



# technical data

heating

FWXV-A

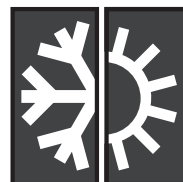




# technical data

heating

FWXV-A



Heat Pump



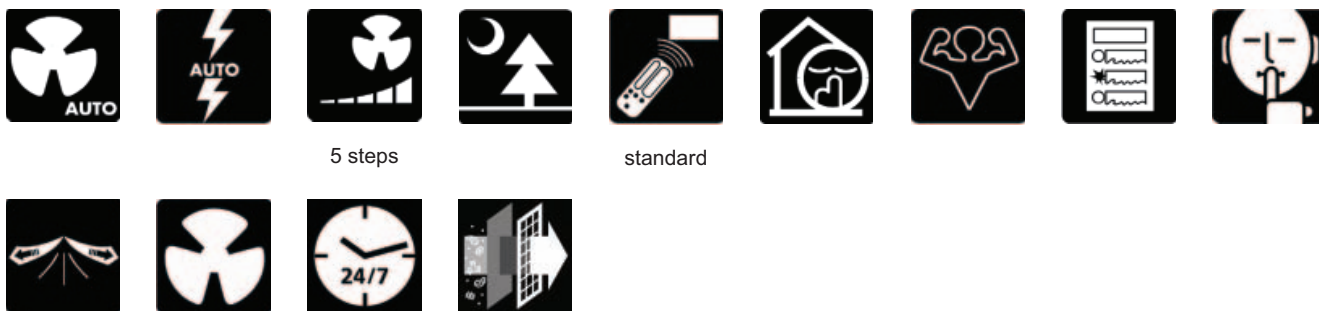
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# 1 Features

- Optimal energy efficiency when connected to a Daikin Altherma system, thanks to the interlink function
- Stylish design
- Flat front panel: its stylish appearance blends easily within any interior décor and is more easy to clean.
- Titanium apatite photocatalytic air purification filter
- Can be installed against a wall or recessed
- Lightweight but sturdy design



5 steps

standard

## 2 Specifications

2-1 For indoor units only				FWXV15AVEB	FWXV20AVEB
Nominal input (Indoor only)	Cooling		kW	0.013	0.015
	Heating		kW	0.013	0.015
Heating capacity	Total capacity	Nom.	kW	1.5	2.0
	Water volume	Nom.	m <sup>3</sup> /hr	0.26	0.34
			l/min	4.3	5.7
	Water pressure drop	Nom.	kPa	13	22
Cooling capacity	Total capacity	Nom.	kW	1.2	1.7
	Sensible capacity	Nom.	kW	0.98	1.4
	Water volume	Nom.	m <sup>3</sup> /hr	0.20	0.29
			l/min	3.4	4.9
	Water pressure drop	Nom.	kPa	10	17

2-2 Technical Specifications				FWXV15AVEB	FWXV20AVEB
Casing	Colour			White	
Dimensions	Packing	Height	mm	696	696
		Width	mm	786	786
		Depth	mm	286	286
	Unit	Height	mm	600	600
		Width	mm	700	700
		Depth	mm	210	210
Weight	Unit		kg	15	15
	Packed Unit		kg	19	19
Heat Exchanger	Dimensions	Length	mm	510	510
		Nr of Rows		2	2
		Fin Pitch	mm	1.2	1.2
		Nr of Stages		22	22
	Tube type		ø6.35 Smooth tube		
	Fin	Type		Multi slit fin	
Fan	Type			Turbo fan	
Air Flow Rate	Heating	High	m <sup>3</sup> /h	318	474
		Medium	m <sup>3</sup> /h	228	354
		Low	m <sup>3</sup> /h	150	240
		Silent Operation	m <sup>3</sup> /h	126	198
	Cooling	High	m <sup>3</sup> /h	318	474
		Medium	m <sup>3</sup> /h	228	354
		Low	m <sup>3</sup> /h	150	240
		Silent Operation	m <sup>3</sup> /h	126	198
Fan	Motor	Model		D48D-28	
		Number of steps		5 steps, silent and auto	
Motor	Speed (heating)	High	rpm	400	560
		Medium	rpm	310	440
		Low	rpm	230	320
		Silent Operation	rpm	210	280
	Speed (cooling)	High	rpm	400	560
		Medium	rpm	310	440
		Low	rpm	230	320
		Silent Operation	rpm	210	280
Heating	Sound Power	Medium	dBA	35	45
	Sound Pressure	Medium	dBA	19	29
Cooling	Sound Power	Medium	dBA	35	45
	Sound Pressure	Medium	dBA	19	29
Piping connections	Liquid ID/OD	Diameter	inch	G1/2 / G1/2	G1/2 / G1/2
	Gas ID/OD	Diameter	inch	G1/2 / G1/2	G1/2 / G1/2
	Drain	Diameter	mm	18	
	Heat Insulation			Both inlet and outlet pipes	
Air Filter			Removable/washable/Mildew proof		
Air direction control			Right, Left, Horizontal, Downward		
Temperature control			Microcomputer control		

