

# 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
MKH2-700-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 Air Return From Side H1 Concealed H3	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

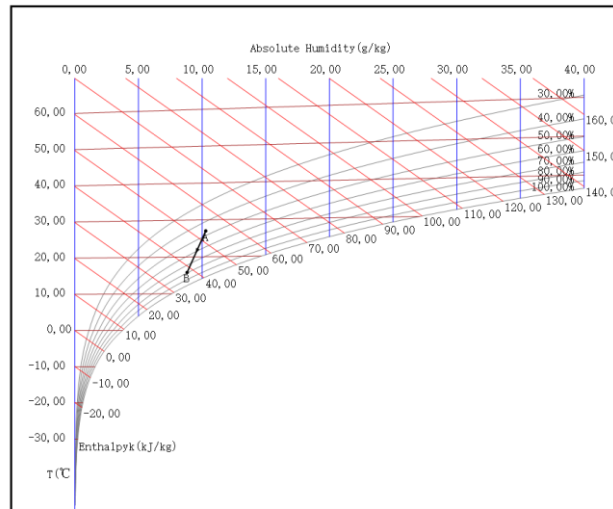
## Specifications MKH2-700-R3 (1)

Unit model					
MKH2-700-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	1190
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	123	Rated current	A	0.53
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	6.00
Outlet air temp (DB/WB)	°C	15.8/13.7	Sensible capacity	kW	4.83
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	1.03
Outlet water temp	°C	12.0	Water pressure drop	kPa	53.79
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	6.15
Outlet air temp (DB/WB)	°C	35.0/20.1	Water flow	m <sup>3</sup> /h	1.05
Inlet water temp	°C	45.0	Water pressure drop	kPa	57.85
Outlet water temp	°C	40.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.17	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*1360	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1465	Packing size (W*H*D)	mm	/
Net weight	kg	27.30	Net weight	kg	/
Gross weight	kg	34.80	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	64/56/45	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	64/56/45			

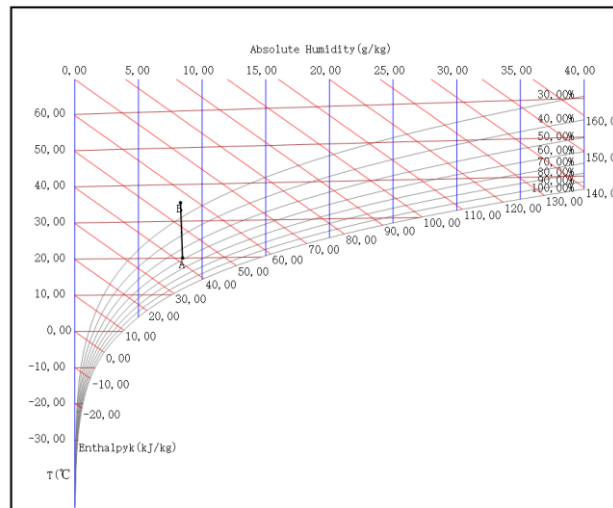
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

