

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
0	Unit type	Lcct, LccE	Unit type			
1	Unit number				0.0 - 899.9	
2	Time of day				00:00 - 23:59	
6	Communications speed	4800 600	Baud rate Baud rate			
8	Bitswitch setting					
9	Set default values selected by Bitswitch				0 - 1	
PROCESSOR ALARMS						
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			
MISCELLANEOUS DATA						
19	Software Version number					
TEMPERATURES						
21	Air on temperature (Coldstore temperature)					
22	Air off temperature					
23	Evaporator temperature					
24	Suction line temperature					
25	Superheat (Evaporator temp - suction line temp)					
AVERAGE ERRORS						
26	Average coldstore temperature error					

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
AUTOMATICALLY ADJUSTED SETPOINTS						
28	Current Air off temperature setpoint (calculated by controller)					
29	Current Evaporator temperature setpoint (calculated by controller)					
PRIMARY TEMPERATURE SETPOINTS						
30	Coldstore temperature (Air on) setpoint (target for item 21)	LCCT00 - LCCT04 (v0.00.0 - 0.00.4)				
				xxCC	-30 to -12	-20
				xxCO	-30 to -12	-26
				xxOC	-5 to +10	0
				xxOO	-5 to +10	+4
		LCCx05 on (v0.00.5 on)				
			xxCC	-30 to -12	-20	
			xxCO	-30 to -12	-26	
			xxOC	-5 to +25	0	
			xxOO	-5 to +25	+4	
32	Overtemperature alarm tolerance			xxCC	0 - 20	10
				xxCO	0 - 20	10
				xxOC	0 - 20	5
				xxOO	0 - 20	10
33	Door open alarm delay time				00:00 - 00:30	00:15
34	Time door presently open					
35	Total time door has been open in last 24 hours					
PROBE SELECTION						
36	Air on probe selection	OFF AO.En	Disabled Enabled		0 - 1	AO.En
37	Air off probe selection	OFF AF.En	Disabled Enabled		0 - 1	AF.En
38	Evaporator probe selection	OFF EP.En	Disabled Enabled		0 - 1	EP.En
39	Suction line probe selection	OFF SP.En	Disabled Enabled		0 - 1	SP.En
DEFROST INFORMATION						
40	Duration of last defrost					
41	Time since end of last defrost					
42	Duration of current defrost					
43	Time next defrost due					
44	Duration of last power down					

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
MISCELLANEOUS SETTINGS						
47	Period over which averages are taken	LCCT only				
		LCCE only				
					00:30 - 03:00	02:00
48	Max starts/hour (Anti-shortcycling timer when using liquid valve relay to control a condensing unit)	0 10.PH 15.PH 20.PH	No limit 10 starts per hour 15 starts per hour 20 starts per hour		0 - 3	0
49	Liquid hold off time (keeps liquid valve shut after drain down)				0 - 10	0
DEFROST SETPOINTS						
50	Defrost termination temperature (evaporator probe)			xxCC	0 - 20	15
				xxCO	0 - 20	15
				xxOC	0 - 30	15
				xxOO	0 - 30	20
51	Defrost time 1	00:00	Defrost disabled	xxCC	00:00 - 23:59	01:00
		00:01 - 23:59	Defrost enabled	xxCO	00:00 - 23:59	02:00
				xxOC	00:00 - 23:59	03:00
				xxOO	00:00 - 23:59	04:00
52	Defrost time 2	00:00	Defrost disabled	xxCC	00:00 - 23:59	07:00
		00:01 - 23:59	Defrost enabled	xxCO	00:00 - 23:59	08:00
				xxOC	00:00 - 23:59	09:00
				xxOO	00:00 - 23:59	10:00
53	Defrost time 3	00:00	Defrost disabled	xxCC	00:00 - 23:59	13:00
		00:01 - 23:59	Defrost enabled	xxCO	00:00 - 23:59	14:00
				xxOC	00:00 - 23:59	15:00
				xxOO	00:00 - 23:59	16:00
54	Defrost time 4	00:00	Defrost disabled	xxCC	00:00 - 23:59	19:00
		00:01 - 23:59	Defrost enabled	xxCO	00:00 - 23:59	20:00
				xxOC	00:00 - 23:59	21:00
				xxOO	00:00 - 23:59	22:00
57	Defrost termination time limit	LCCT00 - LCCT03 (V0.00.0 - 0.00.3)				
				xxCC	00:10 - 00:30	00:20
				xxCO	00:10 - 00:30	00:20
				xxOC	00:10 - 01:00	00:20
				xxOO	00:10 - 01:00	00:40
		LCCx04 on (V0.00.4 on)				
		xxCC	10 - 45	20		
		xxCO	10 - 45	20		
		xxOC	10 - 59	20		
		xxOO	10 - 59	40		

