

Technology

DVM S Water

DVM S Water is a high-capacity indoor cooling and heating system, ideal for large buildings. Unique to other DVM S models, the DVM S Water air conditioning system uses water as its heat source, which connects to a cooling tower and boiler. Using a highly efficient compressor and heat exchanger, DVMS Water provides effective and reliable performance despite changes in the surrounding environment. Its long piping and lightweight design also makes it easy and economical to install almost anywhere.



Water-cooled VRF System

The Samsung DVM S Water air conditioner system delivers optimal comfort, efficient and performance with features such as:

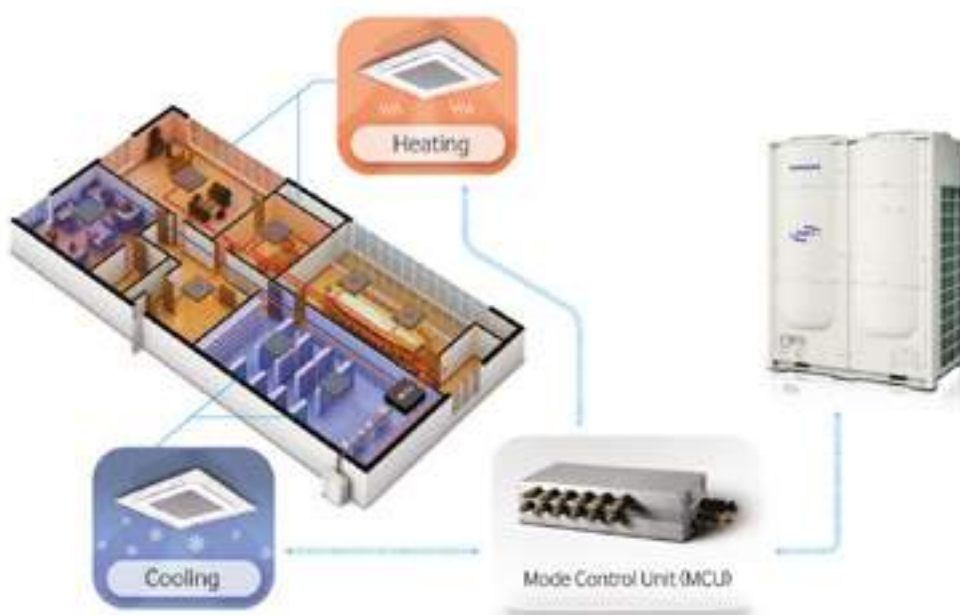
- Increased energy savings. Save on energy consumption and costs with a dual inverter system and high-performance compressors.
- Easy and flexible Installation. Ease installation and minimize effort with a light-weight design, extended piping length and elevation support.
- Premium comfort. Support comfortable living and working environments based on the combined strengths of various technologies.

Energy-efficient Rapid Heating and Cooling

The third-generation innovative system, DDI, adopts a dual inverter compressor system. Both inverter compressors operate simultaneously, providing compressor longevity and balanced oil distribution for quick cooling and heating to save energy and the environment. Plus, the upgraded vapor injection system increases refrigerant flow by 20 percent compared to conventional products.

Independent Cooling and Heating

With the DVM S Water air conditioning system's optional Mode Control Unit (MCU), users can independently operate each indoor unit. This means users can set different temperatures for various spaces at the same time, heating some rooms or areas of the building, while cooling others.



Optimal Water Flow Controller

DVM S Water's built-in Water Flow Controller helps control the amount of water used to cool and heat the unit. It determines the optimum flow of water based on the internal temperature of the spaces, so the variable circulation pump's energy consumption is optimised and costs reduced. And because it's provided as standard 0-10 Volt signal, there's no need to buy a separate water flow control kit.