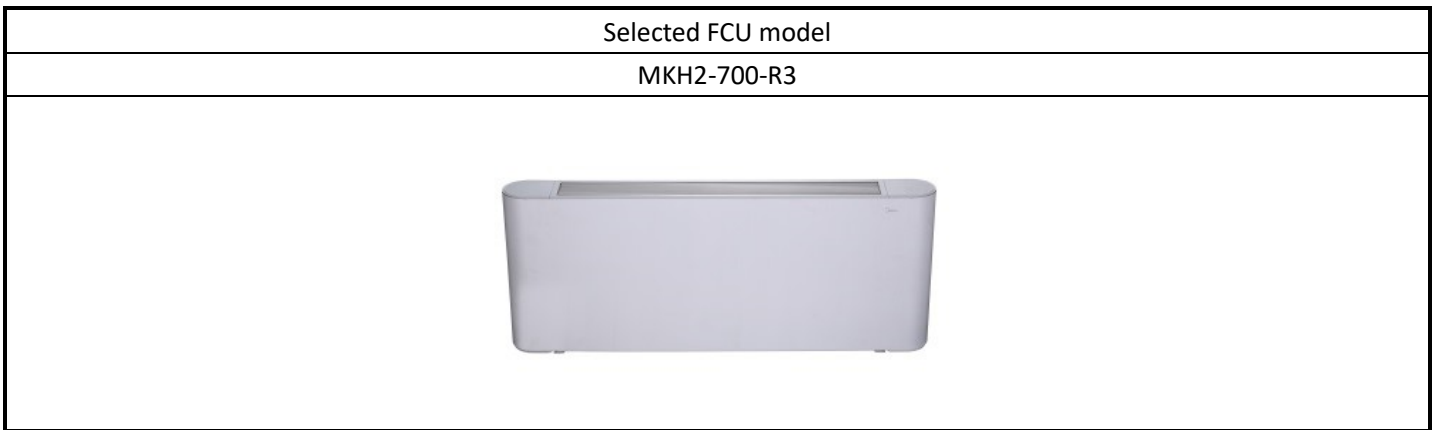
humidity chart of cooling



humidity chart of heating

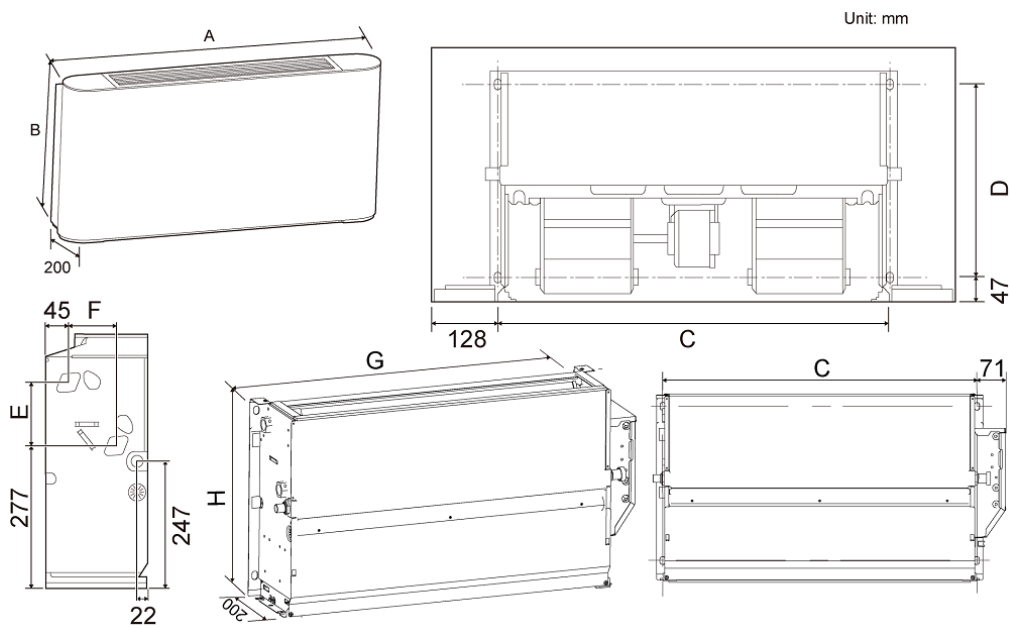


## Appearance



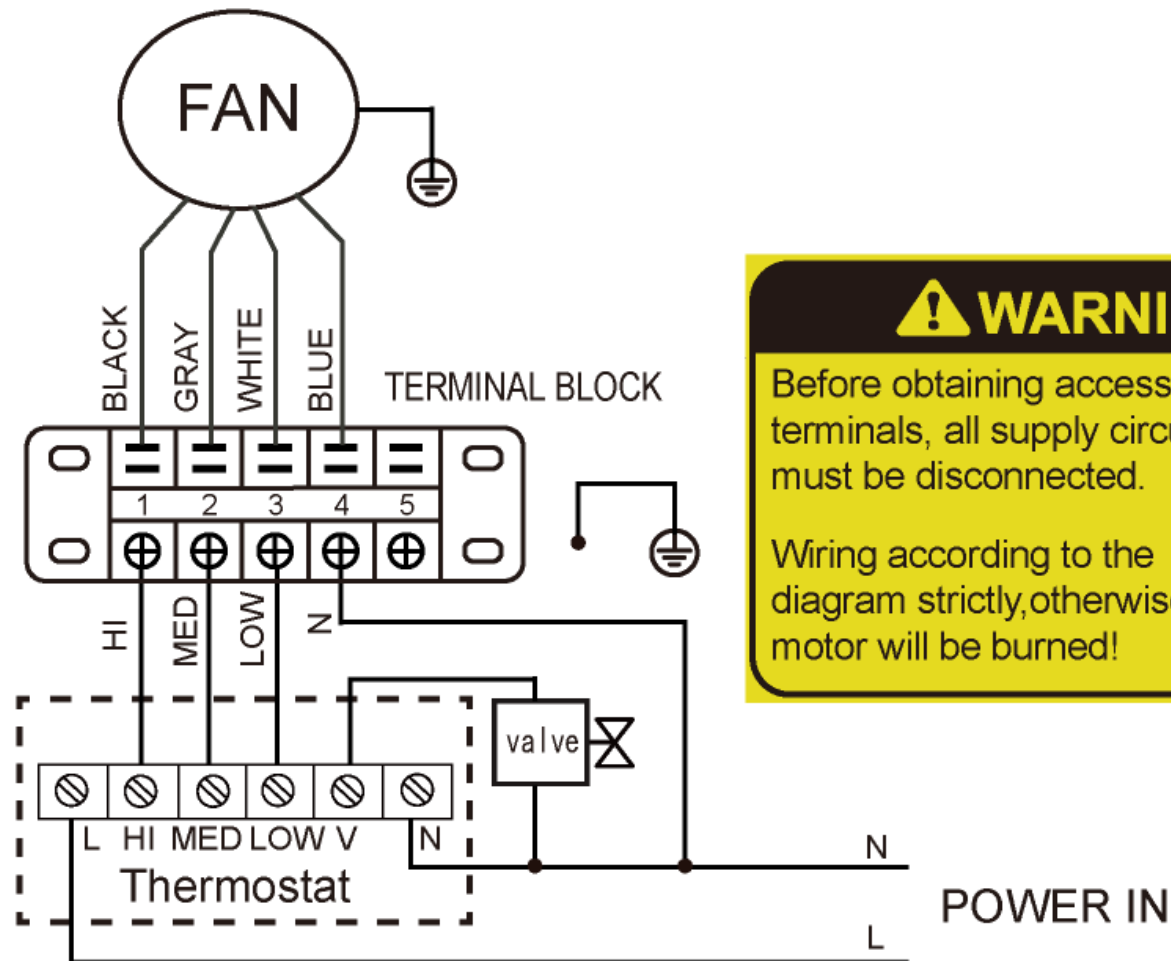
## Dimensions

(Unit: mm):MKH2-700-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 Air Return From Side H1 Concealed H3	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 MKH2-700-R3 (1)

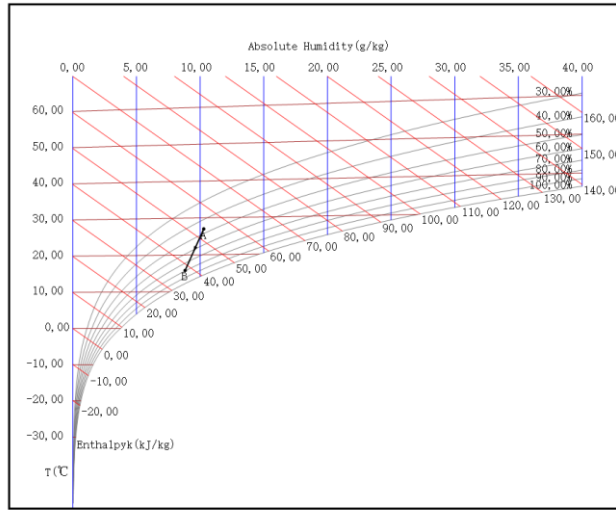
Unit model					
MKH2-700-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	1190
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	123	Rated current	A	0.53
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	6.00
Outlet air temp (DB/WB)	°C	15.8/13.7	Sensible capacity	kW	4.83
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	1.03
Outlet water temp	°C	12.0	Water pressure drop	kPa	53.79
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	6.56
Outlet air temp (DB/WB)	°C	36.2/20.5	Water flow	m <sup>3</sup> /h	0.57
Inlet water temp	°C	50.0	Water pressure drop	kPa	11.17
Outlet water temp	°C	40.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.17	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*1360	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1465	Packing size (W*H*D)	mm	/
Net weight	kg	27.30	Net weight	kg	/
Gross weight	kg	34.80	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	64/56/45	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	64/56/45			

