

# Calculation and Selection Result

## Project 1: Project1

### Project Information

Project name	Project1	Project ref	Project1_V1
Country		Date	2024-7-12
City		Client address	
Altitude(m)	0	Client name	

### Equipment List

Model	Description	Quantity
MKH2-350-R3	2-Pipe FCU/Air Return From Bottom H2	5

## FCU1

### Input Information

General Data				
Series	2-Pipe FCU	Electric heater		No
Type	2nd Ceiling&Floor	Fan motor type		AC
Product name	Air Return From Bottom H2	Fan speed		High
Design according to	Cooling mode Heating mode	Air flow	m <sup>3</sup> /h	/
Pipe connection direction	/	ESP	Pa	/
Antifreeze type	None	Cooling capacity	kW	/
Air volume deviation limit (%)	/	Sensible capacity	kW	/
Capacity deviation limit (%)	20	Heating capacity	kW	4

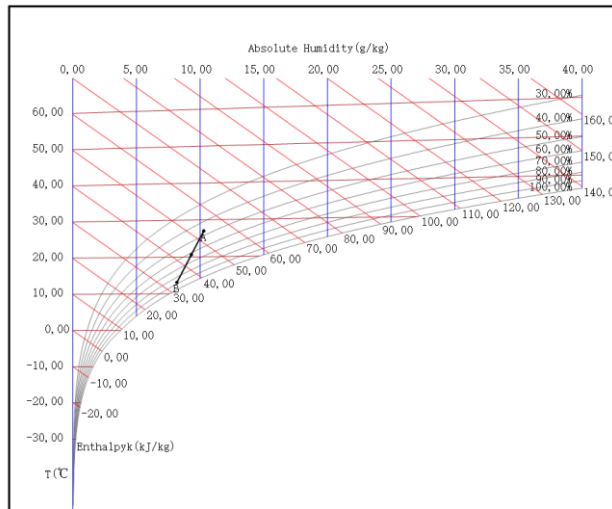
## Specifications MKH2-350-R3 (1)

Unit model					
MKH2-350-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	595
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	51	Rated current	A	0.22
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	3.85
Outlet air temp (DB/WB)	°C	13.1/11.9	Sensible capacity	kW	2.91
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	0.66
Outlet water temp	°C	12.0	Water pressure drop	kPa	38.23
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	4.10
Outlet air temp (DB/WB)	°C	40.5/21.7	Water flow	m <sup>3</sup> /h	0.71
Inlet water temp	°C	45.0	Water pressure drop	kPa	35.52
Outlet water temp	°C	40.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.15	Inlet pipe	mm	Gø19.1
Tube diameter	mm	7.94	Outlet pipe	mm	Gø19.1
Rows		3	Drain pipe	mm	ODø18.5
Body Dimensions			Panel Dimensions		
Dimension (W*H*D)	mm	495*200*1240	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1345	Packing size (W*H*D)	mm	/
Net weight	kg	24.00	Net weight	kg	/
Gross weight	kg	31.00	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	52/44/36	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	52/44/36			

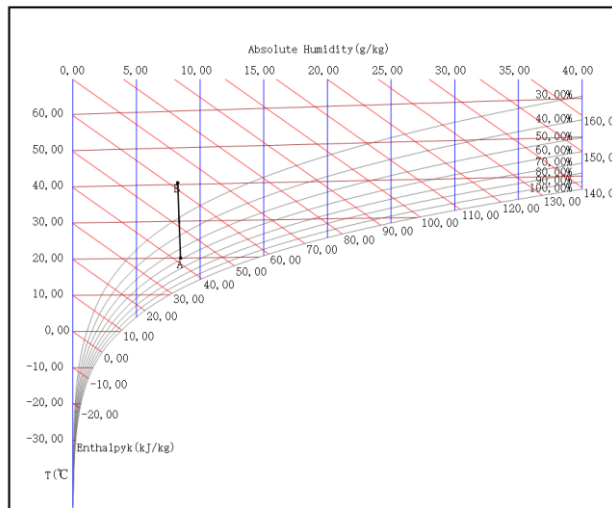
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

