

City Multi R410A System Installation and Commissioning Report

Project Name : _____ **Project ID:** _____

Project Address: _____ **City:** _____

Installation Contractor: _____ **Registration #:** _____

Commissioning Technician: _____

Commissioning Date: _____

Distributor: _____ **Date:** _____

Before commissioning is started the following items are needing to be completed:

- 1) Refrigerant pipe work has been pressure tested and evacuated per installation manual.
- 2) All refrigerant piping lines to be insulated separately and supported properly.
- 3) All communication control wiring to be completed using 16 AWG shielded cable.
- 4) All condensate drain pipe work must be completed.
- 5) Condenser communication wires TB3 and TB7 should be clear marked and disconnected from condenser unit.
- 6) Condenser correct power supply needing to be verified before power is applied.
- 7) Condenser power must be applied for crankcase heater for a 12-hour period prior to commissioning and start-up.

Evacuation Details:

Pressure Test Details:	Evacuation Details:
Test Pressure:	Vacuum Period:
Test Period:	Vacuum Achieved:
Notes:	Pressure Rise Test:

Commissioning Technician Signature: _____

General comments and points for attention concerning installation and commissioning practice:

DISTRIBUTOR NOTE:

Please note that complete commissioning report, maintenance tool file and warranty registration form must be submitted to MESCA within 90 days of completion of commissioning in order to validate product warranty.

City Multi R410A System Commissioning & Installation Report

Primary Model

Individual Units	Condenser # 1		Condenser # 2		Condenser # 3	
Model #						
Serial #						
Comp. Model #						
Comp. Serial #						
Connection of Power Source	Good	Poor	Good	Poor	Good	Poor
Electrical Cable Size (AWG)						
Voltage L1 - L2 (V)						
Voltage L2 - L3 (V)						
Voltage L3 - L1 (V)						
Current L1 (A)						
Current L2 (A)						
Current L3 (A)						
Connection of Control Wiring	Good	Poor	Good	Poor	Good	Poor
Comm. Cable Size (AWG)						
TB3 Voltage (VDC)						
TB7 Voltage (VDC)						
Installation Location						
Furthest Piping Length						
Height Diff. Outdoor - Indoor						
Maintenance Accessibility	Good	Poor	Good	Poor	Good	Poor
Standard of pipe work	Good	Poor	Good	Poor	Good	Poor
Standard of pipe insulation	Good	Poor	Good	Poor	Good	Poor
Comp. Vibration / Noise	Good	Poor	Good	Poor	Good	Poor
Fan Vibration / Noise	Good	Poor	Good	Poor	Good	Poor
Notes						

City Multi R410A Additional Refrigerant Charge (Trim Charge) Calculation

- Piping length from outdoor unit to farthest indoor unit ≤ 30.5 m (100ft) Use table (A) for entire system.
- Piping length from outdoor unit to farthest indoor unit ≥ 30.5 m (100ft) Use table (B) for entire system.

Value of α

Total capacity of connecting indoor units		α
Models	~ 27	2.0 kg (71oz)
Models	28 ~ 54	2.5 kg (89oz)
Models	55 ~ 126	3.0 kg (106oz)
Models	127 ~ 144	3.5 kg (124oz)
Models	145 ~ 180	4.5 kg (159oz)
Models	181 ~ 234	5.0 kg (177oz)
Models	235 ~ 273	6.0 kg (212oz)
Models	274 ~ 307	8.0 kg (283oz)
Models	308 ~ 342	9.0 kg (318oz)
Models	343 ~ 411	10.0 kg (353oz)
Models	412 ~ 480	12.0 kg (424oz)
Models	481 ~	14.0 kg (494oz)

1		2		3		4	
Liquid pipe size Total length of ϕ19.05mm (3/4in)		Liquid pipe size Total length of ϕ15.88mm (5/8in)		Liquid pipe size Total length of ϕ12.70mm (1/2in)		Liquid pipe size Total length of ϕ9.52mm (3/8in)	
(A)	(m)x0.29(kg) (ft)x3.12(oz)	+	(A)	(m)x0.2(kg) (ft)x2.16(oz)	+	(A)	(m)x0.06(kg) (ft)x0.65(oz)
(B)	(m)x0.26(kg) (ft)x2.80(oz)		(B)	(m)x0.18(kg) (ft)x1.94(oz)		(B)	(m)x0.0054(kg) (ft)x0.59(oz)

5		6		7		8	
Liquid pipe size Total length of ϕ6.35mm (1/4in)		Additional refrigerant charge				Additional refrigerant charge	
(A)	(m)x0.024(kg) (ft)x0.26(oz)	+	Outdoor unit model	Charged amount	+	α =	(kg)(oz)
(B)	(m)x0.021(kg) (ft)x0.23(oz)		P96	2.0kg		(A)	(kg)(oz)
			P120	8.0kg		(B)	(kg)(oz)
			P144				

+ + + + + + = (kg)

* When connecting PLFY-P08NBMU-E2, add 0.3kg (11 oz) of refrigerant per indoor unit

(oz)

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	Indoor Unit # 01		Indoor Unit # 02		Indoor Unit # 03	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 04		Indoor Unit # 05		Indoor Unit # 06	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 07		Indoor Unit # 08		Indoor Unit # 09	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 10		Indoor Unit # 11		Indoor Unit # 12	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 13		Indoor Unit # 14		Indoor Unit # 15	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 16		Indoor Unit # 17		Indoor Unit # 18	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 19		Indoor Unit # 20		Indoor Unit # 21	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 22		Indoor Unit # 23		Indoor Unit # 24	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblity	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 25		Indoor Unit # 26		Indoor Unit # 27	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 28		Indoor Unit # 28		Indoor Unit # 30	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 31		Indoor Unit # 32		Indoor Unit # 33	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 34		Indoor Unit # 35		Indoor Unit # 36	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 37		Indoor Unit # 38		Indoor Unit # 39	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 40		Indoor Unit # 41		Indoor Unit # 42	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

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	Indoor Unit # 43		Indoor Unit # 44		Indoor Unit # 45	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						

	Indoor Unit # 46		Indoor Unit # 47		Indoor Unit # 48	
Model #						
Serial #						
Installation Location						
SW14 (Port setting) R2/WR2 only (1-2-3-4-5-6-7-8-9-A-B-C-D-E-F-0)						
SW12 (10's rotary dial setting)						
SW11 (1's rotary dial setting)						
ME Remote Control Address						
Voltage L1 - L2 (V)						
Voltage L1 - G or L2 - G (V)						
TB5 Voltage (VDC)						
Maintenance Accessiblilty	Good	Poor	Good	Poor	Good	Poor
Drain Connected	Good	Poor	Good	Poor	Good	Poor
Notes						