	MITS ELEC	UBI CTR	SH IC
Heating	and	Coc	oling
h Name:			

Submittal Data: PUMY-HP36NKMU2

Air Source Heat Pump System

Job Name:	Location:		
Purchaser:	Submitted By:		
Submitted To:	Reference:	Approval:	Construction:
Engineer:	Date:	Application:	



• Single-phase Outdoor unit with variable refrigerant flow (VRF) zoning technology

• Inverter-driven variable speed compressor

- Uses CITY MULTI indoor units and Control Network
- Compatible with M&P series Indoor Units with Branch Box
- Base pan heater included

Images provided for reference purposes only

Separate	14	Images provided for refer	ence purposes only						
Mon-Ducted Mixed Ducted Ducted Mixed Ducted	Performance	:							
Capacity Rated	Power supply					1	1-phase 208/230 V, 60 H;	Z	
Capacity Rated 47°F Btu/h	Indoor type					Non-Ducted	Mixed	Ducted	
Capacity Rated 47°F Btu/h	ლ Capa	city Rated ¹			Btu/h	36,000	36,000	36,000	
Capacity Rated 47°F Btu/h	Rated power consumption 1			W	2,400	2,670	3,000		
Capacity Rated 47°F Btu/h	8 Curre				Α	11.7/10.6	13.0/11.8	14.6/13.2	
Capacity Max. 37F Btu/h 42,000 42,000 42,000 42,000 42,000 42,000 42,000 42,000 42,000 42,000 42,000 38,500	Capa				Btu/h	42.000		42.000	
Current input (208/230V)	© Capa								
Current input (208/230V)	E Capa								
Current input (208/230V)	⊕ Rateo		47°F 1		· · · · · · · · · · · · · · · · · · ·	3,080	<u> </u>		
A 0 A - When power is supplied separately 45 A - When power is supplied from the outdoor unit 8 4 (8 AWG) - When power is supplied from the outdoor unit 8 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (8 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 3 4 (9 AWG) - When power is supplied from the outdoor unit 4 AWG - 3 4					Α		<u> </u>		
45 A - When power is supplied from the outdoor unit 8.46AWG) - When power is supplied separately 13.3(6AWG) - When power is supplied separately 13.3(6AWG) - When power is supplied from the outdoor unit 14.5(6.7) 11.0(6.7)		<u> </u>				40 A - Wh	en power is supplied sep	parately	
Section Starting method	Breaker size					45 A - When po	wer is supplied from the	outdoor unit	
Total capacity Sol to 13% of outdoor unit connectable Model/Quantity 3						8.4(8AWG) -	When power is supplied	separately	
Total capacity Model/Quantity Model/Quantity Model/Quantity Model/Quantity Model/Quantity Branch box 06 - 36/4	Minimum wire	size				13.3(6AWG) - When	n nower is supplied from	the outdoor unit	
Model/Quantity 3 CITY MULTI 04 - 36/11			Total capacity						
Mode/Quantity Branch box 06 - 36/4	Indoor unit con	nectable	· · · · ·		CITY MULTI	2010		-1	
Description			Model/Quantity				•		
	Sound pressure	level (measured in ar	nechoic room)				•		
Type × Quantity	·	·					<u> </u>		
Type × Quantity	Refrigerant pip	ng diameter							
Airflow rate		Type × Qua			men (mm)		-1 - (+)		
Airflow rate			•		m³/min				
Control, Driving mechanism Motor output kW 0.074 × 2 Type × Quantity Scroll hermetic compressor x 1 Manufacture Missubishi Electric Corporation Manufacture Missubishi Electric Corporation Manufacture Missubishi Electric Corporation Inverter KW 2.8 Lubricant KW Electric Steel Sheet < Munsell 3Y 7.8/1.1> Missubishi Electric Corporation FV505 780z. (2.3L) Kernal dimension HxWxD mm 1,338 × 1,050 × 330 (+25) Inch 52-11/16 × 41-11/32 × 13 (+1) Missubishi Electric Corporation Galvanized Steel Sheet < Munsell 3Y 7.8/1.1> Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation Missubishi Electric Corporation FV505 780z. (2.3L) Missubishi Electric Corporation Missubishi Electric Corporation Missubishi Electric Corporation Missubishi Electric Corporation Missubishi Electric Missubishi	Fan	Airflow rat	e						
Motor output		Control. Dr	iving mechanism		0				
Type × Quantity Scroll hermetic compressor x 1 Missubishi Electric Corporation					kW				
Manufacture Mitsubishi Electric Corporation					KVV	Scr		x 1	
Starting method Motor output kW 2.8							· · · · · · · · · · · · · · · · · · ·		
Motor output	Compressor								
Lubricant FV50S 78oz. (2.3L) kternal finish kternal dimension HxWxD mm	·			kW					
Atternal finish Atternal dimension HxWxD Trotection devices Atternal dimension HxWxD Atternal dimension 1,338 x 1,050 x 30 (+25) Atternal dimension HxWxD Atternal dimens	,		KVV	_					
