PLA-A42EA7 & PUZ-A42NKA7
42,000 BTU/H 3' X 3' CEILING CASSETTE
42,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR

American Standard HEATING & AIR CONDITIONING

MITSUBISHI ELECTRIC

Job Name:

System Reference: Date:

Indoor Unit PLA-A42EA7

Outdoor Unit PUZ-A42NKA7

INDOOR UNIT FEATURES

- Space-efficient ductless installation
- Equipped with 3D i-see Sensor® for enhanced comfort and energy efficiency
- Airflow settings for high and low ceiling applications
- Individual vane settings for direct/indirect airflow control or variable airflow patterns
- Knockouts for outside-air intake and branch-duct run
- Filter indicator signal
- Easy-to-clean, washable filter (optional high-efficiency filter available - requires multi-function casement)
- Built-in condensate lift mechanism
- Ideal for retail shops, classrooms, office spaces, conference centers, building lobbies, and more
- Multiple control options available:
  - kumo cloud® smart device app for remote access
  - Third-party interface options
  - Wired or wireless controllers

OUTDOOR UNIT FEATURES

- Variable speed INVERTER-driven compressor
- Pre-charged with refrigerant volume for piping length up to 100 ft
- Low ambient cooling down to 0°F providing 100% capacity
- 24-hour continuous operation (cooling mode)
- High pressure protection
- Fast restart
- Superior energy and operational efficiency
- 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 Heat exchanger coil to protect it against airborne contaminants.
  - Heat exchanger coil and base panel rated for 2,000 hours in accordance with ASTM B117 testing

*Seacoast protection standard from 2022 production

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SPECIFICATIONS: PLA-A42EA7 & PUZ-A42NKA7

Cooling at 95°F[1]	Maximum Capacity	BTU/H	42,000
	Rated Capacity	BTU/H	42,000
	Minimum Capacity	BTU/H	16,000
	Maximum Power Input	W	3,590
	Rated Power Input	W	3,590
	Moisture Removal	Pints/h	7.9
	Sensible Heat Factor		0.79
	Power Factor [208V / 230V]	%	94.6 / 94.6
Heating at 47°F[2]	Maximum Capacity	BTU/H	48,000
	Rated Capacity	BTU/H	45,000
	Minimum Capacity	BTU/H	18,000
	Maximum Power Input	W	3,820
	Rated Power Input	W	3,290
	Power Factor [208V / 230V]	%	94.1 / 94.1
Heating at 17°F[3]	Maximum Capacity	BTU/H	30,800
	Rated Capacity	BTU/H	28,000
	Maximum Power Input	W	3,110
	Rated Power Input	W	3,070
Heating at 5°F[4]	Maximum Capacity	BTU/H	26,900
	Maximum Power Input	W	3,200
Efficiency	SEER | SEER2		21.0 | 21.5
	EER[1] | EER2[1]		11.6 | 11.6
	HSPF [IV] | HSPF2 [IV]		10.0 | 9.4
	COP at 47°F[2]		4.0
	COP at 17°F at Maximum Capacity[3]		2.91
	COP at 5°F at Maximum Capacity[4]		2.46
	ENERGY STAR® Certified		No
Electrical	Voltage, Phase, Frequency		208/230, 1, 60
	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	5
	Recommended Fuse/Breaker Size (Oudoor)	A	30
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Power Supply		Indoor unit is powered by the outdoor unit
Indoor Unit	MCA	A	2.0
	Fan Motor Full Load Amperage	A	0.95
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	740–920–1,060–1,200
	Airflow Rate at Cooling, Wet	CFM	700–880–1,020–1,160
	Airflow Rate at Heating, Dry	CFM	740–920–1,060–1,200
	Sound Pressure Level [Cooling]	dB[A]	34–38–42–45
	Sound Pressure Level [Heating]	dB[A]	34–38–42–45
	Drain Pipe Size	In. [mm]	1-1/4 [32]
	Condensate Lift Mechanism, Maximum Distance	In. [mm]	33-7/16 [849]
	Coating on Heat Exchanger		—
	External Finish Color		White Munsell 6.4Y 8.9/0.4
	Unit Dimensions	W x D x H: In. [mm]	33-1/16 // 37-13/32 x 33-1/16 // 37-13/32 x 11-3/4 // 1-9/16 [840 // 950 x 840 // 950 x 298 // 40]
	Package Dimensions	W x D x H: In. [mm]	35-9/16 // 39-6/16 x 34-5/16 // 38-3/16 x 16-9/16 // 4-12/16 [903 // 1,000 x 871 // 970 x 421 // 121]
	Unit Weight	Lbs. [kg]	56 // 11 [25 // 5]
	Package Weight	Lbs. [kg]	77 [35]
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 72 WB / 66 DB, 61 WB
	Heating Intake Air Temp [Maximum / Minimum]	°F	77 DB / 59 DB

