

Submittal Data: TM48H20 **48,000 BTUH Super Multi Heat Pump System**

Job Name Location Date

Purchaser Engineer

Submitted To For Reference Approval Construction

Unit Designation Schedule No.

GENERAL FEATURES

- Operates up to 8 Indoor Units
- G10 DC Inverter Technology
- 2-Way & 3-Way Branch Units (Sold Sepatately)
- Gold Fin Coil Coating
- Intelligent Defrost
- Auto Restart on Power Outages



System Ratings

Outdoor Unit Data

| | |
|-------------------|--------------------|
| Cooling | |
| Rated Capacity | 48,000 BTU/H |
| Capacity Range | 3,412-54,592 BTU/H |
| Power Input (Max) | 5,000 W |
| SEER | 16.0 |
| EER | 9.6 |

| | | |
|-------------------|----------------|---------------------------|
| Compressor | Type | DC Inverter Driven Rotary |
| | RLA | 23.0 A |
| Fan Motor | Output Power | 2 x 1/6HP |
| | FLA | 2 x 1.0 A |
| | Air Flow (Max) | 3,766 CFM |

| | |
|-------------------------|--------------------|
| Heating at 47° F | |
| Rated Capacity | 54,500 BTU/H |
| Capacity Range | 4,094-58,000 BTU/H |
| Input Power (Max) | 4,400 W |
| HSPF | 8.0 |
| COP | 3.6 |

| | |
|-----------------------|----------|
| Sound Pressure | |
| Cooling | 57 db(A) |
| Heating | 57 db(A) |

| | |
|-------------------------|--------------|
| Heating at 17° F | |
| Rated Capacity | 36,400 BTU/H |
| Capacity (Max) | 45,358 BTU/H |

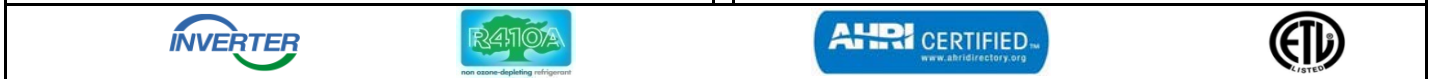
Refrigerant Piping Data

| | | |
|------------------------|-------|--------------|
| Operating Range | | |
| Cooling | (Max) | 118°F (48 C) |
| | (Min) | 5°F (-15 C) |
| Heating | (Max) | 75°F (24 C) |
| | (Min) | -4°F (-20 C) |

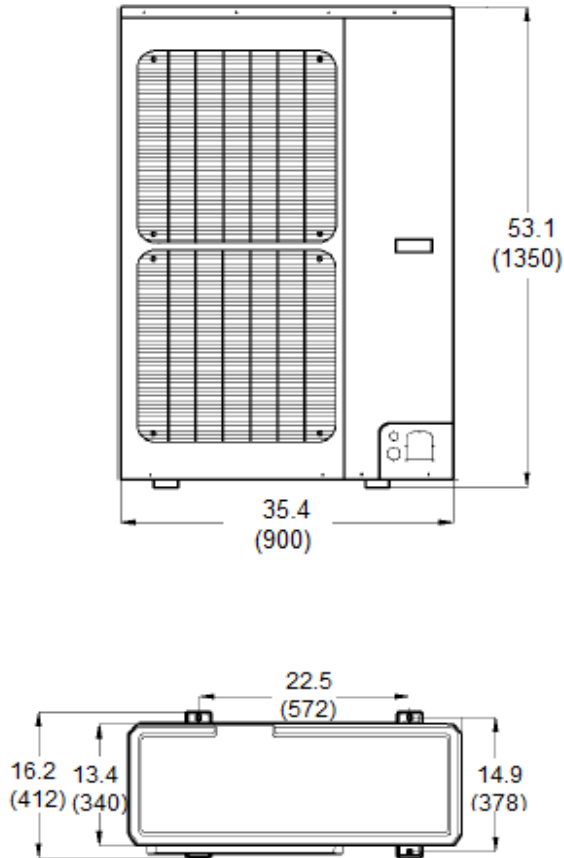
| | |
|--------------------------------------|------------|
| Max. Number of Indoor Units | 8 |
| Connection Method | Flared |
| Refrigerant Type | R410A |
| Additional Charge Per Line Length | 0.54-oz/ft |
| Factory Charge for Total Line Length | 98-ft |