## 2 Specifications

2-2 Technical Specifications				FWXV15AVEB		FWXV20AVEB	
Standard Accessories	Item		Installation manual				
	Quantity		1		1		
	Item		Operation manual				
	Quantity		1		1		
	Item		Wireless remote control				
	Quantity		1		1		
	Item		Batteries				
	Quantity		2		2		
	Item		Remote control holder				
	Quantity		1		1		
	Item		Drain hose				
	Quantity		1		1		
	Item		Photocatalytic filter (apatite)				
	Quantity		2		2		
	Item		Thermal insulation tape				
	Quantity		2		2		
	Item		Thermal insulation tube				
	Quantity		2		2		
	Item		Connection pipe				
	Quantity		2		2		
Item		Binding band					
Quantity		1		1			
Item		O Ring					
Quantity		4		4			
Notes				Cooling: indoor temp. 27°CDB, 19°CWB; entering water temp. 7°C, water temperature rise 5K.			
				Heating: indoor temp. 20°CDB; entering water temp. 45°C, water temperature drop 5K.			
				The range of usable water temperature is 6°C (min.) to 60°C (max.)			
				Maximum allowable water pressure is 1.18 MPa			
				Comply with drinking water directive 98/93/EC for chilled water, hot water and make up water.			
				The amount of water circulation should be 3l/min to 15l/min (0.18m³/hr to 0.9m³/hr)			
				Allowable model of hydrobox interlinking is BA-series			

2-3 Electrical Specifications				FWXV15AVEB		FWXV20AVEB	
Power Supply	Name			VE			
	Phase			1		1	
	Frequency		Hz	50/60		50/60	
	Voltage		V	220-240 / 220			
Current	Nominal running current (RLA)	Heating	A	0.08		0.10	
		Cooling	A	0.08		0.10	

### 3 Capacity tables

#### 3 - 1 Heating capacity tables

FWXV15-20A																
Heating capacity tables																
Air temperature (°C)		20°C														
Water temperature (Entering °C - leaving °C)		35°C-30°C			45°C-40°C			50°C-45°C			55°C-45°C			60°C-50°C		
Model	Fan	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop
		kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa
FWXV15AVFB	H	1.12	3.2	7	2.00	5.7	13	2.43	7.0	16	2.85	8.1	18	3.27	9.7	22
	M	0.88	2.4	5	1.50	4.5	11	1.87	5.5	13	2.13	6.1	14	2.44	7.1	16
	L	0.50	1.4	3	1.00	2.9	6	1.38	3.9	9	1.48	4.1	9	1.64	4.4	10
FWXV20AVFB	H	1.36	4.2	9	2.50	7.6	18	3.63	10.5	24	4.88	14.0	32	4.90	14.0	31
	M	1.12	3.2	7	2.00	5.7	13	2.43	7.0	16	2.85	8.1	18	3.27	9.7	22
	L	0.88	2.4	5	1.50	4.5	11	1.87	5.5	13	2.13	6.1	14	2.44	7.1	16

22°CDB																
Air temperature (°CDB-°CWB)		22°CDB														
Water temperature (Entering °C - leaving °C)		35°C-30°C			45°C-40°C			50°C-45°C			55°C-45°C			60°C-50°C		
Model	Fan	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop	Heating capacity	Water flow	Water pressure drop
		kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa	kW	L/min	kPa
FWXV15AVFB	H	1.07	2.9	6	1.88	5.3	12	2.37	6.8	15	2.69	7.8	17	3.11	8.9	20
	M	0.81	2.1	4	1.38	4.0	9	1.70	4.9	11	1.97	5.7	13	2.27	6.6	15
	L	0.45	1.3	2	0.92	2.6	5	1.26	3.6	8	1.35	3.9	9	1.55	4.4	10
FWXV20AVFB	H	1.38	4.2	9	2.78	7.9	19	3.47	10.0	23	4.66	13.5	30	4.71	13.5	30
	M	1.10	3.0	7	2.24	6.5	15	2.97	8.8	20	3.70	10.6	24	3.92	11.4	26
	L	0.75	2.0	4	1.38	4.0	9	1.70	4.9	11	1.97	5.7	13	2.27	6.6	15

