

1-way Air Discharge Cassette Type

Indoor Unit

MMU-AP0074YH-E
MMU-AP0094YH-E
MMU-AP0124YH-E

MMU-AP0154SH-E
MMU-AP0184SH-E
MMU-AP0244SH-E



Contents

1. Specifications
2. Dimensions
3. Wiring diagram
4. Center of Gravity
5. Electrical characteristics
6. Sensible capacity table
7. Air throw distance chart
8. Sound characteristics (NC-Curve)
9. Fresh air intake (Design guide)
10. Accessories



1. Specifications

1-way Air Discharge Cassette Type

| Model name | | MMU- | AP0074YH-E | AP0094YH-E | AP0124YH-E | AP0154SH-E | AP0184SH-E | AP0244SH-E |
|--|--|--|------------|------------------------------|---|-----------------|------------------|------------|
| Cooling/Heating capacity (Note 1) (kW) | | | 2.2 / 2.5 | 2.8 / 3.2 | 3.6 / 4.0 | 4.5 / 5.0 | 5.6 / 6.3 | 7.1 / 8.0 |
| Electical characteristics | Power supply | 1 phase 50Hz 230V (220-240V) (Sepatate power supply for indoor units is required.) | | | | | | |
| | Running current (A) | | 0.24 | | | 0.34 | 0.37 | 0.62 |
| | Power consumption (kW) | | 0.053 | | | 0.042 | 0.046 | 0.075 |
| | Starting current (A) | | 0.6 | | | 0.51 | 0.54 | 0.80 |
| Appearance | Main unit | Heat-insulating material attached | | Zinc hot dipping steel plate | | | | |
| Ceiling panel | Model | RBC-UY135PG | | | RBC-US21PGE | | | |
| Panel colour | | Moon white(Munsell 2.5GY9.0/0.5) | | | | | | |
| Outer dimintions | Main unit | Hight (mm) | 235 | | 200 | | | |
| | | Width (mm) | 850 | | 1000 | | | |
| | | Depth (mm) | 400 | | 710 | | | |
| | Ceiling panel | Hight (mm) | 18 | | 20 | | | |
| | | Width (mm) | 1050 | | 1230 | | | |
| | | Depth (mm) | 470 | | 800 | | | |
| Total weight | Main unit (kg) | 22 | | 21 | | 22 | | |
| | Ceiling panel (kg) | 3.5 | | 5.5 | | | | |
| Heat exchanger | | Finned tube | | | | | | |
| Sound proof / Heat-insulating material | | Non-flammable insulation | | | Polyethylene foam + Expanded polyethylene | | | |
| Fan unit | Fan | Centrifugal fan | | | | | | |
| | Standard air flow (High/Mid/Low) (m ³ /h) | 540 / 480 / 420 | | | 750 / 690 / 630 | 780 / 720 / 660 | 1140 / 960 / 810 | |
| | Motor output (W) | 22 | | | 30 | | | |
| Air filter | | Standard filter (Long life filter) | | | | | | |
| Controller | | Remote controller | | | | | | |
| Connecting pipe | Gas pipe (mm) | ø 9.5 | | | ø 12.7 | | ø 15.9 | |
| | Liquid pipe (mm) | ø 6.4 | | | ø 9.5 | | | |
| | Drain port(Nominal dia. mm) | 25 (Polyvinyl chloride tube) | | | | | | |
| Sound pressure level (High/Med./Low) (Note 2)(dB(A)) | | 42 / 39 / 34 | | | 37 / 35 / 32 | 38 / 36 / 34 | 45 / 41 / 37 | |

Note 1 : The cooling capacities and electrical characteristics are measured under the conditions specified by JIS B 8615 based on the reference piping. The reference piping consists of 5 m of main piping and 2.5 m of branch piping connected with 0 meter height.

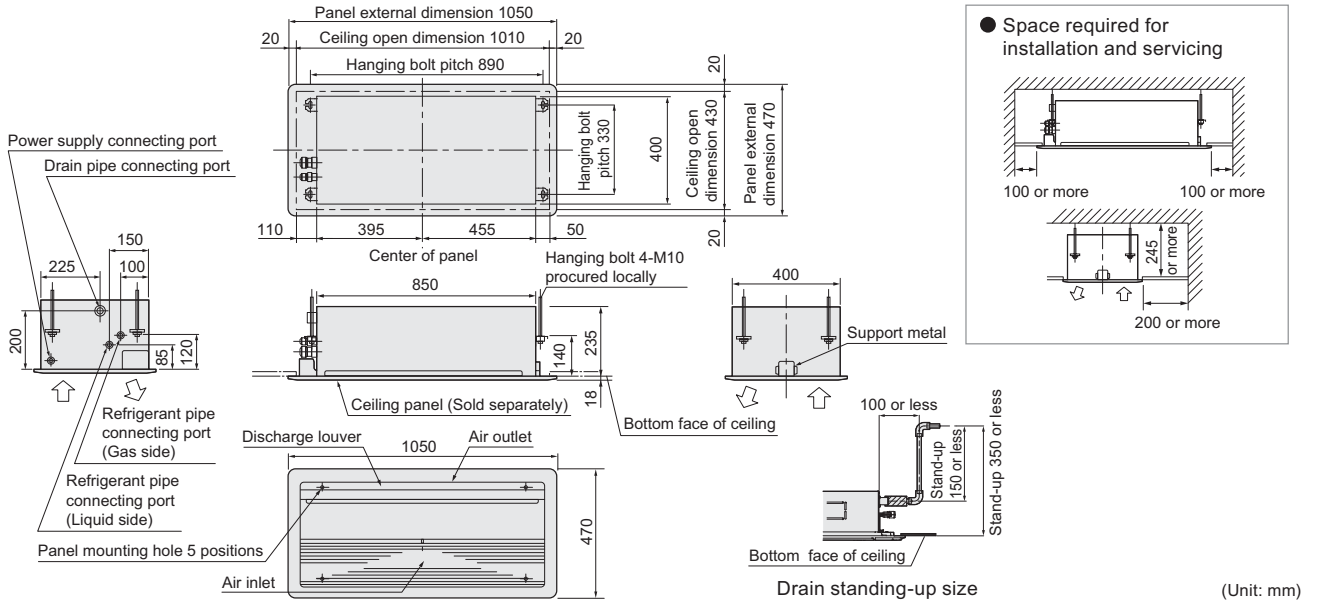
Note 2 : The sound level are measured in an anechoic chamber in accordance with JIS B 8616.