| | |
|----------------------------|---------------------------|
| Power Supply | |
| Normal Operational Voltage | 208/230 V, 1 Phase, 60 Hz |
| Voltage Range | 187 - 253 V |
| MCA | 30.0 A |
| MOCP/Breaker Size | 50 A |

| | |
|--|--------|
| Total Refrigerant Pipe Length | 443-ft |
| Max Refrigerant Piping Length to any Indoor Unit | 230-ft |
| Min Refrigerant Piping Length to any Indoor Unit | 10-ft |
| Max Elevation between Indoor Units | 50-ft |
| Max Lift from Outdoor to Indoor Unit | 98-ft |
| Max Drop from Outdoor to Indoor Unit | 98-ft |



Units: inch (mm)

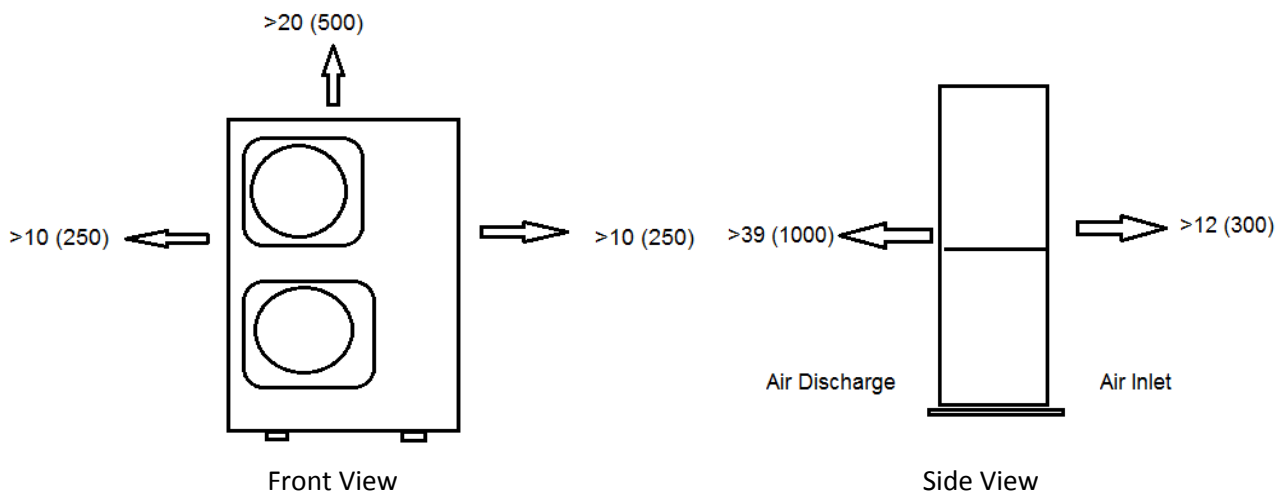


| | |
|-----------------|---------|
| Net Weight | 256 lbs |
| Shipping Weight | 276 lbs |

| | |
|----------------------------|------------------|
| Liquid Line Port Size | 3/8-in OD Flared |
| Suction/Gas Line Port Size | 5/8-in OD Flared |

MINIMUM SPACING REQUIREMENTS

Units: inch (mm)



Notes:

1. Communication Cable minimum 18 AWG Type Stranded Bare Copper Conductors THHN 600V Unshielded Wire
2. Power wiring cable size must comply with applicable national and local codes.

COOLING PERFORMANCE

| Outdoor Ambient Temperature (DB) | Indoor Entering Air Temperatures (DB) 50% RH | | | | | |
|----------------------------------|--|--------|--------|--------|--------|--------|
| | 62 F | | 67 F | | 72 F | |
| | TC | SHC | TC | SHC | TC | SHC |
| 25 F | 51,830 | 41,059 | 54,215 | 42,740 | 56,352 | 44,780 |
| 35 F | 50,990 | 41,010 | 53,535 | 41,780 | 55,648 | 43,020 |
| 45 F | 49,859 | 39,843 | 52,555 | 40,834 | 54,523 | 42,279 |
| 55 F | 47,930 | 38,995 | 51,892 | 41,919 | 52,965 | 41,219 |
| 65 F | 48,150 | 38,555 | 52,730 | 42,710 | 53,160 | 40,819 |
| 75 F | 47,520 | 37,540 | 50,620 | 40,265 | 53,150 | 43,520 |
| 85 F | 46,330 | 39,000 | 49,255 | 40,390 | 52,760 | 42,200 |
| 95 F | 45,620 | 35,665 | 47,800 | 37,162 | 49,196 | 38,234 |
| 105 F | 39,900 | 33,295 | 42,250 | 35,716 | 43,020 | 37,895 |
| 115 F | 35,220 | 30,253 | 36,320 | 32,235 | 36,960 | 33,825 |