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
Conditions	[4]Heating at 5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // 5 DB, 4 WB

*Indoor/Outdoor Unit Operating Temperature Range (Cooling Air Temp [Maximum / Minimum]):
- Applications should be restricted to comfort cooling only; equipment cooling applications are not recommended for low ambient temperature conditions.
  - » Wind baffles required to operate below 23°F DB in cooling mode.
  - » Heat pump system with wind baffle: 0°F - 115°F.
  - » Refer to wind baffle documentation for further information.

**Outdoor Unit Operating Temperature Range (Cooling Thermal Lock-out / Re-start Temperatures; Heating Thermal Lock-out / Re-start Temperatures):
- System cuts out in heating mode to avoid thermistor error and automatically restarts at these temperatures.

***Blue Fin Coating Standard from 2022 production:
- PU(Y/Z)-A(12/18)NKA7 - Beginning with serial number 12U*****
- PU(Y/Z)-A(24/30/36/42)NKA7 - Beginning with serial number 1ZU*****

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SPECIFICATIONS: PLA-A42EA7 & PUZ-A42NKA7

Outdoor Unit	MCA	A	25.0
	MOCP	A	31
	Fan Motor Full Load Amperage	A	0.5 + 0.5
	Fan Motor Output	W	74
	Airflow Rate [Cooling / Heating]	CFM	3880 / 3880
	Refrigerant Control		LEV
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger		Blue Fin Coating***
	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	13.0
	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 x D x H: In. [mm]	41-5/16 x 13 (+1-3/16) x 52-11/16 [1050 x 330 (+30) x 1338]
	Package Dimensions	W x D x H: In. [mm]	42-15/16 x 17-11/16 x 56-4/16 [1091 x 450 x 1429]
	Unit Weight	Lbs. [kg]	214 [97]
	Package Weight	Lbs. [kg]	245 [111]
Outdoor Unit Operating Temperature Range	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 0 DB
	Heating Air Temp [Maximum / Minimum]	°F	70 DB, 59 WB / -4 DB, -4 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-8 / -4
Refrigerant	Type		R410A
	Pre-Charged Refrigerant Amount	Lbs, oz	10.0, 6.0
	Maximum Pre-Charged Piping Length	Ft. [m]	100.0 [30.0]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0.7 [50]
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:

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INDOOR UNIT ACCESSORIES: PLA-A42EA7

