CONTENTS

	JTL COLDSTORE CONTROLLER ITEM NUMBERS				LACN	
ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
1. Jnet NETWORK IDENTIFICATION						
0	Unit type	LACn	Unit type			
19	Software Version number					
1	Unit number				0.1 - 899.8	
2. TEMPERATURES Note: 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	Coldroom temperature (v0.00.2 on)					
21	Air on temperature					
36	Air on sensor selection	OFF AO.En	Disabled Enabled		0 - 1	AO.En
22	Air off temperature					
37	Air off sensor selection	OFF AO.En	Disabled Enabled		0 - 1	AO.En
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)					
141	Termination sensor temperature					
147	Termination sensor selection	OFF tS.En			0 - 1	OFF
247	Site temperature (from broadcast)					
248	Site relative humidity (from broadcast)					
246	Site absolute humidity (from broadcast) (v0.00.3 on)					
122	Temperature display unit choice	CELS FAhr	Celsius Fahrenheit		0 - 1	CELS
3. TEMPERATURE ALARMS						
127	High temperature alarm inhibited selection	OFF A.inh	Alarms enabled always Alarms inhibited during defrost		0 - 1	OFF
26	Average coldstore temperature error					
32	Overtemperature alarm tolerance	0.0	Disable Ht alarm	0 (CC) 1 (CO) 2 (OC) 3 (OO)	0 - 20 0 - 20 0 - 20 0 - 20	10 10 5 10
47	Period over which averages are taken			0, 1 (Cx) 2, 3 (Ox)	00:30 - 03:00	02:00

	JTL COLDSTORE CONTROLLER ITEM NUMBERS					LACN
ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE

4. TEMPERATURE CONTROL

ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
67	Isolate coldroom	run ISOL		Normal operation Coldroom isolated		0 - 1	run
275	Control temperature (from v0.00.5 on) Note: up to v0.00.4 control is on air off	0 1	A.oFF Cr.t	Air off temperature Coldroom temperature		0 - 1	A.oFF
30	Current coldstore temperature setpoint (target for item 21)				0 (CC) 1 (CO) 2 (OC) 3 (OO)	- 30 to -12 - 30 to -12 - 5 to +25 - 5 to +25	- 20 - 26 0 +4
140	Temperature deadband (v0.00.5 on)					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	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						
241	Average liquid line valve open percentage over data logging interval period						

JTL COLDSTORE CONTROLLER ITEM NUMBERS — LACN

ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	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 (v0.00.0)	IP- - IP1 - IP- 2 IP12		No inputs Door closed input on Defrost or alarm or shutdown input on Both inputs on			
71	Input 1 state (v0.00.1 on)	oFF door		Input off Door open			
139	Input 2 state (v0.00.1 on)	oFF dF.iP AL.iP Sh.iP trAP		No input Defrost input on Alarm input on Shutdown input on Man trapped input on			
66	Invert plant alarm input (v0.00.1 on)	no YES		Input=alarm No input=alarm		0 - 1	no
138	Input 2 function selection	0 1 2 3	OFF or nonE E.S.Sd P.A.iP tr.iP	Nothing selected Shutdown Plant alarm Man trapped		v0.00.0	
						0 - 1	OFF
						v0.00.1 on	
						0 - 3	nonE
72	Defrost relay (RL4) (function depends on item 75)	oFF dt.on dc.on		Relay deenergised Defrost termination on Defrost control on			
73	Liquid solenoid relay (RL3)	OFF LS.on		0ff Demanding refrig.			
74	Auxiliary heater and fan relays (RL1 & RL2)	oFF Fn.on Hr.on Both		0ff Fans on Heater on Both on			
75	Defrost relay mode selection	d.tEr d.Con		Defrost termination Defrost control		0 - 1	d.Con

ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
JTL COLDSTORE CONTROLLER ITEM NUMBERS						**LACN**	
full	**6. SUCTION PRESSURE OPTIMISATION**						
200	up to v0.00.2 Disable suction pressure optimisation for this unit when both air sensors are faulty from V0.00.3 Disable suction pressure optimisation for this unit . Note: Suction pressure optimisation is disabled when both air sensors are faulty regardless of this setting.	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)	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)	0 1 2 3	nonE Lt Ht SAt	Not selected Low temperature High temperature Satellite		0 - 3	nonE
212 (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			
217	Plant data to network (binary value interpreted on item 211)						

