

MXZ MULTI-ZONE SYSTEMS

H2i[®] MXZ Outdoor units

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Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

- Highly energy-efficient system that features 100% heating capacity at 5° F with guaranteed capacity down to -13° F
- Compact side discharge outdoor unit
- Indoor unit powered from outdoor unit using A-control (MXZ-2C20/3C24/3C30NAHZ only)
- Auto restart following a power outage
- Wired or wireless controller
- Quiet operation
- Built-in base pan heater to prevent ice in drain pan
- MXZ- 2C20,3C24,3C30NAHZ
 - M-Net adaptor kits are available as an option*
- Limited warranty: five years parts and seven years compressor

*Included standard in PAC-MKA30/50BC Branch Box

For all MXZ H2i® Series outdoor units a minimum of two indoor units must be connected and the minimum installed capacity cannot be less than 12,000 Btu/h.

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

MXZ-2C20NAHZ

| Item | | Outdoor model | | MXZ-2C20NAHZ | |
|---|-------------------------------|-------------------------------|----------------|----------------------------|--------------|
| | | Indoor type | | Non-Duct (09+09) | Duct (09+12) |
| Capacity | Cooling *1 | Btu/h | 18,000 | 20,000 | |
| | Heating 47 *1 | Btu/h | 22,000 | 22,000 | |
| | Heating 17 *2 | Btu/h | 13,700 | 13,700 | |
| Power consumption | Cooling *1 | W | 1,334 | 1,819 | |
| | Heating 47 *1 | W | 1,612 | 1,748 | |
| | Heating 17 *2 | W | 1,450 | 1,588 | |
| EER | Cooling | | 13.5 | 11.0 | |
| SEER | Cooling | | 17.0 | 15.0 | |
| HSPF IV(V) | Heating | | 9.8 | 9.5 | |
| COP | Heating | | 4.00 | 3.69 | |
| External finish | | Munsell 3.0Y 7.8/1.1 | | | |
| Power supply | | V, phase, Hz | 208/230, 1, 60 | | |
| Max. fuse size (time delay) | | A | 40 | | |
| Min. circuit ampacity | | A | 28.9 | | |
| Fan motor | | F.L.A | 1.90 | | |
| Compressor | Model | | MNB33FBTMC-L | | |
| | Winding resistance (at 68 °F) | | Ω | U-V 0.30 V-W 0.30 W-U 0.30 | |
| | | | R.L.A | 20 | |
| | | | L.R.A | 28.8 | |
| Refrigerant control | | LEV | | | |
| Sound level | | dB(A) | 54.0 / 58.0 | | |
| Defrost method | | Reverse cycle | | | |
| Dimensions | W | in. | 37-13/32 | | |
| | D | in. | 13 | | |
| | H | in. | 41-17/64 | | |
| Weight | | lb. | 187 | | |
| Remote controller | | Wireless type | | | |
| Control voltage (by built-in transformer) | | 4 | | | |
| Refrigerant piping | | Not supplied (optional parts) | | | |
| Valve size | Liquid | in. | 1/4 | | |
| | Gas | in. | A,B: 3/8 | | |
| Connection method | Indoor | Flared | | | |
| | Outdoor | Flared | | | |
| Refrigerant charge (R410A) | | lb. | 8 lb. 13 oz. | | |
| Refrigeration oil (Model) | | oz. | 37.4 (FV50S) | | |

NOTE : Test conditions are based on ARI 210/240.

Unit: °F

| Mode | Test | Indoor air condition | | Outdoor air condition | |
|---------|--|----------------------|----------|-----------------------|----------|
| | | Dry bulb | Wet bulb | Dry bulb | Wet bulb |
| Cooling | *1: "A" Cooling steady state at rated compressor speed | 80 | 67 | 95 | (75) |
| | "B-2" Cooling steady state at rated compressor speed | 80 | 67 | 82 | (65) |
| | "B-1" Cooling steady state at minimum compressor speed | 80 | 67 | 82 | (65) |
| | Low ambient cooling steady state at minimum compressor speed | 80 | 67 | 67 | (53.5) |
| | Intermediate cooling steady state at intermediate compressor speed | 80 | 67 | 87 | (69) |
| Heating | *1: Standard rating-heating at rated compressor speed | 70 | 60 | 47 | 43 |
| | *2: Low temperature heating at maximum compressor speed | 70 | 60 | 17 | 15 |
| | Maximum temperature heating at minimum compressor speed | 70 | 60 | 62 | 56.5 |
| | High temperature heating at minimum compressor speed | 70 | 60 | 47 | 43 |
| | Frost accumulation at rated compressor speed | 70 | 60 | 35 | 33 |
| | Frost accumulation at intermediate compressor speed | 70 | 60 | 35 | 33 |

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

MXZ-3C24NAHZ

| Item | | Outdoor model | | MXZ-3C24NAHZ | |
|---|-------------------------------|-------------------------------|-----------------|----------------------------|-----------------|
| | | Indoor type | | Non-Duct (06+06+09) | Duct (09+09+09) |
| Capacity | Cooling *1 | Btu/h | 22,000 | 23,600 | |
| | Heating 47 *1 | Btu/h | 25,000 | 24,600 | |
| | Heating 17 *2 | Btu/h | 14,000 | 14,000 | |
| Power consumption | Cooling *1 | W | 1,630 | 2,360 | |
| | Heating 47 *1 | W | 1,725 | 1,871 | |
| | Heating 17 *2 | W | 1,622 | 1,635 | |
| EER | Cooling | | 13.5 | 10.0 | |
| SEER | Cooling | | 19.0 | 15.5 | |
| HSPF IV(V) | Heating | | 10.0 | 9.0 | |
| COP | Heating | | 4.25 | 3.80 | |
| External finish | | Munsell 3.0Y 7.8/1.1 | | | |
| Power supply | | V, phase, Hz | 208/230, 1, 60 | | |
| Max. fuse size (time delay) | | A | 40 | | |
| Min. circuit ampacity | | A | 29.9 | | |
| Fan motor | | F.L.A | 1.90 | | |
| Compressor | Model | | MNB33FBTMC-L | | |
| | Winding resistance (at 68 °F) | | Ω | U-V 0.30 V-W 0.30 W-U 0.30 | |
| | | | R.L.A | 20 | |
| | | | L.R.A | 28.8 | |
| Refrigerant control | | LEV | | | |
| Sound level | | dB(A) | 54.0 / 58.0 | | |
| Defrost method | | Reverse cycle | | | |
| Dimensions | W | in. | 37-13/32 | | |
| | D | in. | 13 | | |
| | H | in. | 41-17/64 | | |
| Weight | | lb. | 189 | | |
| Remote controller | | Wireless type | | | |
| Control voltage (by built-in transformer) | | 4 | | | |
| Refrigerant piping | | Not supplied (optional parts) | | | |
| Valve size | Liquid | in. | 1/4 | | |
| | Gas | in. | A: 1/2 B,C: 3/8 | | |
| Connection method | Indoor | Flared | | | |
| | Outdoor | Flared | | | |
| Refrigerant charge (R410A) | | lb. | 8 lb. 13 oz. | | |
| Refrigeration oil (Model) | | oz. | 37.4 (FV50S) | | |

NOTE : Test conditions are based on ARI 210/240.

Unit: °F

| Mode | Test | Indoor air condition | | Outdoor air condition | |
|---------|--|----------------------|----------|-----------------------|----------|
| | | Dry bulb | Wet bulb | Dry bulb | Wet bulb |
| Cooling | *1: "A" Cooling steady state at rated compressor speed | 80 | 67 | 95 | (75) |
| | "B-2" Cooling steady state at rated compressor speed | 80 | 67 | 82 | (65) |
| | "B-1" Cooling steady state at minimum compressor speed | 80 | 67 | 82 | (65) |
| | Low ambient cooling steady state at minimum compressor speed | 80 | 67 | 67 | (53.5) |
| | Intermediate cooling steady state at intermediate compressor speed | 80 | 67 | 87 | (69) |
| Heating | *1: Standard rating-heating at rated compressor speed | 70 | 60 | 47 | 43 |
| | *2: Low temperature heating at maximum compressor speed | 70 | 60 | 17 | 15 |
| | Maximum temperature heating at minimum compressor speed | 70 | 60 | 62 | 56.5 |
| | High temperature heating at minimum compressor speed | 70 | 60 | 47 | 43 |
| | Frost accumulation at rated compressor speed | 70 | 60 | 35 | 33 |
| | Frost accumulation at intermediate compressor speed | 70 | 60 | 35 | 33 |

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

MXZ-3C30NAHZ

| Item | | Outdoor model | | MXZ-3C30NAHZ | |
|---|-------------------------------|-------------------------------|-----------------|----------------------------|-----------------|
| | | Indoor type | | Non-Duct (09+09+12) | Duct (09+09+12) |
| Capacity | Cooling *1 | Btu/h | 28,400 | 27,400 | |
| | Heating 47 *1 | Btu/h | 28,600 | 27,600 | |
| | Heating 17 *2 | Btu/h | 18,000 | 17,000 | |
| Power consumption | Cooling *1 | W | 2,272 | 2,661 | |
| | Heating 47 *1 | W | 2,096 | 2,187 | |
| | Heating 17 *2 | W | 1,991 | 1,993 | |
| EER | Cooling | | 12.5 | 10.3 | |
| SEER | Cooling | | 18.0 | 16.0 | |
| HSPF IV(V) | Heating | | 11.0 | 9.8 | |
| COP | Heating | | 4.00 | 3.70 | |
| External finish | | Munsell 3.0Y 7.8/1.1 | | | |
| Power supply | | V, phase, Hz | 208/230, 1, 60 | | |
| Max. fuse size (time delay) | | A | 40 | | |
| Min. circuit ampacity | | A | 29.9 | | |
| Fan motor | | F.L.A | 1.90 | | |
| Compressor | Model | | MNB33FBTMC-L | | |
| | Winding resistance (at 68 °F) | | Ω | U-V 0.30 V-W 0.30 W-U 0.30 | |
| | | | R.L.A | 20 | |
| | | | L.R.A | 28.8 | |
| Refrigerant control | | LEV | | | |
| Sound level | | dB(A) | 54.0 / 58.0 | | |
| Defrost method | | Reverse cycle | | | |
| Dimensions | W | in. | 37-13/32 | | |
| | D | in. | 13 | | |
| | H | in. | 41-17/64 | | |
| Weight | | lb. | 189 | | |
| Remote controller | | Wireless type | | | |
| Control voltage (by built-in transformer) | | 4 | | | |
| Refrigerant piping | | Not supplied (optional parts) | | | |
| Valve size | Liquid | in. | 1/4 | | |
| | Gas | in. | A: 1/2 B,C: 3/8 | | |
| Connection method | Indoor | Flared | | | |
| | Outdoor | Flared | | | |
| Refrigerant charge (R410A) | | lb. | 8 lb. 13 oz. | | |
| Refrigeration oil (Model) | | oz. | 37.4 (FV50S) | | |

NOTE : Test conditions are based on ARI 210/240.

Unit: °F

| Mode | Test | Indoor air condition | | Outdoor air condition | |
|---|--|----------------------|----------|-----------------------|----------|
| | | Dry bulb | Wet bulb | Dry bulb | Wet bulb |
| Cooling | *1: "A" Cooling steady state at rated compressor speed | 80 | 67 | 95 | (75) |
| | "B-2" Cooling steady state at rated compressor speed | 80 | 67 | 82 | (65) |
| | "B-1" Cooling steady state at minimum compressor speed | 80 | 67 | 82 | (65) |
| | Low ambient cooling steady state at minimum compressor speed | 80 | 67 | 67 | (53.5) |
| | Intermediate cooling steady state at intermediate compressor speed | 80 | 67 | 87 | (69) |
| Heating | *1: Standard rating-heating at rated compressor speed | 70 | 60 | 47 | 43 |
| | *2: Low temperature heating at maximum compressor speed | 70 | 60 | 17 | 15 |
| | Maximum temperature heating at minimum compressor speed | 70 | 60 | 62 | 56.5 |
| | High temperature heating at minimum compressor speed | 70 | 60 | 47 | 43 |
| | Frost accumulation at rated compressor speed | 70 | 60 | 35 | 33 |
| Frost accumulation at intermediate compressor speed | 70 | 60 | 35 | 33 | |

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

MXZ-4C36NAHZ

| Item | | Outdoor model | | MXZ-4C36NAHZ | | | |
|----------------------|---------------------------------|--------------------------------|----------------------------|--|-----------------|----------|----------|
| | | Indoor type | | Non-Ducted | Mix | Ducted | |
| Standard performance | Cooling | Capacity Rated*1 | | BTU/h | 36,000 | 36,000 | 36,000 |
| | | Rated power consumption*1 | | W | 2,570 | 2,875 | 3,180 |
| | | EER | | BTU/Wh | 14.01 | 12.52 | 11.32 |
| | | SEER | | BTU/Wh | 19.1 | 17.5 | 15.8 |
| | Heating | Capacity Rated 47°F*1 | | BTU/h | 45,000 | 45,000 | 45,000 |
| | | Capacity Max. 17°F*2 | | BTU/h | 45,000 | 45,000 | 45,000 |
| | | Capacity Max. 5°F | | BTU/h | 45,000 | 45,000 | 45,000 |
| | | Rated power consumption 47°F*1 | | W | 3,340 | 3,795 | 4,250 |
| | | COP 47°F*1 | | BTU/Wh | 3.95 | 3.48 | 3.10 |
| | | HSPF IV(V) | | BTU/Wh | 11.3/9.2 | 10.7/8.9 | 10.1/8.5 |
| OUTDOOR UNIT | Connectable indoor units (Max.) | | 4 | | | | |
| | Max. Connectable Capacity | | 46,000 | | | | |
| | Power supply | | 1 Phase 208 / 230 V, 60 Hz | | | | |
| | Breaker Size / Max. fuse size | | 50 A/ 52 A | | | | |
| | Min. circuit ampacity | | 42 A | | | | |
| | Sound level (Cool/Heat) | | dB | 49/ 53 | | | |
| | External finish | | Munsell 3Y 7.8/ 1.1 | | | | |
| | Refrigerant control | | Linear Expansion Valve | | | | |
| | Compressor | | Hermetic | | | | |
| | Model | | ANB33FJSMT | | | | |
| | Motor output | | kW | 2.8 | | | |
| | Starting method | | Inverter | | | | |
| | Heat exchanger | | Plate fin coil | | | | |
| | Fan | Fan (drive) × No. | | Propeller fan × 2 | | | |
| | | Fan motor output | | kW | 0.06 + 0.06 | | |
| | | Airflow | | m ³ /min (CFM) | 110 (3885) | | |
| | Dimensions (H × W × D) | W | | in (mm) | 41-11/32 (1050) | | |
| | | D | | in (mm) | 13+1 (330+25) | | |
| | | H | | in (mm) | 52-11/16 (1338) | | |
| | Weight | | lb (kg) | 276 (125) | | | |
| | Refrigerant | | R410A | | | | |
| | Charge | | lb (kg) | 10 lbs. 9 oz.(4.8) | | | |
| | Oil/ Model | | oz (L) | 73 (2.3) | | | |
| | Protection devices | High pressure protection | | HP switch | | | |
| | | Compressor protection | | Compressor thermo, Overcurrent detection | | | |
| | | Fan motor protection | | Overheating / Voltage protection | | | |
| | Guaranteed operation range | | (cool) | D.B 23 to 115°F . [D.B.-5 to 46°C] *3 | | | |
| | | | (heat) | D.B. -13 to 70°F [D.B. -25 to 21°C] | | | |
| REFRIGERANT PIPING | Total Piping length (Max.) | | ft (m) | 492 (150) | | | |
| | Farthest | | ft (m) | 262 (80) | | | |
| | Max. Height difference | | ft (m) | 164 (50)*4 | | | |
| | Chargeless length | | ft (m) | 0 | | | |
| | Piping diameter | Liquid | | in (mm) | 3/8 (9.52) | | |
| | | Gas | | in (mm) | 5/8 (15.88) | | |
| | Connection method | Indoor side | | Flared | | | |
| Outdoor side | | Flared | | | | | |

*1 Rating conditions Cooling Indoor : D.B. 80°F/ W.B. 67 °F [D.B.26.7°C/ W.B. 19.4°C]

Outdoor : D.B. 95°F [D.B. 35.0°C]

Heating Indoor : D.B. 70°F [D.B. 21.1°C]

Outdoor : D.B. 47°F/ W.B. 43°F [D.B. 8.3°C/ W.B. 6.1°C]

*2 Conditions

Heating Indoor : D.B. 70°F [D.B. 21.1°C]

Outdoor : D.B. 17°F/ W.B. 15°F [D.B. -8.3°C/ W.B. -9.4°C]

*3 D.B. 5 to 115°F [D.B. -15 to 46°C], when an optional Air Outlet Guide is installed.

