



QUANTUM LX CONTROL PANEL

SETPOINT, CONFIGURATION AND CALIBRATION DATA SHEETS

UNCONTROLLED

CUSTOMER: _____

CUSTOMER PO#: _____

JOHNSON CONTROLS REFERENCE NUMBER: _____

REVISION: _____

REVISION DATE: _____


IMPORTANT: This manual is provided for recording the screen display settings that are entered for Quantum LX control panel installations at start-up. Please file for future reference.

All values or setpoints in the SETPOINT DATA SHEET that are NOT filled in will be at the DEFAULT value or setpoint.

Version 7.10

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Waynesboro, Pennsylvania USA 17268-0997

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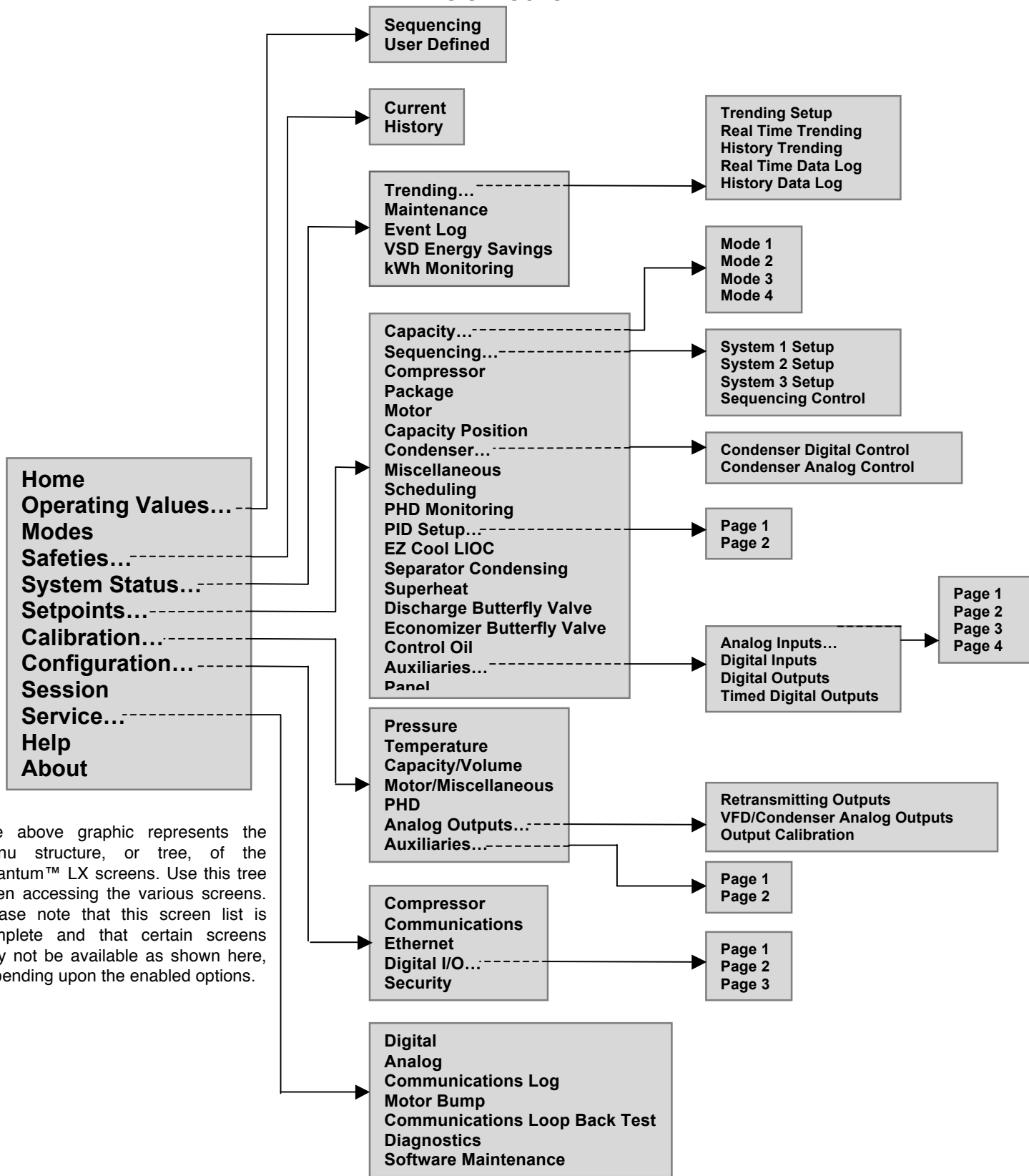
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MENU STRUCTURE



The above graphic represents the menu structure, or tree, of the Quantum™ LX screens. Use this tree when accessing the various screens. Please note that this screen list is complete and that certain screens may not be available as shown here, depending upon the enabled options.

SETPOINT SHEET NOTES

LIMITATION REGARDING CONTROLS ADJUSTMENT

A great deal of care has been taken to design and manufacture this custom engineered packaged system. Nevertheless, it is not possible to operate these types of systems at the factory and therefore, design validation will occur for the first time at the installation site. The controls provided on this equipment include the necessary tuning parameters that allow matching the dynamic response of the machinery to the stimulus of the connected process load profile and external controls so that control cycling or "hunting" can be minimized. The dynamic operating characteristics of the system will change based on changes in operating load profile after startup, changes in seasonal ambient temperature, response of external process control elements, varying chemistry of process or refrigerant, equipment wear and replacement. The tuning of the controls that produces the best overall operation will likely not happen during startup since the operating profile at startup is likely not the normal profile or set of profiles.

JCI/YORK cannot guarantee that the package controls will be correctly tuned for the actual site operating conditions as received from the factory or even following a JCI/YORK supervised startup. The system will likely require fine tuning in response to variable system dynamics as described above. Further, it is highly recommended that the user/operator thoroughly read and understand the JCI/YORK instruction manuals and become familiar with the operation of the package machinery and controls. Periodic adjustments will be needed to maintain operation at peak efficiency and reliability. This adjustment is not included within JCI/YORK's scope.

TITLE STRUCTURE

The title structure of each table in this setpoint sheet is made to reflect the destination of each table in the Quantum LX programming structure.

Example: **MAIN MENU - SUBMENU - SUBMENU - Submenu**

CONFIGURATION ORDER

This setpoint sheet should be followed in order, page by page, to correctly configure the Quantum LX. The configuration screens should be setup first followed by the calibration screens and finally the setpoint screens. Following this order will insure that all options that need set up are correctly configured and calibrated prior to entering setpoints.

Some tables are out of order in this setpoint sheet purposely to configure the Quantum LX correctly. An example of this is the auxiliary analog setup pages found in the Calibration Main Menu - Auxiliaries Submenu. This setpoint sheet will display page 2 first followed by page 1. In order to correctly setup the auxiliary analogs in the Quantum LX, page 2 should be configured first followed by page 1.

PASSWORD PROTECTION AND FACTORY SERVICE

Please note that some of the configuration and calibration setpoint values shown in this setpoint sheet are only visible to JCI/York field service technicians or factory personnel utilizing a password protected factory service setup session.

I/O INTEGRITY

It is possible to have two I/O points in the software addressed to the same input or output channel. This will cause the Quantum LX to not operate as expected. To ensure that the I/O has been correctly configured, the integrity may be checked under the Service – Diagnostics window. Tab down to the "Check IO Integrity" button and press enter. If there are conflicts, the Quantum LX will list them on the right of the screen.

DEFAULT VALUES

Each setpoint configuration chart has a header similar to the following.


Control	Description	Value / Units	Default Value	Default Range	Default Units
---------	-------------	---------------	---------------	---------------	---------------

Please note that this setpoint configuration sheet contains only the default values and default units found in the Quantum LX's programming. If a value is factory set different than the default, that value with the new units will appear in the Value / Units column, otherwise the operating value is assumed to be default.


Please also note that the generic term "Value" has been used to describe any parameter that is being configured in this setpoint sheet. Value can stand for a pressure value in one configuration chart and stand for enabled or disabled in another configuration chart.

For Example the calibration of auxiliary analog 1 found on page 21 of this setpoint sheet has a default high range value of 485.3 PSIG. The value 485.3 appears in the Default column and PSIG appears in the Default Units column. If auxiliary analog 1 is updated to read a temperature input with a range of 0 to 300 deg F named "Subcooler Temperature" then the new value of "300 deg F" will appear in the Value / Units column for the high range value. It should be noted that the default of 485.3 and default unit of PSIG will still be listed on the sheet, however, they will no longer be valid. See example below.

Item #	Description	Value / Units	Default Value	Default Range	Default Units
Auxiliary Analog 1	Name	Subcooler Temperature	Auxiliary Analog 1	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	0 Deg F	0.0 to 1435.6	
	High	300 Deg F	485.3		

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SETPOINT DATA SHEETS

Quantum™ LX Version 7.08 (December 13, 2012)

In most cases, updating software on the Quantum™ LX panel will require clearing the current setpoints and data stored in the nonvolatile memory on the main board. It is suggested that the operator first record all control setpoints prior to performing program upgrades. The setpoint data sheets are useful for recording this information.

