MANUFACTURED FOR:
MITSUBISHI ELECTRIC US, INC.

PAC-SPRFCS

for use with:

CITY MULTI® PUHY-P-T/Y(S)J/K/LMU, PURY-P-T/Y(S)J/K/LMU, PUHY-HP-T/Y(S)JMU and PURY-HP-T/Y(S)KMU Series Outdoor Units

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INSTALLATION MANUAL

FOR INSTALLER

For safe and effective use of this kit, please read this installation manual thoroughly before installing these components

Contents

1. Individual Parts List

Table 1: 1-1/8” and 7/8” Filter Assembly

Component	Manufacturer	Part Number
Ball Valve	Sporlan	EBVT-1090 (502042)
Suction Filter Shell Sporlan	Sporlan	RSF-489-T W/Screen (800501)
4 Bolt Check Valve	Mueller	B34236

Table 2: 1-3/8” Filter Assembly

Component	Manufacturer	Part Number
Ball Valve	Sporlan	EBVT-1110 (502044)
Suction Filter Shell Sporlan	Sporlan	RSF-4811-T W/Screen (800502)
4 Bolt Check Valve	Mueller	B34237

Table 3: 1-5/8” Filter Assembly

Component	Manufacturer	Part Number
Ball Valve	Sporlan	EBVT-1130 (502046)
Suction Filter Shell Sporlan	Sporlan	RSF-4813-T W/Screen (800505)
4 Bolt Check Valve	Mueller	B34238

Table 4: Additional Parts

Component	Manufacturer	Part Number
Pleated Filter Element	Sporlan	RPE-48-BD (404555)
HH Style Solid Filter/Drier Core *	Sporlan	RC-4864-HH (404380)
Pressure Relief Valve	Superior Valve	3001C-600

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2. Procedure

New system start up

Step.1
Pressure test and evacuate the system pursuant to the general procedures documented in the product installation instructions. Insure ball valves on the PAC- SPRFCS are in the open position. Charge the system with refrigerant consistent with data plate amount in addition to calculated trim charge (see DSB file).

Step.2
Configure the ball valves **(V-1: Closed, V-2, 3: Open)** in order to route refrigerant through newly installed
PAC-SPRFCS and start the system. Figure 1

Step.3
This procedure requires the Mitsubishi Maintenance Tool software. While in the operation status monitor ensure the system control mode has completed the initial start up and has transitioned to ordinary (Ctrl Mode in Maintenance Tool). Figure 2

a) Place all indoor units in test run cool with the fan speeds in high.

b) Calculate indoor BTU capacity and partition the indoor units as evenly as possible into thirds.

c) While the system is operating override the indoor unit LEV's on the first 1/3rd to 1800~2000 pulses for 20 minutes, then release the override on the LEV's. Repeat this step for the second and third set.

Step.4
After completions of step 3 stop system, and configure ball valves to bypass the filter **(V-1: Open, V-2, 3: Closed)**. Restart the system and operate as normal.

The following steps pertain to use following a compressor failure and replacement.

Step.5
Using appropriate service literature information and compressor diagnostic methods ensure compressor has failed and is in need of replacement.

Step.6
Following appropriate service procedures remove the failed compressor. Check, and note the volume of
compressor oil and test the oil for the presence of acid and moisture using an appropriate testing kit.
This will determine the type of core utilized. Testing the refrigerant is recommended as well. Virgin
refrigerant should be used if the reclaimed refrigerant is determined to be unacceptable.

Step.7
In the event acid, and/or moisture are present, the following steps should be followed.

a) Remove the paper filter and replace with a Sporlan RC-4864-HH. This is appropriate for the necessary cleanup as it will contain the acid and moisture in the system.

b) It will be important to extract lubricant samples at a later time to check for any acid remnants. Oil will have collected in the Sporlan canister during operation; this is acceptable to use as a test sample.

c) Repeat procedure mentioned in Step 3

d) Allow 24 to 48 hours of operation then perform another acid/ moisture test. If present, then replace the core and test again in 7 days. During this time take measures to ensure the system will be operational. Remove or reduce any temperature setback strategies to allow the compressor(s) to operate. This will expedite the cleanup.

e) Repeat steps as necessary until the system is void of contaminants.

f) Never leave a drier core in the system. It is recommended to replace with a pleated filter element, RPE-48-BD.