Control Interface	3-Pin Connector	☐ PAC-715AD
	Airzone ZBS Wired Blueface Principal Controller White	☐ AZZBSBLUEFACECB
	Airzone ZBS Wired Blueface Principal Controller White	☐ AZZBSBLUEZEROCB
	Airzone ZBS Wired Lite Controller White	☐ AZZBSLITECB
	Airzone ZBS Wireless Lite Controller White	☐ AZZBSLITERB
	Airzone ZBS Wireless Think Controller White	☐ AZZBSTHINKRB
	BACnet® and Modbus® Interface	☐ PAC-UKPRC001-CN-1
	CN24 Relay Kit	☐ CN24RELAY-KIT-CM3
	IT Extender	☐ PAC-WHS01IE-E
	kumo station® for kumo cloud®	☐ TAC-WHS01HC-E
	Remote Operation Adapter‡	☐ PAC-SF40RM-E
	Thermostat Interface	☐ PAC-US444CN-1
	Thermostat Interface	☐ PAC-US445CN-1
	USNAP Adapter	☐ PAC-WHS01UP-E
	Wireless Interface for kumo cloud®	☐ PAC-USWHS002-WF-2
Remote Sensor	Flush Mount Remote Temperature Sensor	☐ PAC-USSEN002-FM-1
	Flush Mount Temperature Sensor	☐ PAC-USSEN001-FM-1
	Remote Temperature Sensor	☐ PAC-SE41TS-E
	Wireless temperature and humitity sensor for kumo cloud®	☐ PAC-USWHS003-TH-1
Wired Remote Controller	Deluxe Wired MA Remote Controller†	☐ AAR-40MAAU
	Simple Ductless Wired Remote Controller	☐ PAC-SDW01RC-1
	Simple MA Remote Controller†	☐ PAC-YT53CRAU-J
	Touch MA Controller†	☐ PAR-CT01MAU-SB
Wireless Remote Controller	kumo touch™ RedLINK™ Wireless Controller	☐ MHK2
	Lockdown bracket for remote controller	☐ RCMKP1CB
	Wireless MA Receiver	☐ PAR-SR32MA-E
	Wireless MA Remote Controller	☐ PAR-FL32MA-E
	Wireless Remote Contoller	☐ PAR-SL101A-E
	Wireless Signal Receiver Panel	☐ PAR-SR4LU-E
Casement	Multi-function Casement	☐ PAC-SJ41TM-E
Condensate	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	☐ X87-721
	Blue Diamond (MegaBlue Advanced) Condensate Pump w/ Reservoir & Sensor	☐ X87-835
	Blue Diamond Sensor Extension Cable — 15 Ft.	☐ C13-103
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	☐ COMBI
Disconnect Switch	(30A/600V/UL) [fits 2” X 4” utility box] - Black	☐ TAZ-MS303
	(30A/600V/UL) [fits 2” X 4” utility box] - White	☐ TAZ-MS303W
Filter	High Efficiency Filter Element**	☐ PAC-SH59KF-E
i-see Sensor® Panel	Grille with 3D i-see Sensor® (required)	✔ PLP-41EAEU
Lineset	10’ x 3/8” x 10’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-10
	100’ x 3/8” x 100’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-100
	15’ x 3/8” x 15’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-15
	30’ x 3/8” x 30’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-30
	50’ x 3/8” x 50’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-50
	65’ x 3/8” x 65’ x 5/8” Lineset (Twin-Tube Insulation)	☐ MPLS385812T-65
Shutter Plate	Shutter Plate	☐ PAC-SJ37SP-E
Space Panel	Space Panel	☐ PAC-SJ38AS-E

NOTES:
‡PAC-SF40RM-E (Unable to use with wireless remote controller)

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OUTDOOR UNIT ACCESSORIES: PUZ-A42NKA7

Air Outlet Guide	Air Outlet Guide (1 Piece)	☐ PAC-SG59SG-E
	Air Outlet Guide (1 Piece)	☐ PAC-SH96SG-E (two pieces are required)
Control/Service Tool	Control/Service Tool	☐ PAC-SK52ST
	M- & P-Series Maintenance Tool Cable Set	☐ M21EC0397
	USB/UART Conversion Cable (Required for all laptop connection)	☐ M21EC1397
M-NET Converter	M-NET Converter	☐ PAC-SJ85MA-E
	M-NET Converter	☐ PAC-SJ95MA-E
Mini-Split Wire	14 Gauge, 4 wire MiniSplit Cable—250 ft. roll	☐ S144-250
	14 Gauge, 4 wire MiniSplit Cable—50 ft. roll	☐ S144-50
	16 Gauge, 4 wire MiniSplit Cable—250 ft. roll	☐ S164-250
	16 Gauge, 4 wire MiniSplit Cable—50 ft. roll	☐ S164-50
Mounting Pad	Condensing Unit Mounting Pad: 24” x 42” x 3”	☐ ULTRILITE2
Stand	18” Dual Fan Stand	☐ QSMS1802M
	24” Dual Fan Stand	☐ QSMS2402M
	Condenser Wall Bracket	☐ QSWB2000M-1
	Condenser Wall Bracket - Stainless Steel Finish	☐ QSWBSS
	Outdoor Unit Stand — 12” High	☐ QSMS1202M
Wind Baffle	Front Wind Baffle	☐ WB-PA3 (two pieces are required)
	Rear Wind Baffle	☐ WB-RE6
	Side Advanced Wind Baffle	☐ WB-SD6