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

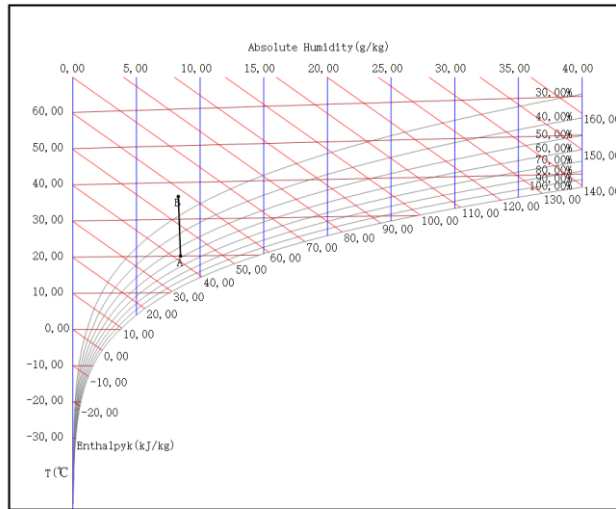


# Enthalpy-Humidity Chart

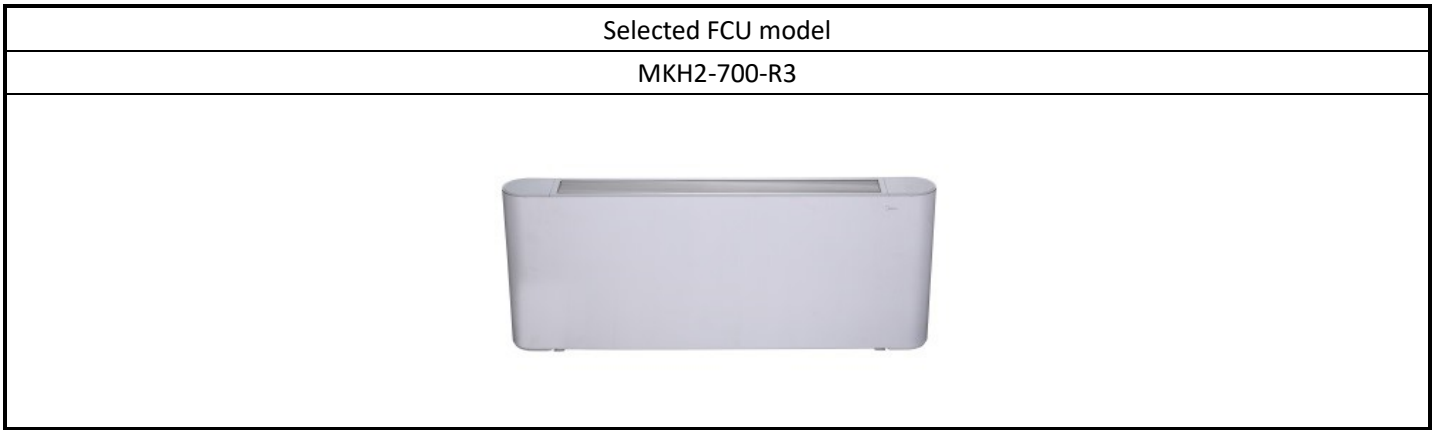
humidity chart of cooling



humidity chart of heating

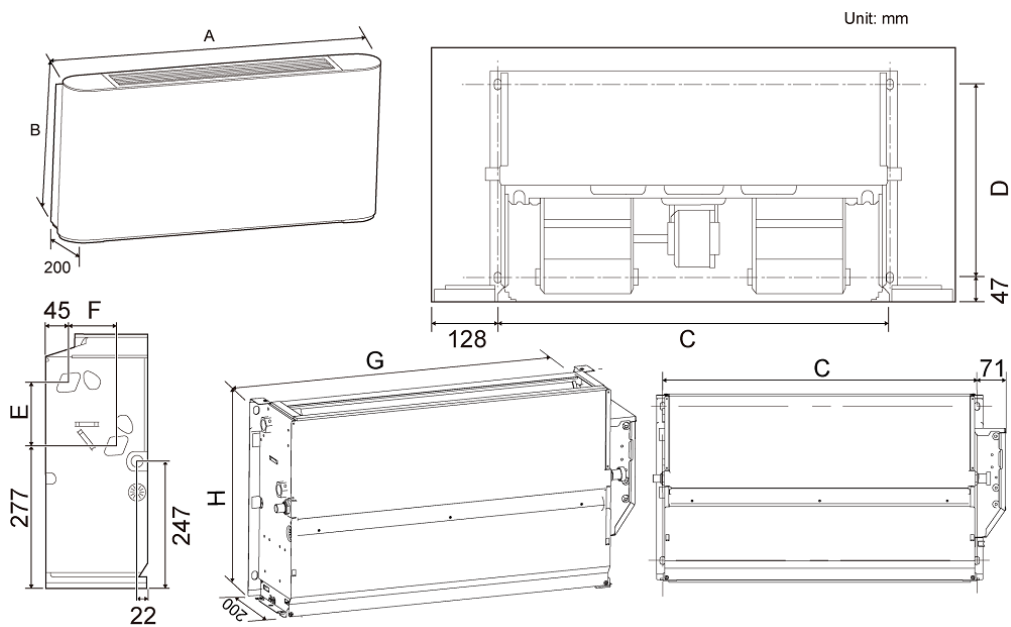


## Appearance



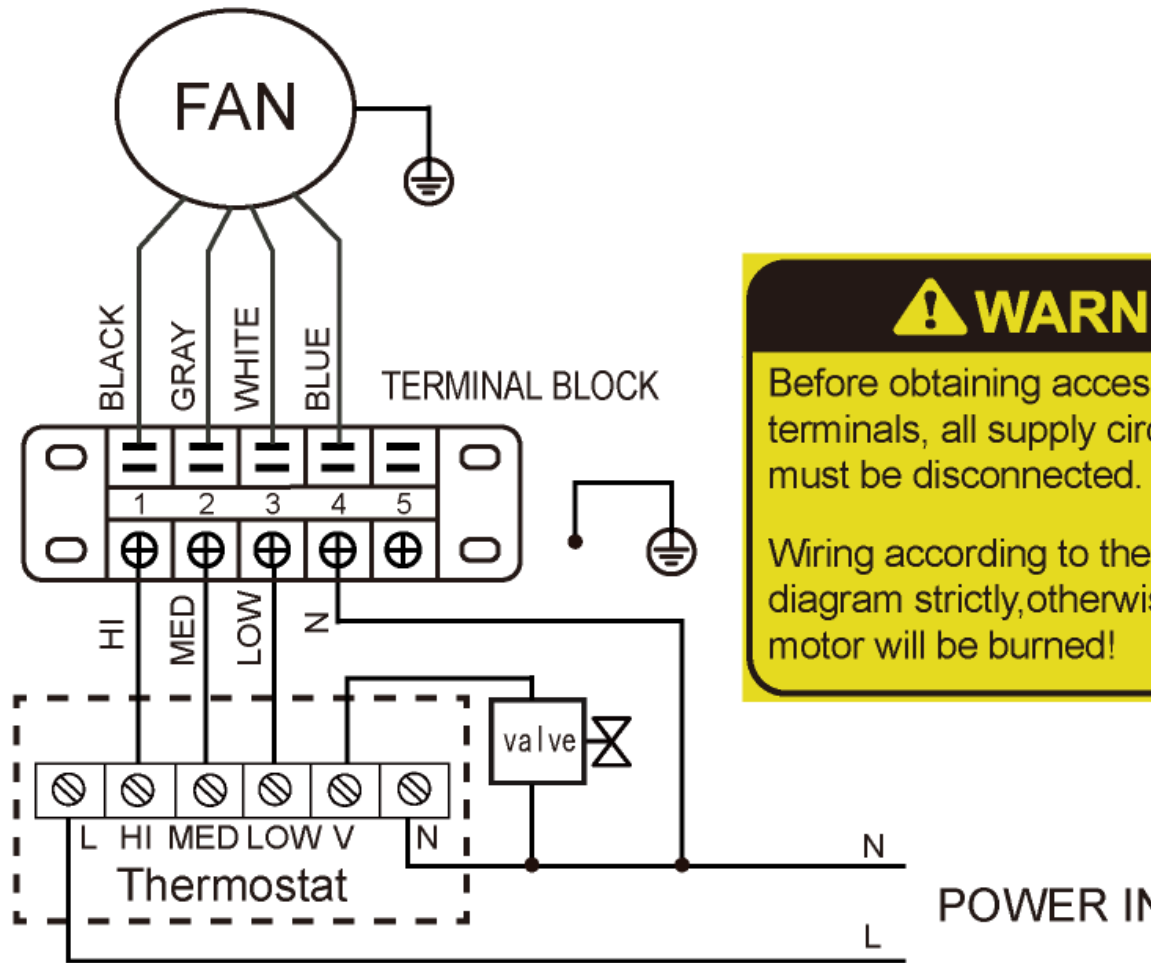
## Dimensions

(Unit: mm):MKH2-700-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 Air Return From Side H1 Concealed H3	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	7