*4 131 ft [40 m], in case of installing outdoor unit lower than indoor unit.

Note: Refer to the indoor unit's service manual for the indoor units specifications.

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

MXZ-5C42NAHZ

| Item | | Outdoor model | | MXZ-5C42NAHZ | | | |
|----------------------|---------------------------------|--------------------------------|---------|---|--|----------|----------|
| | | Indoor type | | | | | |
| Standard performance | Cooling | Capacity Rated*1 | | BTU/h | 42,000 | 42,000 | 42,000 |
| | | Rated power consumption*1 | | W | 3,130 | 3,510 | 3,890 |
| | | EER | | BTU/Wh | 13.42 | 11.97 | 10.80 |
| | | SEER | | BTU/Wh | 19.0 | 17.0 | 15.0 |
| | Heating | Capacity Rated 47°F*1 | | BTU/h | 48,000 | 48,000 | 48,000 |
| | | Capacity Max. 17°F*2 | | BTU/h | 48,000 | 48,000 | 48,000 |
| | | Capacity Max. 5°F | | BTU/h | 48,000 | 48,000 | 48,000 |
| | | Rated power consumption 47°F*1 | | W | 3,430 | 3,890 | 4,350 |
| | | COP 47°F*1 | | BTU/Wh | 4.10 | 3.62 | 3.23 |
| | | HSPF IV(V) | | BTU/Wh | 11.0/9.1 | 10.6/9.0 | 10.1/8.8 |
| OUTDOOR UNIT | Connectable indoor units (Max.) | | | 5 | | | |
| | Max. Connectable Capacity | | | 54,000 | | | |
| | Power supply | | | 1 Phase 208 / 230 V, 60 Hz | | | |
| | Breaker Size / Max. fuse size | | | 50 A/ 52 A | | | |
| | Min. circuit ampacity | | | 42 A | | | |
| | Sound level (Cool/Heat) | | dB | 50/ 54 | | | |
| | External finish | | | Munsell 3Y 7.8/ 1.1 | | | |
| | Refrigerant control | | | Linear Expansion Valve | | | |
| | Compressor | | | Hermetic | | | |
| | Model | | | ANB33FJSM T | | | |
| | Motor output | | kW | 3.0 | | | |
| | Starting method | | | Inverter | | | |
| | Heat exchanger | | | Plate fin coil | | | |
| | Fan | Fan (drive) × No. | | Propeller fan × 2 | | | |
| | | Fan motor output | | kW | 0.06 + 0.06 | | |
| | | Airflow | | m ³ /min (CFM) | 110 (3885) | | |
| | Dimensions (H × W × D) | W | | in (mm) | 41-11/32 (1050) | | |
| | | D | | in (mm) | 13+1 (330+25) | | |
| | | H | | in (mm) | 52-11/16 (1338) | | |
| | Weight | | lb (kg) | 276 (125) | | | |
| | Refrigerant | | | R410A | | | |
| | Charge | | lb (kg) | 10 lbs. 9 oz.(4.8) | | | |
| | Oil/ Model | | oz (L) | 73 (2.3) | | | |
| | Protection devices | High pressure protection | | | HP switch | | |
| | | Compressor protection | | | Compressor thermo, Overcurrent detection | | |
| | | Fan motor protection | | | Overheating / Voltage protection | | |
| | Guaranteed operation range | | (cool) | D.B 23 to 115°F . [D.B.-5 to 46°C] *3 | | | |
| | | | (heat) | D.B. -13 to 70°F [D.B. -25 to 21°C] | | | |
| REFRIGERANT PIPING | Total Piping length (Max.) | | ft (m) | 492 (150) | | | |
| | Farthest | | ft (m) | 262 (80) | | | |
| | Max. Height difference | | ft (m) | 164 (50)*4 | | | |
| | Chargeless length | | ft (m) | 0 | | | |
| | Piping diameter | Liquid | | in (mm) | 3/8 (9.52) | | |
| | | Gas | | in (mm) | 5/8 (15.88) | | |
| | Connection method | Indoor side | | | Flared | | |
| Outdoor side | | | Flared | | | | |

*1 Rating conditions Cooling Indoor : D.B. 80°F/ W.B. 67 °F [D.B.26.7°C/ W.B. 19.4°C]

Outdoor : D.B. 95°F [D.B. 35.0°C]

Heating Indoor : D.B. 70°F [D.B. 21.1°C]

Outdoor : D.B. 47°F/ W.B. 43°F [D.B. 8.3°C/ W.B. 6.1°C]

*2 Conditions

Heating Indoor : D.B. 70°F [D.B. 21.1°C]

Outdoor : D.B. 17°F/ W.B. 15°F [D.B. -8.3°C/ W.B. -9.4°C]

*3 D.B. 5 to 115°F [D.B. -15 to 46°C], when an optional Air Outlet Guide is installed.

*4 131 ft [40 m], in case of installing outdoor unit lower than indoor unit.

Note: Refer to the indoor unit's service manual for the indoor units specifications.

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

Branch Box

PAC-MKA50BC PAC-MKA30BC

| Model name | | | PAC-MKA50BC | PAC-MKA30BC | |
|------------------------------------|-----------------------|---------|--------------------------------|---|-----------------------------------|
| Connectable number of indoor units | | | Maximum 5 | Maximum 3 | |
| Power supply | | | Single phase, 208/230 V, 60 Hz | | |
| Input | kW | | 0.003 | | |
| Running current | A | | 0.05 | | |
| External finish | | | Galvanized sheets | | |
| Dimensions | Width | in (mm) | 17-23/32 (450) | | |
| | Depth | in (mm) | 11-1/32 (280) | | |
| | Height | in (mm) | 6-11/16 (170) | | |
| Weight | | | 16 (7.4) | 15 (6.7) | |
| Piping connection (Flare) | Branch (indoor side)* | Liquid | in (mm) | $\phi 1/4(6.35) \times 5$ {A,B,C,D,E} | $\phi 1/4(6.35) \times 3$ {A,B,C} |
| | | Gas | in (mm) | $\phi 3/8(9.52) \times 4$ {A,B,C,D}, $\phi 1/2(12.7) \times 1$ {E} | $\phi 3/8(9.52) \times 3$ {A,B,C} |
| | Main (outdoor side) | Liquid | in (mm) | $\phi 3/8$ (9.52) | |
| | | Gas | in (mm) | $\phi 5/8$ (15.88) | |

*The piping connection size differs according to the type and capacity of indoor units. Match the piping connection size for indoor and branch box. If the piping connection size of branch box does not match the piping connection size of indoor units, use optional different-diameter (deformed) joints to the branch box side. (Connect deformed joint directly to the branch box side.)

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

Efficiency Ratings

| Model | Configuration | SEER | EER | HSPF | COP @ 47° F | COP @ 17° F |
|--------------|---------------|------|-------|------|----------------|----------------|
| MXZ-2C20NAHZ | Non-Ducted | 17.0 | 13.50 | 9.8 | 4.00 | 2.77 |
| | Ducted | 15.0 | 11.00 | 9.5 | 3.69 | 2.53 |
| MXZ-3C24NAHZ | Non-Ducted | 19.0 | 13.50 | 10.0 | 4.25 | 2.53 |
| | Ducted | 15.5 | 10.00 | 9.0 | 3.80 | 2.51 |
| MXZ-3C30NAHZ | Non-Ducted | 18.0 | 12.50 | 11.0 | 4.00 | 2.65 |
| | Ducted | 16.0 | 10.30 | 9.8 | 3.70 | 2.50 |
| MXZ-4C36NAHZ | Non-Ducted | 19.1 | 14.01 | 11.3 | 3.95 | 2.85 |
| | Ducted | 15.8 | 11.32 | 10.1 | 3.10 | 2.30 |
| MXZ-5C42NAHZ | Non-Ducted | 19.0 | 13.42 | 11.0 | 4.10 | 2.85 |
| | Ducted | 15.0 | 10.80 | 10.1 | 3.23 | 2.50 |
| MXZ-8C48NAHZ | Non-Ducted | 18.9 | 10.00 | 11.0 | 3.75 | 2.70 |
| | Ducted | 14.7 | 9.5 | 10 | 3.17 | 2.40 |

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-1. Compatibility Table

| INDOOR UNIT | | OUTDOOR UNIT | 2C20NAHZ | 3C24NAHZ | 3C30NAHZ | 4C36NAHZ | 5C42NAHZ | 8C48NAHZ |
|-------------|-------------------|--------------|----------|----------|----------|----------|----------|----------|
| M-Series | Wall Mounted | MSZ-FE09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-FE12NA | | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-FH09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-FH12NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-FH15NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-FH18NA | | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-GE06NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-GE09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-GE12NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-GE15NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MSZ-GE18NA | | ○ | ○ | ○ | ○ | ○ |
| | MSZ-GE24NA | | | ○ | ○ | ○ | ○ | |
| | Floor Standing | MFZ-KA09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MFZ-KA12NA | ○ | ○ | ○ | ○ | ○ | ○ |
| MFZ-KA18NA | | | ○ | ○ | ○ | ○ | ○ | |
| S-Series | 4-way Cassette | SLZ-KA09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | SLZ-KA12NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | SLZ-KA18NA | | ○ | ○ | ○ | ○ | ○ |
| | Ceiling Conceald | SEZ-KD09NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | SEZ-KD12NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | SEZ-KD15NA | ○ | ○ | ○ | ○ | ○ | ○ |
| | | SEZ-KD18NA | | ○ | ○ | ○ | ○ | ○ |
| P-Series | 4-way Cassette | PLA-A12BA | | | | ○ | ○ | ○ |
| | | PLA-A18BA | | ○ | ○ | ○ | ○ | ○ |
| | | PLA-A24BA | | | ○ | ○ | ○ | ○ |
| | | PLA-A30BA | | | | ○ | ○ | ○ |
| | | PLA-A36BA | | | | ○ | ○ | ○ |
| | Ceiling Suspended | PCA-A24KA | | | ○ | | | |
| | | PEAD-A24AA | | | ○ | ○ | ○ | ○ |
| | Ceiling Conceald | PEAD-A30AA | | | | ○ | ○ | ○ |
| | | PEAD-A36AA | | | | ○ | ○ | ○ |
| Vertical | Multi Position | MVZ-A12AA4 | ○ | ○ | ○ | ○ | ○ | ○ |
| | | MVZ-A18AA4 | | ○ | ○ | ○ | ○ | ○ |
| | | MVZ-A24AA4 | | | ○ | ○ | ○ | ○ |
| | | MVZ-A30AA4 | | | | ○ | ○ | ○ |
| | | MVZ-A36AA4 | | | | ○ | ○ | ○ |

Notes:

- Minimum of two Indoor Units must be connected to the MXZ-2C20,3C24,3C30,4C36,5C42,8C48NAHZ.
- Minimum installed capacity cannot be less than 12,000 Btu/h.
- System can operate with only one Indoor Unit turned on.
- May connect to any style indoor unit or combination.
- Information provided at 208/230V.
- Refer to the MXZ Technical & Service Manual for detailed specifications and additional information per Indoor Unit Combination.

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-2. Cooling and Heating Capacity and Characteristics

MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ

1-2-1. Method for obtaining system cooling and heating capacity:

To obtain the system cooling and heating capacity and the electrical characteristics of the outdoor unit, first add up the ratings of all the indoor units connected to the outdoor unit (see table below), and then use this total to find the standard capacity with the help of the tables on 1-4. STANDARD CAPACITY DIAGRAM.

(1) Capacity of indoor unit

| | Model Number for indoor unit | Model 06 | Model 09 | Model 12 | Model 15 | Model 18 | Model 24 | Model 30 | Model 36 |
|----------|------------------------------|----------|----------|----------|--|--|----------|----------|----------|
| M series | Model Capacity [kBtu/h] | 6.0 | 9.0 | 12.0 | 14.0* ¹ 15.0* ² | 17.2* ³ 18.0* ⁴ | 22.5 | — | — |
| P series | | — | — | 12.0 | — | 18.0 | 24.0 | 30.0 | 35.0 |
| SEZ | | — | 8.1 | 11.5 | 14.1 | 17.2 | — | — | — |
| SLZ | | — | 8.4 | 11.1 | 15.0 | — | — | — | — |
| MVZ | | — | — | 12.0 | — | 18.0 | 24.0 | 30.0 | 36.0 |

*1 The value is for MSZ-GE15NA.

*2 The value is for MSZ-FH15NA.

*3 The value is for MSZ-GE/FH18NA.

*4 The value is for MSZ-FE18NA or MFZ-KA18NA.

(2) Sample calculation

1 System assembled from indoor and outdoor unit (in this example the total capacity of the indoor units is greater than that of the outdoor unit)

- Outdoor unit MXZ-5C42NAHZ
- Indoor unit MSZ-GE09NA × 2 + MSZ-FH15NA × 2

2 According to the conditions in 1, the total capacity of the indoor unit will be: 9.0 × 2 + 15.0 × 2 = 48.0

3 The following figures are obtained from the 16.8 total capacity of indoor units, referring the standard capacity diagram in "4-3-3. MXZ-5C42NAHZ <cooling>" and "4-3-4. MXZ-5C42NAHZ <heating>".

| Capacity (kBTU/h) | | Outdoor unit power consumption (kW) | | Outdoor unit current (A)/ 230 V | |
|-------------------|---------------|-------------------------------------|---------|---------------------------------|---------|
| Cooling | Heating | Cooling | Heating | Cooling | Heating |
| A 42.0 | B 48.0 | 3.46 | 4.37 | 15.26 | 19.31 |

1-2-2. Method for obtaining the heating and cooling capacity of an indoor unit:

(1) The capacity of each indoor unit (kW) = the capacity **A** (or **B**) × $\frac{\text{model capacity}}{\text{total model capacity of all indoor units}}$

(2) Sample calculation (using the system described above in 4-1-1. (2)):

During cooling:

- The total model capacity of the indoor unit is:
9.0 × 2 + 15.0 × 2 = 48.0 kBTU/h
Therefore, the capacity of MSZ-GE09NA and MSZ-FH15NA will be calculated as follows by using the formula in 4-1-2. (1):

$$\text{Model 09} = 42.0 \times \frac{9.0}{48.0} = 7.88 \text{ kBTU/h}$$

$$\text{Model 15} = 42.0 \times \frac{15.0}{48.0} = 13.13 \text{ kBTU/h}$$

During heating:

- The total model capacity of indoor unit is:
10.9 × 2 + 18.0 × 2 = 57.8 kBTU/h
Therefore, the capacity of MSZ-GE09NA and MSZ-FH15NA will be calculated as follows by using the formula in 4-1-2. (1):

$$\text{Model 25} = 48.0 \times \frac{10.9}{57.8} = 9.05 \text{ kBTU/h}$$

$$\text{Model 50} = 48.0 \times \frac{18.0}{57.8} = 14.95 \text{ kBTU/h}$$

Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-3. Standard Operation Data (Reference Data)

MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ

| Operation | | | | Outdoor unit model | | | | | |
|-----------------------|----------------------------|---------------------------|------------|--------------------|-------------|------------------|-------------|------------------|-------------|
| | | | | MXZ-4C36NAHZ | | MXZ-5C42NAHZ | | MXZ-8C48NAHZ | |
| Operating conditions | Ambient temperature | Indoor | DB/WB | 80°F / 67°F | 70°F / 60°F | 80°F / 67°F | 70°F / 60°F | 80°F / 67°F | 70°F / 60°F |
| | | Outdoor | | 95°F / 75°F | 47°F / 43°F | 95°F / 75°F | 47°F / 43°F | 95°F / 75°F | 47°F / 43°F |
| | Indoor unit | No. of connected units | Unit | 4 | | 4 | | 4 | |
| | | No. of units in operation | | 4 | | 4 | | 4 | |
| | | Model | | — | | 09 × 4 | | 09 × 2 + 12 × 2 | |
| | Piping | Main pipe | m | 9.84 (3) | | 9.84 (3) | | 9.84 (3) | |
| | | Branch pipe | | 14.76 (4.5) | | 14.76 (4.5) | | 14.76 (4.5) | |
| | | Total pipe length | | 68.90 (21) | | 68.90 (21) | | 68.90 (21) | |
| | Fan speed | | — | Hi | | Hi | | Hi | |
| | Amount of refrigerant | | lb oz (kg) | 17 lb 7 oz (7.9) | | 17 lb 7 oz (7.9) | | 17 lb 7 oz (7.9) | |
| Outdoor unit | Electric current | | A | 14.1 | 18.7 | 17.2 | 19.1 | 22.1 | 21.9 |
| | Voltage | | V | 230 | | 230 | | 230 | |
| | Compressor frequency | | Hz | 59 | 74 | 70 | 80 | 86 | 91 |
| LEV opening | Indoor unit | | Pulse | 112 | 128 | 129 | 128 | 112 | 132 |
| Pressure | High pressure/Low pressure | | MPa | 2.57/ 0.98 | 2.78/ 0.64 | 2.72/ 0.80 | 2.80/ 0.56 | 2.83/ 0.77 | 2.82/ 0.55 |
| Temp. of each section | Outdoor unit | Discharge | °C | 62.1 | 66.4 | 64.8 | 63.2 | 69.8 | 65.1 |
| | | Heat exchanger outlet | | 38.2 | 2.6 | 38.8 | 2.0 | 40.9 | 1.3 |
| | | Accumulator inlet | | 10.3 | 2.3 | 9.7 | 1.6 | 8.4 | 0.8 |
| | | Compressor inlet | | 8.4 | 1.1 | 7.4 | 0.4 | 5.8 | -0.8 |
| | Indoor unit | LEV inlet | | 21.1 | 39.7 | 28.7 | 37.9 | 21.7 | 37.1 |
| | | Heat exchanger inlet | | 12.3 | 59.4 | 9.8 | 55.7 | 8.6 | 57.0 |

Due to continuing improvement, above specification may be subject to change without notice.

