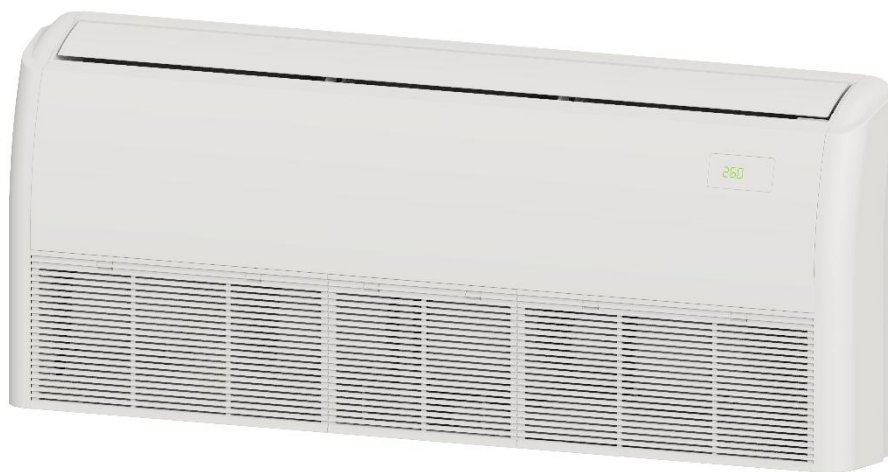


# Engineering Data

## Ceiling & Floor VRF IDU



MIH36DLHN18

MIH90DLHN18

MIH45DLHN18

MIH100DLHN18

MIH56DLHN18

MIH112DLHN18

MIH71DLHN18

MIH125DLHN18

MIH80DLHN18

MIH140DLHN18

MIH160DLHN18

# Ceiling & Floor

|                                                      |           |
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# VRF Indoor Units



## 1 Specifications

### MIH36DLHN18 / MIH45DLHN18 / MIH56DLHN18

| Model                             |                                     |                   | MIH36DLHN18                     | MIH45DLHN18                     | MIH56DLHN18                     |
|-----------------------------------|-------------------------------------|-------------------|---------------------------------|---------------------------------|---------------------------------|
| Power supply                      |                                     |                   | 1 phase, 220-240V, 50/60Hz      |                                 |                                 |
| Cooling <sup>1</sup>              | Capacity                            | kW                | 3.6                             | 4.5                             | 5.6                             |
|                                   |                                     | kBtu/h            | 12.3                            | 15.4                            | 19.1                            |
|                                   | Power input                         | W                 | 16                              | 24                              | 40                              |
| Heating <sup>2</sup>              | Capacity                            | kW                | 4                               | 5                               | 6.3                             |
|                                   |                                     | kBtu/h            | 13.7                            | 17.1                            | 21.5                            |
|                                   | Power input                         | W                 | 16                              | 24                              | 40                              |
| Fan motor                         | Model                               |                   | ZKSN-50-8-5L-4                  | ZKSN-50-8-5L-4                  | ZKSN-50-8-5L-4                  |
|                                   | Type                                |                   | DC                              |                                 |                                 |
| Indoor coil                       | Number of rows                      |                   | 3                               | 3                               | 3                               |
|                                   | Tube pitch × row pitch              | mm                | 18×10.72                        | 18×10.72                        | 18×10.72                        |
|                                   | Fin spacing                         | mm                | 1.35                            | 1.35                            | 1.35                            |
|                                   | Fin type                            |                   | Hydrophilic aluminum            |                                 |                                 |
|                                   | Tube OD and type                    | mm                | Φ5 Inner-groove                 |                                 |                                 |
|                                   | Dimensions (L×H×W)                  | mm                | 730×21.44×288                   | 730×21.44×288                   | 730×21.44×288                   |
|                                   | Number of circuits                  |                   | 8                               | 8                               | 8                               |
| Air flow rate <sup>3</sup>        |                                     | m <sup>3</sup> /h | 564/539/514/492<br>/467/445/424 | 712/674/637/603<br>/565/531/500 | 927/883/840/794<br>/751/707/665 |
| Sound pressure level <sup>4</sup> |                                     | dB(A)             | 32/30/29/28/27/26<br>/25        | 36/35/34/33/32/31<br>/30        | 43/41/40/38/36/34<br>/33        |
| Sound power level                 |                                     | dB(A)             | 43/42/40/39/38/38<br>/37        | 47/45/45/43/42/41<br>/40        | 54/53/51/50/48/47<br>/45        |
| Unit                              | Net dimensions <sup>5</sup> (W×H×D) | mm                | 1069×674×234                    |                                 |                                 |
|                                   | Packed dimensions (W×H×D)           | mm                | 1195×760×320                    |                                 |                                 |
|                                   | Net/Gross weight                    | kg                | 24.7/28.5                       |                                 |                                 |
| Refrigerant type                  |                                     |                   | R410A/R32                       |                                 |                                 |
| Throttle                          |                                     | Type              | Electronic expansion valve      |                                 |                                 |
| Design pressure (H/L)             |                                     | MPa               | 4.4/1.5                         |                                 |                                 |
| Pipe connections                  | Liquid/Gas pipe                     | mm                | Φ6.35/Φ12.7                     |                                 |                                 |
|                                   | Drain pipe                          | mm                | OD Φ25                          |                                 |                                 |

#### Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

**MIH71DLHN18 / MIH80DLHN18 / MIH90DLHN18/ MIH100DLHN18**

| Model                             |                                     |                   | MIH71DLHN18                            | MIH80DLHN18                             | MIH90DLHN18                               | MIH100DLHN18                              |
|-----------------------------------|-------------------------------------|-------------------|----------------------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|
| Power supply                      |                                     |                   | 1 phase, 220-240V, 50/60Hz             |                                         |                                           |                                           |
| Cooling <sup>1</sup>              | Capacity                            | kW                | 7.1                                    | 8                                       | 9                                         | 10                                        |
|                                   |                                     | kBtu/h            | 24.2                                   | 27.3                                    | 30.7                                      | 34.1                                      |
|                                   | Power input                         | W                 | 42                                     | 56                                      | 75                                        | 50                                        |
| Heating <sup>2</sup>              | Capacity                            | kW                | 8                                      | 9                                       | 10                                        | 11.2                                      |
|                                   |                                     | kBtu/h            | 27.3                                   | 30.7                                    | 34.1                                      | 38.2                                      |
|                                   | Power input                         | W                 | 42                                     | 56                                      | 75                                        | 50                                        |
| Fan motor                         | Model                               |                   | ZKSN-60-8-7-3                          | ZKSN-60-8-7-3                           | ZKSN-60-8-7-3                             | ZKSN-60-8-7-3                             |
|                                   | Type                                |                   | DC                                     |                                         |                                           |                                           |
| Indoor coil                       | Number of rows                      |                   | 3                                      | 3                                       | 3                                         | 3                                         |
|                                   | Tube pitch × row pitch              | mm                | 18×10.72                               | 18×10.72                                | 18×10.72                                  | 18×10.72                                  |
|                                   | Fin spacing                         | mm                | 1.35                                   | 1.35                                    | 1.35                                      | 1.35                                      |
|                                   | Fin type                            |                   | Hydrophilic aluminum                   |                                         |                                           |                                           |
|                                   | Tube OD and type                    | mm                | Φ5 Inner-groove                        |                                         |                                           |                                           |
|                                   | Dimensions (L×H×W)                  | mm                | 930×21.44×288                          | 930×21.44×288                           | 930×21.44×288                             | 1305×21.44×288                            |
|                                   | Number of circuits                  |                   | 8                                      | 8                                       | 8                                         | 8                                         |
| Air flow rate <sup>3</sup>        |                                     | m <sup>3</sup> /h | 1128/1062/<br>1024/926/860/<br>791/729 | 1300/1218/<br>1138/1057/982<br>/904/824 | 1480/1397/<br>1302/1218/<br>1138/1056/979 | 1497/1469/1296/<br>1200/1104/1015<br>/918 |
| Sound pressure level <sup>4</sup> |                                     | dB(A)             | 43/40/39/37/<br>35/34/33               | 45/44/42/40/38<br>/36/34                | 48/47/46/44/42<br>/40/37                  | 42/40/39/37/35<br>/33/32                  |
| Sound power level                 |                                     | dB(A)             | 54/53/52/51/<br>49/48/48               | 55/53/51/50/49<br>/46/44                | 58/57/55/54/52<br>/50/49                  | 54/53/51/50/48<br>/46/44                  |
| Unit                              | Net dimensions <sup>5</sup> (W×H×D) | mm                | 1284×674×234                           |                                         |                                           | 1649×674×234                              |
|                                   | Packed dimensions (W×H×D)           | mm                | 1410×760×330                           |                                         |                                           | 1775×760×330                              |
|                                   | Net/Gross weight                    | kg                | 29.8/33.8                              |                                         |                                           | 36.4/41.5                                 |
| Refrigerant type                  |                                     |                   | R410A/R32                              |                                         |                                           |                                           |
| Throttle                          |                                     | Type              | Electronic expansion valve             |                                         |                                           |                                           |
| Design pressure (H/L)             |                                     | MPa               | 4.4/1.5                                |                                         |                                           |                                           |
| Pipe connections                  | Liquid/Gas pipe                     | mm                | Φ9.52/Φ15.9                            |                                         |                                           |                                           |
|                                   | Drain pipe                          | mm                | OD Φ25                                 |                                         |                                           |                                           |