Normally, the values measured in the actual operating environment become larger than the indicated values due to the effects of external sound.

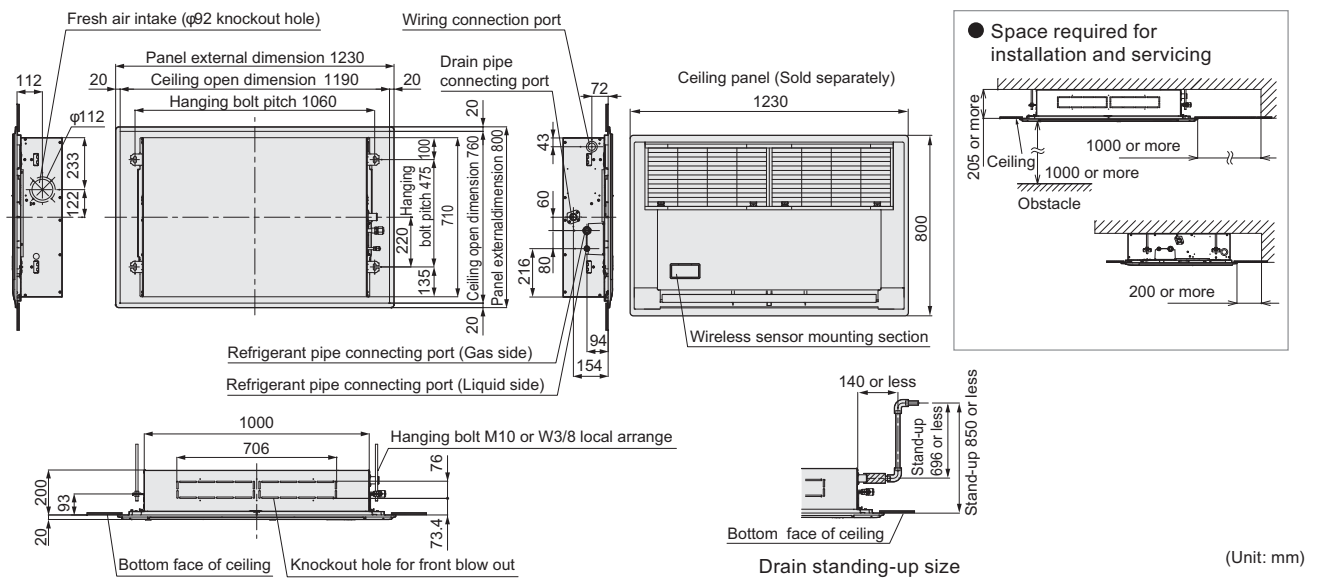
Note : Rated conditions Cooling Indoor air temperature 27°C DB/19°C WB, Outdoor air temperature 35°C DB
 Heating Indoor air temperature 20°C DB, Outdoor air temperature 7°C DB/6°C WB