JTL COLDSTORE CONTROLLER ITEM NUMBERS

LACN

ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
7. DEFROST CONTROL							
7.1 DATA & STRATEGIES							
40	Duration of last defrost						
41	Time since end of last defrost						
42	Duration of current defrost						
411 (107)	Defrost initiation strategy	0 1 2 3 4 5 6 7 8 9	nonE SL.in n.i.L.b rt.in iP.in Prdt nonE n.i.F.b c.d.L.b c.d.F.b	None Suction initiated Network initiated (learned backup) Internal clock initiated External clock initiated PREDICT initiated Not used Network initiated (fixed schedule backup) Coordinated defrost (learned backup) Coordinated defrost (fixed schedule backup)		0 - 9	nonE
412	Current defrost initiation strategy in operation	nonE SL.in JnEt rt.in iP.in		None Suction initiated Jnet network initiated Internal clock initiated External clock initiated			
69	No of defrosts required per day (Note, When the defrost initiation strategy is set to PREDICT operation, this item is not available. When the defrost strategy is set to coordinated defrost this item sets the number of defrosts a day that are required.)	0 1 - 6		Function disabled No of defrosts		0 - 6	3
61	Pump down time					00:00 - 00:10	00:00
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. 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	0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	01:00 02:00 03:00 04:00
351	Defrost method for defrost time 1 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
52	Defrost time 2	00:00 00:01 - 23:59		Defrost disabled Defrost enabled	0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	07:00 08:00 09:00 10:00
352	Defrost method for defrost time 2 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
53	Defrost time 3	00:00 00:01 - 23:59		Defrost disabled Defrost enabled	0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	13:00 14:00 15:00 16:00

ITEM	DESCRIPTION	CODE		CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
	JTL COLDSTORE CONTROLLER ITEM NUMBERS					**LACN**	
353	Defrost method for defrost time 3 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
54	Defrost time 4	00:00 00:01 - 23:59		Defrost disabled Defrost enabled	0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	19:00 20:00 21:00 22:00
354	Defrost method for defrost time 4 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
55	Defrost time 5	00:00 00:01 - 23:59		Defrost disabled Defrost enabled		00:00 - 23:59	00:00
355	Defrost method for defrost time 5 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
56	Defrost time 6	00:00 00:01 - 23:59		Defrost disabled Defrost enabled		00:00 - 23:59	00:00
356	Defrost method for defrost time 6 (from v0.006)	0 1	E.dEF oFF.C	Electric defrost Off Cycle defrost		0 - 1	E.dEF
7.3 SUCTION INITIATED DEFROST							
58	Defrost initiation temperature (suction line sensor)				0 (CC) 1 (CO) 2 (OC) 3 (OO)	-10 - +20 -10 - +20 +5 - +30 +5 - +30	10 10 15 15
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 nonE		Defrost Forced defrost No command			
261 to 272	Defrost schedule (12 times starting at item 261 through to 272)						

	JTL COLDSTORE CONTROLLER ITEM NUMBERS				LACN	
ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
7.6 COORDINATED DEFROST INITIATION This information is for use be defrost schedulers.						
69	No of defrosts expected per day (Note, When the defrost initiation strategy is set to PREDICT operation, this item is not available. When the defrost strategy is set to coordinated defrost this item sets the number of defrosts a day that are required.)	0 1 - 6	Function disabled No of defrosts		0 - 6	3
224	Time since start of last defrost (v0.00.3 on)					
216	Defrost requirement to defrost coordinator					
223	Defrost requirement priority				1 - 8	1
211	Evaporator suction group	0 1 2 3	nonE Lt Ht SAt	Not selected Low temperature High temperature Satellite		0 - 3	nonE
214 (414)	Defrost heater choice	0 1 2 3 4 5 6	brn or rED blac or YELL GrEY or bluE 3 - ph oFF.C	Electric brown phase Electric black phase Electric Grey phase Electric 3 phase Not used Not used Off cycle		0 - 6	brn
213	Elextric circuit choice (depends on item 214)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	cct1 cct2 cct3 cct4 cct5 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	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		to v0.00.5 1 - 7 v0.00.6 on 1 - 15 v0.00.8 on 1 - 31	cct1
210	Electrical distribution Panel No. (from v0.00.6)				0 - 7	0

