P-SERIES

SUBMITTAL DATA: PEAD-A42AA7 & PUZ-A42NKA7(-BS)

42,000 BTU/H HORIZONTAL-DUCTED HEAT PUMP SYSTEM

MITSUBISHI ELECTRIC

Job Name:	
System Reference:	Date:

Indoor Unit:	Outdoor Unit:
PEAD-A42AA7	□ PUZ-A42NKA7 □ PUZ-A42NKA7-BS
	

INDOOR UNIT FEATURES

- Unobtrusive ceiling-concealed design for short-run ductwork.
- Wide ranging external static pressure (0.14-0.60 in. WG)
- Built-in condensate lift mechanism (up to 27-9/16")
- 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

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SPECIFICATIONS: PEAD-A42AA7 & PUZ-A42NKA7(-BS)

Cooling[1]	Maximum Capacity	BTU/H	42,000
	Rated Capacity	BTU/H	42,000
	Minimum Capacity	BTU/H	16,000
	Maximum Power Input	W	3,920
	Rated Power Input	W	3,920
	Moisture Removal	Pints/h	9.00
	Sensible Heat Factor		0.76
	Power Factor	%	93.6
Heating at 47°F[2]	Maximum Capacity	BTU/H	48,000
	Rated Capacity	BTU/H	45,000
	Minimum Capacity	BTU/H	18,100
	Maximum Power Input	W	3,700
	Rated Power Input	W	3,290
	Power Factor	%	92.9
Heating at 17°F[3]	Maximum Capacity	BTU/H	33,700
	Rated Capacity	BTU/H	30,600
	Maximum Power Input	W	3,080
	Rated Power Input	W	3,040
Efficiency	SEER		16.1
	EER[1]		10.7
	HSPF (IV)		10.0
	COP at 47°F[2]		4.00
	COP at 17°F[3]		2.95
Electrical	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
	Voltage: Indoor - Outdoor, S2-S3	V DC	24
	Short-circuit Current Rating (SCCR)	kA	12
	Recommended Fuse/Breaker Size (Outdoor)	A	30
	Recommended Wire Size (Indoor - Outdoor)	AWG	14
Indoor Unit	MCA	A	3.50
	Fan Motor Full Load Amperage	A	2.80
	Fan Motor Output	W	244
	Airflow Rate, Dry	CFM	1042-1254-1483
	Airflow Rate, Wet	CFM	1002-1214-1443
	External Static Pressure	in. WG	0.14-0.20-0.28-0.40-0.60
	Sound Pressure Level	dB(A)	36-40-44
	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

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	Unit Dimensions	W: In. (mm)	55-1/8 (1400)
		D: In. (mm)	28-7/8 (732)
		H: In. (mm)	9-7/8 (250)
	Package Dimensions	W: In.	65
		D: In.	34-11/16
		H: In.	13-7/16
	Unit Weight	Lbs. (kg)	91 (41)
	Package Weight	Lbs.	106
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp (Maximum / Minimum)	°F	90 DB, 73 WB / 66 DB, 59 WB
	Heating Intake Air Temp (Maximum / Minimum)	°F	82 DB / 50 DB
Outdoor Unit	MCA	A	25
	MOCP	A	31
	Fan Motor Full Load Amperage	A	0.5 + 0.5
	Fan Motor Output	W	74 + 74
	Airflow Rate	CFM	3,880
	Refrigerant Control		Electronic Expansion Valve
	Defrost Method		Reverse Cycle
	Heat Exchanger Type		Cross fin
	Sound Pressure Level, Cooling[1]	dB(A)	52
	Sound Pressure Level, Heating[2]	dB(A)	53
	Compressor Type		INVERTER-driven twin rotary
	Compressor Model		MNB33FBRMC-L
	Compressor Rated Load Amps	A	8
	Compressor Locked Rotor Amps	A	13
	Compressor Oil Type // Charge	oz.	FV50S // 45
	External Finish Color		Ivory Munsell 3Y 7.8/1.1
	Base Pan Heater		n/a
	Unit Dimensions	W: In. (mm)	41-5/16 (1050)
		D: In. (mm)	13+1-3/16 (330 + 30)
		H: In. (mm)	52-11/16 (1338)
	Package Dimensions	W: In.	42-15/16
		D: In.	17-11/16
		H: In.	56-4/16
	Unit Weight	Lbs. (kg)	214 (97)
	Package Weight	Lbs. (kg)	245 (111)
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 / -4 DB, -4 WB
	Thermal Lock-out / Re-start Temperatures**	°F	-8 / -4 DB
Refrigerant	Type		R410A
	Charge	Lbs, oz	10 lbs, 6 oz
Piping	Gas Pipe Size O.D. (Flared)	In. (mm)	5/8 (15.88)

