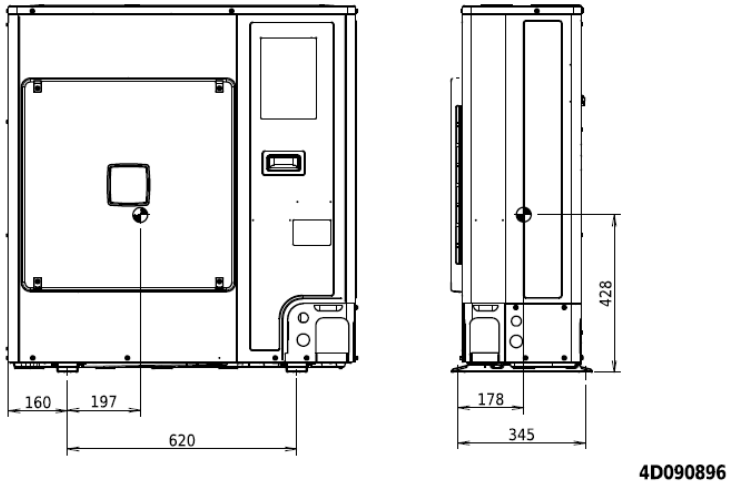
# Specification of 2no Air Handling Units
# Daikin RZQSG125L9V

Technical characteristics of Daikin RZQSG125L9V

| | |
|---|---|
| Cooling power: | 12 kW |
| Heating power: | 13.5 kW |
| Inverter: | Yes |
| Nutrition: | 400 V, 50 Hz, 3 V |
| Coolant (freon): | R410a |
| The size of the outdoor unit (HxWxD): | 990x940x320 mm |
| Outdoor unit weight: | 74 kg |
| Features: | Outdoor unit |
| More details: | The inverter is optimized for all seasons and saves energy compared to conventional air conditioning. The ability to limit power consumption (with the help of additional equipment). Low noise indoor unit (noise level - from 29 dBA). DC-inverter fan control of the indoor unit. External static pressure up to 120 Pa with adjustable from a wired control panel. Small size and weight with high efficiency of air distribution. Possibility to mix fresh air. The mode of air drying (Program Dry Function) maintains the relative humidity of the air in the room from 35 to 60% without changing the temperature. A drainage pump with a lifting height of up to 625 mm is standard. The function of integration into the centralized control system using the DIII-net protocol without an additional adapter. |

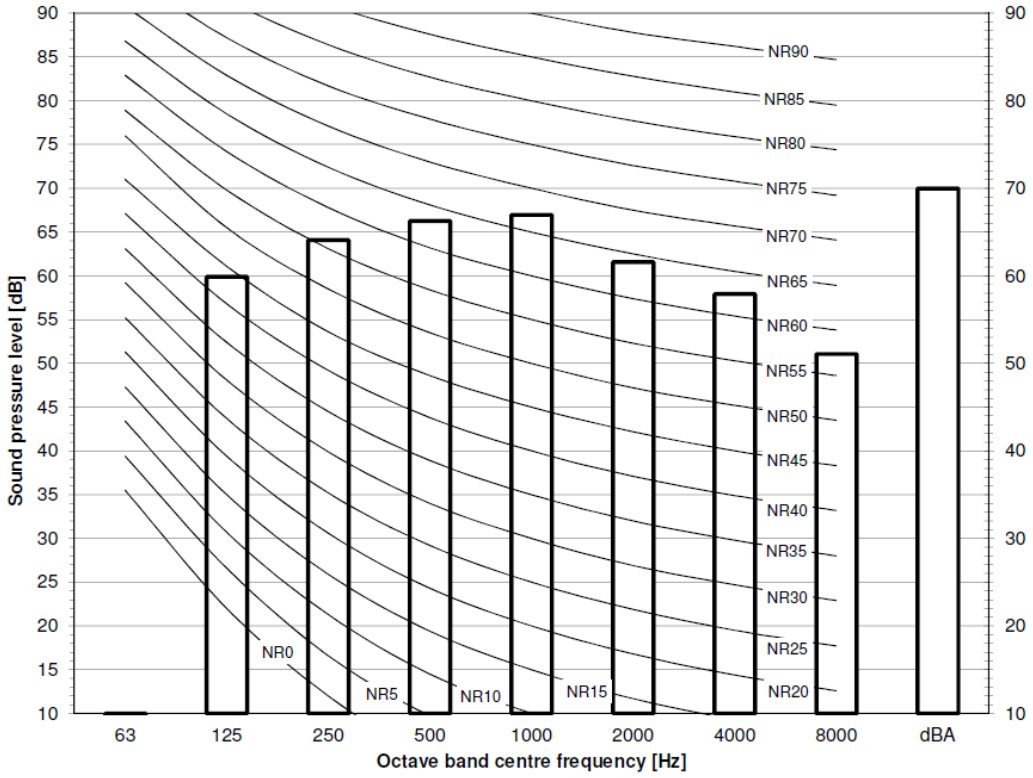

Daikin RZQSG125L9V

**RZQSG125L9V1**




Sound Power Spectrum

RZQSG125L9V1




Notes
- dBA = A-weighted sound power level (A scale according to IEC).
- Reference acoustic intensity 0dB = 10E-6µW/m²
- Measured according to ISO 3744

