

SUBMITTAL REVIEW



CLIENT NAME: Vails Gate Fire Department
PROJECT TITLE: Vails Gate FD - New Firehouse
SUBMITTAL No.: 238126-1 **H2M PROJECT No.:** VGFD2001
SUBMITTAL NAME: Ductless Split System AC PD - Phase 1

SUBMITTAL REVIEW	
REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS	
<input checked="" type="checkbox"/> NO EXCEPTIONS TAKEN	<input type="checkbox"/> SUBMIT SPECIFIED ITEM
<input type="checkbox"/> MAKE CORRECTIONS NOTED (RESUBMISSION NOT REQUIRED)	<input type="checkbox"/> NO ACTION TAKEN (REVIEW IS THE RESPONSIBILITY OF ANOTHER PARTY)
<input type="checkbox"/> REVISE & RESUBMIT	<input type="checkbox"/> NO ACTION TAKEN (THIS SUBMITTAL IS NOT REQUIRED BY THE CONTRACT)
<input type="checkbox"/> REJECTED - SEE REMARKS	<input type="checkbox"/> RECEIVED FOR RECORD
<p>Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating their work with that of all other trades; and performing the work in a safe and satisfactory manner.</p> <p>H2M architects + engineers</p> <p>Date: 08/08/2023 By: MJV</p> <p>Rev.: 2020-05-20</p>	

Comments:

Condenser is wall hung on exterior.

CONTRACTOR'S COMPANY NAME
ADDRESS

SUBMISSION TRANSMITTAL FORM
CLIENT NAME: Vails Gate Fire District
PROJECT TITLE: VGFD2001-New Firehouse

H2M PROJECT NO.: VGFD2001

Product, Item, or System Submitted:	Ductless Split AC Unit Product Data (Phase 1)		
Submission Date:	7/26/2023	Submission Log No.:	238126-1
Specification Section:	238126	Paragraph Reference:	1.06
Contract Drawing Reference(s):			
Manufacturer's Name:			
Manufacturer's Mailing Address:			
Manufacturer's Contact Information:	Name	() Tel. no.	Email
Supplier's Name:	Joseph Lombardo Plumbing Heating		
Supplier's Mailing Address:			
Supplier's Contact Information:	Name	() Tel. no.	Email
This item is a substitution for the specified item:	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	
<p>KEY CONSTRUCTION SERVICES, LLC</p> <p>Project No: VGFD2001</p> <p><small>Reviewed for General Acceptance Only. This review does not relieve the Subcontractors or Suppliers of responsibility for making the work conform to the requirements of the contract. The Subcontractor and Suppliers are responsible for all dimensions, correct fabrication and accurate fit with the work of other trades.</small></p> <p><u>SUBJECT TO ARCHITECT AND OR ENGINEER APPROVAL</u></p> <p>Signed <i>Joseph Manfredi</i> (PM) Date: 7/26/2023</p> <p>Contractor's Approval Stamp with Signature & Date</p>		<p><u>Contractor's Brief Comments or Remarks</u> (attach separate letter as needed):</p> <p>By making this submission, we represent that we have determined and verified all field measurements and dimensions, field construction criteria, site and building constraints in terms of limitations in moving the item into the enclosed space, materials, catalog and model numbers and similar data and that we have checked and coordinated this submission with other work at or adjacent to the installed location in accordance with the requirements contained in the Contract Documents.</p>	

END OF SECTION 013300

Joe Lombardo

Plumbing & Heating of Rockland, Inc.

321 Spook Rock Road
Suffern, NY 10901
Ph. 845-357-6537 Fx 845-357-8529
E: info@josephlombardo.com
Website: www.josephlombardo.com

Rockland Cty. Plumbing #1000 Rockland Cty. Cooling # 1468
Westchester Cty. Plumbing #460 New Jersey State Plumbing #12702

TO: Key Construction
4246 Albany Post Rd. Suite 1
Hyde Park, NY 12538

LETTER OF TRANSMITTAL

DATE: 7-24-23	JOB NO.
ATTENTION: Joe Manfredi	
RE: Vails Gate Firehouse	

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ _____

EMAIL	DATE	NO.	DESCRIPTION
1	7-24-23	238126	DUCTLESS SPLIT AC UNIT PHASE 1

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ No Exceptions Taken ☐ Resubmit _____ copies for review
☐ For your use ☐ Make Corrections Noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Rejected ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ 20 ____ ☐ PRINTS RETURNED AFTER LOAN TO US

COPY TO: Joe Manfredi

SIGNED: Ronald J. Lombardo



Ductless Split Submittal REV0

Prepared For:
H2M

Date: July 24, 2023

Job Name:
Vails Gate Fire District-Office Ductless Splits

Trane U.S. Inc. is pleased to provide the following submittal for your review and approval.

Product Summary

Qty Product

- 1 VRF Accessory
- 1 VRF Controls
- 1 Ductless Split (M Series)

Stav Shadmi
Trane U.S. Inc.
19 Chapin Road, Bldg B, Suite 200
Pine Brook, NJ 07058
Office Phone: (973) 244-7000

The attached information describes the equipment we propose to furnish for this project and is submitted for your approval.

*Submittal acceptance and return is a critical step, so please ensure submittals are returned with approval to release to production within **14 days** of submittal date.*

Product performance and submittal data is valid for a period of 6 months from the date of submittal generation. If six months or more has elapsed between submittal generation and equipment release, the product performance and submittal data will need to be verified. It is the customer's responsibility to obtain such verification.