**Notes:**

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

# VRF Indoor Units



MIH112DLHN18 / MIH125DLHN18 / MIH140DLHN18/ MIH160DLHN18

| Model                             |                                     |                   | MIH112DLHN18                              | MIH125DLHN18                               | MIH140DLHN18                               | MIH160DLHN18                               |
|-----------------------------------|-------------------------------------|-------------------|-------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Power supply                      |                                     |                   | 1 phase, 220-240V, 50/60Hz                |                                            |                                            |                                            |
| Cooling <sup>1</sup>              | Capacity                            | kW                | 11.2                                      | 12.5                                       | 14                                         | 16                                         |
|                                   |                                     | kBtu/h            | 38.2                                      | 42.7                                       | 47.8                                       | 54.6                                       |
|                                   | Power input                         | W                 | 65                                        | 95                                         | 140                                        | 160                                        |
| Heating <sup>2</sup>              | Capacity                            | kW                | 12.5                                      | 14                                         | 16                                         | 18                                         |
|                                   |                                     | kBtu/h            | 42.7                                      | 47.8                                       | 54.6                                       | 61.4                                       |
|                                   | Power input                         | W                 | 65                                        | 95                                         | 140                                        | 160                                        |
| Fan motor                         | Model                               |                   | ZKSN-60-8-7-3                             | ZKSN-60-8-7-3                              | ZKSN-60-8-7-3                              | ZKSN-60-8-7-3                              |
|                                   | Type                                |                   | DC                                        |                                            |                                            |                                            |
| Indoor coil                       | Number of rows                      |                   | 3                                         | 3                                          | 3                                          | 3                                          |
|                                   | Tube pitch × row pitch              | mm                | 18×10.72                                  | 18×10.72                                   | 18×10.72                                   | 18×10.72                                   |
|                                   | Fin spacing                         | mm                | 1.35                                      | 1.35                                       | 1.35                                       | 1.35                                       |
|                                   | Fin type                            |                   | Hydrophilic aluminum                      |                                            |                                            |                                            |
|                                   | Tube OD and type                    | mm                | Φ5 Inner-groove                           |                                            |                                            |                                            |
|                                   | Dimensions (L×H×W)                  | mm                | 1305×21.44×288                            | 1305×21.44×288                             | 1305×21.44×288                             | 1305×21.44×288                             |
|                                   | Number of circuits                  |                   | 8                                         | 8                                          | 8                                          | 8                                          |
| Air flow rate <sup>3</sup>        |                                     | m <sup>3</sup> /h | 1648/1530/1469/<br>1292/1178/1067<br>/956 | 2012/1879/1772/<br>1649/1531/1469<br>/1285 | 2206/2070/1937/<br>1810/1677/1516<br>/1402 | 2406/2256/2085/<br>1914/1744/1573<br>/1402 |
| Sound pressure level <sup>4</sup> |                                     | dB(A)             | 44/42/41/39/37<br>/35/33                  | 49/48/46/44/42<br>/40/38                   | 51.5/50/48/46<br>/44/42/40                 | 54/52/49/47<br>/45/42/40                   |
| Sound power level                 |                                     | dB(A)             | 56/54/53/51/49<br>/47/45                  | 60/59/58/56/54<br>/53/51                   | 63/62/60/58/56<br>/54/53                   | 66/64/62/60/57<br>/55/53                   |
| Unit                              | Net dimensions <sup>5</sup> (W×H×D) | mm                | 1649×674×234                              |                                            |                                            |                                            |
|                                   | Packed dimensions (W×H×D)           | mm                | 1775×760×330                              |                                            |                                            |                                            |
|                                   | Net/Gross weight                    | kg                | 36.4/41.5                                 |                                            |                                            |                                            |
| Refrigerant type                  |                                     |                   | R410A/R32                                 |                                            |                                            |                                            |
| Throttle                          |                                     | Type              | Electronic expansion valve                |                                            |                                            |                                            |
| Design pressure (H/L)             |                                     | MPa               | 4.4/1.5                                   |                                            |                                            |                                            |
| Pipe connections                  | Liquid/Gas pipe                     | mm                | Φ9.52/Φ15.9                               |                                            |                                            |                                            |
|                                   | Drain pipe                          | mm                | OD Φ25                                    |                                            |                                            |                                            |

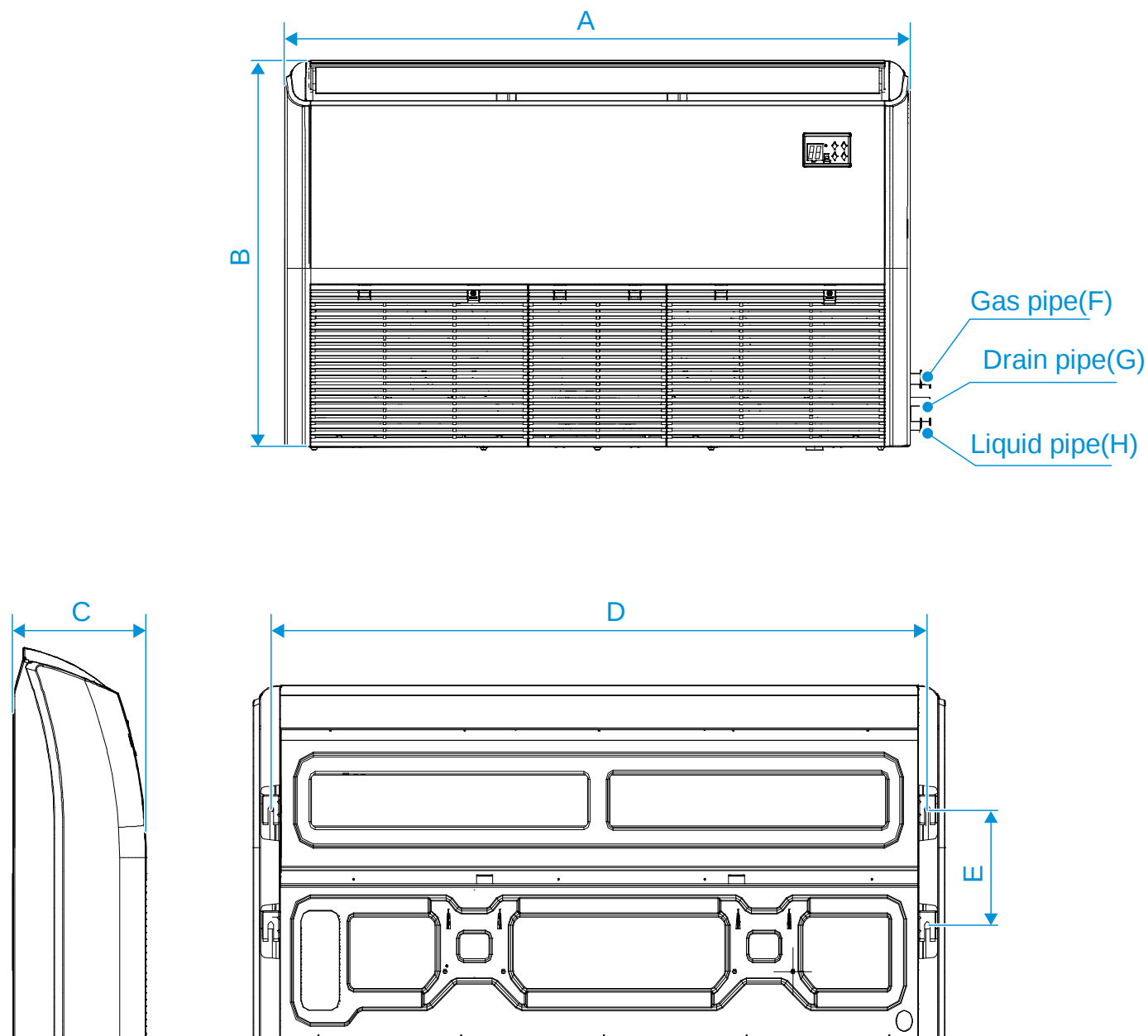
Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.

## 2 Dimensions

### 2.1 Unit Dimensions

Figure 2.1: Ceiling & Floor dimensions (unit: mm)



| Capacity(kW) | A    | B   | C   | D    | E   | F     | G   | H     |
|--------------|------|-----|-----|------|-----|-------|-----|-------|
| kW≤5.6       | 1069 | 674 | 234 | 984  | 221 | Φ12.7 | Φ25 | Φ6.35 |
| 5.6<kW≤9.0   | 1284 | 674 | 234 | 1199 | 221 | Φ15.9 | Φ25 | Φ9.52 |
| 9.0<kW≤16.0  | 1649 | 674 | 234 | 1565 | 221 | Φ15.9 | Φ25 | Φ9.52 |

### 3 Unit Placement

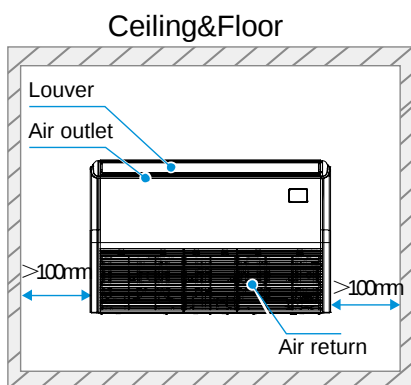
#### 3.1 Placement Considerations

Unit placement should take account of the following considerations:

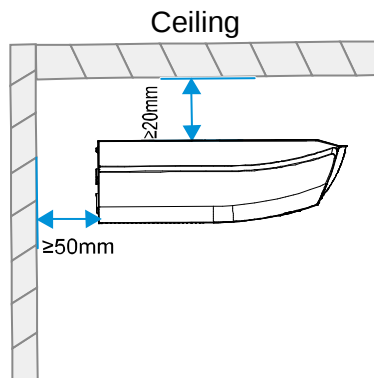
- Units should not be installed in the following locations:
  - A place filled with mineral oil, fumes or mist, like a kitchen.
  - A place where there are corrosive gases, such as acid or alkaline gases.
  - A place exposed to combustible gases and using volatile combustible gases such as diluent or gasoline.
  - A place where there is equipment emitting electromagnetic radiation.
  - A place where there is a high salt content in the air like a coast.
  - Do not use the air conditioner in an environment where an explosion may occur.
  - Places like in vehicles or cabin rooms.
  - Factories with major voltage fluctuations in the power supplies.
  - Other special environmental conditions.
- Units should be installed in positions where:
  - Ensure that the airflow in and out of the IDU is reasonably organized to form an air circulation in the room.
  - Ensure IDU maintenance space.
  - The nearer the drainage pipe and copper pipe are to the ODU, the lower the pipe cost is.
  - Prevent the air conditioner from blowing directly to the human body.
  - The closer the wiring to the power cabinet, the lower the wiring cost is.
  - Keep the air-conditioning return air away from the setting sun of the room.
  - Be careful not to interfere with the light tank, fire pipe, gas pipe and other facilities.
  - The IDU should not be lifted in the places like load-bearing beam and columns that affect the structural safety of the house.
  - The wired controller and the IDU should be in the same installation space; otherwise, the sampling point setting of the wired controller need to be changed.