humidity chart of cooling



humidity chart of heating

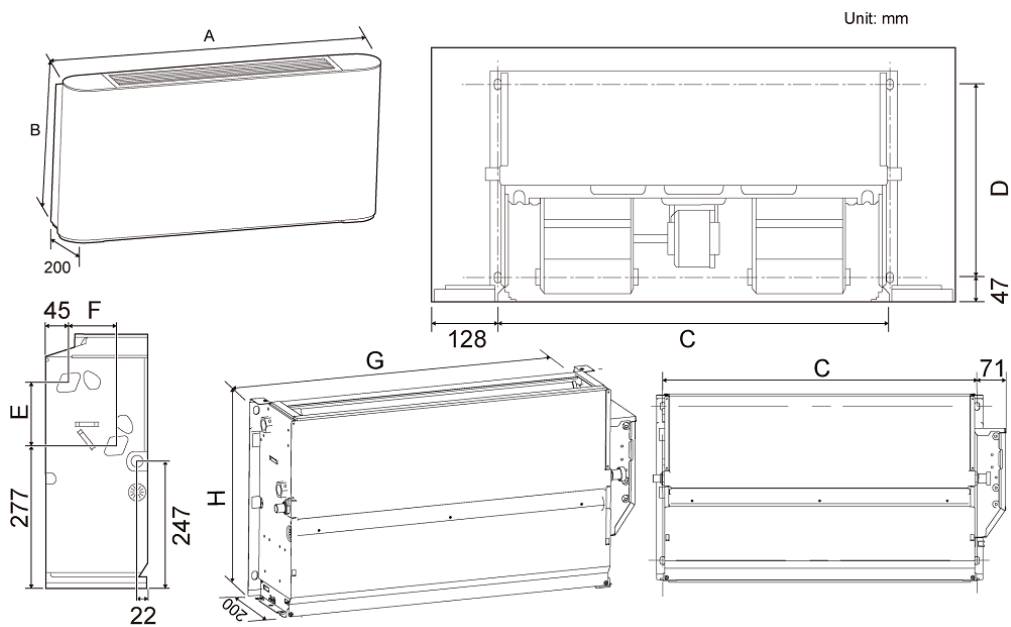


## Appearance



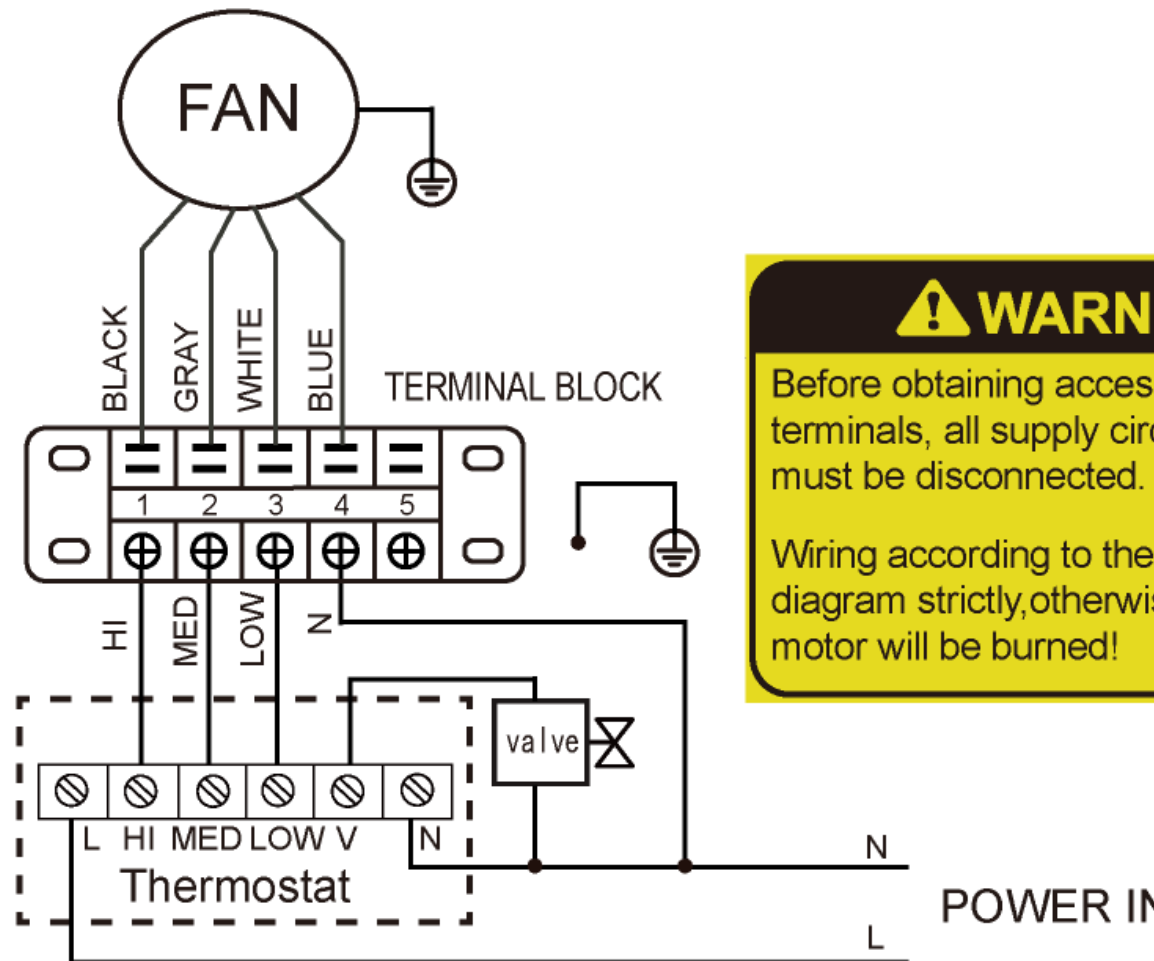
## Dimensions

(Unit: mm):MKH2-350-R3



MODEL	MKH2-V150-R3(R4)	MKH2-V250-R3(R4)	MKH2-V350-R3(R4)	MKH2-V500-R3(R4)	MKH2-V700-R3(R4)	MKH2-V800-R3(R4)
A	790	1020	1240	1240	1360	1360
B	495	495	495	495	495	591
C	534	764	984	984	1104	1104
D	375	375	375	375	375	391
E	123	123	123	123	123	219
F	93	93	93	93	93	102
G	628	858	1078	1078	1198	1198
H	455	455	455	455	455	551

Wiring diagram



**! WARNING**

Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring according to the diagram strictly, otherwise motor will be burned!

## FCU2

### Input Information

General Data				
Series	2-Pipe FCU	Electric heater		No
Type	2nd Ceiling&Floor	Fan motor type		AC
Product name	Air Return From Bottom H2	Fan speed		High
Design according to	Cooling mode Heating mode	Air flow	m <sup>3</sup> /h	/
Pipe connection direction	/	ESP	Pa	/
Antifreeze type	None	Cooling capacity	kW	/
Air volume deviation limit (%)	/	Sensible capacity	kW	/
Capacity deviation limit (%)	20	Heating capacity	kW	5

## Specifications MKH2-350-R3 (1)

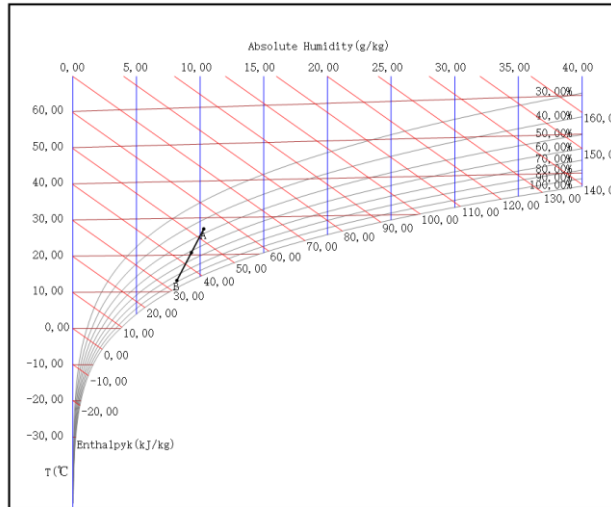
Unit model					
MKH2-350-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	595
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	51	Rated current	A	0.22
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	3.85
Outlet air temp (DB/WB)	°C	13.1/11.9	Sensible capacity	kW	2.91
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	0.66
Outlet water temp	°C	12.0	Water pressure drop	kPa	38.23
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	4.64
Outlet air temp (DB/WB)	°C	42.9/22.4	Water flow	m <sup>3</sup> /h	0.40
Inlet water temp	°C	50.0	Water pressure drop	kPa	11.87
Outlet water temp	°C	40.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.15	Inlet pipe	mm	Gø19.1
Tube diameter	mm	7.94	Outlet pipe	mm	Gø19.1
Rows		3	Drain pipe	mm	ODø18.5
Body Dimensions			Panel Dimensions		
Dimension (W*H*D)	mm	495*200*1240	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1345	Packing size (W*H*D)	mm	/
Net weight	kg	24.00	Net weight	kg	/
Gross weight	kg	31.00	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	52/44/36	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	52/44/36			