Coordination Notes:

1. Equipment will be released as submitted unless otherwise noted:

Qty	Description	Model Number
1	0.75 Ton Hyper Heating Outdoor Unit	NTXSPH09B112AA
1	9 MBH Wall Mounted Indoor Unit for Hyper Heat	NTXWPH09B112AA
1	Disconnect Switch	TAZ-MS303W
1	M-NET & Control Interface	MAC-334IF-E
1	Remote Controller	TAR-CT01MAU-SB

Clarifications and Exceptions - Trane - Mitsubishi Ductless Split

Not Included: Startup services, smoke detectors, refrigeration tees, filter boxes, wind baffles, hail/snow guards, flow switches, secondary drain pans, secondary condensate overflow sensors, disconnects, refrigerant piping specialties, hangers, refrigerant piping, water piping, hose kits/valves, insulation, isolation valves, watt-hour meters, tenant billing software, additional refrigerant, roof rails or curbs, condensing unit mounting brackets, humidity sensors, external vibration isolation, rigging/receiving, spare parts, service labor, installation labor, LEV installation, LEV sensor installation, extended warranty, labor warranty, anything else not listed in proposal above.

NTXWPH09B112AA & NTXSPH09B112AA
9,000 BTU/H DELUXE WALL-MOUNTED INDOOR UNIT
9,000 BTU/H HYPER-HEATING OUTDOOR UNIT



Job Name:

System Reference:

Date:



Indoor Unit.....NTXWPH09B112AA

Outdoor Unit.....NTXSPH09B112AA



INDOOR UNIT FEATURES

- Slim wall-mounted indoor units provide zone comfort control
- Dual Barrier Coating applied to the heat exchanger, vanes and fan to prevent hydrophilic and hydrophobic dirt build-up
- Multiple fan speed options: Quiet, Low, Medium, High, Super-high, Auto
- 3D i-see Sensor® enables advance features:
 - Indirect or Direct Airflow for personalized comfort
 - Absence Detection for energy-saving mode
- Double Vane features:
 - Separates airflow to deliver air across a large area
 - Simultaneously deliver to air separate sections of a room
 - Generates more comfortable natural airflow pattern
- Multiple control options available:
 - Back-lit screen handheld remote controller (provided with unit)
 - kumo cloud® smart device app for remote access
 - Third-party interface options
 - Wired or wireless controllers
- Triple-action Filtration: Nano Platinum Filter, Deodorizing Filter, & Electrostatic Anti-Allergy Enzyme Filter
- Hot-Start Technology: no cold air rush at equipment startup or when restarting after Defrost Cycle
- Quiet operation

OUTDOOR UNIT FEATURES

- INVERTER-driven compressor and LEV provide high efficiency and comfort while using only the energy needed to maintain maximum performance
- Hyper-heating plus offers 100% heating capacity at -5° and 70% to 81% heating capacity at -13° F
- Blue Fin anti-corrosion treatment applied to the outdoor unit heat exchanger for increased coil protection and longer life

SPECIFICATIONS: NTXWPH09B112AA & NTXSPH09B112AA

Cooling at 95°F ¹	Maximum Capacity	BTU/H	12,000
	Rated Capacity	BTU/H	9,000
	Minimum Capacity	BTU/H	1,700
	Maximum Power Input	W	1,000
	Rated Power Input	W	560
	Moisture Removal	Pints/h	0.6
	Sensible Heat Factor		0.92
Heating at 47°F ²	Power Factor [208V / 230V]	%	89.0 / 90.0
	Maximum Capacity	BTU/H	18,000
	Rated Capacity	BTU/H	9,600
	Minimum Capacity	BTU/H	1,600
	Maximum Power Input	W	1,740
	Rated Power Input	W	620
Heating at 17°F ³	Power Factor [208V / 230V]	%	92.0 / 92.0
	Maximum Capacity	BTU/H	14,170
	Rated Capacity	BTU/H	5,900
	Maximum Power Input	W	1,580
Heating at 5°F ⁴	Rated Power Input	W	450
	Maximum Capacity	BTU/H	11,590
Heating at 5°F ⁴	Maximum Power Input	W	1,410
Heating at -5°F ⁶	Maximum Capacity	BTU/H	9,600
Heating at -13°F ⁷	Maximum Capacity	BTU/H	8,000
Efficiency	SEER SEER2		30.5 29.8
	EER ¹ EER2 ¹		16.05 16.05
	HSPF [IV] HSPF2 [IV]		13.5 10.9
	COP at 47°F ²		4.54
	COP at 17°F at Maximum Capacity ³		2.63
	COP at 5°F at Maximum Capacity ⁴		2.2
	COP at -5°F at Maximum Capacity ⁶		2.2
	COP at -13°F at Maximum Capacity ⁷		1.89
Electrical	Voltage, Phase, Frequency		208/230, 1, 60
	Guaranteed Voltage Range	V AC	187 - 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 (Outdoor)	A	15
	Recommended Wire Size [Indoor - Outdoor]	AWG	14
	Power Supply		Indoor unit is powered by the outdoor unit
Indoor Unit	MCA	A	1.0
	Fan Motor Full Load Amperage	A	0.65
	Fan Motor Type		DC Motor
	Airflow Rate at Cooling, Dry	CFM	137–167–221–304–381
	Airflow Rate at Cooling, Wet	CFM	117–143–190–261–328
	Airflow Rate at Heating, Dry	CFM	140–167–225–325–437
	Sound Pressure Level [Cooling]	dB[A]	20–23–29–36–40
	Sound Pressure Level [Heating]	dB[A]	20–24–29–39–42
	Drain Pipe Size	In. [mm]	5/8 [15.88]
	Coating on Heat Exchanger		Dual Barrier Coating
	External Finish Color		Munsell 1.0Y 9.2/0.2
	Unit Dimensions	W x D x H: In. [mm]	36-7/16 x 9-3/16 x 12 (+11/16) [925 x 234 x 305 (+17)]
	Package Dimensions	W x D x H: In. [mm]	39 x 12-1/4 x 15-1/2 [990 x 310 x 400]
	Unit Weight	Lbs. [kg]	29 [13.5]
	Package Weight	Lbs. [kg]	34 [15.4]
Indoor Unit Operating Temperature Range	Cooling Intake Air Temp [Maximum / Minimum]*	°F	90 DB, 73 WB / 67 DB, 57 WB
	Heating Intake Air Temp [Maximum / Minimum]	°F	80 DB / 70 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
⁶ Heating at -5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -5 DB, -6 WB
⁷ Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 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.