#### 3.2 Space Requirements

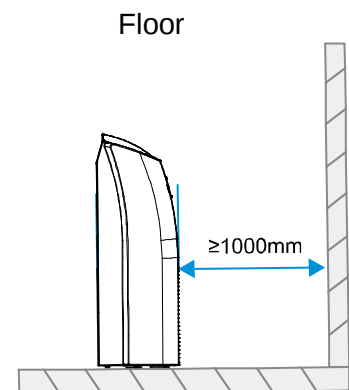
Figure 3.1: Ceiling & Floor space requirements (unit: mm)



Installation distance from both sides of the indoor unit to the wall



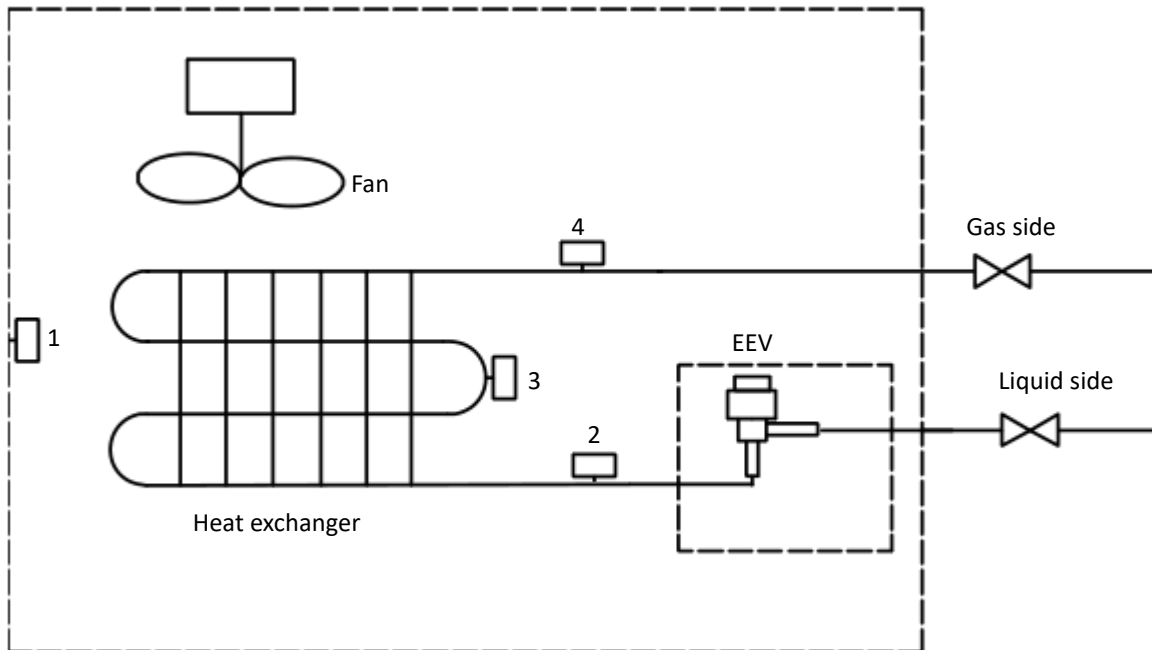
Installation distance from the top and back of the indoor unit to the wall



Installation distance from the back of the indoor unit to the wall

## 4 Piping Diagram

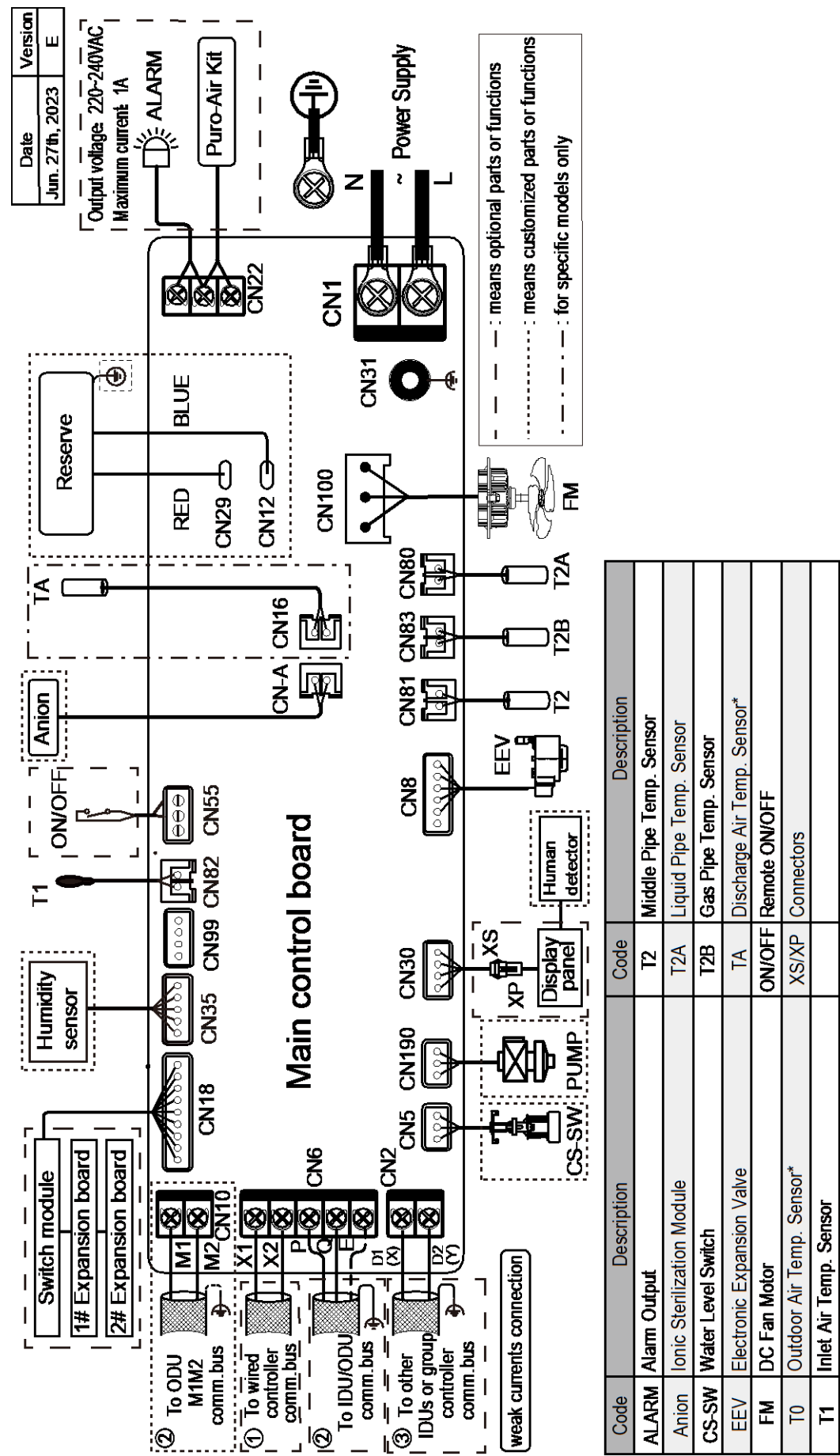
Figure 4.1: Ceiling & Floor piping diagram



| Legend |     |                          |
|--------|-----|--------------------------|
| 1      | T1  | Inlet Air Temp. Sensor   |
| 2      | T2A | Liquid Pipe Temp. Sensor |
| 3      | T2  | Middle Pipe Temp. Sensor |
| 4      | T2B | Gas Pipe Temp. Sensor    |

5 Wiring Diagram

Figure 5.1: Ceiling & Floor wiring diagram



\* Indicates that this sensor is only available for Fresh Air Processing Unit

Notes for installers and service engineers **Caution**

- All installation, servicing and maintenance must be carried out by competent and suitably qualified, certified and accredited professionals and in accordance with all applicable legislation.
- Units should be grounded in accordance with all applicable legislation. Metal and other conductive components should be insulated in accordance with all applicable legislation.
- Power supply wiring should be securely fastened at the power supply terminals – loose power supply wiring would represent a fire risk.
- After installation, servicing or maintenance, the electric control box cover should be closed. Failing to close the electric control box cover risks fire or electric shock.
- PQ and M1M2 communication ports both are used for indoor and outdoor communication, and only one of them can be used at a time. Meanwhile, be sure to connect the same communication ports (PQ to PQ; M1M2 to M1M2) in case of damage of the main control board.
- D1D2 communication ports are used for group control communication. When connecting the group controller, the D1D2 port of the indoor units that are to be group controlled must be connected in daisy chain, and the group controller must be connected to the X1X2 port of one of the indoor units in the group control, and set to group control mode. In addition, D1D2 communication ports can also be connected to the central controller.

## VRF Indoor Units



### 6 Capacity Tables

#### 6.1 Cooling Capacity Table

Table 6.1: Ceiling & Floor cooling capacity

| Model        | Indoor air temperature (°C WB/DB) |      |       |      |       |      |       |      |       |      |       |      |       |      |
|--------------|-----------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|              | 14/20                             |      | 16/23 |      | 18/26 |      | 19/27 |      | 20/28 |      | 22/30 |      | 24/32 |      |
|              | TC                                | SC   | TC    | SC   | TC    | SC   | TC    | SC   | TC    | SC   | TC    | SC   | TC    | SC   |
| MIH36DLHN18  | 3.2                               | 3.0  | 3.4   | 3.0  | 3.6   | 3.1  | 3.6   | 3.0  | 3.7   | 2.9  | 3.8   | 2.8  | 3.9   | 2.7  |
| MIH45DLHN18  | 4.0                               | 3.6  | 4.3   | 3.8  | 4.5   | 3.8  | 4.5   | 3.7  | 4.6   | 3.6  | 4.7   | 3.4  | 4.8   | 3.3  |
| MIH56DLHN18  | 5.0                               | 4.5  | 5.3   | 4.6  | 5.6   | 4.7  | 5.6   | 4.6  | 5.7   | 4.5  | 5.8   | 4.2  | 6.0   | 4.1  |
| MIH71DLHN18  | 6.3                               | 5.7  | 6.7   | 5.8  | 7.0   | 5.9  | 7.1   | 5.8  | 7.2   | 5.6  | 7.4   | 5.4  | 7.6   | 5.2  |
| MIH80DLHN18  | 7.1                               | 6.4  | 7.6   | 6.6  | 7.9   | 6.7  | 8.0   | 6.5  | 8.1   | 6.3  | 8.3   | 6.0  | 8.5   | 5.8  |
| MIH90DLHN18  | 8.0                               | 7.2  | 8.5   | 7.4  | 8.9   | 7.5  | 9.0   | 7.3  | 9.1   | 7.1  | 9.4   | 6.8  | 9.6   | 6.5  |
| MIH100DLHN18 | 8.9                               | 8.1  | 9.5   | 8.3  | 9.9   | 8.4  | 10.0  | 8.2  | 10.1  | 8.0  | 10.4  | 7.6  | 10.7  | 7.3  |
| MIH112DLHN18 | 9.9                               | 9.1  | 10.6  | 9.3  | 11.1  | 9.4  | 11.2  | 9.2  | 11.3  | 8.9  | 11.6  | 8.4  | 11.9  | 8.1  |
| MIH125DLHN18 | 11.0                              | 10.1 | 11.7  | 10.3 | 12.3  | 10.4 | 12.5  | 10.2 | 12.6  | 9.9  | 12.9  | 9.3  | 13.2  | 9.0  |
| MIH140DLHN18 | 12.4                              | 11.3 | 13.2  | 11.6 | 13.8  | 11.7 | 14.0  | 11.4 | 14.2  | 11.1 | 14.5  | 10.5 | 14.9  | 10.1 |
| MIH160DLHN18 | 14.2                              | 13.7 | 15.1  | 13.6 | 15.8  | 13.5 | 16.0  | 13.1 | 16.2  | 12.7 | 16.6  | 12.1 | 17.0  | 11.6 |

