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|---------------|---------------|--------------|---------------|
| Job Name: | Location: | | |
| Purchaser: | Submitted By: | | |
| Submitted To: | Reference: | Approval: | Construction: |
| Engineer: | Date: | Application: | |

PAA-A42BA1-M

PAA-A42CA1-M



Optional Controller

Images provided for reference purposes only

| Outdoor Standard Features: | Description: |
|----------------------------|--------------|
|----------------------------|--------------|

| | |
|-----------------------------|---|
| Blue Fin Coating | Prolong condenser operating life |
| Inverter Motor | Energy efficient operation with variable speed DC motor |
| Auto mode | Automatically switches between heating & cooling modes |
| Fast Auto restart | Automatically restarts after power failure return |
| Automated compressor cutout | Prevents inefficient operation & protects compressor |
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| Indoor Standard Features: | Description: |
|---------------------------|--------------|
|---------------------------|--------------|

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|------------------------|---|
| Economic Balance Point | Allows the customer to choose the outdoor ambient temperature to switch from heat pump to furnace |
| Capacity Balance Point | Allows the customer to determine the length of time (24 to 29 minutes) the heat pump will attempt to heat the space before switching to furnace (as an auxiliary heat source) |
| Emergency Mode | The system will operate in furnace mode when in error |
| Auto Restart Function | Auto-recovery after power failure (must be activated on controller mode #1 set to 2) |

| Description: (Optional Accessories) | Model No. |
|-------------------------------------|-----------|
|-------------------------------------|-----------|

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|--------------------------|----------------------------|
| Front Windscreen | CM-S-FR-NKMU (x2 required) |
| Front Windscreen Blocker | CM-S-BLK-NKMU (x2 per box) |
| Rear Snow Guard | SG-1-RE |
| Side Snow Guard | SG-1-SD |
| | |

Note:

- To be installed by a trained and licensed refrigeration mechanic;
- Suitable for installation with an ANSI certified gas furnace (Z21.47/CSA2.3);
- Not suitable for installation with OIL or DRUM type furnaces;
- Supply air temperature must not exceed 200°F (93.3 °C);
- Furnace output capacity shall not be greater than 300% of the rated PAA cooling capacity;
- Configure furnace fan such that the airflow is greater than or equal to 350 CFM per ton and less than or equal to 400 CFM per ton of nominal PAA unit cooling capacity. In down flow orientation, the furnace fan should be configured to maintain an airflow face velocity below 350 ft/min to prevent water blow-off;
- For detailed requirements, review PAA Installation Manual at: <http://www.mitsubishitechno.ca/>

Note:

- Mitsubishi Electric Sales Canada Inc. (MESCA) supports the use of only MESCA supplied and approved components and accessories for proper functioning of the unit(s). Use of non - MESCA supported components and accessories will affect warranty coverage. MESCA recommends (A) consideration of all applicable design and application parameters and requirements specific to any project.
- Should any person change this document in any manner whatsoever without MESCA's written permission, the document shall be of no force and effect and any change shall be deemed to be a representation and warranty made by that person and not MESCA. That person, and not MESCA, shall assume full responsibility for the consequences of such changes. MESCA assumes no responsibility for any consequences in such cases.

Performance:

| | | | |
|-------------------------------|----------------------|---------|-----------------|
| Cooling at 95°F ^{*1} | Rated Capacity | Btu/h | 42,000 |
| | Capacity Range | Btu/h | 19,800 - 42,000 |
| | Rated Power Input | W | 4,420 |
| | Power Input Range | W | 1,300 - 4,420 |
| | Moisture Removal | pints/h | 8.0 |
| | Sensible Heat Factor | | 0.79 |
| Heating at 47°F ^{*1} | Rated Capacity | Btu/h | 46,000 |
| | Capacity Range | Btu/h | 20,600 - 49,600 |
| | Rated Power Input | W | 4,490 |
| | Power Input Range | W | 1,500 - 4,490 |
| Heating at 17°F ^{*2} | Maximum Capacity | Btu/h | 32,400 |
| | Rated Capacity | Btu/h | 32,400 |
| | Capacity Range | Btu/h | 14,500 - 32,400 |
| | Maximum Power Input | W | 4,020 |
| | Rated Power Input | W | 4,020 |
| | Power Input Range | W | 1,300 - 4,020 |
| Heating at 5°F ^{*3} | Maximum Capacity | Btu/h | 29,300 |
| | Maximum Power Input | W | 3,200 |
| Heating at -5°F | Maximum Capacity | Btu/h | 24,500 |
| | Maximum Power Input | W | 3,100 |

Efficiency:

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|---------------------------|------------------|-------------------|
| SEER / SEER2 | | 15.5 / 14.3 |
| EER / EER2 | | 9.50 / 9.00 |
| HSPF / HSPF2 (IV) / (V) | | 9.50 / 8.50 / TBA |
| COP at 47°F ^{*1} | Rated Capacity | 3.00 |
| COP at 17°F ^{*2} | Maximum Capacity | 2.36 |
| COP at 5°F ^{*3} | Maximum Capacity | 2.68 |

Electrical:

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|--|------|---------------------|
| Power Supply | | 208/230V, 1Ph, 60Hz |
| Voltage: Indoor - Outdoor, S1-S2 | V AC | AC 208/230V |
| Voltage: Indoor - Outdoor, S2-S3 | V DC | 10-24VDC |
| Short-circuit Current Rating (SCCR) | kA | 5 |
| Recommended Fuse/Breaker Size (Outdoor) | A | 30 |
| Recommended Wire Size (Indoor - Outdoor) | AWG | 14 |

Outdoor Temperature Operation Range:

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|--|---------|--|
| Cooling | °F (°C) | ^{*4} 0 to 115 (-18 to 46) |
| Heating | °F (°C) | D.B. -4 to 70 (-20 to 21.1), W.B. -4 to 59 (-20 to 15) |
| Cooling Operation Thermal Lock-out / Re-start Temperatures | °F (°C) | -1.3 / 3.2 (-18.5 / -16.0) |
| Heating Operation Thermal Lock-out / Re-start Temperatures | °F (°C) | -8.5 / -4.9 (-22.5 / -20.5) |

AHRI Rated Conditions (Rated data is determined at a fixed compressor speed)

NOTES : *1. Rating conditions (cooling)-Indoor: D.B. 80°F (26.7°C), W.B. 67°F (19.4°C) Outdoor: D.B. 95°F(35°C), W.B. 75°F (23.9°C)
(heating)-Indoor: D.B. 70°F (21.1°C), W.B. 60°F (15.6°C) Outdoor: D.B. 47°F (8.3°C), W.B. 43°F (6.1°C)

*2. Conditions (heating)-Indoor: D.B. 70°F (21.1°C), W.B. 60°F (15.6°C) Outdoor: D.B. 17°F (-8.3°C), W.B. 15°F (-9.4°C)

*3. Conditions (heating)-Indoor: D.B. 70°F (21.1°C), W.B. 60°F (15.6°C) Outdoor: D.B. 5°F (-15°C), W.B. 5°F (-15°C)

*4. Cooling at 0 °F, wind baffle accessory required. Without wind baffle accessory, the minimum temperature will be 23°F (-5°C).

^{A)} CFM @ 350 per tons.

Submittal Data: PAA-A42(B)(C)A1-M & PUZ-A42NKA7

Indoor Unit Specifications:

| Models | Airflow rate* | W: In. | D: In. | H: In. | W: mm | D: mm | H: mm | kg (lbs) |
|--|------------------|---|--------|--------|---------------------------------|-------------|-------|----------|
| PAA-A42BA1-M | 1225 | 17.5 | 21.3 | 31.0 | 445 | 543 | 785 | 31 (67) |
| PAA-A42CA1-M | 1225 | 21.0 | 21.3 | 31.0 | 534 | 543 | 785 | 37 (82) |
| * Target airflow rate for Y or Y1 signal | | | | | Not including connection pipes. | | | |
| Internal static pressure | in. WG | 0.3 (According to AHRI - 210/240, where this is the maximum allowable internal static pressure for "Coil Only" systems) | | | | | | |
| | [Pa] | 75 (According to AHRI - 210/240, where this is the maximum allowable internal static pressure for "Coil Only" systems) | | | | | | |
| MCA | | | | | A | 0.2 | | |
| Drain Pipe Size | | | | | In. (mm) | 3/4 (19.05) | | |
| External Finish Color | Galvanized Steel | | | | | | | |

Outdoor Unit Specifications:

| | | |
|--|----------------------------|-----------------------|
| MCA | A | 25 |
| MOCP | A | 31 |
| Fan Motor Output | kW | 0.074 + 0.074 |
| Airflow Rate (Cooling/Heating) | CFM | 3,880 / 3,880 |
| Sound Pressure Level, Cooling ¹ | dB(A) | 52 |
| Sound Pressure Level, Heating ² | dB(A) | 53 |
| Refrigerant Control | Electronic Expansion Valve | |
| Compressor Oil Type / Charge | oz. | FV50S (45) |
| External Finish Color | Ivory Munsell 3Y 7.8/1.1 | |
| Unit Weight | kg (lbs) | 97 (214) |
| Unit Dimensions | W: In. (mm) | 41-5/16 (1,050) |
| | D: In. (mm) | 13 + 63/64 (330 + 25) |
| | H: In. (mm) | 52-11/16 (1,338) |
| 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 Height Difference | Ft. (m) | 100 (30) |
| Maximum Piping Length | Ft. (m) | 100 (30) |