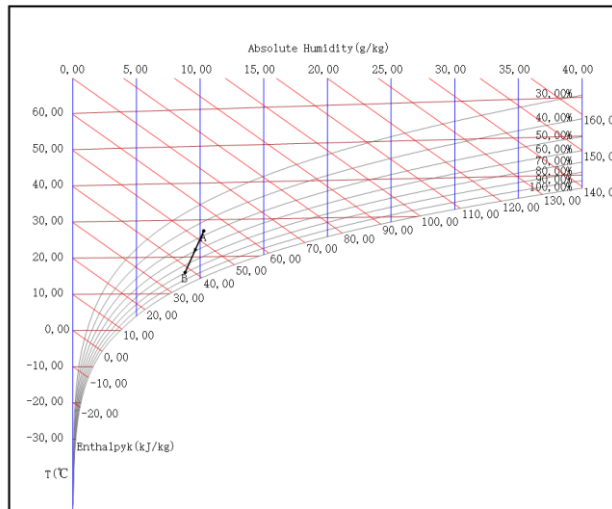
## Specifications MKH2-700-R3 (1)

Unit model					
MKH2-700-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	1190
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	123	Rated current	A	0.53
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	6.00
Outlet air temp (DB/WB)	°C	15.8/13.7	Sensible capacity	kW	4.83
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	1.03
Outlet water temp	°C	12.0	Water pressure drop	kPa	53.79
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	8.03
Outlet air temp (DB/WB)	°C	39.8/21.5	Water flow	m <sup>3</sup> /h	0.69
Inlet water temp	°C	55.0	Water pressure drop	kPa	15.47
Outlet water temp	°C	45.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.17	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*1360	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1465	Packing size (W*H*D)	mm	/
Net weight	kg	27.30	Net weight	kg	/
Gross weight	kg	34.80	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	64/56/45	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	64/56/45			

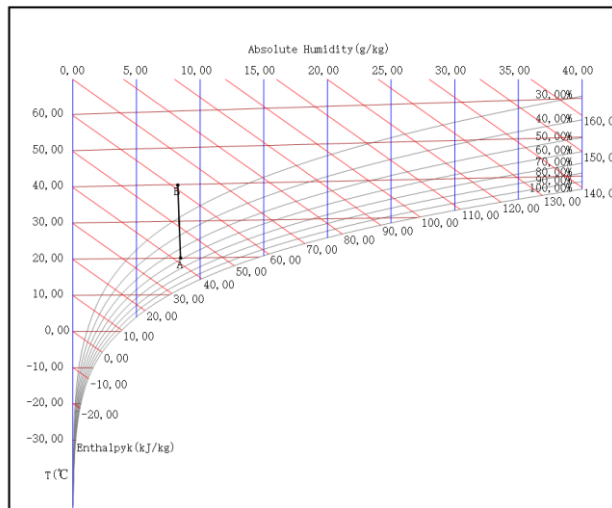
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