Abbreviations:

TC: Total capacity (kW)

SC: Sensible capacity (kW)

Notes:

1. Shaded cells indicate rating condition

#### 6.2 Heating Capacity Table

Table 6.2: Ceiling & Floor heating capacity

| Model        | Indoor air temperature (°C DB) |      |      |      |      |      |
|--------------|--------------------------------|------|------|------|------|------|
|              | 16                             | 18   | 20   | 21   | 22   | 24   |
|              | SHC                            | SHC  | SHC  | SHC  | SHC  | SHC  |
| MIH36DLHN18  | 4.2                            | 4.2  | 4.0  | 3.8  | 3.8  | 3.5  |
| MIH45DLHN18  | 5.3                            | 5.3  | 5.0  | 4.8  | 4.7  | 4.4  |
| MIH56DLHN18  | 6.7                            | 6.6  | 6.3  | 6.1  | 5.9  | 5.5  |
| MIH71DLHN18  | 8.5                            | 8.4  | 8.0  | 7.8  | 7.5  | 7.0  |
| MIH80DLHN18  | 9.5                            | 9.5  | 9.0  | 8.7  | 8.5  | 7.8  |
| MIH90DLHN18  | 10.6                           | 10.5 | 10.0 | 9.7  | 9.4  | 8.8  |
| MIH100DLHN18 | 11.9                           | 11.8 | 11.2 | 10.9 | 10.5 | 9.8  |
| MIH112DLHN18 | 13.3                           | 13.1 | 12.5 | 12.1 | 11.8 | 10.9 |
| MIH125DLHN18 | 14.8                           | 14.7 | 14.0 | 13.6 | 13.2 | 12.2 |
| MIH140DLHN18 | 17.0                           | 16.7 | 16.0 | 15.6 | 15.0 | 14.0 |
| MIH160DLHN18 | 19.1                           | 18.9 | 18.0 | 17.5 | 16.9 | 15.7 |

Abbreviations:

SHC: Sensible Heat Capacity

Notes:

1. Shaded cells indicate rating condition

## 7 Electrical Characteristics

Table 7.1: Ceiling & Floor electrical characteristics

| Model        | Power supply |         |            |            |      |     | Indoor Fan Motor       |      |
|--------------|--------------|---------|------------|------------|------|-----|------------------------|------|
|              | Hz           | Volts   | Min. volts | Max. volts | MCA  | MFA | Rated motor output (W) | FLA  |
| MIH36DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.20 | 15  | 50                     | 0.16 |
| MIH45DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.28 | 15  | 50                     | 0.22 |
| MIH56DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.43 | 15  | 50                     | 0.34 |
| MIH71DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.45 | 15  | 50                     | 0.36 |
| MIH80DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.60 | 15  | 60                     | 0.48 |
| MIH90DLHN18  | 50/60        | 220-240 | 198        | 264        | 0.75 | 15  | 60                     | 0.60 |
| MIH100DLHN18 | 50/60        | 220-240 | 198        | 264        | 0.63 | 15  | 60                     | 0.50 |
| MIH112DLHN18 | 50/60        | 220-240 | 198        | 264        | 0.75 | 15  | 60                     | 0.60 |
| MIH125DLHN18 | 50/60        | 220-240 | 198        | 264        | 1.00 | 15  | 60                     | 0.80 |
| MIH140DLHN18 | 50/60        | 220-240 | 198        | 264        | 1.25 | 15  | 60                     | 1.00 |
| MIH160DLHN18 | 50/60        | 220-240 | 198        | 264        | 1.25 | 15  | 60                     | 1.00 |

Abbreviations:

MCA: Min. Circuit Amps. (A), which is used to select the minimum circuit size to ensure safe operation over a long period of time.s

MFA: Max. Fuse Amps. (A), which is used to select the circuit breaker.

FLA: Full Load Amps. (A), which is the full load current of the indoor fan motor (reliable operation at the fastest speed setting).

# VRF Indoor Units

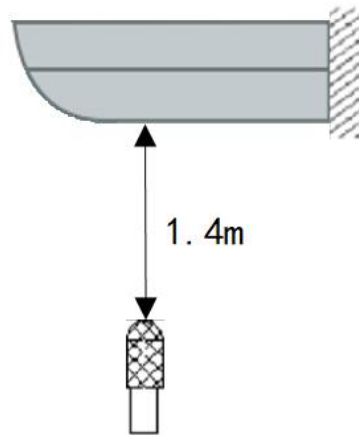


## 8 Sound Levels

### 8.1 Overall

| Model name   | Sound pressure levels dB(A) |    |    |    |    |    |     |
|--------------|-----------------------------|----|----|----|----|----|-----|
|              | SSH                         | SH | H  | M  | L  | SL | SSL |
| MIH36DLHN18  | 32                          | 30 | 29 | 28 | 27 | 26 | 25  |
| MIH45DLHN18  | 36                          | 35 | 34 | 33 | 32 | 31 | 30  |
| MIH56DLHN18  | 43                          | 41 | 40 | 38 | 36 | 34 | 33  |
| MIH71DLHN18  | 43                          | 40 | 39 | 37 | 35 | 34 | 33  |
| MIH80DLHN18  | 45                          | 44 | 42 | 40 | 38 | 36 | 34  |
| MIH90DLHN18  | 48                          | 47 | 46 | 44 | 42 | 40 | 37  |
| MIH100DLHN18 | 42                          | 40 | 39 | 37 | 35 | 33 | 32  |
| MIH112DLHN18 | 44                          | 42 | 41 | 39 | 37 | 35 | 33  |
| MIH125DLHN18 | 49                          | 48 | 46 | 44 | 42 | 40 | 38  |
| MIH140DLHN18 | 51.5                        | 50 | 48 | 46 | 44 | 42 | 40  |
| MIH160DLHN18 | 54                          | 52 | 49 | 47 | 45 | 42 | 40  |

