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JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>1. Jnet NETWORK IDENTIFICATION</b>						
0	Unit type	EP6U	Unit type			
19	Software version number					
1	Unit number				0.1 - 899.9	
<b>2. PRESSURES</b>						
<p>Note: Pressures can be displayed on the maintenance unit in psi, bar or kPa. The choice is made on item 179. All setpoint ranges are shown in psi. Average pressures are averaged over last hour and are updated every 4 minutes.</p>						
179	Pressure display unit choice	PSI bAr PASC	p.s.i. bar kPa		1 - 3	PSI
<b>2.1 LT SUCTION PRESSURE</b>						
21	LT suction pressure					
146	Average LT suction pressure					
42	High LT suction pressure alarm level				10 - 50	20
121	LT pressure transducer selection	OFF Lt.En	Disabled Enabled		0 - 1	Lt.En
126	Absolute LT suction pressure transducer selection	Lt.GA Lt.Ab	Gauge (0 to 100 psi) Absolute (-15 to 85 psi)		0 - 1	Lt.GA
<b>2.2 HT SUCTION PRESSURE</b>						
22	HT suction pressure					
147	Average HT suction pressure					
52	High HT suction pressure alarm level				15 - 80	60
122	HT pressure transducer selection	OFF Ht.En	Disabled Enabled		0 - 1	Ht.En
<b>2.3 SATELLITE SUCTION PRESSURE</b>						
24	Satellite suction pressure					
149	Average satellite suction pressure					
72	High Satellite suction pressure alarm level				20 - 80	50
124	Satellite pressure transducer selection	OFF St.En	Disabled Enabled		0 - 1	St.En
129	Absolute Satellite suction pressure transducer selection	St.GA St.Ab	Gauge (0 to 100 psi) Absolute (-15 to 85psi)		0 - 1	St.GA

JTL COMPRESSOR PACK ITEM NUMBERS						EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE	
				4321			
<b>2.4 DISCHARGE PRESSURE</b>							
Note, EP6U uses a pressure transducer with a full scale range of 0 - 300 psi. EP6HD uses a transducer with a range 0 - 500 psi.							
23	Discharge pressure						
148	Average discharge pressure						
62	High discharge pressure alarm level				EP6U		
					140 - 300	250	
					EP6HD		
					140 - 350	315	
123	Discharge pressure transducer selection	OFF DS.En	Disabled Enabled		0 - 1	DS.En	
<b>3. TEMPERATURES</b>							
Note: Temperatures can be displayed on the maintenance unit in degrees Celsius or Fahrenheit. The choice is made on item 178. All setpoint ranges are shown in celsius.							
178	Temperature display unit choice	CELS FAhr	Celsius Fahrenheit		0 - 1	CELS	
31	Suction gas temperature						
131	Suction temperature	OFF t1.En	Not selected Selected		0 - 1	t1.En	
32	Discharge temperature						
132	HT suction temperature	OFF t2.En	Not selected Selected		0 - 1	t2.En	
33	Discharge temperature						
133	Discharge temperature	OFF t3.En	Not selected Selected		0 - 1	t3.En	
34	Satellite suction gas temperature						
134	Satellite suction temperature	OFF t4.En	Not selected Selected		0 - 1	t4.En	
35	Subcooled liquid temperature						
135	Subcooled liquid temperature	OFF t5.En	Not selected Selected		0 - 1	t5.En	
36	Saturated gas temperature						
136	Saturated gas temperature	OFF t6.En	Not selected Selected		0 - 1	t6.En	
37	Plant room temperature						
137	Plant room temperature	OFF t7.En	Not selected Selected		0 - 1	t7.En	
157	Refrigerant type (v0.01.0 on)	0 1 2 3 4 5 6 7	nonE 422d 422A 404 407A 407B 507 408A	R422D R422A R404 R407A R407B R507 R408A		0 - 7	nonE
897	Site temperature (from broadcast v0.01.0 on)						

