MITSUBISHI ELECTRIC
Heating and Cooling

Submittal Data: PUMY-HP36NKMU2

Air Source Heat Pump System

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

Images provided for reference purposes only

- 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

Performance:

Power supply			1-phase 208/230 V, 60 Hz		
Indoor type			Non-Ducted	Mixed	Ducted
Cooling	Capacity Rated [1]	Btu/h	36,000	36,000	36,000
	Rated power consumption [1]	W	2,400	2,670	3,000
	Current input (208/230V)	A	11.7/10.6	13.0/11.8	14.6/13.2
Heating	Capacity Rated 47°F [1]	Btu/h	42,000	42,000	42,000
	Capacity Max. 17°F [2]	Btu/h	42,000	42,000	42,000
	Capacity Max. 5°F	Btu/h	38,500	38,500	38,500
	Rated power consumption 47°F [1]	W	3,080	3,285	3,520
	Current input (208/230V)	A	15.0/13.6	16.0/14.5	17.2/15.5
Breaker size			40 A - When power is supplied separately 45 A - When power is supplied from the outdoor unit		
Minimum wire size			8.4(8AWG) - When power is supplied separately 13.3(6AWG) - When power is supplied from the outdoor unit		
Indoor unit connectable	Total capacity		50 to 130% of outdoor unit capacity		
	Model/Quantity [3]	CITY MULTI	04 - 36/11		
		Branch box	06 - 36/4		
Sound pressure level (measured in anechoic room)		dB <A>	49/53		
Refrigerant piping diameter	Liquid pipe	inch (mm)	3/8 (ø9.52)		
	Gas pipe	inch (mm)	5/8 (ø15.88)		
Fan	Type × Quantity		Propeller fan × 2		
	Airflow rate	m^3/min	110		
		cfm	3,885		
	Control, Driving mechanism		DC control		
	Motor output	kW	0.074 × 2		
Compressor	Type × Quantity		Scroll hermetic compressor x 1		
	Manufacture		Mitsubishi Electric Corporation		
	Starting method		Inverter		
	Motor output	kW	2.8		
	Lubricant		FV50S 78oz. (2.3L)		
External finish			Galvanized Steel Sheet <Munsell 3Y 7.8/ 1.1>		
External dimension HxWxD		mm	1,338 × 1,050 × 330 (+25)		
		inch	52-11/16 × 41-11/32 × 13 (+1)		
Protection devices	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		
Refrigerant	Type × original charge		R410A 10 lbs. 9 oz. (4.8kg)		
	Control		Linear Expansion Valve		
Net weight		lb (kg)	278 (126)		
Heat exchanger			Cross fin and tube		
HIC circuit (HIC: Heat Inter-Changer)			HIC circuit		
Operating Temperature Range	(Cooling)		D.B 23 to 115°F [D.B.-5 to 46°C] [4, 5, 6]		
	(Heating)		D.B.-13 to 70°F [D.B. -25 to 21°C]		
AHRI Ratings	EER2		15	13.5	12
Non-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

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°F [D.B. 10°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

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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.)

Optional Accessories	Description	Model No.
Branch Box	3 Port Branch Box	PAC-MKA32BC
	3 Port Branch Box	PAC-MKA33BC
	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
	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 pipe	Brazed Connection	MSDD-50BR-E
	Flare Connection	MSDD-50AR-E
Drain Socket	Drain Socket	PAC-SG60DS-E
Port Adapter	Adaptor: 1/2” x 3/8”	MAC-A455JP-E
	Adaptor: 1/2” x 5/8”	MAC-A456JP-E
	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:

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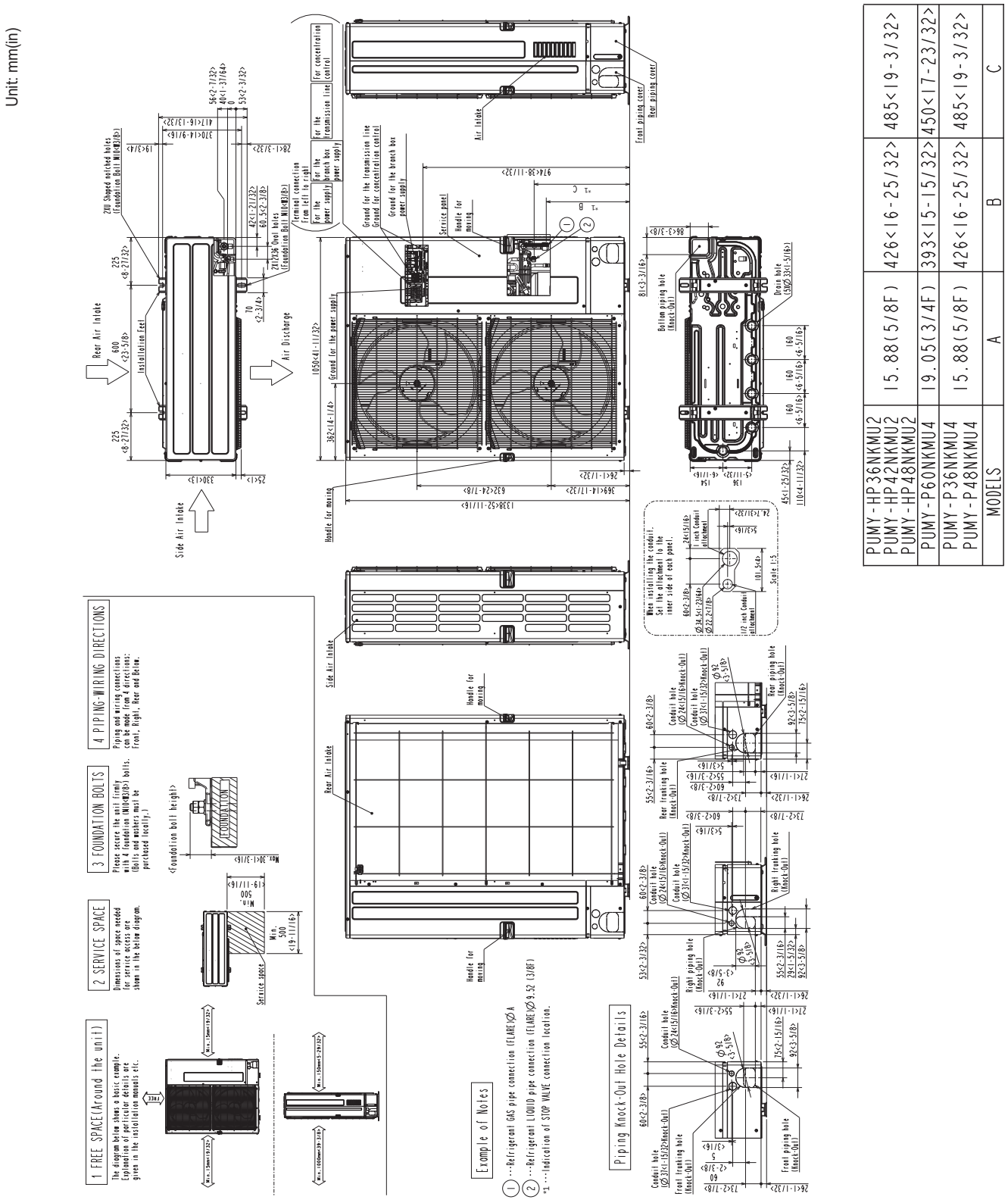
Outdoor Unit Outline and Dimensions:



MODELS	A	B	C
PUMY-HP36NKMU2 PUMY-HP42NKMU2 PUMY-HP48NKMU2	15.88(5/8F)	426<16-25/32>	485<19-3/32>
PUMY-P60NKMU4	19.05(3/4F)	393<15-15/32>	450<17-23/32>
PUMY-P36NKMU4 PUMY-P48NKMU4	15.88(5/8F)	426<16-25/32>	485<19-3/32>