Figure 8.1: Ceiling & Floor sound pressure level measurement



### 8.2 Octave Band Levels

Figure 8.2: MIH36DLHN18 octave band levels

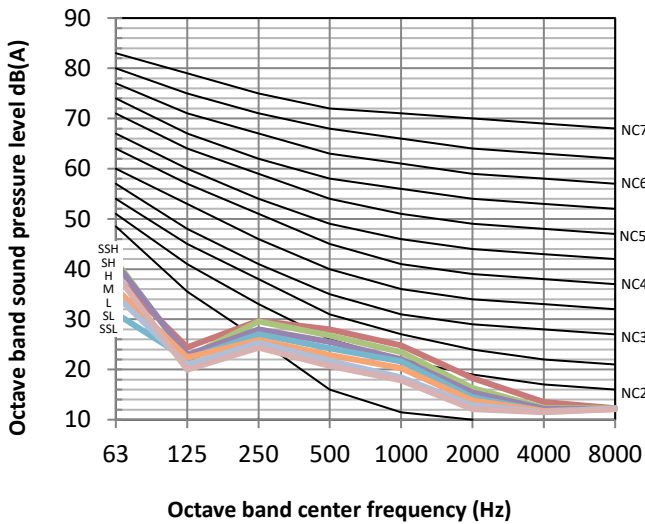


Figure 8.3: MIH45DLHN18 octave band levels

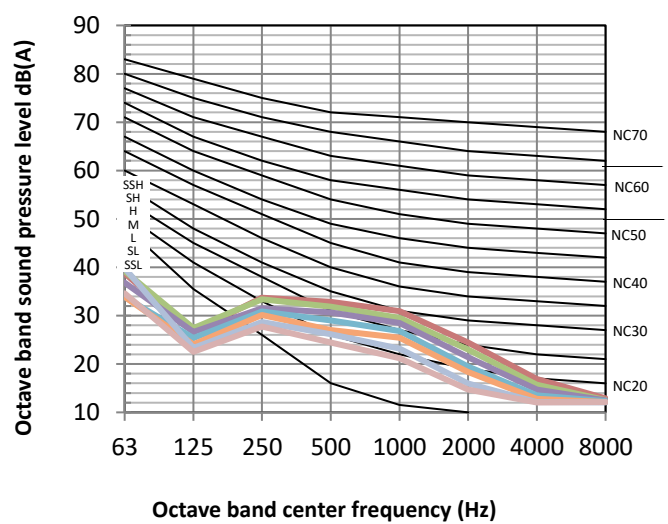


Figure 8.4: MIH56DLHN18 octave band levels

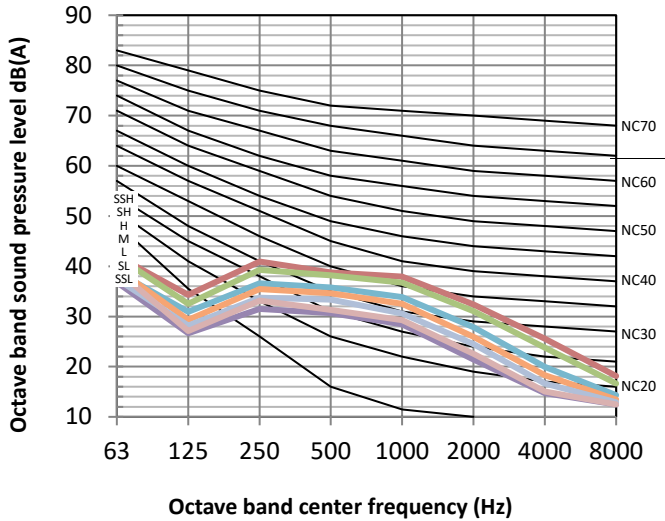


Figure 8.5: MIH71DLHN18 octave band levels

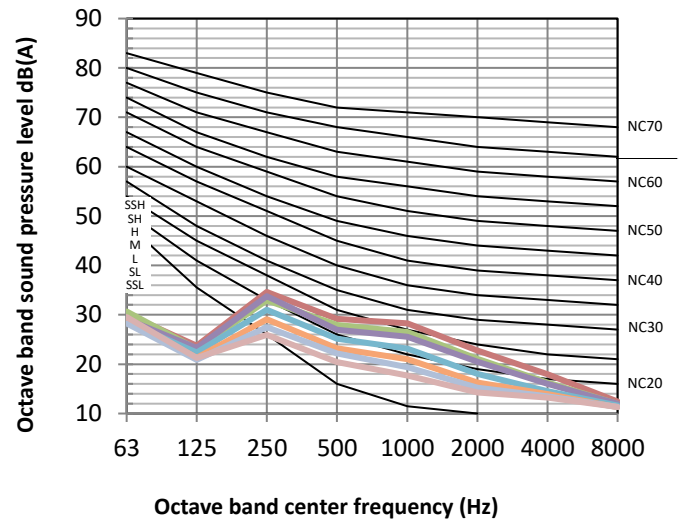


Figure 8.6: MIH80DLHN18 octave band levels

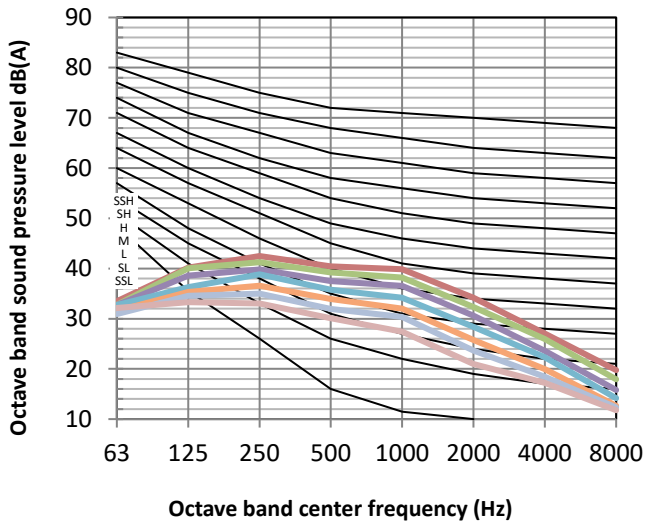


Figure 8.7: MIH90DLHN18 octave band levels

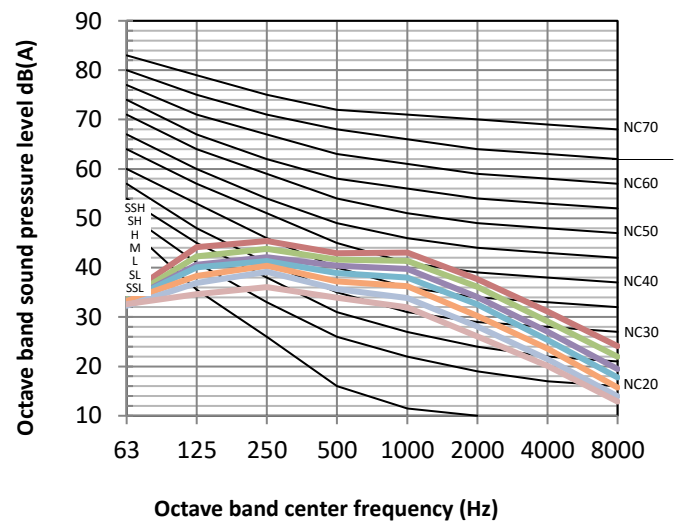


Figure 8.8: MIH100DLHN18 octave band levels

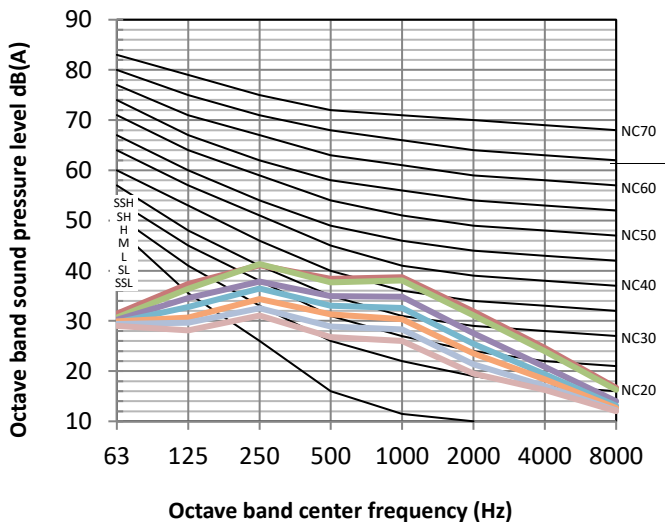


Figure 8.9: MIH112DLHN18 octave band levels

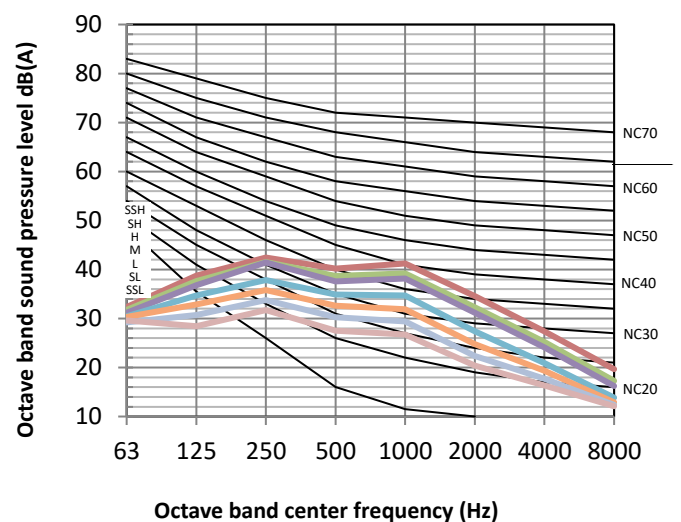


Figure 8.10: MIH125DLHN18 octave band levels

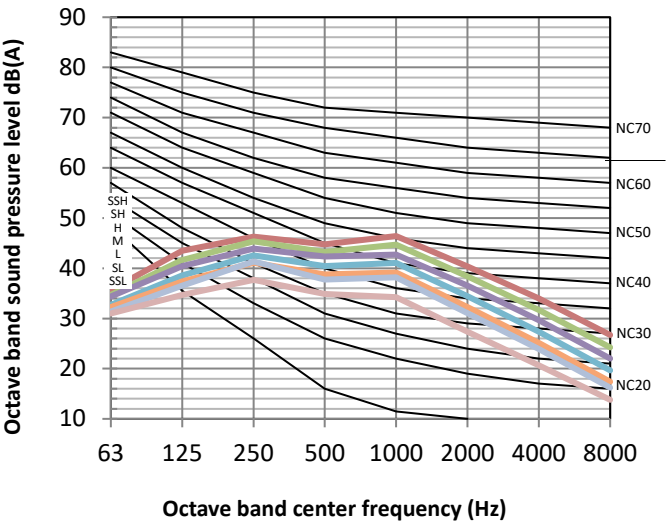


Figure 8.11: MIH140DLHN18 octave band levels

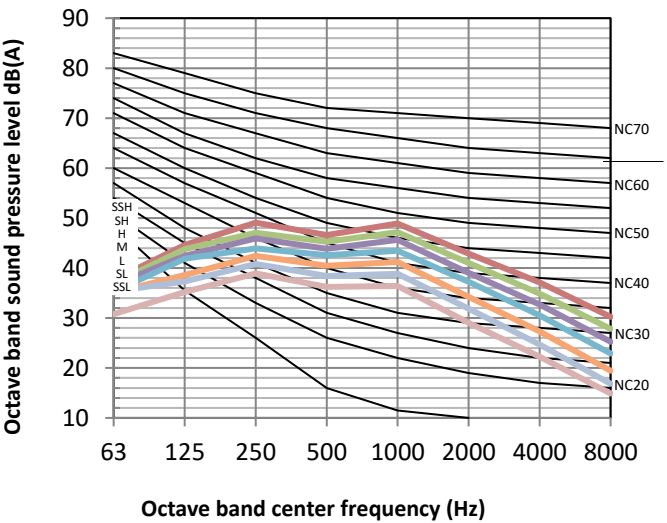
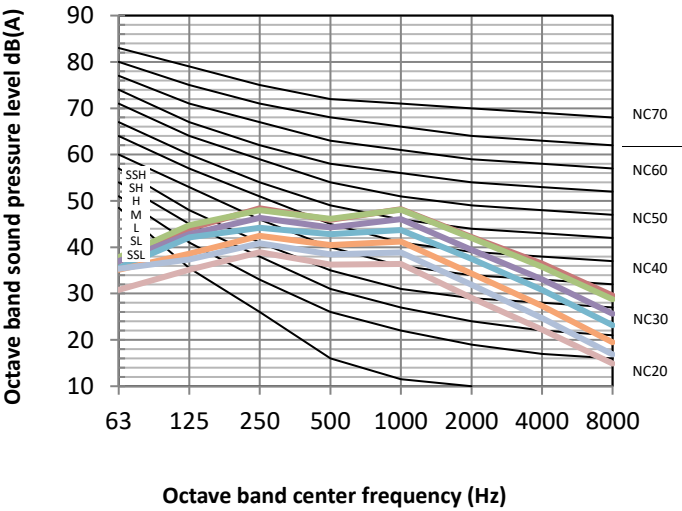


