



CITY MULTI COMMISSIONING REPORT

Site Address				
	SUBURB	STATE	P/C	
Installing Contractor		Tel.No:		
Commissioning Engineer		Contractor licence Number		
Commissioning Date		Refrigerant Handling Licence Number		
System Reference		Equipment Purchased from		
Location				
Warranty Notification No:		CM - Installation/ Commissioning Course Attended?	YES	NO

Before running the system, carry out a full pre commissioning check of the following points:

1. Refrigerant pipe work has been pressure tested and evacuated as per method statements 1 and 2.
2. Correct refrigerant trim charge has been added and service valves are open.
3. All units, remote controllers and centralised controllers in the system have correct address settings before turning on power to outdoor unit.
4. Power supply to all units must be checked prior to switching on. Once the unit has been switched on, the crankcase heater must be left on for a 12 hour period prior to start up. Do not connect M Net terminals during this period. After this 12 hour period has elapsed, turn off isolator for at least 10 minutes, reconnect M Net terminals and then turn mains isolator back on.
5. All control cable installation is completed using 1.5mm screened cable. Make sure that screened section of cable is earthed at the outdoor only. (Not to the "S" terminal).
6. All condensate drain pipe work must be complete.

Commissioning Engineers comments and points for attention;

*E-mail address is required for Mitsubishi Electric to provide Warranty Notification Number
 *Warranty Notification Number provided by MEAUST service department on receipt of commissioning data

NOTE:

Commissioning data must be returned to the following address within 21 days of completion to validate warranty:

**Mitsubishi Electric Australia
 348 Victoria Road,
 Rydalmere
 NSW 2116
 Attn:Service Department**

COMMENTS:

Commissioning Engineers Name	
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METHOD STATEMENT 1 AND 2

Method Statement 1 Strength & Leak Test

Pressure Testing

5 Steps

1	3 bar (N2)	(44psi or 300kpa)	Minimum of 3 minutes
2	15 bar (N2)	(217psi or 1500kpa)	Minimum of 3 minutes
3	32 bar (N2)	(464psi or 3200kpa)	Minimum of 3 minutes
4	41.5 bar (N2)	(600psi or 4150kpa)	Strength test for a period of time that is acceptable - to show any deformation in the pipe work.
5	33 bar (N2)	(478psi or 3300kpa)	After step 4, drop pressure to 33 bar for final leak test. The pressure should be held for a minimum of 24 hours. Taking into account the ambient temperatures across the 24 hours.

Method Statement 2 Triple Evacuation

Triple evacuation method statement

6 Steps

1	Evacuate the system to 10 Torr(1000 Micron) from both service valves. System manifold gauges must not be used to measure vacuum. A Torr or Micron gauge must be use at all times.
2	Break the vacuum with OFN (N2) into "suction" service valve port till 1 Bar(100 Kpa) has registered at the "discharge" service valve port.
3	Evacuate to 5 Torr(500 Micron) from "discharge" service valve port.
4	Repeat step 2. Then continue to step 5.
5	Evacuate through both service valves to the lowest pressure vacuum pump will achieve. (Below 2 Torr or 200 Microns for 1 hour minimum).
6	Pressure Rise Test must then be carried out for a minimum of 30 minutes. If the pressure rises on the Torr or Micron gauge repeat steps 2 and 5 till no rise is detected.



CERTIFICATE OF CONFORMITY

Installer/Contractor NAME			
ADDRESS			
	SUBURB	STATE	P/C

we hereby confirm that the system below has been pressure tested and evacuated in accordance with the Mitsubishi Electric Method Statements 1 & 2

Site Name			
	MODULE 1	MODULE 2	MODULE 3
Model Number			
Serial Number			
Unit Location			
Unit Reference			

Strength Tested to	kpa
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Leak Tested to	kpa
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Strength Test Period	Hours
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Leak Test Period	Hours
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Evacuated to	micron
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Evacuation Period	Hours
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Pressure Rise Test Carried Out	<input type="checkbox"/> Yes
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Engineers Name	
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Witnessed By	
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PRE-COMMISSIONING SYSTEM AND INSTALLATION CHECK LIST