ABOUT

Description	Value / Units	Default Value	Default Range	Default Units
Sales Order		0	0 to 9999999	None
Item		0	0 to 99999	

SESSION

Description	Value	Default Value	Default Range	Default Units
User Level		0		None
Password		None		
Language		English	*	
Pressure Units		PSIG	*	
Temperature Units		F	*	
Date Format		US	*	

* Refer to S90-021 O or S90-022 O (Operation) for additional information

CONFIGURATION - Compressor

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Misc.	Sequencing		Disabled	None	None	
	Condenser		Disabled			
	Screen Saver		15	0 to 60	Time	MIN
Capacity	Mode 1	Disabled / Enabled		Enabled	Disabled or Enabled	None
		Channel		Suction Pressure	None	
		Direction		Forward	Forward or Reverse	
	Mode 2	Disabled / Enabled		Disabled	Disabled or Enabled	
		Channel		Disabled	Disabled or Enabled	
		Direction		Forward	Forward or Reverse	
	Mode 3	Disabled / Enabled		Disabled	Disabled or Enabled	
		Channel		Disabled	Disabled or Enabled	
		Direction		Forward	Forward or Reverse	
	Mode 4	Disabled / Enabled		Disabled	Disabled or Enabled	
		Channel		Disabled	Disabled or Enabled	
		Direction		Forward	Forward or Reverse	
Package	Compressor		RWF	None		
	Pump		Demand			
	Dual Pump		Disabled			
	Drive	Screw Compressor With:	Screw w/Constant Electric Drive			
	Refrigerant		R717			
	Filter		Filter-Oil			
	Power Pac		No			

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CONFIGURATION - Communications

Control	Description	Value / Units	Default Value	Default Range	Default Units
Compressor ID			0	0 to 99	* None
Map File	Should Map File Be Used	No	No	*	
Comm 1	Baud rate	19200	19200	*	
	Data Bits		8	7 to 8	
	Stop Bits		1	1 to 2	
	Parity	None	None	*	
	Protocol	None			
Comm 2	Baud rate	19200	19200		
	Data Bits		8	7 to 8	
	Stop Bits		1	1 to 2	
	Parity	None	None	*	
	Protocol	None			
Comm 3	Baud rate	19200	19200		
	Data Bits		8	7 to 8	
	Stop Bits		1	1 to 2	
	Parity	None	None	*	
	Protocol	None			

* Refer to S90-021 O, S90-022 O (Operation) or S90-020 CS (Communications Setup) for additional information

CONFIGURATION - Ethernet

Control	Description	Value / Units	Default Value	Default Range	Default Units
IP Data	Address Type		Fixed (Static)	Static or Dynamic	None
	IP Address		192	0.0 to 255.0	
			168		
			0		
			83		
	Gateway Address		192		
			168		
			0		
			1		
	Subnet Mask		255		
		255			
		255			
		0			
	Web Server Port		80	0.0 to 99999.0	
Naming Data	Hostname		QLX-Host	*	
	Workgroup		QLX Compressors		
	Comment				
Email Data	Email Notification On Shutdown		Disabled		
	Local Email Address				
	Alias Name For Local Email Address				
	Subject				
	SMTP Server Name OR IP Address				
	SMTP Server Port Number		25		
	Comma-Delimited List Of Email Recipients				
Protocols	ModBus TCP		Disabled	None	
	Ethernet/IP		Disabled		

* Refer to S90-020 CS (Communications Setup) for additional information

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CONFIGURATION - DIGITAL I/O – Page 1

Input/Output	Description	Value	Default Value	Default Range
Oil Level Switch	IO Board		Digital Board 1	*
	IO Channel		13	None
Capacity Decrease	IO Board		Digital Board 1	*
	IO Channel		6	None
Capacity Increase	IO Board		Digital Board 1	*
	IO Channel		5	None
Volume Decrease	IO Board		Digital Board 1	*
	IO Channel		8	None
Volume Increase	IO Board		Digital Board 1	*
	IO Channel		7	None
Capacity Step #1	IO Board		None	*
	IO Channel		0	None
Capacity Step #2	IO Board		None	*
	IO Channel		0	None
Capacity Step #3	IO Board		None	*
	IO Channel		0	None
Capacity Step #4	IO Board		None	*
	IO Channel		0	None
Capacity Step #5	IO Board		None	*
	IO Channel		0	None
Capacity Step #6	IO Board		None	*
	IO Channel		0	None
Capacity Step #7	IO Board		None	*
	IO Channel		0	None
Economizer	IO Board		Digital Board 1	*
	IO Channel		11	None
Liquid Injection	IO Board		Digital Board 1	*
	IO Channel		9	None
Oil Heater	IO Board		Digital Board 1	*
	IO Channel		21	None
Hot Gas Bypass	IO Board		Digital Board 1	*
	IO Channel		16	None
Compressor Motor Start Signal	IO Board		Digital Board 1	*
	IO Channel		1	None
Compressor Motor Starter Feedback	IO Board		Digital Board 1	*
	IO Channel		2	None
Oil Pump Start Signal	IO Board		Digital Board 1	*
	IO Channel		3	None
Oil Pump Feedback	IO Board		Digital Board 1	*
	IO Channel		4	None
Full Flow Pump Start Signal	IO Board		None	*
	IO Channel		0	None
Oil Pump #2 Start Signal	IO Board		Digital Board 2	*
	IO Channel		15	None
Oil Pump #2 Feedback	IO Board		Digital Board 2	*
	IO Channel		16	None

* IO Board

None	Digital Board 1	Digital Board 2
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CONFIGURATION - DIGITAL I/O - Page 2

Input/Output	Description	Value	Default Value	Default Range
High Liquid Level Shutdown	IO Board		Digital Board 1	*
	IO Channel		14	None
Mode Select A	IO Board		Digital Board 1	*
	IO Channel		19	None
Mode Select B	IO Board		Digital Board 1	*
	IO Channel		20	None
Shutdown	IO Board		Digital Board 1	*
	IO Channel		23	None
Warning	IO Board		Digital Board 1	*
	IO Channel		22	None
Balance Piston	IO Board		Digital Board 1	*
	IO Channel		12	None
Panel Heater	IO Board		None	*
	IO Channel		15	None
Permissive Start	IO Board		Digital Board 2	*
	IO Channel		17	None
Ready To Run	IO Board		Digital Board 2	*
	IO Channel		1	None
Remote Enabled	IO Board		Digital Board 2	*
	IO Channel		2	None
Recycle Delay	IO Board		Digital Board 2	*
	IO Channel		6	None
Remote Start/Stop	IO Board		Digital Board 2	*
	IO Channel		3	None
Remote Load	IO Board		Digital Board 2	*
	IO Channel		4	None
Remote Unload	IO Board		Digital Board 2	*
	IO Channel		5	None
Condenser Control Step 1	IO Board		Digital Board 2	*
	IO Channel		21	None
Condenser Control Step 2	IO Board		Digital Board 2	*
	IO Channel		22	None
Condenser Control Step 3	IO Board		Digital Board 2	*
	IO Channel		23	None
Condenser Control Step 4	IO Board		Digital Board 2	*
	IO Channel		24	None
Power Assist	IO Board		Digital Board 1	*
	IO Channel		24	None
Dx Circuit #1	IO Board		Digital Board 2	*
	IO Channel		19	None
Dx Circuit #2	IO Board		Digital Board 2	*
	IO Channel		20	None
Main Oil Injection	IO Board		None	*
	IO Channel		0	None

* IO Board

None	Digital Board 1	Digital Board 2
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CONFIGURATION - DIGITAL I/O - Page 3

Input/Output	Description	Value	Default Value	Default Range
Liquid Level Increase	IO Board		None	*
	IO Channel		0	None
Liquid Level Decrease	IO Board		None	*
	IO Channel		0	None
PLC Interlock	IO Board		None	*
	IO Channel		0	None
High VI Liquid Injection	IO Board		Digital Board 1	*
	IO Channel		10	None
Shunt Trip	IO Board		Digital Board 1	*
	IO Channel		15	None
Discharge Butterfly Valve Solenoid	IO Board		None	*
	IO Channel		0	None
Control Oil Pump #1 Output	IO Board		None	*
	IO Channel		0	None
Control Oil Pump #1 Auxiliary Input	IO Board		None	*
	IO Channel		0	None
Control Oil Pump #2 Output	IO Board		None	*
	IO Channel		0	None
Control Oil Pump #2 Auxiliary Input	IO Board		None	*
	IO Channel		0	None
Control Oil Pump Prelube Solenoid	IO Board		None	*
	IO Channel		0	None

* IO Board

None	Digital Board 1	Digital Board 2
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CALIBRATION - Pressure

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
PSIG Conversion			14.7	8.0 to 20.0	Pressure	PSIG
Suction	Current value			None	None	
	Offset		0.0	-30.0 to 30.0		
	Range	Low	30.0 Hg	30.0 Hg to 985.3	Pressure	PSIG
		High	185.3			
	Sensor Signal **		1-5V	None	None	
	Device Source *		Analog Board 1			
I/O Channel		9				
Discharge	Current value			None	None	
	Offset		0.0	-30.0 to 30.0		
	Range	Low	30.0 Hg	30.0 Hg to 985.3	Pressure	PSIG
		High	485.3			
	Sensor Signal **		1-5V	None	None	
	Device Source *		Analog Board 1			
I/O Channel		8				
Oil	Current value			None	None	
	Offset		0.0	-30.0 to 30.0		
	Range	Low	30.0 Hg	30.0 Hg to 985.3	Pressure	PSIG
		High	485.3			
	Sensor Signal **		1-5V	None	None	
	Device Source *		Analog Board 1			
I/O Channel		6				
Filter	Current value			None	None	
	Offset		0.0	-30.0 to 30.0		
	Range	Low	30.0 Hg	30.0 Hg to 985.3	Pressure	PSIG
		High	485.3			
	Sensor Signal **		1-5V	None	None	
	Device Source *		Analog Board 1			
I/O Channel		7				
Economizer	Current value			None	None	
	Offset		0.0	-30.0 to 30.0		
	Range	Low	30.0 Hg	30.0 Hg to 985.3	Pressure	PSIG
		High	485.3			
	Sensor Signal **		1-5V	None	None	
	Device Source *		None			
I/O Channel		13				

The following are the type of selectable inputs that are available for the device source, and signal selections:

*** Device Source**

None
Analog Board 1
Analog Board 2

**** Sensor Signal Selections:**

None	4-20mA	RTD	Vibration
0-5V	Pot.	CT	1-10V
1-5V	ICTD	RPM	+/- 5V

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CALIBRATION - Pressure (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Balance Piston	Current value			None	None		
	Offset		0.0	-30.0 to 30.0	Pressure	PSIG	
	Range	Low	30.0 Hg	30.0 Hg to 985.3			
		High	485.3				
	Sensor Signal **		1-5V	None		None	
	Device Source *		None				
I/O Channel		10					
System Discharge	Current value			None	None		
	Offset		0.0	-30.0 to 30.0	Pressure	PSIG	
	Range	Low	30.0 Hg	30.0 Hg to 985.3			
		High	485.3				
	Sensor Signal **		1-5V	None		None	
	Device Source *		None				
I/O Channel		11					
Main Oil Injection	Current value			None	None		
	Offset		0.0	-30.0 to 30.0	Pressure	PSIG	
	Range	Low	30.0 Hg	30.0 Hg to 985.3			
		High	485.3				
	Sensor Signal **		1-5V	None		None	
	Device Source *		None				
I/O Channel		15					
Manifold	Current value			None	None		
	Offset		0.0	-30.0 to 30.0	Pressure	PSIG	
	Range	Low	30.0 Hg	30.0 Hg to 130.3			
		High	57.8				
	Sensor Signal **		1-5V	None		None	
	Device Source *		None				
I/O Channel		3					
Economizer Port	Current value			None	None		
	Offset		0.0	-30.0 to 30.0	Pressure	PSIG	
	Range	Low	30.0 Hg	30.0 Hg to 985.3			
		High	485.3				
	Sensor Signal **		1-5V	None		None	
	Device Source *		None				
I/O Channel		0					

The following are the type of selectable inputs that are available for the device source, and signal selections:

*** Device Source**

None
Analog Board 1
Analog Board 2

**** Sensor Signal Selections:**

None	4-20mA	RTD	Vibration
0-5V	Pot.	CT	1-10V
1-5V	ICTD	RPM	+/- 5V

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CALIBRATION - Pressure (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Control Oil	Current value			None	None
	Offset		0.0	-30.0 to 30.0	Pressure PSIG
	Range	Low	30.0 Hg	30.0 Hg to 985.3	
		High	485.3		
	Sensor Signal **		1-5V	None	None
	Device Source *		None		
I/O Channel		0			

CALIBRATION - Temperature

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Suction	Current value			None	None
	Offset		0.0	-92.2 to 92.2	Temperature F
	Range	Low	-459.4	-1768 to 1832	
		High	463.1		
	Sensor Signal **		ICTD	None	None
	Device Source *		Analog Board 1		
I/O Channel		1			
Discharge	Current value			None	None
	Offset		0.0	-92.2 to 92.2	Temperature F
	Range	Low	-459.4	-1768 to 1832	
		High	463.1		
	Sensor Signal **		ICTD	None	None
	Device Source *		Analog Board 1		
I/O Channel		2			
Oil	Current value			None	None
	Offset		0.0	-92.2 to 92.2	Temperature F
	Range	Low	-459.4	-1768 to 1832	
		High	463.1		
	Sensor Signal **		ICTD	None	None
	Device Source *		Analog Board 1		
I/O Channel		3			
Separator	Current value			None	None
	Offset		0.0	-92.2 to 92.2	Temperature F
	Range	Low	-459.4	-1768 to 1832	
		High	463.1		
	Sensor Signal **		ICTD	None	None
	Device Source *		Analog Board 1		
I/O Channel		4			
Process Leaving	Current value			None	None
	Offset		0.0	-92.2 to 92.2	Temperature F
	Range	Low	-459.4	-1768 to 1832	
		High	463.1		
	Sensor Signal **		ICTD	None	None
	Device Source *		None		

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	I/O Channel		5		
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CALIBRATION - Temperature (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Process Entering	Current value			None	None	
	Offset			0.0	-92.2 to 92.2	Temperature
	Range	Low		-459.4	-1768 to 1832	
		High		463.1		
	Sensor Signal **			ICTD	None	None
	Device Source *			None		
I/O Channel			4			
Panel	Current Value			None	None	
	Offset			0.0	0.0 to 45.0	Temperature
Vyper Coolant	Current value			None	None	
	Offset			0.0	-92.2 to 92.2	Temperature
	Range	Low		-459.4	-1768 to 1832	
		High		463.1		
	Sensor Signal **			ICTD	None	None
	Device Source *			None		
I/O Channel			13			

The following are the type of selectable inputs that are available for the device source, and signal selections:

*** Device Source**


None
Analog Board 1
Analog Board 2

**** Sensor Signal Selections:**

None	4-20mA	RTD	Vibration
0-5V	Pot.	CT	1-10V
1-5V	ICTD	RPM	+/- 5V

CALIBRATION – Capacity Volume

Control	Description	Value / Units	Default Value	Default Range	Default Units
Capacity	Sensor Signal		4-20mA	None	None
	IO Board		Analog Board 1		
	IO Channel		14		
	Travel		196.0	0.0 to 500.0	
Volume	Sensor Signal		4-20mA	None	
	IO Board		Analog Board 1		
	IO Channel		15		
	Bottom Of Range		2.2	0.0 to 10.0	
	Top Of Range		5.0		
	Dead Band		0.2		
	Minimum On Time		0.5		

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CALIBRATION – Motor/Miscellaneous

(Units will be based upon the settings of the Session Screen, defaults are shown here)


Control	Description	Value / Units	Default Value	Default Range	Default Units
Motor Amps	Current value				
	Sensor Signal **		CT		None
	Device Source *		Analog Board 1	None	
	I/O Channel		16		
Kilowatts	Current value			None	
	Offset		0.0	-500.0 to 500.0	Kilowatts
	Range	Low	0.0	-1000.0 to 10000.0	
		High	5000.0		
	Sensor Signal **		4-20mA		None
	Device Source *		None		
I/O Channel		16			
RPM	Current value			None	None
	Offset		0.0	-360.0 to 360.0	Speed
	Range	Low	0.0	-1000.0 to 6000.0	
		High	3600 RPM		
	Sensor Signal **		4-20ma		None
	Device Source *		None		
I/O Channel		16			
Remote Capacity Position	Current value			None	None
	Offset		0.0	-10.0 to 10.0	Percent
	Range	Low	0.0	-1000.0 to 1000.0	
		High	100.0		
	Sensor Signal **		4-20Ma		None
	Device Source *		None		
I/O Channel		1			
Remote Control Setpoint	Current value			None	None
	Offset		0.0	-75.0 to 75.0	Pressure
	Range	Low	30 Hg	30.0 Hg to 985.3	
		High	485.3 PSIG		
	Sensor Signal **		4-20mA		None
	Device Source *		None		
I/O Channel		12			
Liquid Level	Current value			None	None
	Offset		0.0	-10.0 to 10.0	Percent
	Range	Low	0.0	-1000.0 to 1000.0	
		High	100.0		
	Sensor Signal **		4-20mA		None
	Device Source *		None		
I/O Channel		0			

*** Device Source**

None
Analog Board 1
Analog Board 2

**** Sensor Signal Selections:**

None	4-20mA	RTD	Vibration
0-5V	Pot.	CT	1-10V
1-5V	ICTD	RPM	+/- 5V

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CALIBRATION - PHD

All RTD inputs must be 3 wire 100 ohm Platinum 0.0°C, $\alpha = 0.00385$.

Reference Frick Technical Bulletin E70-020 TB for an explanation of vibration units and setpoints.

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Compressor Vibration - Suction	Current value			0-30	gF	
	Offset		0.0	-3 to 3		
	Sensor Signal		Vibration	None	None	
	IO Board		None			
	I/O Channel		17			
Compressor Vibration - Discharge	Current value			0-30	gF	
	Offset		0.0	-3 to 3		
	Sensor Signal		Vibration	None	None	
	IO Board		None			
	I/O Channel		18			
Motor Vibration - Shaft Side	Current value			0-30	gF	
	Offset		0.0	-3 to 3		
	Sensor Signal		Vibration	None	None	
	IO Board		None			
	I/O Channel		19			
Motor Vibration - Opposite Shaft Side	Current value			0-30	gF	
	Offset		0.0	-3 to 3		
	Sensor Signal		Vibration	None	None	
	IO Board		None			
	I/O Channel		20			
Motor Temperature Shaft Side	Current value			32 - 500	Temperature	F
	Offset		0.0	-92.2 to 92.2		
	Sensor Signal		RTD	None	None	
	IO Board		None			
	I/O Channel		19			
Motor Temperature Opposite Shaft Side	Current value			32 - 500	Temperature	F
	Offset		0.0	-92.2 to 92.2		
	Sensor Signal		RTD	None	None	
	IO Board		None			
	I/O Channel		20			
Motor Stator #1	Current value			32 - 500	Temperature	F
	Offset		0.0	-92.2 to 92.2		
	Sensor Signal		RTD	None	None	
	IO Board		None			
	I/O Channel		21			
Motor Stator #2	Current value			32 - 500	Temperature	F
	Offset		0.0	-92.2 to 92.2		
	Sensor Signal		RTD	None	None	
	IO Board		None			
	I/O Channel		22			
Motor Stator #3	Current value			32 - 500	Temperature	F
	Offset		0.0	-92.2 to 92.2		
	Sensor Signal		RTD	None	None	
	IO Board		None			
	I/O Channel		23			

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CALIBRATION - ANALOG OUTPUTS – Retransmitting Outputs

Output Channel	Description	Value	Default Value	Default Range	Default Units
A	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source	None	Analog Board 1		
	Device Channel	0	3		
B	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
C	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
D	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
E	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
F	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
G	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
H	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
I	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
J	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
K	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
L	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
M	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
N	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
O	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		
P	Input Channel to Retransmit		Capacity Slide Position	None	None
	Device Source		None		
	Device Channel		0		