Residential

Multi Split

Commercial

VRF

Chiller

Ventilation

Air to Water Heating

Controls & Accessories

Specifications

DVM S Water



Model Name				AM080MXWANR/EU	AM100MXWANR/EU	AM120MXWANR/EU	
Power Supply	Ø, #, V, Hz			3,4,380-415,50/60	3,4,380-415,50/60	3,4,380-415,50/60	
Performance	HP			8	10	12	
	Capacity (Nominal)	Cooling		22,4	28	33,6	
		Heating		25,2	31,5	37,8	
	Maximum number of connectable indoor units			14	18	22	
	Total capacity of the connected Indoor Units 3)	Min.		11,2	14	16,8	
Max.			29,1	36,4	43,7		
Power	Power Input (Nominal)	Cooling		3,67	4,87	6,00	
		Heating		3,97	5,04	6,25	
	Current Input (Nominal)	Cooling		5,9	8,1	9,6	
		Heating		6,4	8,4	10,0	
	Current	Minimum Ssc value		3,9	3,9	4,8	
		MCA		16,1	16,1	20	
MFA			20	20	25		
COP	Nominal Cooling			6,1	5,75	5,6	
	Nominal Heating			6,35	6,25	6,05	
Compressor	Type			Inverter Scroll	Inverter Scroll	Inverter Scroll	
	Output			(4.96) x 1	(4.96) x 1	(6.13) x 1	
	Oil	Type		PVE	PVE	PVE	
	Initial Charge			3,9	3,9	3,9	
Condenser	Type			Plate Heat Exchanger	Plate Heat Exchanger	Plate Heat Exchanger	
	Pipe Size			PT1-1/4	PT1-1/4	PT1-1/4	
	Pressure Drop			22	30	43	
	Water Flow Rate			80	96	114	
	Max. Pressure			1,96	1,96	1,96	
	Liquid Pipe			9,52	9,52	12,7	
				3/8"	3/8"	1/2"	
	Gas Pipe			19,05	22,22	28,58	
				3/4"	7/8"	1 1/8"	
Piping Connections	Discharge Gas Pipe			15,88	19,05	19,05	
				5/8"	3/4"	3/4"	
	Piping length	Outdoor-Indoor	Max.	m	170 (190)	170 (190)	170 (190)
		After branch	Max.	m	90	90	90
	Total piping length	System	Actual	m	500	500	500
	Level difference	Outdoor-Indoor	Outdoor unit in highest position	m	50	50	50
			Indoor unit in highest position	m	40	40	40
Indoor-Indoor		Max.	m	50	50	50	
Wiring connections	Communication			0,75	0,75	0,75	
	Remark			F1, F2	F1, F2	F1, F2	
Refrigerant	Type			R410A	R410A	R410A	
	Factory Charging			5,5	5,8	6	
Sound	Sound Pressure	Cooling		11,48	12,11	12,53	
		Heating		48	48	50	
	Sound Power			51	51	52	
			70	70	70		
External Dimensions	Net Weight			160	160	160	
	Net Dimensions (WxHxD)			770 x 1,000 x 545	770 x 1,000 x 545	770 x 1,000 x 545	
Operating Temp. Range	Cooling			10.0 ~ 45.0	10.0 ~ 45.0	10.0 ~ 45.0	
	Heating			10.0 ~ 45.0	10.0 ~ 45.0	10.0 ~ 45.0	