Figure 8.11: MIH160DLHN18 octave band levels



## 9 Temperature and Airflow Distributions

### 9.1 Simulate condition

Table 9.1: Ceiling & Floor simulate condition

| Model name   | Room size (m) | Ceiling height (m) | Flow angle (Cooling/Heating) | Placing         |
|--------------|---------------|--------------------|------------------------------|-----------------|
| MIH36DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH45DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH56DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH71DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH80DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH90DLHN18  | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH100DLHN18 | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH112DLHN18 | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH125DLHN18 | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH140DLHN18 | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |
| MIH160DLHN18 | 10×10         | 3                  | 12°/52°                      | Ceiling & Floor |

Note:

- These figures are based on software simulation. They show typical temperature and airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

### 9.2 Airflow distributions (unit: m/s)

Figure 9.1: MIH36DLHN18 cooling at 300S

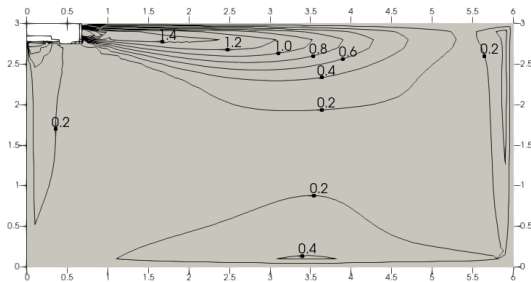


Figure 9.2: MIH36DLHN18 heating at 300S

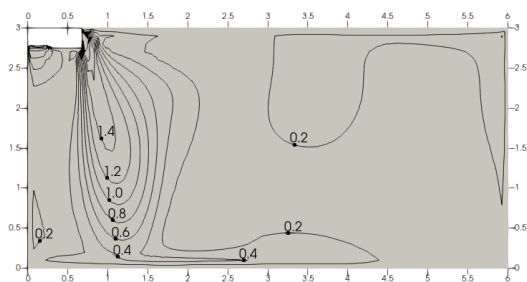


Figure 9.3: MIH45DLHN18 cooling at 300S

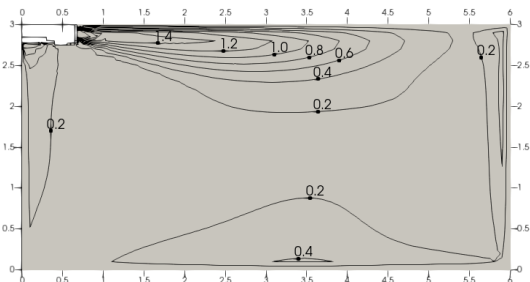


Figure 9.4: MIH45DLHN18 heating at 300S

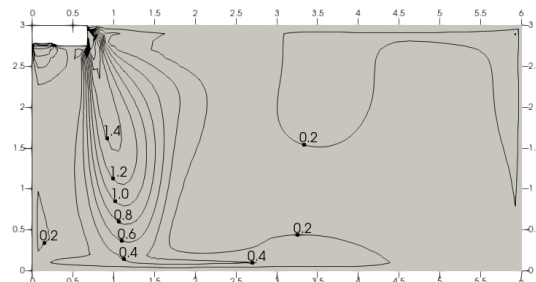


Figure 9.5: MIH56DLHN18 cooling at 300S

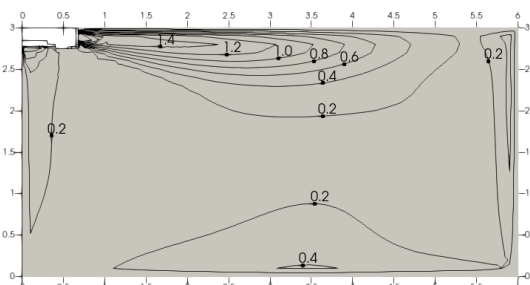
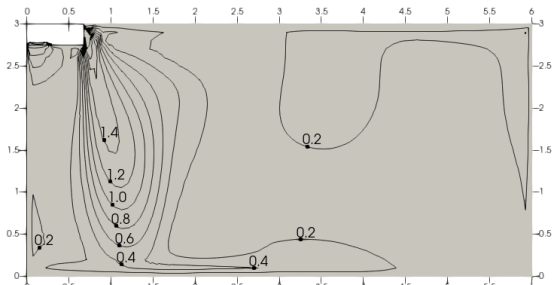


