TPLA0A0421EA70B & TRUZA0421KA70NA
42,000 BTU/H 3' X 3' CEILING CASSETTE
42,000 BTU/H HEAT PUMP UNIVERSAL OUTDOOR

Job Name:

System Reference: Date:

Indoor Unit.....TPLA0A0421EA70B

Outdoor Unit.....TRUZA0421KA70NA

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: TPLA0A0421EA70B & TRUZA0421KA70NA

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: TPLA0A0421EA70B & TRUZA0421KA70NA

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

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INDOOR UNIT ACCESSORIES: TPLA0A0421EA70B

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-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†	TAR-40MAAU
	Simple MA Remote Controller†	TAC-YT53CRAU-J
	Touch MA Controller†	TAR-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	TAR-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)	TLP-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: TRUZA0421KA70NA

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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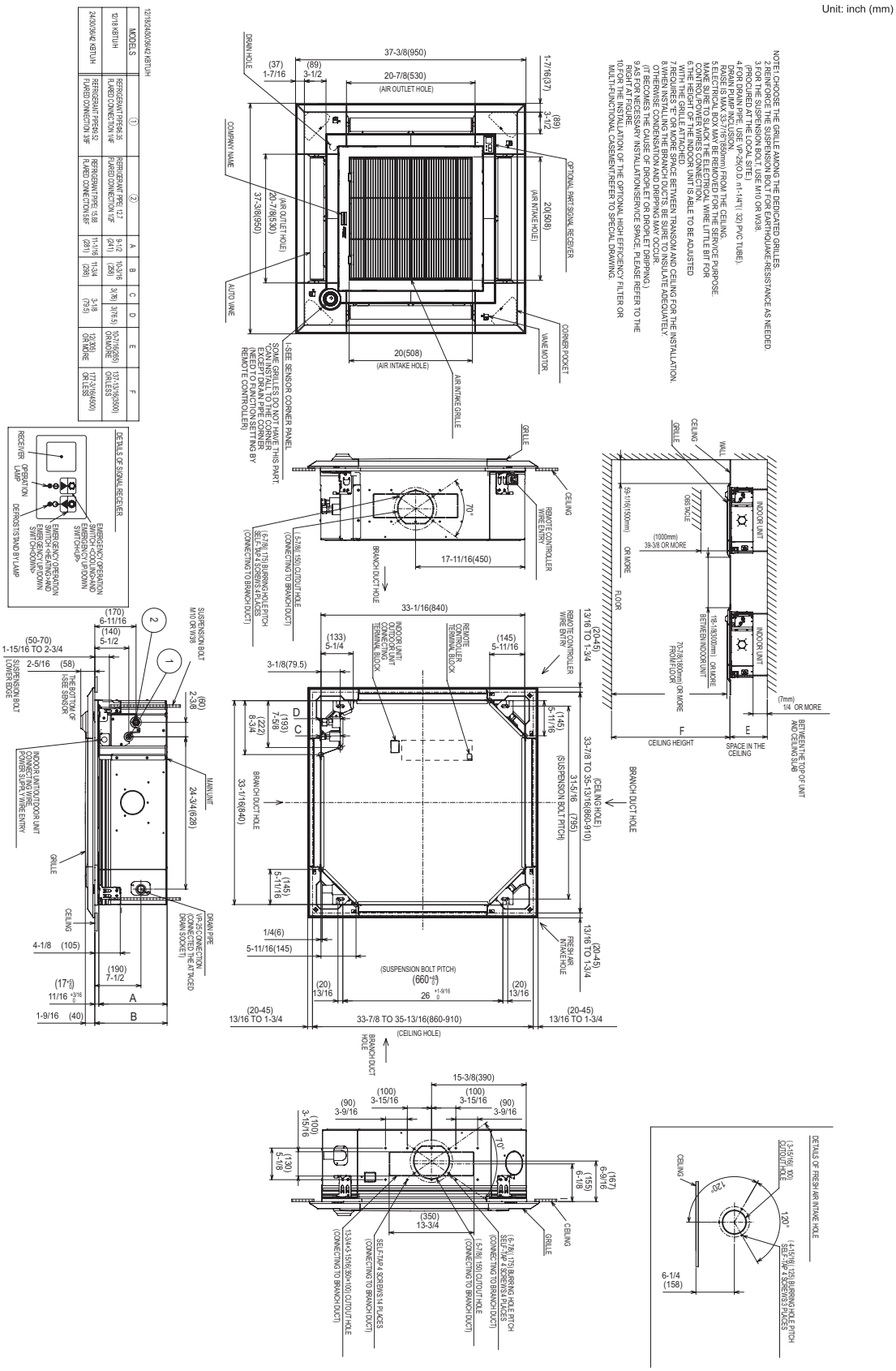
INDOOR UNIT DIMENSIONS: TPLA0A0421EA70B