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
	JTL COLDSTORE CONTROLLER ITEM NUMBERS					**LACN**
215 (46)	Jnet network initiated defrost command status (repeats item 46)	P.dEF F.dEF nonE	Defrost Forced defrost No command			
217	Evaporator data to plant					
219	Jnet network defrost arrangement	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	oFF cord	No defrost coordinator Defrost coordinator present on network			
	7.7 JTL PREDICT DEFROST INITIATION					
225	Minimum time between defrosts (hours)				2 - 8	6
226	Maximum time between defrosts (hours)				6 - 72	24
227	Number of samples to discard from top & bottom of sorted list				0 - 3	1
228	PREDICT volatility integral setpoint				2.0 - 12.0	6.0
229	PREDICT volatility integral					
230	Current PRECICT volatility					
231	Long run PREDICT volatility					
232	Ratio of current PREDICT volatility/long run volatility					
233	Mean value from PREDICT sampling array					
234	Minimum value from PREDICT sampling array					
235	Maximum value from PREDICT sampling array					
236	Average reading in last complete PREDICT sample (frame)					
237	Latest reading					
281 to 296	Array of superheat readings in current samples (frame)					
301 to 316	Array of average reading samples (frames)					
321 to 336	Sorted array of average reading samples (frames)					

	JTL COLDSTORE CONTROLLER ITEM NUMBERS				**LACN**		
ITEM	**DESCRIPTION**		**CODE**	**CODE MEANING**	**FACTORY DEFAULT**	**RANGE**	**ITEM 9 VALUE**
7.8 DEFROST TERMINATION
144 (413)	Termination method Selection	1 2 3 4	EuAP A.OFF tEr tot	Evaporator sensor Air off sensor Termination sensor Time only	0, 1 (CX) 2 (OC)	1 - 4	EuAP
					3 (OO)	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)				0 (CC) 1 (CO) 2 (OC) 3 (OO)	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				0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:05 - 00:59 00:05 - 00:59 00:05 - 00:59 00:05 - 00:59	00:20 00:20 00:20 00:40
59	Drain down duration				0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 00:20 00:00 - 00:20 00:00 - 00:05 00:00 - 00:05	00:10 00:10 00:05 00:02
49	Liquid hold off duration (starts when drain down completed)					00:00 - 00:10	00:00
7.9 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 indicating 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	oFF F.r.En		Disabled Enabled		0 - 1	0
221	Forced defrost requirement to defrost coordinator (requires item 222 set to 1)	0 - 63		Forced value			
8. FAN CONTROL
108	Fan control	1 2 3	F.on F.oFF oFF.E	Fan runs always Fan off during defrost Fans off during electric defrost	0, 1 (CX)	1 - 2	F.on
					2, 3 (OX)	1 - 3	
109	Fan delay after defrost	00:00		Fans cycle on evap temperature		00:00 - 00:10	00:00

	JTL COLDSTORE CONTROLLER ITEM NUMBERS				LACN	
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**FACTORY DEFAULT**	**RANGE**	**ITEM 9 VALUE**
	9. DOOR FUNCTIONS					
128	Select door functions	OFF d.iP.E	Disabled Enabled		0 - 1	d.iP.E
34	Time door presently open					
35	Total time door has been open in last 24 hours					
64	Door open refrigeration delay time			0 (CC) 1 (CO) 2 (OC) 3 (OO)	00:00 - 00:15 00:00 - 00:15 00:00 - 00:30 00:00 - 00:30	00:05 00:05 00:00 00:00
33	Door open alarm delay time				00:00 - 00:30	00:15
126	Coldstore door open critical alarm selection	non.C Crit	Alarm non critical Alarm critical		0 - 1	non.C
	10. Jnet COMMAND FUNCTIONS					
62	Jnet network controlled Shutdown selection	oFF Sh.dn	Disabled Enabled		0 - 1	oFF
63	Jnet network command for shutdown	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	nonE O.S.df PL.Ft P.C.Ft	No command Other associated systems on defrost Plant fault Plant comms fault			
	11. DISPLAY FUNCTIONS					
122	Temperature display unit choice	CELS FAhr	Celsius Fahrenheit		0 - 1	CELS
129	Temperature display type (v0.00.5 on)	0　LEd.5 1　LEd.1	LED5 display LCD13 backlit display		0 - 1	LED5
121	Display pushbutton status (LED5 only)	Pb - - Pb1 - Pb - 2 Pb12	OFF Button 1 pressed Button 2 pressed Both buttons pressed			

JTL COLDSTORE CONTROLLER ITEM NUMBERS — LACN

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
12. CLOCK CALENDAR						

12. 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.