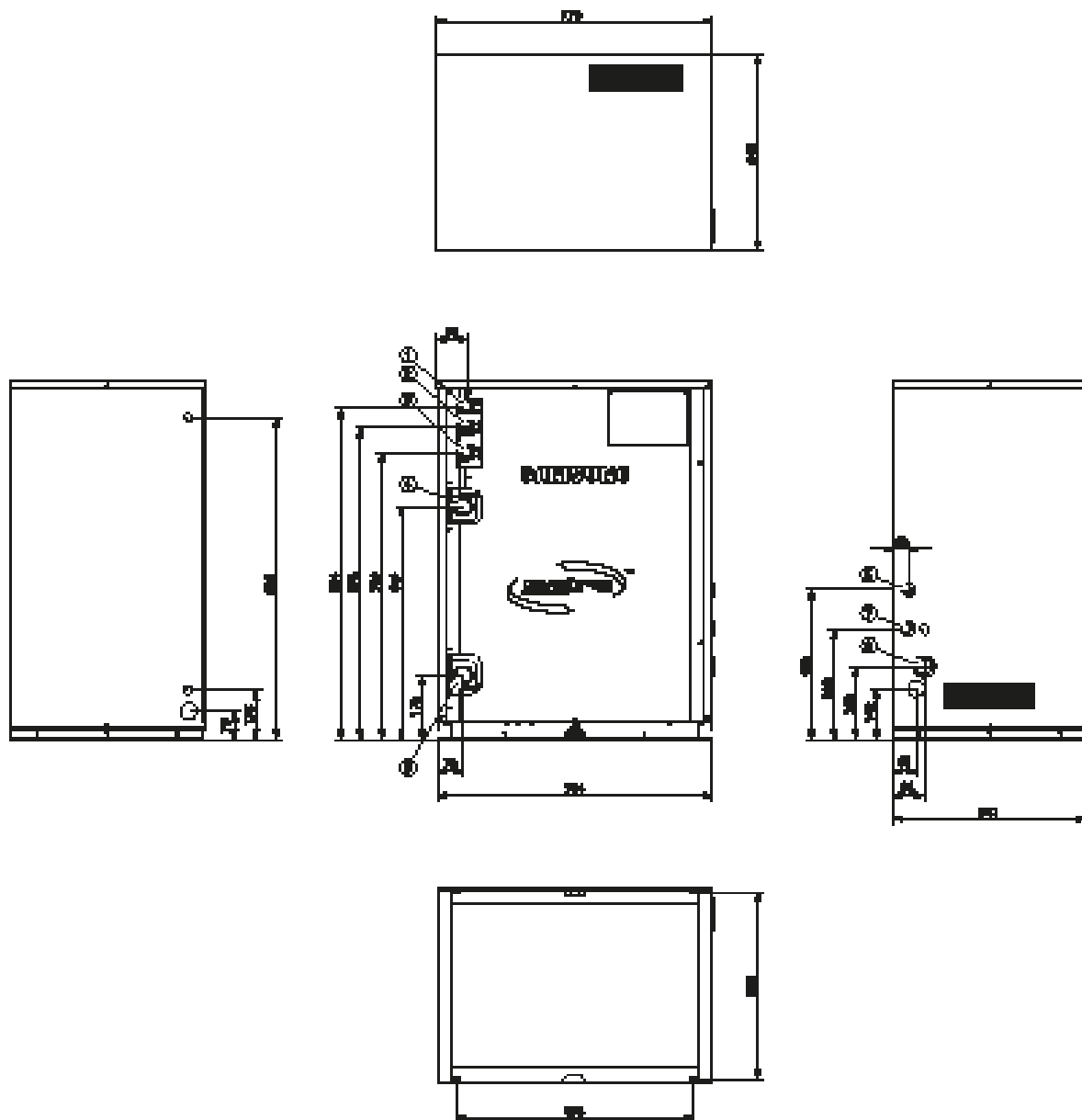


AM200MXWANR/EU	AM300KXWANR/EU
3,4,380-415,50/60	3, 4, 380-415, 50/60
20	30
56	84
63	94,5
36	55
28	42
72,8	109,2
10,77	16,80
10,86	16,88
17,3	26,4
17,4	26,5
7,7	-
32,2	48
40	63
5,2	5
5,8	5,6
Inverter Scroll	SSC Scroll x 2
(4.96) x 2	(6.75)x2
PVE	PVE
6,2	6,2
Plate Heat Exchanger	Plate Heat Exchanger
PT1-1/4	PT2
54	50
190	285
1,96	1,96
15,88	19,05
5/8"	3/4"
28,58	34,92
1 1/8"	1 3/8"
28,58	28,58
1 1/8"	1 1/8"
170 (190)	170 (190)
90	90
500	500
50	50
40	40
50	50
0,75	0,75
F1, F2	F1, F2
R410A	R410A
9,8	-
20,46	11
51	55
52	58
73	75
240	280
1,100 x 1,000 x 545	1100 x 1000 x 545
10.0 ~ 45.0	10.0 ~ 45.0
10.0 ~ 45.0	10.0 ~ 45.0