**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.

SPECIFICATIONS: NTXWPH09B112AA & NTXSPH09B112AA

Outdoor Unit	MCA	A	10.0
	MOCP	A	15
	Fan Motor Full Load Amperage	A	0.5
	Fan Motor Output	W	55
	Airflow Rate [Cooling / Heating]	CFM	1141 / 1183
	Refrigerant Control		LEV
	Defrost Method		Reverse Cycle
	Coating on Heat Exchanger		Blue Fin Coating
	Sound Pressure Level, Cooling ¹	dB(A)	48
	Sound Pressure Level, Heating ²	dB(A)	49
	Compressor Type		Twin Rotary
	Compressor Model		SNB092FQAMT
	Compressor Rated Load Amps	A	9.2
	Compressor Locked Rotor Amps	A	7.4
	Compressor Oil [Type // Charge]	oz.	FV50S // 0.35
	External Finish Color		Munsell 3Y 7.8/1.1
	Base Pan Heater		Optional
	Unit Dimensions	W x D x H: In. [mm]	31-1/2 x 11-1/4 x 21-5/8 [800 x 285 x 550]
	Package Dimensions	W x D x H: In. [mm]	37 x 15 x 24-1/2 [940 x 380 x 630]
	Unit Weight	Lbs. [kg]	82 [37]
	Package Weight	Lbs. [kg]	89 [40]
Outdoor Unit Operating Temperature Range	Cooling Air Temp [Maximum / Minimum]*	°F	115 DB / 14 DB
	Cooling Thermal Lock-out / Re-start Temperatures**	°F	-4 / 0
	Heating Air Temp [Maximum / Minimum]	°F	75 DB, 65 WB / -13 DB, -14 WB
	Heating Thermal Lock-out / Re-start Temperatures**	°F	-18 / -14
Refrigerant	Type		R410A
	Pre-Charged Refrigerant Amount	Lbs, oz	2.0, 9.0
	Maximum Pre-Charged Piping Length	Ft. [m]	25.0 [7.5]
	Additional Refrigerant Charge Per Additional Piping Length	oz./Ft. [g/m]	0.216 [20]
Piping	Gas Pipe Size O.D. [Flared]	In.[mm]	3/8 [9.52]
	Liquid Pipe Size O.D. [Flared]	In.[mm]	1/4 [6.35]
	Maximum Piping Length	Ft. [m]	65 [20]
	Maximum Height Difference	Ft. [m]	40 [12]
	Maximum Number of Bends		10

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
⁶ Heating at -5°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -5 DB, -6 WB
⁷ Heating at -13°F (Indoor // Outdoor)	°F	70 DB, 60 WB // -13 DB, -14 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.

**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.

INDOOR UNIT ACCESSORIES: NTXWPH09B112AA

Control Interface	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
	System Control Interface	MAC-334IF-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	Wired Remote Sensor	M21EAA307
	Wireless temperature and humidity sensor for kumo cloud®	PAC-USWHS003-TH-1
Wired Remote Controller	Deluxe Wired MA Remote Controller†	TAR-40MAAU
	Simple Ductless Wired Remote Controller	PAC-SDW01RC-1
	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
Condensate	Blue Diamond (Advanced) Mini Condensate Pump w/ Reservoir & Sensor (208/230V) [recommended]	X87-721
	Blue Diamond (MicroBlue) Mini Condensate Pump (110/208/230V) up to 18,000 BTU/H	X86-003
	Blue Diamond Alarm Extension Cable — 6.5 Ft.	C13-192
	Blue Diamond MultiTank — collection tank for use with multiple pumps	C21-014
	Blue Diamond Sensor Extension Cable — 15 Ft.	C13-103
	Drain Pan Level Sensor/Control	SS610E
	Fascia Kit for MicroBlue Pump, mounts the MicroBlue and sensor directly beneath indoor unit	T18-016
	Refco Condensate Pump (100-240 VAC)	GOBHI
	Refco Condensate Pump (100-240 VAC) up to 120,000 BTU/H	COMBI
	Sauermann Condensate Pump	SI30-230
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	Electro Static Anti-allergy Enzyme Filter	MAC-2330FT-E
	Platinum Deodorizing Filter	MAC-3000FT-E
Lineset	15' x 1/4" x 15' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-15
	30' x 1/4" x 30' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-30
	50' x 1/4" x 50' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-50
	65' x 1/4" x 65' / 3/8" Lineset (Twin-Tube Insulation)	MLS143812T-65

