

JTL SUCTION PRESSURE OPTIMISER ITEM NUMBERS

OP312
OP324
OP348
OP372

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ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
1. Jnet NETWORK IDENTIFICATION						
0	Unit type	OP31 OP32 OP34 OP37	OP312 (12 evaps) OP324 (24 evaps) OP348 (48 evaps) OP372 (72 evaps)			
19	Firmware version number					
1	Unit number				0.1 - 899.9	
2. OPTIMISER SETUP						
20	Operation Mode	OP.En OP.di Forc Or.En	Optimiser enabled Optimiser disabled Forced value Override on			
140	Disable optimiser	0.En 0.dIS	Enabled Disabled		0 - 1	0.En
200	No of evaporators included in optimisation					
150	Enable display override (set to off)	Off Or.En	Disabled Enabled		0 - 1	Off
157	Refrigerant type	0 0 1 22 2 502 3 404A 4 407A 5 407B 6 507A 7 408A 8 nH3 9 Co2 10 744t 11 407F 12 nonE 13 407C 14 448A 15 449A	None R22/R422A R502/R422D R404A R407A R407B R507A R408A Ammonia (R717) Co2 Transcritical CO2 R407F R407C R448A R449A		up to v0.00.1 1 - 8 from v0.00.2 1 - 9 from v0.00.5 1 - 15	R404A
178	Temperature display unit choice	CELS FAhr	Celsius Fahrenheit		0 - 1	CELS
179	Pressure display unit choice	none PSI bAr PASC	Not selected (kPa) p.s.i bar kPa		0 - 3	PSI

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3. PRESSURE CONTROL Note, pressure can be displayed in p.s.i, bar or kPa. This function is set on item 179. Also temperature can be displayed in Celsius or Fahrenheit, this function is set on item 178. Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
151	Current optimised pressure setpoint					
152	Maximum optimised pressure setpoint				up to v0.00.1	
					5.0 to 60.0	50.0
					v0.00.2 on	
					5.0 to 225.0	50.0
					v0.00.6 on	
40	Minimum optimised pressure setpoint (initial value)				up to v0.00.1	
					-5.0 to 20.0	4.0
					v0.00.2 on	
					-5.0 to 200.0	4.0
					v0.00.6 on	
43	Error deadband temperature (°C)				up to v0.00.1	
					-5.0 to 20.0	4.0
					v0.00.2 on	
					-5.0 to 200.0	4.0
					v0.00.6 on	
42	Increase error deadband for energy saving (°C) (from v0.00.5)				up to v0.00.1	
					-5.0 to 20.0	4.0
					v0.00.2 on	
					-5.0 to 200.0	4.0
					v0.00.6 on	
44	Optimising time constant				0.0 - 2.0	1.0
43	Error deadband temperature (°C)				0 - 3	2
42	Increase error deadband for energy saving (°C) (from v0.00.5)				1 - 240	30
44	Optimising time constant					
141	Current active optimising evaporator temperature error Note positive error is higher than setpoint					
142	Current active optimising evaporator unit number					
202	Current number of evaporators optimising					
205	Number of "worst" evaporators to discard				0 - 20	6
162	Activate forced pressure setpoint	Off F.On	Inactive Active		0 - 1	
161	Forced pressure setpoint				item 40 to item 152	

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4. SORTED EVAPORATOR TEMPERATURE ERRORS Note, temperature can be displayed in Celsius or Fahrenheit, this function is set on item 178. Note 5th to 20th worst data available from v0.00.3						
111	Worst current temperature error					
112	Worst error unit number					
113	2nd worst current temperature error					
114	2nd worst unit number					
115	3rd worst current temperature error					
116	3rd worst unit number					
117	4th worst current temperature error					
118	4th worst unit number					
119	5th worst current temperature error					
120	5th worst unit number					
121	6th worst current temperature error					
122	6th worst unit number					
123	7th worst current temperature error					
124	7th worst unit number					
125	8th worst current temperature error					
126	8th worst unit number					
127	9th worst current temperature error					
128	9th worst unit number					
129	10th worst current temperature error					
130	10th worst unit number					
131	11th worst current temperature error					
132	11th worst unit number					
133	12th worst current temperature error					
134	12th worst unit number					
135	13th worst current temperature error					
136	13th worst unit number					
137	14th worst current temperature error					
138	14th worst unit number					
139	15th worst current temperature error					
180	15th worst unit number					
181	16th worst current temperature error					

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ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
182	16th worst unit number					
183	17th worst current temperature error					
184	17th worst unit number					
185	18th worst current temperature error					
186	18th worst unit number					
187	19th worst current temperature error					
188	19th worst unit number					
189	20th worst current temperature error					
190	20th worst unit number					
5. PERFORMANCE & ALARMS Note, pressure can be displayed in p.s.i, bar or kPa. This function is set on item 179.						
199	Initialise averaging arrays				1234 only	
197	Date arrays flushed					
198	Year arrays flushed					
41	Low optimising pressure rise alarm tolerance				0.0 - 5.0	1.0
45	Average hourly pressure rise (psi)					
46	Average daily pressure rise (psi)					
47	Average weekly pressure rise (psi)					
48	Average monthly pressure rise (psi) (4 weeks)					
49	Average quarterly pressure rise (psi) (12 weeks)					
5.1 WORST UNIT LOGGING (v0.00.1 on)						
50	Worst unit since midnight					
60	Time worst unit at top of list since midnight					
51	Worst unit yesterday					
61	Time worst unit at top of list yesterday					
52	Worst unit 2 days ago					
62	Time worst unit at top of list 2 days ago					
53	Worst unit 3 days ago					
63	Time worst unit at top of list 3 days ago					
54	Worst unit 4 days ago					
64	Time worst unit at top of list 4 days ago					