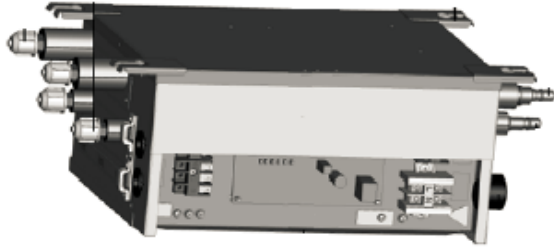
HEATING PERFORMANCE

| Outdoor Ambient Temperature (DB) (80% RH) | Indoor Entering Air Temperatures (DB) | | | | | |
|---|---------------------------------------|--------|--------|--------|--------|--------|
| | 65 F | | 70 F | | 75 F | |
| | TC | SHC | TC | SHC | TC | SHC |
| 5 F | 31,628 | 31,628 | 31,131 | 31,131 | 30,715 | 30,715 |
| 15 F | 36,463 | 36,463 | 35,970 | 35,970 | 35,111 | 35,111 |
| 25 F | 41,200 | 41,200 | 40,664 | 40,664 | 39,633 | 39,633 |
| 35 F | 46,886 | 46,886 | 45,513 | 45,513 | 44,875 | 44,875 |
| 45 F | 53,552 | 53,552 | 52,886 | 52,886 | 51,950 | 51,950 |
| 55 F | 54,197 | 54,197 | 53,400 | 53,400 | 52,698 | 52,698 |
| 65 F | 54,938 | 54,938 | 54,249 | 54,249 | 53,834 | 53,834 |

TC- Total Capacity (BtuH)

SHC- Sensible Capacity (BtuH)

BRANCH (BU) SPECIFICATIONS



1-Port In/2-Ports Out
Model no:



1-Port In/3-Ports Out
Model no:

Electrical

| | | FXA2B-D | FXA3B-D |
|---------------------|-------|----------|----------|
| No. of Indoor Units | | 2 | 3 |
| Power Supply | volts | 208/230v | 208/230v |
| Rated Current | amps | 3.15 | 3.15 |
| MOCP | amps | 15 | 15 |

Piping

| | | FXA2B-D | FXA3B-D |
|---|----|---------|---------|
| Max Equivalent Length (BU to last Indoor Unit) | ft | 60 | 60 |

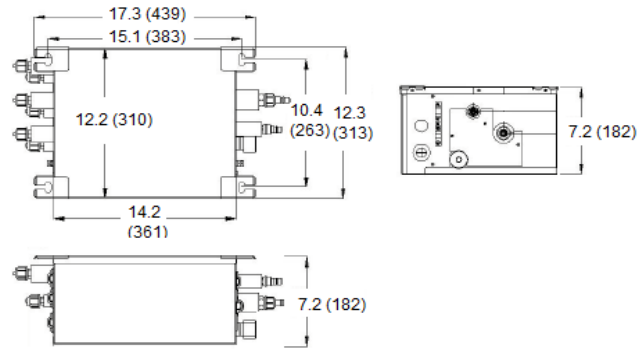
Notes:

1. Communication Cable minimum 18 AWG Type Stranded Bare Copper Conductors THHN 600V Unshielded Wire
2. Power wiring cable size must comply with applicable national and local codes.

BRANCH (BU) BOX DIMENSIONAL SPECIFICATIONS

Units: inch (mm)

