P-SERIES

SUBMITTAL DATA: PEAD-A12AA7 & PUZ-A12NKA7(-BS) 12,000 BTU/H HORIZONTAL-DUCTED HEAT PUMP SYSTEM



Job Name:	
System Reference:	Date:

Indoor Unit: PEAD-A12AA7	Outdoor Unit: □ PUZ-A12NKA7 □ PUZ-A12NKA7-BS
	MISUBSHI ELECTRIC

INDOOR UNIT FEATURES

- · Unobtrusive ceiling-concealed design for short-run ductwork.
- · Wide ranging external static pressure
- · Built-in condensate lift mechanism
- · Auto fan speed mode
- · Optional FB Series filter boxes for easy access and service
- · Ideal for residential homes, retail shopping centers, larger classrooms, office complexes, conference ballrooms, fitness centers, and more

OUTDOOR UNIT FEATURES

- · Variable speed INVERTER-driven compressor
- Suction accumulator pre-charged with refrigerant volume for piping length up to 100 ft (70 ft. for A12/18/24/30)
- 24-hour continuous operation (cooling mode)
- · High pressure protection
- Fast restart due to bypass valve make it ideal for equipment cooling applications, such as data centers
- Superior energy and operational efficiency

SPECIFICATIONS: PEAD-A12AA7 & PUZ-A12NKA7(-BS)

	Indoor Unit		PEAD-A12AA7
Model Number			PUZ-A12NKA7
	Outdoor Unit		PUZ-A12NKA7-BS
	Maximum Capacity	Btu/h	12,000
	Rated Capacity	Btu/h	12,000
	Minimum Capacity	Btu/h	5,000
0 11 1	Maximum Power Input	W	920
Cooling ¹	Rated Power Input	W	920
	Moisture Removal	Pints/h	1.80
	Sensible Heat Factor	0.83	
	Power Factor	%	90.9
	Maximum Capacity	Btu/h	18,000
	Rated Capacity	Btu/h	14,000
	Minimum Capacity	Btu/h	5,800
Heating at 47°F ²	Maximum Power Input	W	1,520
	Rated Power Input	W	1,030
	Power Factor	%	91.4
	Maximum Capacity	Btu/h	10,500
	Rated Capacity	Btu/h	8,700
Heating at 17°F3	Maximum Power Input	W	1,130
	Rated Power Input	W	1,100
	SEER		21.1
	EER *1		13.0
	HSPF (IV)	10.2	
Efficiency	COP at 47°F ²	3.98	
	COP at 17°F ³	2.31	
	ENERGY STAR® Certified (ENERGY STAR products are an EPA-recognized Certification Body.)	Yes	
	Voltage, Phase, Frequency		208 / 230V, 1-phase, 60 Hz
	Guaranteed Voltage Range	V AC	198 – 253
	Voltage: Indoor - Outdoor, S1-S2	V AC	208 / 230
Electrical	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Voltage: Indoor - Remote controller	V DC	12
	Recommended Fuse/Breaker Size	A	15
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
	MCA	А	1.45
	Fan Motor Full Load Amperage	A	1.16
	Fan Motor Output	W	85
Indoor Unit	Airflow Rate, Dry	CFM	353-424-494
	Airflow Rate, Wet	CFM	313-384-454
	External Static Pressure	in. WG	0.14-0.20-0.28-0.40-0.60

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	Indoor Unit	PEAD-A12AA7	
Model Number			PUZ-A12NKA7
	Outdoor Unit	PUZ-A12NKA7-BS	
	Sound Pressure Level	dB(A)	28-30-34
	Drain Pipe Size	In. (mm)	1-1/4 (32)
	Condensate Lift Mechanism, Max. Distance	In. (mm)	27-9/16 (700)
	Heat Exchanger Type		Plate fin coil
	External Finish Color	Galvanized	
		W: In. (mm)	35-7/16 (900)
	Unit Dimensions	D: In. (mm)	28-7/8 (732)
		H: In. (mm)	9-7/8 (250)
		W: In.	45-5/16
	Package Dimensions	D: In.	34-11/16
		H: In.	13-7/16
	Unit Weight	Lbs. (kg)	58 (26)
	Package Weight	Lbs.	69
ndoor Unit Operating	Cooling Intake Air Temp (Maximum / Minimum)	°F	90 DB, 73 WB / 66 DB, 59 WB
emperature Range	Heating Intake Air Temp (Maximum / Minimum)	°F	82 DB / 50 DB
	MCA	А	11
	MOCP	А	28
	Fan Motor Full Load Amperage	А	0.5
	Fan Motor Output	W	46
	Airflow Rate	CFM	1,590
	Refrigerant Control		Electronic Expansion Valve
	Defrost Method		Reverse Cycle
	Heat Exchanger Type		Cross fin
	Sound Pressure Level, Cooling ¹	dB(A)	44
	Sound Pressure Level, Heating ²	dB(A)	46
	Compressor Type		INVERTER-driven twin rotary
Outdoor Unit			SNB092FNCM
	Compressor Rated Load Amps	А	7
	Compressor Locked Rotor Amps	A	12
	Compressor Oil Type // Charge	OZ.	FV50S // 12
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		n/a
		W: In. (mm)	31-13/16 + 7/16 (809+62)
	Unit Dimensions	D: In. (mm)	11-3/16 (300)
		H: In. (mm)	24-13/16 (630)
		W: In.	37-1/16
	Package Dimensions	D: In.	16-3/16
		H: In.	27-7/16

