

[VU-V Heat Recovery] Unit Selection Manual

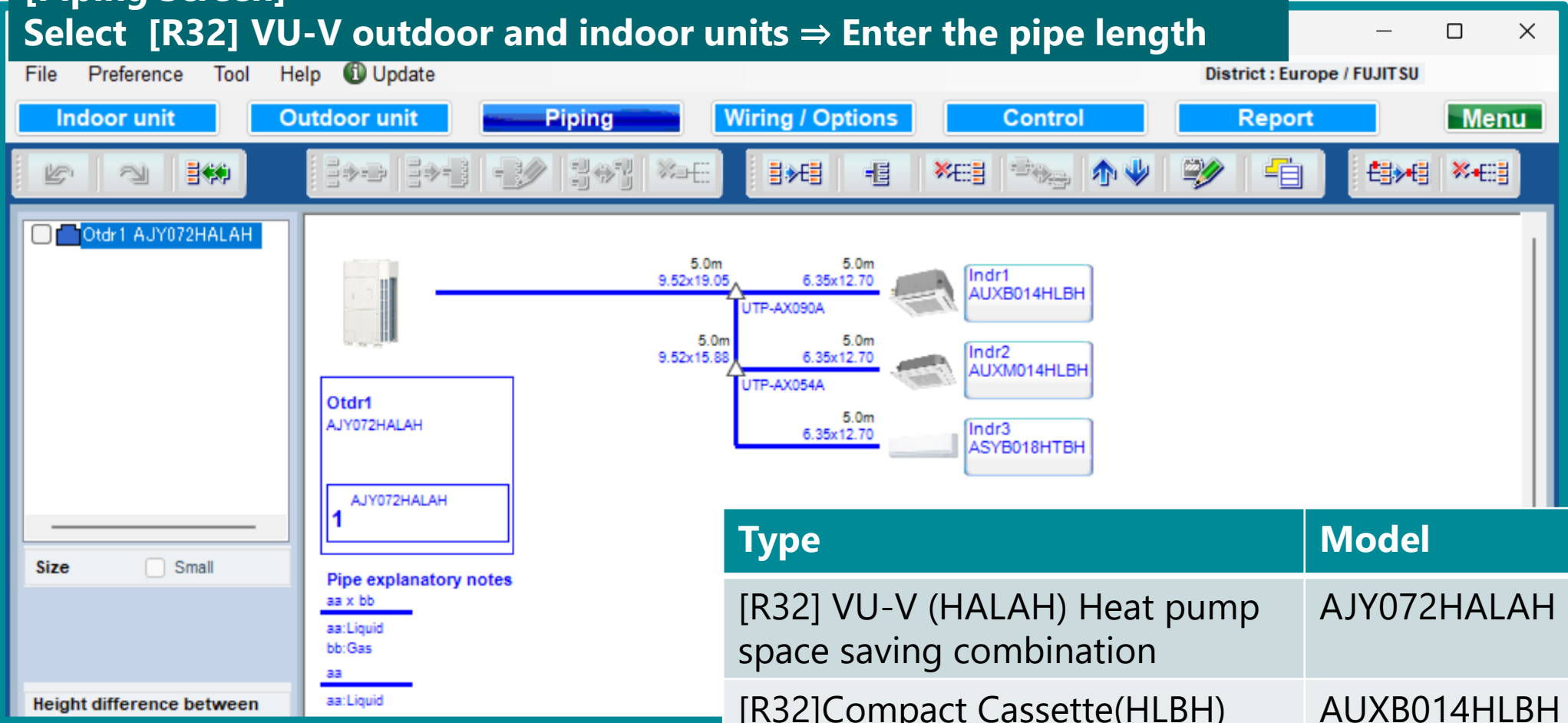
For Design Simulator

Table of Contents

01	<u>VU-V(Heat Recovery) Unit Selection and Pipe Length Input</u>
02	<u>Create a room</u>
03	<u>Allocate an indoor unit to a room</u>
04	<u>(NEW) Allocate an RB to a room</u> <u>Enter the height of the indoor unit and RB</u>
05	<u>Report</u>