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### 3 Capacity tables

#### 3 - 2 Cooling capacity tables

##### FWXV15-20A

##### Cooling capacity tables

Air temperature (°CDB-°CWB)		27°CDB-19°CWB															
Water temperature (Entering °C - leaving °C)		6°C-11°C				7°C-12°C				8°C-13°C				9°C-14°C			
Model	Fan	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop
		kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa
FWXV15AVFB	H	1.1	1.01	3.7	1.1	1.1	1.01	3.4	1.1	1.1	1.01	3.1	1.1	1.1	2.8	3.1	1.1
	M	1.0	0.9	3.6	1.0	1.0	0.9	3.1	1.0	1.0	0.9	2.9	1.0	1.0	2.7	2.9	1.0
	L	0.93	0.87	3.4	0.9	0.93	0.86	2.9	0.9	0.93	0.86	2.7	0.9	0.93	0.85	2.5	0.9
FWXV20AVFB	H	1.6	1.5	5.4	1.6	1.6	1.5	4.9	1.6	1.6	1.5	4.4	1.6	1.6	4.0	4.4	1.6
	M	1.5	1.4	5.2	1.5	1.5	1.4	4.6	1.5	1.5	1.4	4.2	1.5	1.5	3.9	4.2	1.5
	L	1.3	1.2	4.9	1.3	1.3	1.2	4.3	1.3	1.3	1.2	3.9	1.3	1.3	3.6	3.9	1.3

Air temperature (°CDB-°CWB)		22°CDB-16°CWB															
Water temperature (Entering °C - leaving °C)		6°C-11°C				7°C-12°C				8°C-13°C				9°C-14°C			
Model	Fan	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop
		kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa
FWXV15AVEB	H	1.1	1.01	3.7	1.1	1.1	1.01	3.4	1.1	1.1	1.01	3.1	1.1	1.1	2.8	3.1	1.1
	M	0.93	0.87	3.4	0.9	0.93	0.86	2.9	0.9	0.93	0.86	2.7	0.9	0.93	0.85	2.5	0.9
	L	0.84	0.78	3.1	0.8	0.84	0.78	2.6	0.8	0.84	0.78	2.4	0.8	0.84	0.77	2.2	0.8
FWXV20AVEB	H	1.6	1.5	5.4	1.6	1.6	1.5	4.9	1.6	1.6	1.5	4.4	1.6	1.6	4.0	4.4	1.6
	M	1.5	1.4	5.2	1.5	1.5	1.4	4.6	1.5	1.5	1.4	4.2	1.5	1.5	3.9	4.2	1.5
	L	1.3	1.2	4.9	1.3	1.3	1.2	4.3	1.3	1.3	1.2	3.9	1.3	1.3	3.6	3.9	1.3

Air temperature (°CDB-°CWB)		25°CDB-18°CWB															
Water temperature (Entering °C - leaving °C)		6°C-11°C				7°C-12°C				8°C-13°C				9°C-14°C			
Model	Fan	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop
		kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa
FWXV15AVEB	H	1.1	1.01	3.7	1.1	1.1	1.01	3.4	1.1	1.1	1.01	3.1	1.1	1.1	2.8	3.1	1.1
	M	0.93	0.87	3.4	0.9	0.93	0.86	2.9	0.9	0.93	0.86	2.7	0.9	0.93	0.85	2.5	0.9
	L	0.74	0.69	3.1	0.7	0.74	0.69	2.6	0.7	0.74	0.69	2.4	0.7	0.74	0.68	2.2	0.7
FWXV20AVEB	H	1.6	1.5	5.4	1.6	1.6	1.5	4.9	1.6	1.6	1.5	4.4	1.6	1.6	4.0	4.4	1.6
	M	1.5	1.4	5.2	1.5	1.5	1.4	4.6	1.5	1.5	1.4	4.2	1.5	1.5	3.9	4.2	1.5
	L	1.3	1.2	4.9	1.3	1.3	1.2	4.3	1.3	1.3	1.2	3.9	1.3	1.3	3.6	3.9	1.3

