**Evaporator** 

General System			Effec			
Relative Humidity	50.0%	50.0%				
Degrees F (to estimate ambient temp)	70.0	70.0				
Leak Rate of Refrigerant	10.0%		1.02			
Vibration						
General Evaporator						
Cycles per Hour	Cycles < 1	Cycles < 1				
Running fan RPM	1500	1500				
PM Frequency vs Specification	2 times the frequen	cy (1/2 the period of the specification)	0.4			
Operating Voltage in Capacitor	200.0		0.11			
Operating Voltage in Relay	180.0		4.82			
Motor Load	Light Impact		1.5			
Years Elapsed	Part Replaced	<b>Run Hours Per Year</b>				
0		1800	17.47			

PM Task Component	Refrigerant Analysis	Oil Analysis	Vibration Analysis	Calibration	External Inspection	Internal Inspection	Performance Tests	Functional Tests	Operator Rounds	Overhau
Lubrication	<u> </u>	1 year			3–6 months				As required	
Oil pressure					3–6 months				As required	As required
Rotors			3–12 months		3-6 months	2 years				As beriuper
Capacity slide control valve									As required	23 m
Bearings		1 year	3–12 months			2 years			As required	As required
Shaft seal					3-6 months				As required	
Gaskets	1 year				3-6 months					As required
Fasteners					2.6	0				

## Condenser

### **General Condenser**

Running RPM

Cycles per Hour

PM Frequency vs Specification

Vibration

750

Cycles < 1

Same PM as specification

Vibration

Compressor \_ last replaced year 3

Secondary Heat Exchanger Hours per Demand 4.0

Condenser PumpOperating flow, GPM401.00Operating speed, RPM3001.05Filter Size, Microns101.10Hours of Service per Day0.51.25Pump LoadExtreme Shock

Years Elapsed Part Replaced Run Hours Per Year

1800 24

#### Centrifugal Compressor - PM Template

Oil pump

2.16

0.9

1.0

31.34

PM Task Component	Refrigerant Analysis	Oil Analysis	Vibration Analysis	Calibration	External Inspection	Internal Inspection	Performance Tests	Functional Tests	Operator Rounds	Overhau
Oil system	1 year				3-6 months				As required	
Impeller						2 years				
Capacity control (guide vanes)					3–6 months	2 years				
Bearings		1 year	3–12 months	1	(5)					
Gearbox		1 year	3–12 months		9 15				As beriuper	
Gaskets	1 year			7	3-6 months	2 years				
Fasteners and hardware					3–6 months	2 years			As required	
Coupling			3–12 months		3–6 months	2 years			As required	5 years

Reciprocating Compressor - PM Template

PM Task Component	Refrigerant Analysis	Oil Analysis	Vibration Analysis	Calibration	External Inspection	Internal Inspection	Performance Tests	Functional Tests	Operator Rounds	Overhaul
Lubrication		1 year			3–6 months				As required	As required
Cylinders – valves						2 years				
Cylinders – piston rings					3-6 months	2 years			As required	
Cylinder body					3–6 months				As required	
Cylinders – gaskets	1 year					2 years				As required
Bearings		1 year			2 years					As required
Shaft		1 year								As required
Gaskets	1 year					2 years				As required
Fasteners and hardware			2 years		3–6 months					
Unloader valve										As required
Relief valve						2 years			As required	
Pulley sheaves			3-12 months		3-6 months					
Coupling			3=12 months		3-6 months	2 years				As required

PM Tank Component	Refrigerant Analysis	Oil Analysis	Vibration Analysis	Calibration	External Inspection	Internal Inspection	Performance Tests	Functional Tests	Operator Rounds	Overhau
Lubrication		1 year		12	3-6 months	7			As required	
Oil pressure					3-6 months				As required	As required
Rotors			3-12 months		3-6 months	2 years				As required
Capacity slide control valve									As required	
Bearings		1 year	3-12 months			2 years			As required	Ao required
Shaft seal					3-6 months				As required	
Gacketo	1 year				3-6 months					Aa required
Fasteners and hardware					3-6 months	2 years				
Coupling			3 months to 1 year		3-6 months	2 years				As required
Oil pump										As required
Oil separator					3-6 months				As required	

# Compresors

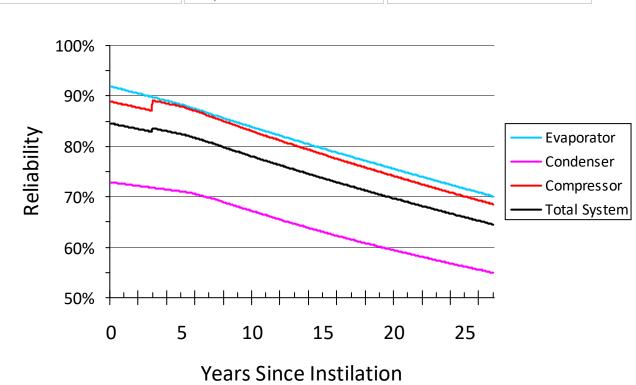
## General Compressor

Cycles per Hour PM Frequency vs Specification Operating Voltage of Capacitor Operating Voltage of Relay Motor Load Non-Scheduled Lubrication Check? Heavy Vibration Level or Shock Loading? **Operating Tempatures** Oil Return Rate g/min Chlorine ion in oil (PPM) Purity of Refrigerant (%) Oil TAN (Total Acid Number) Oil Level (%) Oil Ph Water in Oil (PPM) Vibration

Cycles > 10 1.1 Same PM as specification 1 180.0 0.48 180.0 0.09 Light Impact 1.5 No 1 No 100 1.00 1.0 0.98 0.00 0.85 99.990% 0.94 0.1 0.89 85.0% 1.11 7.0 0.90 (0.001%) 1.17

Years Elapsed Part Replaced Run Hours Per Year

3 Compressor 1800 3.48



Time	Evaporator	Condenser	Compressor	Total
0	91.9%	72.9%	88.9%	84.5%
1	91.2%	72.5%	88.3%	84.0%
3	89.7%	71.8%	89.1%	83.5%
5	88.3%	71.0%	87.9%	82.4%