01. VU-V(Heat Recovery) Unit Selection and Pipe Length Input

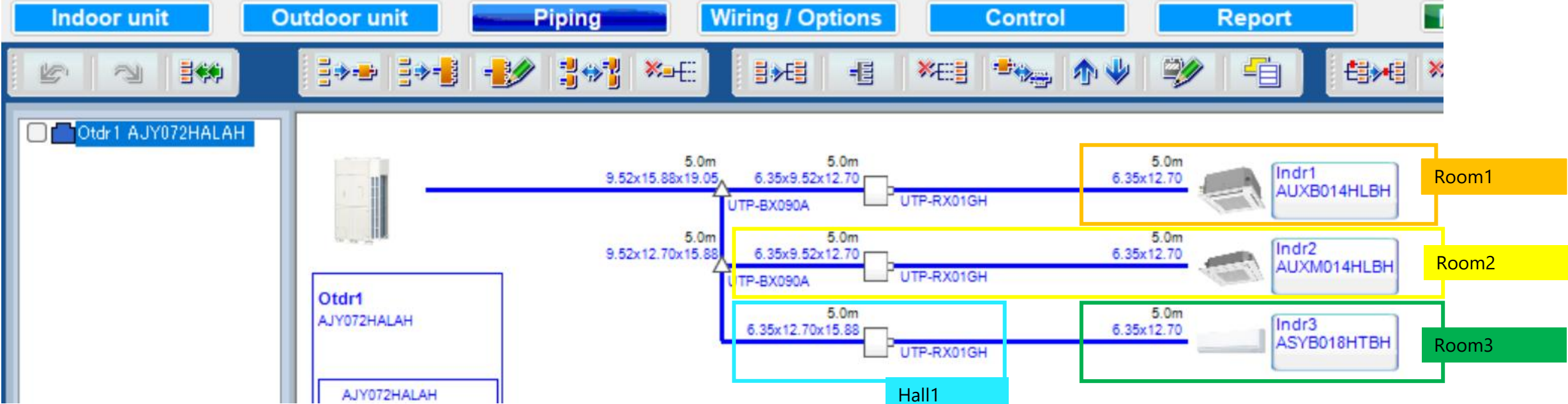
[Piping Screen]
Select [R32] VU-V outdoor and indoor units ⇒ Enter the pipe length



Type	Model
[R32] VU-V (HALAH) Heat pump space saving combination	AJY072HALAH
[R32] Compact Cassette(HLBH)	AUXB014HLBH
[R32] Circular flow Cassette(Slim)	AUXM014HLBH
[R32] Wall-mounted(HTBH)	ASYB018HTBH

02-01. Create a room(Image)

[Piping Screen]
In this manual, we will create rooms and allocate indoor units and RBs as shown in the following image.



Floor1	Allocate Unite
Room1	[R32]Compact Cassette(HLBH)
Room2	RB Single / [R32]Circular flow Cassette(Slim)
Room3	[R32]Wall-mounted(HTBH)
Hall1	RB Single

02-02. Create a room

Project

[Room Setting Screen]

✖Please enter the length, width, and height of the room.

Remove

* Height : The room height is used for safety assessments. Please enter a valid height for the assessment.

	Floor	Room	Length (m)	Width (m)	Height (m)	Room Area (m2)	Room Volume (m3)	IU Height (H0) (m)	RB / SOV Height (m)	Syst
1	Floor1	Room1	4.0	4.0	4.0	16.0	64.0			
2	Floor1	Room2	4.0	4.0	4.0	16.0	64.0			
3	Floor1	Room3	4.0	4.0	4.0	16.0	64.0			
4	Floor1	Hall	4.0	4.0	4.0	16.0	64.0			

