

VRD W6M WATERHeat Recovery Outdoor Units | 208/230/460V-3Ph-60Hz | **R-32****6 to 34 tons****COMMERCIAL
PRODUCT SPECIFICATIONS (EHB)****ASHRAE
Standard
90.1****MODEL NUMBER IDENTIFICATION****V R D 096 W 6 M - 5 Y****Brand/Family**
V = Variable Refrigerant Flow (VRF)**Unit Type**
P = Heat Pump Outdoor Unit**Major Design Sequence**
D = 4th Generation

Cooling Capacity - Tons	
072 = 6 Tons	264 = 22 Tons
096 = 8 Tons	288 = 24 Tons
120 = 10 Tons	312 = 26 Tons
144 = 12 Tons	336 = 28 Tons
168 = 14 Tons	360 = 30 Tons
192 = 16 Tons	384 = 32 Tons
216 = 18 Tons	408 = 34 Tons
240 = 20 tons	

Voltage
Y = 208/230V-3 phase-60Hz
G = 460V-3 phase-60Hz**Minor Design Sequence**
5 = 5th Revision**Refrigerant Circuits**
M = Multiple Circuits**Refrigerant Type**
6 = R-32**Cooling Efficiency**
W = Water Cooling

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Line-Up

Combination Table

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

System Model						
Capacity	Model code	Number of individual outdoor	6	8	10	16
Ton						
6	VRD072W6M-5Y	1	1			
8	VRD096W6M-5Y	1		1		
10	VRD120W6M-5Y	1			1	
12	VRD144W6M-5Y2	2	2			
14	VRD168W6M-5Y2	2	1	1		
16	VRD192W6M-5Y	1				1
18	VRD216W6M-5Y2	2		1	1	
22	VRD264W6M-5Y2	2	1			1
24	VRD288W6M-5Y2	2		1		1
28	VRD336W6M-5Y3	3	2			1
30	VRD360W6M-5Y3	3	1	1		1
32	VRD384W6M-5Y3	3		2		1

NOTE

- Make sure to use an indoor unit that is compatible with Water-Cooled VRF-GEO.
 - If the total capacity of the connected indoor units exceeds the indicated maximum capacity, cooling and heating capacity of the indoor unit may decrease.
 - Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity.
 $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
 - You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from 0~63.
 If the indoor unit address was assigned from 64~79, E201 error will occur.
 - Maximum 32 Wall-mount type indoor units with EEV (VWMD***S6-5P) can be connected.
 - Do not install MSB for R-410A refrigerant. It is not compatible with R-32 products.
- MSB for R-32, R-410A refrigerant: V*MSBB**HR

Line-Up

Combination Table

VRD Water Source Heat Recovery - Compact type (208~230V)

System Model						
Capacity Ton	Model code	Number of individual outdoor	6	8	10	20
20	VRD240W6M-5Y	1				1
26	VRD312W6M-5Y2	2	1			1
28	VRD336W6M-5Y2	2		1		1
30	VRD360W6M-5Y2	2			1	1
34	VRD408W6M-5Y3	3	1	1		1

NOTE

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 - If the total capacity of the connected indoor units exceeds the indicated maximum capacity, cooling and heating capacity of the indoor unit may decrease.
 - Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity.
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 - Maximum 32 Wall-mount type indoor units with EEV (VWMD***S6-5P) can be connected.
 - Do not install MSB for R-410A refrigerant. It is not compatible with R-32 products.
- MSB for R-32, R-410A refrigerant: V*MSBB**HR

Line-Up

Combination Table

VRD Water Source Heat Recovery - Energy efficiency type (460V)

System Model						
Capacity Ton	Model code	Number of individual outdoor	6	8	10	16
6	VRD072W6M-5G	1	1			
8	VRD096W6M-5G	1		1		
10	VRD120W6M-5G	1			1	
12	VRD144W6M-5G2	2	2			
14	VRD168W6M-5G2	2	1	1		
16	VRD192W6M-5G	1				1
18	VRD216W6M-5G2	2		1	1	
22	VRD264W6M-5G2	2	1			1
24	VRD288W6M-5G2	2		1		1
28	VRD336W6M-5G3	3	2			1
30	VRD360W6M-5G3	3	1	1		1
32	VRD384W6M-5G3	3		2		1

NOTE

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 - If the total capacity of the connected indoor units exceeds the indicated maximum capacity, cooling and heating capacity of the indoor unit may decrease.
 - Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity.
 $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
 - You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from 0~63.
 If the indoor unit address was assigned from 64~79, E201 error will occur.
 - Maximum 32 Wall-mount type indoor units with EEV (VWMD***S6-5P) can be connected.
 - Do not install MSB for R-410A refrigerant. It is not compatible with R-32 products.
- MSB for R-32, R-410A refrigerant: V*MSBB**HR

Line-Up

Combination Table

VRD Water Source Heat Recovery - Compact type (460V)

System Model						
Capacity Ton	Model code	Number of individual outdoor	6	8	10	20
20	VRD240W6M-5G	1				1
26	VRD312W6M-5G2	2	1			1
28	VRD336W6M-5G2	2		1		1
30	VRD360W6M-5G2	2			1	1
34	VRD408W6M-5G3	3	1	1		1

NOTE

- Make sure to use an indoor unit that is compatible with Water-Cooled VRF-GEO.
 - If the total capacity of the connected indoor units exceeds the indicated maximum capacity, cooling and heating capacity of the indoor unit may decrease.
 - Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity.
 $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
 - You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from 0~63.
 If the indoor unit address was assigned from 64~79, E201 error will occur.
 - Maximum 32 Wall-mount type indoor units with EEV (VWMD***S6-5P) can be connected.
 - Do not install MSB for R-410A refrigerant. It is not compatible with R-32 products.
- MSB for R-32, R-410A refrigerant: V*MSBB**HR

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit			-	VRD072W6M-5Y	VRD096W6M-5Y	VRD120W6M-5Y
	Outdoor Unit1			-	-	-	-
	Outdoor Unit2			-	-	-	-
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				6.0	8.0	10.0
	Capacity	Cooling	Nominal	kW	21.1	28.1	35.2
				Btu/h	72,000	96,000	120,000
			Rated	kW	20.22	26.96	33.41
				Btu/h	69,000	92,000	114,000
		Heating	Nominal	kW	23.74	31.65	39.56
				Btu/h	81,000	108,000	135,000
			Rated	kW	22.57	30.19	37.81
				Btu/h	77,000	103,000	129,000
Connectable indoor units	Maximum number of connectable indoor units			EA	12	16	20
	Total capacity of the connected Indoor Units		Min.	Btu/h	36,000	48,000	60,000
			Max.	Btu/h	93,600	124,800	156,000
Power	Power Input	Cooling	Nominal	kW	4.50	7.10	10.40
		Heating	Nominal	kW	3.90	5.80	7.50
	Current Input	Cooling	Nominal	A	13.60	20.30	29.00
		Heating	Nominal	A	11.80	16.90	20.90
	Current	MCA		A	16.00	23.00	30.00
		MOP		A	25	40	50
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	DS4BC5066EVA	DS4BC5066EVA	DS4BC5066EVA
	Quantity			EA	1	1	1
	Type			-	SCROLL_INVERTER	SCROLL_INVERTER	SCROLL_INVERTER
	Output			kW	7.17	7.17	7.17
	Oil	Type		-	POE	POE	POE
Initial Charge		fl oz	37.2	37.2	37.2		
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	80.0	95.0	114.0
				GPM	21.1	25.4	30.1
	Pressure Drop(Set. Nominal)			kPa	22.0	30.0	43.0
				ftAq	7.3	10.0	14.4
	Max Operating Pressure			psi	285	285	285
	Pipe connection	Inlet	Diameter	mm	32	32	32
				in	1-1/4	1-1/4	1-1/4
		Outlet	Diameter	mm	32	32	32
				in	1-1/4	1-1/4	1-1/4
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	9.52	9.52	12.7
				in	3/8	3/8	1/2
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	19.05	22.22	22.22
				in	3/4	7/8	7/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit		-	VRD072W6M-5Y	VRD096W6M-5Y	VRD120W6M-5Y	
	Outdoor Unit1		-	-	-	-	
	Outdoor Unit2		-	-	-	-	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	15.88	19.05	19.05	
			in	5/8	3/4	3/4	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	9.70	10.10	10.60	
Sound Level	Sound Pressure Level	Cooling	dB(A)	48.0	48.0	50.0	
		Heating	dB(A)	51.0	51.0	52.0	
	Sound Power Level	Cooling	dB(A)	70.0	70.0	70.0	
External Dimension	Net Weight		lbs	358.0	358.0	358.0	
	Shipping Weight		lbs	374.0	374.0	374.0	
	Net Dimensions	W x H x D	mm	770 x 1,000 x 545	770 x 1,000 x 545	770 x 1,000 x 545	
			in	30-5/16 x 39-3/8 x 21-1/2	30-5/16 x 39-3/8 x 21-1/2	30-5/16 x 39-3/8 x 21-1/2	
	Shipping Dimensions	W x H x D	mm	840 x 1,200 x 620	840 x 1,200 x 620	840 x 1,200 x 620	
			in	33-1/8 x 47-3/16 x 24-3/8	33-1/8 x 47-3/16 x 24-3/8	33-1/8 x 47-3/16 x 24-3/8	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur.0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit			-	VRD144W6M-5Y2	VRD168W6M-5Y2	VRD192W6M-5Y
	Outdoor Unit1			-	VRD072W6M-5Y	VRD072W6M-5Y	-
	Outdoor Unit2			-	VRD072W6M-5Y	VRD096W6M-5Y	-
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				12.0	14.0	16.0
	Capacity	Cooling	Nominal	kW	42.2	49.2	56.3
				Btu/h	144,000	168,000	192,000
			Rated	kW	40.44	47.18	53.93
				Btu/h	138,000	161,000	184,000
		Heating	Nominal	kW	47.48	55.39	63.30
				Btu/h	162,000	189,000	216,000
			Rated	kW	45.13	52.75	60.37
				Btu/h	154,000	180,000	206,000
Connectable indoor units	Maximum number of connectable indoor units			EA	25	29	33
	Total capacity of the connected Indoor Units		Min.	Btu/h	72,000	84,000	96,000
			Max.	Btu/h	187,200	218,400	249,600
Power	Power Input	Cooling	Nominal	kW	9,000.00	11,600.00	15.40
		Heating	Nominal	kW	7,800.00	9,700.00	11.40
	Current Input	Cooling	Nominal	A	27.20	33.90	39.00
		Heating	Nominal	A	23.60	28.70	28.90
	Current	MCA		A	32.00	39.00	39.60
		MOP		A	50	65	50
	Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate
Base			-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC5066EVAx1)x2	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx1)x1	DS4BC5066EVA
	Quantity			EA	1x2	1x1 + 1x1	2
	Type			-	(SCROLL_INVERTERx1)x2	(SCROLL_INVERTERx1)x1+ (SCROLL_INVERTERx1)x1	SCROLL_INVERTER
	Output			kW	(7.17x1)x2	(7.17x1)x1 + (7.17x1)x1	7.17
	Oil	Type		-	(POEx1)x2	(POEx1)x1 + (POEx1)x1	POE
		Initial Charge		fl oz	(37.2x1)x2	(37.2x1)x1 + (37.2x1)x1	37.2
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	160.0	175.0	190.0
				GPM	42.2	46.5	50.2
	Pressure Drop(Set. Nominal)			kPa	22.0x2	22.0x1 + 30.0x1	54.0
				ftAq	7.3x2	7.3x1 + 10.0x1	18.1
	Max Operating Pressure			psi	570	570	285
	Pipe connection	Inlet	Diameter	mm	32x2	32x1 + 32x1	50
				in	1-1/4x2	1-1/4x1 + 1-1/4x1	2
		Outlet	Diameter	mm	32x2	32x1 + 32x1	50
				in	1-1/4x2	1-1/4x1 + 1-1/4x1	2
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	12.7	12.7
				in	1/2	1/2	1/2
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	22.22	22.22	28.58
				in	7/8	7/8	1-1/8
	High Pressure Gas Pipe	Type		-	Welding	Welding	Welding