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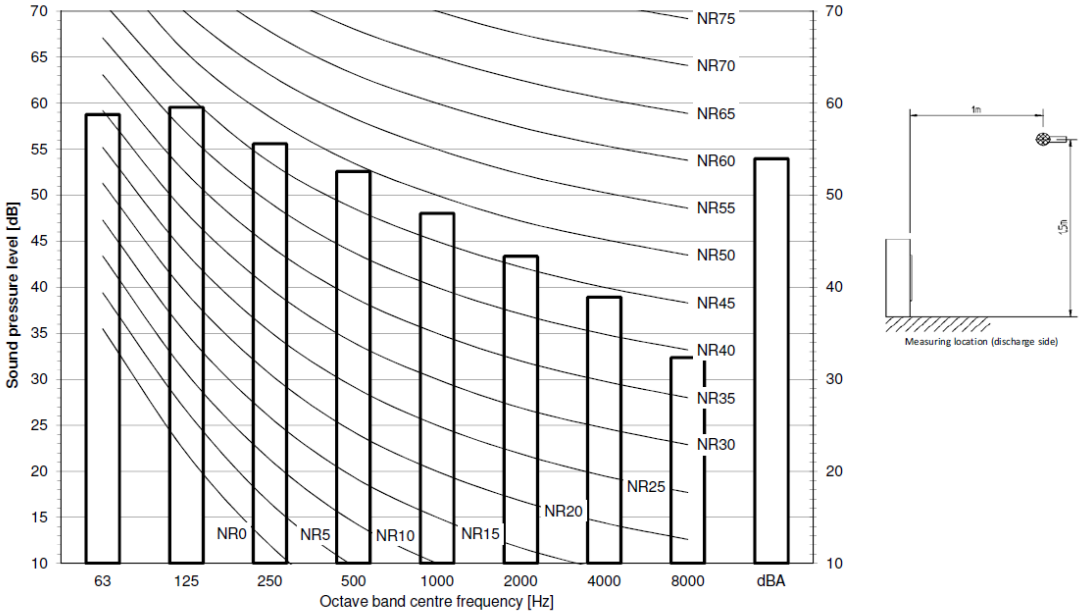
Sound Power Spectrum - Cooling

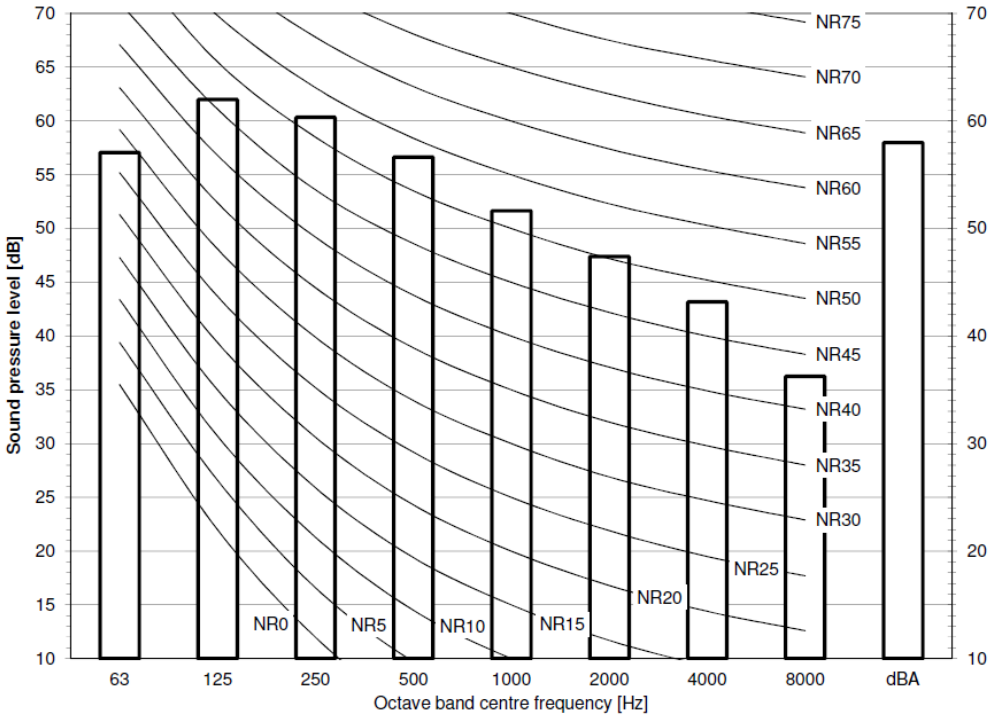
RZQSG125L9V1

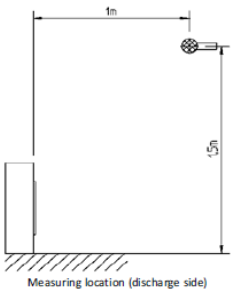



Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

## Sound Power Spectrum - Heating

RZQSG125L9V1




Notes
- Data is valid at free field condition.
- Data is valid at nominal operation condition.
- dBA = A-weighted sound pressure level (A scale according to IEC).
- Reference acoustic pressure 0 dB = 20 µPa

