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| JTL CABINET CONTROLLER ITEM NUMBERS | | | | | LAPA | |
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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 1. Jnet NETWORK IDENTIFICATION | | | | | | |
| 0 | Unit type | LAPA | 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 | 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) | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | 20 - 80 20 - 80 20 - 80 20 - 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 | | | | | |
| 37 (409) | Air off sensor selection | 0 1 2 3 4 5 6 7 | none S 1 - - S - 2 - S - - 3 S 1 2 - S 1 - 3 S - 2 3 S 1 2 3 | none selected Sensor 1 Sensor 2 Sensor 3 Sensor 1 & 2 Sensor 1 & 3 Sensor 2 & 3 Sensor 1, 2 & 3 | 0 - 7 | S 1 - - |
| 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 | | | | | |
| 402 | Air off 2 temperature | | | | | |
| 403 | Air off 3 temperature | | | | | |
| 408 | Overall air off calculation method | 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 | | | | | |

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| 130 | Fan control sensor enabled | OFF E.S.En | OFF enabled | | 0 - 1 | OFF |
| 247 | Site temperature (from broadcast) | | | | | |
| 248 | Site humidity (from broadcast) | | | | | |
| 246 | Site absolute humidity (from broadcast) (v0.00.5 on) | | | | | |
| 122 | Temperature display unit choice | 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 | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | 0 - 20 0 - 20 0 - 20 0 - 20 | 10 10 5 10 |
| 27 | Average Air off temperature error | | | | | |
| 431 | Average air off temperature 1 | | | | | |
| 432 | Average air off temperature 2 | | | | | |
| 433 | Average air off temperature 3 | | | | | |
| 34 | Air off over temperature tolerance | 0.0 | Disable Ht alarm | 0, 1 (CX) 2, 3 (OX) | 0 - 30 0 - 30 | 15 10 |
| 47 | Period over which averages are taken | | | 0, 1 (CX) 2, 3 (OX) | 00:30 - 03:00 | 01:30 01:00 |

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| 4. TEMPERATURE CONTROL | | | | | | | |
| 275 | Control temperature (from v0.00.4 on) Note: upto v0.00.3 control is on air off | 1 2 | A.oFF Cab.t | Air off Cabinet | | 0 - 1 | Cab.t |
| 30 | Current cabinet temperature setpoint (target for item 20) (See items 123 & 127) | | | | | | |
| 123 | Enable 2nd setpoint | oFF E.2SP | | Disabled Enabled | | 0 - 1 | oFF |
| 124 | Cabinet temperature setpoint - primary (target for item 20) | | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | -30 to -15 -30 to -15 -5 to +10 -5 to +10 | -20 -26 +1 +4 |
| 125 | Alternative cabinet temperature setpoint - secondary | | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | -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) | | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | - 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 | | | | | | |
| 241 | Average liquid line valve open percentage over data logging interval period | | | | | | |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | 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 | IP1 - IP - 2 IP1 2 | Defrost input on Lighting override input on Both inputs on | | | |
| 72 | Defrost relay (function depends on item 75) | oFF dt.on dc.on | Relay deenergised Defrost termination on Defrost control on | | | |
| 73 | Liquid solenoid relay | OFF LS.on | Off Demanding refrig. | | | |
| 74 | Fans/Heater relays | oFF Fn.on Hr.on | Off Fans on Heater on | | | |
| 395 | Trim heater relay | oFF th.on | Off Trim heater on | | | |
| 75 | Defrost relay mode selection | d.tEr d.Con | Defrost termination Defrost control | | 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 |

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| 6. SUCTION PRESSURE OPTIMISATION | | | | | | |
| 200 | v0.00.0 Disable suction pressure optimisation for this unit when both air sensors are faulty | En.SO di.SO | Enable Disable | | 0 - 1 | En.SO |
| | from V0.00.1 Disable suction pressure optimisation for this unit . Note: Suction pressure optimisation is disabled when both air sensors are faulty regardless of this setting. | | | | | |
| 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) | 0 1 2 3 | nonE Lt Ht SAT | Not selected Low temperature High temperature Satellite | 0 - 3 | nonE |
| 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) | | | | | |