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
898	Site relative humidity (from broadcast v0.01.0 on)					
896	Site absolute humidity (from broadcast v0.01.0 on)					
899	Outside temperature (from broadcast v0.01.0 on)					
<b>4. SUCTION PRESSURE CONTROL</b>						
If suction pressure optimisation is selected then the suction pressure setpoints as set in item 40, 50 and 70 can be adjusted upwards to the maximum by a JTL optimisation unit connected to the network.						
If there is no JTL optimisation unit on the network then the setpoint remains at the original set value. In the event of network failure the setpoints revert to the original set value after a time delay of 15 minutes.						
150	Select network optimised suction pressure control	oFF OPT.E	Not added Selected		0 - 1	oFF
195	Enable low suction pressure safety (v0.00.8 on)	oFF LP.En	Disabled Enabled		0 - 1	oFF
<b>4.1 LT SUCTION PRESSURE CONTROL</b>						
Note, LT suction control is enabled only when there are LT compressors selected in section 5.2 using item 2x5.						
40	LT suction pressure setpoint				- 5 to + 20	4
151	Optimised LT suction setpoint					
152	Optimised LT suction setpoint upper limit				5 - 20	10
43	LT suction pressure deadband				0 - 5	2
44	LT suction pressure increase time constant				1 - 60	30
45	LT suction pressure decrease time constant				1 - 60	15
46	Suction pressure to hold off stage 2				50 - 100	80
47	Suction pressure to hold off stage 3				30 - 100	60
48	LT suction 1st stage hold on				- 8 to +20	0
191	Integrated LT pressure error					
41	No of LT suction steps loaded					
196	Low LT suction pressure safety shutdown level (v0.00.8 on)				-5 to 10	0
49	LT suction total capacity loaded (in kW)					
181	LT suction increase next step (kW)					
182	LT suction decrease next step (kW)					
204	Forced number of LT suction stages				0 - 40	
101	Maximum number of LT compressors allowed				1 - 10	10
102	Number of LT compressors running					

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>4.2 HT SUCTION PRESSURE CONTROL</b>						
Note, HT suction control is enabled only when there are HT compressors selected in section 5.2 using item 2x5.						
50	HT suction pressure setpoint				5 - 60	25
153	Optimised HT suction setpoint					
154	Optimised HT suction setpoint upper limit				15 - 60	40
53	HT suction pressure deadband				0 - 10	5
54	HT suction pressure increase time constant				1 - 60	30
55	HT suction pressure decrease time constant				1 - 60	15
58	HT suction 1st stage hold on				2 - 60	10
192	Integrated HT pressure error					
51	No of HT suction steps loaded					
197	Low HT suction pressure safety shutdown level (v0.00.8 on)				10 - 40	20
59	HT suction total capacity loaded (in kW)					
183	HT suction increase next step (kW)					
184	HT suction decrease next step (kW)					
205	Forced number of HT suction stages				0 - 40	
103	Maximum number of HT compressors allowed				1 - 10	10
104	Number of HT compressors running					

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>4.3 SATELLITE SUCTION PRESSURE CONTROL</b>						
Note, Satellite suction control is enabled only when there are satellite compressors selected in section 5.2 using item 2x5.						
70	Satellite suction pressure setpoint				-5 to + 50	2
155	Optimised satellite suction setpoint					
156	Optimised Satellite suction setpoint upper limit				5 - 50	10
73	Satellite suction pressure deadband				0 - 10	5
74	Satellite suction pressure increase time constant				1 - 60	30
75	Satellite suction pressure decrease time constant				1 - 60	30
78	Satellite suction 1st stage hold on				- 5 to + 50	0
194	Satellite suction					
71	No of Satellite suction steps loaded					
198	Low satellite suction pressure safety shutdown level (v0.00.8 on)				-5 to 10	0
79	Satellite suction total capacity loaded (in kW)					
187	Satellite suction increase next step (kW)					
188	Satellite suction decrease next step (kW)					
207	Forced number of satellite suction stages				0 - 40	
105	Maximum number of satellite compressors allowed				1 - 10	10
106	Number of satellite compressors running					