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CALIBRATION - ANALOG OUTPUTS - VFD / Condenser Analog Outputs

Output Channel	Description	Value	Default Value	Default Range	Default Units
Compressor VFD	Device Source *	None	Analog Board 2	None	None
	Device Channel	0	3		
Condenser Output A	Device Source *	None	Analog Board 1	None	None
	Device Channel	0	5		
Condenser Output B	Device Source *	None	Analog Board 1	None	None
	Device Channel	0	6		

The following are the type of selectable inputs that are available for the device source:

*** Device Source**

None
Analog Board 1
Analog Board 2

CALIBRATION - ANALOG OUTPUTS - Output Calibration

Description	Value	Default Value	Default Range	Default Units
Select Analog Board		Analog Board 1	None	None
Select Analog Output Channel to Calibrate		1		


CALIBRATION - AUXILIARIES - Page 2

Item #	Description	Value	Default Value	Default Range	Default Units
Auxiliary Analog 1	Device Source*		Analog Board 2	None	None
	I/O Channel		5		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 2	Device Source*		Analog Board 2	None	None
	I/O Channel		6		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 3	Device Source*		Analog Board 2	None	None
	I/O Channel		7		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 4	Device Source*		Analog Board 2	None	None
	I/O Channel		8		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 5	Device Source*		Analog Board 2	None	None
	I/O Channel		9		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		

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Item #	Description	Value	Default Value	Default Range	Default Units
Auxiliary Analog 6	Device Source*		Analog Board 2	None	None
	I/O Channel		10		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 7	Device Source*		Analog Board 2	None	None
	I/O Channel		11		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 8	Device Source*		Analog Board 2	None	None
	I/O Channel		12		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 9	Device Source*		Analog Board 2	None	None
	I/O Channel		13		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 10	Device Source*		Analog Board 2	None	None
	I/O Channel		14		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
EZ Cool Feedback %	Device Source*		Analog Board 1	None	None
	I/O Channel		24		
	Sensor Signal *		4-20mA		
	Sensor Type **		Other		
	Units if Type is Other		%		
Auxiliary Analog 12	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 13	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 14	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		

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CALIBRATION - AUXILIARIES - Page 2 (Continued)

Item #	Description	Value	Default Value	Default Range	Default Units
Auxiliary Analog 15	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 16	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 17	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 18	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 19	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		
Auxiliary Analog 20	Device Source*		None	None	None
	I/O Channel		0		
	Sensor Signal *		1-5 V		
	Sensor Type **		Pressure		
	Units if Type is Other		None		

The following are the type of selectable inputs that are available for the device source, and signal selections:

*** Sensor Signal Selections:**

None	4-20mA	RTD	Vibration
0-5V	Pot.	CT	1-10V
1-5V	ICTD	RPM	+/- 5V

**** Sensor Type**

None
Pressure
Temperature
Other

***Auxiliary Analog selectable minimum and maximum ranges and offsets values:**

***Program will inform user if values are out of range.**


	RANGE		OFFSET	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
PRESSURE	30 Hg	1435.6 PSIG	-75.0 PSIG	+75.0 PSIG
TEMPERATURE	-1768.0 °F	+18032.0°F	-620.5°F	+620.5°F
OTHER	-1000.0	+10000.0	-50.0	+50.0

EZ Cool Feedback is a fixed value.

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CALIBRATION - AUXILIARIES - Page 1

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Item #	Description	Value / Units	Default Value	Default Range	Default Units
Auxiliary Analog 1	Name		Auxiliary Analog 1	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 2	Name		Auxiliary Analog 2	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 3	Name		Auxiliary Analog 3	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 4	Name		Auxiliary Analog 4	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 5	Name		Auxiliary Analog 5	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 6	Name		Auxiliary Analog 6	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 7	Name		Auxiliary Analog 7	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 8	Name		Auxiliary Analog 8	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		
Auxiliary Analog 9	Name		Auxiliary Analog 9	None	None
	Current Value				
	Offset		0.0	-75.0 to 75.0	PSIG
	Range	Low	30.0 Hg	0.0 to 1435.6	
		High	485.3		

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(Units will be based upon the settings of the Session Screen, defaults are shown here)

Item #	Description	Value / Units	Default Value	Default Range	Default Units	
Auxiliary Analog 10	Name		Auxiliary Analog 10	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
EZ Cool Feedback %	Name		EZ Cool Feedback %	None	None	
	Current Value			None	Percent	
	Offset		0.0	-10.0 to 10.0		
	Range	Low		0.0		-1000.0 to 1000.0
		High		100.0		
Auxiliary Analog 12	Name		Auxiliary Analog 12	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 13	Name		Auxiliary Analog 13	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 14	Name		Auxiliary Analog 14	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 15	Name		Auxiliary Analog 15	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 16	Name		Auxiliary Analog 16	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 17	Name		Auxiliary Analog 17	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		
Auxiliary Analog 18	Name		Auxiliary Analog 18	None	None	
	Current Value			None	PSIG	
	Offset		0.0	-75.0 to 75.0		
	Range	Low		30.0 Hg		0.0 to 1435.6
		High		485.3		

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
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Item #	Description	Value / Units	Default Value	Default Range	Default Units
Auxiliary Analog 19	Name		Auxiliary Analog 19	None	None
	Current Value				PSIG
	Offset		0.0	-75.0 to 75.0	
	Range	Low		30.0 Hg	
		High		485.3	
Auxiliary Analog 20	Name		Auxiliary Analog 20	None	None
	Current Value				PSIG
	Offset		0.0	-75.0 to 75.0	
	Range	Low		30.0 Hg	
		High		485.3	

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SETPOINTS

SETPOINTS - CAPACITY CONTROL SETPOINTS - (MODE 1)

Control	Description		Value / Units	Default Value	Default Range	Default Units		
PRESSURE REGULATION	Capacity Control	Setpoint		20.0	0.0 to 185.3	Pressure	PSIG	
		Proportional Band	High		15.0	0.0 to 100.0	Pressure (Magnitude)	PSI
			Low					
		Dead Band	High		0.5	0.0 to 20.0		
			Low					
		Cycle Time	High		3	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		1.5	0.0 to 100.0	Pressure	PSI		
	VFD Integral Gain		30	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Pressure		25.0	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
		Stop	Pressure		15.0	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			10.0	0.0 to 185.3	Pressure	PSIG
		Force Unload			5.0			
		Warning	Setpoint		2.0	0 to 60	Time	SEC
			Delay		2	0 to 60	Time	SEC
	Shutdown	Setpoint		0.0	0.0 to 185.3	Pressure	PSIG	
		Delay		3	0 to 60	Time	SEC	
	Low Suction	Load Inhibit			30 Hg	0.0 to 185.3	Pressure	PSIG
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay		3	0 to 60	Time	SEC	
Shutdown	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG		
	Delay		3	0 to 60	TIME	SEC		
TEMPERATURE REGULATION	Capacity Control	Setpoint		32.0	-459.4 to 463.1	Temperature	F	
		Proportional Band	High		18.0	0.0 to 90.0	Temperature (Magnitude)	F
			Low					
		Dead Band	High		1.8	0.0 to 36.0		
			Low					
		Cycle Time	High		3	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		18.0	0.0 to 100.0	Temperature	F		
	VFD Integral Gain		30.0	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Temp.		32.0	-491.1 to 431.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
		Stop	Temp.		32.0	-459.4 to 463.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			32.0	-459.4 to 463.1	Temperature	F
		Force Unload			32.0			
		Warning	Setpoint		32.0	0 to 60	Time	SEC
			Delay		3	0 to 60	Time	SEC
	Shutdown	Setpoint		32.0	-459.4 to 463.1	Temperature	F	
		Delay		3	0 to 60	Time	SEC	
	Low Suction	Load Inhibit			30.0 Hg	0.0 to 200.0	Pressure	PSIG
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay		3	0 to 60	Time	SEC	
Shutdown	Setpoint		30.0 Hg	0.0 to 200.0	Pressure	PSIG		
	Delay		3	0 to 60	Time	SEC		

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SETPOINTS - CAPACITY CONTROL SETPOINTS - (MODE 2)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description		Value / Units	Default Value	Default Range	Default Units		
PRESSURE REGULATION	Capacity Control	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG	
		Proportional Band	High		1.5	0.0 to 100.0	Pressure (Magnitude)	PSI
			Low					
		Dead Band	High		0.1	0.0 to 20.0		
			Low					
		Cycle Time	High		4	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		1.5	0.0 to 100.0	Pressure	PSI		
	VFD Integral Gain		30	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Pressure		30 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
		Stop	Pressure		30 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			30 Hg	0.0 to 185.3	Pressure	PSIG
		Force Unload						
		Warning	Setpoint		2	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG	
		Delay						3
	Low Suction	Load Inhibit			30 Hg	0.0 to 185.3	Pressure	
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG		
	Delay						3	0 to 60
TEMPERATURE REGULATION	Capacity Control	Setpoint		32.0	-459.4 to 463.1	Temperature		
		Proportional Band	High		18.0	0.0 to 90.0	Temperature (Magnitude)	F
			Low					
		Dead Band	High		1.8	0.0 to 36.0		
			Low					
		Cycle Time	High		4	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		18.0	0.0 to 100.0	Temperature	F		
	VFD Integral Gain		30.0	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Temp.		32.0	-491.1 to 431.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
		Stop	Temp.		32.0	-459.4 to 463.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			32.0	-459.4 to 463.1	Temperature	F
		Force Unload			32.0			
		Warning	Setpoint		3	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		32.0	-459.4 to 463.1	Temperature	F	
		Delay						3
	Low Suction	Load Inhibit			10.0	0.0 to 200.0	Pressure	
Force Unload				5.0				
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		0.0	0.0 to 200.0	Pressure	PSIG		
	Delay						3	0 to 60