Name									
inch 52-11/16 × 41-11/32 × 13 (+1) High pressure protection High pressure switch Inverter circuit (COMP./FAN) Overcurrent detection, Overheat detection (Heat sink thermistor) Compressor protection Compressor thermo, Overcurrent detection Fan motor protection Overheating/Voltage protection Fan motor protection R410A 10 lbs. 9 oz. (4.8kg) Control Linear Expansion Valve Et weight Ib (kg) 278 (126) Fact eat exchanger C circuit (HIC: Heat Inter-Changer) HIC circuit Far graph HIC circuit Far graph Gross fin and tube Far graph HIC circuit Far graph Far gra					mm	·			
High pressure protection Inverter circuit (COMP./FAN) Compressor protection Fan motor protection efrigerant et weight eat exchanger IC circuit (HIC: Heat Inter-Changer) perating Temperature Range High pressure switch Overcurrent detection, Overheat detection (Heat sink thermistor) Compressor thermo, Overcurrent detection Overheating/Voltage protection R410A 10 lbs. 9 oz. (4.8kg) Linear Expansion Valve 1 b (kg) 278 (126) Cross fin and tube HIC circuit (HIC: Heat Inter-Changer) Perating Temperature Range (Cooling) D.B. 23 to 115°F [D.B5 to 46°C] HRI Ratings (Heating) D.B13 to 70°F [D.B25 to 21°C] HRI Ratings on-Ducted/ Mixed/ Ducted HSPF2 (Region IV / V) 12.0 / 10.65 11.5 / 10.2 11.0 / 9.80	External dimen	sion HxWxD							
Inverter circuit (COMP./FAN) Compressor protection Fan motor protection efrigerant et weight et weight et et weight IC circuit (HIC: Heat Inter-Changer) perating Temperature Range HRI Ratings on-Ducted/ Mixed/ Ducted Inverter circuit (COMP./FAN) Compressor protection Compressor thermo, Overcurrent detection Overheating/Voltage protection R410A 10 lbs. 9 oz. (4.8kg) Linear Expansion Valve Ib (kg) 278 (126) Cross fin and tube HIC circuit HIC circuit HIC circuit UHC: Heat Inter-Changer) FER2 SEER2 SEER2 SEER2 SEER2 SEER2 SEER2 SEER2 SEER2 SISSION SOVERHEAT (Asserting the detection, Overheat detection (Heat sink thermistor) Compressor thermo, Overcurrent detection, Overheat detection (Heat sink thermistor) Compressor thermo, Overcurrent detection Overheating Newton, Overcurrent detection, Overheat detection (Heat sink thermistor) Compressor thermo, Overcurrent detection (Heat sink thermistor) Compressor thermo, Overcurrent detection, Overheat detection (Heat sink thermistor) Compressor thermo, Overcurrent detection (Heat sink thermistor) Compressor thermo, Overcurrent detection Overheating/Voltage protection End Set		High press	ure protection						
Compressor protection Fan motor protection Fan motor protection Errigerant Type × original charge Control Et weight Et weight Et weight Fan motor protection Type × original charge Control Type × original charge Type × orignal charge Type × original charge Type × original charge Type ×		Inverter cir							
Fan motor protection Overheating/Voltage protection	Protection devi								
Type × original charge R410A 10 lbs. 9 oz. (4.8kg)									
Control Linear Expansion Valve	Type v original charge								
et weight Ib (kg) 278 (126) eat exchanger Cross fin and tube IC circuit (HIC: Heat Inter-Changer) HIC circuit perating Temperature Range (Cooling) D.B.23 to 115°F [D.B5 to 46°C] 4,5,6 (Heating) D.B13 to 70°F [D.B25 to 21°C] HRI Ratings EER2 15 13.5 12 SEER2 23 20.75 18.5 On-Ducted/ Mixed/ Ducted HSPF2 (Region IV / V) 12.0 / 10.65 11.5 / 10.2 11.0 / 9.80									
Cross fin and tube Cross f	Net weight	20			lh (kg)				
C circuit (HIC: Heat Inter-Changer)		•			.~ (\%)		, ,		
Cooling D.B 23 to 115°F [D.B5 to 46°C] 4,5,6									
Cheating	•	<u> </u>		(Ca	ooling)	D R 23		1 4, 5, 6	
HRI Ratings EER2 15 13.5 12 on-Ducted/ Mixed/ Ducted SEER2 23 20.75 18.5 HSPF2 (Region IV / V) 12.0 / 10.65 11.5 / 10.2 11.0 / 9.80	Operating Tem	perature Range	 -	•	<u> </u>	D.D 23	-13 to 70°F [D.B25 to 2	1°C1	
Fix Ratings SEER2 23 20.75 18.5 on-Ducted/ Mixed/ Ducted HSPF2 (Region IV / V) 12.0 / 10.65 11.5 / 10.2 11.0 / 9.80									
on-Ducted/ Mixed/ Ducted HSPF2 (Region IV / V) 12.0 / 10.65 11.5 / 10.2 11.0 / 9.80	0		F						
	Non-Ducted/ N	lixed/ Ducted	 						
	NOTES:							11.070.00	