Figure 9.6: MIH56DLHN18 heating at 300S



## VRF Indoor Units



Figure 9.7: MIH71DLHN18 cooling at 300S

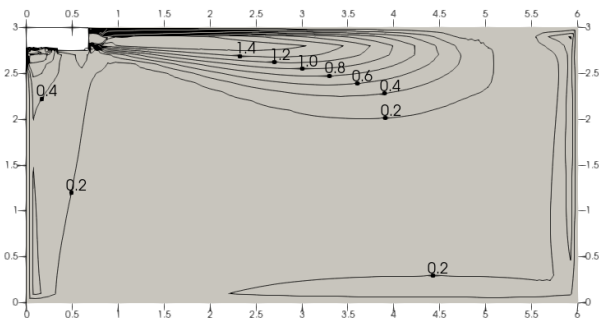


Figure 9.9: MIH80DLHN18 cooling at 300S

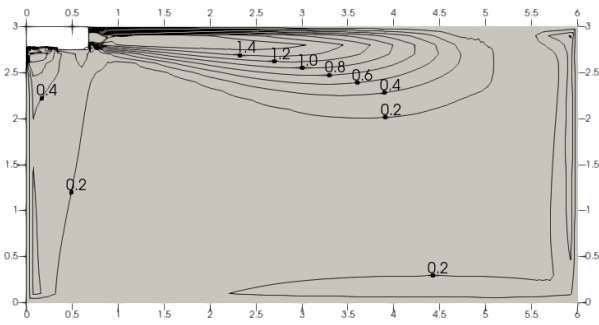


Figure 9.11: MIH90DLHN18 cooling at 300S

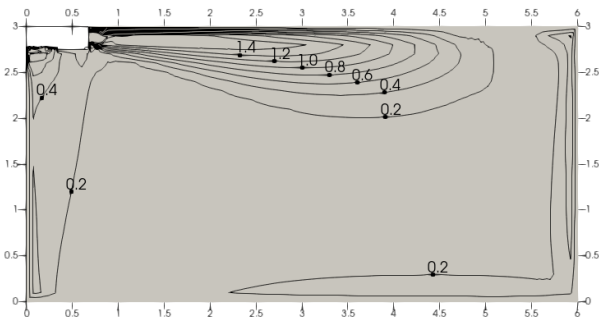


Figure 9.13: MIH100DLHN18 cooling at 300S

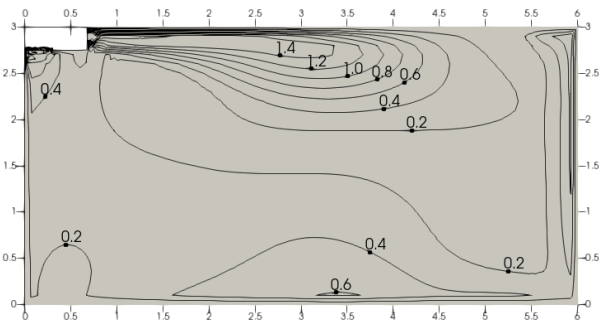


Figure 9.15: MIH112DLHN18 cooling at 300S

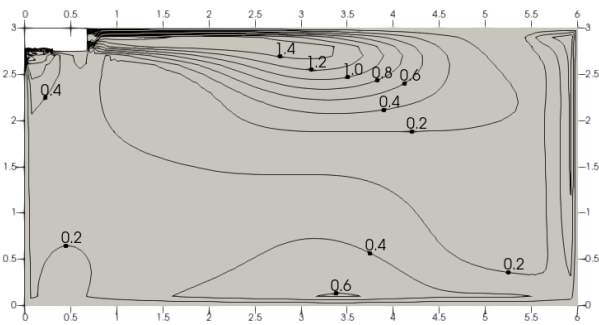


Figure 9.8: MIH71DLHN18 heating at 300S

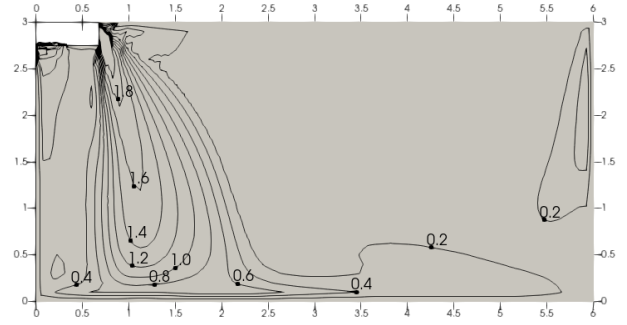


Figure 9.10: MIH80DLHN18 heating at 300S

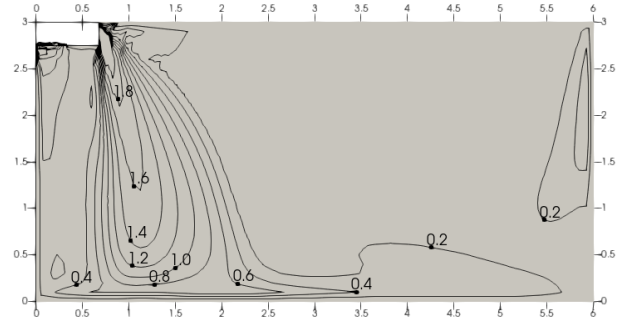


Figure 9.12: MIH90DLHN18 heating at 300S

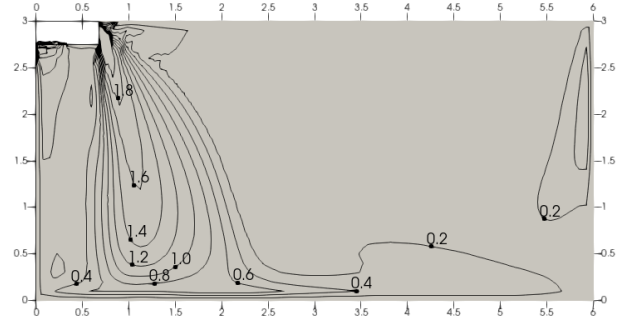


Figure 9.14: MIH100DLHN18 heating at 300S

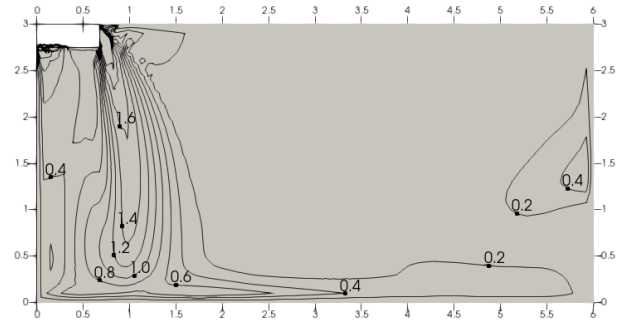


Figure 9.16: MIH112DLHN18 heating at 300S

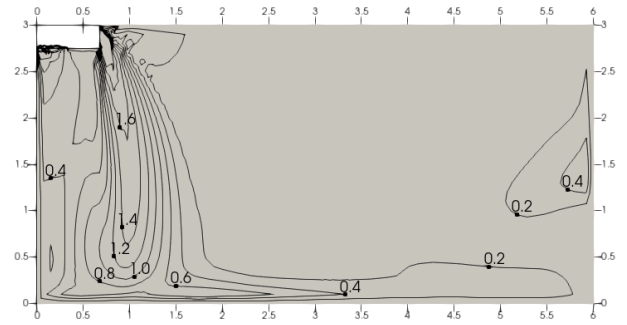


Figure 9.17: MIH125DLHN18 cooling at 300S

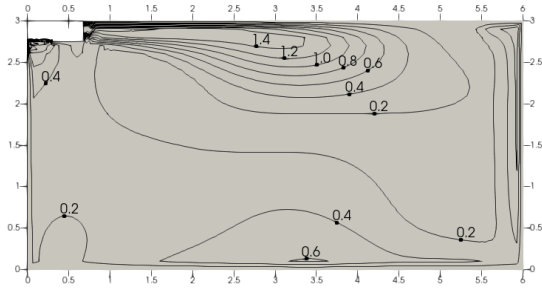


Figure 9.18: MIH125DLHN18 heating at 300S

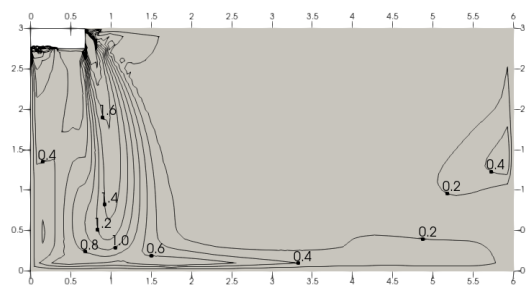


Figure 9.19: MIH140DLHN18 cooling at 300S

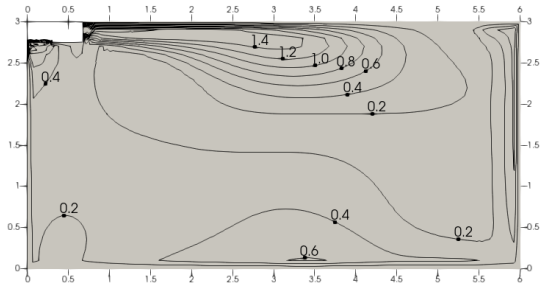


Figure 9.20: MIH140DLHN18 heating at 300S

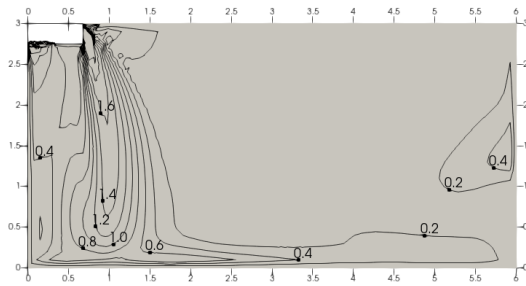


Figure 9.19: MIH160DLHN18 cooling at 300S

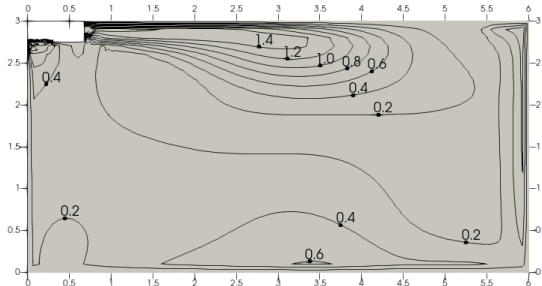
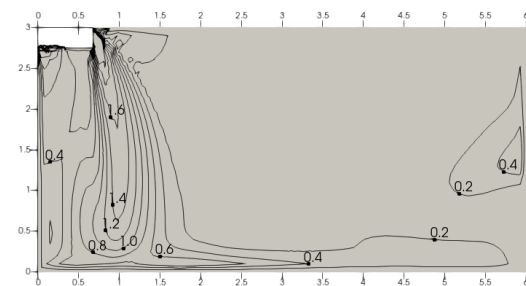


Figure 9.20: MIH160DLHN18 heating at 300S



## 9.3 Temperature distributions

Figure 9.21: MIH36DLHN18 cooling at 300S

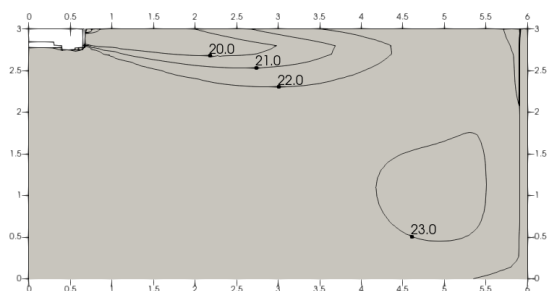


Figure 9.22: MIH36DLHN18 heating at 300S

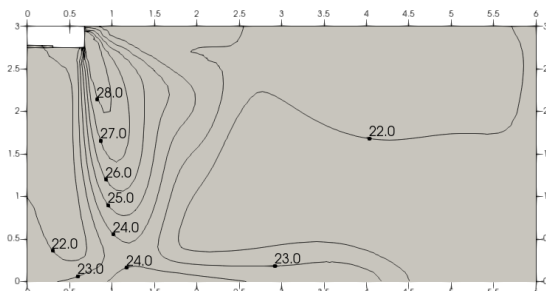


Figure 9.23: MIH45DLHN18 cooling at 300S

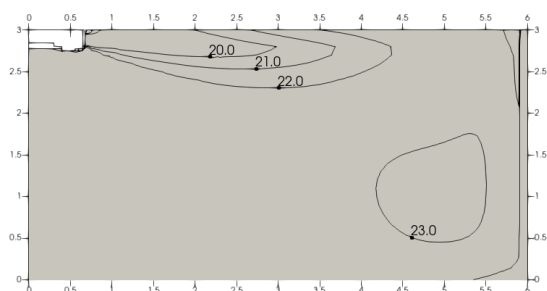
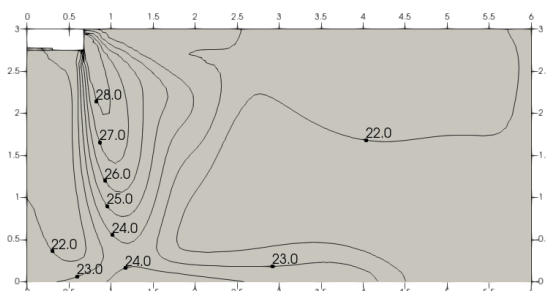