It is important to consult your distributor on whether or not the failed compressor needs returning. Always take note of the steps taken and the oil/refrigerant information. This includes, but is not limited to, oil/refrigerant volume, quality, and what tests were used to determine such. Photographs should be taken of the cores pre and post use, as well as, the oil volume in a graduated container. This will be beneficial in determining a cause to the failure.
For assistance or clarification on this procedure please contact your Mitsubishi City Multi distributor, or call the Mitsubishi Electric technical service number. 1-800-433-4822.
For access plate torque specifications and detailed information on Sporlan products please visit **www.sporlanonline.com**

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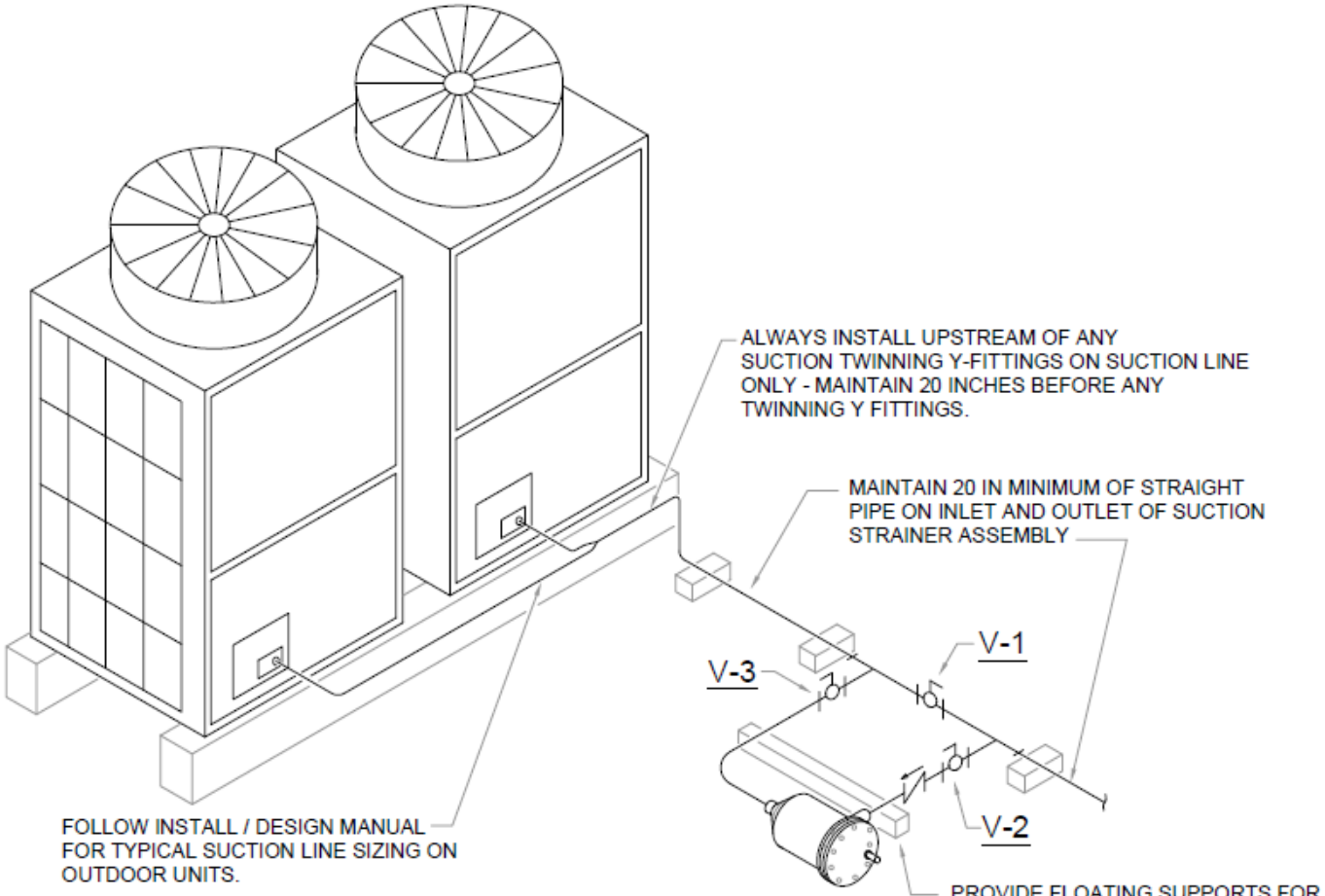
Figure 1



NOTES:

1. SUCTION FILTER ASSEMBLE TO BE INSTALLED IN MAIN SUCTION LINE ONLY. DO NOT INSTALL IN LIQUID LINE (ONLY SUCTION LINE SHOWN ABOVE).
2. SELECT SUCTION FILTER ASSEMBLY WITH LINE SIZE EQUAL TO SPECIFIED SYSTEM MAIN SUCTION PIPE SIZE. FOR SYSTEMS WITH 7/8" MAIN SUCTION LINE SIZE THE 1-1/8" SUCTION FILTER ASSEMBLY MAY BE USED AND REDUCERS INSTALLED IN FIELD IMMEDIATELY AT SUCTION FILTER ASSEMBLY CONNECTIONS.