## Sound Power Spectrum Quiet Mode

# Specification of 2no Air Handling Units
# Daikin 5MXS90E3V3B2

# 1 Features

- Outdoor units for multi model application.
- Up to 5 indoor units can be connected to 1 multi outdoor unit; all indoor units are individually controllable and do not need to be installed in the same room or at the same time; they operate simultaneously within the same cooling or heating mode
- Different types of indoor units can be connected: e.g. wall mounted, ceiling mounted cassette corner, concealed ceiling unit
- Night quiet mode automatically reduces the operation sound of the outdoor unit by 3dBA during nighttime (multi outdoor units in cooling mode only)
- The use of inverter type outdoor units results in an air conditioning system with a high energy efficiency and very low sound level
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency





Inverter

Night quiet mode

# 2 Specifications



| 2-1 Technical Specifications | | | | | 3MXS52E | 4MXS80E | 5MXS90E |
|---|---|---|---|---|---|---|---|
| Capacity control | Method | | | | Inverter controlled | | |
| Casing | Colour | | | | Ivory white | | |
| Dimensions | Unit | Height | | mm | 735 | 770 | |
| | | Width | | mm | 936 | 900 | |
| | | Depth | | mm | 300 | 320 | |
| | Packed unit | Height | | mm | 797 | 900 | |
| | | Width | | mm | 992 | 925 | |
| | | Depth | | mm | 390 | | |
| Weight | Unit | | | kg | 49 | 72 | 73 |
| | Packed unit | | | kg | 56 | 80 | |
| Heat exchanger | Length | | | mm | 845 | 879 | |
| | Rows | Quantity | | | 2 | | |
| | Fin pitch | | | mm | 1.8 | 1.40 | |
| | Stages | Quantity | | | 32 | 34 | |
| | Tube type | | | | ø7.94 grooved tubes 24 | ø8 Hi-XA | |
| | Fin | Type | | | Colgate fin | WF fin | |
| | | Treatment | | | Anti-corrosion treatment | - | |
| Compressor | Model | | | | 2YC36BXD | 2YC63BXD#C | |
| | Type | | | | Hermetically sealed swing compressor | | |
| | Output | | | W | 1,100 | 1,920 | |
| Fan | Type | | | | Propeller fan | | |
| | Air flow rate | Cooling | High | m³/min | 45 | 54.5 | 57.1 |
| | | | | cfm | 1,589 | 1,924 | 2,016 |
| | | | Nom. | m³/min | 45 | - | 54.5 |
| | | | | cfm | 1,589 | - | 1,924 |
| | | | Low | m³/min | 45 | 46.0 | |
| | | | | cfm | 1,589 | 1,624 | |
| | | | Super low | m³/min | - | | |
| | | | | cfm | - | | |
| | | Heating | High | m³/min | 45 | 46.0 | 52.5 |
| | | | | cfm | 1,589 | 1,624 | 1,854 |
| | | | Low | m³/min | 41 | 14.7 | |
| | | | | cfm | 1,448 | 519 | |
| | | | Super low | m³/min | - | | |
| | | | | cfm | - | | |
| | Running current | Cooling | Low | A | 0.29 | 0.69 | |
| | | | Standard | A | - | | 0.97 |
| | | | High | A | 0.33 | 0.97 | 1.02 |
| | | Heating | Low | A | 0.29 | 0.05 | |
| | | | High | A | 0.33 | 0.69 | 0.90 |
| | Power consumption | Cooling | Low | W | 34 | 55 | |
| | | | Standard | W | - | | 86 |
| | | | High | W | 43 | 86 | 95 |
| | | Heating | Low | W | 34 | 9 | |
| | | | High | W | 43 | 55 | 78 |
| Fan motor | Model | | | | KFD-380-50-8C | KFD-280-66-8A | |
| | Output | | | W | 53 | 66.00 | |
| | Speed | Cooling | High | rpm | 720 | 860 | 900 |
| | | | Nom. | rpm | - | | 860 |
| | | | Low | rpm | 660 | 730 | |
| | | | Super low | rpm | - | | |
| | | Heating | High | rpm | 720 | 730 | 830 |
| | | | Low | rpm | 660 | 250 | |
| | | | Super low | rpm | - | | |

# 2 Specifications



| 2-1 Technical Specifications | | | | | 3MXS52E | 4MXS80E | 5MXS90E |
|---|---|---|---|---|---|---|---|
| Sound power level | Cooling | | | dBA | 59 | 62 | 66 |
| | Heating | | | dBA | 60 | - | |
| Sound pressure level | Cooling | Nom. | | dBA | 46 | 48 | 52 |
| | Heating | Nom. | | dBA | 47 | 49 | 52 |
| Operation range | Cooling | Ambient | Min. | °CDB | -10 | | |
| | | | Max. | °CDB | 46 | | |
| | Heating | Ambient | Min. | °CWB | -15 | | |
| | | | Max. | °CWB | 18 | | |
| Refrigerant | Type | | | | R-410A | | |
| | Charge | | | kg | 2.0 | 2.99 | |
| | | | | $TCO_2eq$ | 4.2 | 6.2 | |
| | GWP | | | | 2,087.5 | | |
| Refrigerant oil | Type | | | | FVC50K | | |
| | Charged volume | | | l | 0.65 | 0.75 | |
| Piping connections | Liquid | Quantity | | | 3 | 4 | 5 |
| | | OD | | mm | 6.35 | | |
| | Gas | Quantity | | | 2 | 1 | 2 |
| | | OD | | mm | 9.52 | | |
| | Drain | ID | | mm | - | | |
| | | OD | | mm | 16 (inner diameter of connecting hose) | 25 | |
| | Gas 2 | Quantity | | | 1 | | |
| | | OD | | mm | 12.7 | | |
| | Gas 3 | Quantity | | | - | 2 | |
| | | OD | | mm | - | 15.9 | |
| | Piping length | OU - IU | Max. | m | 25 | | |
| | Additional refrigerant charge | | | kg/m | 0.02 (for piping length exceeding 30m) | | |
| | Level difference | IU - OU | Max. | m | 15 | | |
| | | IU - IU | Max. | m | 7.5 | | |
| | Heat insulation | | | | Both liquid and gas pipes | | |
| | Total piping length | System | Actual | m | 50 | 70 | 75 |