NOTES

1 Rating conditions Cooling Indoor : D.B. 80°F/W.B. 67 °F [D.B.26.7°C/W.B. 19.4°C]

Outdoor : D.B. 95°F [D.B. 35.0°C]
Heating Indoor : D.B. 70°F [D.B. 21.1°C]
Outdoor : D.B. 47°F/W.B. 43°F [D.B. 8.3°C/W.B. 6.1°C]
2 Conditions Heating Indoor : D.B. 70°F [D.B. 21.1°C]
Outdoor : D.B. 17°F/W.B. 15°F [D.B. -8.3°C/W.B. -9.4°C]

3 It cannot be connected mixed CITY MULTI indoor unit and branch box indoor unit. 4 D.B. 5 to 115°F [D.B. -15 to 46°C], when an optional Air Outlet Guide is installed.

However, this condition does not apply to the indoor units listed in #5.

5 50 to 115°F (10 to 46°C) D.B.: When connecting PKFY-P04/06/08/12NLMU, PFFY-P06/08/12NEMU, and PFFY-P06/08/12NRMU type indoor unit.

6 When the temperature is below D.B. $50^{\circ}F$ [D.B. $10^{\circ}C$] with branch box system, noise could potentially occur.

Note: Refer to the indoor unit's service manual for the indoor units specification.

PUMY-HP36NKMU2	Capacity (Btuh)	COP
	-25°C / -13°F	-25°C / -13°F
Ductless	33,000	1.5
Mixed	33,000	1.44
Ducted	33,000	1.4



Submittal Data: PUMY-HP36NKMU2

Piping		
Liquid Pipe Size O.D. (Flared)	In.[mm]	3/8 [9.52]
Gas Pipe Size O.D. (Flared)	In.[mm]	5/8 [15.88]
Total Piping Length when using Branch Box	Ft. [m]	492 [150]
Total Piping Length without Branch Box	Ft. [m]	984 [300]
Maximum Height Difference*A, ODU above IDU	Ft. [m]	164 [50]
Maximum Height Difference*A, ODU below IDU	Ft. [m]	131 [40]
Maximum Height Difference*A, between branch boxes	Ft. [m]	49 [15]
Maximum Height Difference between IDU and IDU withoutbranch box	Ft. [m]	49 [15]
Maximum Piping Length between ODU and Branch Box	Ft. [m]	180 [55]
Farthest Piping Length from ODU to IDU with Branch Box	Ft. [m]	262 [80]
Farthest Piping Length from ODU to IDU without Branch Box	Ft. [m]	492 [150]
Farthest Piping Length after Branch Box	Ft. [m]	82 [25]
Total Piping Length between Branch Boxes and IDU	Ft. [m]	311 [95]
Maximum Number of Bends for IDU	Ft. [m]	15

A Branch box should be placed within the level between the outdoor unit and indoor units.

