

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 ¹	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 ¹		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 ¹	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)	¹ Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
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*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) 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
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

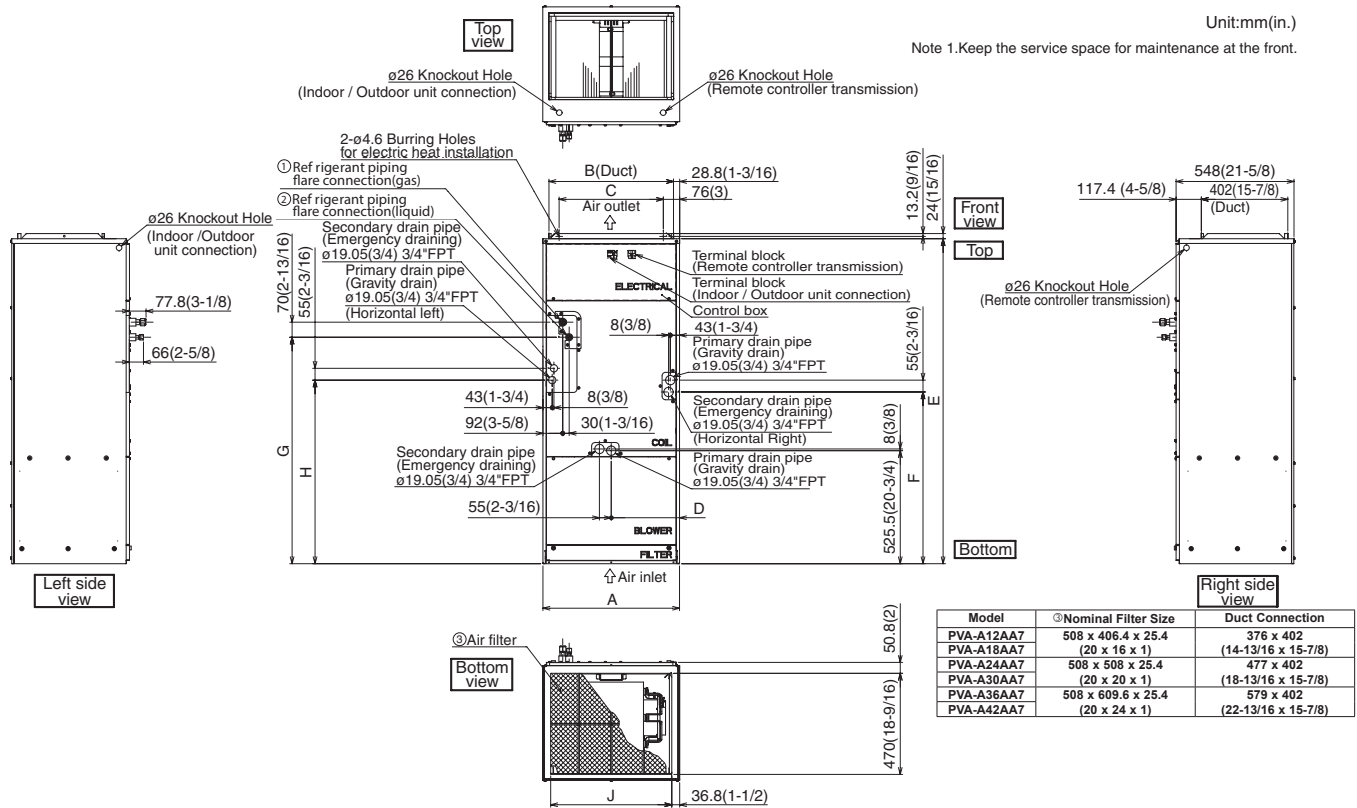
¹ Unable to use with wireless remote controller