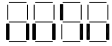
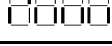
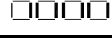
JTL SUCTION PRESSURE OPTIMISER ITEM NUMBERS					OP312 OP324 OP348 OP372	
ITEM	DESCRIPTION	CODE	CODE MEANING	FACTORY DEFAULT	RANGE	ITEM 9 VALUE
55	Worst unit 5 days ago					
65	Time worst unit at top of list 5 days ago					
56	Worst unit 6 days ago					
66	Time worst unit at top of list 6 days ago					
57	Worst unit 7 days ago					
67	Time worst unit at top of list 7 days ago					
6. OPTIMISING EVAPORATOR DATA The data from all the attached evaporators appears in the following data items. This data is unsorted and appears in the zone order of the network controller. The data is in blocks of 10 items starting at item 210 - 215 for the first associated evaporator the next evaporator is in items 220 - 225 up to the maximum of 72 evaporators on items 920 - 925						
2x0	Evaporator unit number					
2x2	Evaporator mode (current data from evaporator)	rEFr dEFr drdn Li.Ho Df.rc Pu.dn Sh.dn	Refrigerating Defrost Drain down Liquid hold off Defrost recovery Pump down Shut down			
2x3	Evaporator setpoint (current data from evaporator)					
2x4	Evaporator temperature (current data from evaporator)					
2x5	Evaporator temperature error (Temperature - Setpoint)					
7. Jnet NETWORK FUNCTIONS						
196	Network defrost arrangement	nonE PrEd dEF.S	None PREDICT defrost scheduler present on network Timed defrost scheduler present on network			
108	Select time for raise deadband (v0.00.5 on)	0 1-8	Disabled Timer number		0 - 8	0
109	Raise deadband command status (v0.00.5 on)	CLr r.SPt	Normal Raise setpoint			

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8. DISPLAY FUNCTIONS							
179	Pressure display unit choice	none PSI bAr PASC		Not selected (kPa) p.s.i bar kPa		0 - 3	PSI
177	Backlight control (v0.00.5 on)	0 1 2 3	B.off BL.on BL.F.F BL.n.F	Backlight off Backlight on Backlight off, flashes for alarm Backlight on, flashes for alarm		0 - 3	B.off
9. LOAD SHEDDING (v0.00.5 on)							
101	Enable load shedding	0 1	off L.S.En	Disabled Enabled		0 - 1	oFF
102	Raise error deadband (item 42)	0 1-8		Disabled Global plant input no		0 - 8	0
10. 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					2007 - 2042	
18	Daylight saving enable	Stnd dAY.S		Standard time Daylight saving time		0 - 1	Stnd
11. RESTORE FACTORY DEFAULTS							
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		Set default values			
		1066		Write to NVRAM without delay			

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12. RESTORE PARAMETERS FROM NETWORK (from v0.00.4) 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.						
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	
13. SYSTEM ALARMS						
80	Group alarm 81 - 88 (see graphical data)	0 1 - 255	No alarms Check 81 - 88			
81	Override on	CLr Or.On	Off Override on			
82	Optimiser disabled	CLr O.dIS				
83	Low optimising pressure alarm	CLr Lo.Lt				
88	Unit number corrupted or not set	CLr Un.CF	Clear Fault			

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14. DIAGNOSTIC & TEST FUNCTIONS						
6	Communications speed	4.8 38.4	Kilo baud rate Kilo baud rate			
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 (NOT USED)					
99	Test digital displays	CLr SEt	Not active Test active		0 - 1	
10	Processor alarms (11 - 17) (see graphical data)	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		OP312 OP324 OP348 OP372
NORMAL DISPLAY		
999.9	Pressure in psi	
--	Not selected	
ALARM TEXT (in descending priority order)		
FAIL	JTL Network communications failure	
oFF	Unit disabled	
Or	Override on	
OTHER TEXT		
JTL	Start-up text	
tArG	Suction optimised pressure setpoint follows this text	
Func	Function mode	
data	Data mode	

GRAPHICAL DISPLAY OF BIT DATA (FROM V0.00.5)				
Graphical display of bit data used on items where the data was shown previously as a decimal value	bit	Graphic	Value	<u>Note:</u> Where the data is shown as a decimal value the meaning is the sum of the associated value e.g. bits 2 and 5 set would be displayed as 18 (16+2)
	None		0	
	1		1	
	2		2	
	3		4	
	4		8	
	5		16	
	6		32	
	7		34	
	8		128	