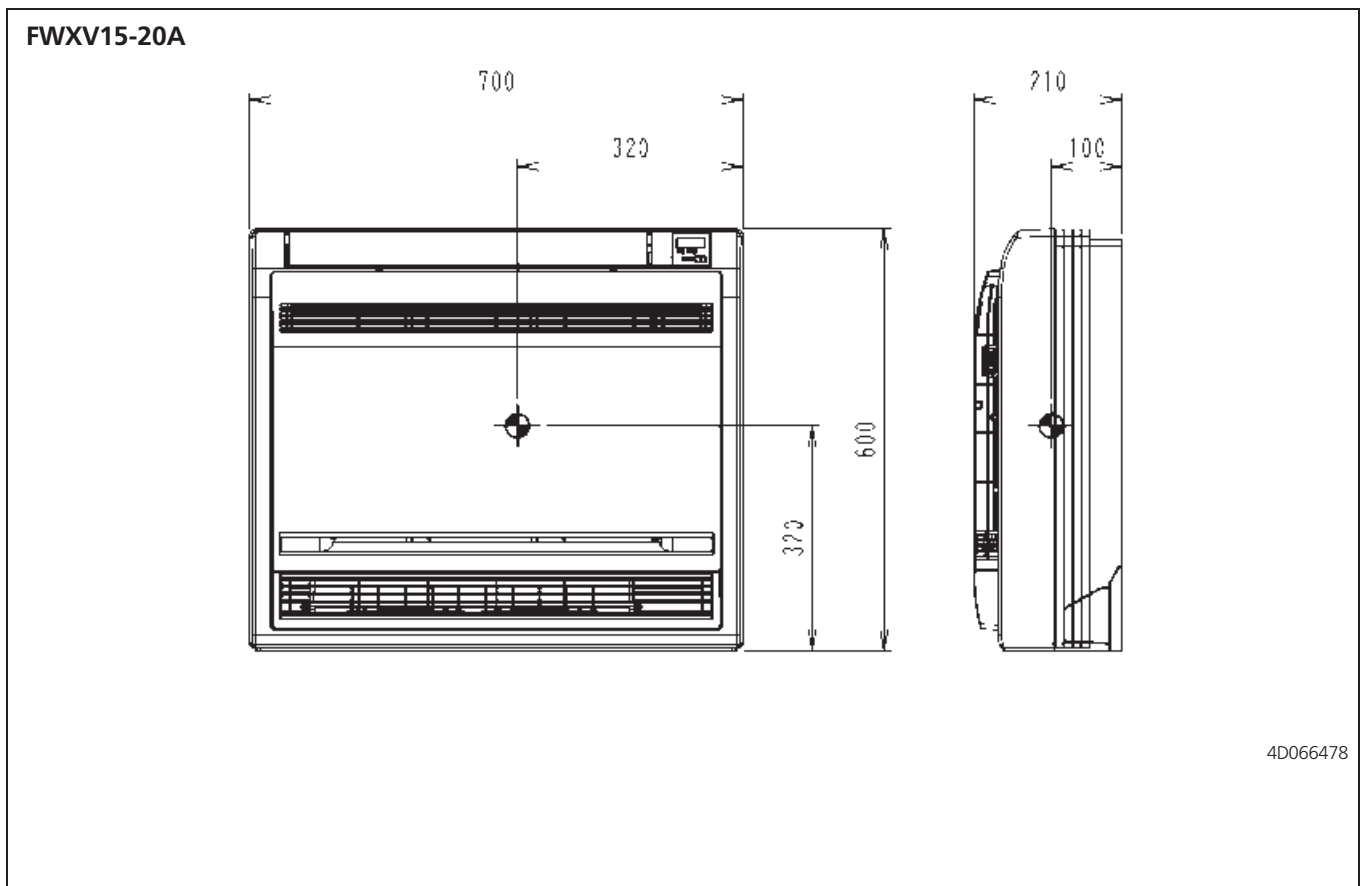
Air temperature (°CDB-°CWB)		30°CDB-22°CWB															
Water temperature (Entering °C - leaving °C)		6°C-11°C				7°C-12°C				8°C-13°C				9°C-14°C			
Model	Fan	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop	Total cooling capacity	Sensible cooling capacity	Water flow	Water pressure drop
		kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa	kW	kW	L/min	kPa
FWXV15AVFB	H	1.1	1.01	3.7	1.1	1.1	1.01	3.4	1.1	1.1	1.01	3.1	1.1	1.1	2.8	3.1	1.1
	M	1.0	0.9	3.6	1.0	1.0	0.9	3.1	1.0	1.0	0.9	2.9	1.0	1.0	2.7	2.9	1.0
	L	1.0	0.9	3.6	1.0	1.0	0.9	3.1	1.0	1.0	0.9	2.9	1.0	1.0	2.7	2.9	1.0
FWXV20AVFB	H	1.6	1.5	5.4	1.6	1.6	1.5	4.9	1.6	1.6	1.5	4.4	1.6	1.6	4.0	4.4	1.6
	M	1.5	1.4	5.2	1.5	1.5	1.4	4.6	1.5	1.5	1.4	4.2	1.5	1.5	3.9	4.2	1.5
	L	1.4	1.3	4.9	1.4	1.4	1.3	4.3	1.4	1.4	1.3	3.9	1.4	1.4	3.6	3.9	1.4

