SERVICE REPORT PREVENTIVE MAINTENANCE

PRECISION AIR CONDITIONING (PAC) PT. HM SAMPOERNA SUKOREJO

PT. HM SAMPOERNA SUKOREJO PLANT Tipe Form PM04

FORM NO.

Lok	asi :	Model Unit:			Team Engi	neer List ·		Date :	
		No. Seri :				Team Engineer Enst:		Start PM:	
Nomor Unit : Periode :					†		1	Close PM:	
1101	nor Cint .	Terrode .			<u> </u>			Close I WI	
CH	ECKLIST TEAM BRIE	FING							
	TENSIVE SAFETY BRIEF AM	ING				?	OK	?	NOT OK
	Filter Section								
		Spec. Range /	4 41	21 1 . 1	T (~. , ,	Spec.		101 1 1
	Item Checked	Cond. Std.	Actual Clean	Checked	5. Clean co	Checked	Range	A Clean	ctual Checked
	1. Check/Replace filters	Clean or Dirty	Cican		pan		Dirty		
	2. Grille area unrestricted	OK / Not OK	Ok		6. Clean tr condensate		Clean or Dirty	Clean	
	Wipe section clean Coil clean	Clean or Dirty Clean or Dirty			7. Check/T	Test filter- n operation	Ok or No	Ok	
R	B Blower Section		Cicuii		Clog 5	r operación.			
U	Blower Section	Spec. Range /	Rlox	wer 1	Blov	wer 2	Blo	wer 3	
	Item Checked	Cond. Std.	Before	After	Before	After	Before	After	Keterangan
	1. Mounting bolts tight		OK	OK		OK		OK	OK
	2. Fan-guard bolts tight	011 01 110		OK				OK OK	OK OK
	3. Impeller spins freely		OK OK	OK					OK OK
	4. Check/Test air sail	0 0 - 1 - 1	OK OK	OK	OK			OK OK	OK OK
	switch	Ok or No							OK
	5. Motor amp draw • Compare to nameplate	FLA L1 =···· A	L1	L1	L1	L1	L1	L1	1
	amps	FLA L2 =····	L2	L2	L2	L2	L2	L2	1
		FLA L3 =····	L3	L3	L3	L3	L3	L3	1
	6. Check belt tension and condition		Ok	Ok	Ok	Ok	Ok	Ok	Ok
	7. Check sheave/pulley	Ok or No	Ok	Ok	Ok	Ok	Ok	Ok	Ok
	17. Check sheave/pulley			OK	OK I	OK			
C	Reheat	OK UI INU	OK	OK	OK	OK	OK		
С		Spec. Range /	Hea	iter 1	Hea	nter 2	Hea	nter 3	Keterangan
С	Reheat	Spec. Range / Cond. Std. FLA =							Keterangan
C	Reheat Item Checked 1. Reheat amp draw 2. Check Heater	Spec. Range / Cond. Std.	Hea	iter 1	Hea	nter 2	Hea Before	nter 3	ŭ
C	Item Checked 1. Reheat amp draw 2. Check Heater Resistance	Spec. Range / Cond. Std. FLA = A 18-22 ohm	Hea Before	ater 1 After	Hea	After 1	Hea Before	After 1	1
C	Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No	Hea Before 1 1 Ok	After 1	Hea Before 1 1 Ok	nter 2	Hea Before 1	After 1	1
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No	Hea Before 1 1 Ok	After I Ok	Hea Before 1 1 Ok	After 1 Ok	Hea Before 1	After 1 Ok	l l Ok
	Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No	Hea Before 1 1 Ok	After I Ok	Hea Before 1 1 Ok	After 1 Ok	Hea Before 1	After 1 Ok Ok	l l Ok
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No	Hea Before 1 Ok Ok	After I Ok	Hea Before 1 1 Ok Ok	After 1 Ok	Hea Before 1 1 Ok Ok	After 1 Ok Ok Spec. Range	1 Ok Ok Actual Checked
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 Ok Ok	After 1 Ok Ok	Hea Before 1 1 Ok Ok Ok	After 1 Ok Ok	Hea Before 1 1 Ok Ok	After 1 Ok Ok Spec.	1 Ok Ok Actual Checked