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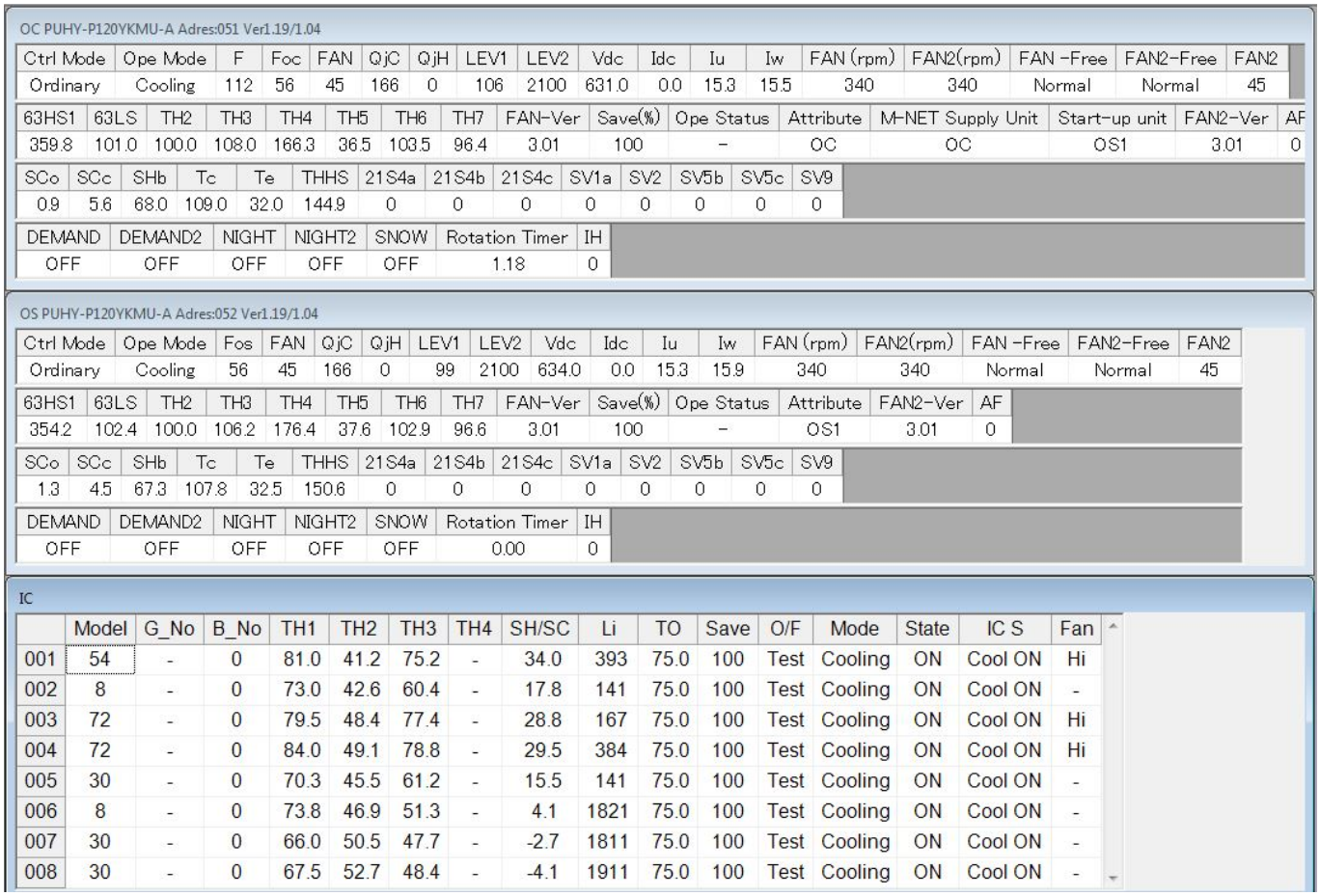
Figure 2