Figure 9.24: MIH45DLHN18 heating at 300S



# VRF Indoor Units



Figure 9.25: MIH56DLHN18 cooling at 300S

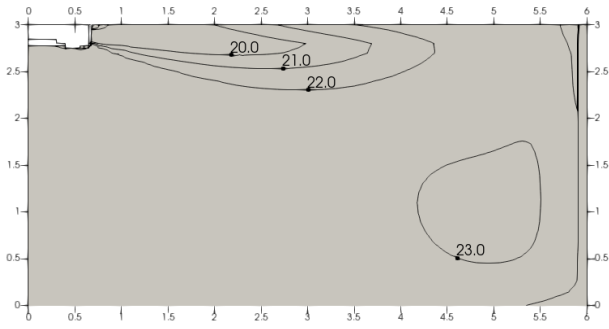


Figure 9.26: MIH56DLHN18 heating at 300S

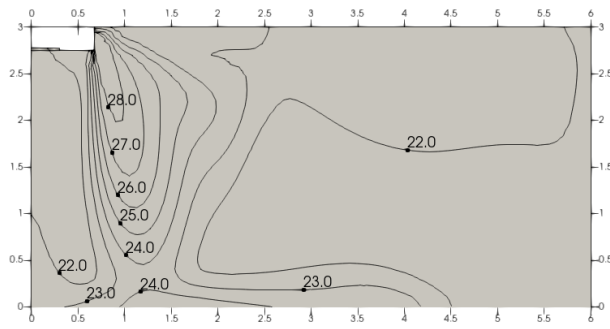


Figure 9.27: MIH71GHN18 cooling at 300S

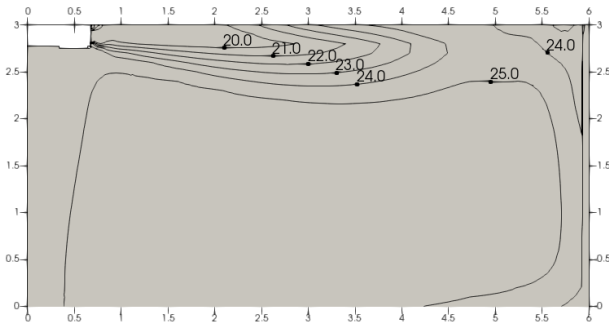


Figure 9.28: MIH71GHN18 heating at 300S

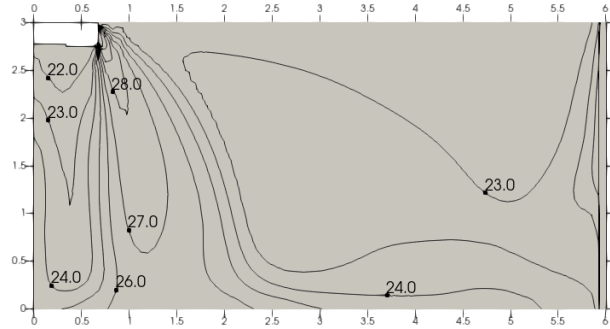


Figure 9.29: MIH80GHN18 cooling at 300S

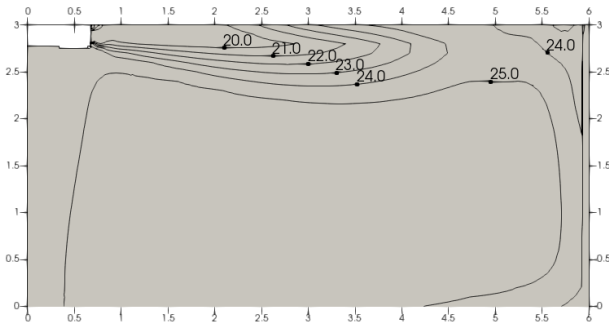


Figure 9.30: MIH80GHN18 heating at 300S

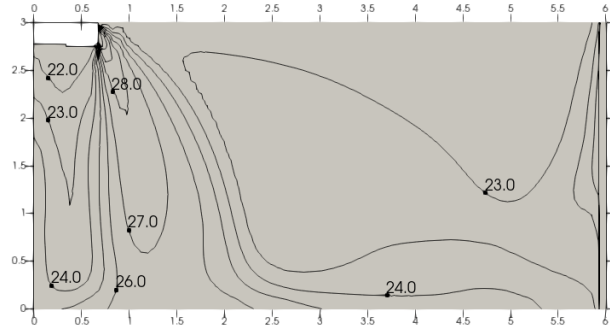


Figure 9.31: MIH90GHN18 cooling at 300S

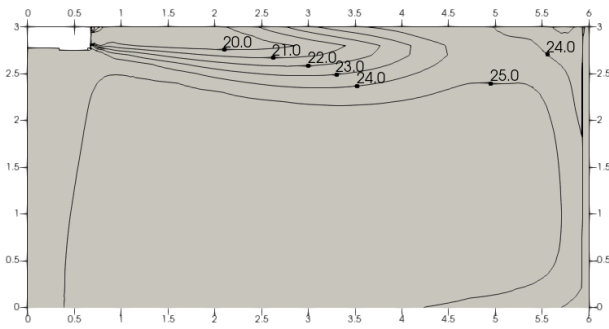


Figure 9.32: MIH90GHN18 heating at 300S

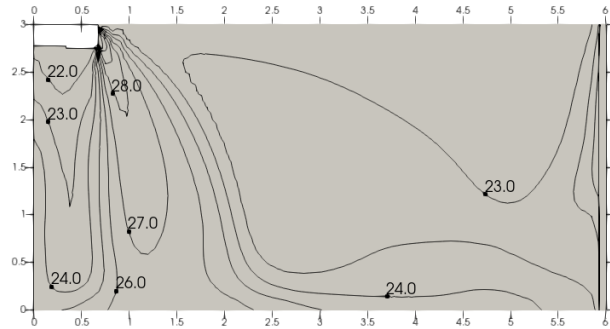


Figure 9.33: MIH100GHN18 cooling at 300S

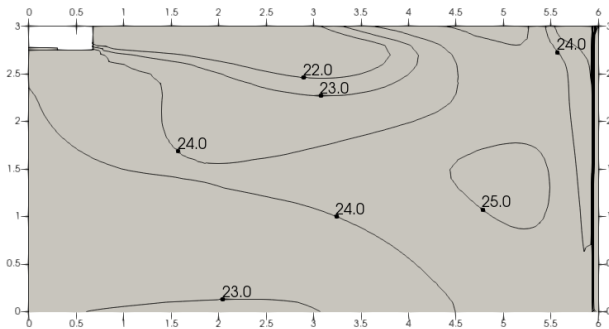


Figure 9.34: MIH100GHN18 heating at 300S

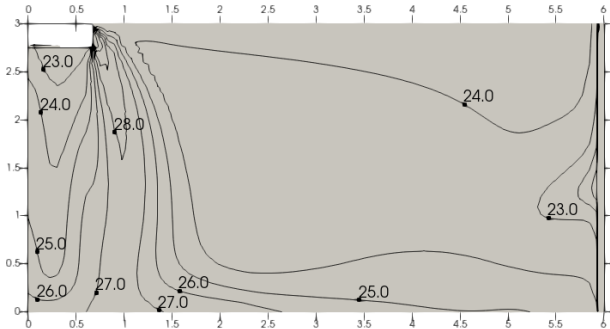


Figure 9.35: MIH112GHN18 cooling at 300S

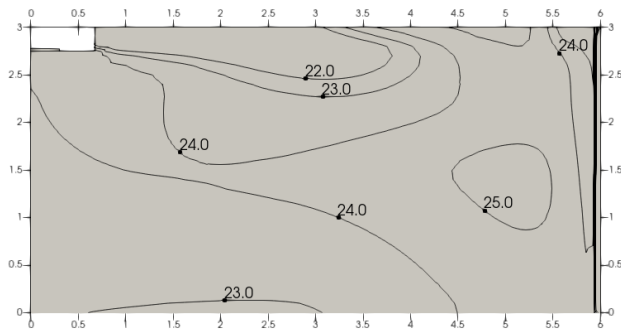


Figure 9.36: MIH112GHN18 heating at 300S

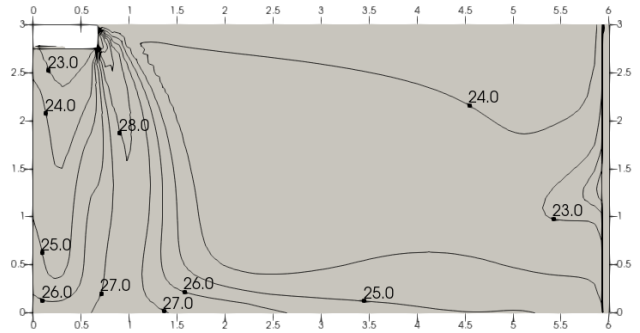


Figure 9.37: MIH125GHN18 cooling at 300S

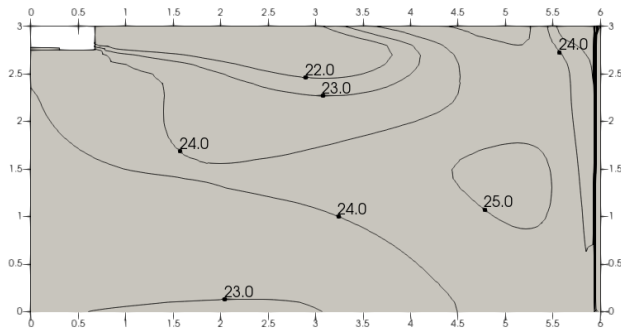


Figure 9.38: MIH125GHN18 heating at 300S

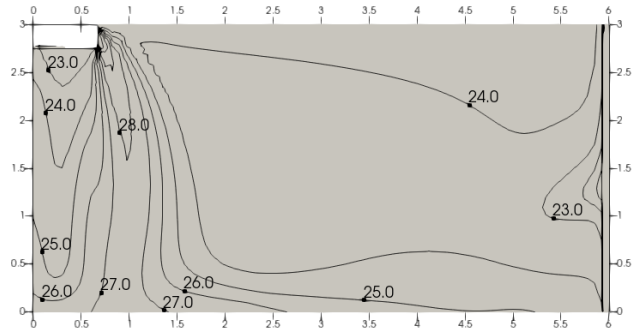


Figure 9.39: MIH140GHN18 cooling at 300S

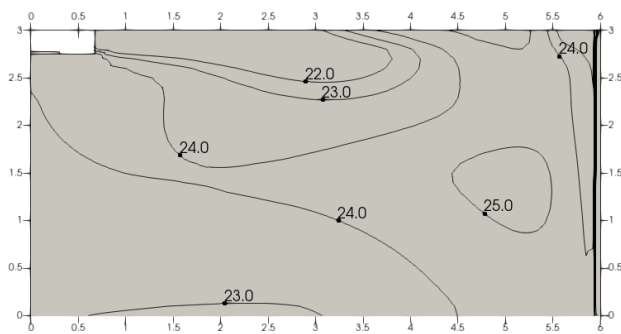


Figure 9.40: MIH140GHN18 heating at 300S

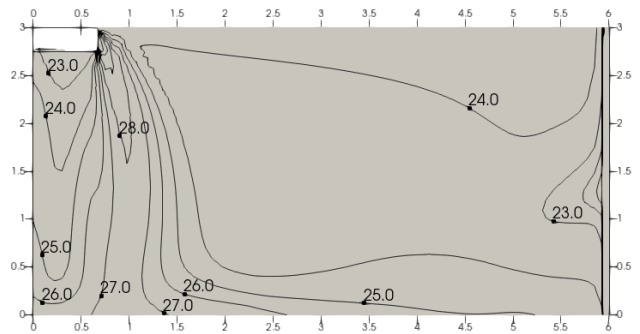


Figure 9.39: MIH160GHN18 cooling at 300S

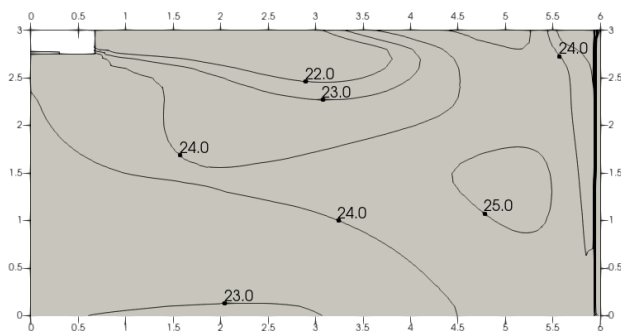
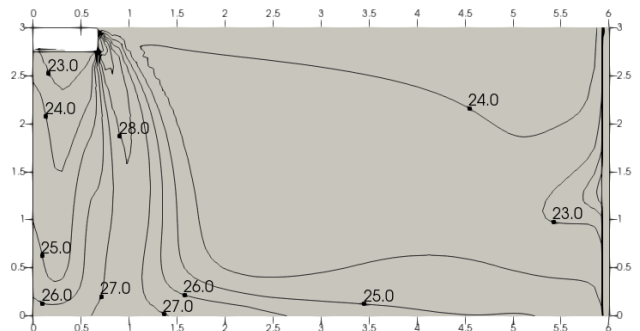


Figure 9.40: MIH160GHN18 heating at 300S



VRF Indoor Units



T-V8DLH  
Ver. 2025-05

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Midea Group

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