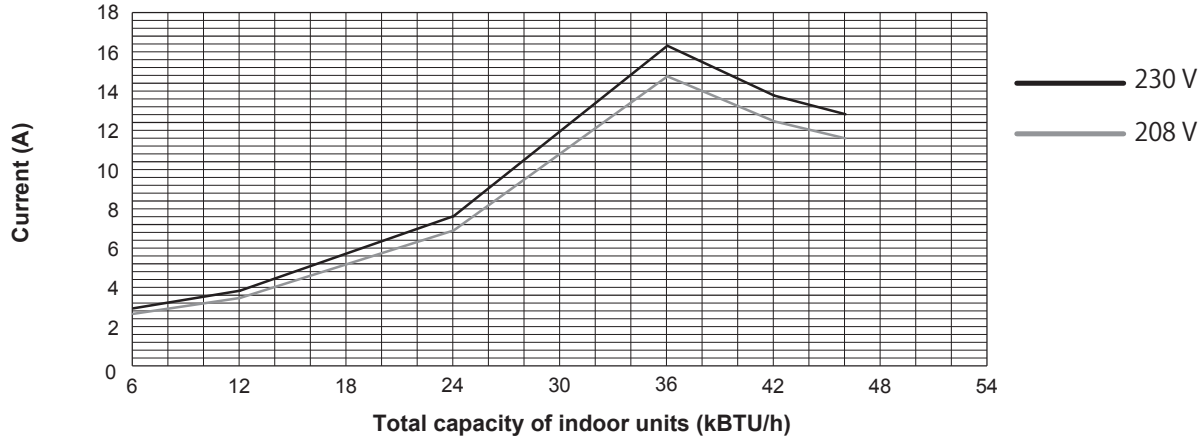
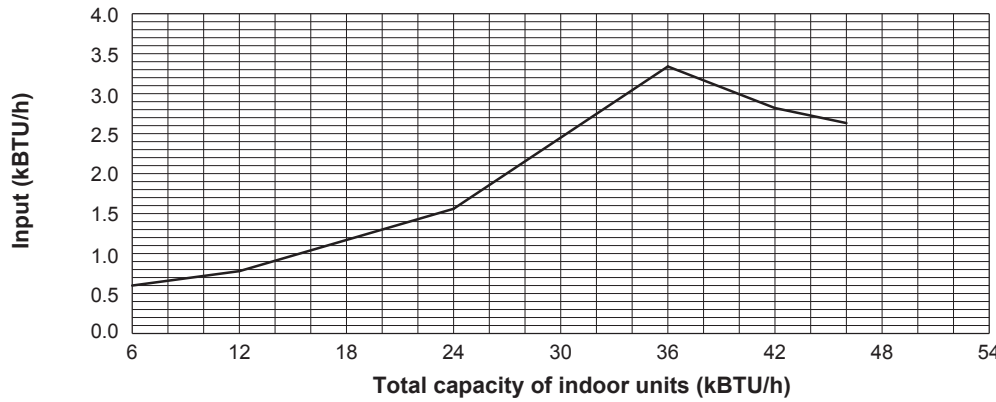
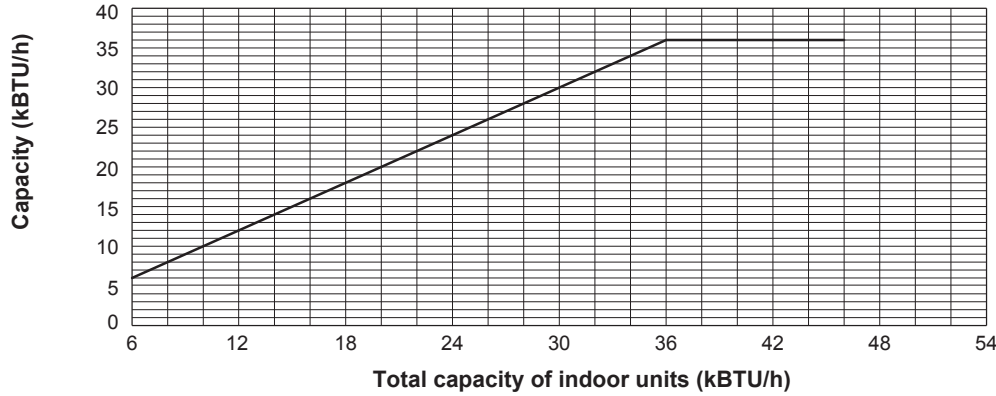
1. SPECIFICATIONS

1-4. Standard Capacity Diagram

Before calculating the sum of total capacity of indoor units, please convert the value into the kW model capacity following the formula on

"1-2-1. Method for obtaining system cooling and heating capacity".

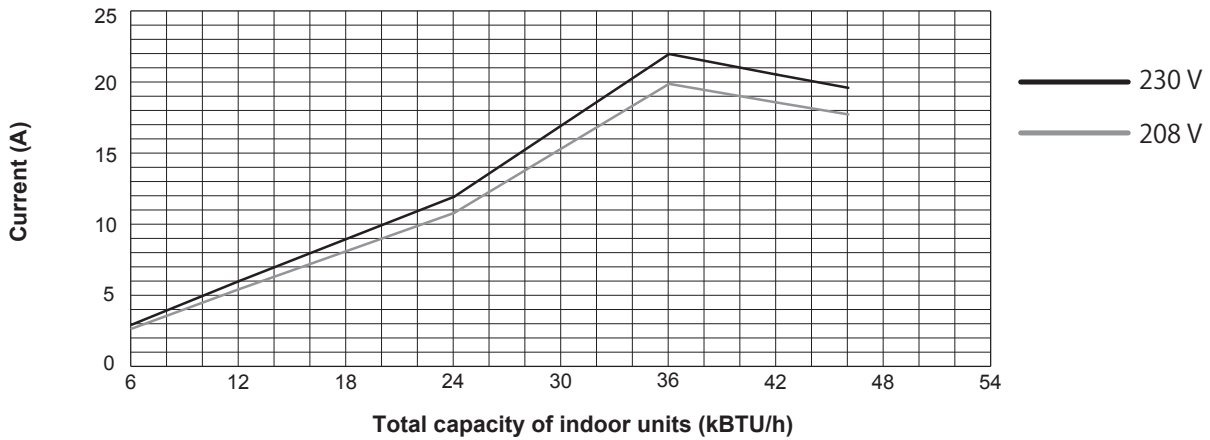
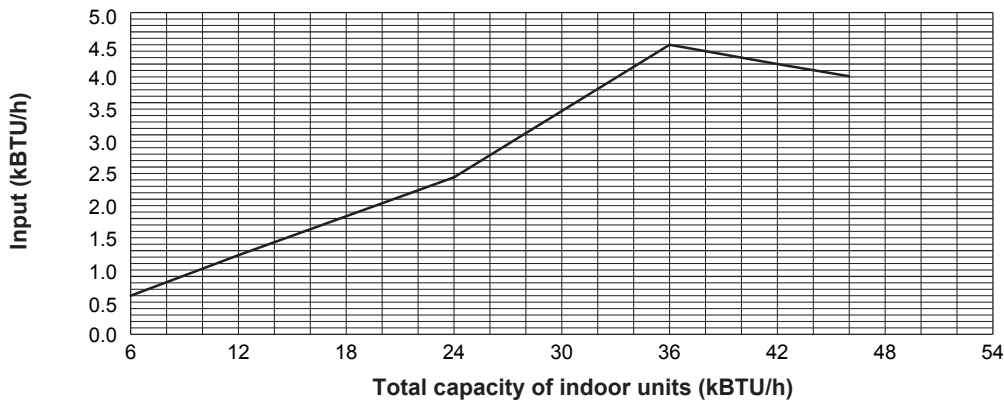
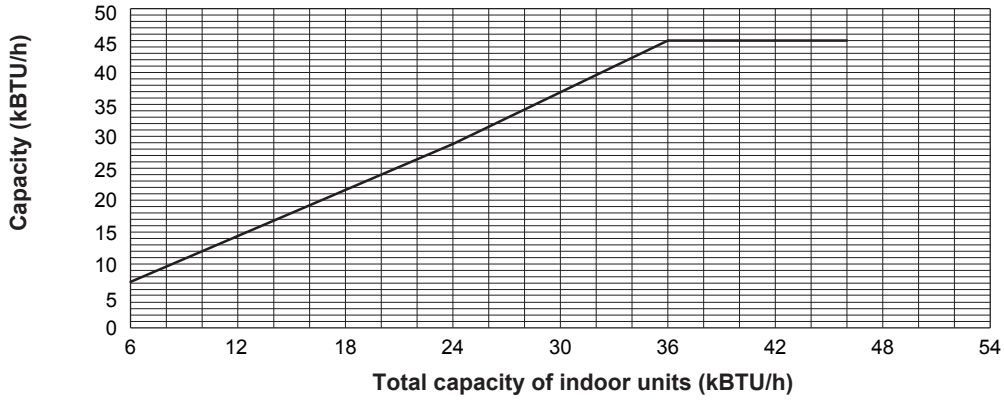
1-4-1. MXZ-4C36NAHZ <cooling>



Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

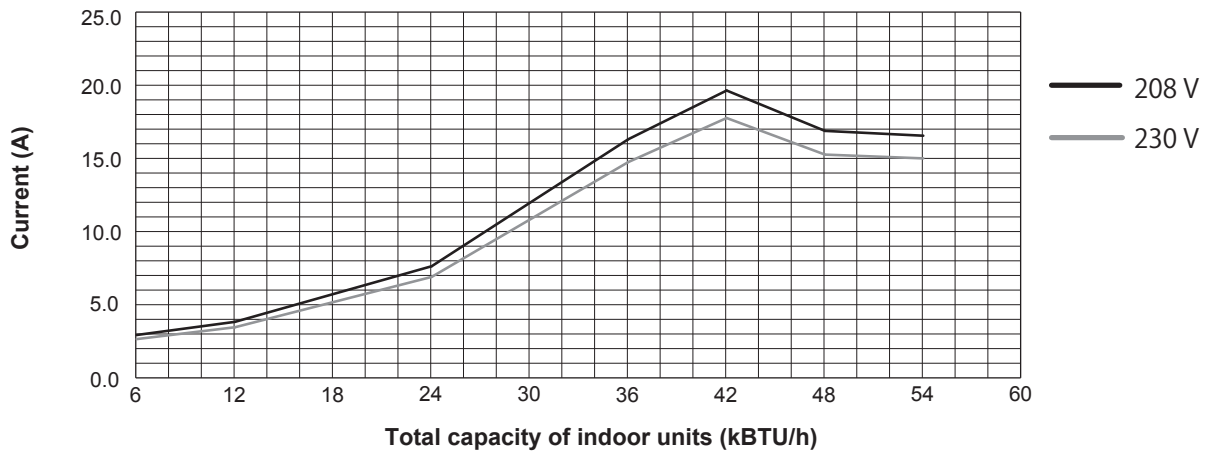
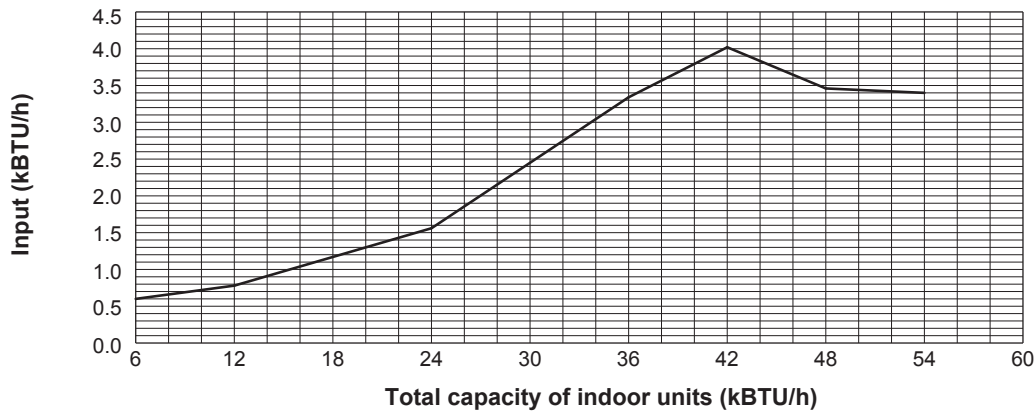
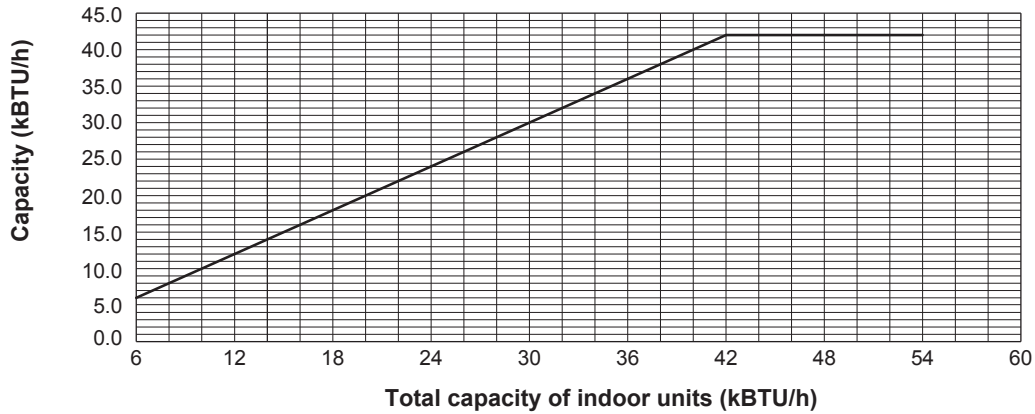
1-4-2. MXZ-4C36NAHZ <heating>



Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

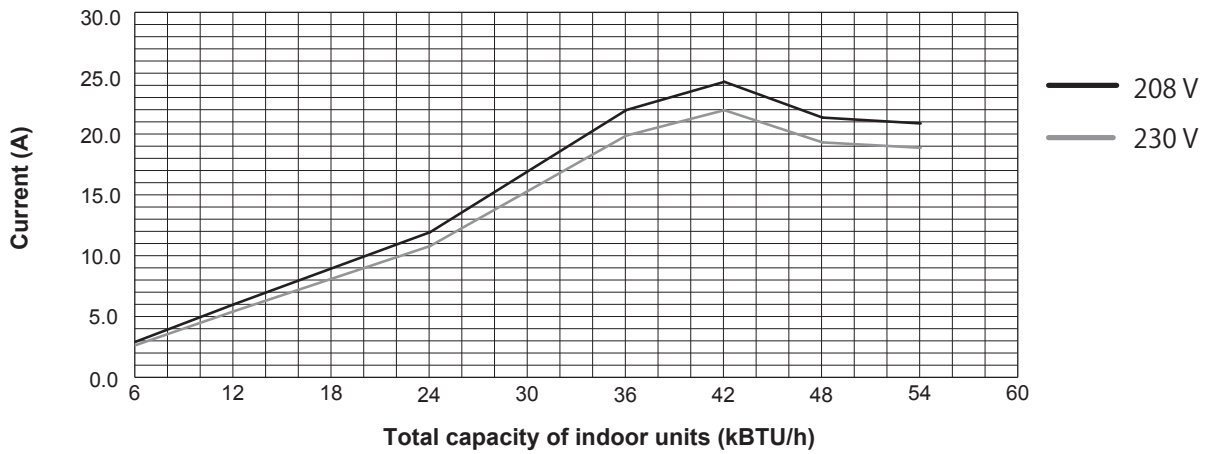
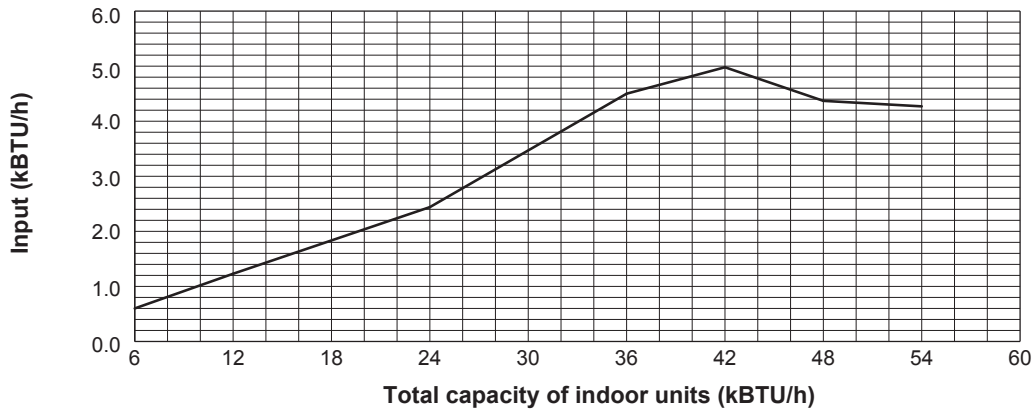
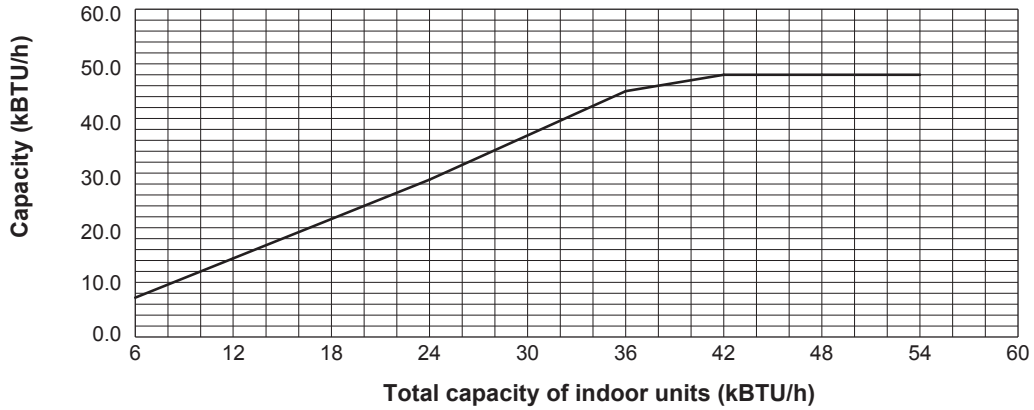
1-4-3. MXZ-5C42NAHZ <cooling>



Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

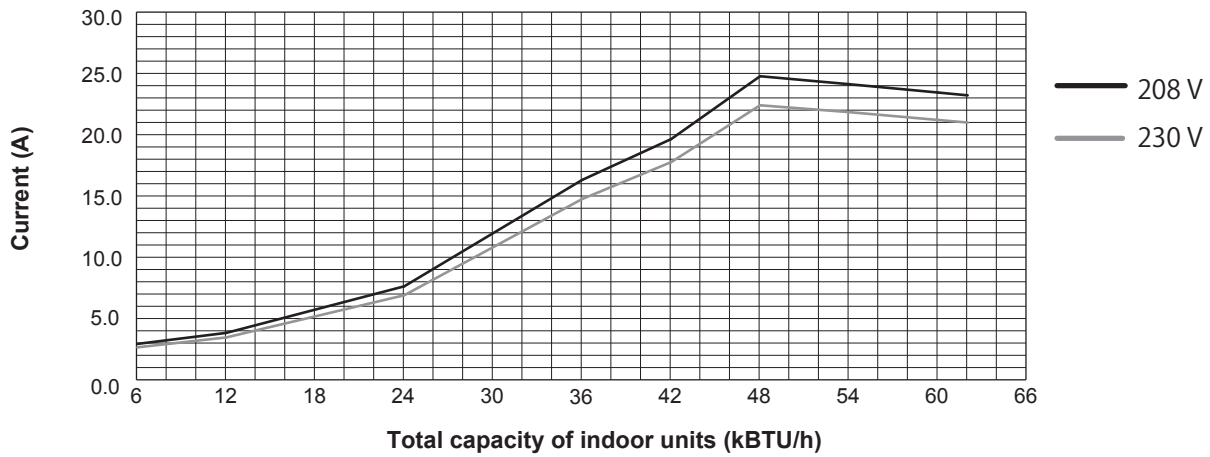
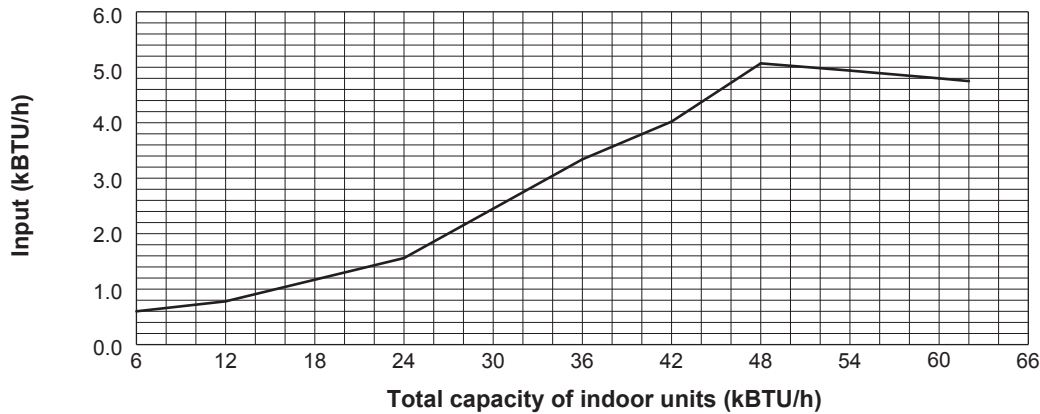
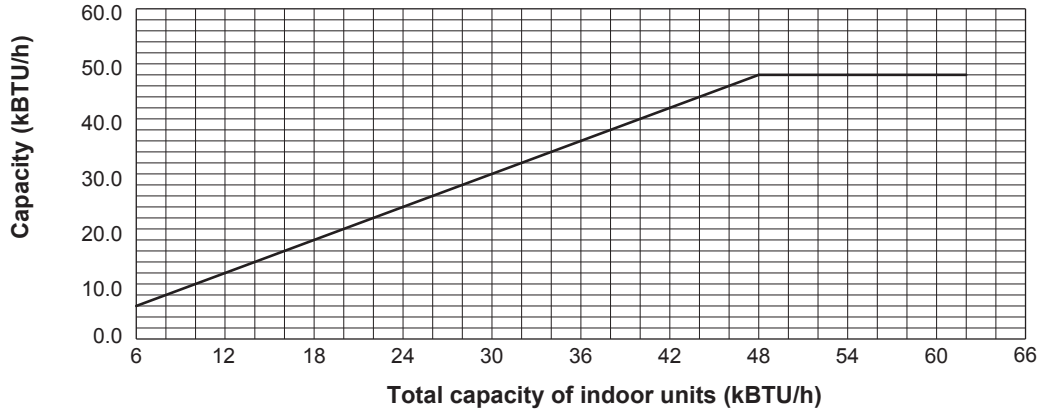
1-4-4. MXZ-5C42NAHZ <heating>



Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

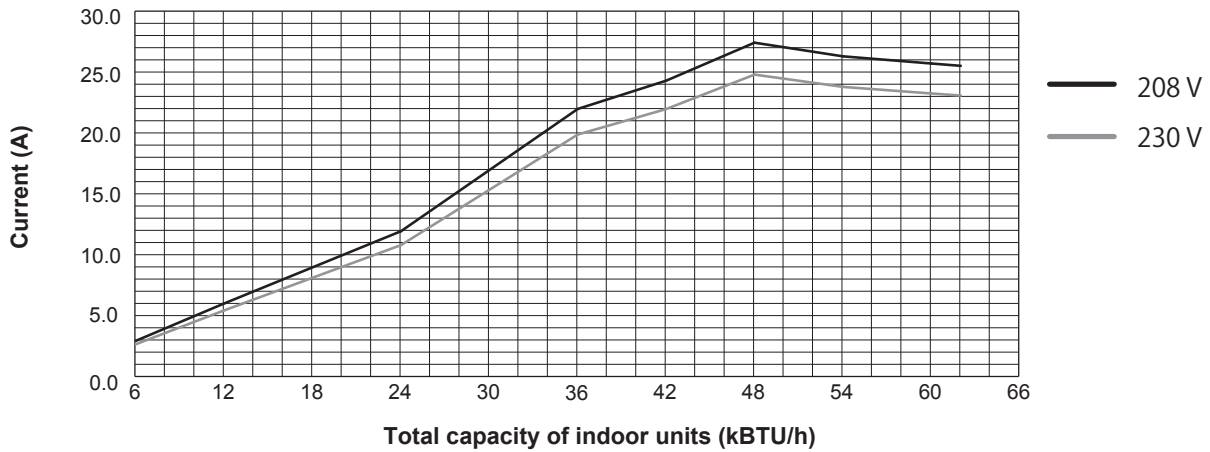
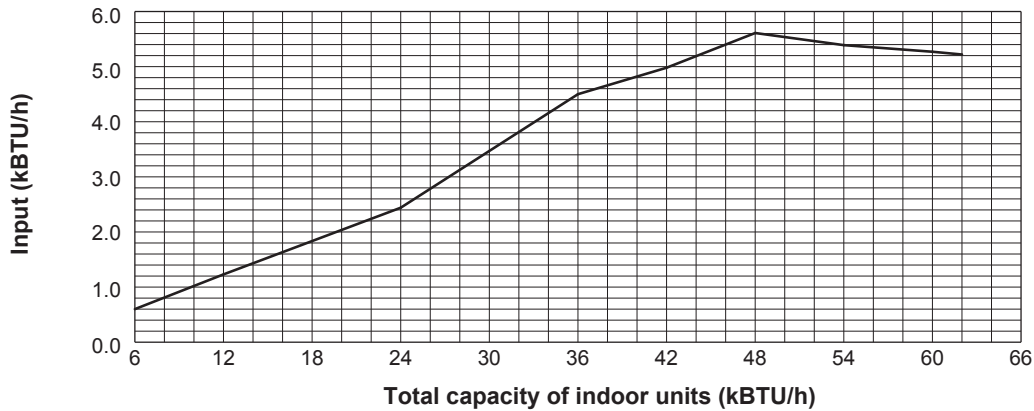
1-4-5. MXZ-8C48NAHZ <cooling>



Due to continuing improvement, above specification may be subject to change without notice.

1. SPECIFICATIONS

1-4-6. MXZ-8C48NAHZ <heating>

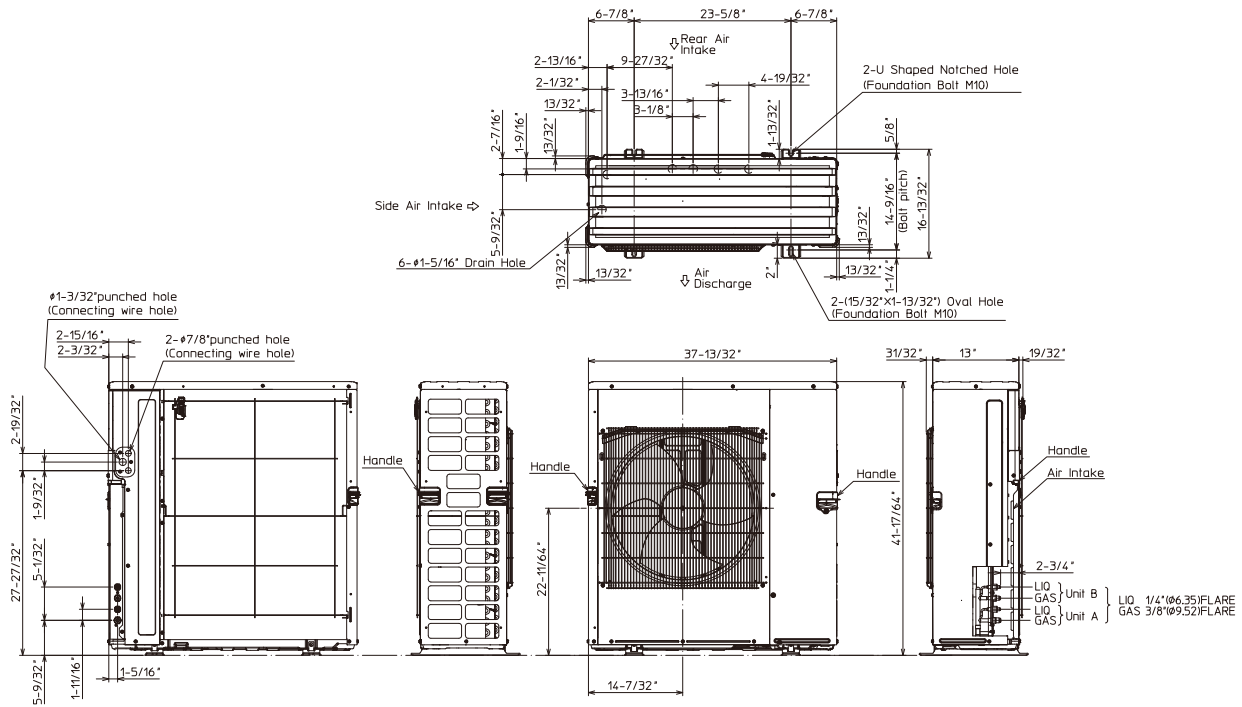


Due to continuing improvement, above specification may be subject to change without notice.