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit		-	VRD144W6M-5Y2	VRD168W6M-5Y2	VRD192W6M-5Y	
	Outdoor Unit1		-	VRD072W6M-5Y	VRD072W6M-5Y	-	
	Outdoor Unit2		-	VRD072W6M-5Y	VRD096W6M-5Y	-	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	22.22	22.22	22.22	
			in	7/8	7/8	7/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	19.40	19.80	17.20	
Sound Level	Sound Pressure Level	Cooling	dB(A)	51.0	51.0	51.0	
		Heating	dB(A)	54.0	54.0	52.0	
	Sound Power Level	Cooling	dB(A)	73.0	73.0	73.0	
External Dimension	Net Weight		lbs	358.0x2	358.0x1 + 358.0x1	541.0	
	Shipping Weight		lbs	374.0x2	374.0x1 + 374.0x1	564.0	
	Net Dimensions	W x H x D	mm	(770 x 1,000 x 545) x 2	(770 x 1,000 x 545) x 1 + (770 x 1,000 x 545) x 1	1,100 x 1,000 x 545	
			in	(30-5/16 x 39-3/8 x 21-7/16) x 2	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (30-5/16 x 39-3/8 x 21-7/16) x 1	43-5/16 x 39-3/8 x 21-1/2	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 2	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1	1,170 x 1,200 x 620	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 2	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1	46-1/8 x 47-3/16 x 24-3/8	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
 - Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur.0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit			-	VRD216W6M-5Y2	VRD264W6M-5Y2	VRD288W6M-5Y2
	Outdoor Unit1			-	VRD096W6M-5Y	VRD072W6M-5Y	VRD096W6M-5Y
	Outdoor Unit2			-	VRD120W6M-5Y	VRD192W6M-5Y	VRD192W6M-5Y
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				18.0	22.0	24.0
	Capacity	Cooling	Nominal	kW	63.3	77.4	84.4
				Btu/h	216,000	264,000	288,000
			Rated	kW	60.37	74.15	80.89
				Btu/h	206,000	253,000	276,000
		Heating	Nominal	kW	71.22	87.04	94.96
				Btu/h	243,000	297,000	324,000
			Rated	kW	67.99	82.94	90.56
				Btu/h	232,000	283,000	309,000
Connectable indoor units	Maximum number of connectable indoor units			EA	37	45	49
	Total capacity of the connected Indoor Units		Min.	Btu/h	108,000	132,000	144,000
			Max.	Btu/h	280,800	343,200	374,400
Power	Power Input	Cooling	Nominal	kW	17,500.00	19,900.00	22,500.00
		Heating	Nominal	kW	13,300.00	15,300.00	17,200.00
	Current Input	Cooling	Nominal	A	49.30	52.60	59.30
		Heating	Nominal	A	37.80	40.70	45.80
	Current	MCA		A	53.00	55.60	62.60
		MOP		A	90	75	90
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx1)x1	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1
	Quantity			EA	1x1 + 1x1	1x1 + 2x1	1x1 + 2x1
	Type			-	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x1 + (7.17x1)x1	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	(POEx1)x1 + (POEx1)x1	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x1 + (37.2x1)x1	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	209.0	270.0	285.0
				GPM	55.5	71.3	75.6
	Pressure Drop(Set. Nominal)			kPa	30.0x1 + 43.0x1	22.0x1 + 54.0x1	30.0x1 + 54.0x1
				ftAq	10.0x1 + 14.4x1	7.3x1 + 18.1x1	10.0x1 + 18.1x1
	Max Operating Pressure			psi	570	570	570
	Pipe connection	Inlet	Diameter	mm	32x1 + 32x1	32x1 + 50x1	32x1 + 50x1
				in	1-1/4x1 + 1-1/4x1	1-1/4x1 + 2x1	1-1/4x1 + 2x1
		Outlet	Diameter	mm	32x1 + 32x1	32x1 + 50x1	32x1 + 50x1
in				1-1/4x1 + 1-1/4x1	1-1/4x1 + 2x1	1-1/4x1 + 2x1	
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	12.7	15.88
				in	1/2	1/2	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	28.58	28.58	34.92
				in	1-1/8	1-1/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit		-	VRD216W6M-5Y2	VRD264W6M-5Y2	VRD288W6M-5Y2	
	Outdoor Unit1		-	VRD096W6M-5Y	VRD072W6M-5Y	VRD096W6M-5Y	
	Outdoor Unit2		-	VRD120W6M-5Y	VRD192W6M-5Y	VRD192W6M-5Y	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	22.22	28.58	28.58	
			in	7/8	1-1/8	1-1/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	20.70	26.90	27.30	
Sound Level	Sound Pressure Level	Cooling	dB(A)	52.1	52.8	52.8	
		Heating	dB(A)	54.5	54.5	54.5	
	Sound Power Level	Cooling	dB(A)	73.0	74.8	74.8	
External Dimension	Net Weight		lbs	358.0x1 + 358.0x1	358.0x1 + 541.0x1	358.0x1 + 541.0x1	
	Shipping Weight		lbs	374.0x1 + 374.0x1	374.0x1 + 564.0x1	374.0x1 + 564.0x1	
	Net Dimensions	W x H x D	mm	(770 x 1,000 x 545) x 1 + (770 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	
			in	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (30-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling		Min. ~ Max.	°F	50 ~ 113	50 ~ 113	
	Heating		Min. ~ Max.	°F	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit			-	VRD336W6M-5Y3	VRD360W6M-5Y3	VRD384W6M-5Y3
	Outdoor Unit1			-	VRD072W6M-5Y	VRD072W6M-5Y	VRD096W6M-5Y
	Outdoor Unit2			-	VRD072W6M-5Y	VRD096W6M-5Y	VRD096W6M-5Y
	Outdoor Unit3			-	VRD192W6M-5Y	VRD192W6M-5Y	VRD192W6M-5Y
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				28.0	30.0	32.0
	Capacity	Cooling	Nominal	kW	98.5	105.5	112.5
				Btu/h	336,000	360,000	384,000
			Rated	kW	94.37	101.11	107.85
				Btu/h	322,000	345,000	368,000
		Heating	Nominal	kW	110.78	118.69	126.61
				Btu/h	378,000	405,000	432,000
			Rated	kW	105.51	113.13	120.75
				Btu/h	360,000	386,000	412,000
	Connectable indoor units	Maximum number of connectable indoor units			EA	58	62
Total capacity of the connected Indoor Units		Min.	Btu/h	168,000	180,000	192,000	
		Max.	Btu/h	436,800	468,000	499,200	
Power	Power Input	Cooling	Nominal	kW	24,400.00	27,000.00	29,600.00
		Heating	Nominal	kW	19,200.00	21,100.00	23,000.00
	Current Input	Cooling	Nominal	A	66.20	72.90	79.60
		Heating	Nominal	A	52.50	57.60	62.70
	Current	MCA		A	71.60	78.60	85.60
		MOP		A	100	115	130
Casing	Material	Body		-	EGI steel plate	EGI steel plate	EGI steel plate
		Base		-	EGI steel plate	EGI steel plate	EGI steel plate
Compressor	Model Name			-	(DS4BC5066EVAx1)x2 + (DS4BC5066EVAx2)x1	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1	(DS4BC5066EVAx1)x2 + (DS4BC5066EVAx2)x1
	Quantity			EA	1x2 + 2x1	1x1 + 1x1 + 2x1	1x2 + 2x1
	Type			-	(SCROLL_INVERTERx1)x2 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x2 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x2 + (7.17x2)x1	(7.17x1)x1 + (7.17x1)x1 + (7.17x2)x1	(7.17x1)x2 + (7.17x2)x1
	Oil	Type		-	(POEx1)x2 + (POEx2)x1	(POEx1)x1 + (POEx1)x1 + (POEx2)x1	(POEx1)x2 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x2 + (37.2x2)x1	(37.2x1)x1 + (37.2x1)x1 + (37.2x2)x1	(37.2x1)x2 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	350.0	365.0	380.0
				GPM	92.4	96.7	101.0
	Pressure Drop(Set. Nominal)			kPa	22.0x2 + 54.0x1	22.0x1 + 30.0x1 + 54.0x1	30.0x2 + 54.0x1
				ftAq	7.3x2 + 18.1x1	7.3x1 + 10.0x1 + 18.1x1	10.0x2 + 18.1x1
	Max Operating Pressure			psi	855	855	855
	Pipe connection	Inlet	Diameter	mm	32x2 + 50x1	32x1 + 32x1 + 50x1	32x2 + 50x1
				in	1-1/4x2 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1	1-1/4x2 + 2x1
		Outlet	Diameter	mm	32x2 + 50x1	32x1 + 32x1 + 50x1	32x2 + 50x1
				in	1-1/4x2 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1	1-1/4x2 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	15.88	15.88	15.88
				in	5/8	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	34.92	34.92	34.92
				in	1-3/8	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Model Code	Outdoor Unit		-	VRD336W6M-5Y3	VRD360W6M-5Y3	VRD384W6M-5Y3	
	Outdoor Unit1		-	VRD072W6M-5Y	VRD072W6M-5Y	VRD096W6M-5Y	
	Outdoor Unit2		-	VRD072W6M-5Y	VRD096W6M-5Y	VRD096W6M-5Y	
	Outdoor Unit3		-	VRD192W6M-5Y	VRD192W6M-5Y	VRD192W6M-5Y	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	28.58	34.92	
			in	1-1/8	1-1/8	1-3/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	36.60	37.00	37.40	
Sound Level	Sound Pressure Level	Cooling	dB(A)	54.0	54.0	54.0	
		Heating	dB(A)	56.1	56.1	56.1	
	Sound Power Level	Cooling	dB(A)	76.0	76.0	76.0	
External Dimension	Net Weight		lbs	358.0x2 + 541.0x1	358.0x1 + 358.0x1 + 541.0x1	358.0x2 + 541.0x1	
	Shipping Weight		lbs	374.0x2 + 564.0x1	374.0x1 + 374.0x1 + 564.0x1	374.0x2 + 564.0x1	
	Net Dimensions	W x H x D	mm	(770 x 1,000 x 545) x 2 + (1,100 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 1 + (770 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 2 + (1,100 x 1,000 x 545) x 1	
			in	(30-5/16 x 39-3/8 x 21-7/16) x 2 + (43-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 2 + (43-5/16 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 2 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 2 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 2 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 2 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
 - Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Compact type (208~230V)