Standard Accessories : Installation manual; Quantity : 1;

Standard Accessories : Drain plug; Quantity : 1;

Standard Accessories : Reducer assembly; Quantity : 1;

Standard Accessories : Air direction adjustment plate; Quantity : 1;

| 2-2 Electrical Specifications | | | | 3MXS52E | 4MXS80E | 5MXS90E |
|---|---|---|---|---|---|---|
| Power supply | Name | | | V1 | V3 | |
| | Phase | | | 1~ | | |
| | Frequency | | Hz | 50 | | |
| | Voltage | | V | 230 | | |
| Current | Starting current | Cooling | A | 6.2 | 9.7 | 11.8 |
| | | Heating | A | 6.2 | 9.7 | 11.8 |
| Current - 50Hz | Maximum fuse amps (MFA) | | A | 20 | | |
| Current - 60Hz | Maximum fuse amps (MFA) | | A | - | | |
| Wiring connections | For power supply | Remark | | 3 for power supply, 4 for interunit wiring (including earth wiring) | | |

**Notes**

Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 7.5m

Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 7.5m

Contains fluorinated greenhouse gases

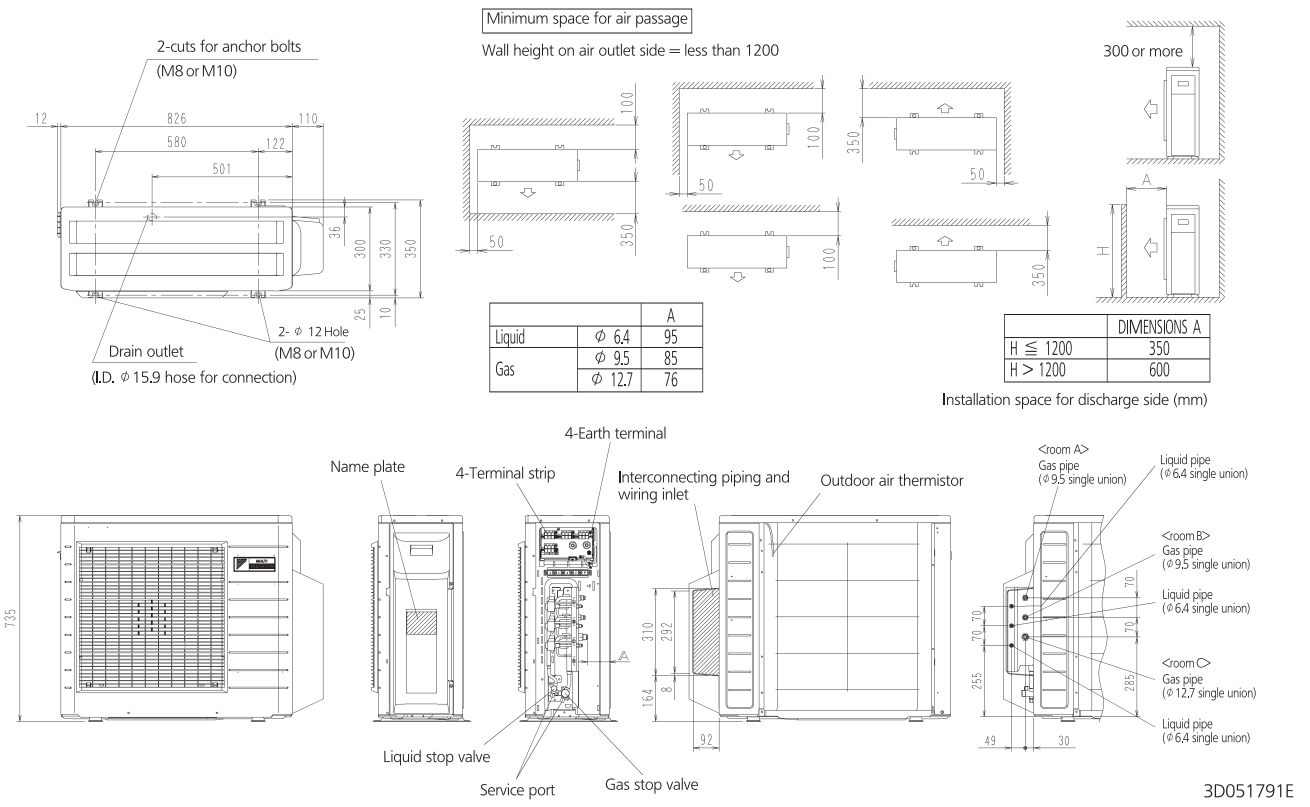
# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings



### 3MXS52E

unit (mm)




| | | A |
|---|---|---|
| Liquid | φ 6.4 | 95 |
| Gas | φ 9.5 | 85 |
| | φ 12.7 | 76 |

| | DIMENSIONS A |
|---|---|
| H ≦ 1200 | 350 |
| H > 1200 | 600 |

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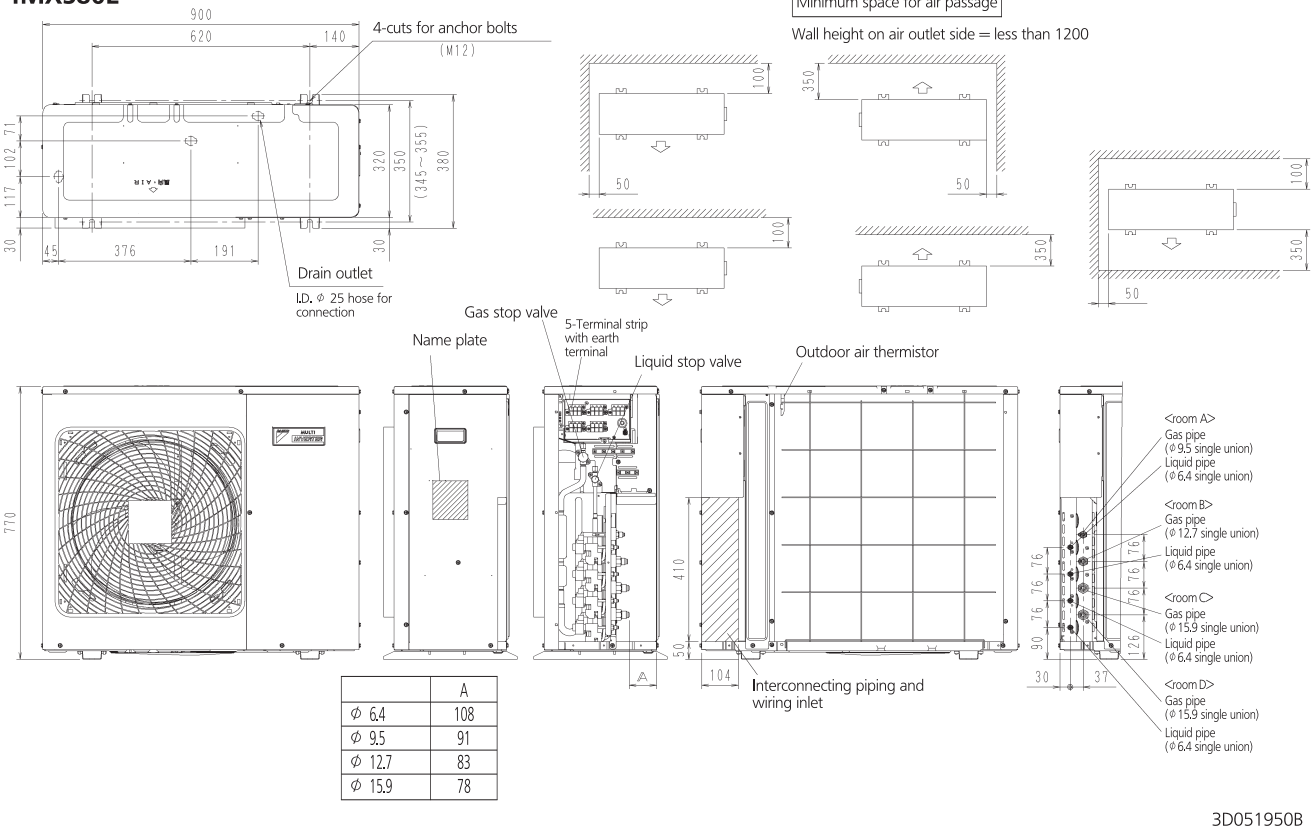
### 4MXS80E

unit (mm)