**Note:** Sound Power Level is tested in a reverberation chamber test room.

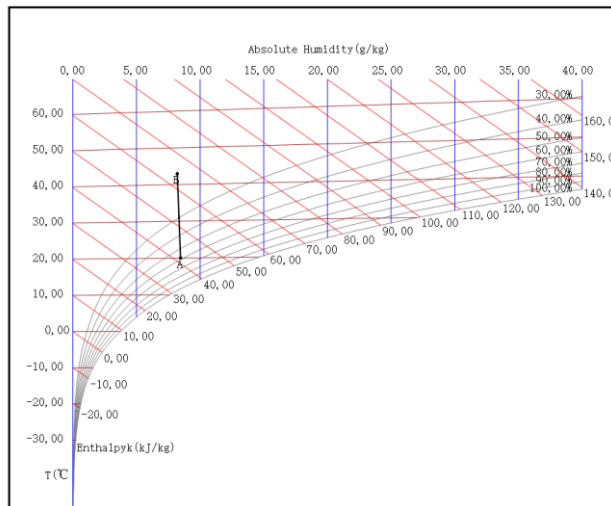


# Enthalpy-Humidity Chart

humidity chart of cooling



humidity chart of heating

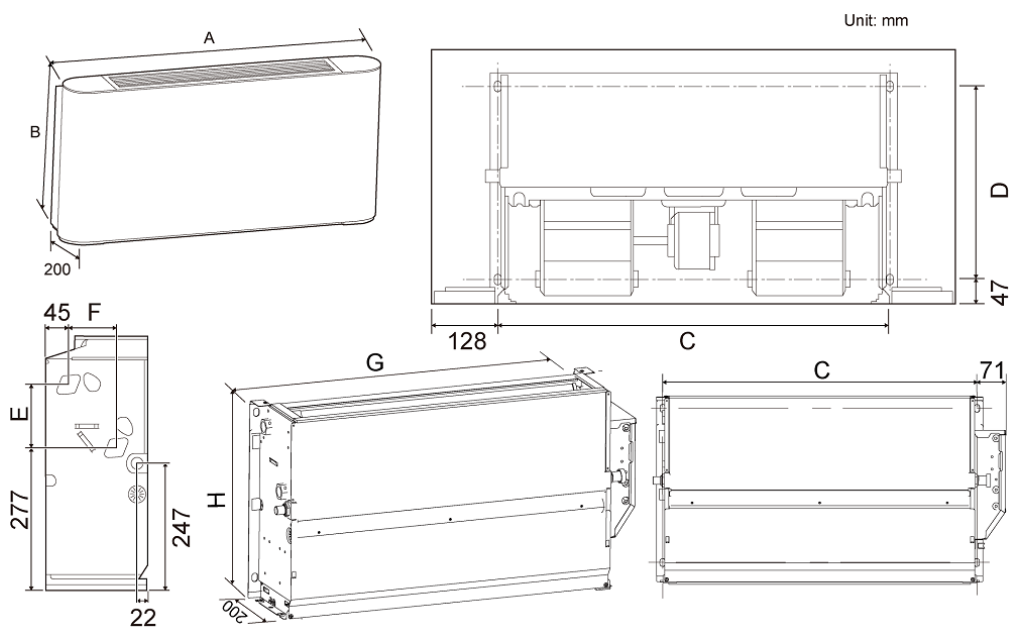


## Appearance



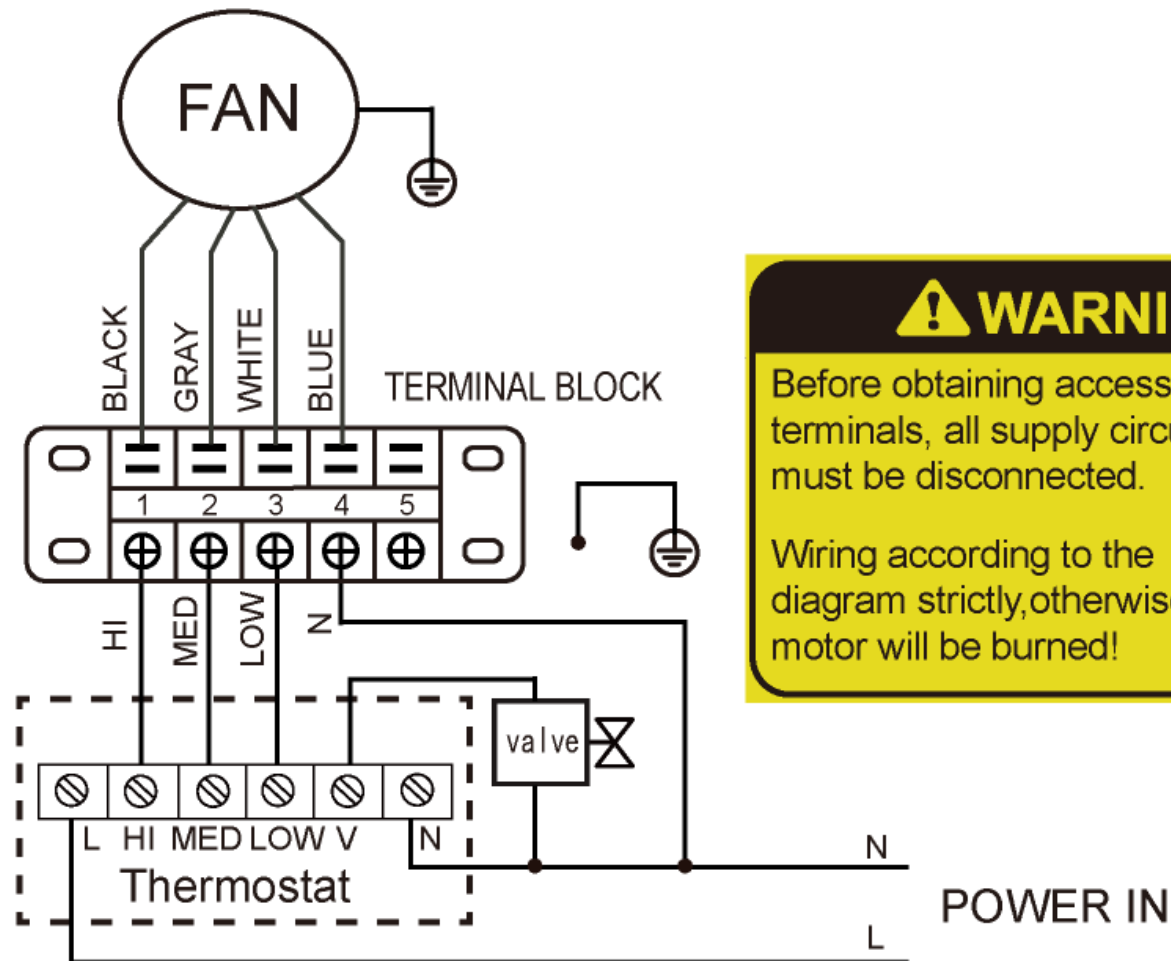
## Dimensions

(Unit: mm):MKH2-350-R3



MODEL	MKH2-V150-R3(R4)	MKH2-V250-R3(R4)	MKH2-V350-R3(R4)	MKH2-V500-R3(R4)	MKH2-V700-R3(R4)	MKH2-V800-R3(R4)
A	790	1020	1240	1240	1360	1360
B	495	495	495	495	495	591
C	534	764	984	984	1104	1104
D	375	375	375	375	375	391
E	123	123	123	123	123	219
F	93	93	93	93	93	102
G	628	858	1078	1078	1198	1198
H	455	455	455	455	455	551

Wiring diagram



**! WARNING**

Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring according to the diagram strictly, otherwise motor will be burned!