Model Code	Outdoor Unit			-	VRD240W6M-5Y	VRD312W6M-5Y2	VRD336W6M-5Y2
	Outdoor Unit1			-	-	VRD072W6M-5Y	VRD096W6M-5Y
	Outdoor Unit2			-	-	VRD240W6M-5Y	VRD240W6M-5Y
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				20.0	26.0	28.0
	Capacity	Cooling	Nominal	kW	70.3	91.4	98.5
				Btu/h	240,000	312,000	336,000
			Rated	kW	66.82	87.04	93.78
				Btu/h	228,000	297,000	320,000
		Heating	Nominal	kW	79.13	102.87	110.78
				Btu/h	270,000	351,000	378,000
			Rated	kW	75.03	97.59	105.21
				Btu/h	256,000	333,000	359,000
Connectable indoor units	Maximum number of connectable indoor units			EA	41	54	58
	Total capacity of the connected Indoor Units		Min.	Btu/h	120,000	156,000	168,000
			Max.	Btu/h	312,000	405,600	436,800
Power	Power Input	Cooling	Nominal	kW	19.80	24.30	26.90
		Heating	Nominal	kW	14.30	18.20	20.10
	Current Input	Cooling	Nominal	A	52.30	65.90	72.60
		Heating	Nominal	A	37.80	49.60	54.70
	Current	MCA		A	66.00	82.00	89.00
		MOP		A	90	115	130
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	DS4BC5066EVA	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1
	Quantity			EA	2	1x1 + 2x1	1x1 + 2x1
	Type			-	SCROLL_INVERTER	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	7.17	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	POE	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	37.2	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	228.0	308.0	323.0
				GPM	60.2	81.3	85.6
	Pressure Drop(Set. Nominal)			kPa	33.0	22.0x1 + 33.0x1	30.0x1 + 33.0x1
				ftAq	11.0	7.3x1 + 11.0x1	10.0x1 + 11.0x1
	Max Operating Pressure			psi	285	570	570
	Pipe connection	Inlet	Diameter	mm	50	32x1 + 50x1	32x1 + 50x1
				in	2	1-1/4x1 + 2x1	1-1/4x1 + 2x1
		Outlet	Diameter	mm	50	32x1 + 50x1	32x1 + 50x1
				in	2	1-1/4x1 + 2x1	1-1/4x1 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	15.88	15.88
				in	1/2	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	28.58	34.92	34.92
				in	1-1/8	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Compact type (208~230V)

Model Code	Outdoor Unit		-	VRD240W6M-5Y	VRD312W6M-5Y2	VRD336W6M-5Y2	
	Outdoor Unit1		-	-	VRD072W6M-5Y	VRD096W6M-5Y	
	Outdoor Unit2		-	-	VRD240W6M-5Y	VRD240W6M-5Y	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	28.58	28.58	
			in	1-1/8	1-1/8	1-1/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	19.40	29.10	29.50	
Sound Level	Sound Pressure Level	Cooling	dB(A)	55.0	55.8	55.8	
		Heating	dB(A)	57.0	58.0	58.0	
	Sound Power Level	Cooling	dB(A)	74.0	75.5	75.5	
External Dimension	Net Weight		lbs	595.0	358.0x1 + 595.0x1	358.0x1 + 595.0x1	
	Shipping Weight		lbs	617.0	374.0x1 + 617.0x1	374.0x1 + 617.0x1	
	Net Dimensions	W x H x D	mm	1,100 x 1,000 x 545	(770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	
			in	43-5/16 x 39-3/8 x 21-1/2	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	1,170 x 1,200 x 620	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	46-1/8 x 47-3/16 x 24-3/8	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling		Min. ~ Max.	°F	50 ~ 113	50 ~ 113	
	Heating		Min. ~ Max.	°F	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Compact type (208~230V)

Model Code	Outdoor Unit			-	VRD360W6M-5Y2	VRD408W6M-5Y3
	Outdoor Unit1			-	VRD120W6M-5Y	VRD072W6M-5Y
	Outdoor Unit2			-	VRD240W6M-5Y	VRD096W6M-5Y
	Outdoor Unit3			-	-	VRD240W6M-5Y
	Outdoor Unit4			-	-	-
Power Supply				Φ # V Hz	3 3 208-230 60	3 3 208-230 60
Mode				-	Heat Recovery	Heat Recovery
Performance	Ton				30.0	34.0
	Capacity	Cooling	Nominal	kW	105.5	119.6
				Btu/h	360,000	408,000
			Rated	kW	100.23	114.00
				Btu/h	342,000	389,000
		Heating	Nominal	kW	118.69	134.52
				Btu/h	405,000	459,000
			Rated	kW	112.83	127.78
				Btu/h	385,000	436,000
Connectable indoor units	Maximum number of connectable indoor units			EA	62	64
	Total capacity of the connected Indoor Units		Min.	Btu/h	180,000	204,000
			Max.	Btu/h	468,000	530,400
Power	Power Input	Cooling	Nominal	kW	30.20	31.40
		Heating	Nominal	kW	21.80	24.00
	Current Input	Cooling	Nominal	A	81.30	86.20
		Heating	Nominal	A	58.70	66.50
	Current	MCA		A	96.00	105.00
		MOP		A	140	155
Casing	Material	Body	-	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1	(DS4BC5066EVAx1)x1 + (DS4BC5066EVAx1)x1 + (DS4BC5066EVAx2)x1
	Quantity			EA	1x1 + 2x1	1x1 + 1x1 + 2x1
	Type			-	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE
	Water Flow Rate			LPM	342.0	403.0
				GPM	90.3	106.7
	Pressure Drop(Set. Nominal)			kPa	43.0x1 + 33.0x1	22.0x1 + 30.0x1 + 33.0x1
				ftAq	14.4x1 + 11.0x1	7.3x1 + 10.0x1 + 11.0x1
	Max Operating Pressure			psi	570	855
	Pipe connection	Inlet	Diameter	mm	32x1 + 50x1	32x1 + 32x1 + 50x1
				in	1-1/4x1 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1
		Outlet	Diameter	mm	32x1 + 50x1	32x1 + 32x1 + 50x1
				in	1-1/4x1 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding
		Diameter		mm	15.88	15.88
				in	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding
		Diameter		mm	34.92	34.92
				in	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Compact type (208~230V)