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	Liquid Pipe Size O.D. (Flared)	In. (mm)	3/8 (9.52)
	Maximum Piping Length	Ft. (m)	165 (50)
	Maximum Height Difference	Ft. (m)	100 (30)
	Maximum Number of Bends		15

Notes

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

*Wind baffles required to operate below 23°F DB in cooling mode. PUZ with wind baffle: 0°F - 115°F.
**System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

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.

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ACCESSORIES: PEAD-A42AA7

Filter Box with MERV 13 Filters	□ FBM2-4-A
Wireless Signal Receiver	□ PAR-SA9CA-E
Wireless Signal Receiver	□ PAR-FA32MA-W
Wireless Signal Receiver	□ PAR-FA32MA-E
Wireless Remote Controller	□ PAR-FL32MA-E
kumo touch™ RedLINK™ Wireless Controller	□ MHK2
Deluxe MA Remote Controller	□ PAR-40MAAU
Simple MA Controller	□ PAC-YT53CRAU-J
Touch MA Controller	□ PAR-CT01MAU-SB
Airzone ZBS Wired Blueface Principal Controller White	□ AZZBSBLUEFACECB
Airzone ZBS Wired Think Controller White	□ AZZBSTHINKCB
Airzone ZBS Wireless Think Controller White	□ AZZBSTHINKRB
Airzone ZBS Wired Lite Controller White	□ AZZBSLITECB
Airzone ZBS Wireless Lite Controller White	□ AZZBSLITERB
Wired Remote Sensor	□ PAC-SE41TS-E
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Flush Mount Remote Temperature Sensor	□ PAC-USSEN001-FM-1
Wireless Interface 2	□ PAC-USWHS002-WF-2
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
Lockdown Bracket for Hand-held Remote Controllers	□ RCMKP1CB
Remote Operation Adapter[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
Advanced Blue Diamond Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	□ X87-721 - 208/230V
(30A/600V/UL) [fits 2" X 4" utility box] - Black	□ TAZ-MS303
(30A/600V/UL) [fits 2" X 4" utility box] - White	□ TAZ-MS303W