## FCU3

### Input Information

General Data				
Series	2-Pipe FCU	Electric heater		No
Type	2nd Ceiling&Floor	Fan motor type		AC
Product name	Air Return From Bottom H2	Fan speed		High
Design according to	Cooling mode Heating mode	Air flow	m <sup>3</sup> /h	/
Pipe connection direction	/	ESP	Pa	/
Antifreeze type	None	Cooling capacity	kW	/
Air volume deviation limit (%)	/	Sensible capacity	kW	/
Capacity deviation limit (%)	20	Heating capacity	kW	5.5

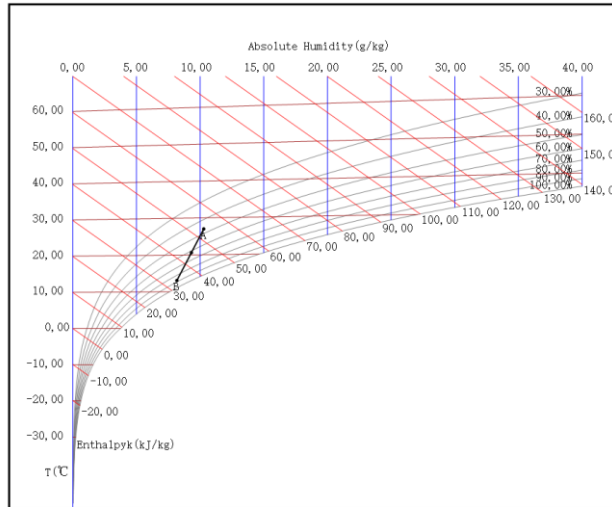
## Specifications MKH2-350-R3 (1)

Unit model					
MKH2-350-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	595
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	51	Rated current	A	0.22
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	3.85
Outlet air temp (DB/WB)	°C	13.1/11.9	Sensible capacity	kW	2.91
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	0.66
Outlet water temp	°C	12.0	Water pressure drop	kPa	38.23
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	5.59
Outlet air temp (DB/WB)	°C	47.6/23.7	Water flow	m <sup>3</sup> /h	0.48
Inlet water temp	°C	55.0	Water pressure drop	kPa	15.95
Outlet water temp	°C	45.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.15	Inlet pipe	mm	Gø19.1
Tube diameter	mm	7.94	Outlet pipe	mm	Gø19.1
Rows		3	Drain pipe	mm	ODø18.5
Body Dimensions			Panel Dimensions		
Dimension (W*H*D)	mm	495*200*1240	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1345	Packing size (W*H*D)	mm	/
Net weight	kg	24.00	Net weight	kg	/
Gross weight	kg	31.00	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	52/44/36	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	52/44/36			

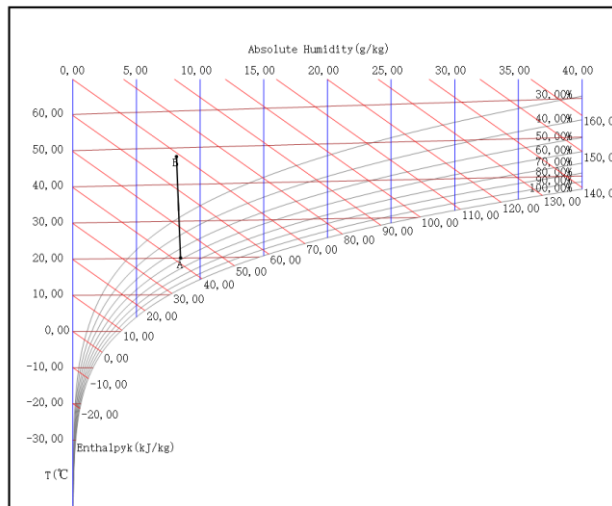
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