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	Indoor Unit	PEAD-A12AA7	
Model Number	Outdoor Unit	PUZ-A12NKA7	
	Outdoor Unit		PUZ-A12NKA7-BS
	Unit Weight	Lbs. (kg)	93 (42)
	Package Weight	Lbs. (kg)	104 (47)
Outdoor Unit Operating Temperature Range	Cooling Intake Air Temp (Maximum / Minimum)	°F	115 DB / 0* DB
	Heating Intake Air Temp (Maximum / Minimum)	°F	70 DB, 59 WB / 12 DB, 10 WB
	Thermal Lock-out / Re-start Temperatures**	°F	8 / 12 DB
Refrigerant	Туре	R410A	
	Charge	Lbs, oz	4 lbs, 7 oz
Piping	Gas Pipe Size O.D. (Flared)	In. (mm)	1/2 (12.7)
	Liquid Pipe Size O.D. (Flared)	In. (mm)	1/4 (6.35)
	Maximum Piping Length	Ft. (m)	100 (30)
	Maximum Height Difference	Ft. (m)	100 (30)
	Maximum Number of Bends	15	

Notes

AHRI Rated Conditions	¹ Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
(Rated data is determined at a fixed	² Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
compressor speed)	³ Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
Conditions	⁴ Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -4 DB, -5 WB

^{*}Wind baffles required to operate below 23°F DB in cooling mode. PUZ with wind baffle: 0°F - 115°F.

SEACOAST PROTECTION

- External Outer Panel: Phosphate coating + Acrylic-Enamel coating
- Fan Motor Support: Epoxy resin coating (at edge face)
- Separator Assembly; Valve Bed: Epoxy resin coating (at edge face)
- "Blue Fin" treatment is an anti-corrosion treatment that is applied to the condenser coil to protect it against airborne contaminants.

^{**}System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

ACCESSORIES: PEAD-A12AA7

Filter Box with MERV 13 Filters	□ FBM2-2
Signal Receiver	□ PAR-SA9CA-E
Wireless Remote Controller	□ PAR-FL32MA-E
Wireless Remote Receiver	□ PAR-FA32MA-E
Backlit, Wall-mounted, Wireless Controller	□ MHK1
Portable Central Controller	□ MCCH1
Wired MA Controller	□ PAR-33MAA
Simple MA Controller	□ PAC-YT53CRAU
Touch MA Controller	□ PAR-CT01MAU-SB
Wired Remote Sensor	□ PAC-SE41TS-E
Lockdown Bracket for Wireless, Hand-held, Remote Controller	□ RCMKP1CB
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	□ MOS1
Flush Mount Remote Temperature Sensor	□ PAC-USSEN001-FM-1
Wireless Interface	□ PAC-USWHS002-WF-1
Thermostat Interface	□ PAC-US444CN-1
kumo station®	□ PAC-WHS01HC-E
USNAP Interface	□ PAC-WHS01UP-E
IT Extender	□ PAC-WHS01IE-E
BACnet® and Modbus Interface	□ PAC-UKPRC001-CN-1
External Fan / Heater Control Relay Adapter	□ CN24RELAY-KIT-CM3
Connector cable for remote display	□ PAC-SA88HA-EP
Connector for CN32 (remote on/off)	□ PAC-SE55RA-E
Remote Operation Adapter (with wire terminals for remote ON/OFF and operation status/ error) ¹	□ PAC-SF40RM-E
Blue Diamond Sensor Extension Cable—15 Ft.	□ C13-103
MegaBlue Advanced Blue Diamond Condensate Pump w/ Reservoir & Sensor	□ X87-835 - 110 to 250V
MaxiBlue Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) up to 48,000 Btu/h [recommended]	□ X87-721 - 208/230V
Drain Pan Level Sensor (Control for indoor unit shut off to prevent drain pan overflow)	□ DPLS2
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - Black	□ TAZ-MS303
3 Pole Disconnect Switch (30A/600VUL) [fits 2"X4" utility] - White	□ TAZ-MS303W
1 Unable to use with window remarks controller	

