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<b>JTL Jnet NETWORK REPEATER ITEM NUMBERS</b>				<b>NR110/111</b>	
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>CODE</b>	<b>CODE MEANING</b>	<b>RANGE</b>	<b>ITEM 9 VALUE</b>
<b>1. Jnet NETWORK IDENTIFICATION</b>					
0	Unit type	nr11	Unit type		
1	Unit Number			0.1 - 899.8	0.1
19	Software version number				
<b>2. ASSOCIATED Jnet UNITS</b>					
A general form of item numbers for Jnet Units shown below. The "xx" shown in each item number should be replaced by the Jnet list position. This sequence covers item numbers 1010-1424					
1xx0	Unit Number				
1xx1	Subnet Location	---- Pri Sec	Unknown Primary Secondary		
1xx2	Comms Status	---- Flt On	Unknown Fault Healthy		

JTL Jnet NETWORK REPEATER ITEM NUMBERS					NR110/111	
ITEM	DESCRIPTION	CODE		CODE MEANING	RANGE	ITEM 9 VALUE
1xx3	Keep Alive Timer					
<b>3. NETWORK HEALTH MONITORING</b>						
70	Comms Faults Overall					
71	Healthy Units Overall					
72	Unit Count Overall					
73	Comms Health Overall					
52	Comms fault timeout (from v7)				10 - 240	30
<b>3.1 COMMS HEALTH PRIMARY NETWORK</b>						
510	Comms Faults					
511	Healthy Units					
512	Unit Count					
513	Comms Health					
<b>3.2 COMMS HEALTH SECONDARY NETWORK</b>						
520	Comms Faults					
521	Healthy Units					
522	Unit Count					
523	Comms Health					
<b>4. LOCAL PRESSURE AND TEMPERATURE DATA</b>						
157	Refrigerant Type	3 4 5 6 7 8 9 11 12 13 14 15	R404A R407A R407B R507A R408A R717 R744 R407F R290 from v2 R407C R448A R449A		3 - 15	744
<b>4.1 LOCAL PRESSURE CHANNEL 1</b>						
31	Temperature					
131	Temperature Sensor Enable	0 1	Off On		0 - 1	Off
21	Pressure					
121	Pressure Sensor Enable	0 1	Off On		0 - 1	On
421	Pressure Sensor Value Range High				up to v4 50 - 200 from v5 50 - 999.9	101.5
426	Pressure Sensor Value Range Low				-15.0 - 0.0	-14.5

JTL Jnet NETWORK REPEATER ITEM NUMBERS					NR110/111	
ITEM	DESCRIPTION	CODE		CODE MEANING	RANGE	ITEM 9 VALUE
142	Dewpoint					
141	Superheat					
210	Pressure Set 1A (from v7)				0 - 9999	0
211	Pressure Set 1B (from v7)				0 - 9999	0
40	Pressure Alarms Enable	0 1	Off On		0 - 1	Off
41	High Pressure Alarm Level				-99.9 - 999.9	0.0
42	Low Pressure Alarm Level				-99.9 - 999.9	0.0
146	Average Pressure Last Hour					
<b>4.2 LOCAL PRESSURE CHANNEL 2 (From v7)</b>						
32	Temperature					
132	Temperature Sensor Enable	0 1	Off On		0 - 1	Off
22	Pressure					
122	Pressure Sensor Enable	0 1	Off On		0 - 1	On
422	Analogue Input Range High (up to v6)				-99.9 - 999.9	100.0
	Pressure Sensor Value Range High (from v7)				50 - 999.9	101.5
427	Analogue Input Range Low (up to v6)				-99.9 - 999.9	0.0
	Pressure Sensor Value Range Low (from v7)				-15 - 0.0	0.0
144	Dewpoint					
143	Superheat					
220	Pressure Set 2A				0 - 9999	0
221	Pressure Set 2B				0 - 9999	0
43	Pressure Alarms Enable	0 1	Off On		0 - 1	Off
44	High Pressure Alarm Level				-99.9 - 999.9	0.0
45	Low Pressure Alarm Level				-99.9 - 999.9	0.0
147	Average Pressure Last Hour					
<b>4.3 LOCAL ANALOGUE CHANNEL 3</b>						
423	Analogue Input Range High				-99.9 - 999.9	100.0
428	Analogue Input Range Low				-99.9 - 999.9	0.0