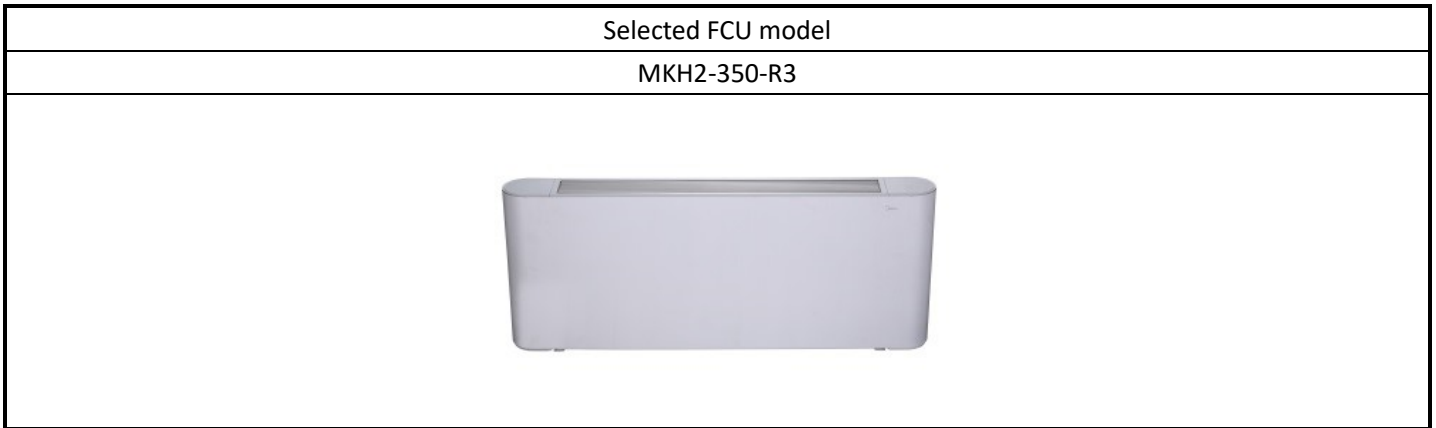
humidity chart of cooling



humidity chart of heating

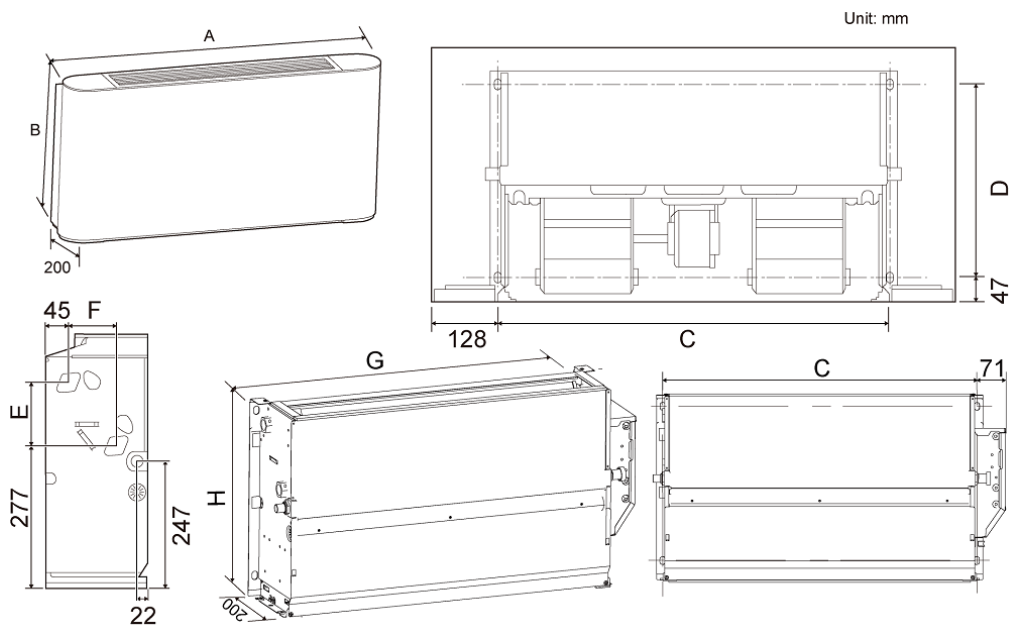


## Appearance



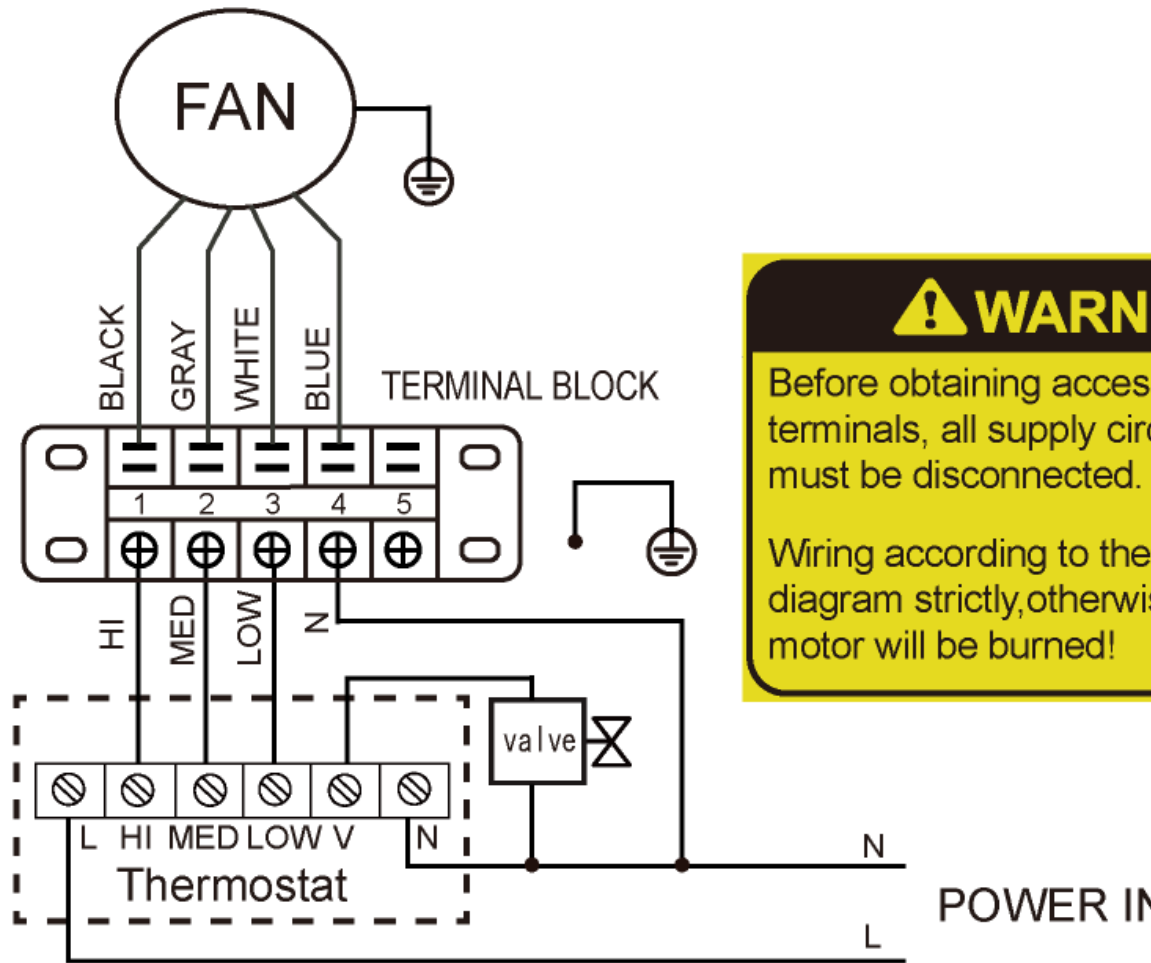
## Dimensions

(Unit: mm):MKH2-350-R3



MODEL	MKH2-V150-R3(R4)	MKH2-V250-R3(R4)	MKH2-V350-R3(R4)	MKH2-V500-R3(R4)	MKH2-V700-R3(R4)	MKH2-V800-R3(R4)
A	790	1020	1240	1240	1360	1360
B	495	495	495	495	495	591
C	534	764	984	984	1104	1104
D	375	375	375	375	375	391
E	123	123	123	123	123	219
F	93	93	93	93	93	102
G	628	858	1078	1078	1198	1198
H	455	455	455	455	455	551

# Wiring diagram



**! WARNING**

Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring according to the diagram strictly, otherwise motor will be burned!



## FCU4

### Input Information

General Data				
Series	2-Pipe FCU	Electric heater		No
Type	2nd Ceiling&Floor	Fan motor type		AC
Product name	Air Return From Bottom H2	Fan speed		High
Design according to	Cooling mode Heating mode	Air flow	m <sup>3</sup> /h	/
Pipe connection direction	/	ESP	Pa	/
Antifreeze type	None	Cooling capacity	kW	/
Air volume deviation limit (%)	/	Sensible capacity	kW	/
Capacity deviation limit (%)	20	Heating capacity	kW	5.5

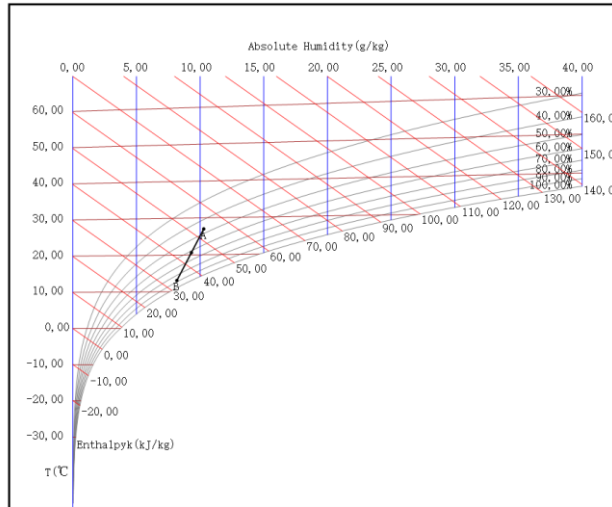
## Specifications MKH2-350-R3 (1)