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| ITEM | DESCRIPTION | CODE | | CODE MEANING | FACTORY DEFAULTS | 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 strategy | 0 | nonE | None | | 0 - 9 | 0 |
| | | 1 | SL.in | Suction initiated | | | |
| | | 2 | n.i.L.b | Network initiated (learned backup) | | | |
| | | 3 | rt.in | Internal clock initiated | | | |
| | | 4 | iP.in | External clock initiated | | | |
| | | 5 | Prdt | Predict operation | | | |
| | | 6 | | Not used | | | |
| | | 7 | n.i.F.b | Network initiated (fixed schedule backup) | | | |
| | | 8 | c.d.L.b | Coordinated defrost (learned backup) | | | |
| | | 9 | c.d.F.b | Coordinated defrost (fixed schedule backup) | | | |
| 412 | Current defrost initiation strategy in operation | nonE | | None | | | |
| | | SL.in | | Suction initiated | | | |
| | | JnEt | | Jnet network initiated | | | |
| | | rt.in | | Internal clock initiated | | | |
| | | iP.in | | External clock initiated | | | |
| 69 | No of defrosts required per day (Note, when the defrost 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 - 12 | | Function disabled No of defrosts | | 0 - 12 | 3 |
| 61 | Pump down time | | | | | 00:00 - 00:10 | 00:00 |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 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 |
| 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 |
| 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 |
| 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 |
| 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) | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | -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 nonE | Defrost Forced defrost No command | | | |
| 261 to 272 | Defrost schedule (12 times starting at item 261 through to 272) | | | | | |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 7.6 COORDINATED DEFROST INITIATION | | | | | | |
| 69 | No of defrosts required per day (Note, when the defrost 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 - 12 | Function disabled No of defrosts | | 0 - 12 | 3 |
| 224 | Time since the start of last defrost (v0.00.2 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 | Electric 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 v0.00.4 1 - 7 from v0.00.5 1 - 15 v0.00.7 on 1 - 31 | 1 |
| 210 | Electrical distribution Panel No. (from v0.00.5) | | | | 0 - 7 | 0 |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 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 PREDICT 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) | | | | | |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 7.8 DEFROST TERMINATION | | | | | | |
| 144 (413) | Termination method Selection | 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 - 00:40 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 |
| 7.9 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 412 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 | | | |

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| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 8. FAN CONTROL | | | | | | |
| 108 | Fan control (106 must be set to FAn.S) | 1 2 3 | F.on F.off F.c.d.d | Fan runs always Fan off during defrost Fan controlled during defrost | | 1 - 3 F.on |
| 146 | Temperature to turn fan off during defrost. Depends on item 108 | | | | 0, 1 (Cx) 2, 3 (Ox) | -12.0 to -2.0 0.0 to 20.0 -7.0 10.0 |
| 109 | Fan delay after defrost | 00:00 | | Fans cycle on evap temperature | | 00:00 - 00:10 00:00 |
| 150 | Temperature to bring fan on after defrost. Depends on item 108 | | | | 0, 1 (Cx) 2, 3 (Ox) | -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 | | | | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | -30 to -15 -30 to -15 -5 to +8 -5 to +8 -25.0 -30.0 0.0 2.0 |
| 9. TRIM HEATER CONTROL | | | | | | |
| 390 | Control strategy | 1 2 3 4 5 | oFF ISOL 24hr trad Jnet | No control Off when isolated Fixed adjustment Fixed with non-trading adjustment Network adjustment | | 1 - 5 ISOL |
| 391 | Actual output (% of full power) | | | | | |
| 392 | Fixed output. Used for strategy 3 and as a base for strategies 4 & 5. | | | | | 0 - 100% 50% |
| 393 | Non-trading hours adjustment | | | | | 0 - 100% 75% |
| 394 | Network delivered adjustment | | | | | |
| 395 | Trim heater output status | oFF th.on | Off Trim heater on | | | |