NOTES:

†Requires MAC-334IF-E

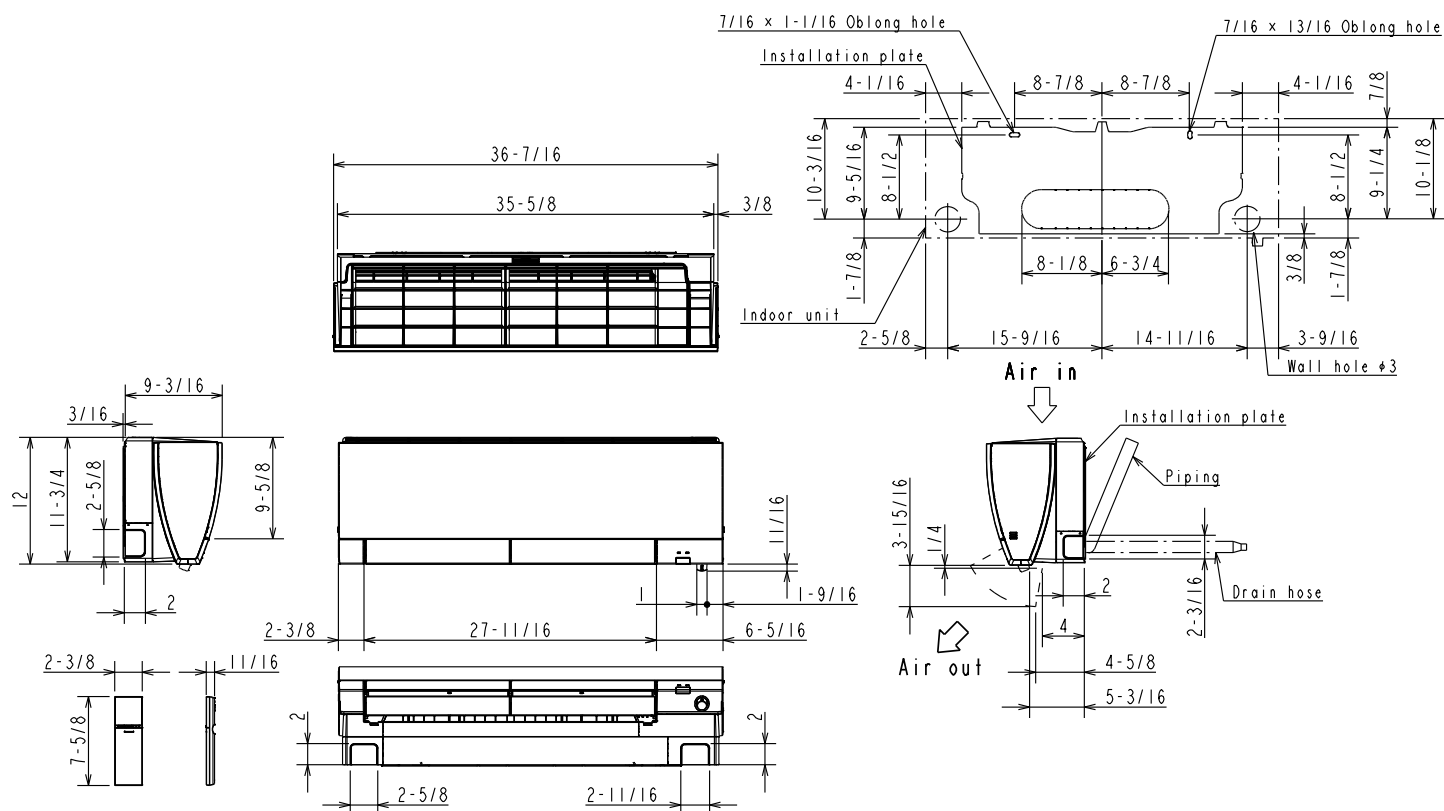
- Nv-Series EZ FIT® Recessed Ceiling Cassette, Floor-mount and Wall-mount
Allows indoor units to connect to an MA Controller:
Deluxe MA Remote Controller
Simple MA Controller
Touch MA Controller

OUTDOOR UNIT ACCESSORIES: NTXSPH09B112AA

Control/Service Tool	M- & P-Series Maintenance Tool Cable Set	M21EC0397
	USB/UART Conversion Cable (Required for all laptop connection)	M21EC1397
Drain Socket	Drain Socket	MAC-871DS
Hail Guards	Hail Guard	HG-B4
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: 16" x 36" x 3"	ULTRILITE1
	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	DSD-400P
Optional Defrost Heater	Optional Defrost Heater	MAC-640BH-U
Stand	18" Single Fan Stand	QSMS1801M
	24" Single Fan Stand	QSMS2401M
	Condenser Wall Bracket	QSWB2000M-1
	Condenser Wall Bracket - Stainless Steel Finish	QSWBSS
	Outdoor Unit Stand — 12" High	QSMS1201M

INDOOR UNIT DIMENSIONS: NTXWPH09B112AA

Unit: inch



(06/09/12 KBTU/H)

Piping	Insulation	1-7/16 O.D
	Liquid line	1/4 19-11/16 (Flared connection 1/4)
	Gas line	3/8 16-15/16 (Flared connection 3/8)
	Drain hose	Insulation 1-1/8 Connected part 5/8 O.D

(15/18 KBTU/H)