Unit model					
MKH2-350-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	595
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	51	Rated current	A	0.22
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	3.85
Outlet air temp (DB/WB)	°C	13.1/11.9	Sensible capacity	kW	2.91
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	0.66
Outlet water temp	°C	12.0	Water pressure drop	kPa	38.23
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	6.53
Outlet air temp (DB/WB)	°C	52.3/24.9	Water flow	m <sup>3</sup> /h	0.56
Inlet water temp	°C	60.0	Water pressure drop	kPa	20.58
Outlet water temp	°C	50.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.15	Inlet pipe	mm	Gø19.1
Tube diameter	mm	7.94	Outlet pipe	mm	Gø19.1
Rows		3	Drain pipe	mm	ODø18.5
Body Dimensions			Panel Dimensions		
Dimension (W*H*D)	mm	495*200*1240	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1345	Packing size (W*H*D)	mm	/
Net weight	kg	24.00	Net weight	kg	/
Gross weight	kg	31.00	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	52/44/36	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	52/44/36			

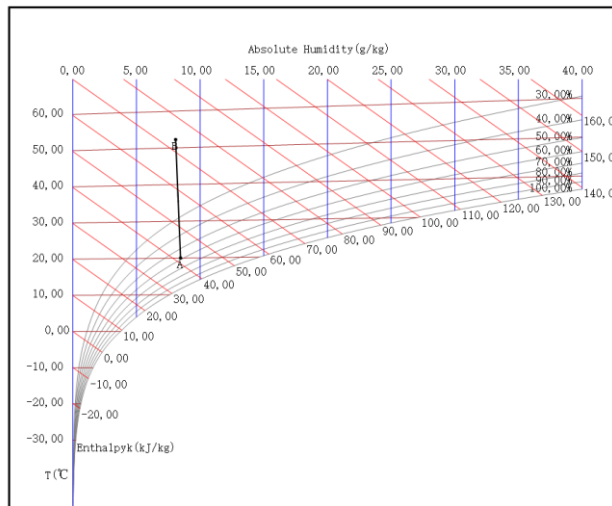
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

