

SYSTEM ON
COOLING MODE

LOAD SHED ON

NO CW FLOW
SYSTEM FAULT

Compressors

SYSTEM PUMPS

Heaters

CW
15
PSIG



CW
15
PSIG

COMPRESSORS

HEATERS

SEAWATER PUMPS



CHILLWATER

0 °C INLET

7 °C OUTLET



SEAWATER

INLET °C **30**

No Active Alarms

**Compressor
Control**

**Cooling
Settings**

**Refrigerant
Pressures**

**Alternating
Sequence
Settings**

Diagnostics

**Heating
Control**

**Heating
Settings**

Main Screen

**Software
Version
Information**

Hour Meters

COMPRESSOR CONTROL



LOAD SHED ON

INLET 0 °C



- COMPRESSOR RUNNING
- LOW REFRIGERANT PRESSURE
- HIGH REFRIGERANT PRESSURE
- COMPRESSOR INVERTER FAULT
- COMPRESSOR HIGH TEMPERATURE
- LOW OIL PRESSURE
- SAW PUMP INVERTER FAULT
- FREEZE FAULT
- REFRIGERANT SUCTION PRESSURE
- REFRIGERANT DISCHARGE PRESSURE
- STAGE CYCLING TEMPERATURE

65
225
7

63
220
9

No Active Alarms

COMPRESSOR VFD SETTINGS

4

COMPRESSOR MODULATING DIFF. °C



COMPRESSOR in MODULATING MODE

50

35

Maximum-Minimum VFD Frequency

1228

Max-Min Frequency Count Difference

42.5

37.0

Calculated VFD Output Frequency

Main Screen

INLET 0 °C

Compressor Control

REFRIGERANT PRESSURES

1



SUCTION

DISCHARGE

2



Main
Screen

Compressor
Control

COOLING SETTINGS



1



2

STAGE CYCLING TEMPERATURES °C



COOLING
DIFFERENTIAL
°C



SWP - Compressor
TIME DELAY
SECONDS



COMPRESSOR
TIME DELAY
SECONDS

Main Screen

Compressor Control

ALTERNATING SEQUENCE SETTINGS

24.0

ALTERNATING TIME PERIOD, HOURS

1

ALTERNATING SEQUENCE MANUAL=0 AUTO = 1

1

CURRENT LEAD COMPRESSOR

12

CURRENT ALTERNATING SEQUENCE

12.5

TIME REMAINING IN CURRENT SEQUENCE, HOURS

Main Screen

Compressor Control

DIAGNOSTICS MENU

Temperature
Display
Calibration

Time
Delay
Settings

PLC CPU
Error
Codes

PLC
Outputs

PLC
Inputs

06/24/08 17:19

Compressor
VFD Info

No Active Alarms

HOUR METERS

RESET HOURS



0

COMPRESSOR 1



0

COMPRESSOR 2



0

HEATER 1



0

HEATER 2



0

HEATER 3

RESET HOURS



0

SAW PUMP 1



0

SAW PUMP 2



0

CW PUMP 1



0

CW PUMP 2

Main Screen

Compressor Control

Heater Control

PLC CPU ERROR CODES

0 FATAL ERROR CODE V7755

0 MAJOR ERROR CODE V7756

0 MINOR ERROR CODE V7757

0 BASE & SLOT NUMBER V7760

0 ERROR CODE V7762

0 CURRENT SCAN TIME, ms, V7775

0 MINIMUM SCAN TIME, ms, V7776

0 MAXIMUM SCAN TIME, ms, V7777

Main Screen

PLC INPUT STATUS



- LOW REFRIGERANT PRESSURE
- HIGH REFRIGERANT PRESSURE
- COMPRESSOR INVERTER FAULT
- COMPRESSOR HIGH TEMPERATURE
- LOW OIL PRESSURE
- S/W PUMP INVERTER FAULT
- FREEZE FAULT
- COOLING FLOW SWITCH
- HEATING FLOW SWITCH
- HEATING HI-TEMP THERMOSTATS
- C/W PUMP THERMAL OVERLOADS
- LOAD SHED SYSTEM

Main Screen

Compressor Control

Heater Control

PLC DIGITAL OUTPUTS

 COMPRESSOR 1	 HEATER 1
 COMPRESSOR 2	 HEATER 2
 LIQUID LINE SOLENOID 1	 HEATER 3
 LIQUID LINE SOLENOID 2	 CHILLWATER PUMP 1
 SEAWATER PUMP 1	 CHILLWATER PUMP 2
 SEAWATER PUMP 2	

Main Screen

Compressor Control

Heater Control

TEMPERATURE DISPLAY CALIBRATION

SENSOR
TEMP °C

AMOUNT
TO ADD

AMOUNT TO
SUBTRACT

ADJUSTED
TEMP °C

C/W
INLET

11

+

2

-

0

=

0

C/W
OUTLET

9

+

0

-

2

=

7

S/W
INLET

27

+

3

-

0

=

30

Main Screen

TIME DELAY SETTINGS

5

TEMPERATURE DISPLAY MUTING, secs

15

GENERAL ALARM MUTING, secs

5

COOLING FLOW SWITCH MUTING, secs

10

HEATING FLOW SWITCH MUTING, secs

120

ANTI-SHORT CYCLE TIMER, secs

Main Screen

HEATER CONTROL



1

2

3

INLET 0 °C

HEATER RUNNING

7

9

11

STAGE CYCLING TEMPERATURE

LOAD SHED ON

No Active Alarms

HEATING SETTINGS

43

1

49

2

54

3

STAGE CYCLING TEMPERATURES °C

0

HEATING
DIFFERENTIAL
°C

0

HEATER
TIME DELAY
SECONDS

Main Screen

Heater Control



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[Main Screen](#)