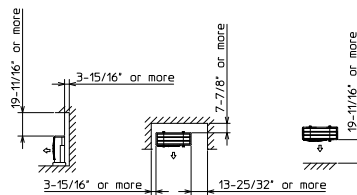
2. EXTERNAL DIMENSIONS

MXZ-2C20NAHZ

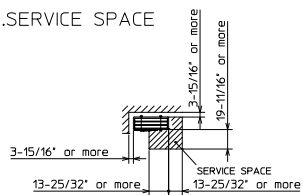
Unit: mm <in>



1.FREE SPACE



2.SERVICE SPACE

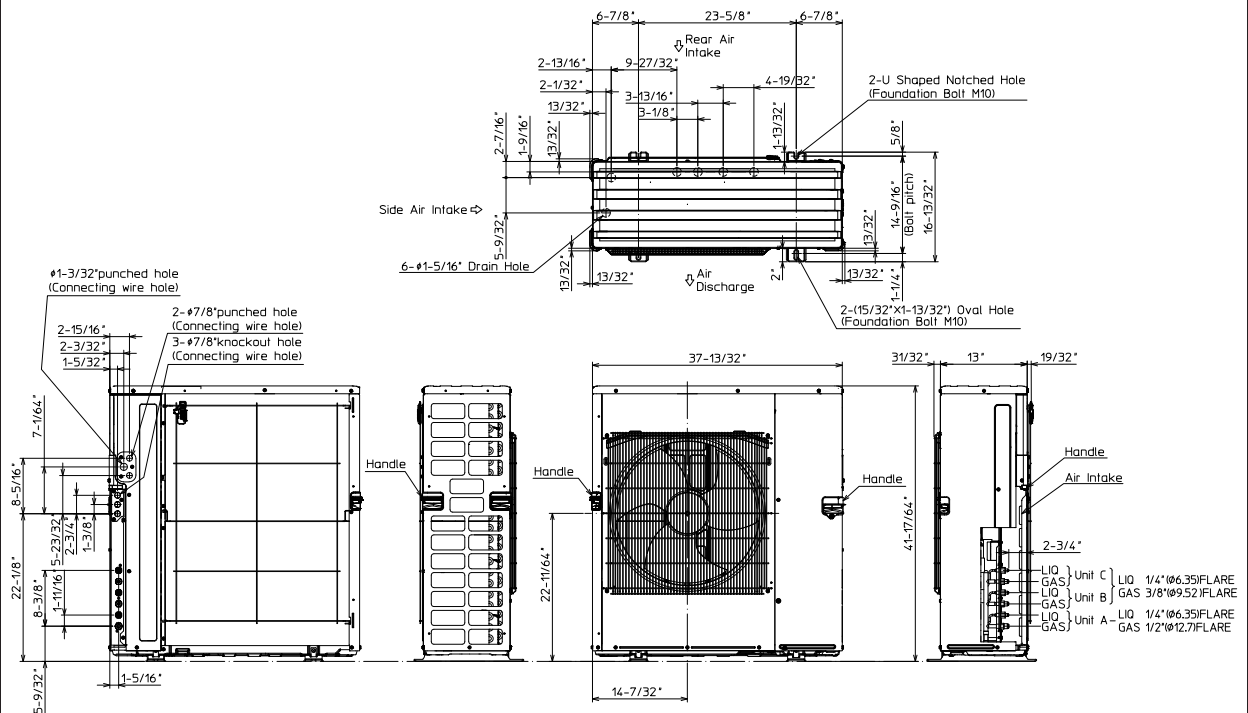


Due to continuing improvement, above specification may be subject to change without notice.

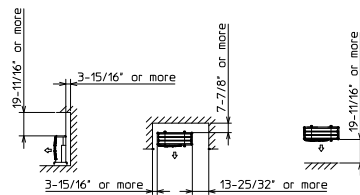
2. EXTERNAL DIMENSIONS

MXZ-3C24NAHZ MXZ-3C30NAHZ

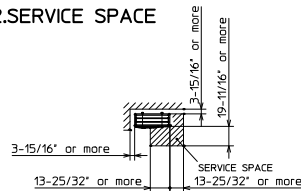
Unit: mm <in>



1.FREE SPACE



2.SERVICE SPACE



Due to continuing improvement, above specification may be subject to change without notice.

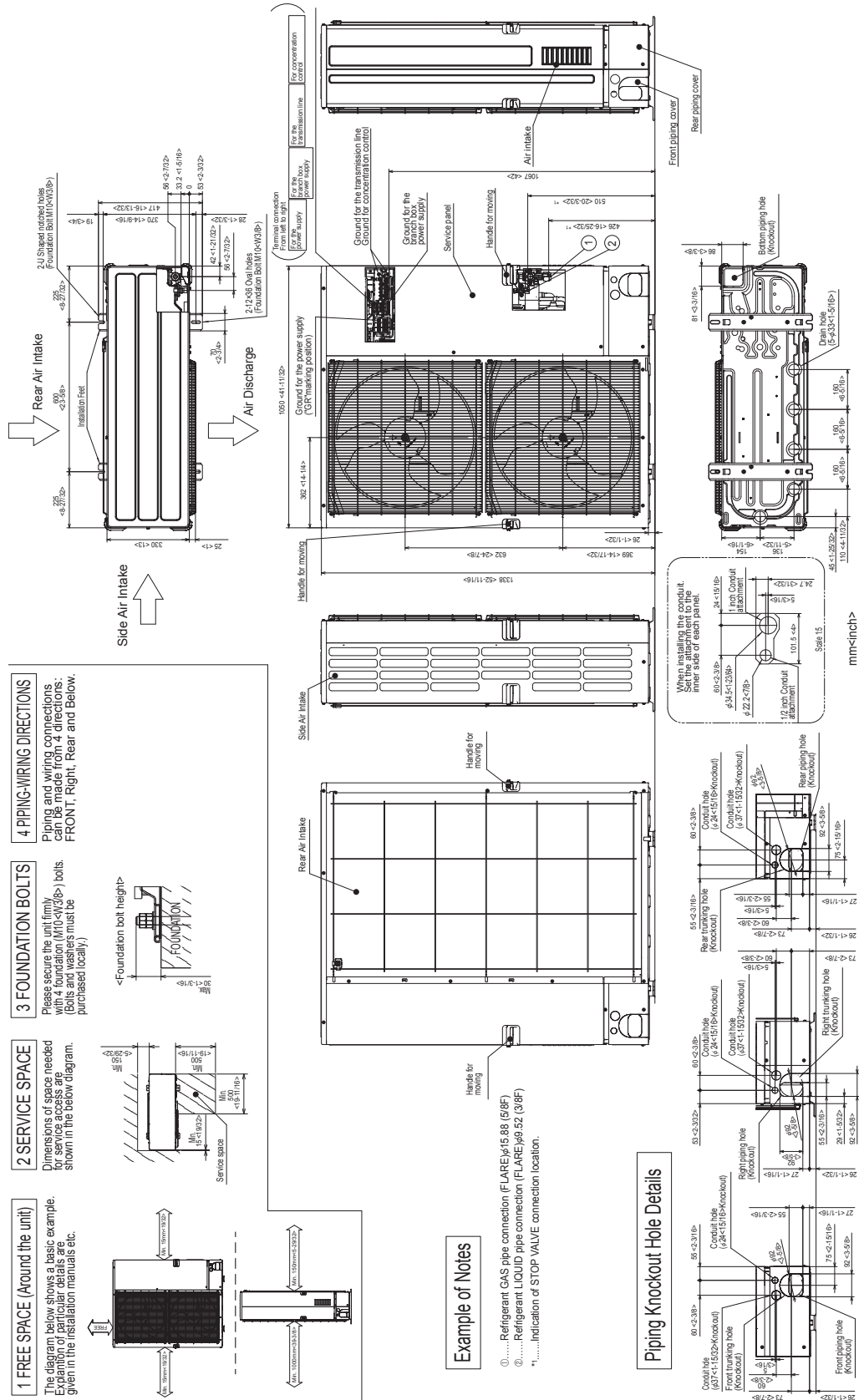
2. EXTERNAL DIMENSIONS

MXZ-4C36NAHZ

MXZ-5C42NAHZ

MXZ-8C48NAHZ

Unit: mm <in>



Due to continuing improvement, above specification may be subject to change without notice.

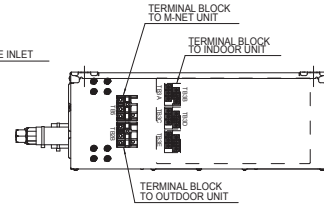
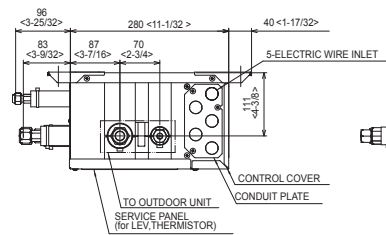
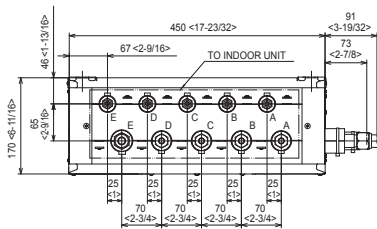
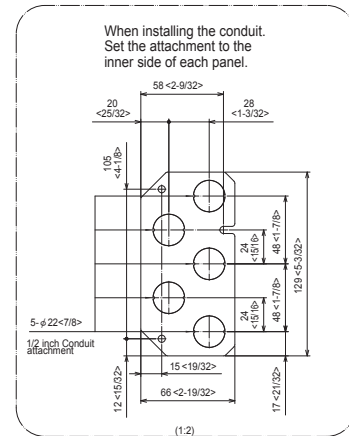
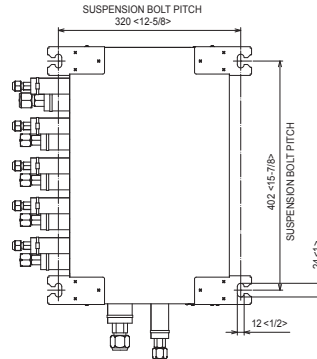
2. EXTERNAL DIMENSIONS

Branch Box PAC-MKA50BC

Unit: mm <in>

SUSPENSION BOLT : W3/8(M10)
REFRIGERANT PIPE FLARED CONNECTION

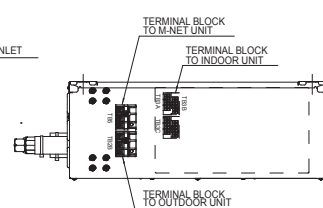
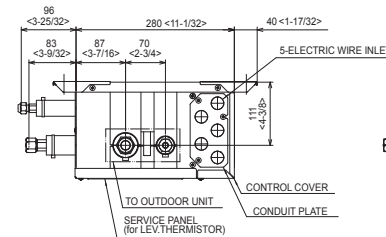
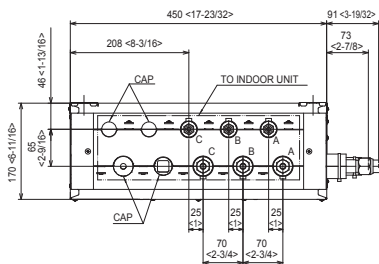
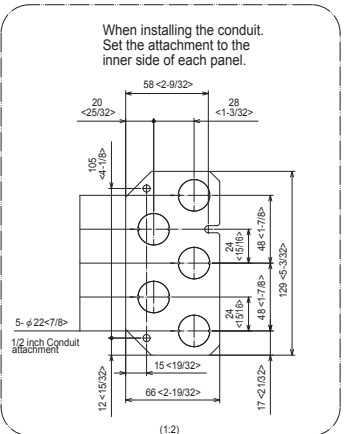
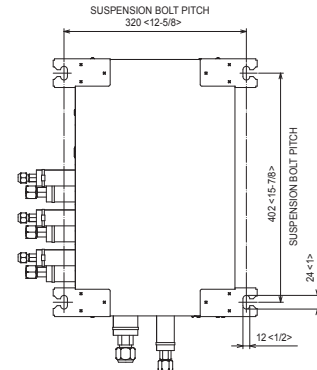
| | A | B | C | D | E | TO OUTDOOR UNIT |
|-------------|------|------|------|------|------|-----------------|
| LIQUID PIPE | 1/4F | 1/4F | 1/4F | 1/4F | 1/4F | 3/8F |
| GAS PIPE | 3/8F | 3/8F | 3/8F | 3/8F | 1/2F | 5/8F |



PAC-MKA30BC

SUSPENSION BOLT : W3/8(M10)
REFRIGERANT PIPE FLARED CONNECTION

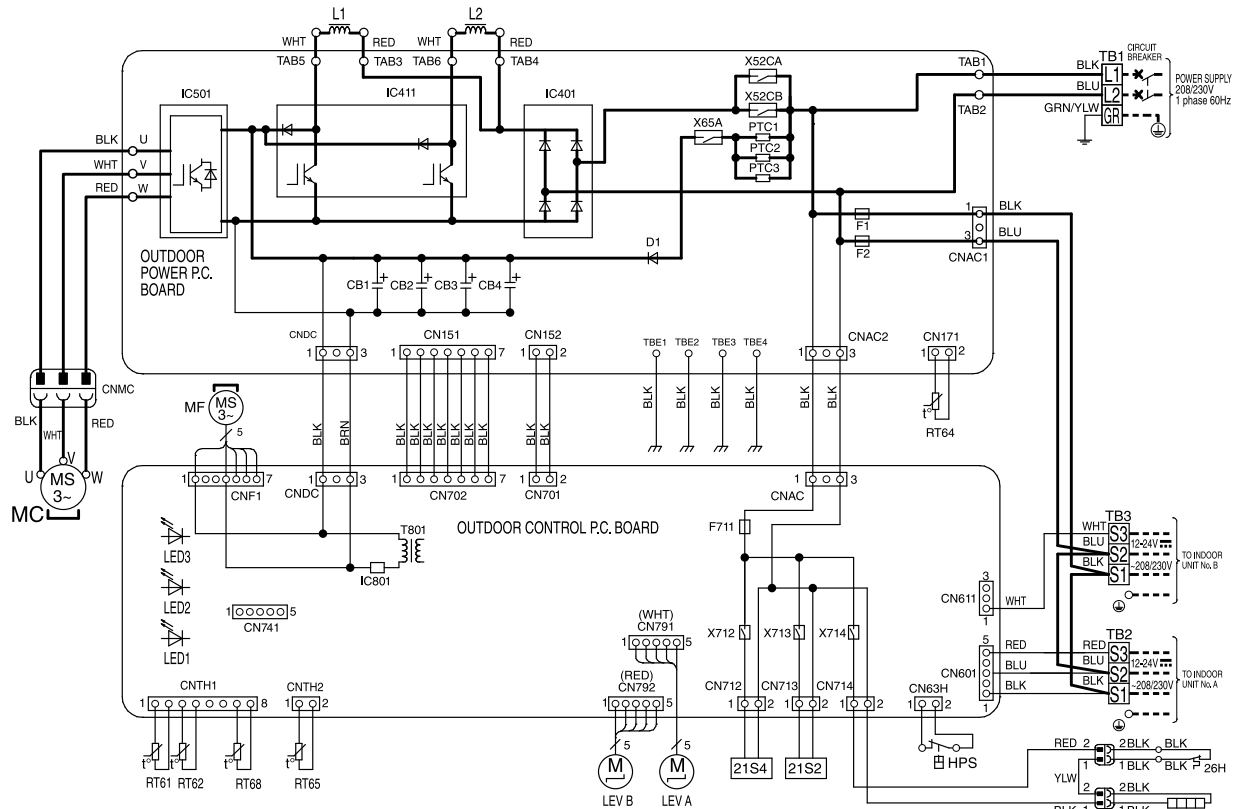
| | A | B | C | | TO OUTDOOR UNIT |
|-------------|------|------|------|--|-----------------|
| LIQUID PIPE | 1/4F | 1/4F | 1/4F | | 3/8F |
| GAS PIPE | 3/8F | 3/8F | 3/8F | | 5/8F |



Due to continuing improvement, above specification may be subject to change without notice.