Dimensional Drawing

DVM S Water

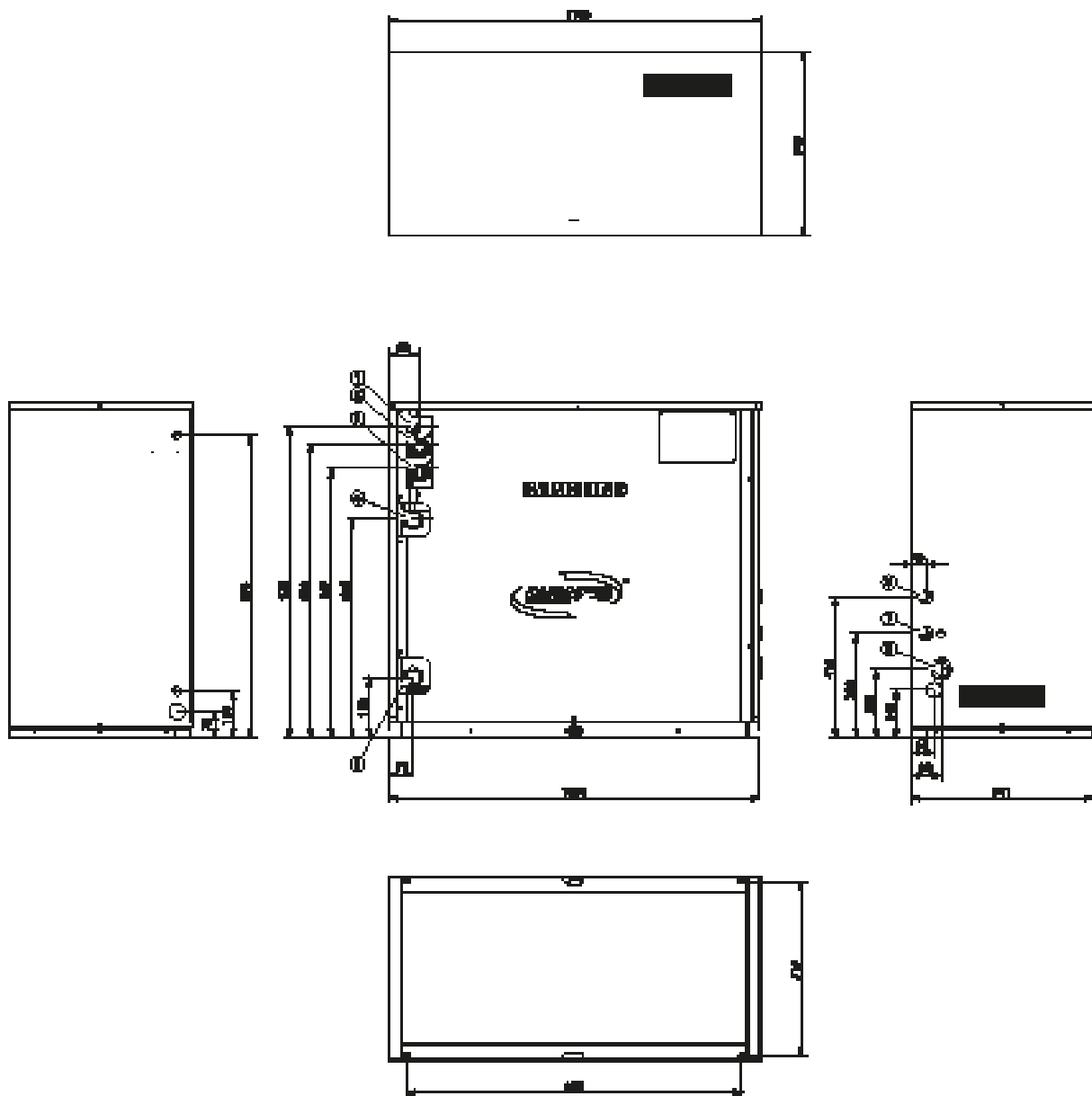
AM080/100/120FXWATT (8, 10, 12HP)



No.	Name	8HP	10HP	12HP
1	Liquid ref. pipe	9.52 (3/8")	9.52 (3/8")	12.70 (1/2")
2	High pressure gas ref. pipe	15.88 (5/8")	19.05 (3/4")	19.05 (3/4")
3	Low pressure gas ref. pipe	19.05 (3/4")	22.22 (7/8")	28.58 (11/8")
4	Water outlet pipe	PT1-1/4		