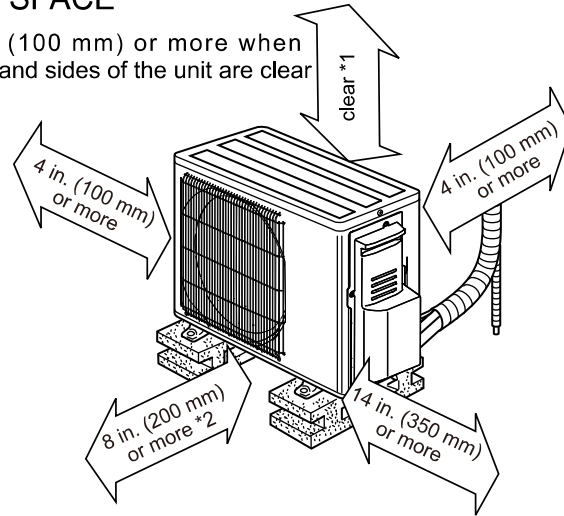
Piping	Insulation	1-7/16 O.D
	Liquid line	1/4 19-11/16 (Flared connection 1/4)
	Gas line	3/8 16-15/16 (Flared connection 1/2)
	Drain hose	Insulation 1-1/8 Connected part 5/8 O.D

OUTDOOR UNIT DIMENSIONS: NTXSPH09B112AA

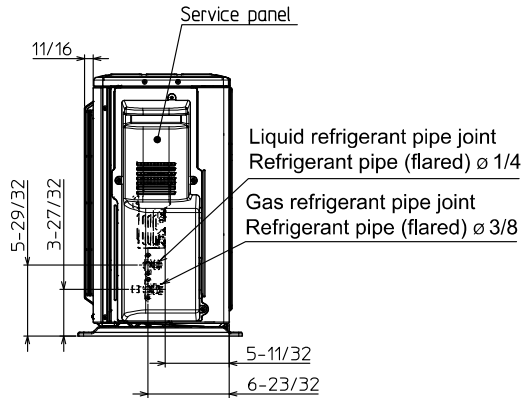
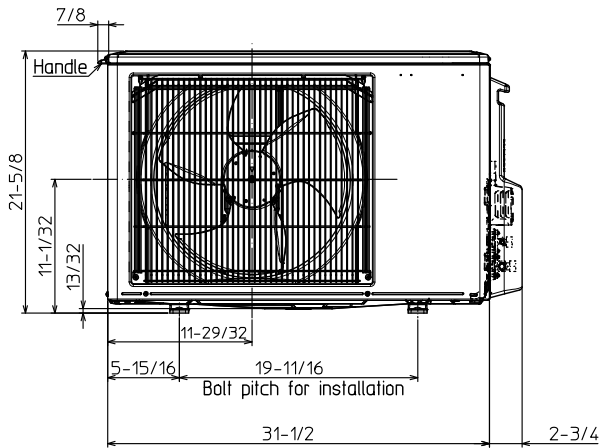
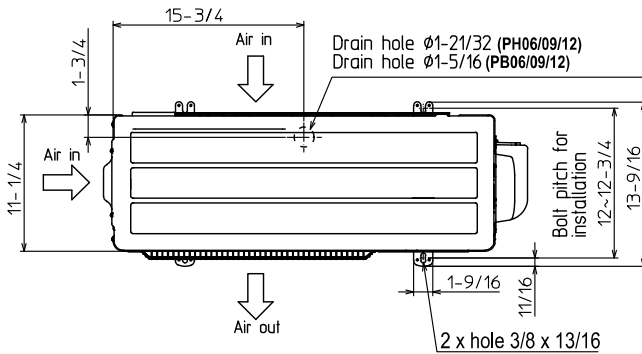
Unit: inch

REQUIRED SPACE

*1 4 in. (100 mm) or more when front and sides of the unit are clear



*2 When any 2 sides of left, right and rear of the unit are clear



MAC-334IF-E

System Control Interface



Job Name:

System Reference:

Date:



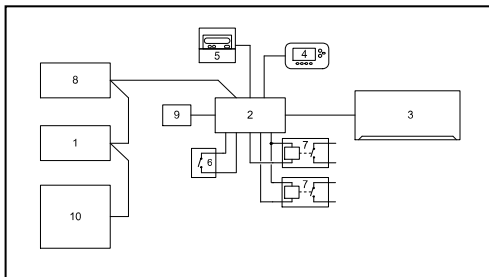
System Configuration

Devices that may be used with the System Control Interface System Control Interface:

1. Central Controller
(TE-200, TW-50A, TT-24B-J*)
2. System Control Interface (MAC-334IF)
3. M-Series indoor unit
4. CN105 Interface
5. MA Remote Controller
6. Input Contact (field supplied)
7. Output Relay (field supplied)
8. M-Net Power Supply Unit (PAC-SC51KUA)
9. External 12VDC Power Supply (field supplied)
10. BAC-HD150* or LMAP03U*

*TT-24B-J is not compatible with LMAP04U.

For details on individual components, please refer to the appropriate manual(s).