4. ELECTRICAL WIRING DIAGRAMS

MXZ-2C20NAHZ



| SYMBOL | NAME | SYMBOL | NAME |
|--------|---|----------|-------------------------------|
| CB1-4 | SMOOTHING CAPACITOR | L1, L2 | REACTOR |
| D1 | DIODE | LED 1-3 | LED |
| F1, F2 | FUSE (T6.3AL 250V) | LEV A, B | EXPANSION VALVE |
| F711 | FUSE (T3.15AL 250V) | MC | COMPRESSOR |
| HPS | HIGH PRESSURE SWITCH | MF | FAN MOTOR |
| IC401 | DIODE BRIDGE | T801 | TRANSFORMER |
| IC411 | POWER MODULE | TB1-3 | TERMINAL BLOCK |
| IC501 | POWER MODULE | X52CA, B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| PTC1-3 | CIRCUIT PROTECTION | X712 | RELAY |
| RT61 | DEFROST THERMISTOR | X713 | RELAY |
| RT62 | DISCHARGE TEMP. THERMISTOR | X714 | RELAY |
| RT64 | FIN TEMP. THERMISTOR | 21S2 | 2WAY VALVE SOLENOID COIL |
| RT65 | AMBIENT TEMP. THERMISTOR | 21S4 | REVERSING VALVE SOLENOID COIL |
| RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR | 26H | HEATER PROTECTOR |
| | | H | DEFROST HEATER |

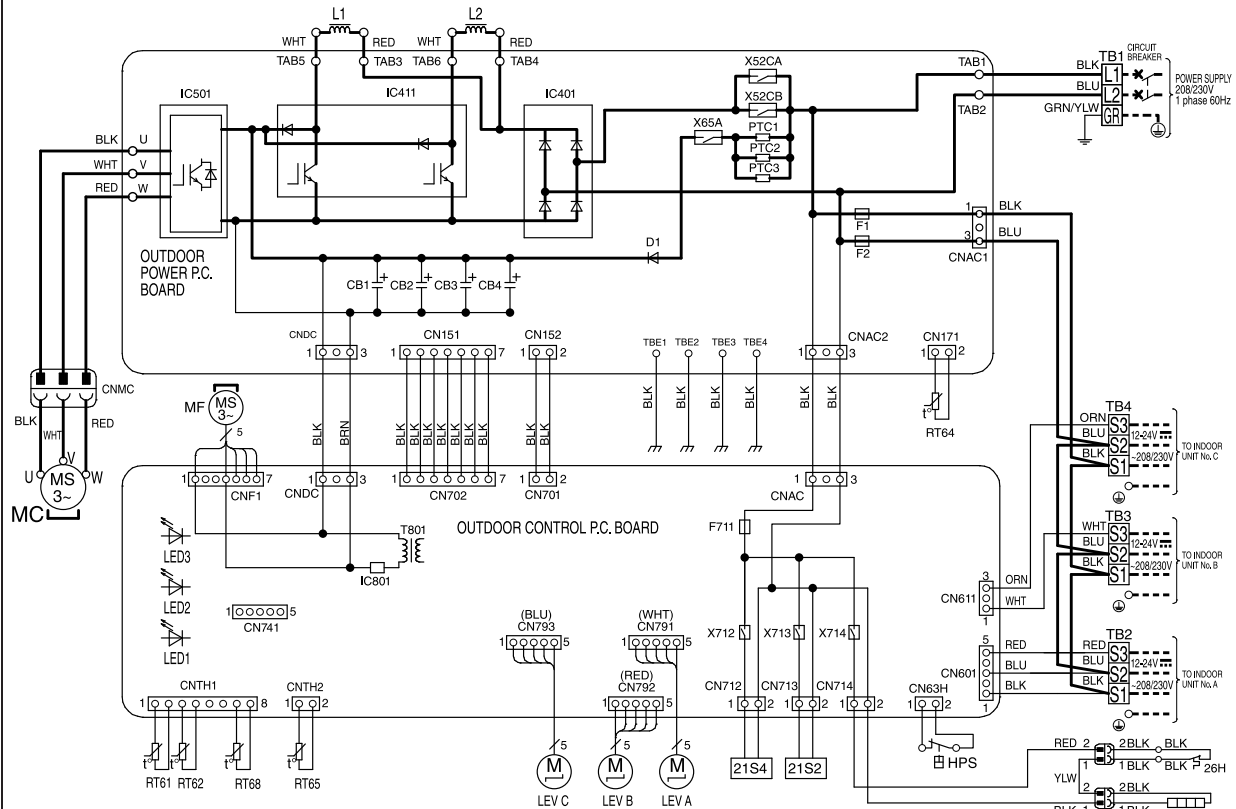
NOTES:
 1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for servicing.
 2. Use copper conductors only (For field wiring).
 3. Symbols below indicate.

NOTES:
 1. À propos du câblage électrique de côté intérieur se référer à l'unité intérieure câblage schéma électrique pour l'entretien.
 2. Utiliser des conducteurs en cuivre (pour le câblage).
 3. Symbole ci-dessous indique.

Due to continuing improvement, above specification may be subject to change without notice.

4. ELECTRICAL WIRING DIAGRAMS

MXZ-3C24NAHZ MXZ-3C30NAHZ



| SYMBOL | NAME | SYMBOL | NAME |
|--------|---|----------|-------------------------------|
| CB1-4 | SMOOTHING CAPACITOR | L1, L2 | REACTOR |
| D1 | DIODE | LED 1-3 | LED |
| F1, F2 | FUSE (T6.3AL 250V) | LEV A-C | EXPANSION VALVE |
| F711 | FUSE (T3.15AL 250V) | MC | COMPRESSOR |
| HPS | HIGH PRESSURE SWITCH | MF | FAN MOTOR |
| IC401 | DIODE BRIDGE | T801 | TRANSFORMER |
| IC411 | POWER MODULE | TB1-4 | TERMINAL BLOCK |
| IC501 | POWER MODULE | X52CA, B | RELAY |
| IC801 | POWER DEVICE | X65A | RELAY |
| PTC1-3 | CIRCUIT PROTECTION | X712 | RELAY |
| RT61 | DEFROST THERMISTOR | X713 | RELAY |
| RT62 | DISCHARGE TEMP. THERMISTOR | X714 | RELAY |
| RT64 | FIN TEMP. THERMISTOR | 21S2 | 2WAY VALVE SOLENOID COIL |
| RT65 | AMBIENT TEMP. THERMISTOR | 21S4 | REVERSING VALVE SOLENOID COIL |
| RT68 | OUTDOOR HEAT EXCHANGER TEMPERATURE THERMISTOR | 26H | HEATER PROTECTOR |
| | | H | DEFROST HEATER |

NOTES:

1. About the indoor side electric wiring refer to the indoor unit electric wiring diagram for servicing.
2. Use copper conductors only (For field wiring).
3. Symbols below indicate.

□ : Terminal block
 ○ : connector

NOTES:

1. À propos du câblage électrique de côté intérieur se référer à l'unité intérieure câblage schéma électrique pour l'entretien.
 2. Utiliser des conducteurs en cuivre (pour le câblage).
 3. Symbole ci-dessous indique.
- : bornier
 ○ : connecteur

Due to continuing improvement, above specification may be subject to change without notice.

4. ELECTRICAL WIRING DIAGRAMS

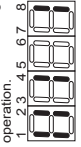
MXZ-4C36NAHZ

MXZ-5C42NAHZ

MXZ-8C48NAHZ

| SYMBOL | NAME | SYMBOL | NAME | SYMBOL | NAME |
|-------------|--|-------------|---------------------------------|------------|--|
| TB1 | Terminal Block (Power Supply) | TH6 | Thermistor (Suction Pipe) | SW7 | Switch (Function Selection) |
| TB1B | Terminal Block (Branch Box) | TH7 | Thermistor (Ambient) | SW8 | Switch (Function Selection) |
| TB3 | Terminal Block (Branch box/Outdoor Transmission Line) | TH8 | Thermistor (Heat Sink) | SW9 | Switch (Function Selection) |
| TB7 | Terminal Block (Centralized Control Transmission Line) | LEV-A/LEV-B | Electronic Expansion Valve | SWU1 | Switch (Unit Address Selection, 1st Digit) |
| FUSE1/FUSE2 | Fuse (T20AL250V) | DCL | Reactor | SWU2 | Switch (Unit Address Selection, 2nd Digit) |
| MC | Motor For Compressor | UVW | Power Circuit Board | CNS2 | Connector (Branch box/Outdoor Transmission Line) |
| FM | Fan Motor | UVW | Connection Terminal (UVW-Phase) | SS | Connector (Base heater) |
| NI | Connection Terminal (N-Phase) | LI | Connection Terminal (L-Phase) | CNS3 | Connector (Connection For Option) |
| Z1S4 | Solenoid Valve (Four-Way Valve) | DCL1/DCL2 | Connection Terminal (R-Phase) | CNS4 | Connector (Connection For Option) |
| HP | High Pressure Switch | EL/EL2/EL3 | Power Module | CNS5 | Connector (Connection For Option) |
| GSLS | Gas Pressure Sensor | EL/EL2/EL3 | Controller Circuit Board | CNS6 | Connector (Connection For Option) |
| LS | Low Pressure Switch | MULTI B. | Controller Circuit Board | LED1/LED2 | LED (Operation Inspection Display) |
| SV1 | Solenoid Valve (Brass Valve) | SW1 | Switch (Display Selection) | LED3 | LED (Power Supply to Main Microcomputer) |
| SV2 | Solenoid Valve (Switching Valve) | SW2 | Switch (Function Selection) | FI/F2 | Fuse (TR-3AL250V) |
| BH | Base heater | SW3 | Switch (Test Run) | X501~505 | Relay |
| TH2 | Thermistor (Hic Pipe) | SW4 | Switch (Model Selection) | M-NET P.B. | MAIET Power Circuit Board |
| TH3 | Thermistor (Outdoor Liquid Pipe) | SW5 | Switch (Function Selection) | TB1 | Connection Terminal (Ground) |
| TH4 | Thermistor (Compressor) | SW6 | Switch (Function Selection) | | |

(Example)
When the compressor and operation is turned during cooling



- During normal operation
The LED indicates the drive state of the controller in the outdoor unit.
- When fault requiring inspection has occurred
The LED status indicator indicates the inspection code and the location of the unit in which the fault has occurred.

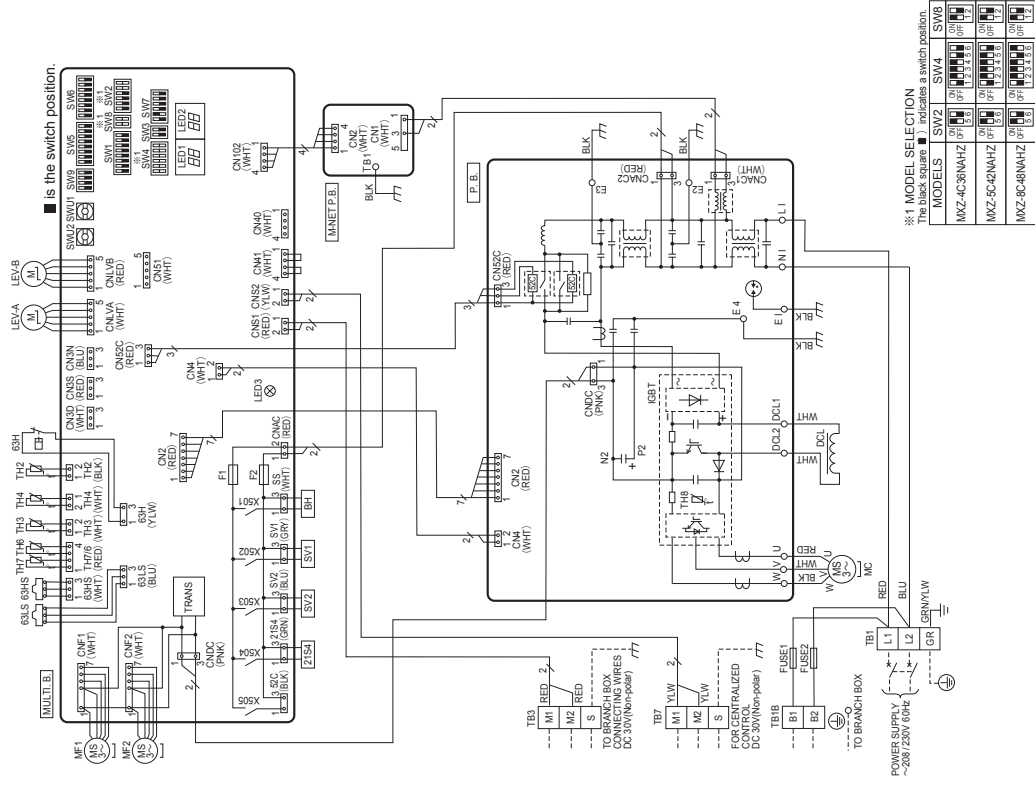
| BIT | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|-----------------------|-----|------|-----|-----|---|---|------------|
| Indication | Compressor overloaded | 52C | 21S4 | SV1 | SV2 | — | — | Always lit |

| Check code | Trouble | Check code | Trouble |
|------------|---|------------|---|
| 0403 | Serial transmission trouble | 6602 | Transmission error |
| 1102 | Compressor temperature trouble | 5101 | Fan controller trouble (Outdoor) |
| 1502 | High pressure trouble | 5102 | Air inlet sensor trouble (TH2) or Compressor temperature sensor trouble (TH4) |
| 1501 | Inefficient refrigerant | 5103 | Pipe temperature sensor trouble (TH6) or Suction temperature sensor trouble (TH8) |
| 1508 | Fourway valve disconnection trouble | 5105 | Gas pipe temperature sensor trouble (TH3) |
| 2502 | Drain pump trouble | 5106 | Pipe temperature sensor trouble (TH5) |
| 4100 | Overcurrent trouble (Outdoor compressor oc) | 5110 | Ambient temperature sensor trouble (TH2) |
| 4116 | Fan controller trouble (Indoor unit) | 5201 | HIC piping temperature sensor trouble (TH8) |
| 4210 | Compressor overcurrent trouble | 5202 | GRT heat sink temperature sensor trouble (TH8) |
| 4220 | Inverter trouble | 5300 | High Pressure sensor trouble (GS.S) |
| 4230 | Overheat protection of heat sink | 5300 | Low Pressure sensor trouble (GS.S) |
| 4250 | Power module trouble or Overcurrent trouble | 6600 | Current sensor trouble |
| | | 6600 | Duplicated unit address setting |

Caution for electrical work
• Use copper supply wires.
Cautions when servicing

⚠ **WARNING:** When the main supply is turned off, the voltage [340 V] in the main capacitor will drop to 20 V in approx. 2 minutes (input voltage: 230 V). When servicing, make sure that LED1, LED2 on the outdoor circuit board goes out, and then wait for at least 1 minute.
• Components other than the outdoor board may be faulty. Check and take corrective action, referring to the service manual.
Do not replace the outdoor board without checking.

NOTES:
1. Refer to the wiring diagrams of the indoor units for details on wiring of each indoor unit.
2. Self-diagnosis function
The indoor and outdoor units can be diagnosed automatically using the self-diagnosis switch (SW1) and LED1, LED2 (LED indication) found on the multi-controller of the outdoor unit.
LED indication: Set all contacts of SW1 to OFF.



※1 MODEL SELECTION
The black square ■ indicates a switch position.

| MODELS | SW2 | SW4 | SW6 |
|--------------|-----|-----|-----|
| MXZ-4C36NAHZ | OFF | OFF | OFF |
| MXZ-5C42NAHZ | OFF | OFF | OFF |
| MXZ-8C48NAHZ | OFF | OFF | OFF |

Due to continuing improvement, above specification may be subject to change without notice.

4. ELECTRICAL WIRING DIAGRAMS

Branch Box PAC-MKA50BC

PAC-MKA30BC

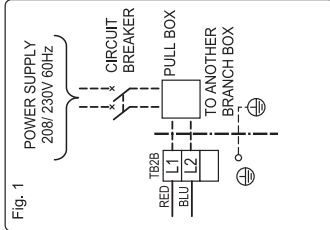
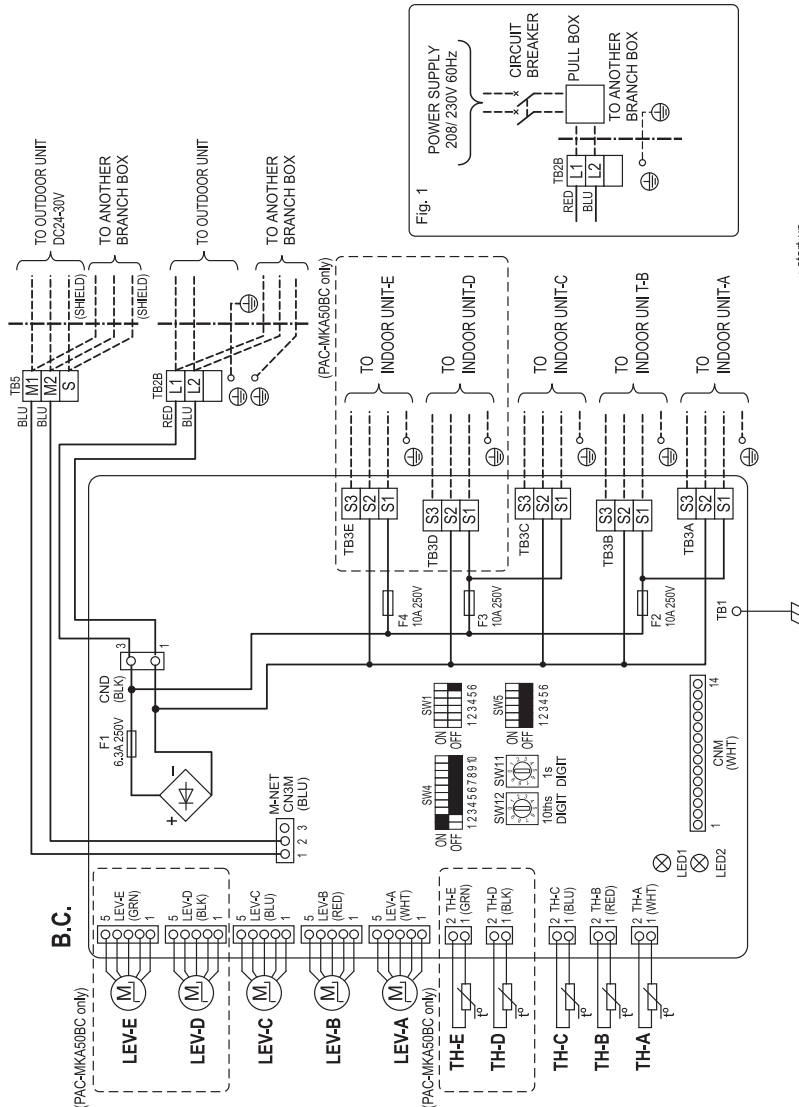
- <Note>
1. At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
 2. Caution for electrical work.
 - Use copper supply wires.
 3. When work to supply power separately to Branch box and outdoor units are applied, refer to Fig. 1.
 4. For the connection method, please refer to the Branch box Installation Manual.