Enter the dimensions of the room

✖Example

Floor	Room	Length(m)	Width(m)	Height(m)
Floor1	Room1	4	4	4
Floor1	Room2	4	4	4
Floor1	Room3	4	4	4
Floor1	Hall1	4	4	4

IU Allocation

*Required input for R32 VRF S

Auto-select

Gas Sensor Kit (inc. alarm)

☐ select one to an IU in the room which required safety measures

Cancel

OK

03. Allocate an indoor unit to a room

[Indoor unite allocation Screen]

1.Select Room

Floor1

Room1

2. Select Indoor

V2

Indr1

3.Select[Allocate IU]

Allocate IU

Floor	Room	Length (m)	Width (m)	Height (m)	Room Area (m2)	Room Volume (m3)	Rq TC (kW)	Rq SC (kW)	Rq HC (kW)
Floor1	Room1	4.0	4.0	4.0	16.0	64.0			

Name	Model	Tmp C (C/%)	Tmp H (C)	Discharge Tmp C (C/WBT)	Outside Tmp C (C/%)	Discharge Tmp H (C)

Select	Series	Name	Comments	Model	Capa C (kW)	Capa H (kW)	Outdoor
☐	V2	Indr1		AUXB014HLBH	4.5	5.0	Otdr1
☐	V2	Indr2		AUXM014HLBH	4.5	5.0	Otdr1
☐	V2	Indr3		ASYB018HTBH	5.6	6.3	Otdr1

Show IU already allocated.

Close

4.The room has been assigned an indoor unit

Indr1

Floor	Room	Length (m)	Width (m)	Height (m)	Room Area (m2)	Room Volume (m3)	Rq TC (kW)	Rq SC (kW)	Rq HC (kW)
Floor1	Room1	4.0	4.0	4.0	16.0	64.0			

Series	Name	Model	Tmp C (C/%)	Tmp H (C)	Discharge Tmp C (C/WBT)	Outside Tmp C (C/%)	Discharge Tmp H (C)	Out
V2	Indr1	AUXB014HLBH	27.0/46.3	20.0	-		-	

Allocate IU

Clear IU

Select	Series	Name	Comments	Model	Capa C (kW)	Capa H (kW)	Outdoor
☒	V2	Indr2		AUXM014HLBH	4.5	5.0	Otdr1
☐	V2	Indr3		ASYB018HTBH	5.6	6.3	Otdr1

Show IU already allocated.

5. Repeat steps 1 through 4 to assign indoor units

Floo1	Allocate Unite
Room1	Indoor1
Room2	Indoor2
Room3	Indoor3
Hall1	

04-01. (New) Allocate an RB to a room

[Room Setting Screen] How to allocate an RB to a room

Project

Detail Room setting

Floor Floor1 Floor setting * Add room

* Height : The room height is used for safety assessments. Please enter a valid height.

	Floor	Room	* Room Volume (m3)	** IU Height (H0) (m)	RB / SOV Height (m)	System of RB / SOV
1	Floor1	Room1	0			None
2	Floor1	Room2	0			None
3	Floor1	Room3	64.0	1.8		None
4	Floor1	Hall	64.0	1.8		None

1.Select [None]

2. Select [Otdr1]
⇒A pop-up window for allocating RBs opens

- Otdr1 : RB for Otdr1 is allocated
- Same as I.U. : Refers to RB connected to the same refrigerant circuit as the indoor unit allocated to the room (Heat Pump : Shutoff Valve)

System of RB / SOV

Select system of RB / SOV.

☐ Same as I.U.

☒ Otdr1

Cancel OK

3.Select [OK]

Project

Detail Room setting

Floor Floor1 Floor setting * Add room Remove

* Height : The room height is used for safety assessments. Please enter a valid height for the assessment.