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>5. COMPRESSOR CONTROL</b>						
Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
<b>5.1 COMMON DATA</b>						
200	Number of compressors				0 - 10	10
201	Number of steps on load					
203	Total capacity loaded (in kW)					
208	Minimum compressor stop time (seconds)				0 - 240	30
206	Compressor fault alarm delay (mins)				0 - 10	0
209	Bias loading towards base machine selection	OFF bASE	Disable Enable bias		0 - 1	OFF
158	Compressor fault repeat alarm delay time (v0.00.8 on)	00:00	Feature disabled		00:00 - 24:00	00:00
909	Interface baud rate (v0.00.8 on) Note baud rate fixed at 600 baud from v0.01.0	0.6	600 baud			
<b>5.2 COMPRESSOR DATA</b>						
A general form of item numbers for compressors is shown below. The "x" shown in each item number should be replaced by the compressor number. This sequence covers item numbers 210-299 for compressors 1 - 9 and 300 - 309 for compressor 10.						
2x5	Compressor function	0 Lt.C Ht.C SAAt.C	Not in use LT HT Satellite		0 - 3	Lt.c
2x3	Compressor status  <u>Note:-</u>  If more than one input is present, the numbers shown in brackets are added together and displayed instead.	run (128) rdy (64)  O.L (32) Lo.Pr (16) Hi.Pr (8) Oil.F (4) th.Ft (2)  0	Running Ready to run (no faults) Motor overload Low pressure fault High pressure fault Oil pressure failure Motor thermistor fault Off or compressor interface fault			
2x6	Compressor capacity in <u>effective</u> kW				1 - 100	10
2x0	Compressor loading method.  From v0.00.8 compressor can be set to unequal capacity steps 66/100%	0 1 2 3 4 5	none 1.Stp 2.StP 3.StP 4.StP 2.Une	not controlled 1 step 2 steps (50/100%) 3 steps (33/66/100%) 4 steps (25/50/75/100%) 2 steps (66/100%)		up to v0.00.7 0 - 4 4.StP v0.00.8 on 0 - 5 4.StP
2x1	Number of steps on load.					

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
2x8	Force compressor off	CP.En C.OFF	Compressor enabled to run Forced off			
2x7	Forced number of compressor steps				0 - 4	
2x2	Total running hours (in 10s of hours)				0 - 9999	
37x	Compressor run time last 24 hours (371 for compressor 1 etc)					
2x4	Compressor restart inhibit timer (seconds)					
2x9	Compressor number of starts per hour				4 - 20	10
35x	Average number of starts per hour last 24 hours (351 for compressor 1 etc)					
<b>6. INVERTER DATA (v0.01.0 on)</b>						
330	Select inverter control	OFF In.1S	Not selected Inverter selected		0 - 1	0
151	Optimised suction setpoint (operational)					
153	Optimised HT suction setpoint					
347	Suction pressure error					
344	Inverter capacity loaded in effective kW					
341	Minimum cut out pressure				- 8 to +40	0
340	Time constant				1 - 240	30
339	Speed gain				up to v0.01.1	
					5 - 50	10
					from v0.01.2	
					1 - 250	100
345	Current proportional term					
346	Current Integral term					
331	Number of steps on load	0 127	Off Maximum			
332	Inverter run hours (in 10's of hours)				0 - 9999	
333	Inverter status	rdy  run In.Ft Th.Ft  Oil.F HP.LP  Ph.Ft O.L	ready to run (Inverter & compressor healthy) Compressor running Inverter fault Motor thermistor fault Oil failure HP/LP pressure switch fault Phase failure Motor overload			
343	Minimum steps allowed				1 - 63	1
342	Maximum steps allowed				64 - 127	127
335	Inverter capacity at minimum speed in effective kW				1 - 100	5