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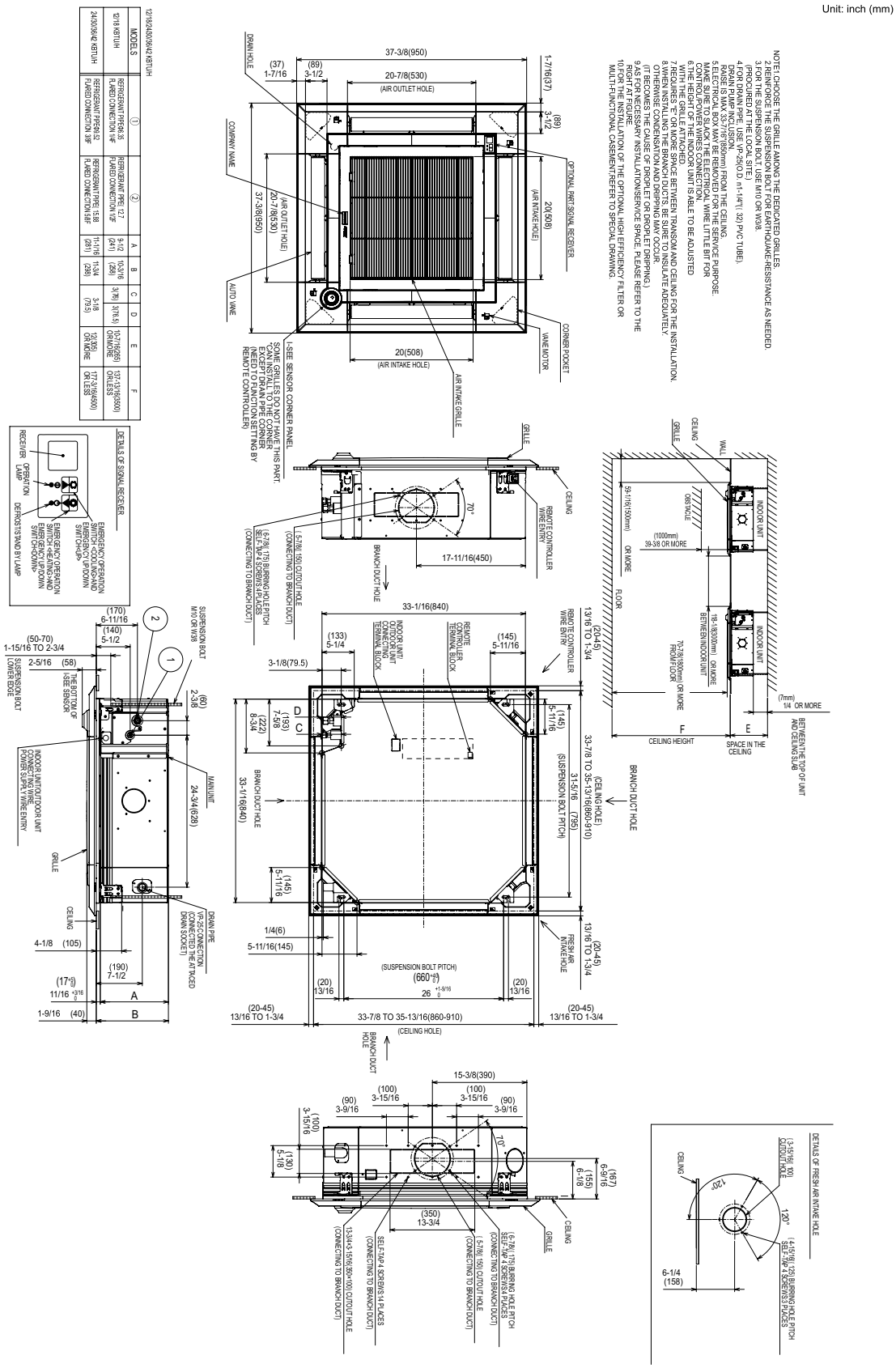
INDOOR UNIT DIMENSIONS: PLA-A42EA7