MAC-334IF-E system control interface specifications for Nv-Series indoor units

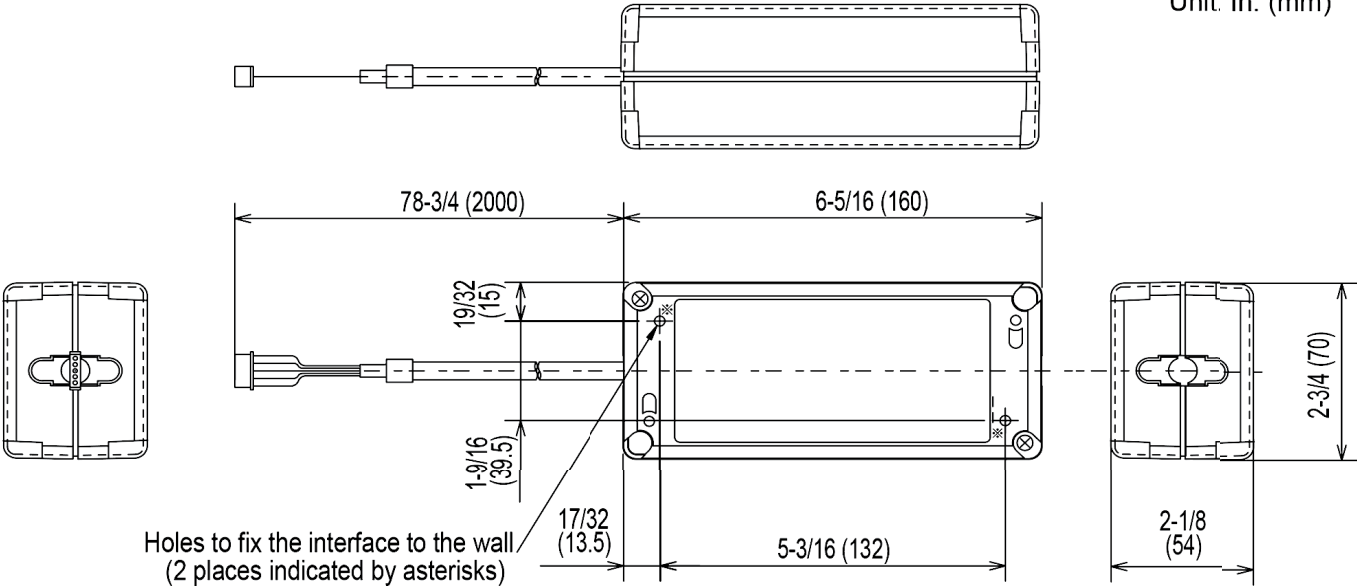
- Allows the Nv-Series indoor units to communicate with the CITY MULTI® Controls Network
- Dual-setpoint Auto mode can be enabled by dip switch
- Can turn external heater ON/OFF based on setpoint and room temperature
- Provides two outputs to allow for the following control scenarios:
 - Equipment Status and Error
 - Equipment Status and Auxiliary Heat Source
 - Equipment Status and Humidifier Control
 - Auxiliary Heat Control and Humidifier Control
- Note: External 12VDC power supply is required
- Provides an input to allow remote On/Off control of indoor unit (3-Wire plug adapter included)
- Allows the M-Series indoor units to connect to CN105 interface via CN505 on the MAC-334IF-E when using other MAC-334IF functions
 - Note: external 12VDC power supply is required
- Allows the Nv-Series indoor units to connect to a MA remote controller
- Indoor unit CN105 cable included
- In order to have a MAC-334IF-E in the same group as a MAC-333IF-E, DIP switch 502-7 must be set to ON

COMPATIBILITY

M&P Ductless
MSZ-EF09NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF18NA(B/W/S)
MSZ-EF09NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF18NA(B/W/S)
MSZ-EF09NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF18NA(B/W/S)
NTXFKS09A112AA
NTXFKS12A112AA
NTXFKS15A112AA
NTXFKS18A112AA
NTXUKS06A112AA
NTXUKS09A112BA
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NTXWST24A112AA
NTXWST30B112AA
NTXWST36B112AA
NTYWST09A112AB
NTYWST12A112AB
NTYWST15A112AB
NTYWST18A112AA
NTYWST24A112AA
NTYWST30B112AA
NTYWST36B112AA
NTXUKS06A112AA
NTXUKS09A112BA
NTXUKS12A112BA

DIMENSIONS: MAC-334IF-E

Unit: In. (mm)



TAR-CT01MAU-SB

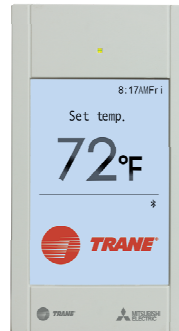
Touch MA Controller†



Job Name:

System Reference:

Date:



CAPABILITIES

- Supports both Fahrenheit and Celsius
- Basic functions:
 - ON/OFF
 - Operation mode: AUTO, COOL, HEAT, FAN
 - Vane Setting: Auto, Step 1-5, Swing
 - Airflow direction
 - Daylight Savings Time (DST)
- Restriction
 - Set temperature range limits (dependent on system connected):
- Cooling from 67°F to 95°F
- Heating from 63°F to 83°F
- Auto (Single Set Point) from 67°F to 83°F
 - Operation lock: On/Off, Mode, Set Temperature, Vane, Menu, Fan, Louver, Hold
- Ventilation (Lossnay): Off, Low, High
- Manual vane angle: No Setting, Step 1-5, Draft Reduction, All outlet
 - Draft reduction mode keeps the vane angle more horizontal than the angle of Step 1
- Room Temperature can be sensed either at the indoor unit (default) or the remote controller
- Error code notification
 - Displays error code and error unit address
 - Error time occurrence
 - Contact information is accessible
- Grouping:
 - Only one remote controller can be connected to a group made up of indoor units
 - The MA Touch Remote Controller cannot be used in combination with other MA remote controllers
- Customizable display
 - Customizable Text and background color
 - Background Logo: load a custom image onto the screen using the smartphone app
- Main Display
 - Full: Shows all icons and values
 - Basic: Limited to Mode, Set Temperature, Fan, Time & Day
 - Temporarily disable display for cleaning (30 seconds)
 - Adjustable contrast level
 - Language - English, French, Spanish
- Bluetooth connection to remotely control settings on Touch MA controller
 - Clock synchronization
 - Copy settings from one controller to others
- 22/2 AWG required, stranded recommended
- High Power
 - Temporarily operate at maximum capacity until set temperature has been met or 30 minutes have passed
- On/Off Timer
 - Set On Time (5-minute increments)
 - Set Off Time (5-minute increments)
 - Repeat daily
- Auto-Off Timer
 - Automatically turns unit off after preset time is reached
 - Time range: 30 to 240 minutes (10-minute increments)
- Weekly Schedule