Model Code	Outdoor Unit		-	VRD360W6M-5Y2	VRD408W6M-5Y3	
	Outdoor Unit1		-	VRD120W6M-5Y	VRD072W6M-5Y	
	Outdoor Unit2		-	VRD240W6M-5Y	VRD096W6M-5Y	
	Outdoor Unit3		-	-	VRD240W6M-5Y	
	Outdoor Unit4		-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	34.92	
			in	1-1/8	1-3/8	
	Heat Insulation		-	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	
		Remark	-	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	
	Factory Charge		lbs	30.00	39.20	
Sound Level	Sound Pressure Level	Cooling	dB(A)	56.2	56.5	
		Heating	dB(A)	58.2	58.8	
	Sound Power Level	Cooling	dB(A)	75.5	76.5	
External Dimension	Net Weight		lbs	358.0x1 + 595.0x1	358.0x1 + 358.0x1 + 595.0x1	
	Shipping Weight		lbs	374.0x1 + 617.0x1	374.0x1 + 374.0x1 + 617.0x1	
	Net Dimensions	W x H x D	mm	(770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	(770 x 1,000 x 545) x 1 + (770 x 1,000 x 545) x 1 + (1,100 x 1,000 x 545) x 1	
			in	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	(30-5/16 x 39-3/8 x 21-7/16) x 1 + (30-5/16 x 39-3/8 x 21-7/16) x 1 + (43-5/16 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit			-	VRD072W6M-5G	VRD096W6M-5G	VRD120W6M-5G
	Outdoor Unit1			-	-	-	-
	Outdoor Unit2			-	-	-	-
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				6.0	8.0	10.0
	Capacity	Cooling	Nominal	kW	21.1	28.1	35.2
				Btu/h	72,000	96,000	120,000
			Rated	kW	20.22	26.96	33.41
				Btu/h	69,000	92,000	114,000
		Heating	Nominal	kW	23.74	31.65	39.56
				Btu/h	81,000	108,000	135,000
			Rated	kW	22.57	30.19	37.81
				Btu/h	77,000	103,000	129,000
	Connectable indoor units	Maximum number of connectable indoor units			EA	12	16
Total capacity of the connected Indoor Units		Min.	Btu/h	36,000	48,000	60,000	
		Max.	Btu/h	93,600	124,800	156,000	
Power	Power Input	Cooling	Nominal	kW	4.50	7.10	10.40
		Heating	Nominal	kW	3.90	5.80	7.50
	Current Input	Cooling	Nominal	A	6.80	10.10	14.50
		Heating	Nominal	A	5.90	8.30	10.50
	Current	MCA		A	10.00	11.00	15.60
		MOP		A	15	15	25
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	DS4BC7066FVA	DS4BC7066FVA	DS4BC7066FVA
	Quantity			EA	1	1	1
	Type			-	SCROLL_INVERTER	SCROLL_INVERTER	SCROLL_INVERTER
	Oil	Output		kW	7.17	7.17	7.17
		Type	-	POE	POE	POE	
Water Side Heat Exchanger		Initial Charge		fl oz	37.2	37.2	37.2
		Type			-	PHE	PHE
	Water Flow Rate			LPM	80.0	95.0	114.0
				GPM	21.1	25.4	30.1
	Pressure Drop(Set. Nominal)			kPa	22.0	30.0	43.0
				ftAq	7.3	10.0	14.4
	Max Operating Pressure			psi	285	285	285
	Pipe connection	Inlet	Diameter	mm	32	32	32
				in	1-1/4	1-1/4	1-1/4
		Outlet	Diameter	mm	32	32	32
				in	1-1/4	1-1/4	1-1/4
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	9.52	9.52	12.7
				in	3/8	3/8	1/2
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	19.05	22.22	22.22
				in	3/4	7/8	7/8
	High Pressure Gas Pipe	Type		-	Welding	Welding	Welding

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit		-	VRD072W6M-5G	VRD096W6M-5G	VRD120W6M-5G	
	Outdoor Unit1		-	-	-	-	
	Outdoor Unit2		-	-	-	-	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	15.88	19.05	19.05	
			in	5/8	3/4	3/4	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	9.70	10.10	10.60	
Sound Level	Sound Pressure Level	Cooling	dB(A)	48.0	48.0	50.0	
		Heating	dB(A)	51.0	51.0	52.0	
	Sound Power Level	Cooling	dB(A)	70.0	70.0	70.0	
External Dimension	Net Weight		lbs	373.0	373.0	373.0	
	Shipping Weight		lbs	389.0	389.0	389.0	
	Net Dimensions	W x H x D	mm	790 x 1,000 x 545	790 x 1,000 x 545	790 x 1,000 x 545	
			in	31-5/16 x 39-3/8 x 21-1/2	31-5/16 x 39-3/8 x 21-1/2	31-5/16 x 39-3/8 x 21-1/2	
	Shipping Dimensions	W x H x D	mm	840 x 1,200 x 620	840 x 1,200 x 620	840 x 1,200 x 620	
			in	33-1/8 x 47-3/16 x 24-3/8	33-1/8 x 47-3/16 x 24-3/8	33-1/8 x 47-3/16 x 24-3/8	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit			-	VRD144W6M-5G2	VRD168W6M-5G2	VRD192W6M-5G
	Outdoor Unit1			-	VRD072W6M-5G	VRD072W6M-5G	-
	Outdoor Unit2			-	VRD072W6M-5G	VRD096W6M-5G	-
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				12.0	14.0	16.0
	Capacity	Cooling	Nominal	kW	42.2	49.2	56.3
				Btu/h	144,000	168,000	192,000
			Rated	kW	40.44	47.18	53.93
				Btu/h	138,000	161,000	184,000
		Heating	Nominal	kW	47.48	55.39	63.30
				Btu/h	162,000	189,000	216,000
			Rated	kW	45.13	52.75	60.37
				Btu/h	154,000	180,000	206,000
Connectable indoor units	Maximum number of connectable indoor units			EA	25	29	33
	Total capacity of the connected Indoor Units		Min.	Btu/h	72,000	84,000	96,000
			Max.	Btu/h	187,200	218,400	249,600
Power	Power Input	Cooling	Nominal	kW	9.00	11.60	15.40
		Heating	Nominal	kW	7.80	9.70	11.40
	Current Input	Cooling	Nominal	A	13.60	16.90	21.50
		Heating	Nominal	A	11.80	14.20	15.90
	Current	MCA		A	20.00	21.00	26.20
		MOP		A	30	30	35
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC7066FVAx1)x2	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx1)x1	DS4BC7066FVA
	Quantity			EA	1x2	1x1 + 1x1	2
	Type			-	(SCROLL_INVERTERx1)x2	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1	SCROLL_INVERTER
	Output			kW	(7.17x1)x2	(7.17x1)x1 + (7.17x1)x1	7.17
	Oil	Type		-	(POEx1)x2	(POEx1)x1 + (POEx1)x1	POE
		Initial Charge		fl oz	(37.2x1)x2	(37.2x1)x1 + (37.2x1)x1	37.2
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	160.0	175.0	190.0
				GPM	42.2	46.5	50.2
	Pressure Drop(Set. Nominal)			kPa	22.0x2	22.0x1 + 30.0x1	54.0
				ftAq	7.3x2	7.3x1 + 10.0x1	18.1
	Max Operating Pressure			psi	570	570	285
	Pipe connection	Inlet	Diameter	mm	32x2	32x1 + 32x1	50
				in	1-1/4x2	1-1/4x1 + 1-1/4x1	2
		Outlet	Diameter	mm	32x2	32x1 + 32x1	50
				in	1-1/4x2	1-1/4x1 + 1-1/4x1	2
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	12.7	12.7
				in	1/2	1/2	1/2
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	22.22	22.22	28.58
				in	7/8	7/8	1-1/8
	High Pressure Gas Pipe	Type		-	Welding	Welding	Welding

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit		-	VRD144W6M-5G2	VRD168W6M-5G2	VRD192W6M-5G	
	Outdoor Unit1		-	VRD072W6M-5G	VRD072W6M-5G	-	
	Outdoor Unit2		-	VRD072W6M-5G	VRD096W6M-5G	-	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	22.22	22.22	22.22	
			in	7/8	7/8	7/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	19.40	19.80	17.20	
Sound Level	Sound Pressure Level	Cooling	dB(A)	51.0	51.0	51.0	
		Heating	dB(A)	54.0	54.0	52.0	
	Sound Power Level	Cooling	dB(A)	73.0	73.0	73.0	
External Dimension	Net Weight		lbs	373.0x2	373.0x1 + 373.0x1	557.0	
	Shipping Weight		lbs	389.0x2	389.0x1 + 389.0x1	579.0	
	Net Dimensions	W x H x D	mm	(790 x 1,000 x 545) x 2	(790 x 1,000 x 545) x1 + (790 x 1,000 x 545) x 1	1,120 x 1,000 x 545	
			in	(31-1/8 x 39-3/8 x 21-7/16) x 2	(31-1/8 x 39-3/8 x 21-7/16) x1 + (31-1/8 x 39-3/8 x 21-7/16) x1	44-1/8 x 39-3/8 x 21-1/2	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 2	(840 x 1,200 x 620) x1 + (840 x 1,200 x 620) x1	1,170 x 1,200 x 620	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 2	(33-1/16 x 47-1/4 x 24-7/16) x1 + (33-1/16 x 47-1/4 x 24-7/16) x1	46-1/8 x 47-3/16 x 24-3/8	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
 - Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit			-	VRD216W6M-5G2	VRD264W6M-5G2	VRD288W6M-5G2
	Outdoor Unit1			-	VRD096W6M-5G	VRD072W6M-5G	VRD096W6M-5G
	Outdoor Unit2			-	VRD120W6M-5G	VRD192W6M-5G	VRD192W6M-5G
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				18.0	22.0	24.0
	Capacity	Cooling	Nominal	kW	63.3	77.4	84.4
				Btu/h	216,000	264,000	288,000
			Rated	kW	60.37	74.15	80.89
				Btu/h	206,000	253,000	276,000
		Heating	Nominal	kW	71.22	87.04	94.96
				Btu/h	243,000	297,000	324,000
			Rated	kW	67.99	82.94	90.56
				Btu/h	232,000	283,000	309,000
Connectable indoor units	Maximum number of connectable indoor units			EA	37	45	49
	Total capacity of the connected Indoor Units		Min.	Btu/h	108,000	132,000	144,000
			Max.	Btu/h	280,800	343,200	374,400
Power	Power Input	Cooling	Nominal	kW	17.50	19.90	22.50
		Heating	Nominal	kW	13.30	15.30	17.20
	Current Input	Cooling	Nominal	A	24.60	28.30	31.60
		Heating	Nominal	A	18.80	21.80	24.20
	Current	MCA		A	26.60	36.20	37.20
		MOP		A	40	50	50
	Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate
Base			-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx1)x1	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1
	Quantity			EA	1x1 + 1x1	1x1 + 2x1	1x1 + 2x1
	Type			-	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x1 + (7.17x1)x1	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	(POEx1)x1 + (POEx1)x1	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x1 + (37.2x1)x1	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	209.0	270.0	285.0
				GPM	55.5	71.3	75.6
	Pressure Drop(Set. Nominal)			kPa	30.0x1 + 43.0x1	22.0x1 + 54.0x1	30.0x1 + 54.0x1
				ftAq	10.0x1 + 14.4x1	7.3x1 + 18.1x1	10.0x1 + 18.1x1
	Max Operating Pressure			psi	570	570	570
	Pipe connection	Inlet	Diameter	mm	32x1 + 32x1	32x1 + 50x1	32x1 + 50x1
				in	1-1/4x1 + 1-1/4x1	1-1/4x1 + 2x1	1-1/4x1 + 2x1
		Outlet	Diameter	mm	32x1 + 32x1	32x1 + 50x1	32x1 + 50x1
				in	1-1/4x1 + 1-1/4x1	1-1/4x1 + 2x1	1-1/4x1 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	12.7	15.88
				in	1/2	1/2	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	28.58	28.58	34.92
				in	1-1/8	1-1/8	1-3/8
	High Pressure Gas Pipe	Type		-	Welding	Welding	Welding

