

Job Name:

System Reference:

Date:

Indoor Unit:  
PVA-A42AA7

Outdoor Unit:  
 PUZ-A42NKA7  
 PUZ-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
- 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: PVA-A42AA7 & PUZ-A42NKA7-BS

Model number	Indoor unit		PVA-A42AA7
	Outdoor unit		PUZ-A42NKA7
			PUZ-A42NKA7-BA
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	7.90
	Sensible Heat Factor		0.81
	Power factor	%	87.60
Heating at 47° F <sup>2</sup>	Maximum Capacity	Btu/h	48,000
	Rated Capacity	Btu/h	46,000
	Minimum Capacity	Btu/h	18,100
	Maximum Power Input	W	4,320
	Rated Power Input	W	3,900
	Power factor	%	95.40
Heating at 17° F <sup>3</sup>	Maximum Capacity	Btu/h	31,400
	Rated Capacity	Btu/h	28,400
	Maximum Power Input	W	3,490
	Rated Power Input	W	3,440
Efficiency	SEER		18.00
	EER <sup>1</sup>		10.10
	HSPF (IV)		9.30
	COP at 47° F <sup>2</sup>		3.45
	COP at 17° F <sup>3</sup>		2.42
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)

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	Outdoor unit		PUZ-A42NKA7
			PUZ-A42NKA7-BA
	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)	78 (172)	
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 <sup>1</sup>	dB(A)	52
	Sound Pressure Level, Heating <sup>2</sup>	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.	214 (97)	
Package Weight	Lbs.	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

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Model number	Indoor unit		PVA-A42AA7
	Outdoor unit		PUZ-A42NKA7
			PUZ-A42NKA7-BA
	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)	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)	<sup>1</sup> Cooling (Indoor // Outdoor)	°F	80 DB, 67 WB // 95 DB, 75 WB
	<sup>2</sup> Heating at 47°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 47 DB, 43 WB
	<sup>3</sup> Heating at 17°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 17 DB, 15 WB
Conditions	<sup>4</sup> 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.

\*\*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
Electric Heat Kit for Multi-position AHU	□ EH10-MPA-L(B)
Electric Heat Kit for Multi-position AHU	□ EH15-MPAS- L(B)
Electric Heat Kit for Multi-position AHU	□ EH17- MPAS-L(B)

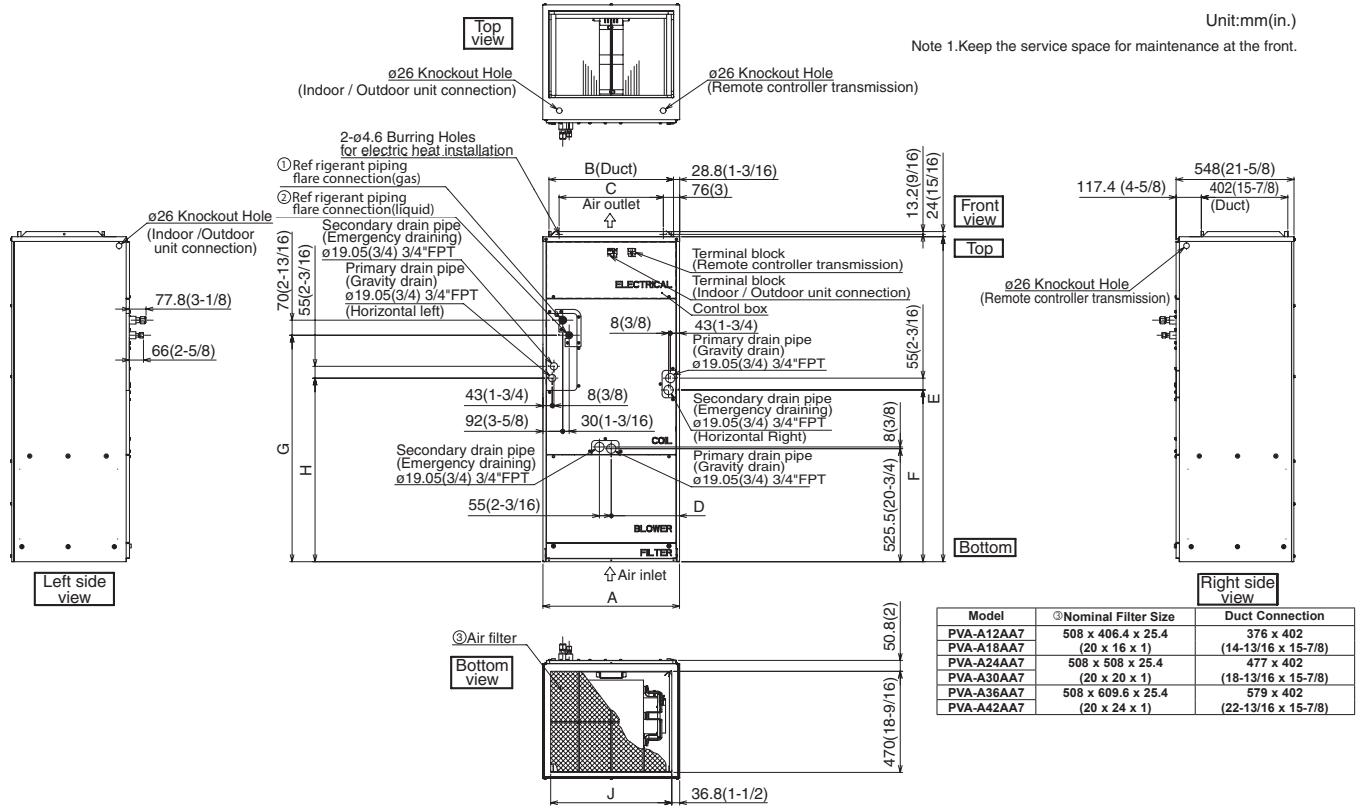
<sup>1</sup> Unable to use with wireless remote controller

## ACCESSORIES: PUZ-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)
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 & PUZ-A42NKA7 (-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		
PVA-A36AA7		
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										Φ 15.88 (5/8)	Φ 9.52 (3/8)
PVA-A24AA7	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)		
PVA-A30AA7											
PVA-A36AA7											
PVA-A42AA7	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)		