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw 2. Check drain	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 Ok Ok	After 1 Ok Ok	Hea Before 1 1 Ok Ok Ok	After 1 Ok Ok Ok Condition of	Hea Before 1 1 Ok Ok	After 3 After 1 Ok Ok Spec. Range Ok or No	1 Ok Ok Ok Actual Checked Clean Clean
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 Ok Ok Actual	After 1 Ok Ok	Hea Before 1 1 Ok Ok Ok	After 1 Ok Ok Ok Condition of	Hea Before 1 1 Ok Ok	After 1 Ok Ok Spec. Range	1 Ok Ok Ok Actual Checked Clean Clean
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw 2. Check drain valve/drain lines/trap fordamage/clogs/leaks	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 Ok Ok Actual	After 1 Ok Ok	Hea Before 1 Ok Ok Ok 4. Check chose 5. Clean st	After 1 Ok Ok Ok Condition of	Hea Before 1 1 Ok Ok	After 3 After 1 Ok Ok Ok Spec. Range Ok or No	1 Ok Ok Ok Actual Checked Clean Clean
	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw 2. Check drain valve/drain lines/trap fordamage/clogs/leaks 3. Check water fill valve and all supply	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 1 Ok Ok Actual 1	After 1 Ok Ok	Hea Before 1 Ok Ok Ok 4. Check chose 5. Clean st 6. Check h (Boiler	After After Ok Ok Ok Condition of	Hea Before 1 1 Ok Ok	After 3 After 1 Ok Ok Spec. Range Ok or No	1 Ok Ok Ok Actual Checked Clean Clean
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D	Reheat Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw 2. Check drain valve/drain lines/trap fordamage/clogs/leaks 3. Check water fill valve and all supply lines/connection for leaks Electrical Panel Item Checked 1. Check fuses 2. Check contactors for	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. Range	Hea Before 1 1 Ok Ok Actual 1 Ok	After 1 Ok Ok Checked	Hea Before 1 1 Ok Ok Ok 4. Check o hose 5. Clean st 6. Check h (Boiler tank) 7. Check o	After After Ok Ok Ok Item Check condition of rainer umidifier b peration of tual cked	Hea Before 1 1 Ok Ok ok ed steam	After 3 After 1 Ok Ok Spec. Range Ok or No Ok or No	1 Ok Ok Ok Actual Checked Clean Clean Clean Ck Keterangan
D	Item Checked 1. Reheat amp draw 2. Check Heater Resistance 3. Inspect elements 4. Check wire connections Steam Generating Hum Item Checked 1. Humidifier amp draw 2. Check drain valve/drain lines/trap fordamage/clogs/leaks 3. Check water fill valve and all supply lines/connection for leaks Electrical Panel Item Checked 1. Check fuses	Spec. Range / Cond. Std. FLA = A 18-22 ohm Ok or No Ok or No idiffer Spec. RangeA Ok or No Ok or No Ok or No Ok or No	Hea Before 1 1 Ok Ok Actual 1 Ok Clean	After 1 Ok Ok Checked	Hea Before 1 1 Ok Ok Ok 4. Check o hose 5. Clean st 6. Check h (Boiler tank) 7. Check o	After After Ok Ok Ok Item Check condition of rainer umidifier b peration of tual cked Ok	Hea Before 1 1 Ok Ok ok ed steam	After 3 After 1 1 Ok Ok Spec. Range Ok or No Ok or No Ok or No	1 Ok Ok Ok Actual Checked Clean Clean Clean Ok Keterangan Ok