2. Dimension

MMU-AP0074YH-E, AP0094YH-E, AP0124YH-E



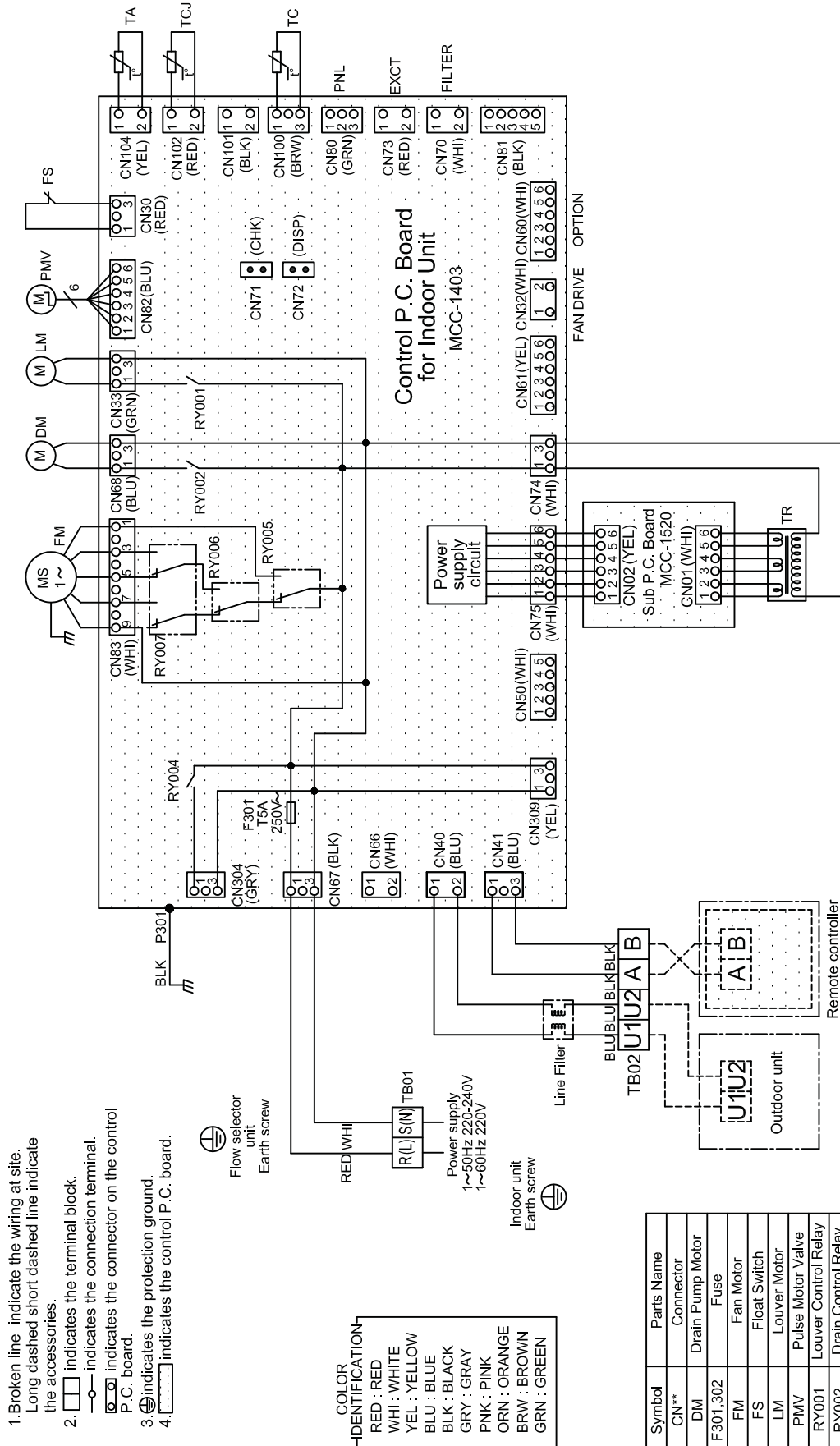
MMU-AP0154SH-E, AP0184SH-E, AP0244SH-E





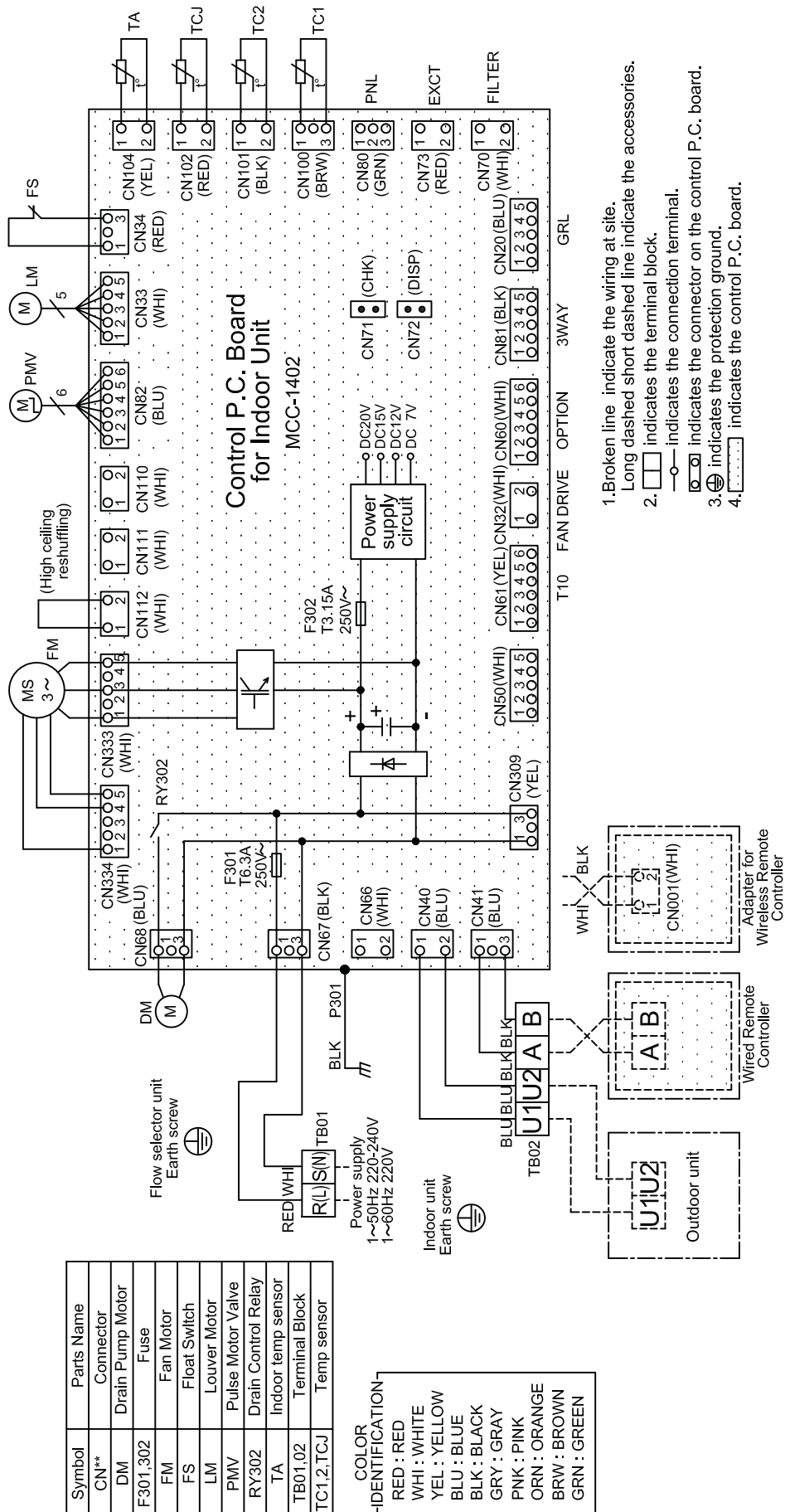
3. Wiring diagram

MMU-AP0074YH-E, AP0094YH-E, AP0124YH-E





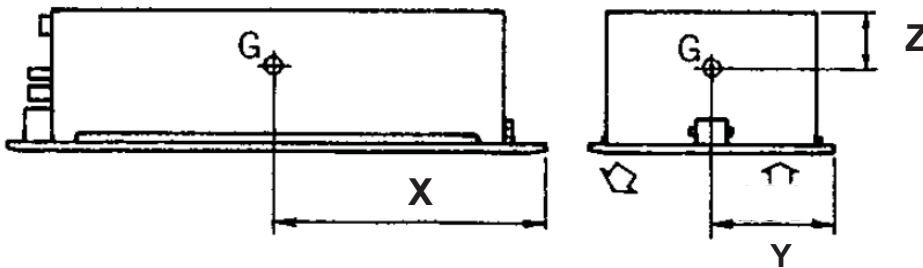
MMU-AP0154SH-E, AP0184SH-E, AP0244SH-E



4. Center of Gravity

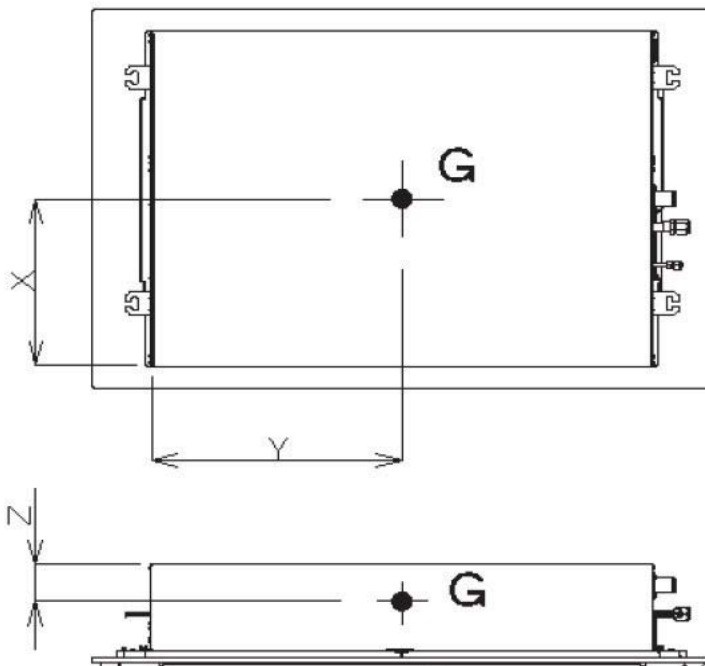
1-way YH Type

| Model name | X(mm) | Y(mm) | Z(mm) | Total weight(kg) | |
|----------------|------------|------------|------------|------------------|---------------|
| | | | | Main unit | Ceiling panel |
| MMU-AP0074YH-E | 500 | 230 | 120 | 22 | 3.5 |
| MMU-AP0094YH-E | | | | | |
| MMU-AP0124YH-E | | | | | |



1-way SH Type

| Model name | X(mm) | Y(mm) | Z(mm) | Total weight(kg) | |
|----------------|------------|------------|-----------|------------------|---------------|
| | | | | Main unit | Ceiling panel |
| MMU-AP0154SH-E | 370 | 475 | 80 | 21 | 5.5 |
| MMU-AP0184SH-E | | | | | |
| MMU-AP0244SH-E | | | | 22 | |