| | A |
|---|---|
| φ 6.4 | 108 |
| φ 9.5 | 91 |
| φ 12.7 | 83 |
| φ 15.9 | 78 |

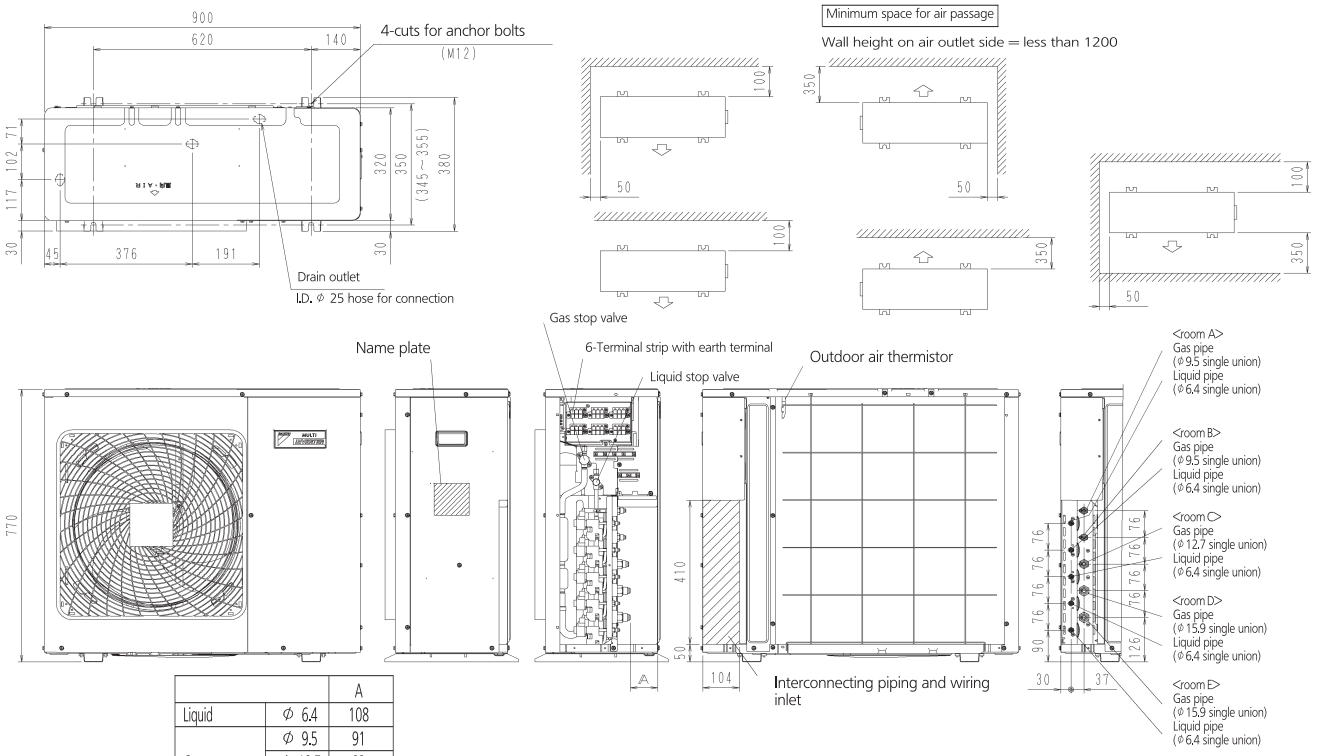
3D051950B

# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

**5MXS90E**

unit (mm)




| | | A |
|---|---|---|
| Liquid | φ 6.4 | 108 |
| Gas | φ 9.5 | 91 |
| | φ 12.7 | 83 |
| | φ 15.9 | 78 |

