

Job Name:

System Reference:

Date:

Indoor Unit:  
PVA-A42AA7

Outdoor Unit:  
 PUY-A42NKA7  
 PUY-A42NKA7-BS



### INDOOR UNIT FEATURES

- Ducted air handler provides a solution to cool and heat large zones
- Highly efficient totally enclosed ECM motor
- Selectable external static pressure: 0.30, 0.50 and 0.80 in.WG with 3 fan speeds at each static setting
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency
- Positive pressure cabinet with air leakage of less than 1.0% at 1.0 in.WG
- Unique blow through design allows simple coil cleaning when the blower is removed
- Multi-position installation: horizontal (left or right), vertical (up or down). For downflow configurations, the CMA-1 is recommended for proper management of condensate to prevent water blow-off in certain conditions
- Optional electric heat kit for additional heat capacity
- Optional humidifier control and ERV control

### OUTDOOR UNIT FEATURES

- Variable speed INVERTER-driven compressor
- Power receiver pre-charged with refrigerant volume for piping length up to 100 ft (70 ft. for A12/18/24/30)
- Low ambient cooling down to -40°F providing 100% capacity (only for PUY models with wind baffles installed)
- 24-hour continuous operation (cooling mode)
- High pressure protection
- Fast restarts in cooling mode (15 seconds for 12/18/36/42; 50 seconds for 24/30)
- Superior energy and operational efficiency

# SPECIFICATIONS: PVA-A42AA7 & PUY-A42NKA7-BS

Model Number	Indoor Unit		PVA-A42AA7	
	Outdoor Unit		PUY-A42NKA7	
			PUY-A42NKA7-BS	
Cooling <sup>1</sup>	Maximum Capacity	Btu/h	42,000	
	Rated Capacity	Btu/h	42,000	
	Minimum Capacity	Btu/h	15,000	
	Maximum Power Input	W	4,150	
	Rated Power Input	W	4,150	
	Moisture Removal	Pints/h	7.2	
	Sensible Heat Factor		0.81	
	Power Factor	%	87.60	
Efficiency	SEER		18.00	
	EER <sup>1</sup>		10.10	
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	
	Voltage: Indoor - Remote controller	V DC	12	
	Recommended Fuse/Breaker Size	A	30	
	Recommended Wire Size (Indoor - Outdoor)	AWG	14	
Indoor Unit	MCA	A	5.63	
	Fan Motor Full Load Amperage	A	4.50	
	Fan Motor Output	W	430	
	Airflow Rate, Dry	CFM	1040-1262-1485	
	Airflow Rate, Wet	CFM	n/a	
	External Static Pressure	in.WG	0.30-0.50-0.80	
	Sound Pressure Level	dB(A)	34-38-42	
	Drain Pipe Size	In. (mm)	3/4 FPT (19.05)	
	Condensate Lift Mechanism, Max. Distance	In. (mm)	n/a	
	Heat Exchanger Type		Plate fin coil	
	External Finish Color		Galvanized steel cabinet-Powder coated Slate Gray	
	Unit Dimensions	W: In. (mm)		25 (635)
		D: In. (mm)		21-5/8 (548)
H: In. (mm)			59-1/2 (1511)	
Unit Weight	Lbs. (kg)		172 (78)	
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp (Maximum / Minimum)	°F	90 DB, 73 WB / 66 DB, 59 WB	
Outdoor Unit	MCA	A	25	
	MOCP	A	31	
	Fan Motor Full Load Amperage	A	0.5 + 0.5	
	Fan Motor Output	W	74 + 74	

## SPECIFICATIONS: PVA-A42AA7 & PUY-A42NKA7-BS

Model Number	Indoor Unit		PVA-A42AA7
	Outdoor Unit		PUY-A42NKA7
			PUY-A42NKA7-BS
	Airflow Rate	CFM	3,880
	Refrigerant Control		Electronic Expansion Valve
	Heat Exchanger Type		Cross fin
	Sound Pressure Level, Cooling <sup>1</sup>	dB(A)	52
	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)	211 (96)
	Package Weight	Lbs. (kg)	243 (110)
Outdoor Unit Operating Temperature Range	Cooling Intake Air Temp (Maximum / Minimum)	°F	115 DB / -40* DB
Refrigerant	Type		R410A
	Charge	Lbs, oz	10 lbs, 6 oz
Piping	Gas Pipe Size O.D. (Flared)	In.(mm)	5/8 (15.88)
	Liquid Pipe Size O.D. (Flared)	In.(mm)	3/8 (9.52)
	Maximum Piping Length	Ft. (m)	225 (69)
	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)	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
--	--	----	------------------------------

\*Wind baffles required to operate below 23F DB in cooling mode. For PUY models, wind baffles can be utilized to extend the cooling operation range to -40F. Please refer to the wind baffle submittals to determine which baffles are required to meet the desired operation range.