5. Electrical characteristics

| Type | Model | Nominal Voltage (V-Ph-Hz) | Voltage Range | | Fan Motor | | Power Supply | |
|---|------------------|------------------------------|---------------|-----|-----------|------|--------------|------|
| | | | Min | Max | kW | FLA | MCA | MOCP |
| 1-Way Air Discharge Cassette Type | MMU-AP 0074 YH-E | 230-1-50 | 198 | 264 | 0.022 | 0.28 | 0.35 | 15 |
| | MMU-AP 0094 YH-E | 230-1-50 | 198 | 264 | 0.022 | 0.28 | 0.35 | 15 |
| | MMU-AP 0124 YH-E | 230-1-50 | 198 | 264 | 0.022 | 0.28 | 0.35 | 15 |
| | MMU-AP 0154 SH-E | 230-1-50 | 198 | 264 | 0.030 | 0.40 | 0.49 | 15 |
| | MMU-AP 0184 SH-E | 230-1-50 | 198 | 264 | 0.030 | 0.42 | 0.53 | 15 |
| | MMU-AP 0244 SH-E | 230-1-50 | 198 | 264 | 0.030 | 0.71 | 0.88 | 15 |

MCA : Minimum Circuit Amps

FLA : Full Load Amps

MOCP : Maximum Overcurrent Protection (Amps)



6. Sensible capacity table

1-way Air Discharge Cassette Type (MMU-AP*4YH-E)**

TC : Total capacity [kW] SHC : Sensible capacity [kW]

| unit size | outdoor air temp. °CDB | indoor air temp. | | | | | | | | | | | | | |
|-----------|------------------------|------------------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| | | 14.0°CWB | | 16.0°CWB | | 18.0°CWB | | 19.0°CWB | | 20.0°CWB | | 22.0°CWB | | 24.0°CWB | |
| | | 20°CDB | | 23°CDB | | 26°CDB | | 27°CDB | | 28°CDB | | 30°CDB | | 32°CDB | |
| | | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 007 | 10.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 12.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 14.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 16.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 18.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 20.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 21.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 23.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 25.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 27.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 29.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 31.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| | 33.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 |
| 35.0 | 1.8 | 1.6 | 2.0 | 1.7 | 2.1 | 1.8 | 2.2 | 1.8 | 2.3 | 1.8 | 2.4 | 1.8 | 2.5 | 1.7 | |
| 37.0 | 1.7 | 1.5 | 1.9 | 1.6 | 2.1 | 1.7 | 2.1 | 1.7 | 2.2 | 1.7 | 2.3 | 1.7 | 2.4 | 1.7 | |
| 39.0 | 1.7 | 1.5 | 1.9 | 1.6 | 2.0 | 1.7 | 2.1 | 1.7 | 2.1 | 1.7 | 2.3 | 1.7 | 2.4 | 1.6 | |
| 009 | 10.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 12.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 14.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 16.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 18.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 20.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 21.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 23.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 25.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 27.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 29.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 31.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| | 33.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 |
| 35.0 | 2.3 | 2.0 | 2.5 | 2.1 | 2.7 | 2.2 | 2.8 | 2.2 | 2.9 | 2.2 | 3.1 | 2.2 | 3.2 | 2.1 | |
| 37.0 | 2.2 | 1.9 | 2.5 | 2.0 | 2.6 | 2.1 | 2.7 | 2.1 | 2.8 | 2.1 | 3.0 | 2.1 | 3.1 | 2.1 | |
| 39.0 | 2.2 | 1.8 | 2.4 | 2.0 | 2.6 | 2.1 | 2.6 | 2.1 | 2.7 | 2.1 | 2.9 | 2.1 | 3.0 | 2.0 | |
| 012 | 10.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 12.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 14.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 16.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 18.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 20.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 21.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 23.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 25.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 27.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 29.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 31.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| | 33.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 |
| 35.0 | 3.0 | 2.4 | 3.3 | 2.5 | 3.5 | 2.7 | 3.6 | 2.7 | 3.7 | 2.7 | 3.9 | 2.7 | 4.1 | 2.6 | |
| 37.0 | 2.9 | 2.3 | 3.2 | 2.5 | 3.4 | 2.6 | 3.5 | 2.6 | 3.6 | 2.6 | 3.8 | 2.6 | 4.0 | 2.5 | |
| 39.0 | 2.8 | 2.3 | 3.1 | 2.4 | 3.3 | 2.5 | 3.4 | 2.5 | 3.5 | 2.5 | 3.7 | 2.5 | 3.9 | 2.5 | |