JTL COMPRESSOR PACK ITEM NUMBERS						EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE		CODE MEANING	BIT	RANGE	ITEM 9 VALUE
					4321		
336	Inverter capacity at maximum speed in effective kW					1 - 100	10
337	Forced no. of steps					0 - 127	
338	Force inverter off	CP.En C.OFF		Enabled to run Inverter forced off		0 - 1	
909	Interface baud rate (See section 5.3)						
<b>7. DISCHARGE PRESSURE CONTROL</b>							
From v0.01.0 the discharge pressure setpoint can float if item 363 is set to a non zero value. The discharge pressure is item controlled to the appropriate temperature depending on the outside ambient temperature. Note temperatures can be displayed on the Maintenance Unit in celsius or fahrenheit. The choice is made on item 178.							
178	Temperature display unit choice	0 1	CELS FAhr	Celsius fahrenheit		0 - 1	CELS
60	Discharge pressure setpoint					EP6U	
						100 - 250	200
						EP6UHD	
						100 - 300	275
350	Maximum discharge pressure set point					175 - 250	200
899	Outside temperature						
363	Floating discharge temperature differential	0.0		Function disabled		0 - 15	0.0
364	Effective minimum discharge temperature						
365	Condenser operating temperature						
370	Optimised discharge pressure set point						
394	Analogue/stepped condenser control selection	up to v0.00.5					
		StEP A.LOG		Step control Analogue control		0 - 1	StEP
		v0.00.6 on					
		1 2 3 4	A.LOG CS-A CS-b CS-C	Analogue control Sequence A Sequence B Sequence C		1 - 4	CS-A
63	Discharge pressure deadband					0 - 20	5
395	Analogue fan speed gain					up to v0.00.1	10
						1 - 125	
						from v0.00.2	
						5 - 50	
64	Condenser control time constant					1 - 250	30
65	Discharge pressure to reduce capacity					EP6U	
						140 - 320	300
						EP6UHD	

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
					140 - 370	350
193	Integrated discharge pressure error					
67	Discharge pressure setpoint offset during gas defrost				0 - 50	0
68	Discharge pressure setpoint offset during heat reclaim				0 - 50.0	0
<b>8 CONDENSER CONTROL</b>						
Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
<b>8.1 STEP CONTROL</b>						
390	Number of condenser steps				up to v0.00.7 0 - 13 v0.00.8 on 0 - 14	7
61 (391)	Number of condenser steps running					
392	Forced number of condenser steps				0 - no. of steps (item 390)	
<b>8.2 ANALOGUE CONTROL</b>						
368	Maximum speed at night (%) (v0.00.8 on)				50 - 100	100
369	Select network timer for nighttime definition (v0.00.8 on)	0 1 - 8			0 - 8	0
397	Number of condenser steps in backup analogue mode (from v0.00.2)				0 - 99	0 - 99
392	Forced number of condenser steps				0 - 99	