JTL Jnet NETWORK REPEATER ITEM NUMBERS					NR110/111	
ITEM	DESCRIPTION	CODE		CODE MEANING	RANGE	ITEM 9 VALUE
<b>5. Jnet PRESSURE</b>						
20	Operating mode	Up to v6				
		Off	Substitution Off			
		On	Substitution On			
		From v7				
Rptr	Repeater Mode					
Brdg	Jnet Bridge Mode					
<b>5.1 Jnet PRESSURE 1 DATA Up to v6</b>						
29	Received Pressure over Jnet					
50	Pressure Substitution	0 1	Off On		0 - 1	On
51	Pressure Fault Strategy	0 1	Off F.Err	Substitution off Force error	0 - 1	F.Err
<b>From v7 5.1.1 Jnet DOWNSTREAM PRESSURE 1 DATA</b>						
600	Broadcast Output Value					
607	Average broadcast pressure last hour					
690	Time since last received broadcast pressure					
691	Average broadcast pressure period over 1 hour					
692	Peak broadcast pressure period (resettable to 0)					
604	Pressure Substitution	0 1	Off On		0 - 1	On
605	Pressure Fault Strategy	0 1	Off F.Err	Substitution off Force error	0 - 1	F.Err
<b>5.1.2 PRESSURE ANALYSIS</b>						
603	Pressure analysis method	0	Loc	Local pressure sources Local pressures with remote pressure backup Remote pressure sources All pressure sources	0 - 3	Loc.R
		1	Loc.R			
		2 3	Rem All.P			
608	Active broadcast pressure method	Loc Rem All.P		Local pressure sources Remote pressure sources All pressure sources		
601	Pressure Set				0 - 9999	0
606	Number of pressures included in analysis					

JTL Jnet NETWORK REPEATER ITEM NUMBERS					NR110/111	
ITEM	DESCRIPTION	CODE		CODE MEANING	RANGE	ITEM 9 VALUE
<b>5.1.3 INCOMING PRESSURE OFFSETS</b> x = Incoming where x = 1 to 8						
61x	Transmitting Unit Number				0 - 899.8	0.0
62x	Transmitting Channel Number				1 - 2	1
63x	Pressure Offset (psi)				-99.9 to 999.9	0.0
<b>5.1.4 PRESSURE 1 SOURCE DATA</b> x = data group where x = 1 to 8						
602	Broadcast Analysis period (sec)				0 - 240	15
64x	Unit number					
65x	Unit channel					
66x	Average pressure of included readings					
67x	Average pressure plus pressure offset					
68x	Number of readings included in average					
<b>5.2 Jnet PRESSURE 2 DATA (From v7)</b>						
<b>5.2.1 Jnet DOWNSTREAM PRESSURE 2 DATA</b>						
28	Received Pressure over Jnet					
700	Broadcast Output Value					
707	Average broadcast pressure last hour					
790	Time since last received broadcast pressure					
791	Average broadcast pressure period over 1 hour					
792	Peak broadcast pressure period (resettable to 0)					
704	Pressure Substitution	0 1	Off On		0 - 1	On
705	Pressure Fault Strategy	0 1	Off F.Err	Substitution off Force error	0 - 1	F.Err
<b>5.2.2 PRESSURE ANALYSIS</b>						
703	Pressure analysis method	0 1 2 3	Loc Loc.R Rem All.P	Local pressure sources Local pressures with remote pressure backup Remote pressure sources All pressure sources	0 - 3	Loc.R
708	Active broadcast pressure method		Loc Rem All.P	Local pressure sources Remote pressure sources All pressure sources		
701	Pressure Set				0 - 9999	0
706	Number of pressures included in analysis					