\*\*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.

## ACCESSORIES: PVA-A42AA7

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
Wireless Temperature and Humidity Sensor	□ PAC-USWHS003-TH-1
Outside Air Sensor for MHK1	□ MOS1
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) <sup>1</sup>	□ 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
MegaBlue Blue Diamond Condensate Pump (110-230V) up to 170,000 Btu/h	□ X87-835
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
Separate Power Terminal Block Kit	□ SPTB1
Electric Heat Lockout Control	□ ETC-211000-MIT

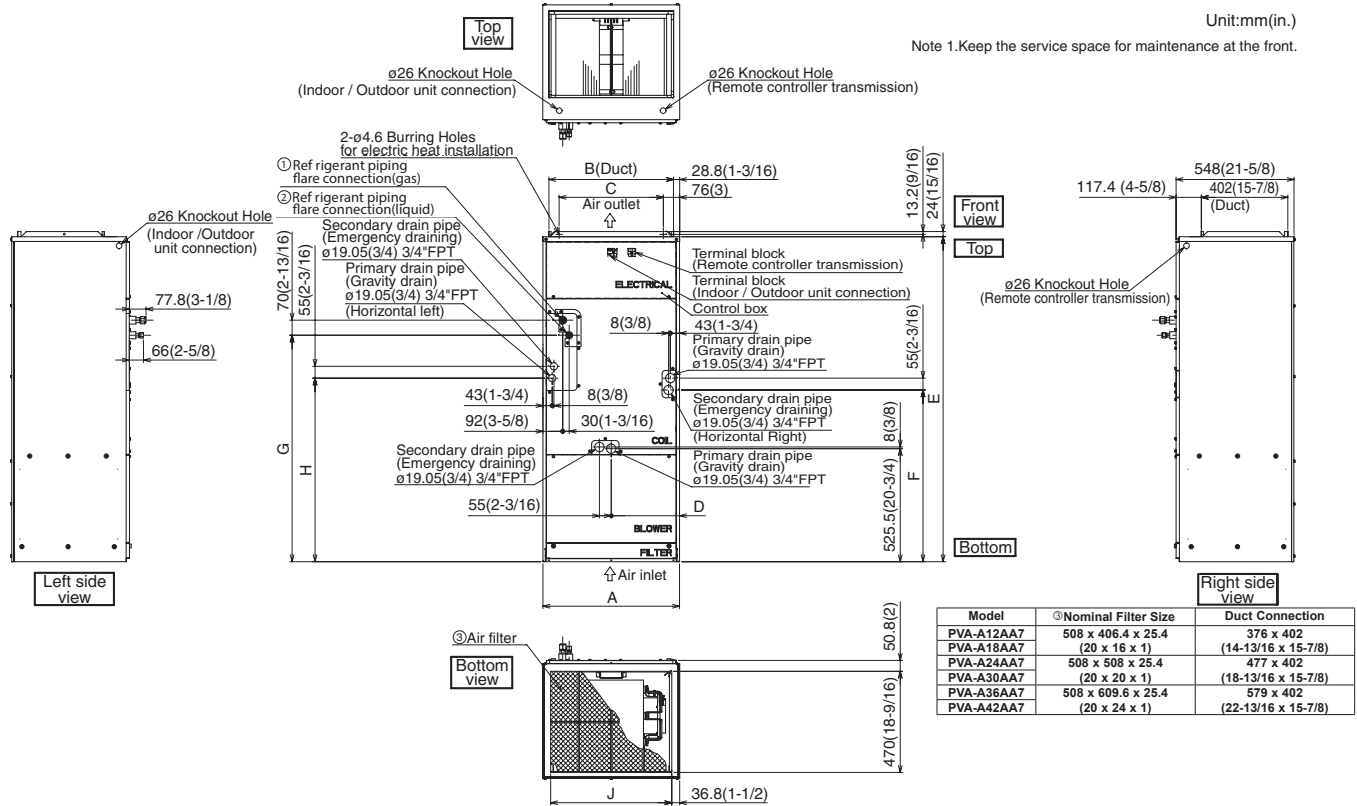
<sup>1</sup> Unable to use with wireless remote controller