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>8.3 CONDENSER INPUT &amp; OUTPUT STATUS</b>						
Note 1. If combinations of input or output are present then the value displayed is added up from the individual input/output values as follows: <ul style="list-style-type: none"> <li>1 Input/Output 1</li> <li>2 Input/Output 2</li> <li>4 Input/Output 4</li> <li>8 Input/Output 5</li> <li>16 Input/Output 6</li> <li>32 Input/Output 6</li> <li>64 Input/Output 7</li> </ul> Note 2. From v0.00.6 the normal combinations are displayed as shown below.						
			Input/output			
389	Output status interface 1 (v0.00.6 on)	1	1 on			
388	Output status interface 2 (v0.00.6 on)	1 - 2	1 & 2 on			
		1 - 3	1, 2 & 3 on			
		1 - 4	1, 2, 3 & 4 on			
396	Input status interface 1	1 - 5	1, 2, 3, 4 & 5 on			
		1 - 6	1, 2, 3, 4, 5 & 6 on			
387	Input status interface 2 (v0.00.6 on)	1 - 7	1, 2, 3, 4, 5, 6 & 7 on			
		1.7	1 & 7 on			
		1 - 2.7	1, 2 & 7 on			
		1 - 3.7	1, 2, 3 & 7 on			
		1 - 4.7	1, 2, 3, 4 & 7 on			
		1 - 5.7	1, 2, 3, 4, 5 & 7 on			
909	Interface baud rate (see section 5.1) (from v0.00.8)					
<b>9. INPUTS AND OUTPUTS</b>						
20	Operating mode (v0.00.2 on)	oFF Auto	Manual Automatic			
170	Input states	iP - - iP 1 - iP - 2	No input Input 1 Input 2			
171	Auto/manual (IP-1)	OFF Auto	Manual (pack controller dormant) Auto mode			
172	Liquid level (IP-2)	CLr Lo.Li	Liquid o.k. Low liquid level			
175	Low level liquid alarm delay (minutes)				15 - 240	30
393	Heat reclaim input	OFF Hr.On	Heat reclaim off Heat reclaim on			
160	Watchdog output (LN/LD-2) (Item 169=CPnH)	OFF On	Watchdog fail Watchdog healthy			
161	Gas dump valve output (LN/LD-1) (Item 169=CPnC)	OFF v.on	Off Dump valve on			
162	Gas regulator valve output (LN/LD-2) (Item 169=CPnC or CPnA)	OFF Gr.on	Off Gas regulator on			
163	Differential pressure output relief valve control (LN/LD-1) (Item 169=CPnH)	Gd no.Gd	Gas defrost (Diff. pressure) No gas defrost (Diff. pressure relief)			
164	Cool gas valve output (LN/LD-2) (Item 169=CPnL)					
165	Interstage valve output (LN/LD-2) (Item 169=CPnA)	OFF IS.on	Off Interstage valve on			

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
166	Liquid valve output (see item 168) LN/LD-1 (item 169=CPnL)	OFF Li.on	Off Liquid valve energised			
168	Liquid line valve type	n.c n.o	Normally closed Normally open		0 - 1	n.c
169	Output function selection	nonE CPnH  CPnC  CPnA  CPnL	Disabled Differential valve & watchdog Dump valve & Gas regulator Interstage valve & Gas regulator Differential valve & Cool Gas valve		0 - 4	CPnH
145	Interstage interlock selection	OFF IL.En	Interlock disabled Interlock enabled		0 - 1	OFF
66	Gas temperature to open regulator valve				25 - 40	30
<b>10. DEFROST CONTROL</b>						
<b>10.1 COMMON DATA</b>						
400	Number of defrost systems				0 - 28	28
401	Maximum gas defrost duration Note: Off cycle defrosts as assumed to be longer than this setting				15 - 40	25
402	Time before next gas defrost due				0 - 5	0
403	Time before end of gas defrosts				0 - 5	0
404	Maximum number of gas/electric defrosts allowed at any time				1 - 28	3
398	Jnet network defrost arrangement	nonE PrEd dEFS	No scheduling Predict scheduler Time scheduler			
399	JTL Predict defrost controller present on network	oFF PrEd	Not present Present			
176	Defrost scheduling operation in manual	Auto MAn	Enabled in auto only Enabled always		0 - 1	Auto
177	JTL numbering on systems on defrost display Note: Depends on unit no setting on item 1.	oFF J.no	System no. range 1- 28 System no. range x01 - x28		0 - 1	oFF
405	Evaporator inhibit defrost function selection	OFF En.El	Disable Inhibit enabled		0 - 1	OFF
406	Select defrost relay termination at beginning or end of drain down period	OFF  t.End.	Relay terminates at beginning of drain down Relay terminates at end of drain down		0 - 1	OFF
407	Group interface selection	OFF CG.On	Group interface not used. Group interface used for differential pressure control.		0 - 1	OFF