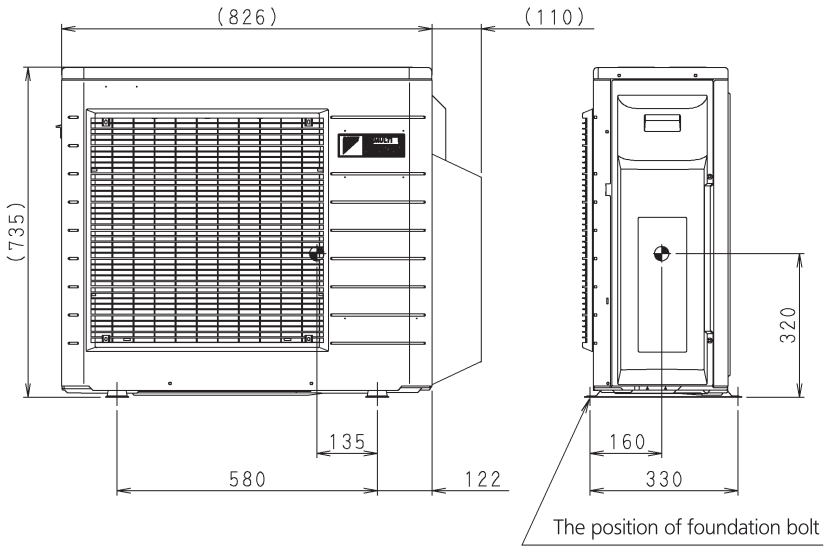
3D051948B

# 8 Centre of gravity

## 8 - 1 Centre of Gravity

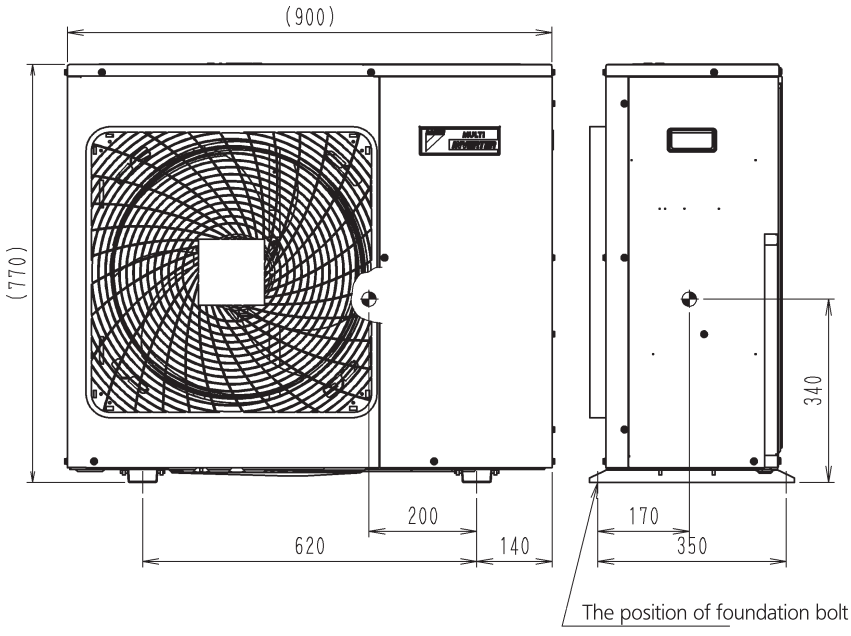


**3MXS52E**




4D037024U

**4MXS80E, 5MXS90E**

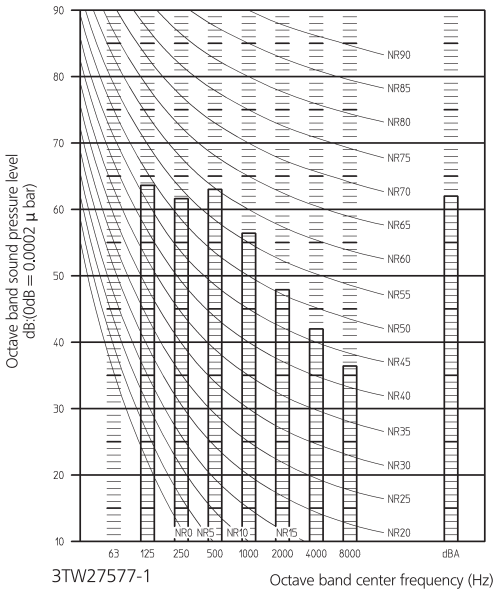



4D052059F

# 11 Sound data

## 11 - 1 Sound Power Spectrum

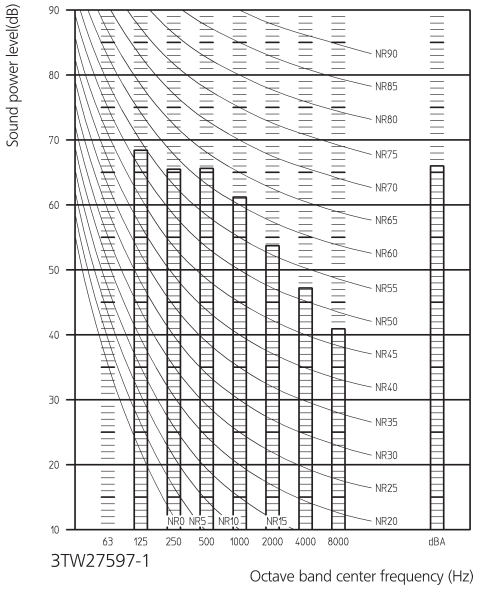
**4MXS80E**




**NOTES**

1 dB(A) = A-weighted sound power level (A-scale according to IEC)
2 Reference acoustic intensity 0dB = 10E-6 μW/m$^2$
3 Measured according to ISO 3744

**5MXS90E**




**NOTES**

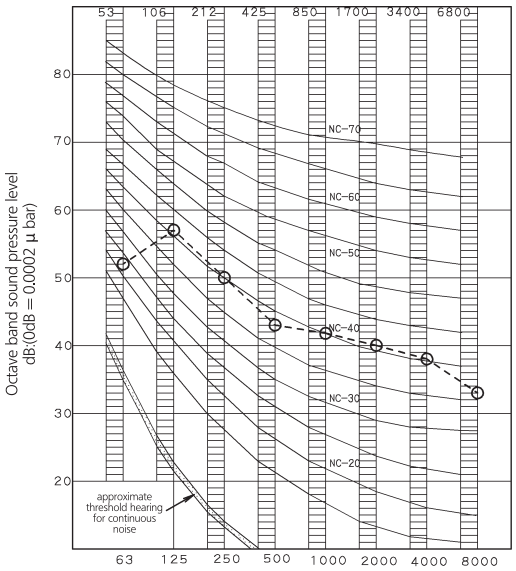
1 dBA = A-weighted sound power level (A-scale according to IEC)
2 Refernece acoustic intensity 0dB = 10E-6μW/m$^2$
3 Measured according to ISO 3744

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum - Cooling



### 3MXS52E (Cooling)



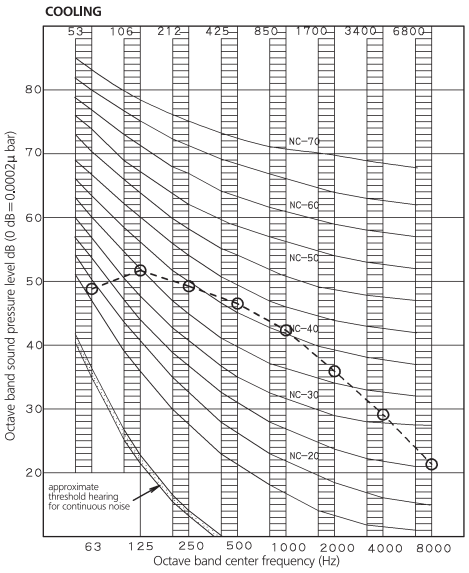

3D052818C

#### NOTES

| Scale | 50Hz 220V~240V |
|---|---|
| A | 46 |

1 Overall (dB):
(B,G,N is already rectified)
2 Measuring place: Measured in an anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 220~240V, 50Hz
5 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612