## ACCESSORIES: PUY-A42NKA7(-BS)

Air Outlet Guide	<input type="checkbox"/> PAC-SH96SG-E (two pieces are required)
Front Wind Baffle	<input type="checkbox"/> WB-PA3 (two pieces are required)
Side Advanced Wind Baffle	<input type="checkbox"/> WB-SD6
Rear Advanced Wind Baffle	<input type="checkbox"/> WB-RE6
Drain Socket	<input type="checkbox"/> PAC-SG61DS-E
M-NET Converter	<input type="checkbox"/> PAC-SF83MA-E
M-NET Converter	<input type="checkbox"/> PAC-SJ95MA-E
Control/Service Tool	<input type="checkbox"/> PAC-SK52ST
Condensing Unit Mounting Pad 24" x 42" x 3"	<input type="checkbox"/> ULTRILITE2
Outdoor Unit Stand—12" High	<input type="checkbox"/> QSMS1202M
Outdoor Unit Stand—18" High	<input type="checkbox"/> QSMS1802M
Outdoor Unit Stand—24"High	<input type="checkbox"/> QSMS2402M
Heavy Duty Wall Mounting Bracket for Outdoor Units—Coated Steel	<input type="checkbox"/> QSWB2000M-1
Heavy Duty Wall Mounting Bracket for Outdoor Units—316 Series Stainless Steel	<input type="checkbox"/> QSWBSS
3/8" x 5/8" x 10' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-10
3/8" x 5/8" x 15' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-15
3/8" x 5/8" x 30' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-30
3/8" x 5/8" x 50' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-50
3/8" x 5/8" x 65' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-65
3/8" x 5/8" x 100' / 1/2" Lineset (Twin-Tube Insulation)	<input type="checkbox"/> MPLS385812T-100

# DIMENSIONS: PVA-A42AA7 & PUY-A42NHA7 (-BS)

## PVA-A42AA7

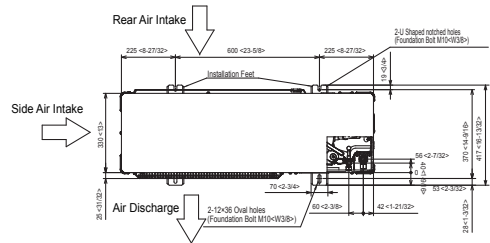
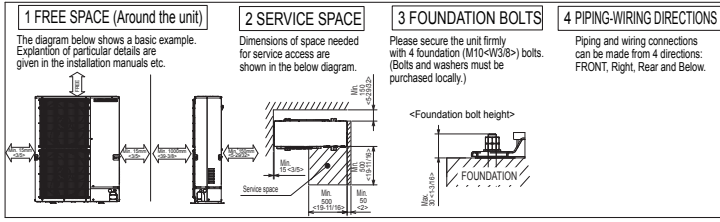


Model	A	B	C	D	E	F	G	H	J	Unit: mm (in.)	
										⊙Gas Pipe	⊙Liquid Pipe
PVA-A12AA7	432 (17)	376 (14-13/16)	281 (11-1/8)	224 (8-7/8)	1275 (50-1/4)	680 (26-13/16)	823 (32-7/16)	735.5 (29)	360 (14-3/16)	Φ 12.7 (1/2)	Φ 6.35 (1/4)
PVA-A18AA7	534 (21)	477 (18-13/16)	382.6 (15-1/8)	266.5 (10-1/2)	1378 (54-1/4)	737 (29-1/16)	953.5 (37-9/16)	792 (31-3/16)	461 (18-3/16)	Φ 15.88 (5/8)	Φ 9.52 (3/8)
PVA-A24AA7	635 (25)	579 (22-13/16)	484.6 (19-1/8)	317.5 (12-1/2)	1511 (59-1/2)	798.5 (31-7/16)	1053 (41-1/2)	853.5 (33-5/8)	563 (22-3/16)		