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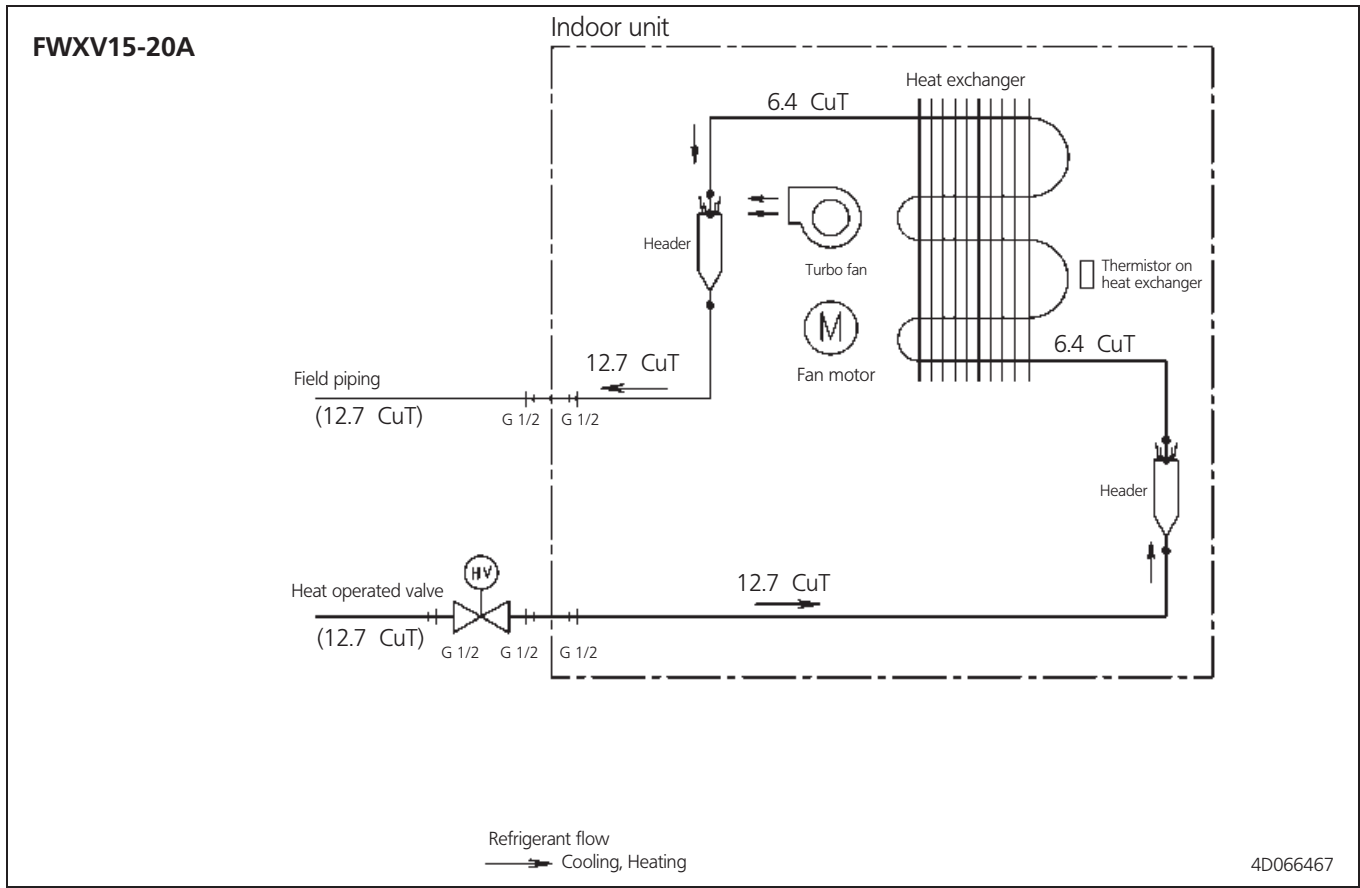