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	Electrical Panel								
	Item Checked	Spec. Range / Cond. Std.	Actual Checked					Keterangan	
			Before After				After		
	4. Voltage Line to Neutral Ground	220 + 10%	L1/L2/L3 =1		V	L1/L2/L3 =1		V	1
	5. Voltage Line to Line	380 + 10%	L1L2/L2L3/L V	1L3 =1		L1L2/L2L3/L1L3 = 1 V			1
	6. Frequency	50 + 10%	F=1		Hz	F = 1		Hz	1
R	Controls								
	Item Checked	Spec. Range / Cond. Std.	Actual Checked		Item Checked		Spec. Range	Actual Checked	
	1. Check/Verify control operation	Ok or No			detectiond	3. Check/Test water- detectiondevice			Ok
	2. Check/Test changeover device	Ok or No	Ok		4. Check/Test CAN connection between indoor and outdoor units			Ok or No	Ok
\mathbf{G}	Refrigeration Piping								
	Item Checked	Spec. Range	Actual Checked			Item Checked		Spec. Range	Actual Checked
	1. Check refrigerant lines (clamps secure/no	Ok or No	Ok		3. Check for restriction temperature drop across filterdrier				Clean
	rubbing/no leaks) 2. Check for moisture (sight glass)	Ok or No	Ok					Ok or No	
Ħ	Compressor Section								
		Spec. Range /	Cor	mp. 1	Co	Comp. 2 Con		np. 3	
	Item Checked	Cond. Std.	Before	After	Before	After	Before	After	Keterangan
	1. Ampere draw	OA··· A	1	1	1	1	1	1	1
	2. Check oil level	55 - 90 PsiG	1	1	1	1	1	1	1
	3. Check for oil leaks	200 - 300 PsiG	1	1	1	1	1	1	1
	4. Check compressormounts (springs/bushings)	Ok or No	Ok	Ok	Ok	Ok	Ok	Ok	Ok
	5. Cap tubes (not rubbing)	Ok or No	Ok	Ok	Ok	Ok	Ok	Ok	Ok
	6. Check/Re-torque wireconnections (inside compressor box)	Ok or No	Ok	Ok	Ok	Ok	Ok	Ok	Ok
	7. Compressor operation	Hz	4		1				
	(vibration/noise)	dB		1	1	1	1	1	1
			Ok	1 Ok	1 Ok	1 Ok	1 Ok	1 Ok	l Ok
	(vibration/noise) 8. Check crank-case	dB	Ok	Ok	1 Ok Ok	Ok	Ok		Ok
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for	Ok or No							
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for refrigerantleaks 10. Suction pressure Circuit 11. Discharge Pressure Circuit	dB Ok or No Ok or No 55 - 90 PsiG 200 - 300 PsiG	Ok 1						
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for refrigerantleaks 10. Suction pressure Circuit 11. Discharge	Ok or No Ok or No 55 - 90 PsiG	Ok 1	Ok 1 1 1 1			Ok 1 1 1 1	Ok 1 1	Ok 1
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for refrigerantleaks 10. Suction pressure Circuit 11. Discharge Pressure Circuit	dB Ok or No Ok or No 55 - 90 PsiG 200 - 300 PsiG	Ok 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 Ok	Ok 1 1 Ok
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for refrigerantleaks 10. Suction pressure Circuit 11. Discharge Pressure Circuit 12. Superheat Circuit 13. Low-pressure	Ok or No Ok or No 55 - 90 PsiG 200 - 300 PsiG	Ok 1 1	Ok 1 1 1 1	Ok 1 1 1 1	Ok 1 1 1 1	Ok 1 1 1 1	Ok 1 1 Ok	Ok 1 1
	(vibration/noise) 8. Check crank-case heater fuses/operation 9. Check for refrigerantleaks 10. Suction pressure Circuit 11. Discharge Pressure Circuit 12. Superheat Circuit 13. Low-pressure switchcut out Circuit 14. Low pressure cut	dB Ok or No Ok or No 55 - 90 PsiG 200 - 300 PsiG	Ok 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 1 Ok	Ok 1 1 Ok Ok Ok	Ok 1 1 Ok