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| 10. 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 | |
| 11. 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 | | | |

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| 12. DISPLAY FUNCTIONS | | | | | | |
| 122 | Temperature display unit choice | 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 status | Si - - Si1 - Si- 2 Si12 | OFF Position 1 Position 2 Both | | | |
| 13. 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 | | | | 2004 - 2034 | |
| 18 | Daylight saving enable | Stnd dAY.S | Standard time Daylight saving time | | 0 - 1 | Stnd |
| 14. 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. | | | | | | |
| 966 | Virtual bitswitch setting From version 0.00.5 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 CABINET CONTROLLER ITEM NUMBERS | | | | | LAPA | |
|---|---|---|--|------------------|----------|--------------|
| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 15. RESTORE PARAMETERS FROM NETWORK (from v0.00.5) | | | | | | |
| <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 | Parameters restore progress | rdy dnl.r din.P dnl.c FA.IL | Restore function possible Restore requested Restore in progress Restore complete Restore fault | | | |
| 959 | Requested template | 0 1-9999 | As commissioned Template number | | 0 - 9999 | |
| 16. 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 overtemperature | CLr A.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 | | | |
| 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 | | | |
| 96 | Energy saving sensor fault | CLr E.S.Pr | No fault Fault | | | |

| JTL CABINET CONTROLLER ITEM NUMBERS | | | | | LAPA | |
|--|---|---|--|--------------------------------------|-------|--------------|
| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 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 | | | |
| 253 | Air off 2 overtemperature | CLr A2.Ht | | | | |
| 254 | Air off 3 overtemperature | CLr A3.Ht | | | | |
| 255 | Air off 1 sensor fault | CLr A1.Sn | | | | |
| 256 | Air off 2 sensor fault | CLr A2.Sn | | | | |
| 257 | Air off 3 sensor fault | CLr A3.Sn | | | | |
| 258 | Backup defrost strategy in operation | CLr d.bAc | No fault Backup defrost | | | |
| 17. DIAGNOSTIC & TEST FUNCTIONS | | | | | | |
| 44 | Power off duration | | | | | |
| 6 | Communications speed (in kilo baud) | 4.8 | Baud rate | | | |
| 7 | Communications (Half duplex) | HALF | 2 wire | | | |
| 967 | Latest unit no polled on zone (from v0.00.5) | | | | | |
| 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 | Fr.Fd (0) ICE.c (1) Chil (2) OFF.c (3) | Frozen food Ice cream Chiller Produce (off cycle) | 0 (CC) 1 (CO) 2 (OC) 3 (OO) | | |
| 89 | Sensor excitation value (Factory test) | | Not used | | | |

| JTL CABINET CONTROLLER ITEM NUMBERS | | | | | LAPA | |
|-------------------------------------|------------------------------|-----------------------------------|---|------------------|-------|--------------|
| ITEM | DESCRIPTION | CODE | CODE MEANING | FACTORY DEFAULTS | RANGE | ITEM 9 VALUE |
| 99 | Test digital display | CLr SEt | Not active Test active | | 0 - 1 | |
| 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 switch status | Si - - Si1 - Si- 2 Si12 | OFF Position 1 Position 2 Both | | | |
| 421 | Temperature sensor 1 reading | | | | | |
| 422 | Temperature sensor 2 reading | | | | | |
| 423 | Temperature sensor 3 reading | | | | | |
| 424 | Temperature sensor 4 reading | | | | | |
| 425 | Temperature 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 | | LAPA |
|---|---|-------------|
| 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 | |
| Lo | Switched to primary setpoint | |
| Hi | Switched to secondary setpoint | |