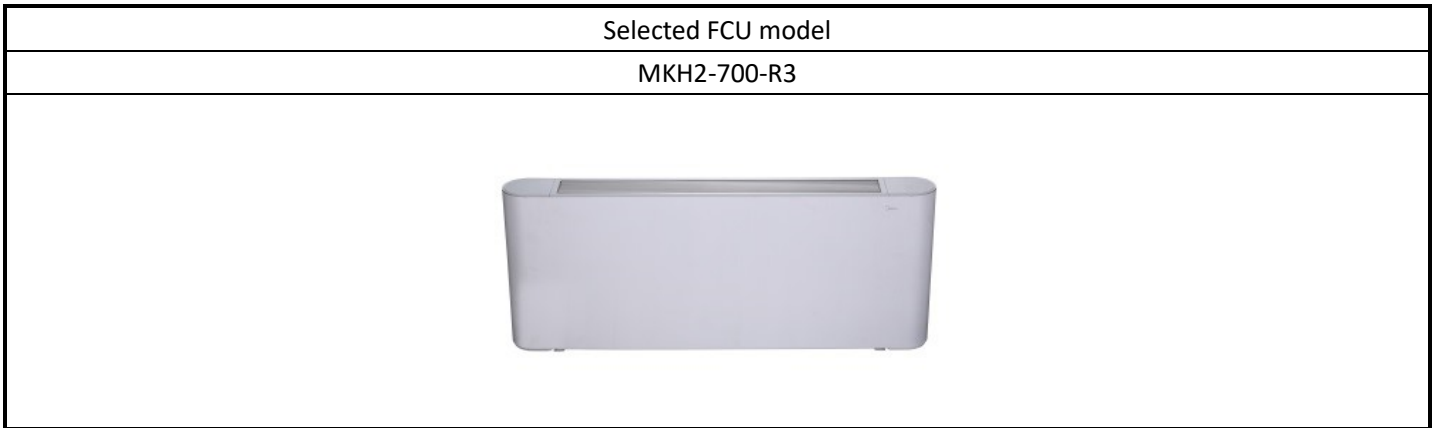
humidity chart of cooling



humidity chart of heating

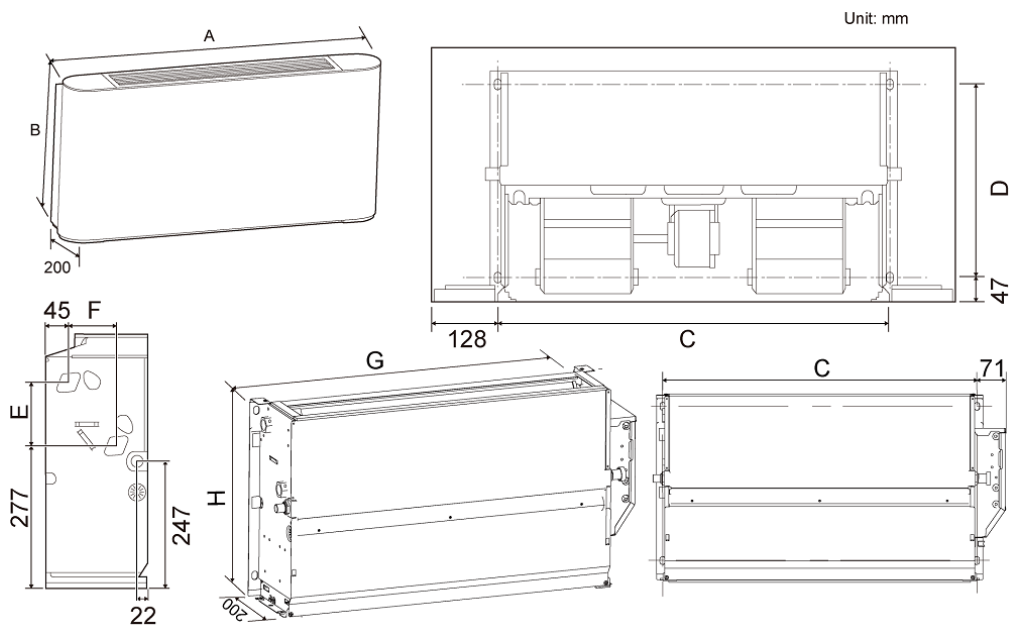


## Appearance



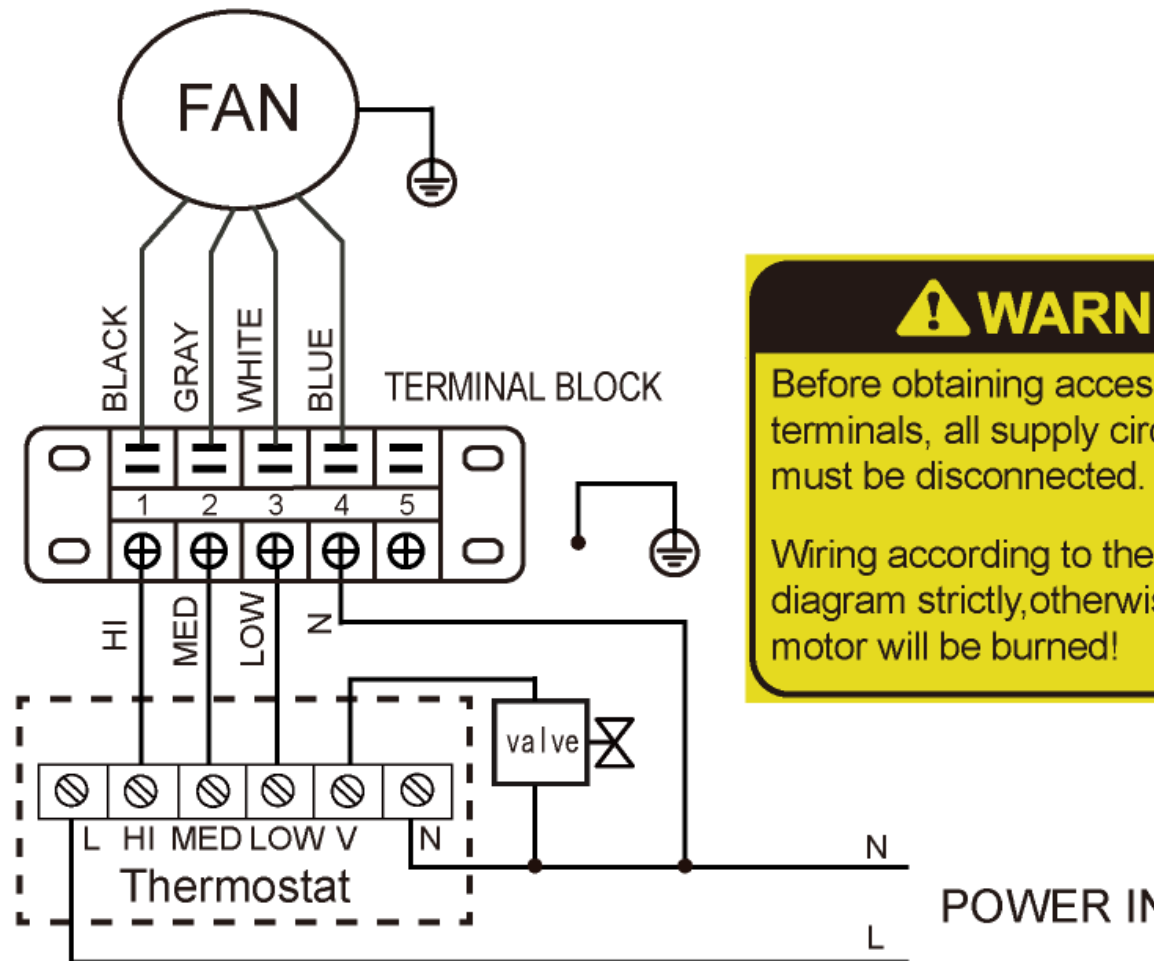
## Dimensions

(Unit: mm):MKH2-700-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 Air Return From Side H1 Concealed H3	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	8

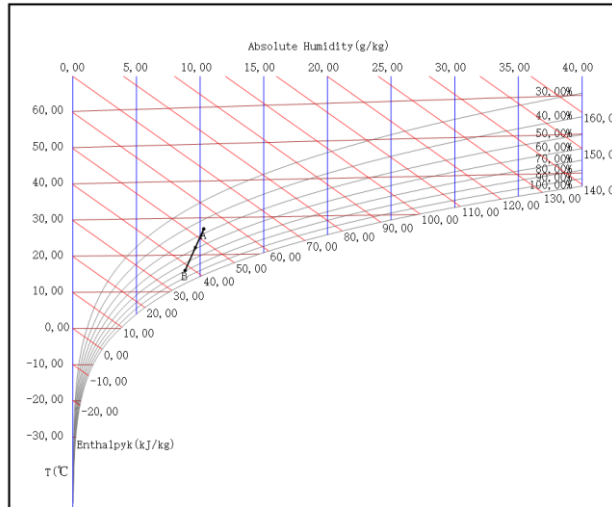
## Specifications MKH2-700-R3 (1)

Unit model					
MKH2-700-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	1190
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	123	Rated current	A	0.53
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	6.00
Outlet air temp (DB/WB)	°C	15.8/13.7	Sensible capacity	kW	4.83
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	1.03
Outlet water temp	°C	12.0	Water pressure drop	kPa	53.79
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	9.49
Outlet air temp (DB/WB)	°C	43.5/22.6	Water flow	m <sup>3</sup> /h	0.82
Inlet water temp	°C	60.0	Water pressure drop	kPa	20.41
Outlet water temp	°C	50.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.17	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*1360	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1465	Packing size (W*H*D)	mm	/
Net weight	kg	27.30	Net weight	kg	/
Gross weight	kg	34.80	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	64/56/45	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	64/56/45			