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SETPOINTS - CAPACITY CONTROL SETPOINTS - (MODE 3)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description		Value / Units	Default Value	Default Range	Default Units		
PRESSURE REGULATION	Capacity Control	Setpoint		30.0 Hg	0.0 to 185.3	Pressure	PSIG	
		Proportional Band	High		1.5	0.0 to 100.0	Pressure (Magnitude)	PSI
			Low					
		Dead Band	High		0.1	0.0 to 20.0		
			Low					
		Cycle Time	High		3	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		1.5	0.0 to 100.0	Pressure	PSI		
	VFD Integral Gain		30	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Pressure		30.0 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
		Stop	Pressure		30.0 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			30.0 Hg	0.0 to 185.3	Pressure	PSIG
		Force Unload						
		Warning	Setpoint		2	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		30.0 Hg	0.0 to 185.3	Pressure	PSIG	
		Delay						3
	Low Suction	Load Inhibit			30 Hg	0.0 to 185.3	Pressure	
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG		
	Delay						3	0 to 60
TEMPERATURE REGULATION	Capacity Control	Setpoint		32.0	-459.4 to 463.1	Temperature		
		Proportional Band	High		18.0	0.0 to 90.0	Temperature (Magnitude)	F
			Low					
		Dead Band	High		1.8	0.0 to 36.0		
			Low					
		Cycle Time	High		4	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		18.0	0.0 to 100.0	Temperature	F		
	VFD Integral Gain		30.0	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Temp.		32.0	-491.1 to 431.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
		Stop	Temp.		32.0	-459.4 to 463.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			32.0	-459.4 to 463.1	Temperature	F
		Force Unload						
		Warning	Setpoint		3	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		32.0	-459.4 to 463.1	Temperature	F	
		Delay						3
	Low Suction	Load Inhibit			30.0 Hg	0.0 to 200.0	Pressure	
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		30.0 Hg	0.0 to 200.0	Pressure	PSIG		
	Delay						3	0 to 60

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SETPOINTS - CAPACITY CONTROL SETPOINTS - (MODE 4)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description		Value / Units	Default Value	Default Range	Default Units		
PRESSURE REGULATION	Capacity Control	Setpoint		30.0 Hg	0.0 to 185.3	Pressure	PSIG	
		Proportional Band	High		1.5	0.0 to 100.0	Pressure (Magnitude)	PSI
			Low					
		Dead Band	High		0.1	0.0 to 20.0		
			Low					
		Cycle Time	High		3	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		1.5	0.0 to 100.0	Pressure	PSI		
	VFD Integral Gain		30	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Pressure		30.0 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
		Stop	Pressure		30.0 Hg	0.0 to 185.3	Pressure	PSIG
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			30.0 Hg	0.0 to 185.3	Pressure	PSIG
		Force Unload						
		Warning	Setpoint		2	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		30.0 Hg	0.0 to 185.3	Pressure	PSIG	
		Delay						3
	Low Suction	Load Inhibit			30 Hg	0.0 to 185.3	Pressure	
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		30 Hg	0.0 to 185.3	Pressure	PSIG		
	Delay						3	0 to 60
TEMPERATURE REGULATION	Capacity Control	Setpoint		32.0	-459.4 to 463.1	Temperature		
		Proportional Band	High		18.0	0.0 to 90.0	Temperature (Magnitude)	F
			Low					
		Dead Band	High		1.8	0.0 to 36.0		
			Low					
		Cycle Time	High		4	0 to 60	Time	SEC
	Low							
	VFD Proportional Band		18.0	0.0 to 100.0	Temperature	F		
	VFD Integral Gain		30.0	0.0 to 999.0	Time	SEC		
	Autocycle	Start	Temp.		32.0	-491.1 to 431.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
		Stop	Temp.		32.0	-459.4 to 463.1	Temperature	F
			Delay		1	0 to 60	Time	MIN
	Mode Safeties	Load Inhibit			32.0	-459.4 to 463.1	Temperature	F
		Force Unload						
		Warning	Setpoint		3	0 to 60	Time	SEC
			Delay					
	Shutdown	Setpoint		32.0	-459.4 to 463.1	Temperature	F	
		Delay						3
	Low Suction	Load Inhibit			30.0 Hg	0.0 to 200.0	Pressure	
Force Unload								
Warning		Setpoint		3	0 to 60	Time	SEC	
		Delay						
Shutdown	Setpoint		30.0 Hg	0.0 to 200.0	Pressure	PSIG		
	Delay						3	0 to 60

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SETPOINTS - SEQUENCING – System 1 Setup

Note: Sequencing screen will only be shown when sequencing is enabled in the *compressor configuration* screen.
(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
System 1 Setup	Sequencing		Disabled	Disabled / Enabled	None	
	Setpoint		30 Hg	30.0 Hg to 485.3	Press.	PSIG
	Minimum Run Time		20	0 to 300	Time	MIN
	High Stage System Link	None	None	None / System 2 / System 3	None	
1	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
2	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
3	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
4	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
5	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
6	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
7	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
8	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		

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SETPOINTS - SEQUENCING – System 2 Setup

Note: Sequencing screen will only be shown when sequencing is enabled in the *compressor configuration* screen.
(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
System 2 Setup	Sequencing		Disabled	Disabled / Enabled	None	
	Setpoint		30 Hg	30.0 Hg to 485.3	Press.	PSIG
	Minimum Run Time		20	0 to 300	Time	MIN
	High Stage System Link	None	None	None / System 1 / System 3	None	
1	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
2	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
3	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
4	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
5	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
6	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
7	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
8	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		

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SETPOINTS - SEQUENCING – System 3 Setup

Note: Sequencing screen will only be shown when sequencing is enabled in the *compressor configuration* screen.
(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
System 3 Setup	Sequencing		Disabled	Disabled / Enabled	None	
	Setpoint		30 Hg	30.0 Hg to 485.3	Press.	PSIG
	Minimum Run Time		20	0 to 300	Time	MIN
	High Stage System Link	None	None	None / System 1 / System 2	None	
1	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
2	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
3	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
4	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
5	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
6	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
7	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		
8	Sequencing ID		0	0 to 255	None	
	Start		1	0 to 8		
	Compressor Mode	Manual	Manual	None		
	Capacity Mode	Manual	Manual	0 to 100	Percent	%
	Minimum Capacity		0.0	0.0 to 100.0		

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SETPOINTS - SEQUENCING – Sequencing Control


(Units will be based upon the settings of the Session Screen, defaults are shown here)

Description	Value / Units	Default Value	Default Range	Default Units	
Average Capacity For Start		90.0	0.0 to 100.0	Percent	%
Full Load Slide Valve Position		98.0	0.0 to 100.0		
Full Load Drive Speed		98.0	0.0 to 100.0		
Minimum Capacity Dead Band		1.0	0.0 to 20.0		
Start Failure Reset Delay		12.0	0.0 to 600.0	Time	MIN
Slide Valve Failure Safety		Disabled	Disabled	None	
			Enabled		

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SETPOINTS – Compressor Safeties

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
High Discharge Temperature	Load Inhibit		212.0	32.0 to 250.0	Temperature	F	
	Force Unload						
	Warning	Setpoint	205.0	5	0.0 to 60.0	Time	SEC
		Delay					
	Shutdown	Setpoint	212.0	5	32.0 to 250.0	Temperature	F
Delay							
Misc.	Starting Diff. Press. Below		50.0	0.0 to 380.0	Pressure	PSI	
	Dual Mode		Disabled	None	None		
High Discharge Pressure	Load Inhibit	Modes 1 & 3	190.0	0.0 to 270.0	Pressure	PSIG	
		Modes 2 & 4	190.0				
	Force Unload	Modes 1 & 3	200.0				
		Modes 2 & 4	200.0				
	Warning	Modes 1 & 3	220.0	2	0.0 to 5.0	Time	SEC
		Delay					
		Modes 2 & 4	220.0				
	Shutdown	Modes 1 & 3	270.0	2	0.0 to 5.0	Time	SEC
		Delay					
		Modes 2 & 4	270.0				
		Delay					
	Misc.	Highest Cap. To Permit Starting		10	0.0 to 100.0	Percent	%
Starting Period Before Permitting Cap. Increase			0	0.0 to 999.0	Time	SEC	
Stopping Period for Capacity Unload			30	0.0 to 300.0			
Compressor Automatic Mode Minimum Capacity			10	0.0 to 100.0	Percent	%	
Capacity Unload Assist			Disabled	None	None		
Rate			2.0	1.0 to 5.0	Percent	%	
Separator Velocity Reference			2.00	0.0 to 100.0	None		
Compression Ratio			4.00	1.0 to 30.0			
Liquid Slugging		Warning		10.0	0.0 to 90.0	Discharge ΔT over 5 SEC	F
		Shutdown		20.0			
High Suction Pressure	Load Inhibit		105.3	0.0 to 200.0	Pressure	PSIG	
	Force Unload		115.3				
	Warning	Setpoint		125.3	2	0 to 60	Time
		Delay					
	Shutdown	Setpoint		135.3	2	0 to 60	Time
Delay							
Economizer	Enabled / Disabled		Disabled	None	None		
	On when above		90.0	0 to 100	Percent	%	
	Off when below		85.0				
	Override: Discharge Press. < (suction x 1.6^k)		15.0	0.0 to 100.0	Pressure	PSI	
	Port Value		1.40	0.0 to 5.0	None		
	Pressure Input		Disabled	None			
	Fixed Pressure Setpoint		12.2 Hg	30.0Hg to 185.3	Pressure	PSIG	
Balance Piston	Enabled / Disabled		Disabled	None	None		
	On		70.0	0.0 to 100.0	Percent	%	
	Off		65.0				
	Ignore Delay		5	0.0 to 60.0	Time	MIN	