## 4 Dimensional drawing & centre of gravity

### 4 - 2 Centre of gravity

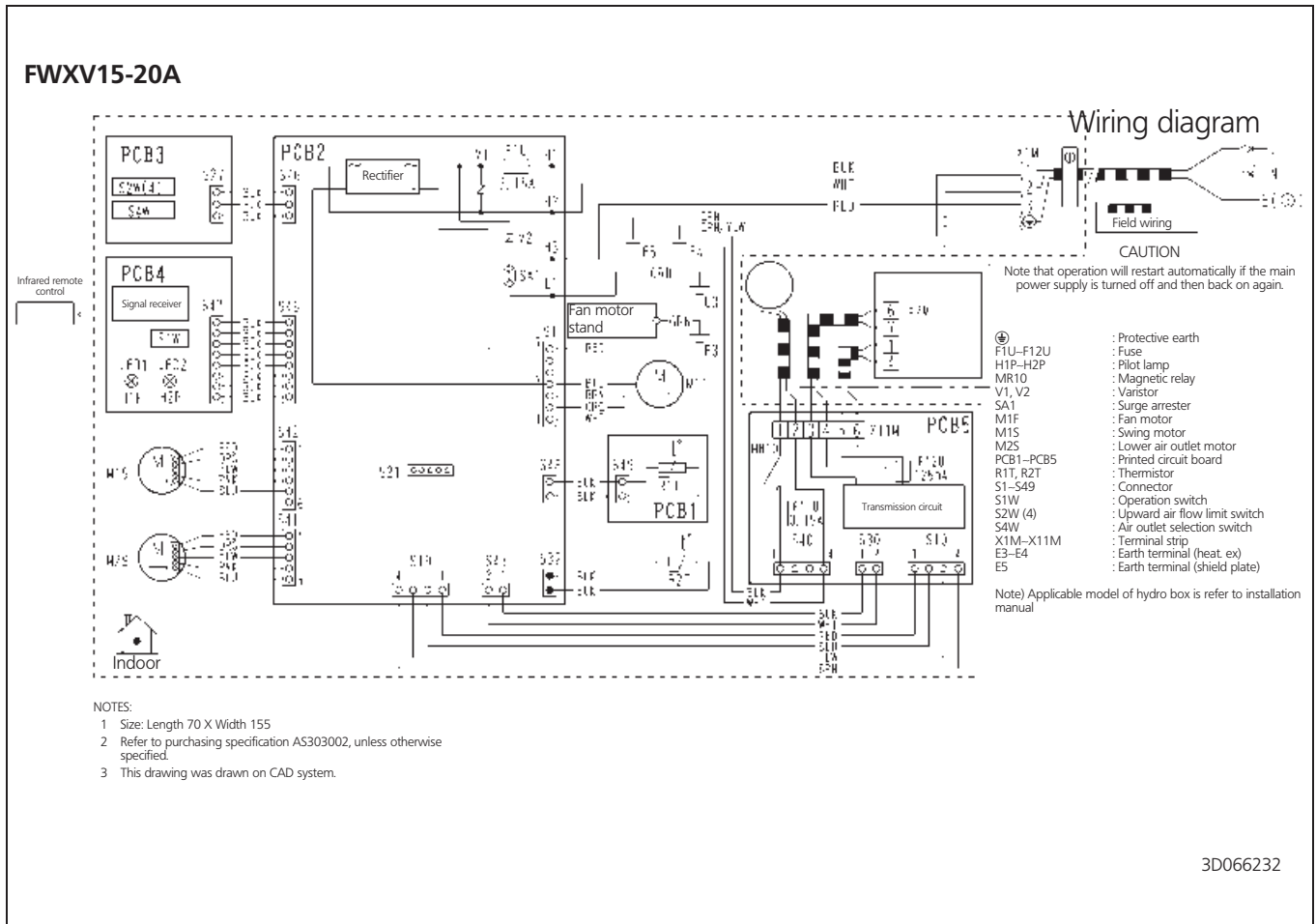