humidity chart of cooling



humidity chart of heating

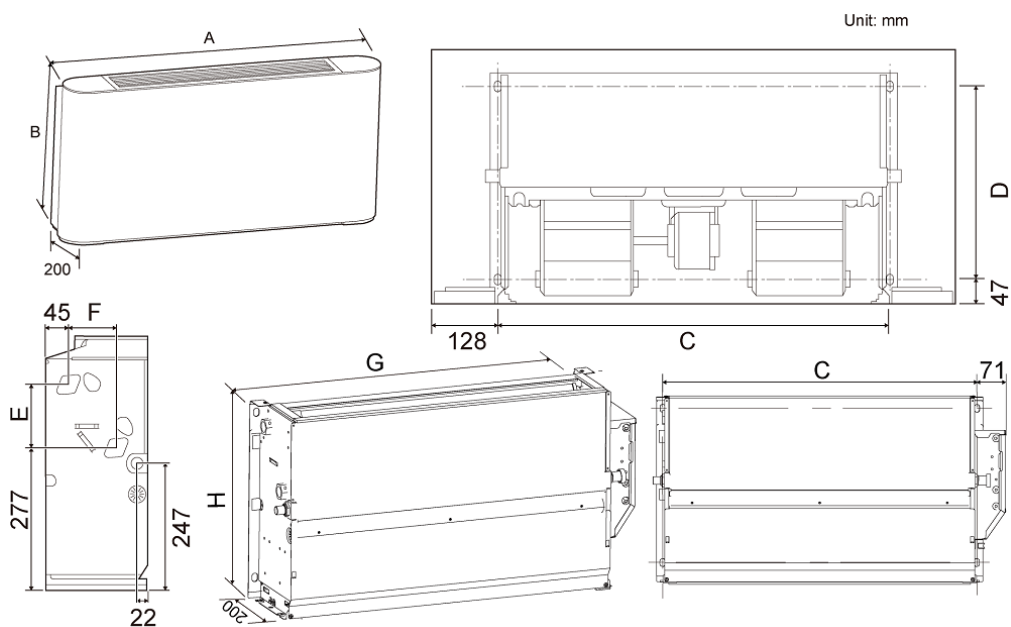


## Appearance



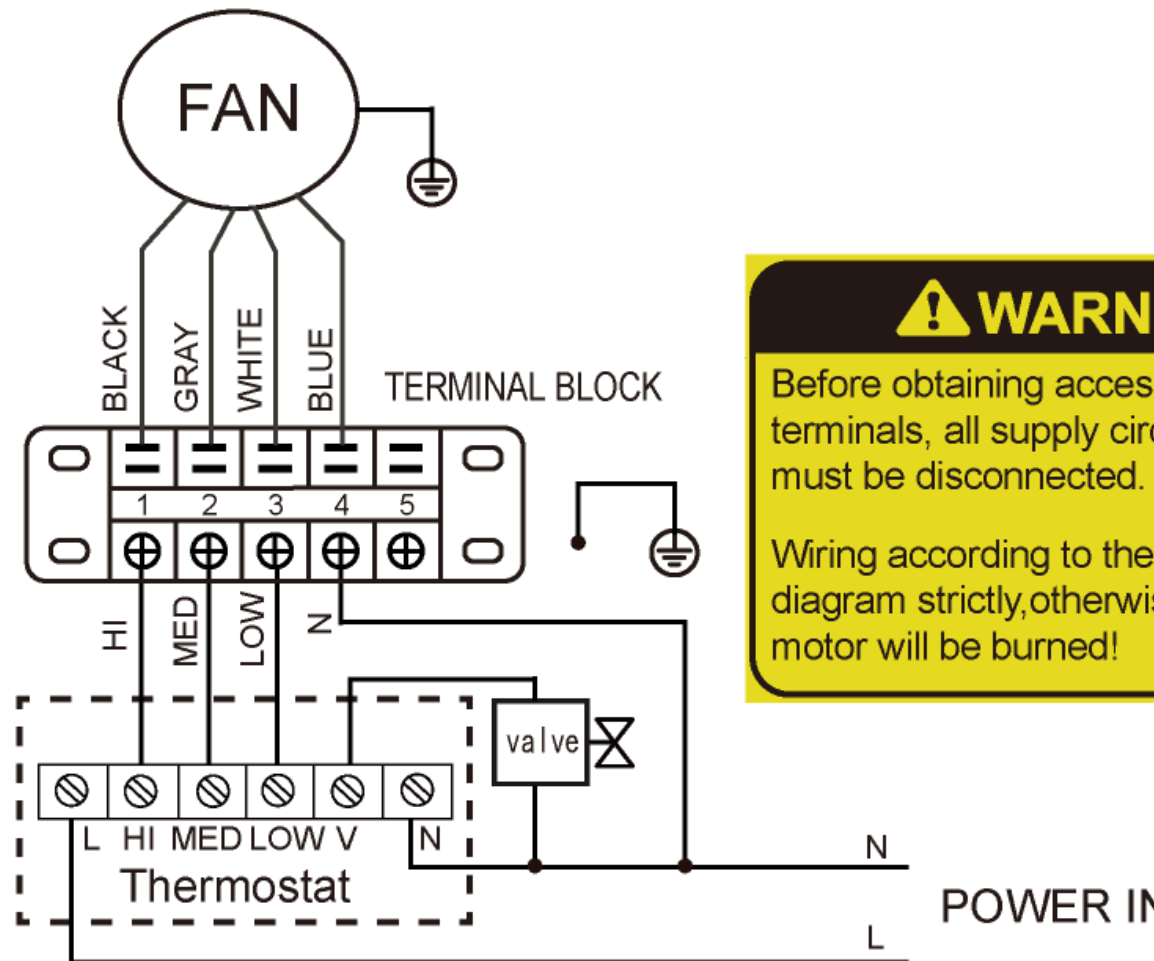
## Dimensions

(Unit: mm):MKH2-350-R3



MODEL	MKH2-V150-R3(R4)	MKH2-V250-R3(R4)	MKH2-V350-R3(R4)	MKH2-V500-R3(R4)	MKH2-V700-R3(R4)	MKH2-V800-R3(R4)
A	790	1020	1240	1240	1360	1360
B	495	495	495	495	495	591
C	534	764	984	984	1104	1104
D	375	375	375	375	375	391
E	123	123	123	123	123	219
F	93	93	93	93	93	102
G	628	858	1078	1078	1198	1198
H	455	455	455	455	455	551

Wiring diagram



**! WARNING**

Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring according to the diagram strictly, otherwise motor will be burned!

## FCU5

### Input Information

General Data				
Series	2-Pipe FCU	Electric heater		No
Type	2nd Ceiling&Floor	Fan motor type		AC
Product name	Air Return From Bottom H2	Fan speed		High
Design according to	Cooling mode Heating mode	Air flow	m <sup>3</sup> /h	/
Pipe connection direction	/	ESP	Pa	/
Antifreeze type	None	Cooling capacity	kW	/
Air volume deviation limit (%)	/	Sensible capacity	kW	/
Capacity deviation limit (%)	20	Heating capacity	kW	6.5

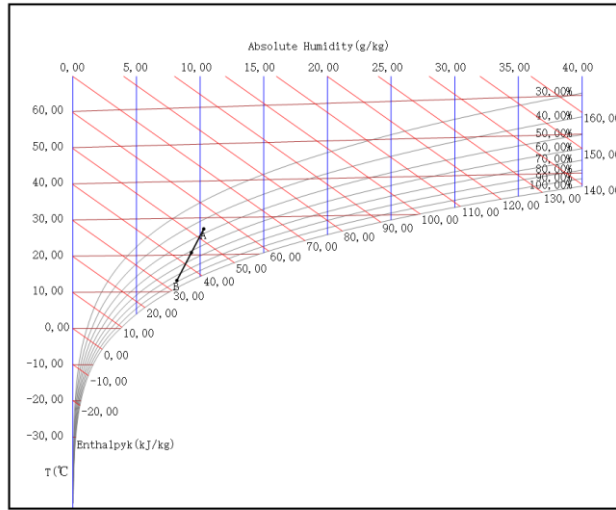
## Specifications MKH2-350-R3 (1)

Unit model					
MKH2-350-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	595
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	51	Rated current	A	0.22
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	3.85
Outlet air temp (DB/WB)	°C	13.1/11.9	Sensible capacity	kW	2.91
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	0.66
Outlet water temp	°C	12.0	Water pressure drop	kPa	38.23
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	7.45
Outlet air temp (DB/WB)	°C	56.8/26.1	Water flow	m <sup>3</sup> /h	0.64
Inlet water temp	°C	65.0	Water pressure drop	kPa	25.43
Outlet water temp	°C	55.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.15	Inlet pipe	mm	Gø19.1
Tube diameter	mm	7.94	Outlet pipe	mm	Gø19.1
Rows		3	Drain pipe	mm	ODø18.5
Body Dimensions			Panel Dimensions		
Dimension (W*H*D)	mm	495*200*1240	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1345	Packing size (W*H*D)	mm	/
Net weight	kg	24.00	Net weight	kg	/
Gross weight	kg	31.00	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	52/44/36	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	52/44/36			

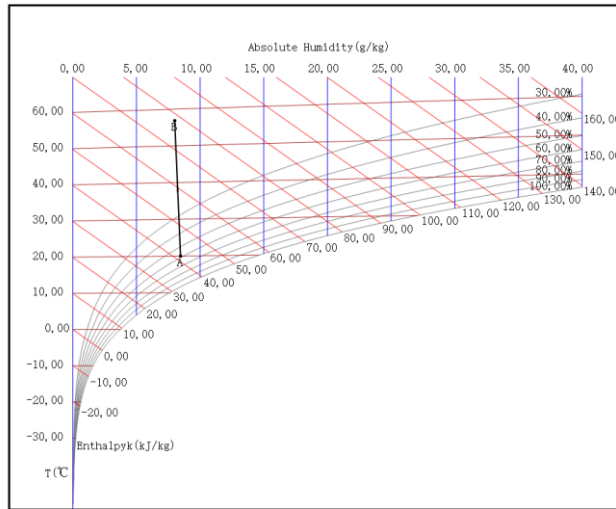
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