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
408	Drain (bleed) down interface selection	OFF dd.On	Drain down interfaces not used. Drain down interfaces used for drain down control.		0 - 1	OFF
409	Stub defrost interfaces selection	OFF Sb.On	Stub interfaces not used. Stub interfaces used for defrost control.		0 - 1	On
<b>10.2 DEFROST DATA</b>						
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".						
410	Start time for first daily defrost	SYSTEM			00:00 - 23:59	TIME
420		1				08:00
430		2				08:30
440		3				09:00
450		4				09:30
460		5				10:00
470		6				10:30
480		7				11:00
490		8				11:30
500		9				12:00
510		10				12:30
520		11				13:00
530		12				13:30
540		13				08:15
550		14				08:45
560		15				09:15
570		16				09:45
580		17				10:15
590		18				10:45
600		19				11:15
610		20				11:45
620		21				12:15
630		22				12:45
640		23				13:15
650		24				13:45
660		25				08:00
670		26				09:00
680		27				10:00
	28			11:00		

# JTL COMPRESSOR PACK ITEM NUMBERS

## EP6U (EP6HD)

ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<p>A general form of item numbers for defrost systems is shown below.                      The "x" shown in each item number should be replaced by the system number up to system 9.                      Systems 10-19 use items 500-599 and systems 20-28 use items 600-689.                      Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.</p>						
4x1	Defrost duration (mins)				5 - 60	20
4x2	Defrost pattern	0 1 - 6 7 8	No defrosts. Number of equally spaced daily defrosts. 3 defrosts per day, but the 3rd is missing. 4 defrosts per day, but the 4th is missing.		0 - 8	4
4x3	Forced defrost	OFF Fd.on	No forced defrost Forced defrost on		0 - 1	
4x4	Forced refrigeration	OFF Fr.on	No forced refrig. Forced refrig. on		0 - 1	
4x5	Defrost mode	0 deF dr.dn F.dEF F.rEF d.inH FAIL	Refrig. Defrost Drain down Forced defrost Forced refrig. Defrost inhibited Defrost interface fail			
4x6	Drain down duration				0 - 15	5
4x7	Compressor group associated with this defrost system	0 Lt.C Ht.C Sat.C	No association Lt compressor group Ht compressor group Satellite compressor group		0 - 3	0
4x8	No of evaporators on this defrost system	0 1 - 10	Defrost terminated on time only. JTL units terminate defrost on temp. and inform pack.		0 - 10	0
4x9	No of JTL-controlled evaporators terminated					

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>11. DISPLAY FUNCTIONS</b>						
138	Display configuration	0  1  2  3	4 pressures displayed on LED display  4 pressures, No of compressors running, No of condenser step systems on defrost shown on LED display  4 pressures & systems on defrost shown on LED display.  Reserved		0 - 3	1
139	Display type selection (v0.00.1 - v0.00.6) NOTE: This item is not operational and should be set at LED.2	LEd.1 LEd.2	(not allowed) 4 displays		0 - 1	LEd.2
177	JTL numbering on systems on defrost display Note: Depends on unit no setting on item 1.	oFF J.no	System no. range 1- 28 System no. range x01 - x28		0 - 1	oFF
179	Pressure display unit choice	PSI bAr PASC	p.s.i. bar kPa		1 - 3	PSI
<b>12. CLOCK CALENDAR</b>						
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				up to v0.00.6 1992 - 2022 from v0.00.7 2004 - 2034	
18	Daylight saving enable	Stnd dAY.S	Standard time Daylight saving time		0 - 1	Stnd

JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>13. RESTORE FACTORY DEFAULTS</b>						
9	Set default values To set the factory defaults into the memory of the controller, 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.	1234 1066	Load default settings Write to NVRAM immediately			
<b>14. RESTORE PARAMETERS FROM NETWORK (from v0.01.0)</b>						
<p>To restore the data from the network first set 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 the parameter 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	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	
<b>15. SYSTEM ALARMS</b>						
80	Group alarm 81 - 88	0 1 - 255	No alarms Check 81 - 88			
81	High LT suction pressure	CLr Hi.Lt	No fault Fault			
82	High HT suction pressure	CLr Hi.Ht	No fault Fault			
83	High discharge pressure	CLr Hi.dP	No fault Fault			
84	High Satellite suction pressure	CLr Hi.St	No fault Fault			
85	Refrigerant loss	CLr Lo.Li	No fault Fault			
86	Motor thermistor fault	CLr Th.Ft	No fault Fault			
87	Motor overload fault	CLr OL	No fault Fault			
88	Condenser fault	CLr Fn.Ft	No fault Fault			
90	Group alarm 91 - 98	0 1 - 255	No alarms Check 91 - 98			
91	Pressure transducer fault	CLr Pt.Ft	No fault Fault			
92	Thermistor fault	CLr th.Ft	No fault Fault			
93	Thermistor excitation voltage (Mk1 assemblies only)	CLr PS.Ft	No fault Fault			