# 5 Piping diagram



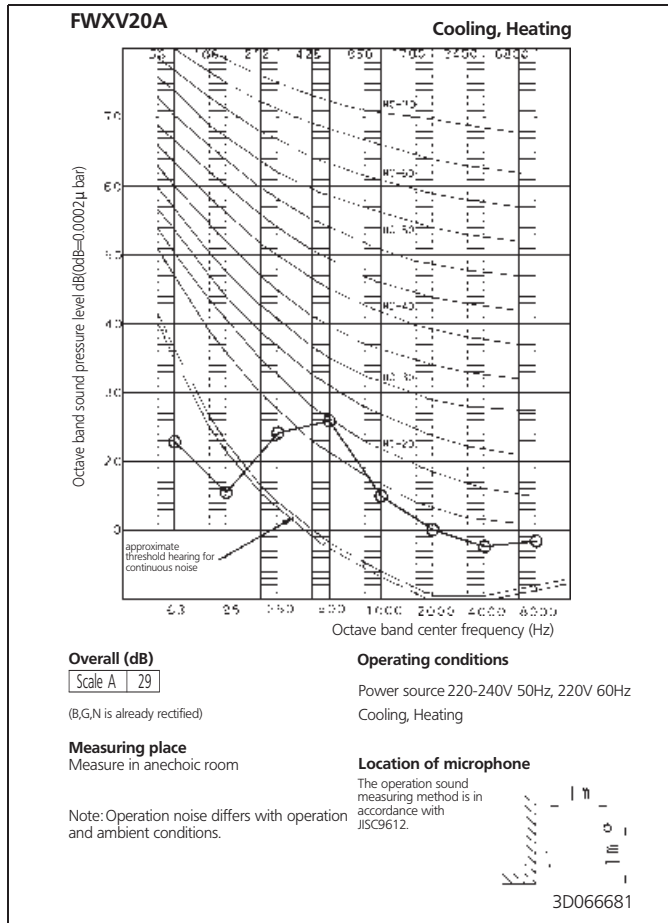
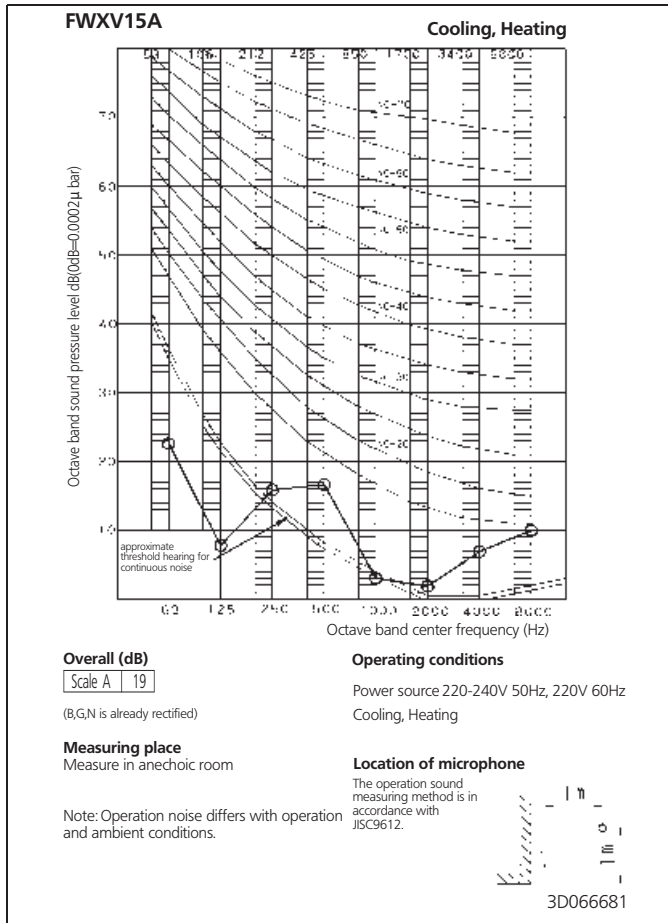
# 6 Wiring diagram