[1] Unable to use with wireless remote controller

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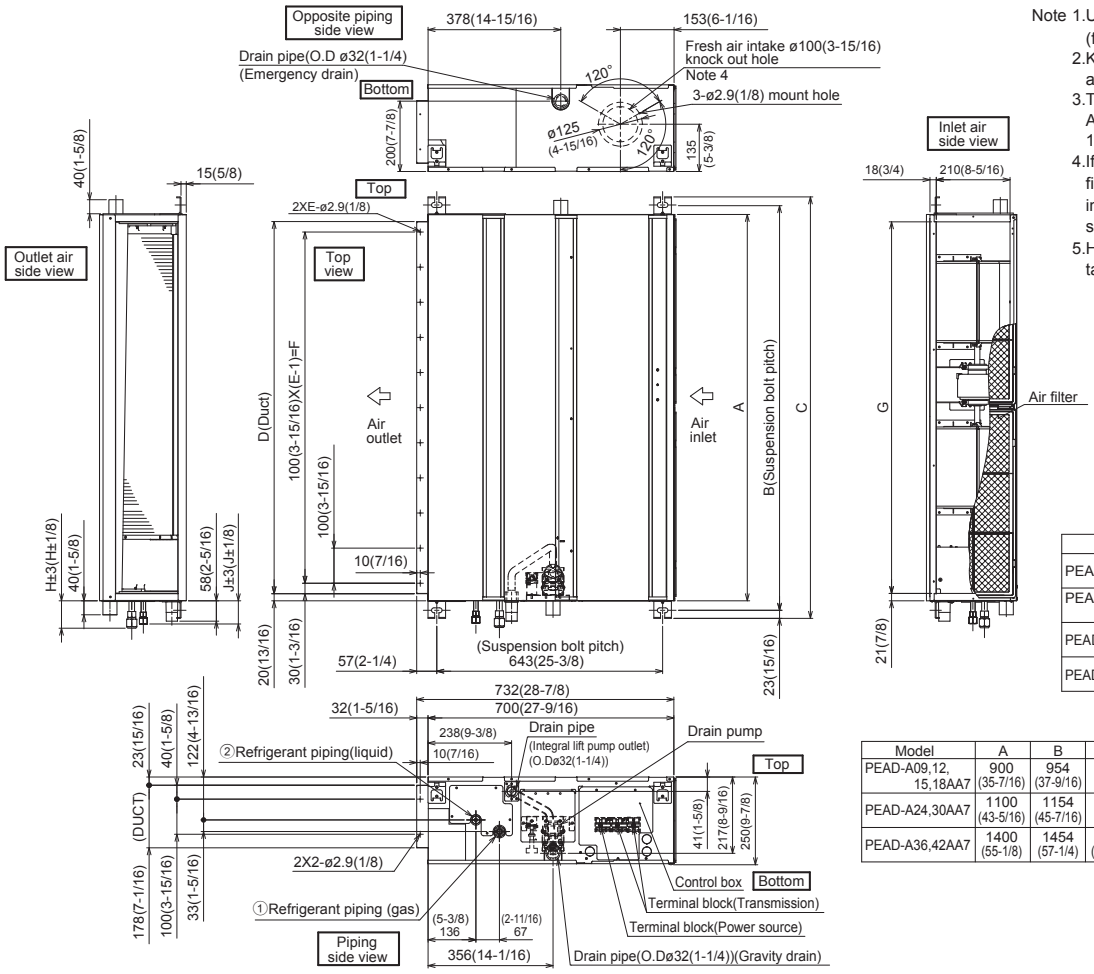
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ACCESSORIES: PUZ-A42NKA7(-BS)

Air Outlet Guide	□ PAC-SH96SG-E (two pieces are required)
Front Wind Baffle	□ WB-PA3 (two pieces are required)
Side Advanced Wind Baffle	□ WB-SD6
Rear Advanced Wind Baffle	□ WB-RE6
Drain Socket	□ PAC-SG61DS-E
M-NET Converter	□ PAC-SJ85MA-E
M-NET Converter	□ PAC-SJ95MA-E
Control/Service Tool	□ PAC-SK52ST
Condensing Unit Mounting Pad 24" x 42" x 3"	□ ULTRILITE2
Outdoor Unit Stand—12" High	□ QSMS1202M
Outdoor Unit Stand—18" High	□ QSMS1802M
Outdoor Unit Stand—24"High	□ QSMS2402M
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
3/8" x 5/8" x 10' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-10
3/8" x 5/8" x 15' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-15
3/8" x 5/8" x 30' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-30
3/8" x 5/8" x 50' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-50
3/8" x 5/8" x 65' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-65
3/8" x 5/8" x 100' / 1/2" Lineset (Twin-Tube Insulation)	□ MPLS385812T-100

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DIMENSIONS: PEAD-A42AA7



Note 1.Use an M10 screw for the suspension bolt (field supply).
2.Keep the service space for maintenance at the bottom.
3.This drawing is for PEAD-A24·30·36·42 AA7 models,which have 2 fans. PEAD-A09·12·15·18AA7 models have 1 fan.
4.If the inlet duct is used,remove the air filter (supplied with the unit), then install the filter (field supply) at the suction side.
5.Heat air to 0°C (32°F) or higher when taking fresh air with a fresh air intake.

Unit:mm(in.)

Model	J	①Gas pipe	②Liquid pipe
PEAD-A09AA7	62 (2-1/2)	ø9.52 (3/8)	ø6.35 (1/4)
PEAD-A12,15, 18AA7	62 (2-1/2)	ø12.7 (1/2)	ø6.35 (1/4)
PEAD-A24,30AA7	66 (2-5/8)	ø15.88 (5/8)	ø9.52 (3/8)
PEAD-A36,42AA7			

Unit:mm(in.)