Unit: inch (mm)



MODELS	①	②	A	B	C	D	E	F
12/18 KBTUH	REFRIGERANT TYPE:R410A FLARED CONNECTION :1/4"	REFRIGERANT PIPE: 1/2.7 FLARED CONNECTION :1/2"	9-1/2 (241)	10-3/16 (258)	3(76)	3(75.5)	10-7/16(265) OR MORE	137-13/16(3500) OR LESS
24/30/36/42 KBTUH	REFRIGERANT TYPE:R410A FLARED CONNECTION :3/8"	REFRIGERANT TYPE: 5/8 FLARED CONNECTION :5/8"	11-1/16 (281)	11-3/4 (298)	3-1/8 (79.5)	3(76)	12(305) OR MORE	177-1/16(4500) OR LESS

12/18/24/30/36/42 KBTUH

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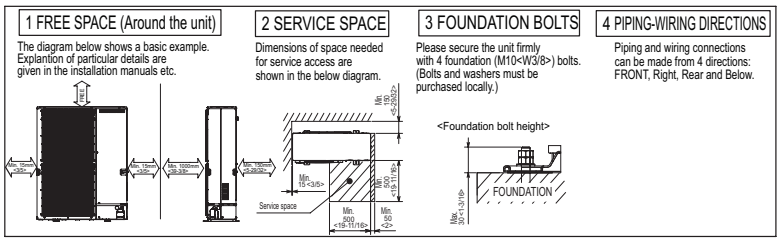
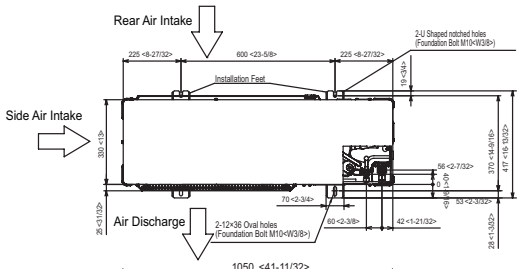
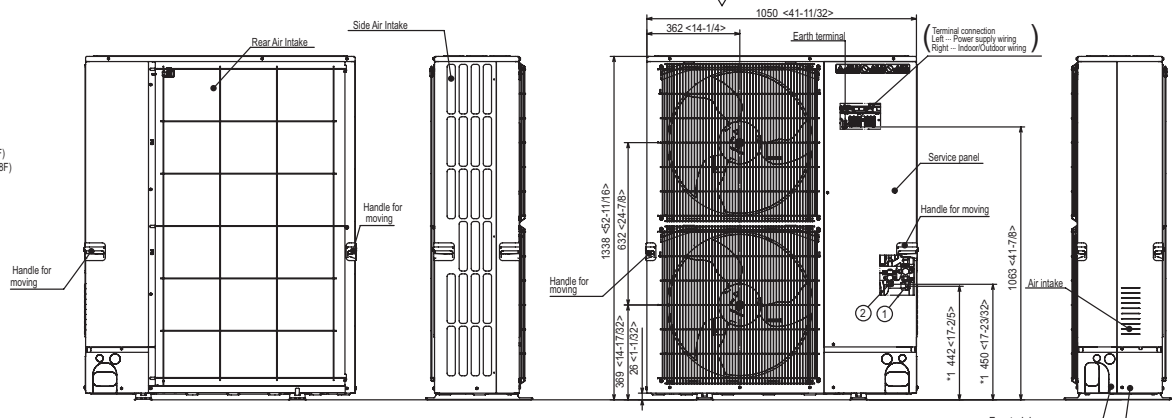
OUTDOOR UNIT DIMENSIONS: TRUZA0421KA70NA

Unit: mm<in>



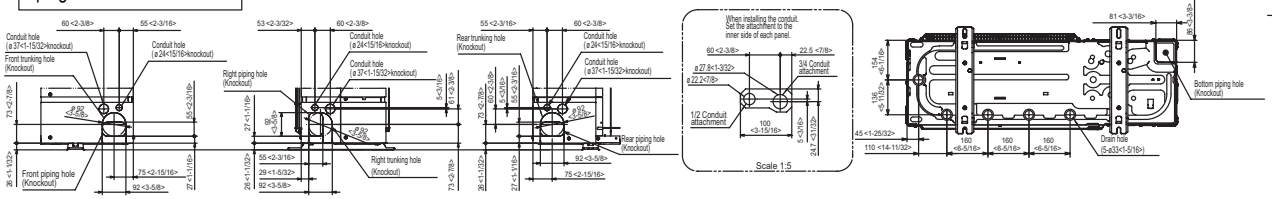




Example of Notes

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# TPLA0A0421EA70B & TRUZA0421KA70NA - 202303

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