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	Fail Delay		2			
	Pressure Setpoint		50.0	-100.0 to 200.0	Pressure	PSI

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SETPOINTS – Compressor Safeties (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Misc.	Oil Log	Enabled / Disabled	Disabled	None	None
		Delay	30	0.0 to 300.0	Time SEC
	Oil Pump Unload Assist		Enabled	None	None
	Main Oil Injection	On When Discharge Temperature	Is Above	150.0	32.0 to 212.0
For			5	0.0 to 300.0	Time SEC

SETPOINTS – Package Safeties

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Low Oil Separator Temperature	Warning	Setpoint	55.0	49.0 to 100.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
	Shutdown	Setpoint	49.0	49.0 to 100.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
Low Comp. Oil Temperature	Warning	Setpoint	55.0	49.0 to 100.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
	Shutdown	Setpoint	49.0	49.0 to 100.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
High Comp. Oil Temperature	Warning	Setpoint	173.0	100.0 to 230.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
	Shutdown	Setpoint	180.0	100.0 to 230.0	Temperature F
		Delay	5	0.0 to 60.0	Time SEC
Low Comp. Oil Pressure	Warning	Setpoint	25.0	0.0 to 45.0	Pressure (Differential) PSI
		Delay	600	0.0 to 600.0	Time SEC
	Shutdown	Setpoint	30.0	0.0 to 45.0	Pressure (Differential) PSI
		Delay	900	0.0 to 900.0	Time SEC
High Filter Pressure	Warning	Setpoint	25.0	0.0 to 344.8	Pressure (Differential) PSI
		Delay	10	0.0 to 60.0	Time MIN
	Shutdown	Setpoint	30.0	0.0 to 344.8	Pressure (Differential) PSI
		Delay	15	0.0 to 60.0	Time MIN
Main Oil Injection	Enabled / Disabled		Disabled	None	None
	Shutdown	Setpoint	15.0	5.0 to 50.0	Pressure PSI
		Delay	180	0.0 to 1000.0	Time SEC
Oil Heater Off Above			120.0	100.0 to 150.0	Temperature F
High Level Shutdown Delay			5	0.0 to 60.0	Time SEC
Low Oil Level Delay			30	0.0 to 30.0	
Oil Pump Lube Time Before Starting			0	0.0 to 60.0	
Dual Pump Transition Time			10		
Pull Down	Enabled / Disabled		Disabled	None	None
	Capacity Position		5.0	0.0 to 100.0	Percent %
	Amount of Time		60	0 to 900	Time SEC

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SETPOINTS – Package Safeties (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Pump Down	Enabled / Disabled		Disabled	None	None	
	On When Suction Above	Setpoint	0.3	0.0 to 200.0	Pressure	PSIG
		Delay	5	0 to 60	Time	MIN
DX Circuit	#1 Action		Disabled	None	None	
	#2 Action					
	DX Circuit 1 Off When Below		85	0.0 to 100.0	Percent	%
	DX Circuit 1 On When Above		90	0.0 to 100.0		
	DX Circuit 2 Off When Below		85	0.0 to 100.0		
DX Circuit 2 On When Above		90	0.0 to 100.0			
Liquid Injection	Enabled / Disabled		Disabled	None		
	On When Above	Setpoint	122.0	100.0 to 180.0	Temperature	F
		Delay	5	0 to 60	Time	SEC
	Dual Port Transition		4.2	0.0 to 5.0	None	
Misc.	Hot Gas Bypass		0.0	0.0 to 100%	Percent	%
	Power Assist		30	0.0 to 60.0	Time	SEC

SETPOINTS – Motor (VFD / ENGINE / TURBINE / DBS / VYPER)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Name Plate	Motor Amps		100.0	0.0 to 3000.0	Current	AMPS
	Volts		480.0	0.0 to 9999.0	None	
	Service Factor		1.15	0.0 to 2.0		
	Power Factor		0.92	0.8 to 1.0		
	Horse Power		100.0	0.0 to 3000.0		
	CT Factor					
	Recycle Delay		20	20 to 255	Time	MIN
High Motor Amps	Load Inhibit		100.0	0.0 to 3000.0	Current	AMPS
	Force Unload		105.0			
	Warning	Setpoint	110.0	0 to 60	Time	SEC
		Delay	5			
	Shutdown	Setpoint	115.0	0.0 to 3000.0	Current	AMPS
	Delay	5	0 to 60	Time	SEC	
Low Motor Amps	Shutdown	Setpoint	25.0	0.0 to 60.0	Current	AMPS
		Delay	30	0 to 60	Time	SEC
	Confirmed Running Motor Amps		20.0	0.0 to 750.0	Current	AMPS
	Starting Motor Amps Ignore Period		5	0 to 30	Time	SEC
Motor Starter (See DBS Manual)	Locked Rotor Current		0.0*	300.0 to 600.0	Percent	%
	Stall Time		0*	1 to 60	Time	SEC
	Jam Current Level		0.0*	100.0 to 600.0	Percent	%
	Jam Run Delay		0*	0.0 to 60	Time	SEC
	Service Factor		0.0*	75.0 to 125.0	Percent	%
	Current	Warning Level		2.0 to 25.0		
	Unbalance	Warning Delay	0*	0 to 240	Time	SEC
RTD	Warning Level		32.0*	32.0 to 500.0	Temperature	F

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	Temp.	Trip Level					
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* These values are returned from the DBS unit via communications

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SETPOINTS – Motor (VFD / ENGINE / TURBINE / DBS / VYPER) (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Engine / Turbine	Confirmed Running		450.0	0.0 to 750.0	Speed	RPM	
	Starting Maximum Delay		5	0.0 to 60.0	Time	MIN	
	Idle Speed		0.0	0.0 to 100.0	Percent	%	
	Cool Down Period Before Stopping		0	0.0 to 999.0	Time	SEC	
	High RPM	Warning	Setpoint	1900	0.0 to 4000.0	Speed	RPM
			Delay	1	0.0 to 5.0	Time	SEC
		Shutdown	Setpoint	2000	0.0 to 4000.0	Speed	RPM
			Delay	1	0.0 to 5.0	Time	SEC
	Low RPM	Load Inhibit		1100	0.0 to 3000.0	Speed	RPM
		Force Unload		1075			
		Warning	Setpoint	700	0.0 to 180.0	Time	SEC
			Delay	30			
		Shutdown	Setpoint	600	0.0 to 3000.0	Speed	RPM
			Delay	30			
	High Manifold Pressure	Load Inhibit		5.9 Hg	0.0 to 31.0	Pressure	PSIG
		Force Unload		5.1 Hg			
		Warning	Setpoint	4.1 Hg	0.0 to 60.0	Time	SEC
			Delay	3			
		Shutdown	Setpoint	3.1 Hg	0.0 to 31.0	Pressure	PSIG
			Delay	3			
Engine / Turbine / DBS / VFD	Drive Output	Maximum	100.0	0.0 to 100.0	Percent	%	
		Minimum	50.0				
	Rate of Increase	Setpoint	2.0	0.1 to 25.0	Time	SEC	
		Delay	1	0.0 to 30.0			
	Rate of Decrease	Setpoint	2.0	0.1 to 25.0	Percent	%	
		Delay	1	0.0 to 30.0			
	Drive will increase when SV loads to		95.0	0.0 to 100.0	Percent	%	
	The drive will reach		50.0				
	Variable Speed Minimum SV Position		25.0				
	Skip Frequency Bands	Bottom					0.0
		Top					
		Bottom					
		Top					
		Bottom					
		Top					
Bottom							
Top							
Bottom							

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SETPOINTS – Capacity Position

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Capacity Position	Maximum Capacity Position		100.0	0.0 to 100.0	Percent	%
	Minimum Capacity Position		0.0			

SETPOINTS - CONDENSER – Condenser Digital Control

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Condenser Digital Control	Condenser Control Setpoint		30 Hg	0.0 to 485.3	Pressure	PSIG	
	Module A		0	0 to 4	None		
	Module B						
	Module C						
	Module D						
	Step Up	Deadband		0.0	0.0 to 20.0	Pressure (Magnitude)	PSI
		Delay		0	0 to 60	Time	SEC
	Step Down	Deadband		0.0	0.0 to 20.0	Pressure (Magnitude)	PSI
		Delay		0	0 to 60	Time	SEC
		High Pressure Override		200	0.0 to 1000.0	Pressure	PSIG
	High Pressure Override Delay		5	0.0 to 300.0	Time	SEC	

SETPOINTS - CONDENSER – Condenser Analog Control


(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Condenser Analog Control	Condenser Control Setpoint		30 Hg	0.0 to 485.3	Pressure	PSIG	
	Analog Output A		Disabled	None			
	Analog Output B		Disabled				
		Proportional Band		5.0	0.0 to 100.0	Pressure	PSI
		Integration Time		30	0.0 to 999.0	Time	SEC
		High Limit		100.0	0.0 to 100.0	Percent	%
		Low Limit		40.0			