1-way (SH series) Air Discharge Cassette Type (MMU-AP*4SH-E)**

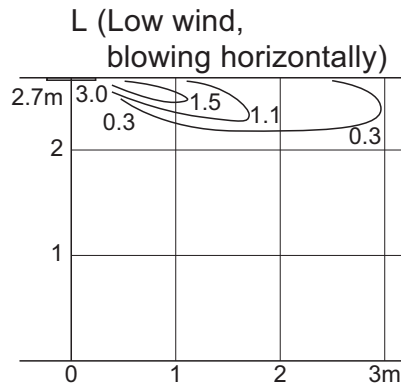
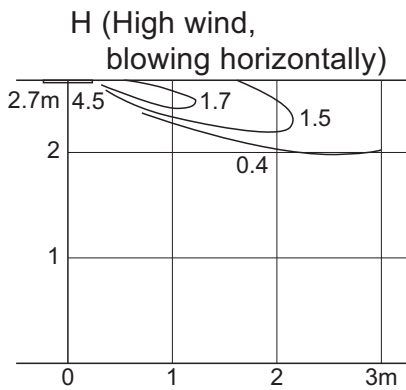
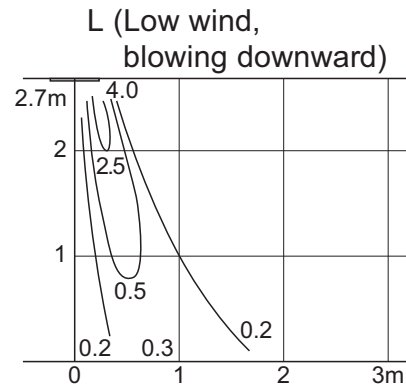
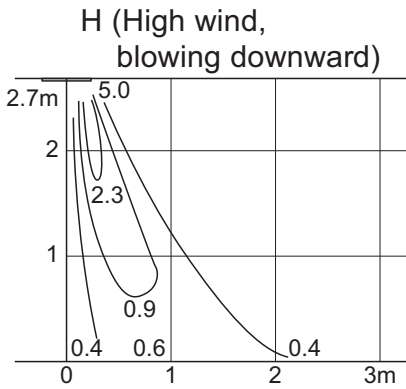
TC : Total capacity [kW] SHC : Sensible capacity [kW]

| Unit size | Outdoor air temp. °CDB | Indoor air temp. | | | | | | | | | | | | | |
|-----------|------------------------|------------------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| | | 14.0°CWB | | 16.0°CWB | | 18.0°CWB | | 19.0°CWB | | 20.0°CWB | | 22.0°CWB | | 24.0°CWB | |
| | | 20°CDB | | 23°CDB | | 26°CDB | | 27°CDB | | 28°CDB | | 30°CDB | | 32°CDB | |
| | | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 015 | 10.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 12.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 14.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 16.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 18.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 20.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 21.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 23.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 25.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 27.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 29.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 31.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 33.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| | 35.0 | 3.7 | 2.8 | 4.1 | 3.0 | 4.4 | 3.2 | 4.5 | 3.2 | 4.6 | 3.2 | 4.9 | 3.2 | 5.1 | 3.1 |
| 37.0 | 3.6 | 2.7 | 4.0 | 2.9 | 4.2 | 3.1 | 4.4 | 3.1 | 4.5 | 3.1 | 4.7 | 3.1 | 5.0 | 3.0 | |
| 39.0 | 3.5 | 2.7 | 3.8 | 2.8 | 4.1 | 3.0 | 4.2 | 3.0 | 4.4 | 3.0 | 4.6 | 3.0 | 4.8 | 2.9 | |
| 018 | 10.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 12.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 14.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 16.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 18.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 20.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 21.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 23.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 25.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 27.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 29.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 31.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 33.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| | 35.0 | 4.6 | 3.5 | 5.1 | 3.7 | 5.4 | 3.9 | 5.6 | 3.9 | 5.8 | 3.9 | 6.1 | 3.9 | 6.4 | 3.8 |
| 37.0 | 4.5 | 3.3 | 4.9 | 3.6 | 5.3 | 3.8 | 5.4 | 3.8 | 5.6 | 3.8 | 5.9 | 3.7 | 6.2 | 3.7 | |
| 39.0 | 4.3 | 3.3 | 4.8 | 3.5 | 5.1 | 3.7 | 5.3 | 3.7 | 5.4 | 3.7 | 5.7 | 3.6 | 6.0 | 3.6 | |
| 024 | 10.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 12.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 14.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 16.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 18.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 20.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 21.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 23.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 25.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 27.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 29.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 31.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 33.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| | 35.0 | 5.8 | 4.4 | 6.4 | 4.7 | 6.9 | 5.0 | 7.1 | 5.0 | 7.3 | 5.0 | 7.7 | 5.0 | 8.1 | 4.8 |
| 37.0 | 5.6 | 4.3 | 6.2 | 4.6 | 6.7 | 4.9 | 6.9 | 4.8 | 7.1 | 4.8 | 7.5 | 4.8 | 7.8 | 4.7 | |
| 39.0 | 5.5 | 4.2 | 6.1 | 4.4 | 6.5 | 4.7 | 6.7 | 4.7 | 6.9 | 4.7 | 7.3 | 4.7 | 7.6 | 4.6 | |

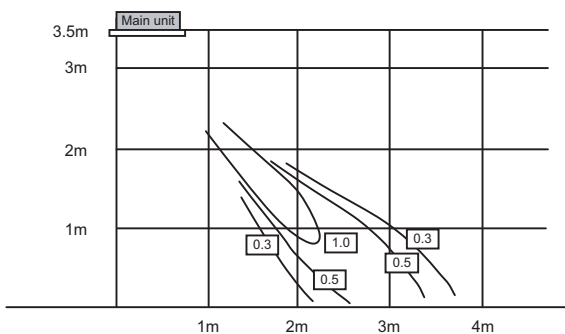


7. Air throw distance chart

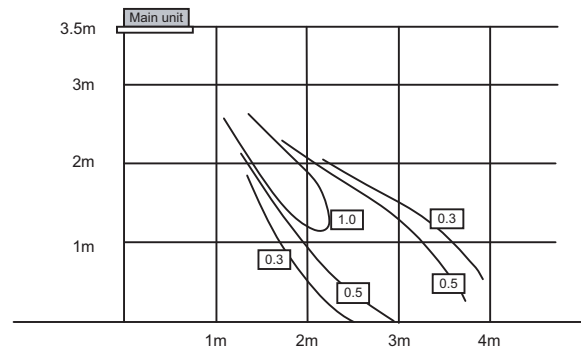
MMU-AP0074YH-E, AP0094YH-E, AP0124YH-E



MMU-AP0154SH-E, AP0184SH-E



MMU-AP0244SH-E



unit : [m/s]