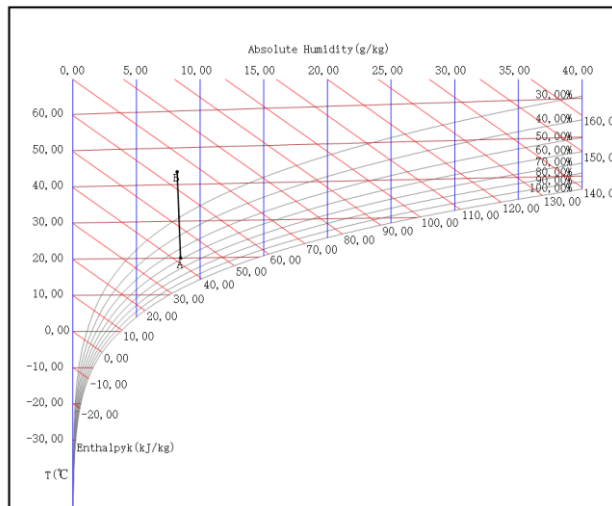
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

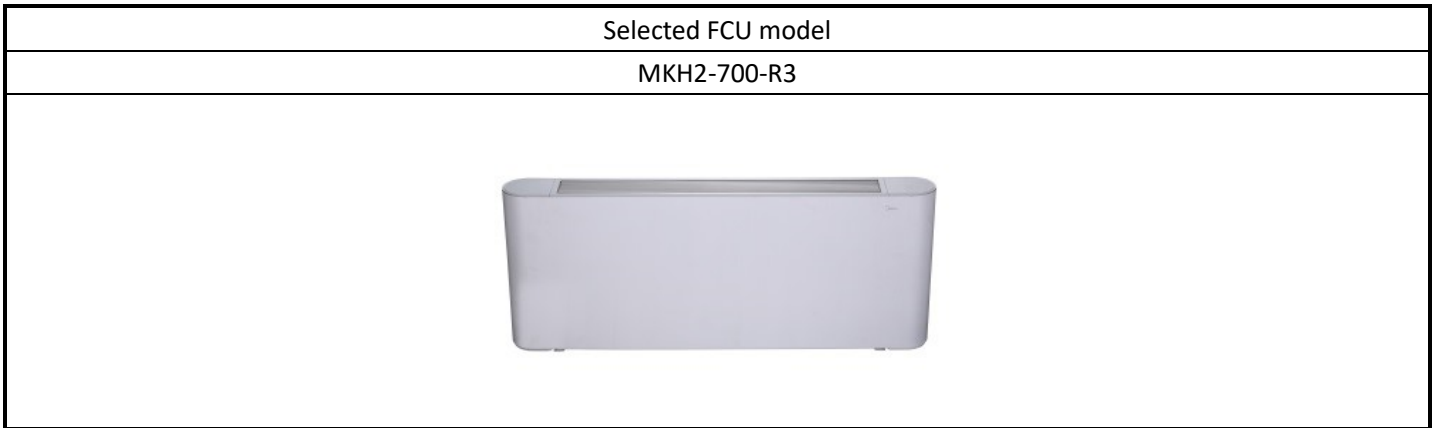
humidity chart of cooling



humidity chart of heating

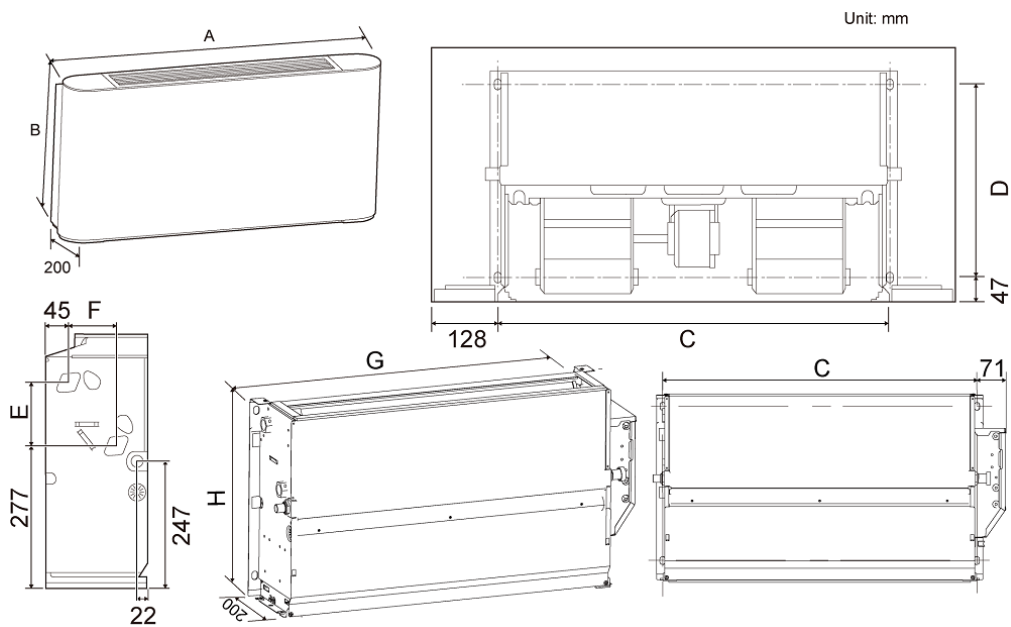


## Appearance



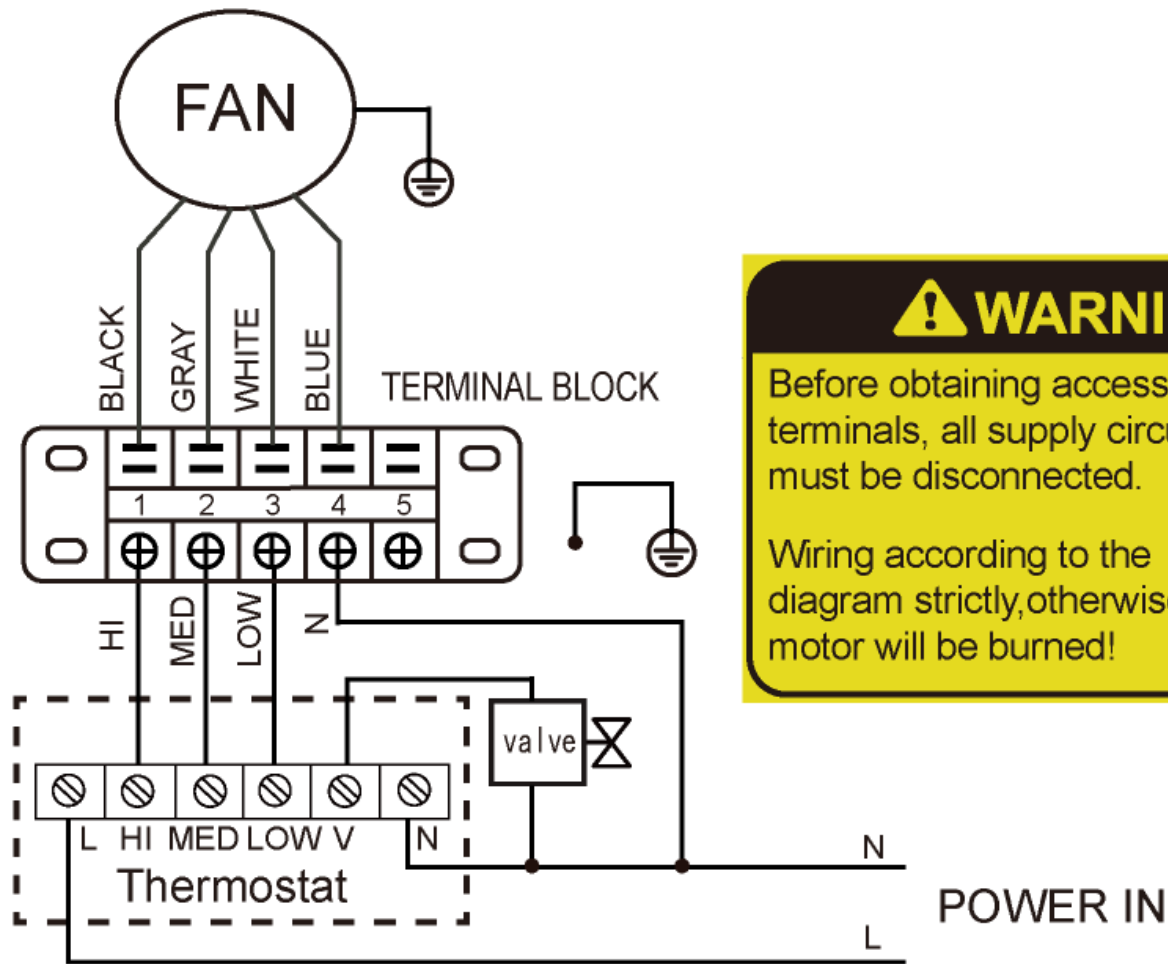
## Dimensions

(Unit: mm):MKH2-700-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 Air Return From Side H1 Concealed H3	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	10

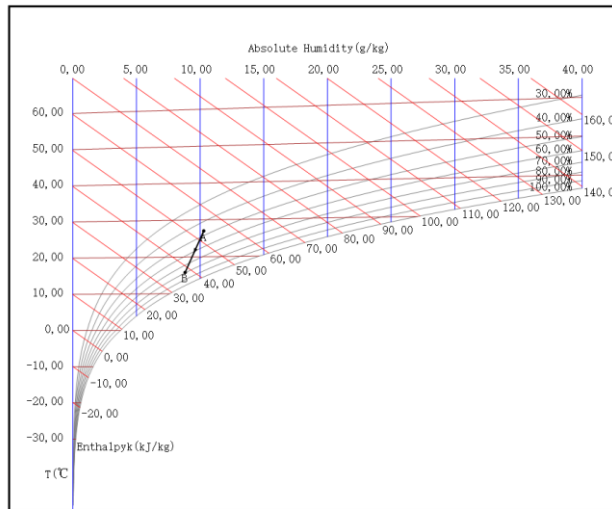
## Specifications MKH2-700-R3 (1)

Unit model					
MKH2-700-R3					
Fan motor data					
Type	2nd Ceiling&Floor		Fan speed		High
Quantity	1		Air flow	m <sup>3</sup> /h	1190
Power supply	220-240/1/50		ESP	Pa	/
Power input	W	123	Rated current	A	0.53
Cooling					
Inlet air temp (DB/WB)	°C	27.0/19.0	Total capacity	kW	6.00
Outlet air temp (DB/WB)	°C	15.8/13.7	Sensible capacity	kW	4.83