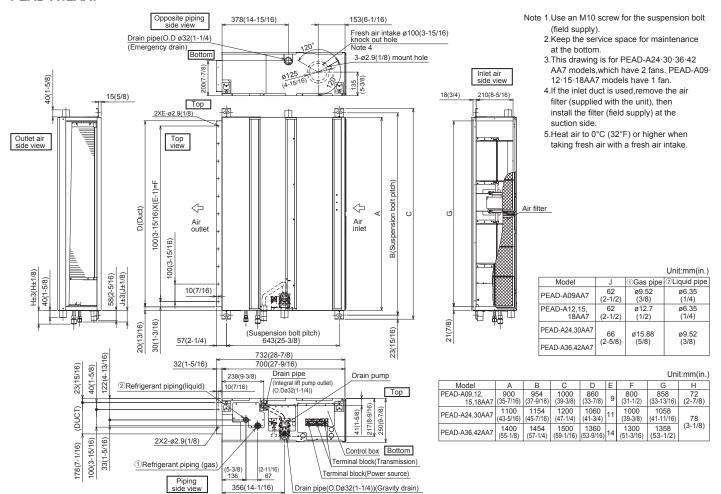
¹ Unable to use with wireless remote controller

ACCESSORIES: PUZ-A12NKA7(-BS)

Air Outlet Guide	□ PAC-SJ07SG-E
Front Wind Baffle	□ WB-PA4
Side Advanced Wind Baffle	□ WB-SD4
Drain Socket	□ PAC-SJ08DS-E
Centralized Drain Pan	□ PAC-SG63DP-E
M-NET Converter	□ PAC-SJ19MA-E
M-NET Converter	□ PAC-SJ96MA-E
Control/Service Tool	□ PAC-SK52ST
Hail Guard	□ HG-A5
Condensing Unit Mounting Pad 16" x 36" x 3"	□ ULTRILITE1
Outdoor Unit Stand—12" High	□ QSMS1201M
Outdoor Unit Stand—18" High	□ QSMS1801M
Outdoor Unit Stand—24" High	□ QSMS2401M
Heavy Duty Wall Mounting Bracket for Outdoor Units—Coated Steel	□ QSWB2000M-1
Heavy Duty Wall Mounting Bracket for Outdoor Units—316 Series Stainless Steel	□ QSWBSS
1/4" x 1/2" x 15' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-15
1/4" x 1/2" x 30' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-30
1/4" x 1/2" x 50' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-50
1/4" x 1/2" x 65' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-65
1/4" x 1/2" x 100' / 1/2" Lineset (Twin-Tube Insulation)	□ MLS141212T-100
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DIMENSIONS: PEAD-A12AA7 & PUZ-A12NKA7 (-BS)

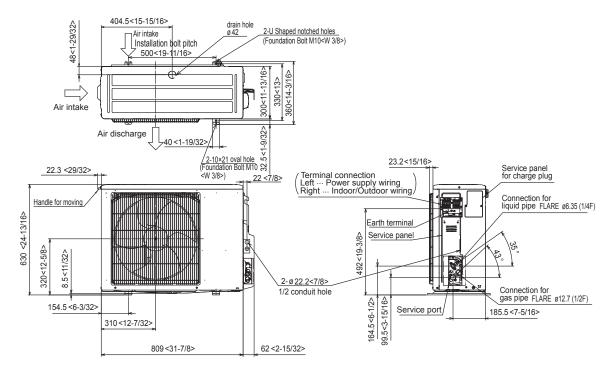
PEAD-A12AA7



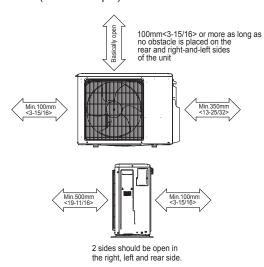
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PUZ-A12NKA7(-BS)

Unit: mm<in>



Free space around the outdoor unit (basic example)



FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10<W3/8>) bolts. (Bolts, washers and nut must be purchased locally).

<Foundation bolt height>



PIPING-WIRING DIRECTION

Piping and wiring connection can be made from the rear direction only.



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