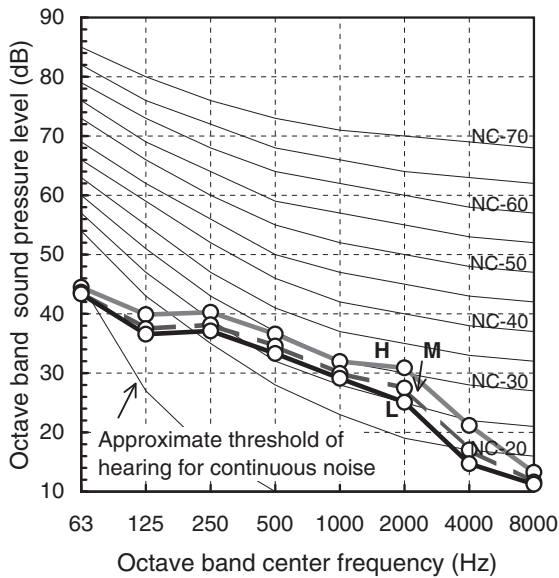


8. Sound Characteristics (NC Curve)

1-way (SH series) Air Discharge Cassette Type

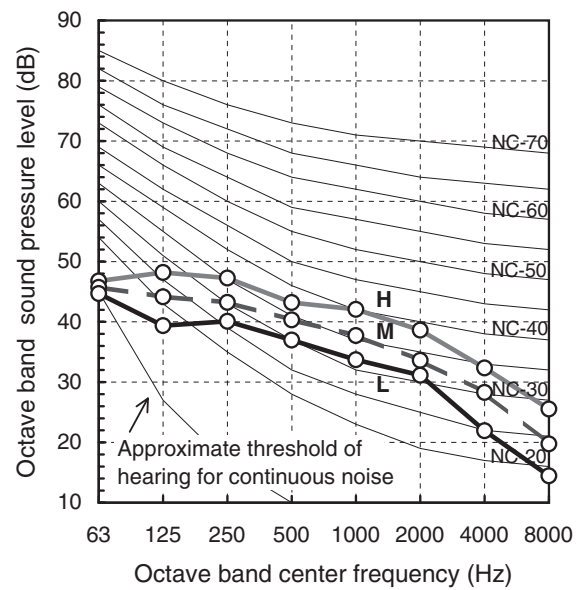
MMU-AP0154SH-E

| Fan tap | H | M | L |
|------------------------------|----|----|----|
| Sound pressure level (dB(A)) | 37 | 35 | 32 |



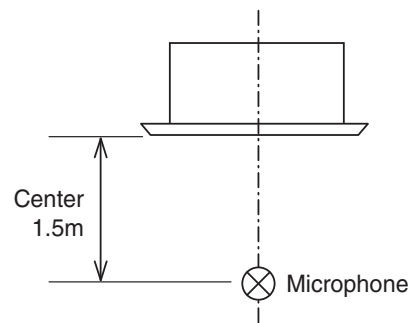
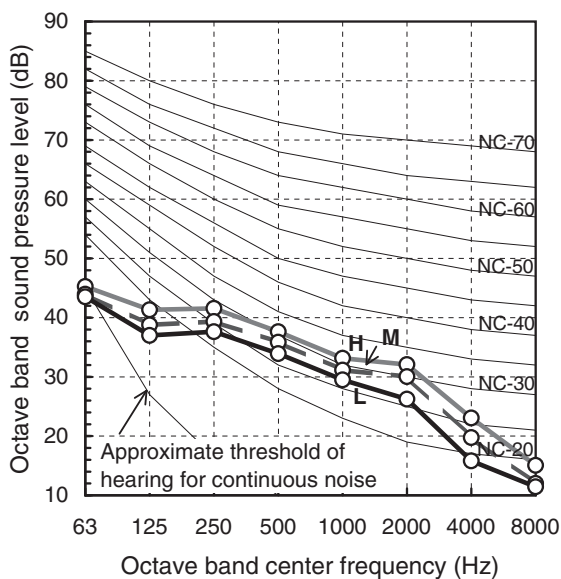
MMU-AP0244SH-E

| Fan tap | H | M | L |
|------------------------------|----|----|----|
| Sound pressure level (dB(A)) | 45 | 41 | 37 |



MMU-AP0184SH-E

| Fan tap | H | M | L |
|------------------------------|----|----|----|
| Sound pressure level (dB(A)) | 38 | 36 | 34 |





9. Fresh air intake (Design guide)

1-way (SH series) Air Discharge Cassette Type

Caution

The fresh air shall be conditioned by a heat reclaim ventilator or similar. Ensure the fresh air volume is determined so that mixed suction air and fresh air can maintain the operating temperature.

- *1. Recommended conditioned air temperature is 12 °C to 30 °C. However, Make a fresh air volume within 20% of standard.