	Floor	Room	System of RB / SOV	R32 VRF Safety measures
				Response measure 1 Response measure 2 Response measure 3
1	Floor1	Room1	None	IU Air circulation Safety alarm Safety shutoff valve or Ve...
2	Floor1	Room2	Otdr1	IU Air circulation Safety alarm Ventilation
3	Floor1	Room3	None	IU Air circulation Safety alarm Safety shutoff valve or Ve...
4	Floor1	Hall	None	

4. RB (with shutoff valve function) has been allocated to Floor 1
Please See System of RB / Shutoff valve

04-02. (New) Allocate an RB to a room

[Room Setting Screen] How to allocate an RB to a room
※Repeat steps 04-01 to allocate an RB to the room

Floor1

Floor setting

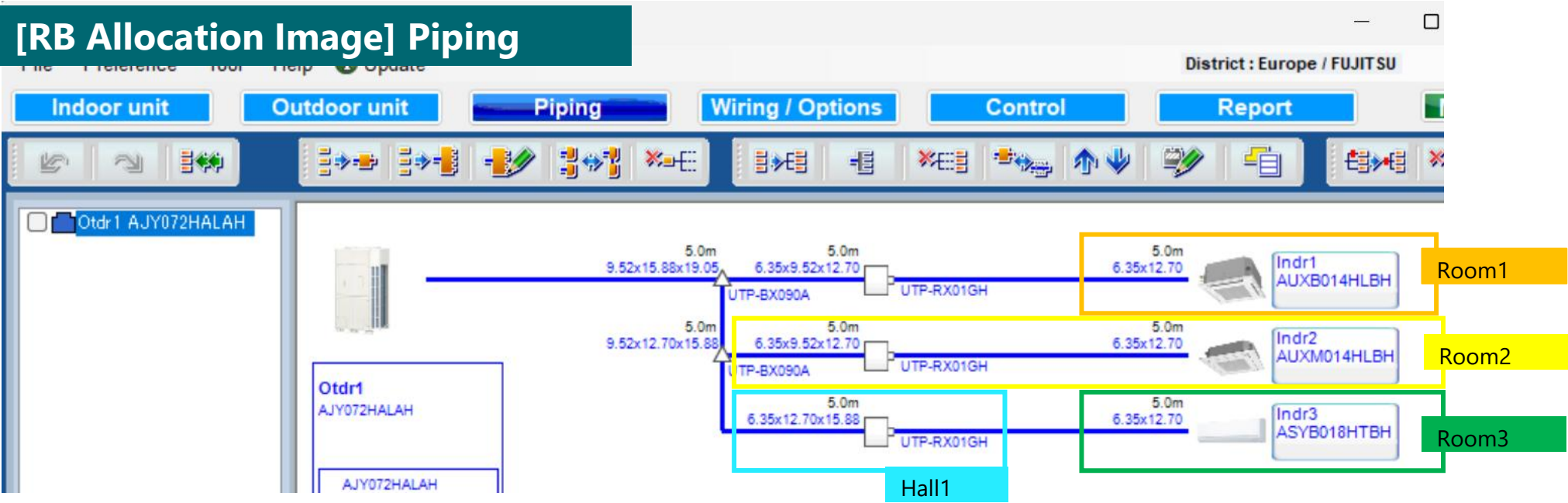
Add room

Remove

* Height : The room height is used for safety assessments. Please enter a valid height for the assessment.

	Floor	Room	System of RB / SOV	R32 VRF Safety measures		
				Response measure 1	Response measure 2	Response measure 3
1	Floor1	Room1	None	IU Air circulation	Safety alarm	Safety shutoff valve or Ve...
2	Floor1	Room2	Otdr1	IU Air circulation	Safety alarm	Ventilation
3	Floor1	Room3	None	IU Air circulation	Safety alarm	Safety shutoff valve or Ve...
4	Floor1	Hall1	Otdr1	-	-	-

[RB Allocation Image] Piping



04-03. (NEW) Allocate an RB to a room
Enter the height of the indoor unit and RB

[Room Setting]

- ※Please enter the heights of RB, Room, and Indoor unit each time.
- Units (RB and room ,Indoor unite) for which height has not been entered will be excluded when calculating the effective height.
- When not all values (RB and room, Indoor unite) are entered, the indoor unit installation height will be used as the effective height.