The outdoor unit is lower: 131ft [40m] or less (98ft [30,] or less if PKFY-P04/06/08/12NLMU, PFFY-P06/08/12NEMU, and PFFY-P06/08/12NRMU are included.)

l Accessories	Description	Model No.
	3 Port Branch Box	PAC-MKA32BC
December Dec	3 Port Branch Box	PAC-MKA33BC
Branch Box	5 Port Branch Box	PAC-MKA52BC
	5 Port Branch Box	PAC-MKA53BC
Branch Joint	T-Branch	CMY-Y62-G-E
Header	4 Branch	CMY-Y64-G-E
neadel	8 Branch	CMY-Y68-G-E
Centralized Drain Pan	Central Drain Pan	PAC-SH97DP-E
Control/Service Tool	Maintenance Tool Interface	PAC-USCMS-MN-1
Distribution sinc	Brazed Connection	MSDD-50BR-E
Distribution pipe	Flare Connection	MSDD-50AR-E
Drain Socket	Drain Socket	PAC-SG60DS-E
	Adaptor: 1/2" x 3/8"	MAC-A455JP-E
Port Adapter	Adaptor: 1/2" x 5/8"	MAC-A456JP-E
Port Adapter	Adaptor: 3/8" x 1/2"	MAC-A454JP-E
	Adaptor: 3/8" x 5/8"	PAC-SG76RJ-E
Snow/Wind Guard	Front	CM-S-FR-NKMU (two pieces are required
Snow/Wind Guard	Rear	SG-1-RE
Snow/Wind Guard	Side	SG-1-SD
Snow/Wind Guard	Blocker	CM-S-BLK-NKMU

Note: Mitsubishi Electric (MESCA) supports the use of only MESCA supplied and approved Snow Guard / Wind Deflectors / Windscreens and accessories for proper functioning of the unit(s). Use of non-MESCA supported Snow Guard / Wind Deflectors / Windscreens and accessories will affect warranty coverage.

"Should this document be altered or changed without MESCA's permission, it becomes null and void. MESCA assumes no responsibility for any consequences in such cases" All electrical work shall comply with National (CEC) and local codes and regulations.

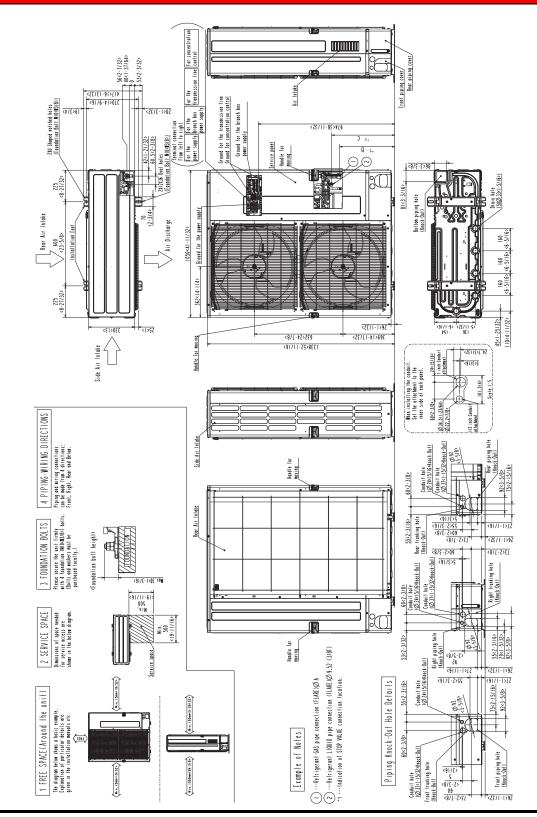
Notes:



Submittal Data: PUMY-HP36NKMU2

Outdoor Unit Outline and Dimensions:

Unit: mm(in)









485<19-3/32>

426<16-25/32>

88(5/8F 05(3/4F

5 9.

PUMY - HP36NKMU2 PUMY - HP42NKMU2 PUMY - HP48NKMU2

393<15-15/32>

19-3/32>

485<1

32>

426<16-25/

<u>8</u>

88(5/8

PUMY - P60NKMU4 PUMY - P36NKMU4 PUMY - P48NKMU4

MODFLS