- <Remarque>
1. Pour le service de l'unité extérieure, suivez toujours le diagramme de câblage de l'unité extérieure.
 - Utilisez des câbles d'alimentation en cuivre.
 2. Précautions relatives aux travaux électriques.
 - Utilisez des câbles d'alimentation en cuivre.
 3. Lorsque des travaux pour alimenter séparément le boîtier de dérivation et les unités extérieures sont effectués, reportez-vous à la Fig. 1.
 4. Pour la méthode de raccordement, veuillez vous reporter au mode d'emploi du boîtier de dérivation.

<Symbols used in wiring diagram>

□ : Terminal block, □□ : Connector

■ : Dip switch (■/black square) indicates a switch position



| Mark | Meaning | Function |
|-------|------------------------------|--|
| LED 1 | Main power supply | Main power supply (208/230V) |
| LED 2 | normal operating | Power on → Lamps are lit |
| Mark | Meaning | Function |
| LED 1 | Main power supply | Lamp is lit |
| LED 2 | Total number of indoor units | Blink depend on the total number of indoor units |
| | | ① Blink 2 for three sec. |
| | | ② Turn off for three sec. |
| | | ③ Repeat ① to ②. |

| SW1-1 | INDOOR UNIT-A | OFF | ON |
|-------|---------------|-------------|---------|
| SW1-2 | INDOOR UNIT-B | NOT CONNECT | CONNECT |
| SW1-3 | INDOOR UNIT-C | NOT CONNECT | CONNECT |
| SW1-4 | INDOOR UNIT-D | NOT CONNECT | CONNECT |
| SW1-5 | INDOOR UNIT-E | NOT CONNECT | CONNECT |
| SW1-6 | NO USE | | |

After each indoor unit is connected to the outdoor unit, turn on the switch corresponding to each indoor unit. For example, when the indoor units are connected to INDOOR UNIT-A and C, turn SW1-1 and SW1-3 to on.

| SYMBOL | NAME |
|---------------|--------------------------------------|
| B.C. | Branch box controller board |
| F1 | Fuse 250V 6.3A |
| F2-F4 | Fuse 250V 10A |
| SW1 | Switch for indoor unit connection *1 |
| SW2 | Switch for mode selection |
| SW3 | Switch for mode selection |
| SW4 | Switch for mode selection |
| SW5 | Switch for mode selection |
| CNM | Connector <Connection for service> |
| LED1,2 | Light emitting diode *2 |
| LEVA-E | Linear expansion valve *3 |
| THA-E | Thermistor <Gas pipe> *3 |
| TB2B | Terminal block <To Power Supply> |
| TB5 | Terminal block <Transmission> |
| TB3A-E <B.C.> | Terminal block To indoor unit-A-E *3 |
| SW11 | Address Setting 1s DIGIT |
| SW12 | Address Setting 10ths DIGIT |

*1 SW1 setting
*2 LED on Branch box controller board for service
*3 D and E for PAC-MKA50BC only.

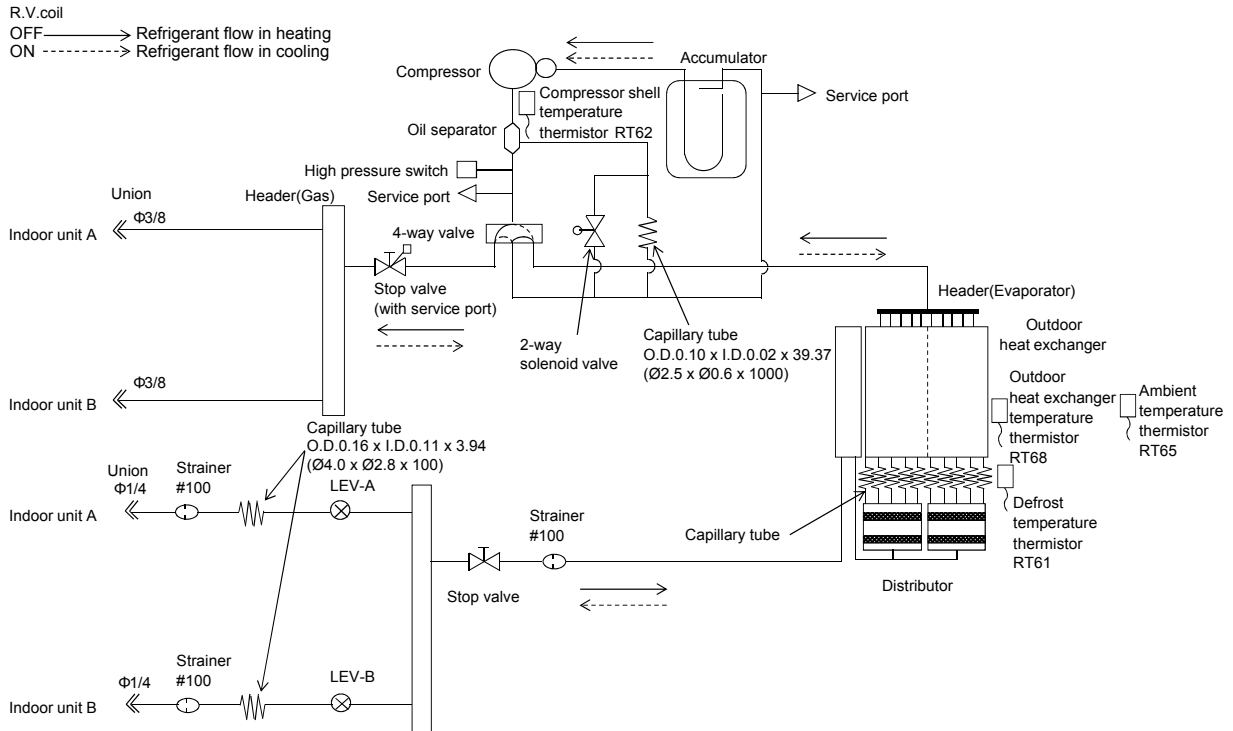
(Combination of indoor units)
Enter the location of combined indoor units with model name in each blank below because it is necessary for service and maintenance.

| | | | | |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Indoor unit - A | Indoor unit - B | Indoor unit - C | Indoor unit - D | Indoor unit - E |
|-----------------|-----------------|-----------------|-----------------|-----------------|

Due to continuing improvement, above specification may be subject to change without notice.

5. REFRIGERANT SYSTEM DIAGRAMS

MXZ-2C20NAHZ

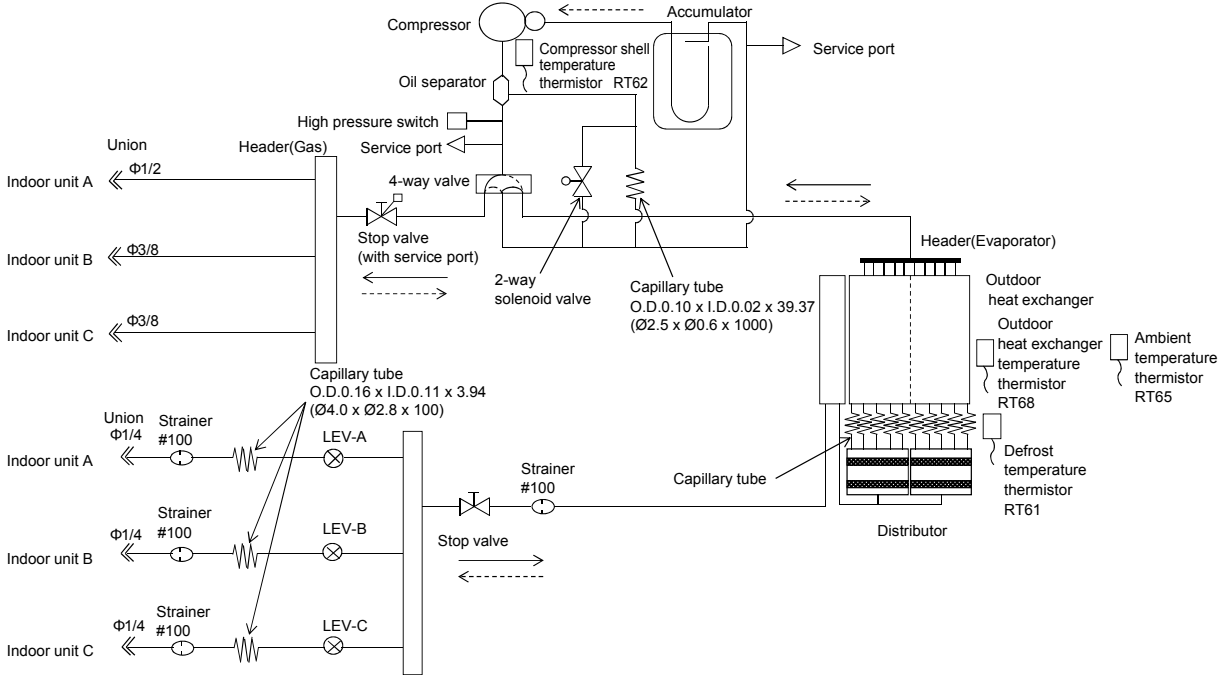


Due to continuing improvement, above specification may be subject to change without notice.

5. REFRIGERANT SYSTEM DIAGRAMS

MXZ-3C24NAHZ MXZ-3C30NAHZ

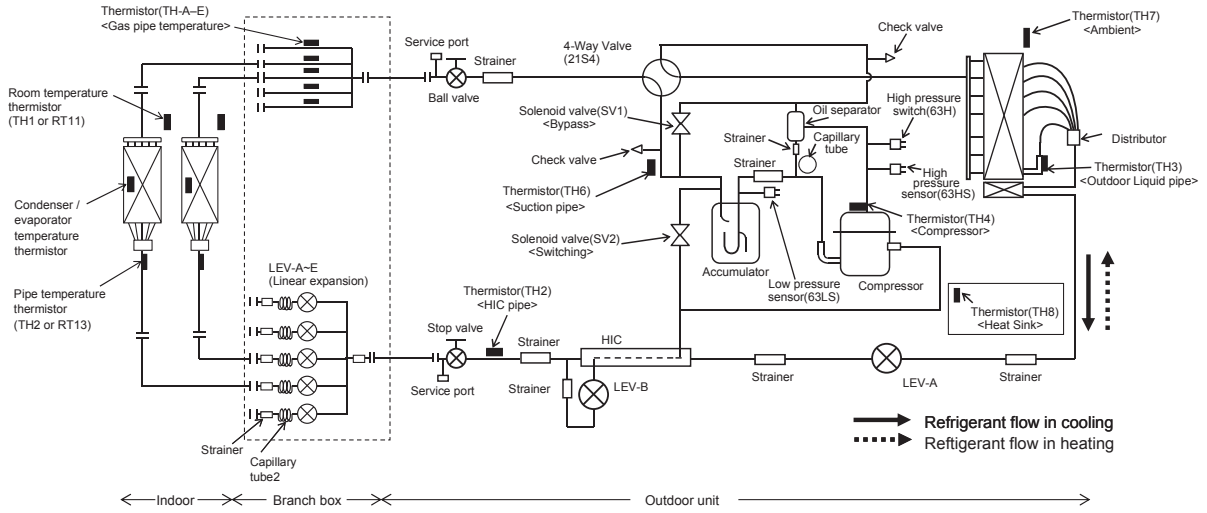
R. V. coil
 OFF → Refrigerant flow in heating
 ON - - - - - Refrigerant flow in cooling



Due to continuing improvement, above specification may be subject to change without notice.

5. REFRIGERANT SYSTEM DIAGRAMS

MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ



Unit: in (mm)

| | | Capillary tube 1 (For return of oil from oil separator) | Capillary tube 2 behind LEV (in cooling mode) |
|--------------|--|--|--|
| Outdoor unit | MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ | $\phi 0.098 \times \phi 0.031 \times L(39-1/2)$ ($\phi 2.5 \times \phi 0.8 \times L1000$) | |
| Branch box | PAC-MKA50BC | — | $(\phi 0.157 \times \phi 0.117 \times L(5-1/8)) \times 5$ ($(\phi 4 \times \phi 3.0 \times L130) \times 5$) |
| | PAC-MKA30BC | — | $(\phi 0.157 \times \phi 0.117 \times L(5-1/8)) \times 3$ ($(\phi 4 \times \phi 3.0 \times L130) \times 3$) |

Due to continuing improvement, above specification may be subject to change without notice.

5. REFRIGERANT SYSTEM DIAGRAMS

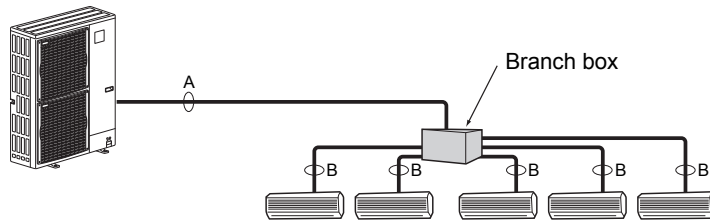
Piping Connection Size

MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ

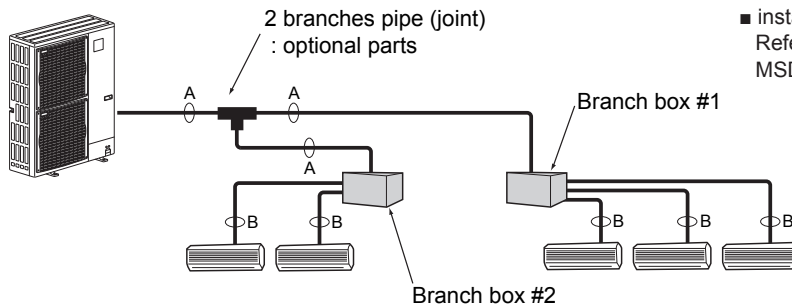
| | A | B |
|-------------|--------------|--|
| Liquid (mm) | $\phi 9.52$ | The pipe connection size differs according to the type and capacity of indoor units. Match the piping connection size of branch box with indoor unit. If the piping connection size of branch box does not match the piping connection size of indoor unit, use optional different-diameter (deformed) joints to the branch box side. (Connect deformed joint directly to the branch box side.) |
| Gas (mm) | $\phi 15.88$ | |

■ In case of using 1-branch box

Flare connection employed (No. brazing)



■ In case of using 2-branch boxes



■ installation procedure (2 branch pipe (joint))
Refer to the installation manuals of MSDD-50AR-E and MSDD-50BR-E.

Due to continuing improvement, above specification may be subject to change without notice.

6. CAPACITY CORRECTION CURVE BY TEMPERATURE

**DUE TO CONTINUING RESEARCH AND PRODUCT IMPROVEMENT,
SPECIFICATIONS AND DATA ARE STILL UNDER REVIEW**

Due to continuing improvement, above specification may be subject to change without notice.

7. CAPACITY CORRECTION TABLE BY TEMPERATURE

**DUE TO CONTINUING RESEARCH AND PRODUCT IMPROVEMENT,
SPECIFICATIONS AND DATA ARE STILL UNDER REVIEW**

Due to continuing improvement, above specification may be subject to change without notice.