### 4MXS80E




#### NOTES

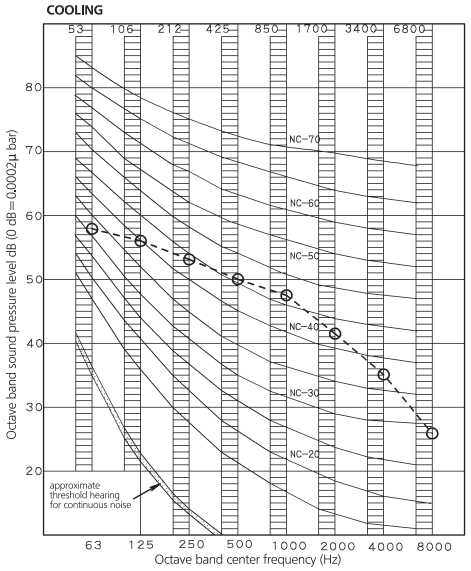
1 Overall (dB)

| Scale | 50Hz 230V |
|---|---|
| A | 48 |

(B,G,N is already rectified)
2 Measuring place: Measure in anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 230V 50Hz
O—O 50Hz 230V
Cooling
5 Location of microphone
JISC9612
The operation noise measuring method is in accordance with JISC9612

3D052303A

### 5MXS90E




#### NOTES

1 Overall (dB)

| Scale | 50Hz 230V |
|---|---|
| A | 52 |

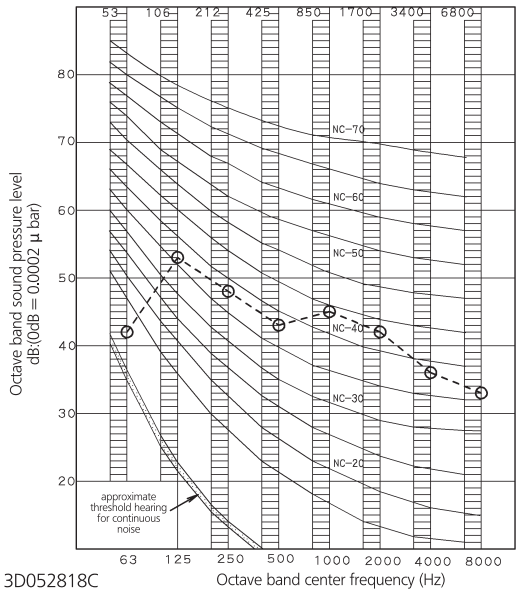
(B,G,N is already rectified)
2 Measuring place: Measure in anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 230V 50Hz
O—O 50Hz 230V
Cooling
5 Location of microphone
JISC9612
The operation noise measuring method is in accordance with JISC9612

3D052302A

# 11 Sound data

## 11 - 3 Sound Pressure Spectrum - Heating

### 3MXS52E (Heating)



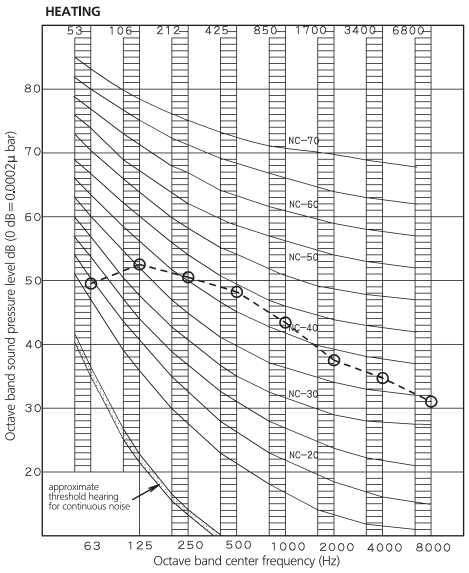

3D052818C

**NOTES**

| Scale | 50Hz 220V~240V |
|---|---|
| A | 47 |

1 Overall (dB):
(B,G,N is already rectified)
2 Measuring place: Measured in an anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 220~240V, 50Hz
5 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612

### 4MXS80E




**NOTES**

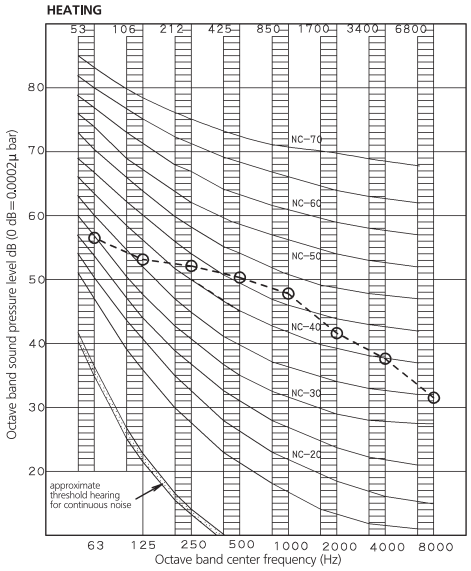
1 Overall (dB)

| Scale | 50Hz 230V |
|---|---|
| A | 49 |

(B,G,N is already rectified)
2 Measuring place: Measure in anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 230V 50Hz
O—O 50Hz 230V
Heating
5 Location of microphone
JISC9612
The operation noise measuring method is in accordance with JISC9612

3D052303A

### 5MXS90E




**NOTES**

1 Overall (dB)

| Scale | 50Hz 230V |
|---|---|
| A | 52 |

(B,G,N is already rectified)
2 Measuring place: Measure in anechoic room
3 Operation noise differs with operation and ambient conditions.
4 Operating conditions: Power source 230V 50Hz
O—O 50Hz 230V
Heating
5 Location of microphone
JISC9612
The operation noise measuring method is in accordance with JISC9612

3D052302A