No	SYSTEM AND INSTALLATION STATUS	REMARKS
1	Installation Location BC Contoller(s)	
2	Maintenance and Access to Remove Covers Outdoor Unit BC Contoller(s) Indoor Units	as per specifications yes/no
3	Furthest Piping Length (m)	Outdoor to Indoor m
4	Height Difference	Outdoor to BC m
		BC to BC (R2 only) m
		Indoor to BC m
		Indoor to Indoor m
5	Connection of mains power source Outdoor Unit	checked yes no
6	Connection of Control System	Outdoor - BC checked y/n
		BC -BC (if used) checked y/n
		BC - Indoor checked y/n
		Indoor - Indoor checked y/n
		Indoor - RC checked y/n
		Electric Cable Type: Size:
7	Control Method type	<input type="checkbox"/> AG-150
		<input type="checkbox"/> TG2000 other
8	Safety Interlocks Connected (WR2 only)	<input type="checkbox"/> Non-Centralised
		<input type="checkbox"/> Water Flow Switch <input type="checkbox"/> Pump Interlock
9	Connection of Options	
10	Water Flow Rate (WR2)	M3/Hr
11	Water Temperature (WR2)	Inlet C Outlet C

12	Outdoor Unit (Module 1) Details	Model No:		Serial No:	
13	Outdoor Unit (Module 2) Details	Model No:		Serial No:	
14	Outdoor Unit (Module 3) Details	Model No:		Serial No:	
15	Power Source (V)	L1 - N	L2 - N	L3 - N	E - N
16	Control Voltage				
17	BC Controller (Master)	Model No:		Serial No:	
18	BC Controller (Slave)	Model No:		Serial No:	
19	BC Controller (2nd Slave)	Model No:		Serial No:	

Notes and Comments:

Extra gas charge calculated: **yes** **no**



ADDITIONAL REFRIGERANT CHARGE AND TOTAL PIPE RUN
FOR R2 SERIES R410A

Unit Address No.	
BC box Address No.	
BS box Address No.	

BASE CHARGE FOR PURY P-YHM(A)(kg)	P200	P250	P300	P350	P400	EP200	EP300
	8.0	10.5	10.5	13.0	13.0	10.5	13.0

LENGTH OF PIPE RUN IN METRES	(m)		(kg)	
	1 1/8	7/8	x 0.36	L1
28.58	7/8	x 0.23	L2	
22.2	3/4	x 0.16	L3	
19.05	5/8	x 0.11	L4	
15.88 HIGH PRESS	5/8	x 0.2	L5	
15.88 LIQUID	1/2	x 0.12	L6	
12.7	3/8	x 0.06	L7	
9.52	1/4	x 0.024	L8	
6.35				

ADDITIONAL CHARGE = L1 + L2 + L3 + L4 + L5 + L6 + L7 + L8 x 0.2 + 0.3 + 0.4

TOTAL SYSTEM ADDITIONAL CHARGE = [] Kg

TOTAL SYSTEM PIPE LENGTH (m) = []

OUTDOOR UNIT SIZE	
INDOOR UNITS SIZE	QUANTITY
= 20 X	
= 25 X	
= 32 X	
= 40 X	
= 50 X	
= 63 X	
= 71 X	
= 80 X	
= 100 X	
= 125 X	
= 140 X	
= 200 X	
= 250 X	
TOTAL INDEX =	

α1	Total Index Capacity of Indoor Units Connected	00~80	81~160	161~300	301~390	391~480	481~630	631~710
	Kg to be added	2.0Kg	2.5Kg	3.0Kg	3.5Kg	4.5Kg	5.0Kg	6.0Kg
		8.0Kg	9.0Kg	10.0Kg	1071~1250	1251~1400Kg		

α2	BC Controller additional charge standard Kg to be added	MODEL	CHARGE
		(E)P200	2.0Kg
		P250	3.0Kg
		(E)P300	3.0Kg
		P350	4.5Kg
		(E)P400	4.5Kg
		(E)P450	5.0Kg
		(E)P500	6.0Kg
		(E)P550	6.0Kg
		(E)P600	6.0Kg
P650	7.5Kg		
P700	7.5Kg		
P750	9.0Kg		
P800	9.0Kg		

α3 If BC controller(Main is "HA" type then add another 2.0Kg Refrigerant

α4	BC controller (SUB) Kg to be added	TOTAL NUMBER OF BC SUB	CHARGE
		1	1
		2	2



INDOOR UNITS ADDRESS SETTINGS AND STATUS

INDOOR UNITS					REMARKS	
Model No.				Unit Address No.		
Serial No.						
Service Ref No.						
Location				SW12	SW11	SW14
Remocon Address No.						R2 Only
Voltage				V Control Voltage		
Air "ON"	Cooling Temp		C	Heating Temp		C
Air "OFF"	Cooling Temp		C	Heating Temp		C

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