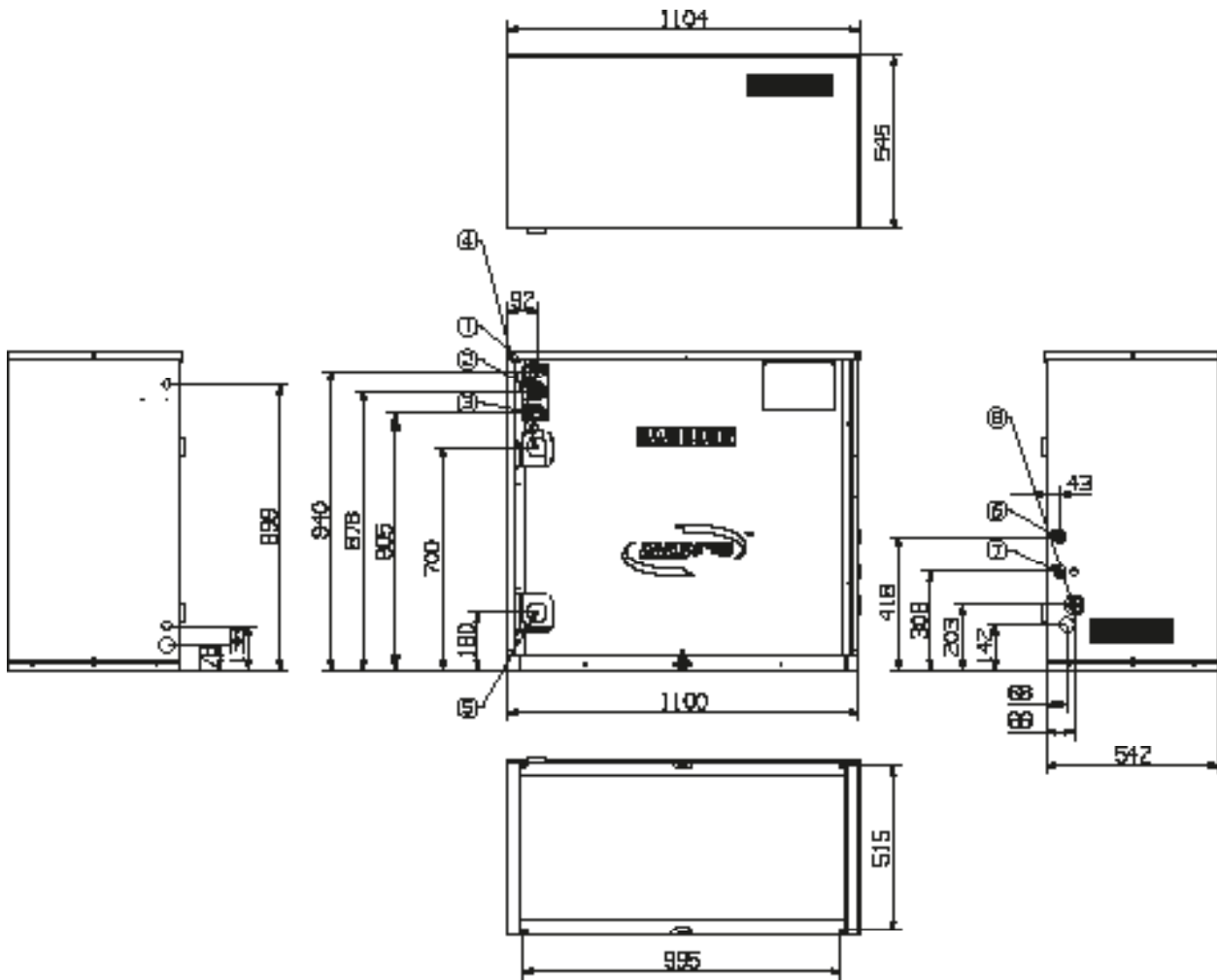
No.	Name	Description	8HP	10HP	12HP
5	Water inlet pipe	PT1-1/4			
6	Communication wiring	-			
7	External contact wiring	-			
8	Power wiring	-			

AM200FXWATT (20HP)



No.	Name	Description
20HP		
1	Liquid ref. pipe	15.88 (5/8")
2	High pressure gas ref. pipe	28.58 (11/8")
3	Low pressure gas ref. pipe	28.58 (11/8")
4	Water outlet pipe	PT1-1/4

No.	Name	Description
20HP		
5	Water inlet pipe	PT1-1/4
6	Communication wiring	-
7	External contact wiring	-
8	Power wiring	-



No.	Name	Description
30HP		
1	Liquid ref. pipe	Ø 19.05 (3/4")
2	High pressure gas ref. pipe	Ø 28.58 (1 1/8")
3	Low pressure gas ref. pipe	Ø 34.92 (1 3/8")
4	Water outlet pipe	PT2

No.	Name	Description
30HP		
5	Water inlet pipe	PT2
6	Communication wiring	-
7	External contact wiring	-
8	Power wiring	-