- Schedulable: Mon, Tue, Wed, Thu, Fri, Sat, Sun
- 1 to 8 time periods per day (5-minute increments)
- Set Mode: On/Off/Auto (Dual set point)
- Outdoor Unit silent mode
 - Schedulable: Mon, Tue, Wed, Thu, Fri, Sat, Sun
 - Start/Stop times (5-minute increments)
 - Silent levels: Normal, Middle, Quiet
- Energy saving features:
 - Automatic return to the preset temperature set point if the set point is changed from the remote controller after a preset time range
 - Cool preset temperature: Cool, Dry, Auto-Cool
 - Heat preset temperature: Heat, Auto-Heat
 - Range: 30 to 120 minutes (10-minute increments)
 - Energy-saving Operation Schedule
- Schedulable: Mon, Tue, Wed, Thu, Fri, Sat, Sun
- 1 to 4 time periods per day (5-minute increments)
- Four daily patterns with time periods (5 minute increments) and energy-saving rate 0% to 90%
- Home screen display icon
- Night setback
 - Starts Heat/Cool operation when room temperature exceeds preset temperature range
 - Adjustable time range (5-minute increments)
- Filter maintenance notification

SPECIFICATIONS

Product Size (W x H x D)	In. (mm)	2-9/16 x 4-3/4 x 9/16 (65 x 120 x 14.1)
Net Weight	Lbs. (kg)	13/64 (0.09)
Rated Power Supply Voltage		12 VDC (supplied from indoor units)
Power Consumption		0.6
Usage Environment		Temperature: 32 ~ 104°F (0 – 40°C) Humidity: 25 ~ 90%RH (with no dew condensation)
Material	W	Main Body: ABS

TAR-CT01MAU-SB

COMPATIBILITY

M&P Ductless
MSZ-EF09NA(B/W/S)
MSZ-EF09NA(B/W/S)
MSZ-EF09NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF12NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF15NA(B/W/S)
MSZ-EF18NA(B/W/S)
MSZ-EF18NA(B/W/S)
MSZ-EF18NA(B/W/S)
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NTXCKS12A112AA
NTXCKS15A112AA
NTXCKS18A112AA
NTXFKS09A112AA
NTXFKS12A112AA
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NTXWPH12B112AA
NTXWPH15B112AA
NTXWPH18B112AA
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TPLA0A0181EA70B
TPLA0A0241EA70B
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M&P Ducted
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NTXAMT18A112AA
NTXAMT24A112AA
NTXAMT30A112AA
NTXAMT36A112AA
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TPEADA0181AA80A
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TPEADA0361AA80A
TPEADA0091AA80A
TPEADA0121AA80A
TPEADA0151AA80A
intelli-HEAT
PAA-A30AA1
PAA-A30BA1
PAA-A36BA1
PAA-A36CA1
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PAA-A24AA1
PAA-A24BA1

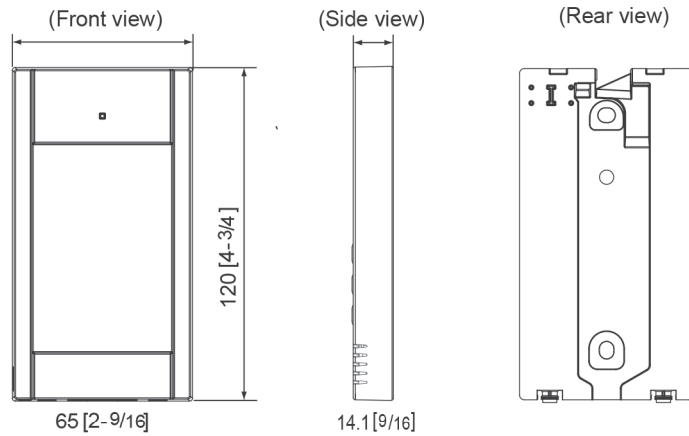
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TPCFYP030KM140B
TPCFYP036KM140B
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TPFFYP006RE140A
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TPFFYP008RE140A
TPFFYP012CS140A
TPFFYP012RE140A
TPFFYP015CS140A
TPFFYP015RE140A
TPFFYP018CS140A
TPFFYP018RE140A
TPFFYP024CS140A
TPFFYP024RE140A
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TPKFYP008LM140A
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TPLFYP012EM140B
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TPLFYP018EM141B
TPLFYP018FM140A
TPLFYP024EM140B
TPLFYP030EM140B
TPLFYP036EM140B
TPLFYP048EM140B
TPMFYP006BM140F
TPMFYP008BM140F
TPMFYP012BM140F
TPMFYP015BM140F