# DIMENSIONS: PVA-A42AA7 & PUY-A42NHA7 (-BS)

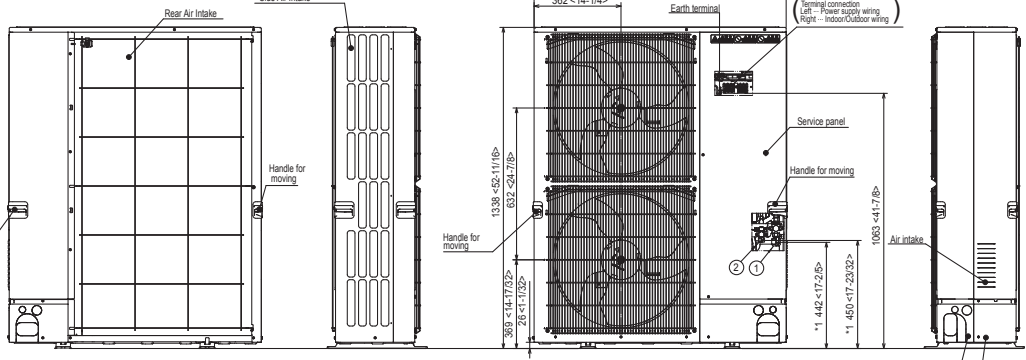
## PUY-A42NKA7(-BS)

Unit: mm<in>

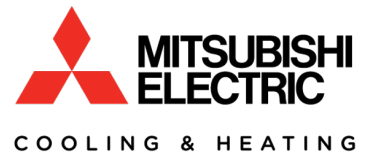
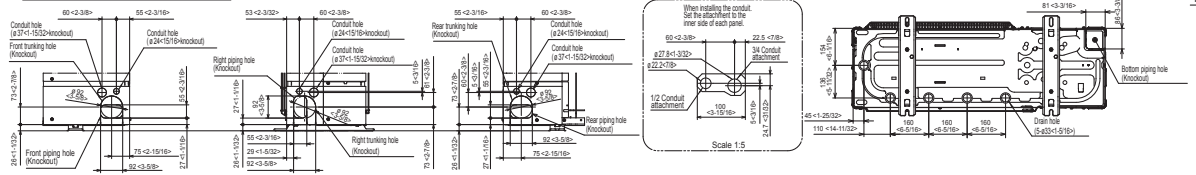


**Example of Notes**

- ① - Refrigerant GAS pipe connection (FLARE)  $\phi$ 15.88(5/8F)
- ② - Refrigerant LIQUID pipe connection (FLARE)  $\phi$ 9.52(3/8F)
- \*1 - Indication of STOP VALVE connection location.



**Piping Knockout Hole Details**



1340 Satellite Boulevard, Suwanee, GA 30024  
 Toll Free: 800-433-4822 www.mehvac.com



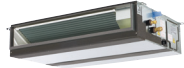
FORM# PVA-A42AA7 / PUY-A42NKA7(-BS) - 201810

Specifications are subject to change without notice.

© 2018 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Job Name: \_\_\_\_\_

System Reference: \_\_\_\_\_ Date: \_\_\_\_\_



Indoor Unit: PEAD-A42AA5



Outdoor Unit: PUZ-HA42NKA

### ACCESSORIES:

#### Indoor Unit

- Condensate Pump (BlueDiamond X87-711/721; 115/230V)
- Condensate Pump (Sauermann SI30-115/230; 115/230V)
- Filter Box & MERV 13 Filter (FBM2-4)
- Humidifier Control Relay (PAC-740)

#### Outdoor Unit

- Air Outlet Guide (PAC-SG59SG-E [x2])
  - Wind Baffle (WB-PA3 [x2])
- \*Allows operation to 0° F (-18° C).
- Mounting Base (QSMS1202)
  - Wall Bracket (QSWB2000M-1)

#### Controls

- Wireless Controller (MHK1)
- Advanced Wired Controller (PAR-31MAA)
- Simple Wired Controller (PAC-YT53CRAU)
- M-NET Adapter (PAC-SF83MA-E)
- Temperature Sensor (PAC-SE41TS)

### SPECIFICATIONS:

#### Rated Conditions (Capacity / Input)\*

Cooling	Btu/h / W	42,000 / 4,200
Heating at 47° F	Btu/h / W	48,000 / 3,800
Heating at 17° F	Btu/h / W	43,000 / 4,850