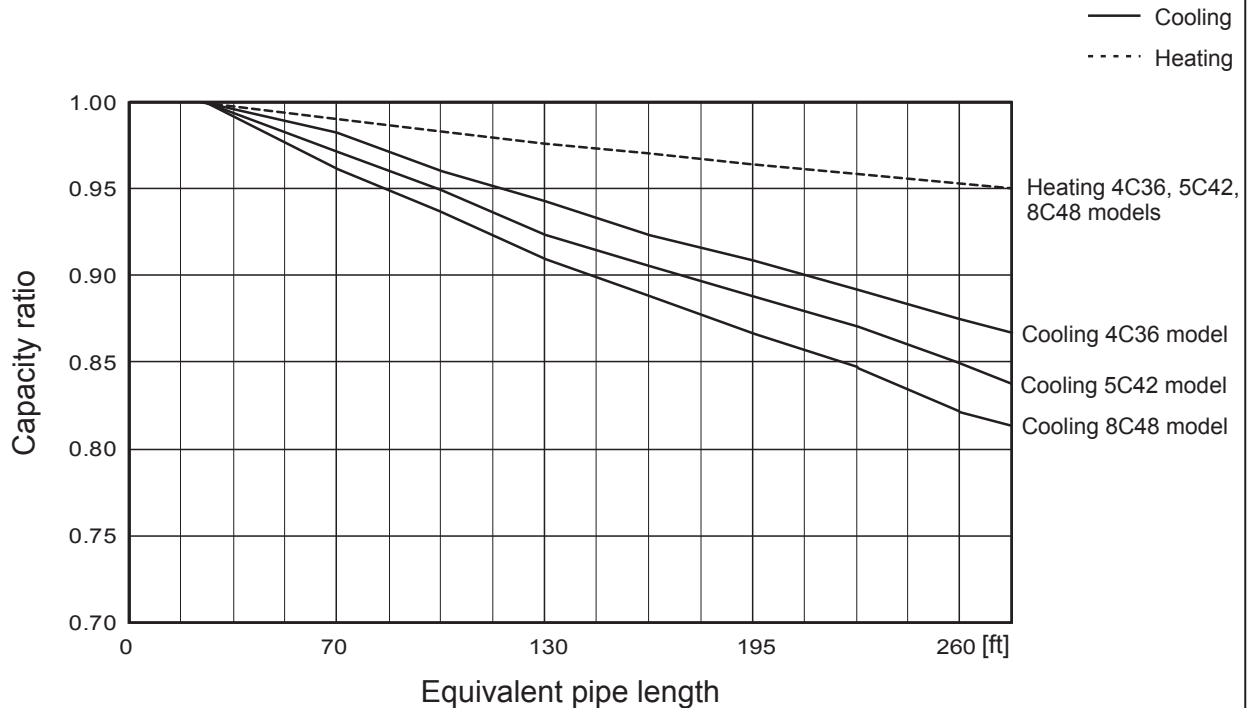
8. CAPACITY CORRECTION CURVE BY REFRIGERANT PIPING LENGTH

MXZ-4C36NAHZ MXZ-5C42NAHZ MXZ-8C48NAHZ

- (1) During cooling, obtain the ratio (and the equivalent piping length) of the outdoor units rated capacity and the total in-use indoor capacity, and find the capacity ratio corresponding to the standard piping length from Figure 3. Then multiply by the cooling capacity from Figure 1 to obtain the actual capacity.
- (2) During heating, find the equivalent piping length, and find the capacity ratio corresponding to standard piping length from Figure 3. Then multiply by the heating capacity from Figure 2 to obtain the actual capacity.

Capacity Correction Factor

Fig. 1 Capacity correction curve



Due to continuing improvement, above specification may be subject to change without notice.

9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

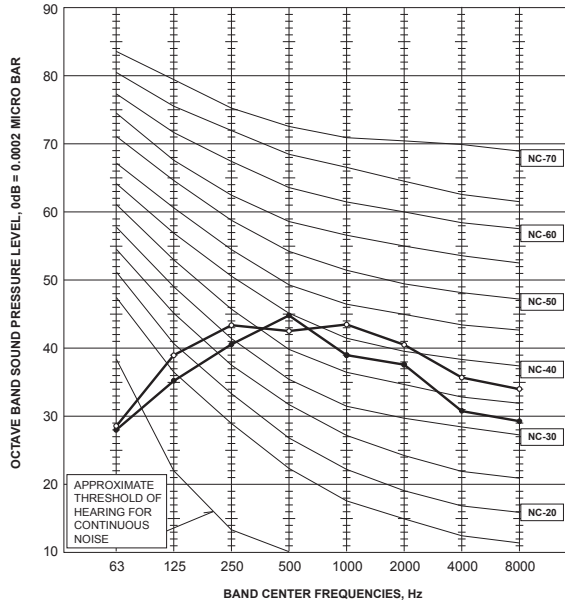
**DUE TO CONTINUING RESEARCH AND PRODUCT IMPROVEMENT,
SPECIFICATIONS AND DATA ARE STILL UNDER REVIEW**

Due to continuing improvement, above specification may be subject to change without notice.

10. SOUND PRESSURE LEVELS

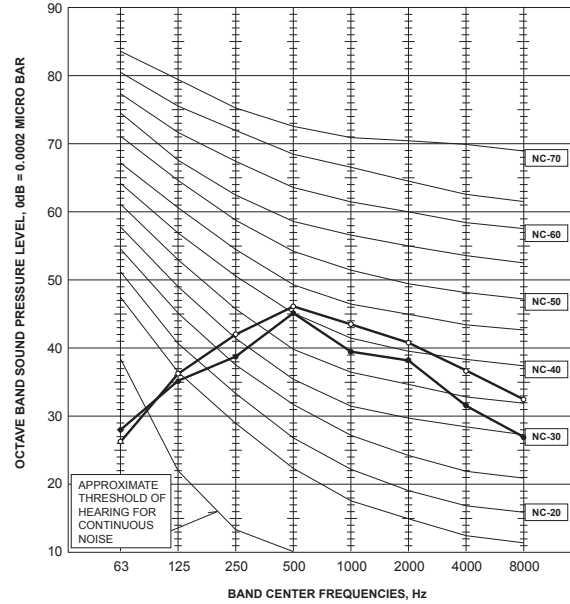
MXZ-2C20NAHZ

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|-----------|----------|------------|------|
| High | Cooling | 54 | ●—● |
| High | Heating | 58 | ○—○ |



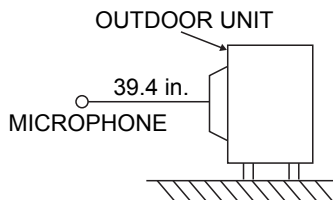
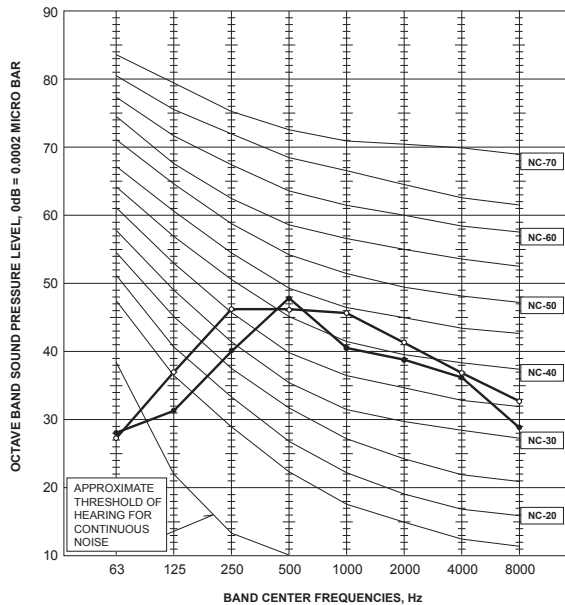
MXZ-3C24NAHZ

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|-----------|----------|------------|------|
| High | Cooling | 54 | ●—● |
| High | Heating | 58 | ○—○ |



MXZ-3C30NAHZ

| FAN SPEED | FUNCTION | SPL(dB(A)) | LINE |
|-----------|----------|------------|------|
| High | Cooling | 54 | ●—● |
| High | Heating | 58 | ○—○ |



Test conditions

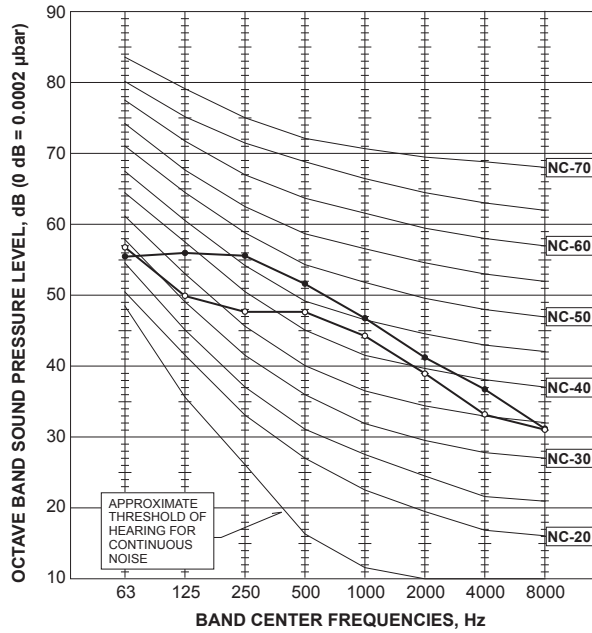
Cooling: Dry-bulb temperature 95°F Wet-bulb temperature 75°F
 Heating: Dry-bulb temperature 45°F Wet-bulb temperature 43°F

Due to continuing improvement, above specification may be subject to change without notice.

10. SOUND PRESSURE LEVELS

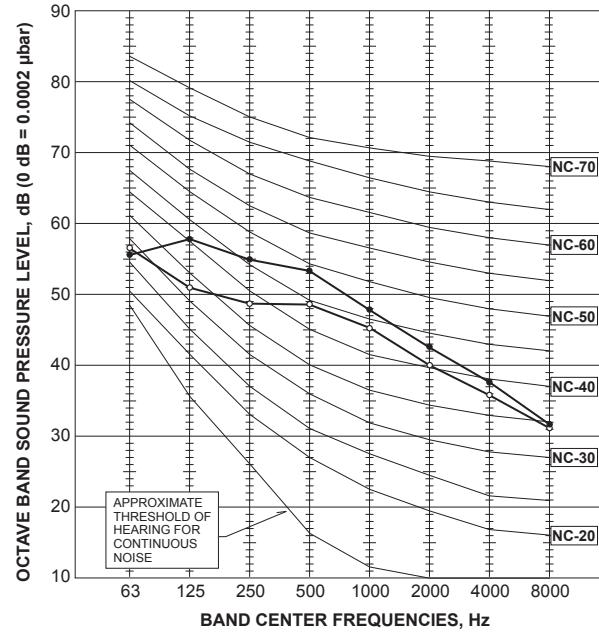
MXZ-4C36NAHZ

| MODE | SPL(dB) | LINE |
|---------|---------|------|
| COOLING | 49 | ○—○ |
| HEATING | 53 | ●—● |



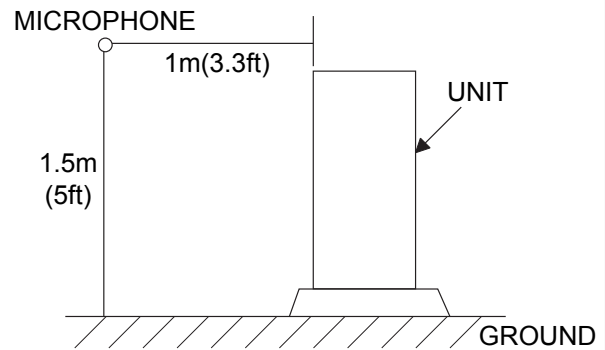
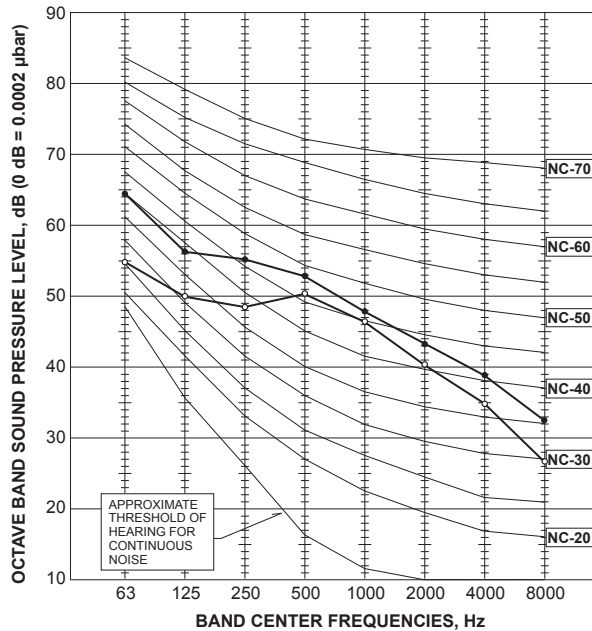
MXZ-5C42NAHZ

| MODE | SPL(dB) | LINE |
|---------|---------|------|
| COOLING | 50 | ○—○ |
| HEATING | 54 | ●—● |



MXZ-8C48NAHZ


| MODE | SPL(dB) | LINE |
|---------|---------|------|
| COOLING | 51 | ○—○ |
| HEATING | 54 | ●—● |



Due to continuing improvement, above specification may be subject to change without notice.

11. STANDARD OPERATION RANGE

MXZ-2C20NAHZ MXZ-3C24NAHZ MXZ-3C30NAHZ

| | Model | Rating | Guaranteed Voltage |
|--------------|--|--------------------------|---|
| Outdoor unit | MXZ-2C20NAHZ MXZ-3C24NAHZ MXZ-3C30NAHZ | 208/230 V 60 Hz 1 ϕ | Min. 198 V 208 V 230 V Max. 253 V  |

Due to continuing improvement, above specification may be subject to change without notice.

12. ACCESSORIES

| Part Number | Descriptions | Applicable model |
|---------------|--|--|
| BV12FFSI2 | Refrigeration Ball Valve-Flare/Schrader/Insulated - 1/2" size | 4C36, 5C42, 8C48NAHZ and branch boxes |
| BV14FFSI2 | Refrigeration Ball Valve-Flare/Schrader/Insulated - 1/4" size | |
| BV38FFSI2 | Refrigeration Ball Valve-Flare/Schrader/Insulated - 3/8" size | |
| BV58FFSI2 | Refrigeration Ball Valve-Flare/Schrader/Insulated - 5/8" size | All Models |
| CWMB1 | 4 piece (1 pair) condensing unit wall mounting brackets - painted steel | |
| DSD-400P | Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic | |
| MSDD-50AR-E | Flared Connections for connecting two branch boxes | 4C36, 5C42, 8C48NAHZ |
| MSDD-50BR-E | Brazed Connections for connecting two branch boxes | |
| MAC-A454JP-E | Port Adapter size: 3/8" X 1/2" | 2C20, 3C24, 3C30, 4C36, 5C42, 8C48NAHZ |
| MAC-A455JP-E | Port Adapter size: 1/2" X 3/8" | 3C24, 3C30, 4C36, 5C42, 8C48NAHZ |
| MAC-A456JP-E | Port Adapter size: 1/2" X 5/8" | |
| PAC-493PI | Port Adapter size: 1/4" x 3/8" | 3C30, 4C36, 5C42, 8C48NAHZ |
| PAC-IF01MNT-E | M-NET Adapter | All Models |
| ULTRILITE2 | Condensing Unit Mounting Pad 24" x 42" x 3" | |

Due to continuing improvement, above specification may be subject to change without notice.

12. ACCESSORIES

| Part Number | Descriptions | Applicable model |
|--------------|--------------------------|-------------------------------|
| PAC-MKA30BC | Three Port Branch Box | 4C36, 5C42, 8C48NAHZ |
| PAC-MKA50BC | Five Port Branch Box | |
| PAC-SG76RJ | 3/8" x 5/8" Port Adapter | 3C30, 4C36, 5C42, 8C48NAHZ |
| PAC-SG60DS-E | Drain Socket | 2C20, 3C24, 3C30NAHZ |
| PAC-SH71DS-E | Drain Socket | 4C36, 5C42, 8C48NAHZ |
| PAC-SH96SG-E | Airflow Guide | All Models |

Due to continuing improvement, above specification may be subject to change without notice.