Inlet water temp	°C	7.0	Water flow	m <sup>3</sup> /h	1.03
Outlet water temp	°C	12.0	Water pressure drop	kPa	53.79
Heating					
Inlet air temp (DB/WB)	°C	20.0/15.0	Heating capacity	kW	10.95
Outlet air temp (DB/WB)	°C	47.1/23.6	Water flow	m <sup>3</sup> /h	0.94
Inlet water temp	°C	65.0	Water pressure drop	kPa	25.64
Outlet water temp	°C	55.0			
Coil Data			Water Pipe Diameter		
Face area	m <sup>2</sup>	0.17	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*1360	Dimension (W*H*D)	mm	/
Packing size (W*H*D)	mm	595*300*1465	Packing size (W*H*D)	mm	/
Net weight	kg	27.30	Net weight	kg	/
Gross weight	kg	34.80	Gross weight	kg	/
Sound Power Level Data			Electrical Heater		
High/Medium/Low	dB(A)	64/56/45	Capacity	kW	/
Sound Pressure Level Data					
High/Medium/Low	dB(A)	64/56/45			

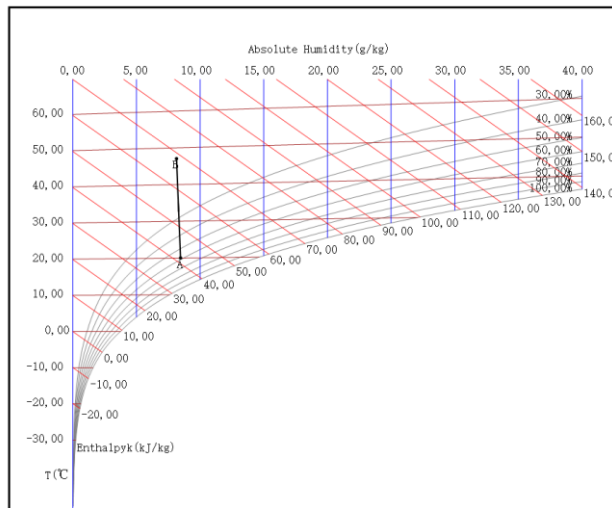
**Note:** Sound Power Level is tested in a reverberation chamber test room.