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit		-	VRD216W6M-5G2	VRD264W6M-5G2	VRD288W6M-5G2	
	Outdoor Unit1		-	VRD096W6M-5G	VRD072W6M-5G	VRD096W6M-5G	
	Outdoor Unit2		-	VRD120W6M-5G	VRD192W6M-5G	VRD192W6M-5G	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	22.22	28.58	28.58	
			in	7/8	1-1/8	1-1/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	20.70	26.90	27.30	
Sound Level	Sound Pressure Level	Cooling	dB(A)	52.1	52.8	52.8	
		Heating	dB(A)	54.5	54.5	54.5	
	Sound Power Level	Cooling	dB(A)	73.0	74.8	74.8	
External Dimension	Net Weight		lbs	373.0x1 + 373.0x1	373.0x1 + 557.0x1	373.0x1 + 557.0x1	
	Shipping Weight		lbs	389.0x1 + 389.0x1	389.0x1 + 579.0x1	389.0x1 + 579.0x1	
	Net Dimensions	W x H x D	mm	(790 x 1,000 x 545) x 1 + (790 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	
			in	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (31-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit			-	VRD336W6M-5G3	VRD360W6M-5G3	VRD384W6M-5G3
	Outdoor Unit1			-	VRD072W6M-5G	VRD072W6M-5G	VRD096W6M-5G
	Outdoor Unit2			-	VRD072W6M-5G	VRD096W6M-5G	VRD096W6M-5G
	Outdoor Unit3			-	VRD192W6M-5G	VRD192W6M-5G	VRD192W6M-5G
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				28.0	30.0	32.0
	Capacity	Cooling	Nominal	kW	98.5	105.5	112.5
				Btu/h	336,000	360,000	384,000
			Rated	kW	94.37	101.11	107.85
				Btu/h	322,000	345,000	368,000
		Heating	Nominal	kW	110.78	118.69	126.61
				Btu/h	378,000	405,000	432,000
			Rated	kW	105.51	113.13	120.75
				Btu/h	360,000	386,000	412,000
	Connectable indoor units	Maximum number of connectable indoor units			EA	58	62
Total capacity of the connected Indoor Units		Min.	Btu/h	168,000	180,000	192,000	
		Max.	Btu/h	436,800	468,000	499,200	
Power	Power Input	Cooling	Nominal	kW	24.40	27.00	29.60
		Heating	Nominal	kW	19.20	21.10	23.00
	Current Input	Cooling	Nominal	A	35.10	38.40	41.70
		Heating	Nominal	A	27.70	30.10	32.50
	Current	MCA		A	46.20	47.20	48.20
		MOP		A	65	65	65
Casing	Material	Body		-	EGI steel plate	EGI steel plate	EGI steel plate
		Base		-	EGI steel plate	EGI steel plate	EGI steel plate
Compressor	Model Name			-	(DS4BC7066FVAx1)x2 + (DS4BC7066FVAx2)x1	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1	(DS4BC7066FVAx1)x2 + (DS4BC7066FVAx2)x1
	Quantity			EA	1x2 + 2x1	1x1 + 1x1 + 2x1	1x2 + 2x1
	Type			-	(SCROLL_INVERTERx1)x2 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x2 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x2 + (7.17x2)x1	(7.17x1)x1 + (7.17x1)x1 + (7.17x2)x1	(7.17x1)x2 + (7.17x2)x1
	Oil	Type		-	(POEx1)x2 + (POEx2)x1	(POEx1)x1 + (POEx1)x1 + (POEx2)x1	(POEx1)x2 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x2 + (37.2x2)x1	(37.2x1)x1 + (37.2x1)x1 + (37.2x2)x1	(37.2x1)x2 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	350.0	365.0	380.0
				GPM	92.4	96.7	101.0
	Pressure Drop(Set. Nominal)			kPa	22.0x2 + 54.0x1	22.0x1 + 30.0x1 + 54.0x1	30.0x2 + 54.0x1
				ftAq	7.3x2 + 18.1x1	7.3x1 + 10.0x1 + 18.1x1	10.0x2 + 18.1x1
	Max Operating Pressure			psi	855	855	855
	Pipe connection	Inlet	Diameter	mm	32x2 + 50x1	32x1 + 32x1 + 50x1	32x2 + 50x1
				in	1-1/4x2 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1	1-1/4x2 + 2x1
		Outlet	Diameter	mm	32x2 + 50x1	32x1 + 32x1 + 50x1	32x2 + 50x1
				in	1-1/4x2 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1	1-1/4x2 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	15.88	15.88	15.88
				in	5/8	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	34.92	34.92	34.92
				in	1-3/8	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Model Code	Outdoor Unit		-	VRD336W6M-5G3	VRD360W6M-5G3	VRD384W6M-5G3	
	Outdoor Unit1		-	VRD072W6M-5G	VRD072W6M-5G	VRD096W6M-5G	
	Outdoor Unit2		-	VRD072W6M-5G	VRD096W6M-5G	VRD096W6M-5G	
	Outdoor Unit3		-	VRD192W6M-5G	VRD192W6M-5G	VRD192W6M-5G	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	28.58	34.92	
			in	1-1/8	1-1/8	1-3/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	36.60	37.00	37.40	
Sound Level	Sound Pressure Level	Cooling	dB(A)	54.0	54.0	54.0	
		Heating	dB(A)	56.1	56.1	56.1	
	Sound Power Level	Cooling	dB(A)	76.0	76.0	76.0	
External Dimension	Net Weight		lbs	373.0x2 + 557.0x1	373.0x1 + 373.0x1 + 557.0x1	373.0x2 + 557.0x1	
	Shipping Weight		lbs	389.0x2 + 579.0x1	389.0x1 + 389.0x1 + 579.0x1	389.0x2 + 579.0x1	
	Net Dimensions	W x H x D	mm	(790 x 1,000 x 545) x 2 + (1,120 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 1 + (790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 2 + (1,120 x 1,000 x 545) x 1	
			in	(31-1/8 x 39-3/8 x 21-7/16) x 2 + (44-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 2 + (44-1/8 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 2 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 2 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 2 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 2 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
 - Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
 - Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
 - Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Compact type (460V)

Model Code	Outdoor Unit			-	VRD240W6M-5G	VRD312W6M-5G2	VRD336W6M-5G2
	Outdoor Unit1			-	-	VRD072W6M-5G	VRD096W6M-5G
	Outdoor Unit2			-	-	VRD240W6M-5G	VRD240W6M-5G
	Outdoor Unit3			-	-	-	-
	Outdoor Unit4			-	-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	Ton				20.0	26.0	28.0
	Capacity	Cooling	Nominal	kW	70.3	91.4	98.5
				Btu/h	240,000	312,000	336,000
			Rated	kW	66.82	87.04	93.78
				Btu/h	228,000	297,000	320,000
		Heating	Nominal	kW	79.13	102.87	110.78
				Btu/h	270,000	351,000	378,000
			Rated	kW	75.03	97.59	105.21
				Btu/h	256,000	333,000	359,000
Connectable indoor units	Maximum number of connectable indoor units			EA	41	54	58
	Total capacity of the connected Indoor Units		Min.	Btu/h	120,000	156,000	168,000
			Max.	Btu/h	312,000	405,600	436,800
Power	Power Input	Cooling	Nominal	kW	19.80	24.30	26.90
		Heating	Nominal	kW	14.30	18.20	20.10
	Current Input	Cooling	Nominal	A	27.60	34.40	37.70
		Heating	Nominal	A	19.90	25.80	28.20
	Current	MCA		A	33.00	43.00	44.00
		MOP		A	45	60	60
Casing	Material	Body	-	EGI steel plate	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	DS4BC7066FVA	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1
	Quantity			EA	2	1x1 + 2x1	1x1 + 2x1
	Type			-	SCROLL_INVERTER	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	7.17	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	POE	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	37.2	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE	PHE
	Water Flow Rate			LPM	228.0	308.0	323.0
				GPM	60.2	81.3	85.6
	Pressure Drop(Set. Nominal)			kPa	33.0	22.0x1 + 33.0x1	30.0x1 + 33.0x1
				ftAq	11.0	7.3x1 + 11.0x1	10.0x1 + 11.0x1
	Max Operating Pressure			psi	285	570	570
	Pipe connection	Inlet	Diameter	mm	50	32x1 + 50x1	32x1 + 50x1
				in	2	1-1/4x1 + 2x1	1-1/4x1 + 2x1
		Outlet	Diameter	mm	50	32x1 + 50x1	32x1 + 50x1
				in	2	1-1/4x1 + 2x1	1-1/4x1 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	12.7	15.88	15.88
				in	1/2	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding	Welding
		Diameter		mm	28.58	34.92	34.92
				in	1-1/8	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Compact type (460V)