	Ι	Condensor Section				
ı		Item	Spec. Range	Before	After	Keterangan
ı		Checked				

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	1. Coil clean of debris (Cle ifrequired)	ean coil	Clean or Dirty	Clean	Clean		
	2. Fans free of debris		Clean or Dirty	Clean Clean			
	3. Fans securely mounted		1	1	1		
	4. Motor bearings in good		1	1	1		
	5. Check all refrigerant lin		1	Ok	Ok		
	vibration	165 161	Ok or No	OK	OK		
	isolation. Support as necessary						
	6. Check for refrigerant le		Ok or No	Ok	Ok		
	7. Check surge-protection		OL N	Ok	Ok		
	(ifinstalled) status-indicat		Ok or No		<u> </u>		
	8. Check/Re-torque wire c		Ok or No	Ok	Ok		
	9. Check contactors for pitting (replace ifpitted)		Ok or No	Ok	Ok		
	10. Verify operation seque	ence/set points	1	1	1		
	11. Charge verification:		1	1	1		
	a. Outdoor Ambient Temp	perature	1	1	1		
	b. Subcooling		1	1	1		
	c. Indoor-unit Return-air		1	1	1		
	d. Sight-glass level (if Lee- orpumped refrigerant)	Temp	1	1	1		
			F7 A 1 A	L1/L2/L3 =	L1/L2	2/L3 =	
	12. Motor amp draw		FLA = 1 A	1 Amp	1 A	mp	
J	General Function						
	Item Checked	Spec. Range	Actual Checked	Item Check	æd	Spec. Range	Actual Checked
	1. Cooling Test	Ok or No	Ok	4. Dehumidification T	est	Ok or No	Ok
	2. Heating Test	Ok or No	Ok	5. Alarm Test		Ok or No	Ok
	3. Humidification Test	Ok or No	Ok				
K	Room Condition						
	Itom Chasked	Item Checked Spec. Range		Item Checked		Spec. Range	Actual
	Hem Checked	Spec. Kange	Actual Checked	2000		Range	Checked
	1. Temperature	1 C	Checked	2. Humidity		1 %	Checked
	1. Temperature		Checked	2. Humidity		Ü	Checked 1
_	1. Temperature		Checked 1	2. Humidity		Ü	Checked
_	1. Temperature		Checked 1 NOT	2. Humidity		Ü	Checked 1
_	1. Temperature		Checked 1	2. Humidity		Ü	Checked 1
_	1. Temperature muan : komendasi : JOB COMPLETED	1 C	Checked 1 NOT	2. Humidity YES	RUNNING	1 %	Checked
_	1. Temperature muan : komendasi :	1 C	Checked NOT RESU ? NO, please check on	2. Humidity TES UME 1 NOTES		1 %	Checked 1
_	1. Temperature muan : komendasi : JOB COMPLETED	1 C	Checked NOT RESU ? NO, please check on	2. Humidity TES UME I NOTES		1 %	Checked 1
_	1. Temperature muan : komendasi : JOB COMPLETED	1 C	Checked NOT RESU ? NO, please check on	2. Humidity TES UME I NOTES DVAL ING		1 % GHOURS:	Checked 1 Service By
_	1. Temperature muan : komendasi : JOB COMPLETED ? Approved by	1 C	Checked NOT RESU ? NO, please check on APPRO SIGN Verified B	2. Humidity TES UME INOTES DVAL ING		1 % GHOURS:	Service By
Ė	1. Temperature muan : komendasi : JOB COMPLETED ?	1 C	Checked NOT RESU ? NO, please check on APPRO SIGN	2. Humidity TES UME INOTES DVAL ING		1 % GHOURS:	1
_	1. Temperature muan : komendasi : JOB COMPLETED ? Approved by	1 C	Checked NOT RESU ? NO, please check on APPRO SIGN Verified B	2. Humidity TES UME INOTES DVAL ING		1 % GHOURS:	Service By
_	1. Temperature muan : komendasi : JOB COMPLETED ? Approved by	1 C	Checked NOT RESU ? NO, please check on APPRO SIGN Verified B	2. Humidity TES UME INOTES DVAL ING		1 % GHOURS:	Service By
_	1. Temperature muan : komendasi : JOB COMPLETED ? Approved by	1 C	Checked NOT RESU ? NO, please check on APPRO SIGN Verified B	2. Humidity TES UME INOTES DVAL ING		1 % GHOURS:	Service By

Keterangan: Lembar 1 untuk Teknisi; Lembar 2 untuk User; Lembar 3 Arsip Kantor