# Enthalpy-Humidity Chart

humidity chart of cooling

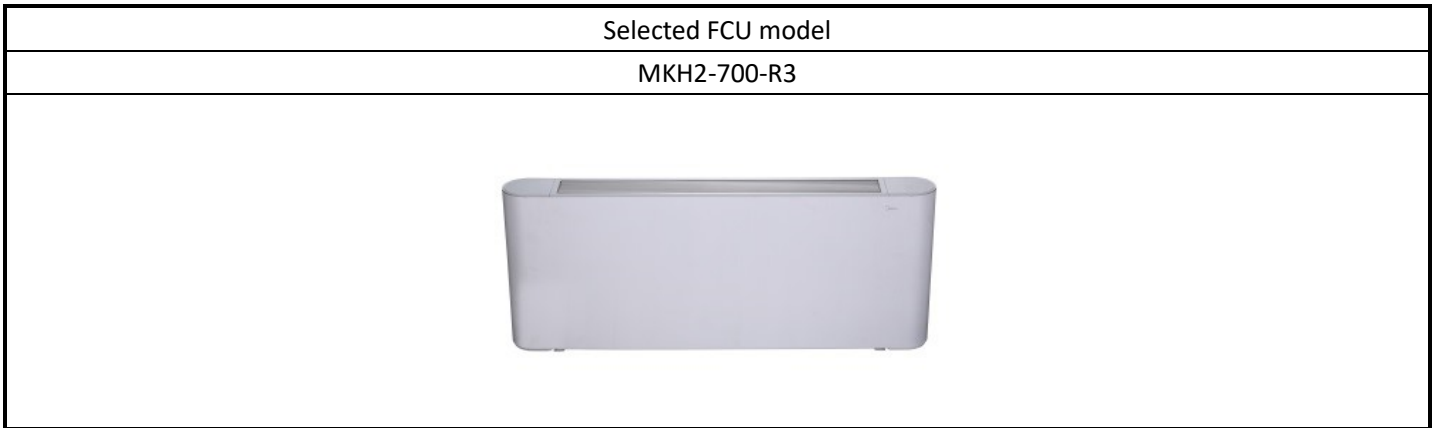


humidity chart of heating



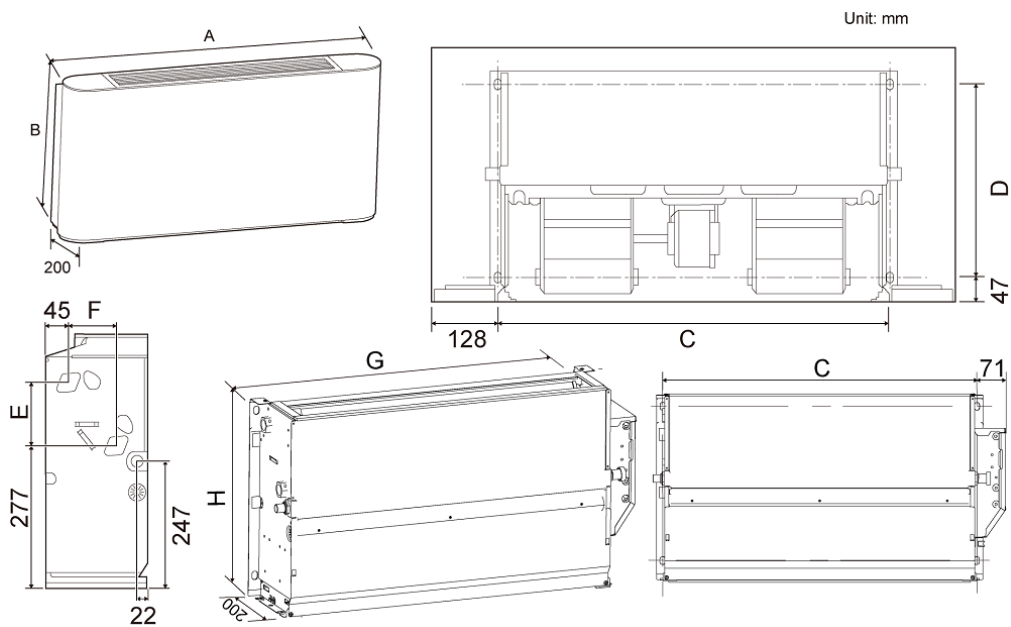


## Appearance



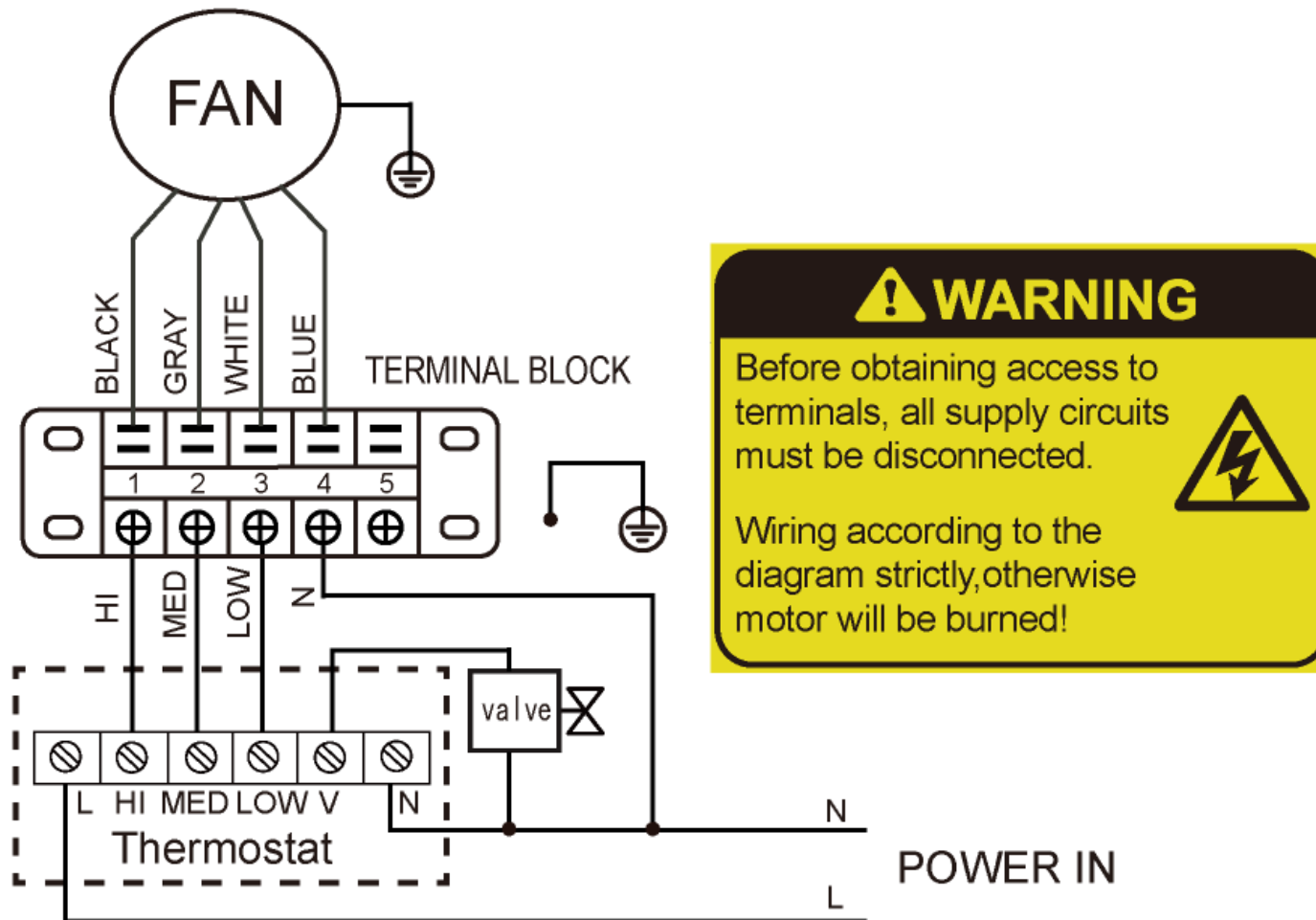
## Dimensions

(Unit: mm):MKH2-700-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



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.