1-Port In/2-Ports Out
Model no: FXA2B-D

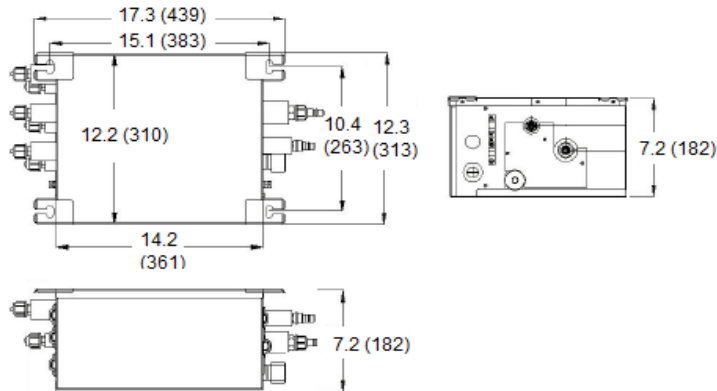


| | Indoor Unit Side | | Outdoor Unit |
|-------------|---------------------|---------------------|-------------------|
| | Port A ¹ | Port B ¹ | Side ¹ |
| Liquid Pipe | φ1/4 | φ1/4 | φ3/8 |
| Gas Pipe | φ3/8 | φ3/8 | φ5/8 |

(1) Flare Fittings

| Weight | |
|--------|--------|
| Net | Gross |
| 12 lbs | 16 lbs |

1-Port In/3-Ports Out
Model no: FXA3B-D



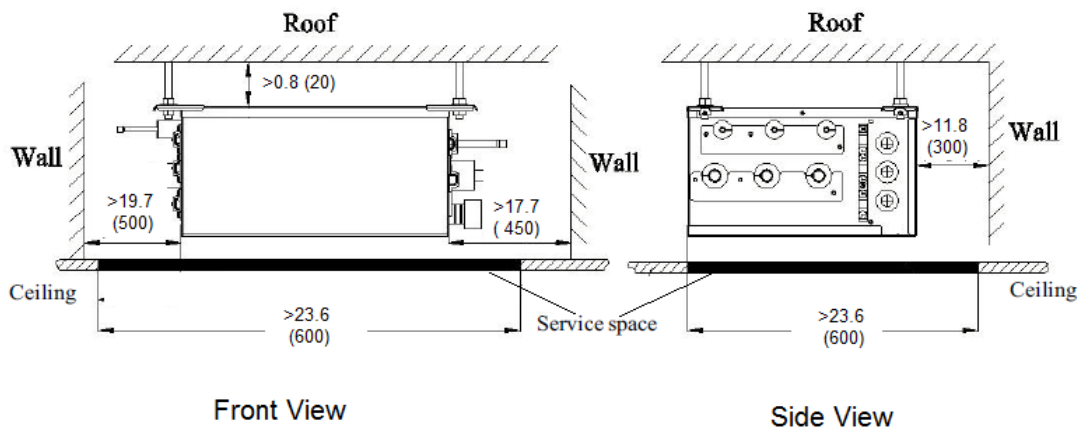
| | Indoor Unit Side | | | Outdoor Unit |
|-------------|---------------------|---------------------|---------------------|-------------------|
| | Port A ¹ | Port B ¹ | Port C ¹ | Side ¹ |
| Liquid Pipe | φ1/4 | φ1/4 | φ1/4 | φ3/8 |
| Gas Pipe | φ3/8 | φ3/8 | φ3/8 | φ5/8 |

(1) Flare Fittings

| Weight | |
|--------|--------|
| Net | Gross |
| 13 lbs | 17 lbs |

MINIMUM SPACING REQUIREMENTS

Units: inch (mm)



Notes:

1. Recommended Interconnecting Cable Type Stranded Bare Copper Conductors THHN 600V Unshielded Wire
2. Power wiring cable size must comply with applicable national and local codes.



Model Number & Description

Ceiling Cassette
 TM12HKDI 12,000 BtuH
 TM18HKDI 18,000 BtuH
 TM24HKDI 24,000 BtuH



Universal Floor/Ceiling
 TM09HTDI 9,000 BtuH
 TM12HTDI 12,000 BtuH
 TM18HTDI 18,000 BtuH
 TM24HTDI 24,000 BtuH



Wall Mount
 TW09HM2C2DI 9,000 BtuH
 TW12HM2C2DI 12,000 BtuH
 TW18HM2C2DI 18,000 BtuH



Slim Duct
 TM09HFDI 9,000 BtuH
 TM12HFDI 12,000 BtuH
 TM18HFDI 18,000 BtuH
 TM24HFDI 24,000 BtuH



Console
 TM09HEDI 9,000 BtuH
 TM12HEDI 12,000 BtuH
 18,000 BtuH



Branch (BU) Boxes
 FXA2B-D 1-Port In/2-Ports Out
 FXA3B-D 1-Port In/3-Ports Out



Copper Y-Branch Conne Liquid Branch & Gas Branch