\* Rating Conditions per AHRI Standard:  
 Cooling | Indoor: 80° F (27° C)DB / 67° F (19° C)WB; Outdoor: 95° F (35° C)DB / 75° F (24° C)WB  
 Heating at 47° F | Indoor: 70° F (21° C)DB / 60° F (16° C)WB; Outdoor: 47° F (8° C)DB / 43° F (6° C)WB  
 Heating at 17° F | Indoor: 70° F (21° C)DB / 60° F (16° C)WB; Outdoor: 17° F (-8° C)DB / 15° F (-9° C)WB

#### Capacity Range

Cooling	Btu/h	19,000 - 42,000
Heating at 47° F	Btu/h	21,000 - 54,000

#### Operating Range

Cooling	0° F** to 115° F (-18° C to 46° C) DB
Heating	-13° F to 70° F (-25° C to 21° C) DB

\*\* With optional wind baffle accessory installed. If not installed, the min. temp. will be 23° F (-5° C) DB.

#### AHRI Efficiency Ratings

EER	10.0
SEER	14.3
HSPF	10.8
COP at 47° F	3.70
COP at 17° F	2.60

Electrical Power Requirements	208 / 230V, 1-Phase, 60 Hz
-------------------------------	----------------------------

Minimum Circuit Ampacity (MCA)		
Indoor / Outdoor	A	3.30 / 37

Indoor Unit		
Blower Motor (ECM)	F.L.A.	2.64
Blower Motor Output	W	244
SHF / Moisture Removal		0.76 / 9.0 pt./h
External Static Pressure	In. WG	0.14-0.20-0.28-0.40-0.60
Drain Lift Mechanism (Included)	H: In.	27-9/16

Outdoor Unit		
Compressor		INVERTER
Fan Motor (ECM)	F.L.A.	0.4+0.4
MOCP	A	44

Airflow Rate (Low-Mid-Hi)			
Indoor (Cooling)	DRY	CFM	847-1,024-1,201
	WET		777-953-1,130
Outdoor	DRY		3,320

Sound Pressure Level			
Indoor (Low-Mid-Hi)		dB(A)	33-38-42
Outdoor	Cooling		49
	Heating		51

External Dimensions			
Indoor (H x W x D)	In.(mm)	9-7/8 x 55-1/8 x 28-7/8 (250 x 1,400 x 732)	
Outdoor (H x W x D)		52-11/16 x 41-5/16 x 13 + 1-3/16 (1,338 x 800 x 330 + 30)	

Net Weight		
Indoor	Lbs.(kg)	91 (41)
Outdoor		287 (130)

External Finish	
Indoor	Galvanized-steel Sheet
Outdoor	Munsell No. 3Y 7.8 / 1.1

Refrigerant	R410A ; 13lbs. 4oz.
-------------	---------------------

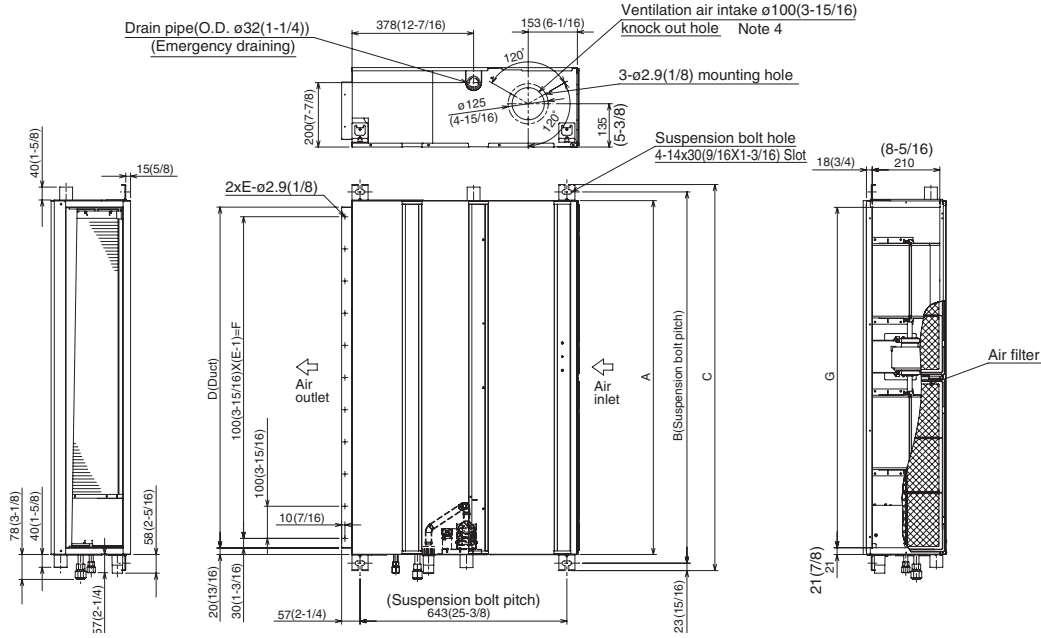
Refrigerant Piping (Flared)		
Liquid (High Pressure)	In.(mm)	3/8 (9.52)
Gas (Low Pressure)		5/8 (15.88)
Maximum Total Refrigerant Pipe Length	Ft. (m)	245 (75)
Maximum Vertical Separation	Ft. (m)	100 (30)