Model Code	Outdoor Unit		-	VRD240W6M-5G	VRD312W6M-5G2	VRD336W6M-5G2	
	Outdoor Unit1		-	-	VRD072W6M-5G	VRD096W6M-5G	
	Outdoor Unit2		-	-	VRD240W6M-5G	VRD240W6M-5G	
	Outdoor Unit3		-	-	-	-	
	Outdoor Unit4		-	-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	28.58	28.58	
			in	1-1/8	1-1/8	1-1/8	
	Heat Insulation		-	All Pipes	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	18	
		Remark	-	F1,F2	F1,F2	F1,F2	
Refrigerant	Type		-	R32	R32	R32	
	Factory Charge		lbs	19.40	29.10	29.50	
Sound Level	Sound Pressure Level	Cooling	dB(A)	55.0	55.8	55.8	
		Heating	dB(A)	57.0	58.0	58.0	
	Sound Power Level	Cooling	dB(A)	74.0	75.5	75.5	
External Dimension	Net Weight		lbs	610.0	373.0x1 + 610.0x1	373.0x1 + 610.0x1	
	Shipping Weight		lbs	632.0	389.0x1 + 632.0x1	389.0x1 + 632.0x1	
	Net Dimensions	W x H x D	mm	1,120 x 1,000 x 545	(790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	
			in	44-1/8 x 39-3/8 x 21-1/2	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	1,170 x 1,200 x 620	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	46-1/8 x 47-3/16 x 24-3/8	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Specification

VRD Water Source Heat Recovery - Compact type (460V)

Model Code	Outdoor Unit			-	VRD360W6M-5G2	VRD408W6M-5G3
	Outdoor Unit1			-	VRD120W6M-5G	VRD072W6M-5G
	Outdoor Unit2			-	VRD240W6M-5G	VRD096W6M-5G
	Outdoor Unit3			-	-	VRD240W6M-5G
	Outdoor Unit4			-	-	-
Power Supply				Φ # V Hz	3 3 460 60	3 3 460 60
Mode				-	Heat Recovery	Heat Recovery
Performance	Ton				30.0	34.0
	Capacity	Cooling	Nominal	kW	105.5	119.6
				Btu/h	360,000	408,000
			Rated	kW	100.23	114.00
				Btu/h	342,000	389,000
		Heating	Nominal	kW	118.69	134.52
				Btu/h	405,000	459,000
			Rated	kW	112.83	127.78
				Btu/h	385,000	436,000
Connectable indoor units	Maximum number of connectable indoor units			EA	62	64
	Total capacity of the connected Indoor Units		Min.	Btu/h	180,000	204,000
			Max.	Btu/h	468,000	530,400
Power	Power Input	Cooling	Nominal	kW	30.20	31.40
		Heating	Nominal	kW	21.80	24.00
	Current Input	Cooling	Nominal	A	42.10	44.50
		Heating	Nominal	A	30.40	34.10
	Current	MCA		A	48.60	54.00
		MOP		A	70	75
Casing	Material	Body	-	EGI steel plate	EGI steel plate	
		Base	-	EGI steel plate	EGI steel plate	
Compressor	Model Name			-	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1	(DS4BC7066FVAx1)x1 + (DS4BC7066FVAx1)x1 + (DS4BC7066FVAx2)x1
	Quantity			EA	1x1 + 2x1	1x1 + 1x1 + 2x1
	Type			-	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1	(SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx1)x1 + (SCROLL_INVERTERx2)x1
	Output			kW	(7.17x1)x1 + (7.17x2)x1	(7.17x1)x1 + (7.17x1)x1 + (7.17x2)x1
	Oil	Type		-	(POEx1)x1 + (POEx2)x1	(POEx1)x1 + (POEx1)x1 + (POEx2)x1
		Initial Charge		fl oz	(37.2x1)x1 + (37.2x2)x1	(37.2x1)x1 + (37.2x1)x1 + (37.2x2)x1
Water Side Heat Exchanger	Type			-	PHE	PHE
	Water Flow Rate			LPM	342.0	403.0
				GPM	90.3	106.7
	Pressure Drop(Set. Nominal)			kPa	43.0x1 + 33.0x1	22.0x1 + 30.0x1 + 33.0x1
				ftAq	14.4x1 + 11.0x1	7.3x1 + 10.0x1 + 11.0x1
	Max Operating Pressure			psi	570	855
	Pipe connection	Inlet	Diameter	mm	32x1 + 50x1	32x1 + 32x1 + 50x1
				in	1-1/4x1 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1
		Outlet	Diameter	mm	32x1 + 50x1	32x1 + 32x1 + 50x1
				in	1-1/4x1 + 2x1	1-1/4x1 + 1-1/4x1 + 2x1
Piping Connections	Liquid Pipe	Type		-	Welding	Welding
		Diameter		mm	15.88	15.88
				in	5/8	5/8
	Gas Pipe	Type		-	Welding	Welding
		Diameter		mm	34.92	34.92
				in	1-3/8	1-3/8
High Pressure Gas Pipe	Type		-	Welding	Welding	

Specification

VRD Water Source Heat Recovery - Compact type (460V)

Model Code	Outdoor Unit		-	VRD360W6M-5G2	VRD408W6M-5G3	
	Outdoor Unit1		-	VRD120W6M-5G	VRD072W6M-5G	
	Outdoor Unit2		-	VRD240W6M-5G	VRD096W6M-5G	
	Outdoor Unit3		-	-	VRD240W6M-5G	
	Outdoor Unit4		-	-	-	
Piping Connections	High Pressure Gas Pipe	Diameter	mm	28.58	34.92	
			in	1-1/8	1-3/8	
	Heat Insulation		-	All Pipes	All Pipes	
	Total piping length (System)		Max.	ft	1,640	1,640
	Piping length (1st Branch-IDU)		Max.	ft	295	295
	Piping length (ODU-IDU)		Max.	ft	558	558
	Piping length (ODU-IDU)	Equivalent	Max.	ft	623	623
	Level difference (IDU-IDU)		Max.	ft	164	164
	Level difference (ODU in highest position)		Max.	ft	164	164
	Level difference (IDU in highest position)		Max.	ft	131	131
Wiring Connection	Transmissi on Cable	Min.	AWG	18	18	
		Remark	-	F1, F2	F1, F2	
Refrigerant	Type		-	R32	R32	
	Factory Charge		lbs	30.00	39.20	
Sound Level	Sound Pressure Level	Cooling	dB(A)	56.2	56.5	
		Heating	dB(A)	58.2	58.8	
	Sound Power Level	Cooling	dB(A)	75.5	76.5	
External Dimension	Net Weight		lbs	373.0x1 + 610.0x1	373.0x1 + 373.0x1 + 610.0x1	
	Shipping Weight		lbs	389.0x1 + 632.0x1	389.0x1 + 389.0x1 + 632.0x1	
	Net Dimensions	W x H x D	mm	(790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	(790 x 1,000 x 545) x 1 + (790 x 1,000 x 545) x 1 + (1,120 x 1,000 x 545) x 1	
			in	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	(31-1/8 x 39-3/8 x 21-7/16) x 1 + (31-1/8 x 39-3/8 x 21-7/16) x 1 + (44-1/8 x 39-3/8 x 21-7/16) x 1	
	Shipping Dimensions	W x H x D	mm	(840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	(840 x 1,200 x 620) x 1 + (840 x 1,200 x 620) x 1 + (1,170 x 1,200 x 620) x 1	
			in	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	(33-1/16 x 47-1/4 x 24-7/16) x 1 + (33-1/16 x 47-1/4 x 24-7/16) x 1 + (46-1/16 x 47-1/4 x 24-7/16) x 1	
Operating Water Temp. Range	Cooling	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	
	Heating	Min. ~ Max.	°F	50 ~ 113	50 ~ 113	

NOTE

- Specification may be subject to change without prior notice.
- Nominal capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80°F(26.7°C) DB, 67°F(19.4°C) WB / Inlet water temperature : 85°F(29.4°C)
- Heating : Indoor temperature : 70°F(21.1°C) DB, 60°F(15.6°C) WB / Inlet water temperature : 68°F(20°C)
- Rated capacities are based on (Equivalent refrigerant piping : 25ft(7.5m), Level differences : 0ft(0m)
- Cooling : Indoor temperature : 80.6°F(27°C) DB, 66.2°F(19°C) WB / Inlet water temperature : 86°F(30°C)
- Heating : Indoor temperature : 68°F(20°C) DB, 59°F(15°C) WB / Inlet water temperature : 68°F(20°C)
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20uPa
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level
- Reference power : 1pW
- Measured according to ISO 3741
- Sound values of multi combination are theoretical values based on sound results of individual installed units.
- These products contain R32 which is fluorinated greenhouse gas.
- Total capacity of the connected indoor units can be allowed from 50% to 130% of the total outdoor unit capacity. $0.5 \times \Sigma(\text{Outdoor unit capacity}) \leq \text{Total capacity of the connected indoor units} \leq 1.3 \times \Sigma(\text{Outdoor unit capacity})$
- You can connect maximum 64 indoor units to the outdoor unit. Maximum quantity of connectable indoor unit is set to 64 since outdoor unit only support up to 64 communication address. Indoor unit address can be assigned from indoor unit address was assigned from 64~79, E201 error will occur. 0~63.
- If the indoor unit address was assigned from 64~79, E201 error will occur.

