HP AIR COMPRESSORS PARAMETER SHEET

1. CAPACITY TRIALS.

S. NO.	DESCRIPTION	PORT	STBD
(a)	Compressor starting time		
(b)	Compressor stopping time		
(c)	Bottle Capacity		
(d)	Bottle air pressure (Designed 150 kg/cm2)		
(e)	Compressor capacity achieved		
(f)	Remarks		

2. SAFETY DEVICE CHECKS

Sl	Description	Unit	Design Value	HPAC No.1(FER)	HPAC No.2(MER)	Remarks
(i)	1st stage Relief valve	Bar	6.5			
(ii)	2nd stage Relief valve	Bar	48			
(iii)	3rd stage Relief valve	Bar	230			
(iv)	Cooling water outlet temp.	°C	40			
(v)	Lub oil temp.	°C	50			
(vi)	1st stage air temp.	°C	190			
(vii)	2nd stage air temp.	°C	180			
(viii)	3rd stage air temp.	°C	180			
(ix)	Air outlet temp trip	°C	90			
(x)	Auto Drain Mechanism					

3. OVERALL VIBRATION

POINTS	PORT			STBD		
	V	A	H	V	A	H
MOTOR F/E						
MOTOR D/E						
COMP D/E						
COMP F/E						

ATTENUATION CHECKS OF MOUNTS

	PORT						STBD					
	1	2	3	4	5	6	1	2	3	4	5	6
TOP												
BOTTOM												
%												

AIR CONDITIONING PLANT – **Ship**_____

SAFETY DEVICES CHECKS:

S. NO.	DESCRIPTION	UNIT	DESIGN VALUE	AC NO.1	AC NO.2	AC NO.3
(A)	LP CUT OUT	KG/CM²	2±0.4			
(B)	HP CUT OUT	KG/CM²	12.4±0.5			
(C)	DOP CUT OUT	KG/CM²	1.5-0.3			
(D)	DOP CUT OUT TIME	SEC	60			
(E)	STARTING INTERLOCK	ATU ON/OFF				
(F)	LOW SW PR. TRIP	KG/CM²	0.2±0.1			

VIBRATION CHECKS:

		AC NO.1			AC NO.2			AC NO.3		
SL	DESCRIPTION	V	A	H	V	A	H	V	A	H
1	COMPRESSOR FE									
2	COMPRESSOR DE									
2	MOTOR DE									
4	MOTOR FE									

PERFORMANCECHECKS:

SL	DESCRIPTION		UNIT	AC NO.1	AC NO.2	AC NO.3
1	SUCTION PRESSURE		BAR			
2	DISCHARGE PRESSURE		BAR			
2	LUB OIL PRESSURE		BAR			
4	SEA WATER PRESSURE		BAR			
5	COMPRESSURE SUCTION TEMP		DEG C			
6	COMPRESSURE DISCH TEMP		DEG C			
7	CONDENSOR INLET/OUTLET TEMP		DEG C			
8	ATU INLET / OUTLET TEMP		DEG C			
9	INSULATION		MΩ			
10	STARTING CURRENT		AMPS			
11	RUNNING CURRENT		AMPS			
12	SPM	MOTOR DE	DBm/dBc			
		MOTOR NDE				

ATTENUATION CHECKS OF MOUNTS

	AC NO. 1						AC NO. 2						AC NO. 3					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
TOP																		

BOTTOM																		
%																		

HP Air Compressors

(a) **Safety device checks**.

Ser.	Description	Unit	Design value	Port HPAC	Stbd HPAC
(i)	1st stage Pr relief	Kg/cm^2	8		
(ii)	2nd stage Pr relief	Kg/cm^2	55		
(iii)	3rd stage Pr relief	Kg/cm^2	155		
(iv)	Auto cut off	Kg/cm^2			
(v)	Auto cut in	Kg/cm^2			
(vi)	Manual drain	Sat/Unsat			
(vii)	Low LO press trip	Bar	0.5		
(viii)	Auto Drain	Sat/Unsat			

(b) **Performance trials**.

Ser.	Description	Unit	Port HPAC	Stbd HPAC
(i)	Compressor starting time	hrs		
(ii)	Compressor stopping time	hrs		
(iii)	Time taken	Min		
(iv)	Bottle capacity	ltrs		
(v)	Bottle air pr. (designed 150 Kg/cm^2)	Kg/cm^2		
(vi)	Compressor capacity achieved	Ltrs/min		

(c) **Vibration trials**.

Ser.	Description	Port HPAC			Stbd HPAC		
		V	A	H	V	A	H
(i)	Motor free end						
(ii)	Motor drive end						
(iii)	Comp drive end						
(iv)	Comp free end						

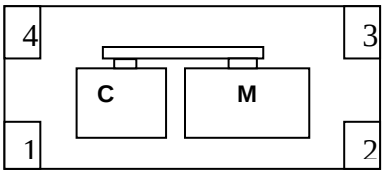
(d) **Electrical Trials**.

Ser.	Description		Unit	Port HPAC	Stbd HPAC
(i)	Insulation checks		MΩ		
(ii)	Starting current		Amps		
(iii)	Running current		Amps		
(iv)	SPM	Motor DE	dBm/dBc		

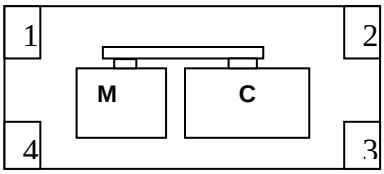
(v)		Motor NDE			

(e) **Attenuation checks**.

Stbd HPAC



Port HPAC



Position	**HPAC**			
	1	**2**	**3**	**4**
Top				
Bottom				
Attenuation %age (Limit 70-90)				
Remarks				

Position	**HPAC**			
	1	**2**	**3**	**4**
Top				
Bottom				
Attenuation %age (Limit 70-90)				
Remarks				