# DIMENSIONS: PEAD-A42AA5 & PUZ-HA42NKA

## PEAD-A42AA5

Unit: mm (inch)

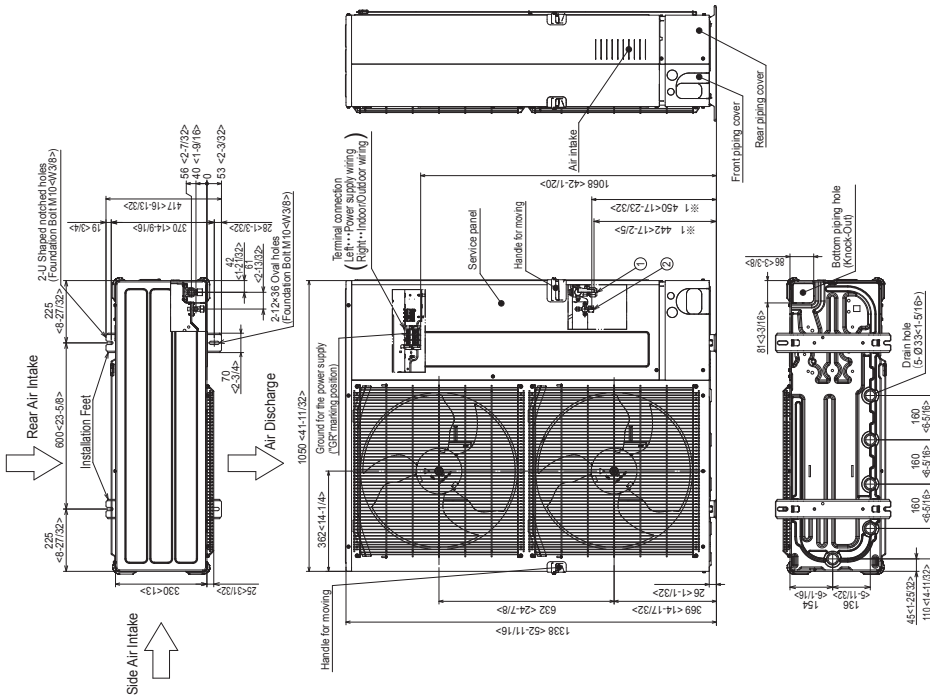


Model	A	B	C	D	E	F	G	H	J	K	L	M	N	① Gas pipe	② Liquid pipe
PEAD-A24, 30AA4	1100 (43-5/16)	1154 (45-7/16)	1200 (47-1/4)	1060 (41-3/4)	11	1000 (39-3/8)	1058 (41-11/16)	1200 (47-1/4)	49 (1-15/16)	330 (13)	4	990 (39)	10	ø15.88 (5/8)	ø9.52 (3/8)
PEAD-A36, 42AA4	1400 (55-1/8)	1454 (57-1/4)	1500 (59-1/16)	1360 (53-9/16)	14	1300 (51-3/16)	1358 (53-1/2)	1500 (59-1/16)	54 (2-3/16)	320 (12-5/8)	5	1280 (50-7/16)	12		

- NOTE 1. Use M10 screw for the Suspension bolt (field supply).  
 2. Keep the service space for the maintenance at the bottom.  
 3. This chart indicates for PEAD-A24-30-36-42AA4 models, which have 2 fans.  
 4. In case of the inlet duct is used, remove the air filter (supplied with the unit), then install a filter (field supplied) at suction side.

## PUZ-HA42NKA

Unit: mm<inch>



COOLING & HEATING

1340 Satellite Boulevard, Suwanee, GA 30024  
 Toll Free: 800-433-4822 www.mehvac.com