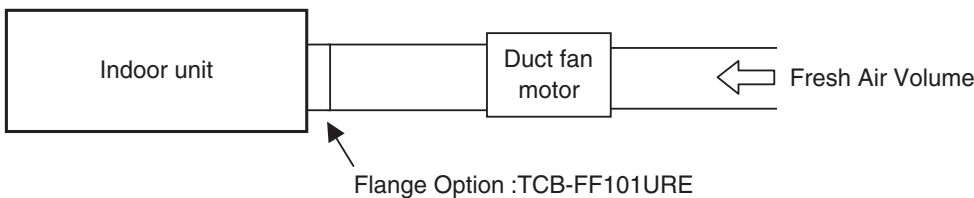
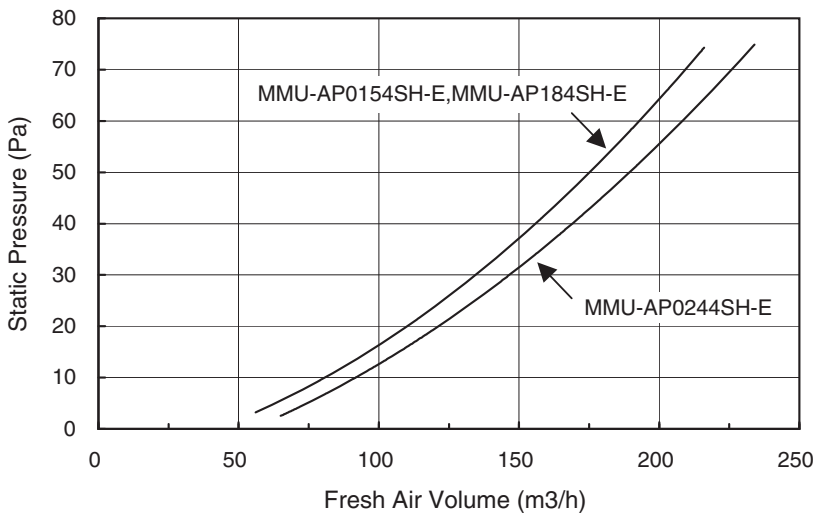
| | | | | |
|-------------------|---------------------|------------|------------|------------|
| Model name | MMU- | AP0154SH-E | AP0184SH-E | AP0244SH-E |
| Standard air flow | (m ³ /h) | 750 | 780 | 1140 |

Install a filter within the fresh air duct.

(Fresh air does not pass through the filter of Indoor unit.)

Insulate the fresh air duct.

Electrically connect the fan of the Heat exchanger unit and the Indoor unit to a single isolator.



Inter - lock circuit

Connect the driving relay of the duct fan(DC 12V) between 1 and 6 on the indoor P.C. board.

(Rated current of the relay for duct fan should be up to 75mA.)

After installation, carry out a trial operation to check that the duct fan of the indoor unit start/stop simultaneously.

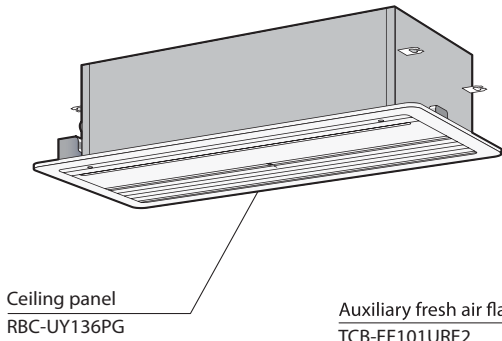
(Carry out the trial operation following the installation manual of the indoor unit.)



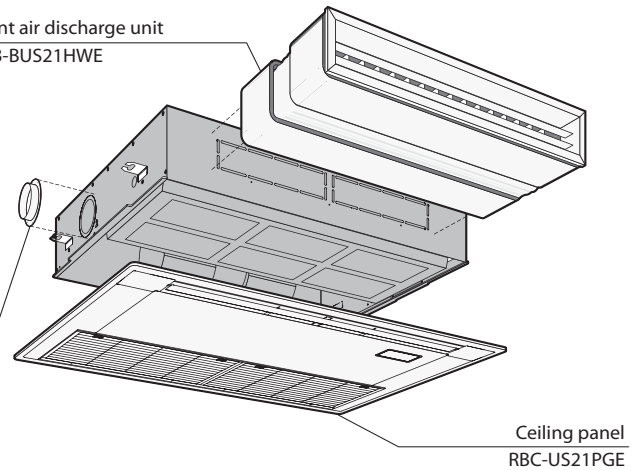
10. Accessories

| Parts name | Model name | Applied model | Note | Remarks |
|----------------------------|---------------|----------------|--|---------|
| Ceiling panel | RBC-UY136PG | MMU-AP***4YH-E | Required accessory | |
| | RBC-US21PGE | | Required accessory | |
| Front air discharge unit | TCB-BUS21HWE | MMU-AP***4SH-E | For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100 mm) | |
| Auxiliary fresh air flange | TCB-FF101URE2 | | | |

MMU-AP0074YH-E, AP0094YH-E, AP0124YH-E



**Front air discharge unit
TCB-BUS21HWE**



MMU-AP0154SH-E, AP0184SH-E, AP0244SH-E