OC PUHY-P120YKMU-A Adres:051 Ver1.19/1.04

Ctrl Mode	Ope Mode	F	Foc	FAN	QjC	QjH	LEV1	LEV2	Vdc	Idc	Iu	Iw	FAN (rpm)	FAN2(rpm)	FAN -Free	FAN2-Free	FAN2
Ordinary	Cooling	112	56	45	166	0	106	2100	631.0	0.0	15.3	15.5	340	340	Normal	Normal	45

63HS1	63LS	TH2	TH3	TH4	TH5	TH6	TH7	FAN-Ver	Save(%)	Ope Status	Attribute	M-NET Supply Unit	Start-up unit	FAN2-Ver	AF
359.8	101.0	100.0	108.0	166.3	36.5	103.5	96.4	3.01	100	-	OC	OC	OS1	3.01	0

SCo	SCc	SHb	Tc	Te	THHS	21S4a	21S4b	21S4c	SV1a	SV2	SV5b	SV5c	SV9
0.9	5.6	68.0	109.0	32.0	144.9	0	0	0	0	0	0	0	0

DEMAND	DEMAND2	NIGHT	NIGHT2	SNOW	Rotation Timer	IH
OFF	OFF	OFF	OFF	OFF	1.18	0

OS PUHY-P120YKMU-A Adres:052 Ver1.19/1.04

Ctrl Mode	Ope Mode	Fos	FAN	QjC	QjH	LEV1	LEV2	Vdc	Idc	Iu	Iw	FAN (rpm)	FAN2(rpm)	FAN -Free	FAN2-Free	FAN2
Ordinary	Cooling	56	45	166	0	99	2100	634.0	0.0	15.3	15.9	340	340	Normal	Normal	45

63HS1	63LS	TH2	TH3	TH4	TH5	TH6	TH7	FAN-Ver	Save(%)	Ope Status	Attribute	FAN2-Ver	AF
354.2	102.4	100.0	106.2	176.4	37.6	102.9	96.6	3.01	100	-	OS1	3.01	0

SCo	SCc	SHb	Tc	Te	THHS	21S4a	21S4b	21S4c	SV1a	SV2	SV5b	SV5c	SV9
1.3	4.5	67.3	107.8	32.5	150.6	0	0	0	0	0	0	0	0

DEMAND	DEMAND2	NIGHT	NIGHT2	SNOW	Rotation Timer	IH
OFF	OFF	OFF	OFF	OFF	0.00	0

IC

	Model	G_No	B_No	TH1	TH2	TH3	TH4	SH/SC	Li	TO	Save	O/F	Mode	State	IC S	Fan
001	54	-	0	81.0	41.2	75.2	-	34.0	393	75.0	100	Test	Cooling	ON	Cool ON	Hi
002	8	-	0	73.0	42.6	60.4	-	17.8	141	75.0	100	Test	Cooling	ON	Cool ON	-
003	72	-	0	79.5	48.4	77.4	-	28.8	167	75.0	100	Test	Cooling	ON	Cool ON	Hi
004	72	-	0	84.0	49.1	78.8	-	29.5	384	75.0	100	Test	Cooling	ON	Cool ON	Hi
005	30	-	0	70.3	45.5	61.2	-	15.5	141	75.0	100	Test	Cooling	ON	Cool ON	-
006	8	-	0	73.8	46.9	51.3	-	4.1	1821	75.0	100	Test	Cooling	ON	Cool ON	-
007	30	-	0	66.0	50.5	47.7	-	-2.7	1811	75.0	100	Test	Cooling	ON	Cool ON	-
008	30	-	0	67.5	52.7	48.4	-	-4.1	1911	75.0	100	Test	Cooling	ON	Cool ON	-

1 - OC control and operation mode.
The control mode should read ordinary, and the operation mode cooling or C only.

2 - OS control and operation mode.

3 - Indoor unit nominal value in BTU's.
Use these values to partition the total into thirds.

4 - Indoor unit LEV (linear expansion valve) position in pulses.
Units being flushed should be between 1800 and 2000 pulses.
These are overridden from the indoor unit control in Maintenance Tool.

5 - Indoor

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This product is designed and intended for use in the reisdential, light-commercian and commercial environment.

Please be sure to put the contact address/telephone number on this manual before handing it to the customer.

Manufactured for MITSUBISHI ELECTRIC US, INC.
www.mitsubishielectric-usa.com
Toll Free: 800-433-4822

PAC-SPRFCS Installation Instructions, November 2015
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