## 6 - 1 Wiring diagram



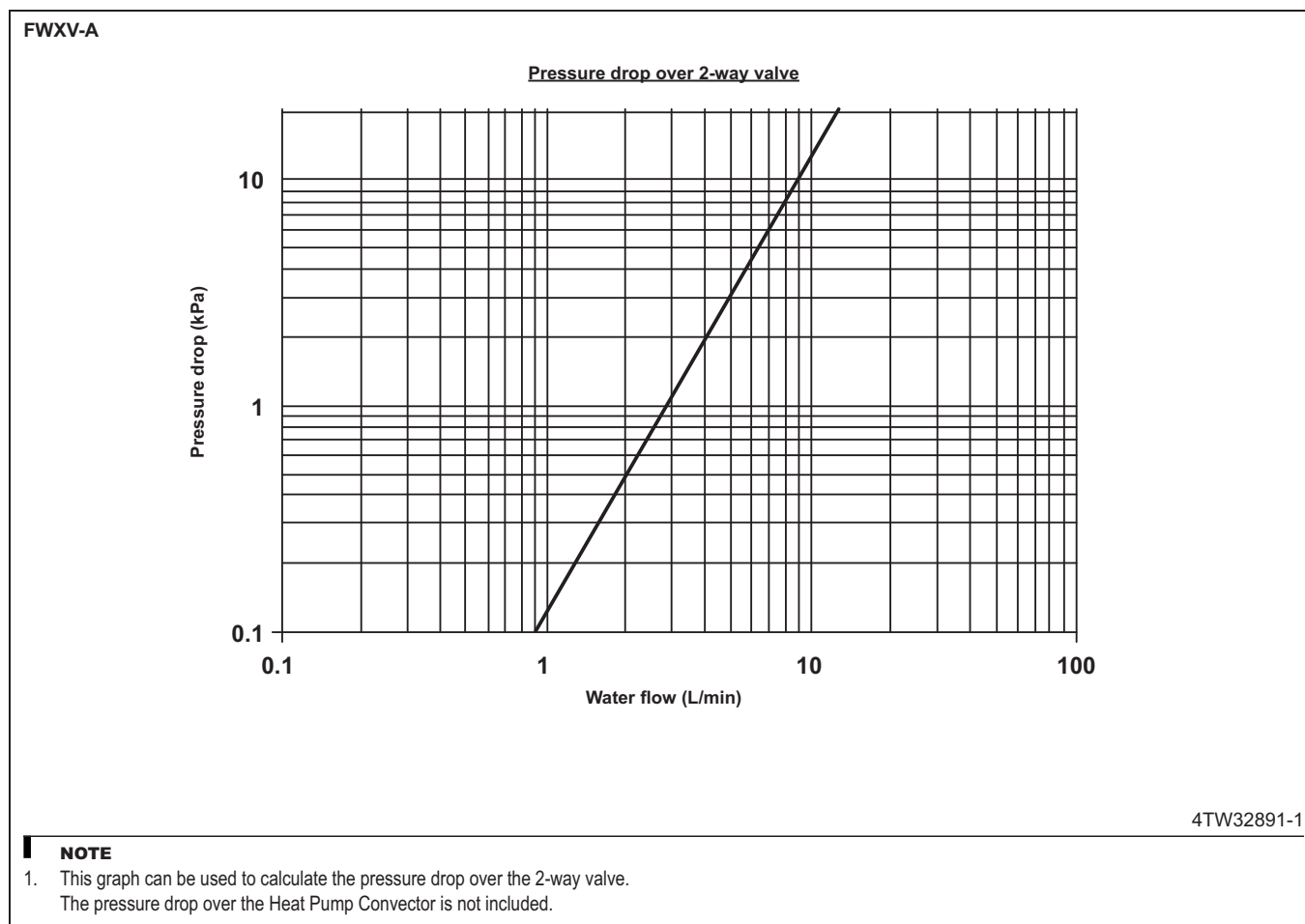
# 7 Sound data

## 7 - 1 Sound pressure spectrum



## 8 Hydraulic performance

### 8 - 1 Static pressure drop unit



In all of us,  
a green heart



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intension to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.

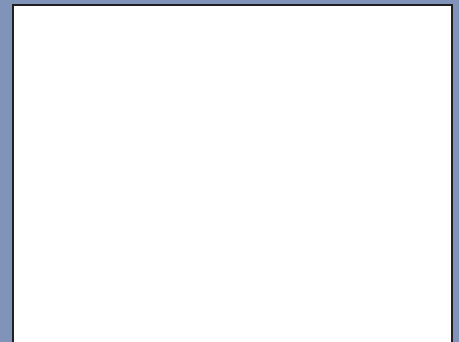


Daikin units comply with the European regulations that guarantee the safety of the product.



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