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SETPOINTS - Miscellaneous

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Miscellaneous	Remote Capacity Deadband		1.0	0.5 to 20.0	Percent	%	
	Process Entering Temperature Safeties	High Warning		482.0	-463.1 to 482.0	Temperature	F
		Delay		0	0.0 to 100.0	Time	SEC
		Low Warning		-463.0	-463.1 to 482.0	Temperature	F
		Delay		0	0.0 to 100.0	Time	SEC
		High Shutdown		482.0	-463.1 to 482.0	Temperature	F
		Delay		0	0.0 to 100.0	Time	SEC
		Low Shutdown		-463.0	-463.1 to 482.0	Temperature	F
	Delay		0	0.0 to 100.0	Time	SEC	
	Process Leaving Temperature Safeties			Disabled	None		
	Process Leaving Temperature Safeties	Load Inhibit		38.0	-459.4 to 463.1	Temperature	F
		Force Unload		36.0			
		Low Warning		35.0			
		Delay		0	0 to 60	Time	SEC
		Low Shutdown		33.0	-459.4 to 463.1	Temperature	F
	Delay		0	0 to 60	Time	SEC	
	High Comp. Oil Pressure			Disabled	None		
	High Comp Oil Pressure	Shutdown		50.0	0.0 to 500.0	Pressure	PSI
		Delay		5	0.0 to 60.0	Time	SEC
	Max Slide Valve Timer			30	0.0 to 600.0	Time	0.1 SEC
	Dewpoint Temp. Warning - Running			Disabled	None		
	Dewpoint Temp. Warning - Running	Safety Factor		20.0	20.0 to 100.0	Temperature	F
		Delay		5	0.0 to 99.0	Time	MIN
	Dewpoint Temp. Warning - Off			Disabled	None		
	Dewpoint Temp. Warning - Off	Safety Factor		2.0	0.0 to 100.0	Temperature	F
		Delay		5	0.0 to 99.0	Time	MIN
		Heater Control Safety Factor		5.0	0.0 to 100.0	Temperature	F
	Low Discharge Pressure			Disabled	None		
	Low Discharge Pressure	Shutdown		200.0	0.0 to 270.0	Pressure	PSIG
		Delay		5	0.0 to 90.0	Time	SEC
Start Delay			60	0.0 to 600.0	Time	SEC	
Maximum Discharge Pressure			270.0	0.0 to 365.3	Pressure	PSIG	
Low Oil Pressure Maximum			45.0	0.0 to 75.0	Pressure	PSIG	
Maximum Discharge and Oil Temp.			250.0	100.0 to 300.0	Temperature	F	


SETPOINTS - Scheduling

Control	Scheduling						Disabled					
	Hour (0-23)	Min (0-59)	Mode (1-4)	Hour (0-23)	Min (0-59)	Mode (1-4)	Hour (0-23)	Min (0-59)	Mode (1-4)	Hour (0-23)	Min (0-59)	Mode (1-4)
Sunday												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												

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SETPOINTS - PHD Monitoring

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Reference Frick Technical Bulletin E70-020 TB for an explanation of vibration units and setpoints.

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Compressor Bearing	Compressor Bearing		Disabled	None			
	Suction End	High Warning		3.5	0.0 to 30.0	g's F	gF
		Delay		99	0.0 to 999.0	Time	SEC
		High Shutdown		10.0	0.0 to 30.0	g's F	gF
		Delay		1	0.0 to 999.0	Time	SEC
	Discharge End	High Warning		3.5	0.0 to 30.0	g's F	gF
		Delay		99	0.0 to 999.0	Time	SEC
		High Shutdown		10.0	0.0 to 30.0	g's F	gF
		Delay		1	0.0 to 999.0	Time	SEC
	Motor Bearing	Motor Bearing		Disabled	None		
Shaft Side (Vibration)		High Warning		3.5	0.0 to 30.0	g's F	gF
		Delay		99	0.0 to 999.0	Time	SEC
		High Shutdown		10.0	0.0 to 30.0	g's F	gF
		Delay		1	0.0 to 999.0	Time	SEC
Opposite Shaft (Vibration)		High Warning		3.5	0.0 to 30.0	g's F	gF
		Delay		99	0.0 to 999.0	Time	SEC
		High Shutdown		10.0	0.0 to 30.0	g's F	gF
		Delay		1	0.0 to 999.0	Time	SEC
Shaft Side (Temperature)		High Warning		203.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
		High Shutdown		221.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
Opposite Shaft (Temperature)		High Warning		203.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
		High Shutdown		221.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
Motor Stator		Motor Stator		Disabled	None		
	Stator #1	High Warning		302.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
		High Shutdown		311.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
	Stator #2	High Warning		302.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
		High Shutdown		311.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
	Stator #3	High Warning		302.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC
		High Shutdown		311.0	32.0 to 500.0	Temperature	F
		Delay		5	0.0 to 999.0	Time	SEC

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SETPOINTS - PID SETUP - Page 1

* Default, Range & Units will be based on the Control Point setting (settings shown are for the default Control Point setting of Capacity Slide).

Control	Description	Value / Units	Default Value *	Default Range *	Default Units *				
PID 1	Name		PID 1	Refer to S90-022 Operation	None				
	Control		Disabled						
	Action		Forward						
	Control Point		Cap. slide						
	IO Board		None						
	Output Channel		0						
	Setpoint		0						
	Prop. Band						-1768.0 to 1832.0		
	Integration Time		30				0.0 to 1000.0	Time	SEC
	High Limit		100.0				-50.0 to 150.0	Percent	%
	Low Limit		0.0						
	When Running Off Value		0.0				0.0 to 100.0		
PID 2	Name		PID 2	Refer to S90-022 Operation	None				
	Control		Disabled						
	Action		Forward						
	Control Point		Cap. slide						
	IO Board		None						
	Output Channel		0						
	Setpoint		0						
	Prop. Band						-1768.0 to 1832.0		
	Integration Time		30.0				0.0 to 1000.0	Time	SEC
	High Limit		100.0				-50.0 to 150.0	Percent	%
	Low Limit		0.0						
	When Running Off Value		0.0				0.0 to 100.0		
PID 3	Name		PID 3	Refer to S90-022 Operation	None				
	Control		Disabled						
	Action		Forward						
	Control Point		Cap. slide						
	IO Board		None						
	Output Channel		0						
	Setpoint		0						
	Prop. Band						-1768.0 to 1832.0		
	Integration Time		30				0.0 to 1000.0	Time	SEC
	High Limit		100.0				-50.0 to 150.0	Percent	%
	Low Limit		0.0						
	When Running Off Value		0.0				0.0 to 100.0		
PID 4	Name		PID 4	Refer to S90-022 Operation	None				
	Control		Disabled						
	Action		Forward						
	Control Point		Cap. slide						
	IO Board		None						
	Output Channel		0						
	Setpoint		0						
	Prop. Band						-1768.0 to 1832.0		
	Integration Time		30				0.0 to 1000.0	Time	SEC
	High Limit		100.0				-50.0 to 150.0	Percent	%
	Low Limit		0.0						
	When Running Off Value		0.0				0.0 to 100.0		

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SETPOINTS - PID SETUP - Page 2

* Default, Range & Units will be based on the Control Point setting (settings shown are for the default Control Point setting of Capacity Slide).

Control	Description	Value / Units	Default Value *	Default Range *	Default Units *	
PID 5	Name		PID 5	Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Point		Cap.			
	IO Board		None			
	Output Channel		0			
	Setpoint		0	-1768.0 to 1832.0	Time	SEC
	Prop. Band			0.0 to 1000.0		
	Integration Time		30		Percent	%
	High Limit		100.0	-50.0 to 150.0		
	Low Limit		0.0			
	When Running Off Value		0.0	0.0 to 100.0		
PID 6	Name		PID 6	Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Point		Cap.			
	IO Board		None			
	Output Channel		0			
	Setpoint		0	-1768.0 to 1832.0	Time	SEC
	Prop. Band			0.0 to 1000.0		
	Integration Time		30.0		Percent	%
	High Limit		100.0	-50.0 to 150.0		
	Low Limit		0.0			
	When Running Off Value		0.0	0.0 to 100.0		
PID 7	Name		PID 7	Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Point		Cap.			
	IO Board		None			
	Output Channel		0			
	Setpoint		0	-1768.0 to 1832.0	Time	SEC
	Prop. Band			0.0 to 1000.0		
	Integration Time		30		Percent	%
	High Limit		100.0	-50.0 to 150.0		
	Low Limit		0.0			
	When Running Off Value		0.0	0.0 to 100.0		
PID 8	Name		PID 8	Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Point		Cap.			
	IO Board		None			
	Output Channel		0			
	Setpoint		0	-1768.0 to 1832.0	Time	SEC
	Prop. Band			0.0 to 1000.0		
	Integration Time		30		Percent	%
	High Limit		100.0	-50.0 to 150.0		
	Low Limit		0.0			
	When Running Off Value		0.0	0.0 to 100.0		

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SETPOINTS – EZ Cool LIOC

Control	Description	Value / Units	Default Value	Default Range	Default Units	
EZ Cool LIOC	Control		Always	Refer to S90-022 Operation	None	
			High Stage			
	Action		Forward			
	Control Point		Discharge Temperature			
	IO Board	None	Analog 1			
	Output Channel	0	1			
	Setpoint		160.0	-1768.0 to 1832.0	Temperature	F
	Proportional Band		25.0	0.0 to 1000.0		
	Integration Time		30		Time	SEC
	High Limit		100.0	-50.0 to 150.0	Percent	%
	Low Limit		0.0			
	When Running Off Value		0.0	0.0 to 100.0		
Port Multiplier		1.0	1.0 to 20.0	None		

SETPOINTS – Separator Condensing

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Separator Condensing	Separator Condensing Safeties		Disabled		None		
	Start Inhibit Offset		15.0	0.0 to 100.0	Temperature	F	
	When Running	Warning Offset					20.0
		Delay		60	0.0 to 1200.0	Time	SEC
		Shutdown Offset		15.0	0.0 to 100.0	Temperature	F
		Delay		60	0.0 to 1200.0	Time	SEC

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SETPOINTS – Superheat Control Setup