Summary Table

VRD Water Source Heat Recovery - Energy efficiency type (208~230V)

Electric Characteristics

Capacity Ton	Model Code	Power Supply		Module #1				Module #2				Module #3			
				RLA		Current(A)		RLA		Current(A)		RLA		Current(A)	
		Hz	Voltage	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP
6.0	VRD072W6M-5Y	60	208-230	12.7	-	16.0	25.0	-	-	-	-	-	-	-	-
8.0	VRD096W6M-5Y	60	208-230	18.3	-	23.0	40.0	-	-	-	-	-	-	-	-
10.0	VRD120W6M-5Y	60	208-230	23.9	-	30.0	50.0	-	-	-	-	-	-	-	-
12.0	VRD144W6M-5Y2	60	208-230	12.7	-	16.0	25.0	12.7	-	16.0	25.0	-	-	-	-
14.0	VRD168W6M-5Y2	60	208-230	12.7	-	16.0	25.0	18.3	-	23.0	40.0	-	-	-	-
16.0	VRD192W6M-5Y	60	208-230	17.5	17.5	39.6	50.0	-	-	-	-	-	-	-	-
18.0	VRD216W6M-5Y2	60	208-230	18.3	-	23.0	40.0	23.9	-	30.0	50.0	-	-	-	-
22.0	VRD264W6M-5Y2	60	208-230	12.7	-	16.0	25.0	17.5	17.5	39.6	50.0	-	-	-	-
24.0	VRD288W6M-5Y2	60	208-230	18.3	-	23.0	40.0	17.5	17.5	39.6	50.0	-	-	-	-
28.0	VRD336W6M-5Y3	60	208-230	12.7	-	16.0	25.0	12.7	-	16.0	25.0	17.5	17.5	39.6	50.0
30.0	VRD360W6M-5Y3	60	208-230	12.7	-	16.0	25.0	18.3	-	23.0	40.0	17.5	17.5	39.6	50.0
32.0	VRD384W6M-5Y3	60	208-230	18.3	-	23.0	40.0	18.3	-	23.0	40.0	17.5	17.5	39.6	50.0

NOTE

- MCA : Minimum circuit amperes (A)
- MOP : Maximum Overcurrent Protective Device (A)
- RLA : Rated Load Ampere
- Select wire size based on the value of MCA

Summary Table

VRD Water Source Heat Recovery - Compact type (208~230V)

Electric Characteristics

Capacity	Model Code	Power Supply		Module #1				Module #2				Module #3			
				RLA		Current(A)		RLA		Current(A)		RLA		Current(A)	
Ton		Hz	Voltage	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP
6.0	VRD072W6M-5Y	60	208-230	12.7	-	16.0	25.0	-	-	-	-	-	-	-	-
8.0	VRD096W6M-5Y	60	208-230	18.3	-	23.0	40.0	-	-	-	-	-	-	-	-
10.0	VRD120W6M-5Y	60	208-230	23.9	-	30.0	50.0	-	-	-	-	-	-	-	-
20.0	VRD240W6M-5Y	60	208-230	29.3	29.3	66.0	90.0	-	-	-	-	-	-	-	-
26.0	VRD312W6M-5Y2	60	208-230	12.7	-	16.0	25.0	29.3	29.3	66.0	90.0	-	-	-	-
28.0	VRD336W6M-5Y2	60	208-230	18.3	-	23.0	40.0	29.3	29.3	66.0	90.0	-	-	-	-
30.0	VRD360W6M-5Y2	60	208-230	23.9	-	30.0	50.0	29.3	29.3	66.0	90.0	-	-	-	-
34.0	VRD408W6M-5Y3	60	208-230	12.7	-	16.0	25.0	18.3	-	23.0	40.0	29.3	29.3	66.0	90.0

NOTE

- MCA : Minimum circuit amperes (A)
- MOP : Maximum Overcurrent Protective Device (A)
- RLA : Rated Load Ampere
- Select wire size based on the value of MCA

Summary Table

VRD Water Source Heat Recovery - Energy efficiency type (460V)

Electric Characteristics

Capacity	Model Code	Power Supply		Module #1				Module #2				Module #3			
				RLA		Current(A)		RLA		Current(A)		RLA		Current(A)	
Ton		Hz	Voltage	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP
6.0	VRD072W6M-5G	60	460	7.9	-	10.0	15.0	-	-	-	-	-	-	-	-
8.0	VRD096W6M-5G	60	460	8.7	-	11.0	15.0	-	-	-	-	-	-	-	-
10.0	VRD120W6M-5G	60	460	12.4	-	15.6	25.0	-	-	-	-	-	-	-	-
12.0	VRD144W6M-5G2	60	460	7.9	-	10.0	15.0	7.9	-	10.0	15.0	-	-	-	-
14.0	VRD168W6M-5G2	60	460	7.9	-	10.0	15.0	8.7	-	11.0	15.0	-	-	-	-
16.0	VRD192W6M-5G	60	460	11.5	11.5	26.2	35.0	-	-	-	-	-	-	-	-
18.0	VRD216W6M-5G2	60	460	8.7	-	11.0	15.0	12.4	-	15.6	25.0	-	-	-	-
22.0	VRD264W6M-5G2	60	460	7.9	-	10.0	15.0	11.5	11.5	26.2	35.0	-	-	-	-
24.0	VRD288W6M-5G2	60	460	8.7	-	11.0	15.0	11.5	11.5	26.2	35.0	-	-	-	-
28.0	VRD336W6M-5G3	60	460	7.9	-	10.0	15.0	7.9	-	10.0	15.0	11.5	11.5	26.2	35.0
30.0	VRD360W6M-5G3	60	460	7.9	-	10.0	15.0	8.7	-	11.0	15.0	11.5	11.5	26.2	35.0
32.0	VRD384W6M-5G3	60	460	8.7	-	11.0	15.0	8.7	-	11.0	15.0	11.5	11.5	26.2	35.0

NOTE

- MCA : Minimum circuit amperes (A)
- MOP : Maximum Overcurrent Protective Device (A)
- RLA : Rated Load Ampere
- Select wire size based on the value of MCA

Summary Table

VRD Water Source Heat Recovery - Compact type (460V)

Electric Characteristics

Capacity	Model Code	Power Supply		Module #1				Module #2				Module #3			
				RLA		Current(A)		RLA		Current(A)		RLA		Current(A)	
Ton		Hz	Voltage	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP	Comp1	Comp2	MCA	MOP
6.0	VRD072W6M-5G	60	460	7.9	-	10.0	15.0	-	-	-	-	-	-	-	-
8.0	VRD096W6M-5G	60	460	8.7	-	11.0	15.0	-	-	-	-	-	-	-	-
10.0	VRD120W6M-5G	60	460	12.4	-	15.6	25.0	-	-	-	-	-	-	-	-
20.0	VRD240W6M-5G	60	460	14.6	14.6	33.0	45.0	-	-	-	-	-	-	-	-
26.0	VRD312W6M-5G2	60	460	7.9	-	10.0	15.0	14.6	14.6	33.0	45.0	-	-	-	-
28.0	VRD336W6M-5G2	60	460	8.7	-	11.0	15.0	14.6	14.6	33.0	45.0	-	-	-	-
30.0	VRD360W6M-5G2	60	460	12.4	-	15.6	25.0	14.6	14.6	33.0	45.0	-	-	-	-
34.0	VRD408W6M-5G3	60	460	7.9	-	10.0	15.0	8.7	-	11.0	15.0	14.6	14.6	33.0	45.0

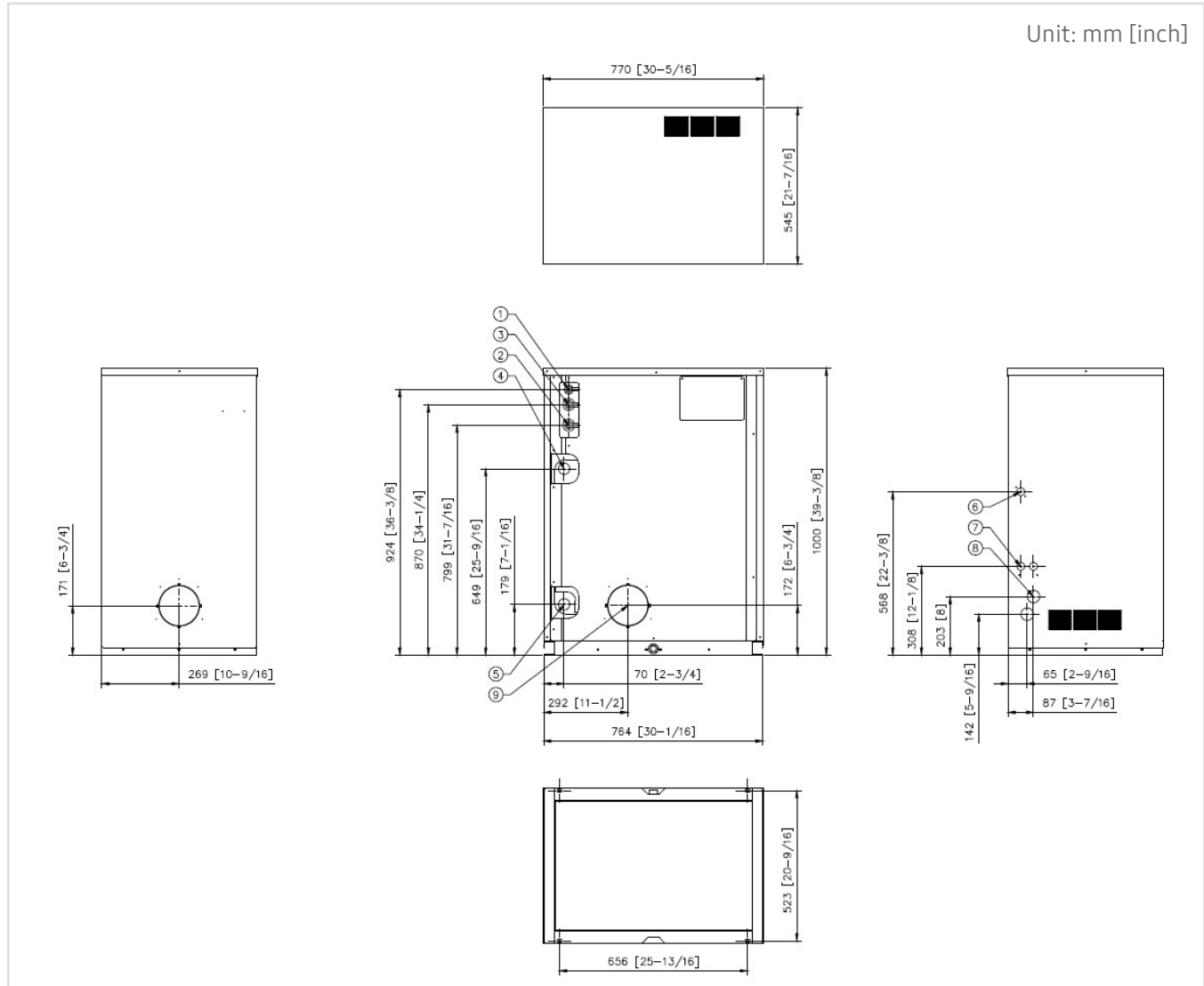
NOTE

- MCA : Minimum circuit amperes (A)
- MOP : Maximum Overcurrent Protective Device (A)
- RLA : Rated Load Ampere
- Select wire size based on the value of MCA