Project

Detail Room setting

※When using a heat pump, the shutoff valve

Floor Floor1 Floor setting * Add room Remove

* Height : The room height is used for safety assessments. Please enter a valid height for the assessment.

	Floor	Room	IU Height (H0)** (m)	RB / SOV Height (m)	System of RB / SOV	R32 VRF Safety measures	
						Response measure 1	Response measure 2
1	Floor1	Room1	1.8		None	IU Air circulation	Safety alarm
2	Floor1	Room2	1.8	2.0	Otdr1	IU Air circulation	Safety alarm
3	Floor1	Room3	1.8		None	IU Air circulation	Safety alarm
4	Floor1	Hall	1.8	2.0	Otdr1	IU Air circulation	Safety alarm

Please check Safety measures of the report.

AIRSTAGE

Project Name :
Management Number :
Building :
Created by :
Company :
Address :

1. Material list
1.1. Material list

Model	Quantity	Type
AJY072HALAH	1	[R32] VU-V (HALAH) Heat Recovery space saving combination
AUXB014HLBH	1	[R32] Compact cassette (HLBH)
AUXM014HLBH	1	[R32] Circular flow cassette (Slim)
ASYB018HTBH	1	[R32] Wall-mounted (HTBH)
UTY-RNRYZ6	3	Wired RC(Touch) Z6
UTG-UFYH-W	1	Cassette Grille
UTG-UKYC-W	1	Cassette Grille
UTP-BX090A	2	Separation tube
UTP-RX01GH	3	RB unit

1.2. Material List 2 (Pipe)
Series: VRF system

Pipe length(m)					
	6.35	9.52	12.70	15.88	19.05
Total	30.0	20.0	35.0	15.0	5.0

1.3. Material List 3 (Calculation of additional charge refrigerant)
Series: VRF system

Refrigerant	kg
R32	1.43

1.4. Material List 4 (Locally purchased)

Results of unit selection

AIRSTAGE

9. Room list
1. Room list

Floor	Room	Length (m)	Width (m)	Height (m)	Room Area (m2)	Room Volume (m3)	Rq TC (kW)	Rq SC (kW)	Rq HC (kW)
Floor1	Room1	4.0	4.0	4.0	16	64			
Floor1	Room2	4.0	4.0	4.0	16	64			
Floor1	Room3	4.0	4.0	4.0	16	64			
Floor1	Room4	4.0	4.0	4.0	16	64			

Floor	Room	Tmp C (DBT)	Tmp C (RH %)	Tmp H (C)	Remarks1	Remarks2	Remarks3	Remarks4	Remarks5
Floor1	Room1	27	46.3	20					
Floor1	Room2	27	46.3	20					
Floor1	Room3	27	46.3	20					
Floor1	Room4	27	46.3	20					

Floor	Room	Remarks6	Remarks7	Remarks8
Floor1	Room1			
Floor1	Room2			
Floor1	Room3			
Floor1	Room4			

9.2. Room-indoor list

Floor	Room	Series	Name	Model
Floor1	Room1	V2	Indr1	AUXB014HLBH
Floor1	Room2	V2	Indr2	AUXM014HLBH
Floor1	Room3	V2	Indr3	ASYB018HTBH

9.3. R32 VRF Safety measures

Floor	Room	Response measure 1	Response measure 2	Response measure 3
Floor1	Room1	IU Air circulation	Safety alarm	Safety shutoff valve or Ventilation
Floor1	Room2	IU Air circulation	Safety alarm	Ventilation
Floor1	Room3	IU Air circulation	Safety alarm	Safety shutoff valve or Ventilation
Floor1	Room4	IU Air circulation	Safety alarm	Ventilation

Floor	Room	
Floor1	Room1	
Floor1	Room2	
Floor1	Room3	
Floor1	Room4	

Please check Safety measures



Creating a Life Conditioner