Control	Description	Value / Units	Default Value*	Default Range *	Default Units *	
Superheat #1	Name	Superheat #1		Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Pressure		Suction			
	Control Temperature		Discharge			
	Output Board		None			
	Output Channel		0			
	Setpoint		10.0	-150.0 to 1000.0	Temperature	F
	Prop. Band		2.0	0.0 to 100.0	Time	SEC
	Integration Time		180			
	High Limit		100.0	-50.0 to 150.0	Percent	%
	Low Limit		0.0			
	When Running Off		0.0	0.0 to 100.0		
Superheat #2	Name	Superheat #2		Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Pressure		Suction			
	Control Temperature		Discharge			
	Output Board		None			
	Output Channel		0			
	Setpoint		10.0	-150.0 to 1000.0	Temperature	F
	Prop. Band		2.0	0.0 to 1000.0	Time	SEC
	Integration Time		180			
	High Limit		100.0	-50.0 to 150.0	Percent	%
	Low Limit		0.0			
	When Running Off		0.0	0.0 to 100.0		
Superheat #3	Name	Superheat #3		Refer to S90-022 Operation	None	
	Control		Disabled			
	Action		Forward			
	Control Pressure		Suction			
	Control Temperature		Discharge			
	Output Board		None			
	Output Channel		0			
	Setpoint		10.0	-150.0 to 1000.0	Temperature	F
	Prop. Band		2.0	0.0 to 1000.0	Time	SEC
	Integration Time		180			
	High Limit		100.0	-50.0 to 150.0	Percent	%
	Low Limit		0.0			
	When Running Off		0.0	0.0 to 100.0		

SETPOINTS – Discharge Butterfly Valve

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Discharge Butterfly Valve	Discharge Butterfly Valve Control		Disabled	Refer to S90-022 Operation	None	
	IO Board		None			
	IO Channel		0			
	Pressure Differential Setpoint		0.0	0.0 to 40.0	Pressure	PSI
	Discharge Pressure Offset		2.0	-10.0 to 20.0		
	Proportional Band		5.0	0.0 to 100.0		

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SETPOINTS – Economizer Butterfly Valve

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Economizer Butterfly Valve	Economizer Butterfly Valve Control		Disabled	Refer to S90-022 Operation	None	
	IO Board		None			
	IO Channel		0			
	Economizer Pressure Setpoint		40.0	0.0 to 200.0	Pressure	PSIG
	Open Rate		2.0	0.0 to 100.0	Percent	%
	Proportional Band		5.0	0.0 to 1000.0	Pressure	PSI
	Integration Time		30	0.0 to 1000.0	Time	SEC
	High Limit		100.0	0.0 to 100.0	Percent	%
	Low Limit		0.0			

SETPOINTS – Control Oil

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Control Oil	Control Oil Pump Mode		Manual	Refer to S90.022 Operation	None	
	Dual Control Oil Pump Sequence		Pump 1 Lead			
	Control Oil Pump		Disabled			
	Dual Control Oil Pump		Disabled			
	Pre-Lube Time		10.0	0.0 to 60.0	Time	SEC
	Low Control Oil Pressure		Disabled		None	
	Low Control Oil Pressure Warning		30.0	0.0 to 100.0	Pressure	PSI

SETPOINTS - Panel

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units		
Panel	Panel Heater	On	53.6	32.0 to 77.0	Temperat ure	F	
		Off	55.4				
	Remote Enable Output		Disabled	None			
	Input Module Capacity Mode Selection						
	Demand Pump Pressure Safeties						
	Permissive Start						
	Power Fail Restart	Delay		0	1.0 to 99.0	Time	MIN
	Restart Lockout			Disabled	None	None	
		Delay		0.0	0.0 to 24.0	Time	HRS
	Run Hours			0	0.0 to 1 MIL		
	PLC Interlock			Disabled	None		
	Remote Control Setpoint			1 Place			
	Pressure Display Resolution			Disabled			
	Browser Automatic Refresh			Disabled			
	Extra Digital Auxiliaries			Disabled			
	Extra Analog Auxiliaries and Retransmitting Outputs			Disabled			

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SETPOINTS - AUXILIARIES - ANALOG INPUTS - Page 1

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Auxiliary Analog 1	Auxiliary Analog 1		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 2	Auxiliary Analog 2		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 3	Auxiliary Analog 3		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 4	Auxiliary Analog 4		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 5	Auxiliary Analog 5		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	

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SETPOINTS - AUXILIARIES - ANALOG INPUTS - Page 2

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Auxiliary Analog 6	Auxiliary Analog 6		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 7	Auxiliary Analog 7		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 8	Auxiliary Analog 8		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 9	Auxiliary Analog 9		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 10	Auxiliary Analog 10		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	

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SETPOINTS - AUXILIARIES - ANALOG INPUTS - Page 3

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description		Value / Units	Default Value	Default Range	Default Units	
EZ Cool Feedback %	EZ Cool Feedback %			Disabled	None	None	
	Low Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	Low Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	High Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
High Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG	
	Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 12	Auxiliary Analog 12			Disabled	None	None	
	Low Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	Low Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	High Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
High Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG	
	Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 13	Auxiliary Analog 13			Disabled	None	None	
	Low Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	Low Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	High Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
High Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG	
	Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 14	Auxiliary Analog 14			Disabled	None	None	
	Low Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	Low Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	High Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
High Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG	
	Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 15	Auxiliary Analog 15			Disabled	None	None	
	Low Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	Low Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
	High Warning	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay		0	0 to 99	Time	SEC
High Shutdown	Setpoint		30.0 Hg	0.0 to 485.3	Pressure	PSIG	
	Delay		0	0 to 99	Time	SEC	

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SETPOINTS - AUXILIARIES - ANALOG INPUTS - Page 4

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units	
Auxiliary Analog 16	Auxiliary Analog 16		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 17	Auxiliary Analog 17		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 18	Auxiliary Analog 18		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 19	Auxiliary Analog 19		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	
Auxiliary Analog 20	Auxiliary Analog 20		Disabled	None	None	
	Low Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	Low Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Warning	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
		Delay	0	0 to 99	Time	SEC
	High Shutdown	Setpoint	30.0 Hg	0.0 to 485.3	Pressure	PSIG
Delay		0	0 to 99	Time	SEC	

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SETPOINTS - AUXILIARIES – Digital Input Configuration

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Auxiliary Input 1	Name***		Auxiliary Input 1	None	None
	Device Source		Dig. Bd. 1		
	IO Channel		17		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 2	Name***		Auxiliary Input 2	None	None
	Device Source		Dig. Bd. 1		
	IO Channel		18		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 3	Name***		Auxiliary Input 3	None	None
	Device Source		Dig. Bd. 2		
	IO Channel		9		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 4	Name***		Auxiliary Input 4	None	one
	Device Source		Dig. Bd. 2		
	IO Channel		10		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 5	Name***		Auxiliary Input 5	None	None
	Device Source		Dig. Bd. 2		
	IO Channel		11		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 6	Name***		Auxiliary Input 6	None	None
	Device Source		Dig. Bd. 2		
	IO Channel		12		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 7	Name***		Auxiliary Input 7	None	None
	Device Source		Dig. Bd. 2		
	IO Channel		13		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 8	Name***		Auxiliary Input 8	None	None
	Device Source		Dig. Bd. 2		
	IO Channel		14		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 9	Name***		Auxiliary Input 9	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 10	Name***		Auxiliary Input 10	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		

***Chinese version does not have option to change text for auxiliary input Name – default name only available.

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SETPOINTS - AUXILIARIES - Digital Input Configuration (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Auxiliary Input 11	Name***		Auxiliary Input 11	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 12	Name***		Auxiliary Input 12	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 13	Name***		Auxiliary Input 13	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 14	Name***		Auxiliary Input 14	None	one
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 15	Name***		Auxiliary Input 15	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 16	Name***		Auxiliary Input 16	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 17	Name***		Auxiliary Input 17	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 18	Name***		Auxiliary Input 18	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 19	Name***		Auxiliary Input 19	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		
Auxiliary Input 20	Name***		Auxiliary Input 20	None	None
	Device Source		None		
	IO Channel		0		
	Activity		Disabled		
	Delay		0		

***Chinese version does not have option to change text for auxiliary input Name – default name only available.

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SETPOINTS - AUXILIARIES – Digital Output Configuration
(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Output A	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		Dig. Bd. 2		
	I/O Channel		7		
Output B	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		Dig. Bd. 2		
	I/O Channel		8		
Output C	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		Dig. Bd. 2		
	I/O Channel		18		
Output D	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		
Output E	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		
Output F	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		
Output G	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		

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SETPOINTS - AUXILIARIES – Digital Output Configuration (Continued)

(Units will be based upon the settings of the Session Screen, defaults are shown here)

Control	Description	Value / Units	Default Value	Default Range	Default Units
Output H	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		
Output I	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		
Output J	Analog Channel		Capacity Slide Position	None	None
	<>	>	>	< or >	
	On When		0.0	-10000.0 to 10000.0	%
	Off When				
	Control When	Disabled	Disabled	None	
	Device Source		None		
	I/O Channel		0		

SETPOINTS - AUXILIARIES – Timed Digital Output Configuration

Control	Description	Value / Units	Default Value	Default Range	Default Units
Output A	On (Hours)		00	0.0 to 23.0	Hours
	On (Minutes)		00	0.0 to 59.0	Min
	Off (Hours)		00	0.0 to 23.0	Hours
	Off (Minutes)		00	0.0 to 59.0	Min
	Control When		Disabled	None	
	Which Days		Every Day		
	IO Board		None		
	IO Channel		0		
Output B	On (Hours)		00	0.0 to 23.0	Hours
	On (Minutes)		00	0.0 to 59.0	Min
	Off (Hours)		00	0.0 to 23.0	Hours
	Off (Minutes)		00	0.0 to 59.0	Min
	Control When		Disabled	None	
	Which Days		Every Day		
	IO Board		None		
	IO Channel		0		
Output C	Run Hour Interval		0	0.0 to 100000.0	Hours
	On Time		0	0.0 to 10000.0	Min
	IO Board		None	None	
	IO Channel		0		

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MODES

Control	Description	Value / Units	Default Value	Default Range	Default Units
Mode Setup	Compressor		Manual	None	
	Capacity				
	Volume				
	Active Mode		Mode 1		
	Pump		Automatic		
	Dual Pump Sequence		Pump 1 Lead		

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