Description: (Optional Controls)

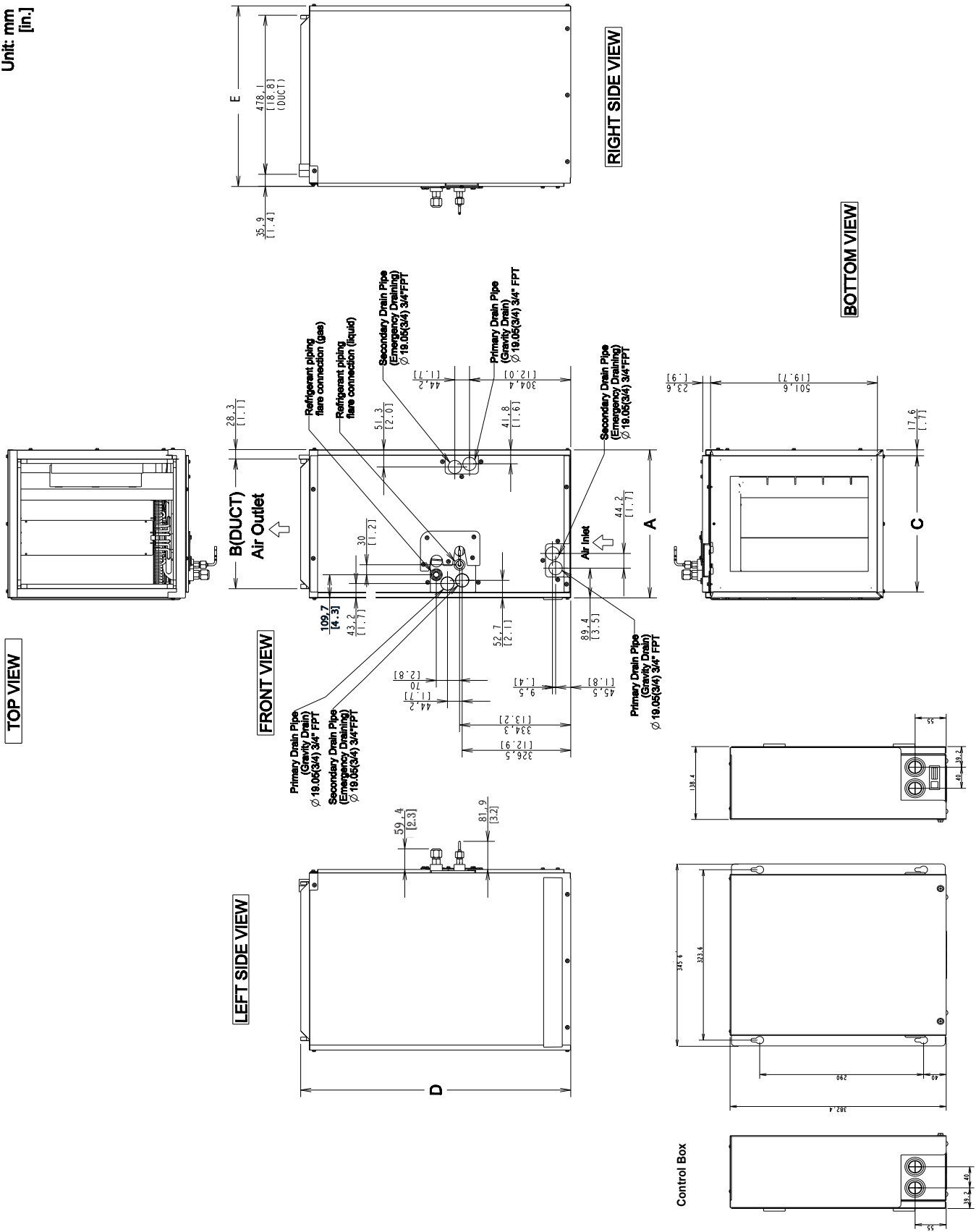
| Description: (Optional Controls) | Model No. |
|--------------------------------------|------------|
| Wired wall mounted remote control | PAR-40MAAU |
| Wireless wall mounted remote control | MHK2 |
| North American T-Stat Interface | RMF-CA100 |
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Indoor Unit Dimensions:

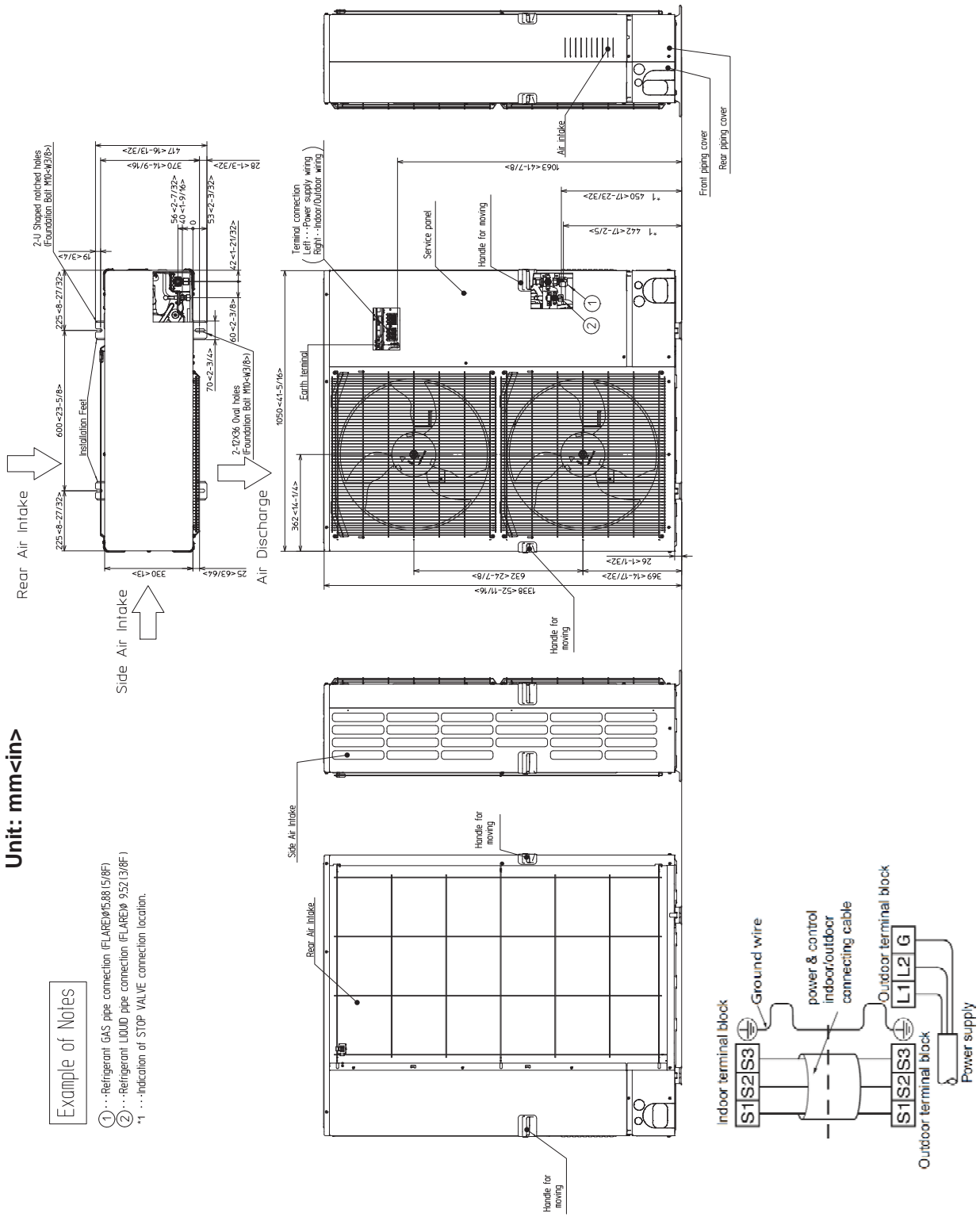
| Model | A mm (inches) | B mm (inches) | C mm (inches) | D mm (inches) | E mm (inches) |
|------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| PAA-A42BA1 | 445.0 (17-1/2) | 390 (15-5/16) | 409.6 (16-1/8) | 785.2 (31) | 543 (21-3/8) |
| PAA-A42CA1 | 534.6 (21) | 479.4 (18-7/8) | 499 (19-5/8) | 785.2 (31) | 543 (21-3/8) |

Indoor Unit Outline and Dimensions:

Unit: mm [in.]



Outdoor Unit Outline and Dimensions:



Unit: mm<in>

Example of Notes

- ① ...Refrigerant GAS pipe connection (FLARE) Ø5.88 (5/8")
- ② ...Refrigerant LIQUID pipe connection (FLARE) Ø 5.51 (3/8")
- * ...Indication of STOP VALVE connection location.