humidity chart of cooling

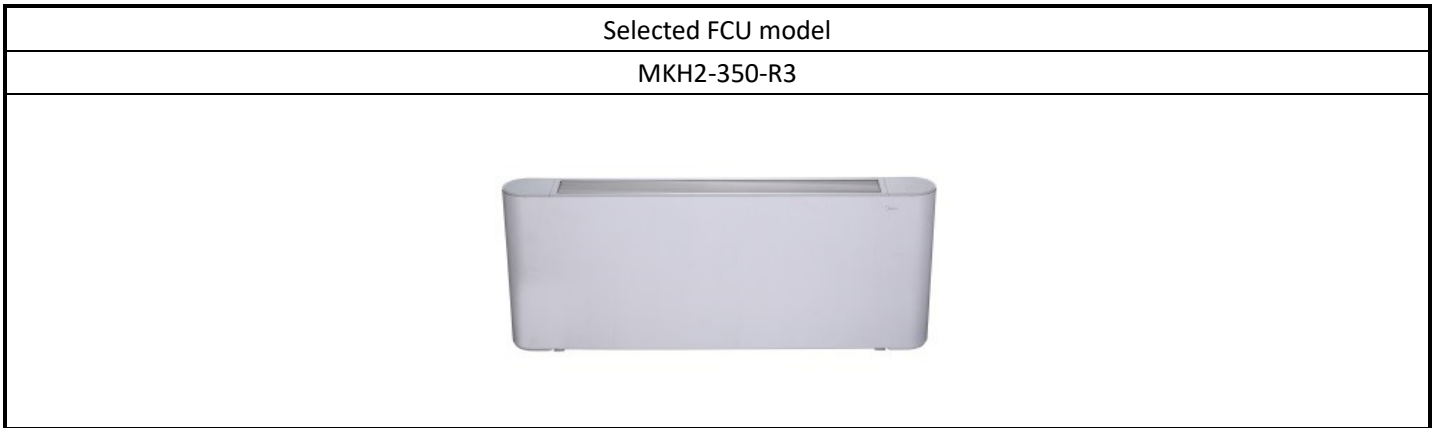


humidity chart of heating



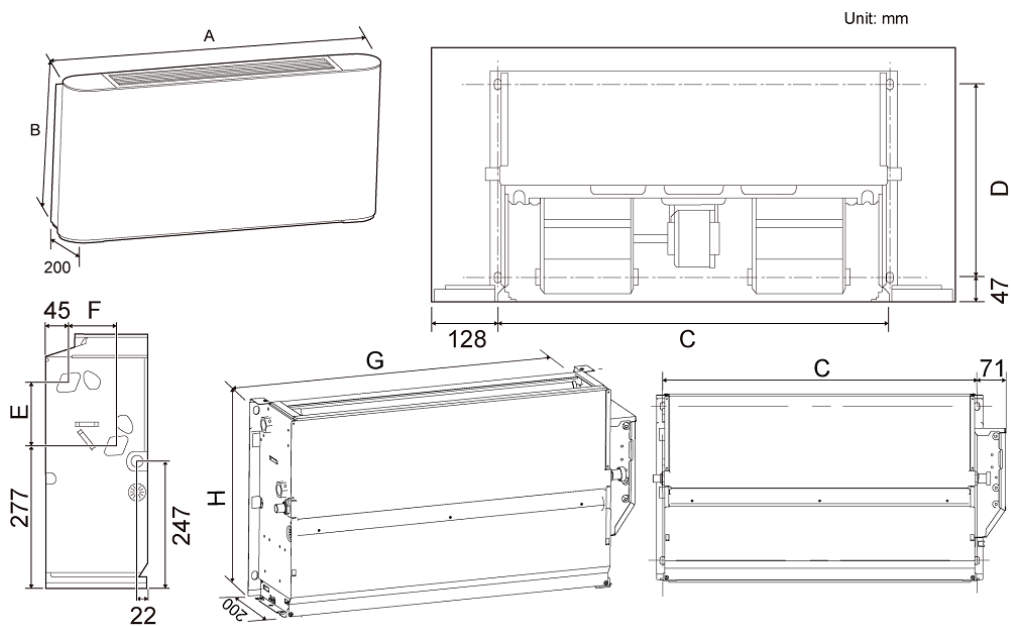


## Appearance



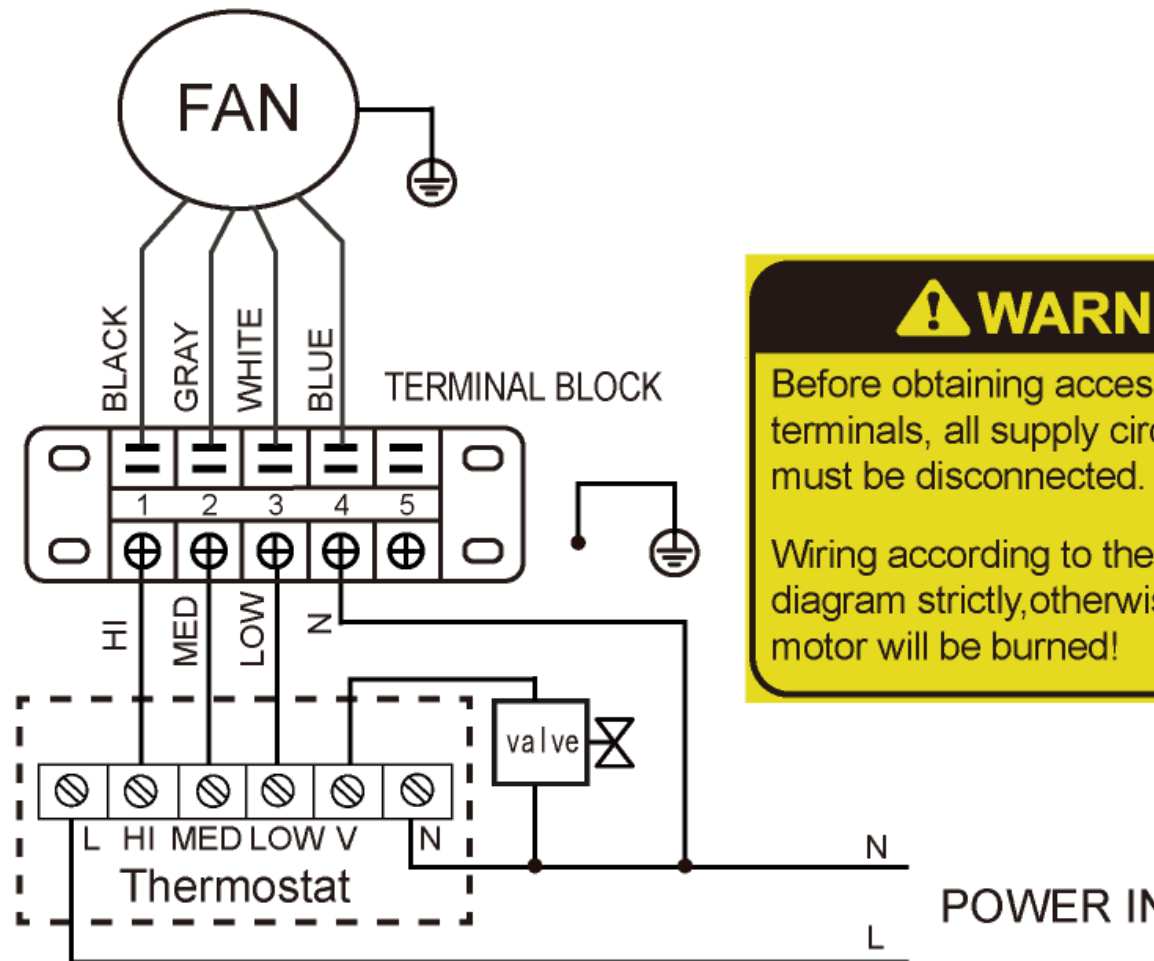
## Dimensions

(Unit: mm):MKH2-350-R3



MODEL	MKH2-V150-R3(R4)	MKH2-V250-R3(R4)	MKH2-V350-R3(R4)	MKH2-V500-R3(R4)	MKH2-V700-R3(R4)	MKH2-V800-R3(R4)
A	790	1020	1240	1240	1360	1360
B	495	495	495	495	495	591
C	534	764	984	984	1104	1104
D	375	375	375	375	375	391
E	123	123	123	123	123	219
F	93	93	93	93	93	102
G	628	858	1078	1078	1198	1198
H	455	455	455	455	455	551

# Wiring diagram



**! WARNING**

Before obtaining access to terminals, all supply circuits must be disconnected.

Wiring according to the diagram strictly, otherwise motor will be burned!

This selection software is provided as a tool to aid project design. Responsibility for product selection remains with the user. Product selection should be based on project requirements and the latest product specifications.