up to v0.00.6)	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 (from v0.00.7) 207 (up to v0.00.6)	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	Bitswitch setting	0 1 2 3	Frozen food Ice cream Chiller Produce (off cycle)	xxCC xxCO xxOC xxOO		
89	Sensor excitation value (Factory test)		Not used			
99	Test digital display	CLr SEt	Not active Test active		0 - 1	
100	Test inputs (v0.01.0 on)	iP - - iP1 - iP - 2 iP12	No inputs Input 1 on Input 2 on Both inputs on			
101	Test output relays (v0.00.5 on)	CLr SEt	Not active Test active		0 - 1	
121	Display switch 1 status (v0.00.7 on)	Si - - Si1 - Si- 2 Si12	OFF Position 1 Position 2 Both			

JTL CABINET CONTROLLER ITEM NUMBERS					LCPT/LCPN	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
421	(v0.01.2 on) Temperature sensor 1 reading					
422						
423						
424						
425						
426						
427						
10	Processor alarms (11 - 17)	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			
16	NVRAM fault	CLr n.Ft	No fault Fault			
17	Instruction TRAP fault	CLr tP.Ft	No fault Fault			

DISPLAY DATA		LCPT/LCPN	
GRAPHICS DISPLAY			
	Fans running		
	Defrost recovery		
	Defrost		
	Fault condition		
NORMAL DISPLAY			
- 99 ^c	Cabinet temperature (item 20 rounded)		
dEF	Defrost		
dEFr	Defrost recovery		
Off	Unit Shutdown or fans only mode (indicated by fan symbol)		
FAnS	Fans only mode		
--	Display data error		
ALARM TEXT (in descending priority order)			
t.SEn	All sensors faulty, deselected or disconnected		
Ht	High cabinet or air off temperature		
ISOL	Unit shutdown		
OTHER TEXT			
JTL	Start-up text		