CM Ducted
TPEFYP006MA144A
TPEFYP006MS140C
TPEFYP008MA144A
TPEFYP008MS140C
TPEFYP012MA144A
TPEFYP012MS140C
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TPEFYP015MH142A
TPEFYP015MS140C
TPEFYP018MA144A
TPEFYP018MH142A
TPEFYP018MS140C
TPEFYP024MA144A
TPEFYP024MH142A
TPEFYP024MS140C
TPEFYP027MA144A
TPEFYP027MH142A
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TPEFYP030MH142A
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TPEFYP054MH142A
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TPEFYP096MH140A
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TPVFYP012AM141A
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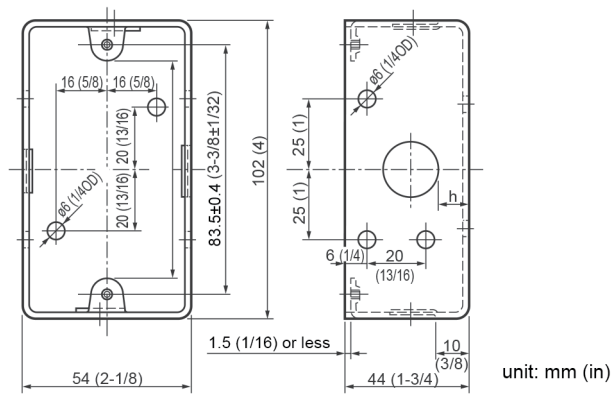
TAR-CT01MAU-SB

DIMENSIONS

Unit: mm[in.]

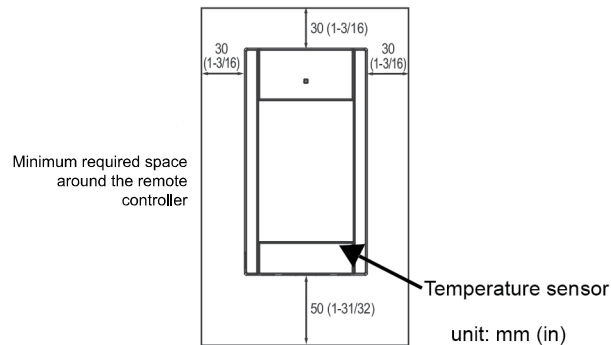


MOUNTING DIAGRAM



INSTALLATION SPACE

External dimensions of remote controller



A-Control Disconnect Switch



Catalog #: TAZ-MS303

UPC# 07847702032

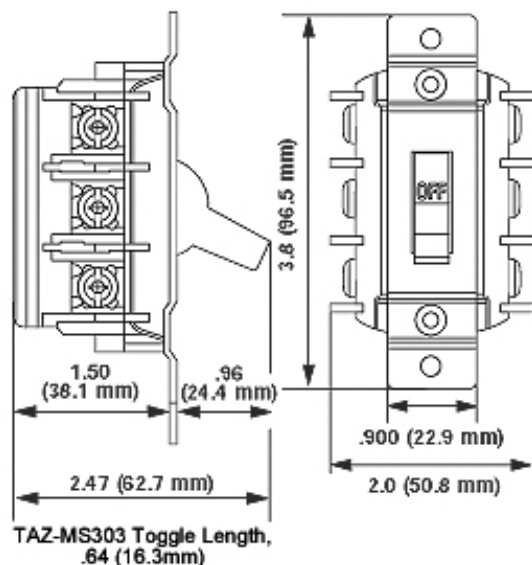
30 Amp, 600 Volt, Toggle Three-pole AC Switch, Industrial Grade, Non-grounding, Side Wired, - Black

Product Features:

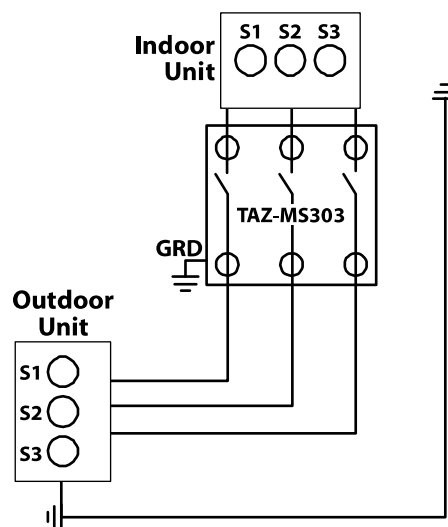


Three-pole

Ground: Non-grounding
 Amperage: 30 Amp
 Voltage: 600 Volt
 HP Rating: 3HP-120V 7-1/2HP-240V 15HP-480V 20HP-600V
 Termination: Side
 Actuator Material: Valox
 Body Material: Rynite
 Strap Material: Nickel-plated brass
 Color: Black
 Standards and Certifications: UL/CUL
 Warranty: 10 year limited
 Installation: 2" x 4" electrical wall box with switch cover plate (by others)



Wiring Diagram 3-Pole



SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:	Use with:
	TAZ-MS303	
JOB NUMBER:		

Specifications subject to change without notice
 Effective: 10/2/2006

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - VRF Controls

Item	Tag(s)	Qty	Description	Model Number
B1	JV_CTRL-1	1	VRF Controls (JV_CTRL)	

Field Installed Option Description	Part/Ordering Number
TAR-CT01MAU-SB	TAR-CT01MAU-SB
MAC-334IF-E M-NET & Control Interface	MAC-334IF-E