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
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				up to v0.00.2	
					1992 - 2022	
					from v0.00.3	
					2004 - 2034	
18	Daylight saving enable	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.

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
966	Virtual bitswitch setting. From version 0.00.6 the physical bitswitches have been replaced by virtual bitswitches. Set this item in place of using the bitswitches which are redundant.	0 1 2 3	Frozen food Ice cream Chiller Produce (off cycle)	0 1 2 3		
9	Set default values selected by Bitswitch. Note: Setting the bitswitches alone has no effect.	1234	Set default values	0 (CC) 1 (CO) 2 (OC) 3 (OO)	Frozen food Ice cream Chiller Produce (off cycle) where C = CLOSED or ON O = OPEN or OFF x = Don't care For unmarked switches C = dot visible O = dot not visible	
		1066	Write to NVRAM without delay			

JTL COLDSTORE CONTROLLER ITEM NUMBERS — LACN

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
14. RESTORE PARAMETERS FROM NETWORK						

14. RESTORE PARAMETERS FROM NETWORK (from v0.00.6)
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.

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
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		As commissioned Template number		0 - 9999	
	15. SYSTEM ALARMS					
80	Group alarm 81 - 88	0 1 - 255	No alarms Check 81 - 88			
81	Coldstore overtemperature	CLr C.Ht	No fault Fault			
83	Air on sensor fault	CLr AO.Pr	No fault Fault			
84	Air off sensor fault	CLr AF.Pr	No fault Fault			
85	Sensor power supply fault	CLr PS.Ft	No fault Fault			
86	Non critical door open alarm	CLr dO.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 PREDICT, the alarm occurs 3 hours after the defrost requirement has been set when no defrost has occurred.	CLr dEF.F	No fault Fault			
95	Plant alarm	CLr AL.IP	No fault Fault			

ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
	JTL COLDSTORE CONTROLLER ITEM NUMBERS				**LACN**	
96	Critical door open alarm	Clr dO.Ft	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	CLr FAIL	No fault Comms failure			
257	Man trapped (v0.00.1 on)	CLr trAP	No fault Man trapped			
258	Backup defrost strategy in operation	CLr d.bAc	No fault Backup defrost			
	16. DIAGNOSTIC & TEST FUNCTIONS					
44	Power off duration					
6	Communications speed (in kilo baud)	600 4800	Baud rate Baud rate			
7	Communications (Half duplex)	HALF	2 wire			
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)			
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)			
89	Sensor excitation value (Factory test)					
99	Test digital display	CLr SEt	Not active Test active		0 - 1	

	JTL COLDSTORE CONTROLLER ITEM NUMBERS				LACN	
ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
100	Test inputs	iP - - iP1 - iP - 2 iP12	No inputs Input 1 on Input 2 on Both inputs on			
101	Test output relays	Clr SEt	Not active Test active		0 - 1	
121	Display pushbutton status (LED5 only)	Pb - - Pb1 - Pb - 2 Pb12	OFF Button 1 pressed Button 2 pressed Both buttons pressed			
421	Temp. sensor 1 reading					
422	Temp. sensor 2 reading					
423	Temp. sensor 3 reading					
424	Temp. sensor 4 reading					
425	Temp. sensor 5 reading					
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	LACN

NORMAL DISPLAY	
- 99^c	Cabinet temperature (item 20 rounded)
dEF	Defrost
dEFr	Defrost recovery
OFF	Shutdown
FAnS	Fans only
--	Display data error
JTL	Start-up text
ALARM TEXT (in descending priority order)	
t.SEn	All sensors faulty, deselected or disconnected
Ht	High cabinet or air off temperature
trAP	Man trapped in
AL.IP	External alarm input
door	Door open alarm
ISOL	Unit shutdown
OTHER TEXT (LED5 display only)	
A.on	Air on temperature follows this text
A.oFF	Air off temperature follows this text
EVAP	Evaporator temperature follows this text
Suct	Suction line temperature follows this text
T.diF	Superheat temperature follows this text
L.dEF	Time since last defrost follows this text
n.dEF	Time of next defrost follows this text
SEt.P	Coldstore temperature setpoint follows this text