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
DEFROST SETPOINTS CONTINUED						
59	Drain down time	LCCT00 - LCCT03 (V0.00.0 - 0.00.3)				
				xxCC	00:00 - 00:20	00:10
				xxCO	00:00 - 00:20	00:10
				xxOC	00:00 - 00:05	00:05
			xxOO	00:00 - 00:05	00:05	
LCCx04 on (V0.00.4 on)						
				xxCC	0 - 15	10
				xxCO	0 - 15	10
				xxOC	0 - 5	5
				xxOO	0 - 5	5
61	Pump down time	LCCx04 on (V0.00.4 on)				
					0 - 10	0
MISCELLANEOUS SETTINGS						
62	Communications controlled shut down selection	LCCx06 on (V0.00.6 on)				
		OFF Sh.dn	Disabled Enabled		0 - 1	0
63	Network command	LCCx06 on (V0.00.6 on)				
		run Sh.dn	Run Shutdown			
64	Door open refrigeration delay time				00:00 - 00:30	00:15
67	Isolate coldroom	run ISOL	Normal operation Coldroom Isolated		0 - 1	run
MODES, INPUTS AND OUTPUTS						
70	Operating mode	rEFr dEFr dr.dn Li.Ho dF.rc Pu.dn ISOL	Refrig. Defrost Drain down Liquid hold off Defrost recovery Pump down Isolated			
71	Door switch input	OFF dr.OP	Door closed Door switch contacts open			
72	Pan heater relay	OFF Pn.Ht	Contacts open Contacts closed			
73	Fans relay	OFF Fn.on	Contacts open Contacts closed			

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
MODES, INPUTS AND OUTPUTS CONTINUED						
74	Defrost relay	up to LCCT05 (up to V0.00.5)				
		OFF d0.on	Contacts open Contacts closed			
		LCCx06 on (V0.00.6 on)				
		d0.on d1 d2 d1.2	defrost output on defrost output 1 on defrost output 2 on defrost output 1&2 on			
75	Liquid solenoid relay	OFF LS.on	Off Demanding refrig.			
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	OFF Fd.on	Off Forced defrost		0 - 1	
78	Forced refrigeration	OFF Fr.on	Off Forced refrig.		0 - 1	
79	External alarm input	OFF AL.IP	No input Alarm input			
SYSTEM ALARMS						
80	Group alarm 81 - 88	0 1 - 255	No alarms Check 81 - 88			
81	Coldstore (Air on) overtemperature	Clr C.Ht	No fault Fault			
83	Air on probe fault	Clr AO.Pr	No fault Fault			
84	Air off probe fault	Clr AF.Pr	No fault Fault			
85	Thermistor power supply fault	Clr PS.Ft	No fault Fault			
86	Door open alarm	Clr dO.Ft	No fault Fault			
87	Unit number corrupted/not set	up to LCCT05 (up to V0.00.5)				
		Clr Un.CF	No fault Fault			
87	Unit shutdown by communications network command	LCCx06 on (V0.00.6 on)				
		Clr Sh.dn	No fault Shutdown			
88	All probes faulty, deselected or disconnected	Clr t.SEn	No fault Fault			

JTL COLDSTORE CONTROLLER ITEM NUMBERS					LCCT LCCE	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
MISCELLANEOUS DATA						
89	Thermistor excitation value (Factory set)		Not used			
SYSTEM ALARMS						
90	Group alarm 91 - 98	0 1 - 255	No alarms Check 91 - 98			
91	Termination probe fault	LCCE only				
		CLr dt.Pr	No fault Fault			
92	Evaporator probe fault	CLr EP.Pr	No fault Fault			
93	Suction line probe fault	CLr SL.Pr	No fault Fault			
95	External Alarm	CLr AL.IP	No fault Fault			
UTILITY						
99	Test digital display	CLr SEt	Not active Test active		0 - 1	
PROBE TYPE SELECTION						
102	Probe type selection	5000 2000	Tempkey Elm		0 - 1	5000
TERMINATION PROBES LCCE ONLY						
131	Termination probe 1 temperature					
132	Termination probe 2 temperature					
137	Termination probe 1 selection	OFF t1.En	Disabled Enabled		0 - 1	0
138	Termination probe 2 selection	OFF T2.En	Disabled Enabled		0 - 1	0

BITSWITCH SETTINGS

4321
 xx**CC** Frozen food
 xx**CO** Ice cream
 xx**OC** Chillers
 xx**OO** Provisions

where **C** = CLOSED (dot on switch visible)
O = OPEN (dot on switch hidden)

DISPLAY DATA		LCCT LCCE
NORMAL DISPLAY		
-99°	Coldstore (Air on) temperature (item 21 rounded)	
dEF	Defrost	
dEFr	Defrost recovery	
--	Display data error	
ALARM TEXT (in descending priority order)		
t.SEn	All probes faulty, deselected or disconnected	
Ht	High coldstore (Air on) temperature	
ALIP	Alarm input	
door	Door open alarm	
OTHER TEXT		
JTL	Start-up text	
DISPLAY - SCROLLED DATA		LCCE only
To Enter Scrolled Data mode press the left hand button on the display. Then press the centre button to scroll the data onto the display 1 item at a time.		
SEt.P	Cabinet temperature setpoint follows this text	
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	
tEr.1	Termination temperature 1 follows this text	
tEr.2	Termination temperature 2 follows this text	
t.o.d	Time of day follows this text	
L.dEF	Time since last defrost follows this text	
n.dEF	Time of next defrost follows this text	