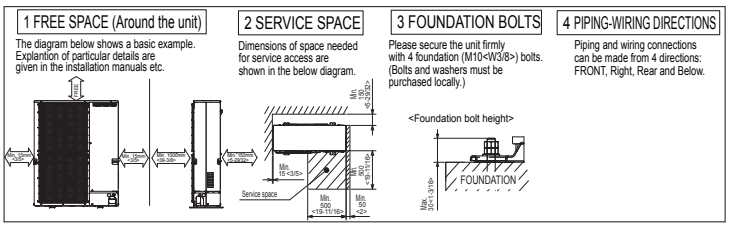
Model	A	B	C	D	E	F	G	H
PEAD-A09,12, 15,18AA7	900 (35-7/16)	954 (37-9/16)	1000 (39-3/8)	860 (33-7/8)	9	800 (31-1/2)	858 (33-13/16)	72 (2-7/8)
PEAD-A24,30AA7	1100 (43-5/16)	1154 (45-7/16)	1200 (47-1/4)	1060 (41-3/4)	11	1000 (39-3/8)	1058 (41-11/16)	78 (3-1/8)
PEAD-A36,42AA7	1400 (55-1/8)	1454 (57-1/4)	1500 (59-1/16)	1360 (53-9/16)	14	1300 (51-3/16)	1358 (53-1/2)	

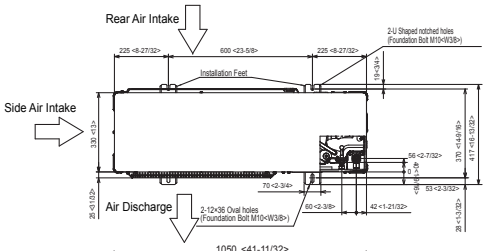
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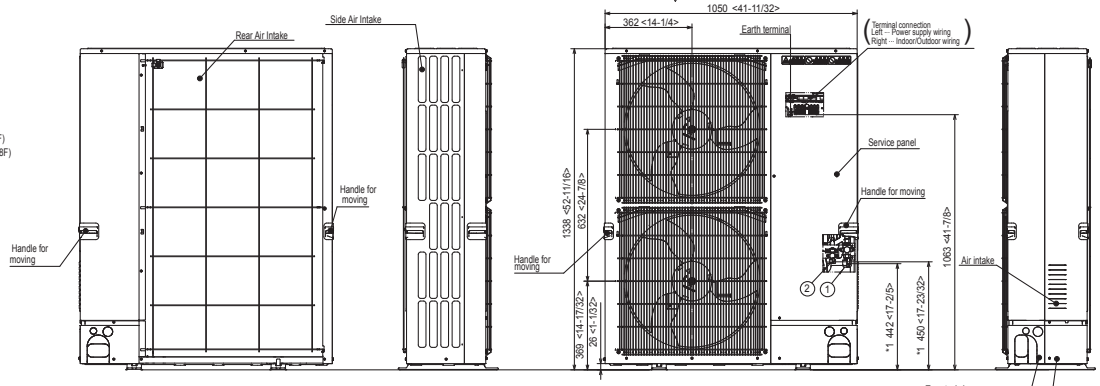
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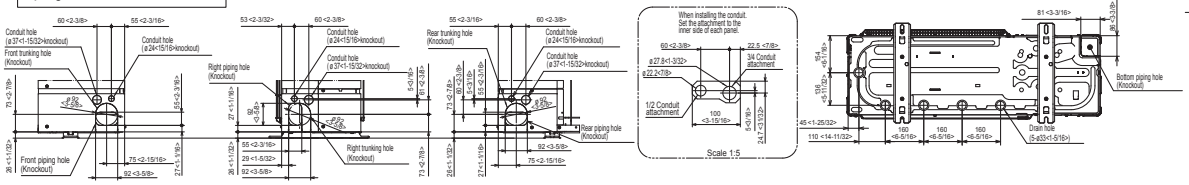


Example of Notes

① ··· Refrigerant GAS pipe connection (FLARE) ø15.88(5/8F)
② ··· Refrigerant LIQUID pipe connection (FLARE) ø9.52(3/8F)
*1 ··· Indication of STOP VALVE connection location.



Piping Knockout Hole Details



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Toll Free: 800-433-4822 www.mehvac.com

FORM# PEAD-A42AA7 / PUZ-A42NKA7(-BS) - 202003

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