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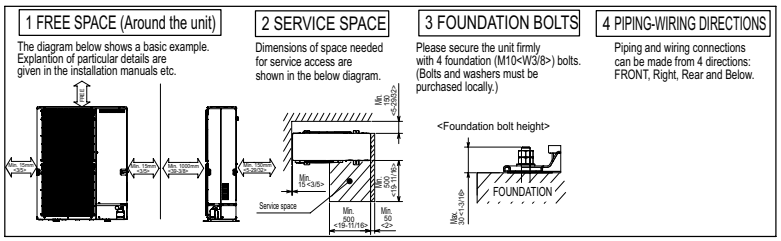
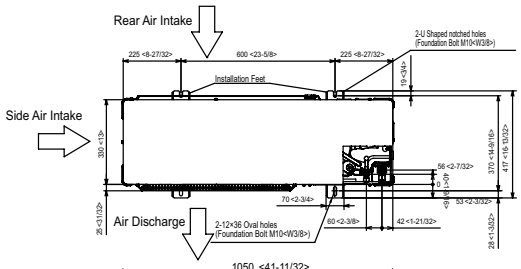
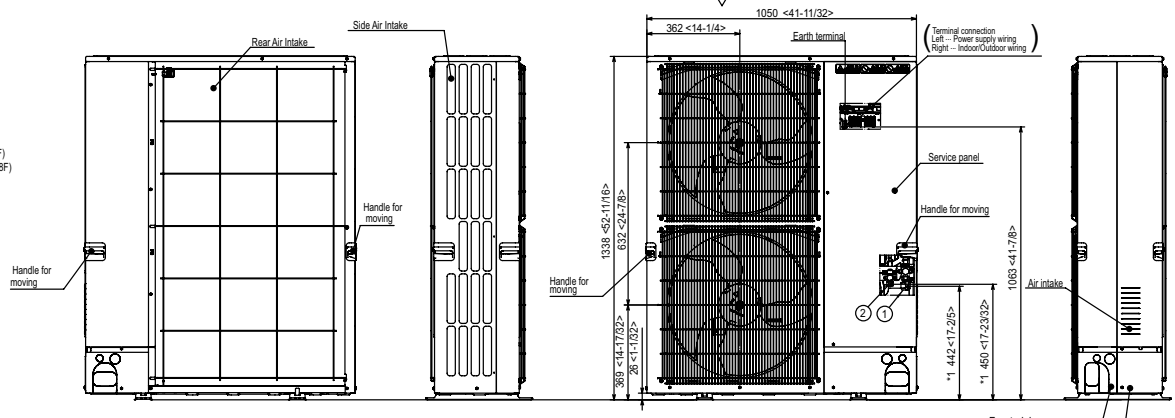
OUTDOOR UNIT DIMENSIONS: PUZ-A42NKA7

Unit: mm<in>



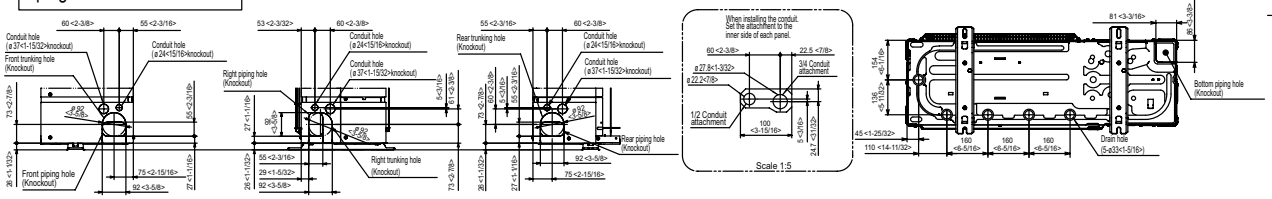




Example of Notes

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



FORM# PLA-A42EA7 & PUZ-A42NKA7 - 202304

Specifications are subject to change without notice.

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