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



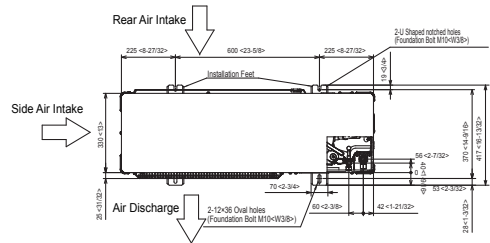
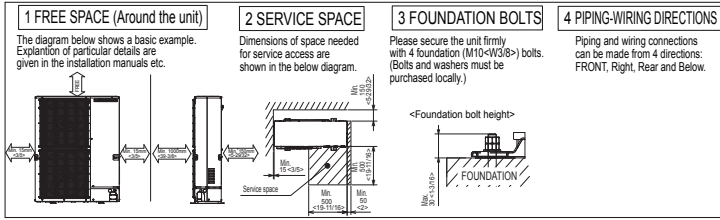
Model	⊙Nominal Filter Size	Duct Connection
PVA-A12AA7	508 x 406.4 x 25.4 (20 x 16 x 1)	376 x 402 (14-13/16 x 15-7/8)
PVA-A18AA7	508 x 508 x 25.4 (20 x 20 x 1)	477 x 402 (18-13/16 x 15-7/8)
PVA-A24AA7	508 x 609.6 x 25.4 (20 x 24 x 1)	579 x 402 (22-13/16 x 15-7/8)
PVA-A30AA7	508 x 609.6 x 25.4 (20 x 24 x 1)	579 x 402 (22-13/16 x 15-7/8)
PVA-A36AA7	508 x 609.6 x 25.4 (20 x 24 x 1)	579 x 402 (22-13/16 x 15-7/8)
PVA-A42AA7	508 x 609.6 x 25.4 (20 x 24 x 1)	579 x 402 (22-13/16 x 15-7/8)

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)	Φ 15.88 (5/8)	Φ 9.52 (3/8)

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

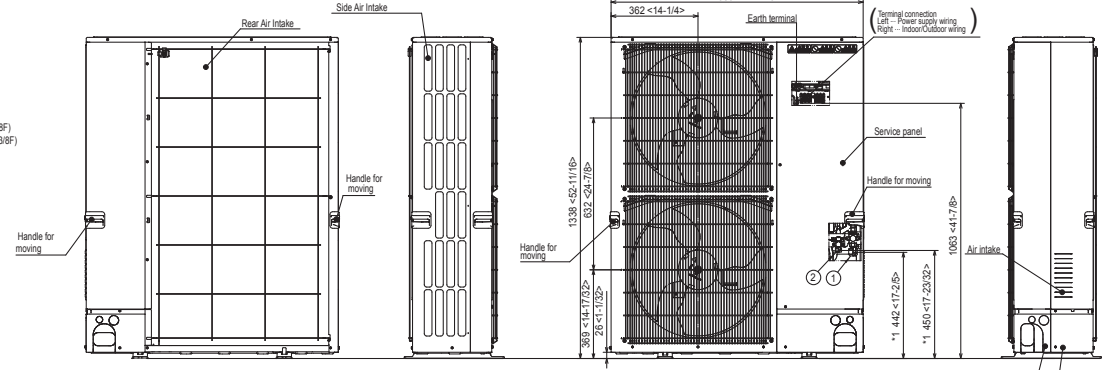
PUY-A42NKA7(-BS)

Unit: mm<in>

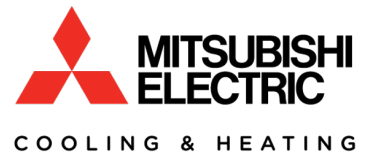
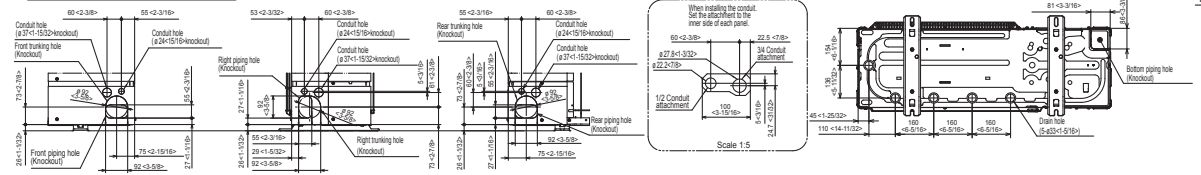


Example of Notes

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