JTL COMPRESSOR PACK ITEM NUMBERS					EP6U (EP6HD)	
ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
94	High or low pressure switch fault	CLr HP.LP	No fault Fault			
95	Defrost interface card fault	CLr Stub	No fault Fault			
96	Compressor interface card fault	CLr CP.F	No fault Fault			
97	Compressor fault OR Auto input not present	CLr CPr.F	No fault Fault			
98	Oil pressure fault	CLr OIL.F	No fault Fault			
900	Group alarm 901 - 908 v0.00.8 on)	0 1 - 255	No alarms Check 901 - 908			
901	Compressor 1 fault v0.00.8 on)	CLr C1.F	No fault fault			
902	Compressor 2 fault v0.00.8 on)	CLr C2.F	No fault fault			
903	Compressor 3 fault v0.00.8 on)	CLr C3.F	No fault fault			
904	Compressor 4 fault v0.00.8 on)	CLr C4.F	No fault fault			
905	Compressor 5 fault v0.00.8 on)	CLr C5.F	No fault fault			
906	Compressor 6 fault v0.00.8 on)	CLr C6.F	No fault fault			
907	Compressor 7 fault v0.00.8 on)	CLr C7.F	No fault fault			
908	Compressor 8 fault v0.00.8 on)	CLr C8.F	No fault fault			
910	Group alarm 910 - 918 v0.00.8 on)	0 1 - 255	No alarms Check 910 - 918			
911	Compressor 9 fault v0.00.8 on)	CLr C9.F	No fault fault			
912	Compressor 10 fault v0.00.8 on)	CLr C10.F	No fault fault			
915	Auto input not present (PLANT FAULT) v0.00.8 on)	CLr P.FlT	No fault fault			
917	Phase failure fault v0.01.0 on)	CLr Ph.Fl	No fault fault			
918	Compressor inverter fault (v0.01.0 on)	CLr In.Fl	No fault fault			

# JTL COMPRESSOR PACK ITEM NUMBERS

**EP6U  
(EP6HD)**

ITEM	DESCRIPTION	CODE	CODE MEANING	BIT	RANGE	ITEM 9 VALUE
				4321		
<b>16. DIAGNOSTIC &amp; TEST FUNCTIONS</b>						
6	JTL Network communications speed	4.8 38.4	Kilo Baud Kilo Baud			
7	Communications method	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		Unused			
89	Thermistor excitation value (Factory test)		Not used			
99	Test digital displays	CLr SEt	Not active Test active		0 - 1	
100	Test inputs	- - - - 1 - - - - 2 - -	No inputs Input 1 on Input 2 on			
199	Test relay outputs	clr SEt	Not active Active		0 - 1	
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			

<b>DISPLAY DATA</b>		<b>EP6U (EP6HD)</b>	
<b>NORMAL DISPLAY</b>			
999.9	Pressure in psi		
--	Not selected		
<b>ALARM TEXT (in descending priority order)</b>			
P.Fld	Plant failed		
Hi.dP	High discharge pressure		
Stub	Defrost interface fault		
rEF.L	Refrigerant loss		
CPr	Compressor fault		
FAn	Condenser fan problem		
Hi.Lt	High LT suction pressure		
Hi.Ht	High HT suction pressure		
Hi.St	High satellite suction pressure		
Hi.dt	High discharge temperature		
<b>OTHER TEXT</b>			
JTL	Start-up text		
Lt	LT suction pressure follows this text		
Ht	HT suction pressure follows this text		
SAt	Satellite suction pressure follows this text		