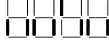

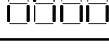
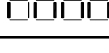
JTL Jnet NETWORK REPEATER ITEM NUMBERS					NR110/111	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE	
<b>5.2.3 INCOMING PRESSURE OFFSETS</b> x = Incoming where x = 1 to 8						
71x	Transmitting Unit Number			0 - 899.8	0.0	
72x	Transmitting Channel Number			1 - 2	1	
73x	Pressure Offset (psi)			-99.9 to 999.9	0.0	
<b>5.2.4 PRESSURE 1 SOURCE DATA</b> x = data group where x = 1 to 8						
702	Broadcast Analysis period (sec)			0 - 240	15	
74x	Unit number					
75x	Unit channel					
76x	Average pressure of included readings					
77x	Average pressure plus pressure offset					
78x	Number of readings included in average					
<b>6. Jnet OVER IP BRIDGE (from v7)</b>						
500	Jnet over IP Bridge Operation	oFF On		0 - 1	oFF	
501	Zone over IP for Jnet bridge operation			0 - 99	0	
<b>7. DISPLAY DATA</b>						
178	Temperature Units	0 1 2	Cels Fahr Kelv	0 - 2	Celsius	
179	Pressure Units	1 2 3 4	psi barg kPa bara	1 - 4	psi	
<b>8. CLOCK CALENDER</b>						
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			2013 - 2034		
<b>9. RESTORE FACTORY DEFAULTS</b> To set the factory defaults into the memory of the controller, first set the virtual 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	0	nonE	Not used		
9	Set default values selected by bitswitch	1234		Set default values		
	Note: Setting the virtual bitswitches alone has no affect	1066		Write to all data to nvRAM		

JTL Jnet NETWORK REPEATER ITEM NUMBERS				NR110/111	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
<b>10. RESTORE PARAMETERS FROM NETWORK</b>					
<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 data base 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 1-999	As commissioned Template number	0-9999	
<b>11. SYSTEM ALARMS</b>					
80	System Alarms 81 - 88	See Graphical Data			
81	Critical Alarm	Clr Alrm	Clear Alarm		
82	New Critical Alarm	Clr Alrm	Clear Alarm		
83	Pressure Transducer 1 Fault	Clr Flt	No Fault Fault		
84	Low Pressure 1 Alarm	Clr Flt	No Fault Fault		
85	High Pressure 1 Alarm	Clr Flt	No Fault Fault		
86	ADC Reference Tolerance Fault	Clr Flt	No Fault Fault		
88	Unit No Corrupt/Not Set	Clr Un.CF	No Fault Fault		
90	System Alarms 91 -98	See Graphical Data			
91	Temperature Sensor 1 Fault	Clr Flt	No Fault Fault		
92	Primary Subnet Inactive	Clr Flt	No Fault Fault		
93	Pressure Transducer 2 Fault (from v7)	Clr Flt	No Fault Fault		
94	Low Pressure 2 Alarm (from v7)	Clr Flt	No Fault Fault		
95	High Pressure 2 Alarm (from v7)	Clr Flt	No Fault Fault		
96	Temperature 2 Sensor Fault (from v7)	Clr Flt	No Fault Fault		

JTL Jnet NETWORK REPEATER ITEM NUMBERS				NR110/111	
ITEM	DESCRIPTION	CODE	CODE MEANING	RANGE	ITEM 9 VALUE
<b>12. DIAGNOSTICS &amp; TEST FUNCTIONS</b>					
6	Communications speed (in kilo baud)	4.8	Baud rate		
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)		
977	Transmit control line status for the operation of the Jnet network communications.	Hi Lo	Transmit Receive		
8	Virtual bitswitch setting	None	Not used		
89	Sensor excitation value (Factory test)		Not used		
411	Pressure 1 Temperature sensor 1 reading				
412	Pressure 2 Temperature sensor 2 reading				
413	Analogue input 3 Temperature sensor 3 reading				
414	Temperature 2 Temperature sensor 4 reading				
415	Temperature 1 Temperature sensor 5 reading				
10	Processor alarms	0	No alarms		



**GRAPHICAL DISPLAY OF BIT DATA**

Graphical display of bit data used on items where the data was shown previously as a decimal value	<b>bit</b>	<b>Graphic</b>
	None	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	