Dimensional Drawing

Water-Cooled VRF

VRD072W6M-5Y, VRD096W6M-5Y, VRD120W6M-5Y



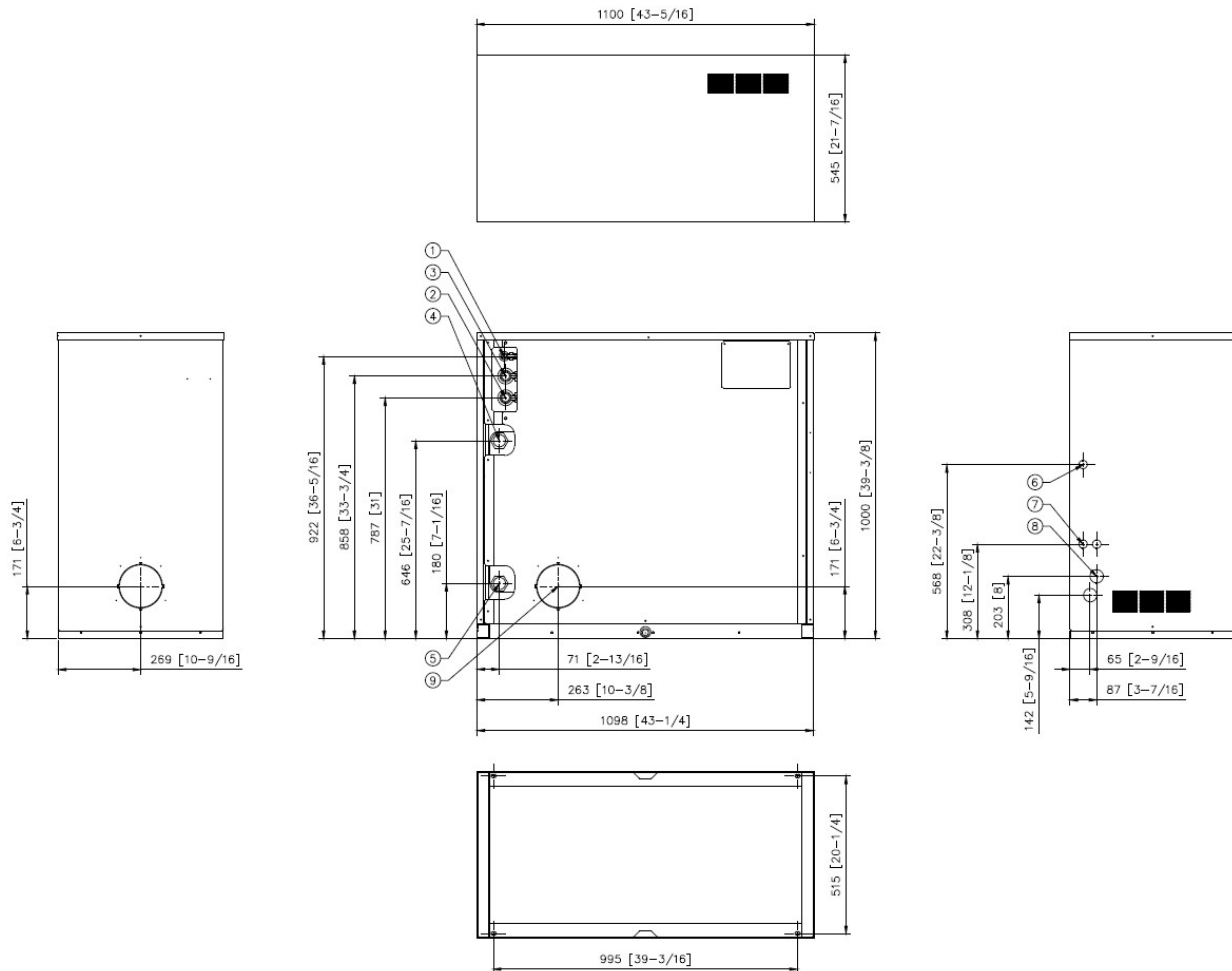
No.	Name	Description		
		VRD072W6M-5Y	VRD096W6M-5Y	VRD120W6M-5Y
1	Liquid pipe connection	9.52 [3/8]		12.7 [1/2]
2	Low pressure gas pipe connection	19.05 [3/4]	22.22 [7/8]	
3	High pressure gas pipe connection	15.88 [5/8]	19.05 [3/4]	
4	Water outlet pipe connection	32 [1-1/4]		
5	Water inlet pipe connection	32 [1-1/4]		
6	Communication wiring conduit	-		
7	Communication/External contact wiring conduit	-		
8	Power supply wiring conduit	-		
9	Duct Hole	-		

Dimensional Drawing

Water-Cooled VRF

VRD192W6M-5Y

Unit: mm [inch]

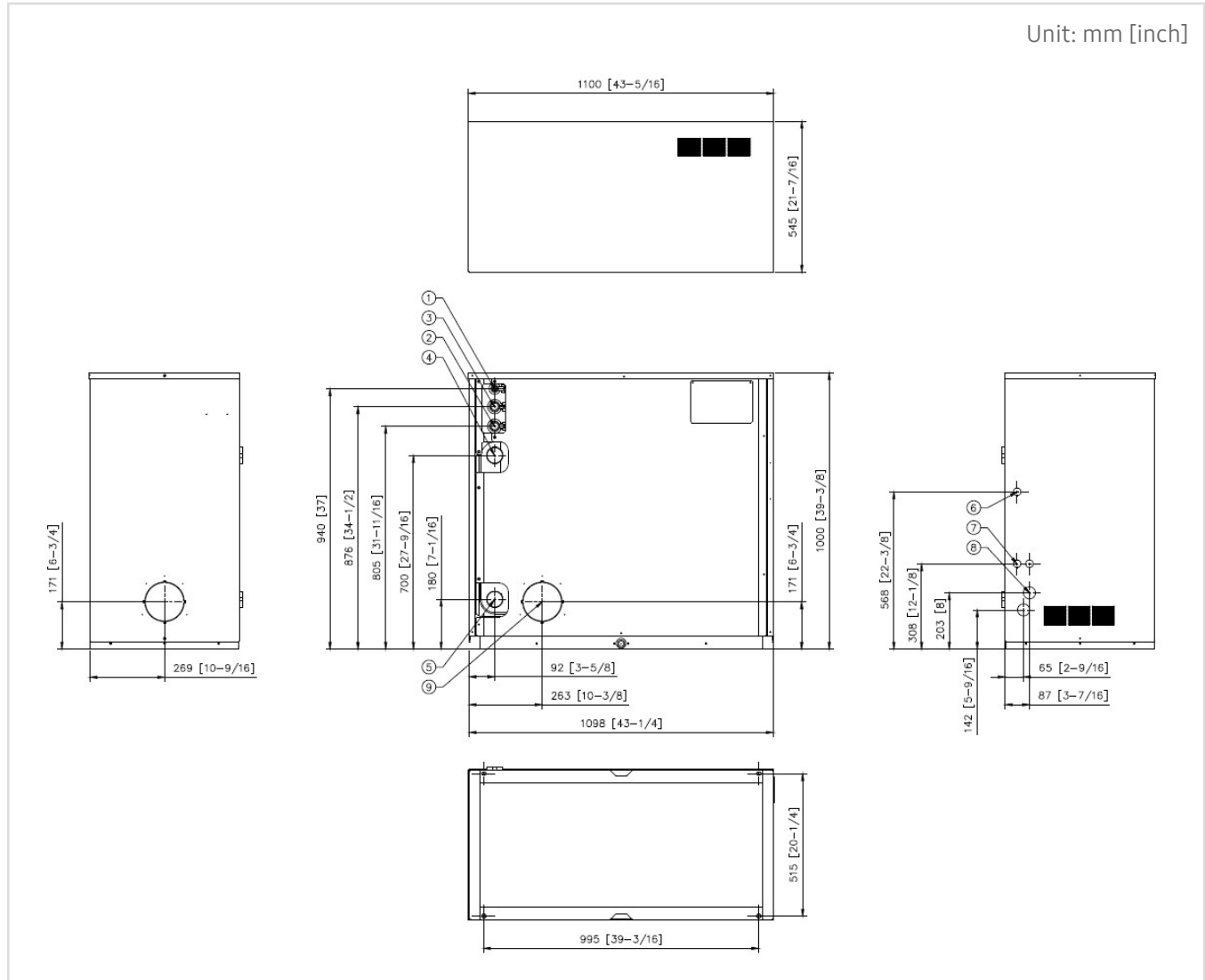


No.	Name	Description
1	Liquid pipe connection	12.7 [1/2]
2	Low pressure gas pipe connection	28.58 [1-1/8]
3	High pressure gas pipe connection	22.22 [7/8]
4	Water outlet pipe connection	50 [2]
5	Water inlet pipe connection	50 [2]
6	Communication wiring conduit	-
7	Communication/External contact wiring conduit	-
8	Power supply wiring conduit	-
9	Duct Hole	-

Dimensional Drawing

Water-Cooled VRF

VRD240W6M-5Y

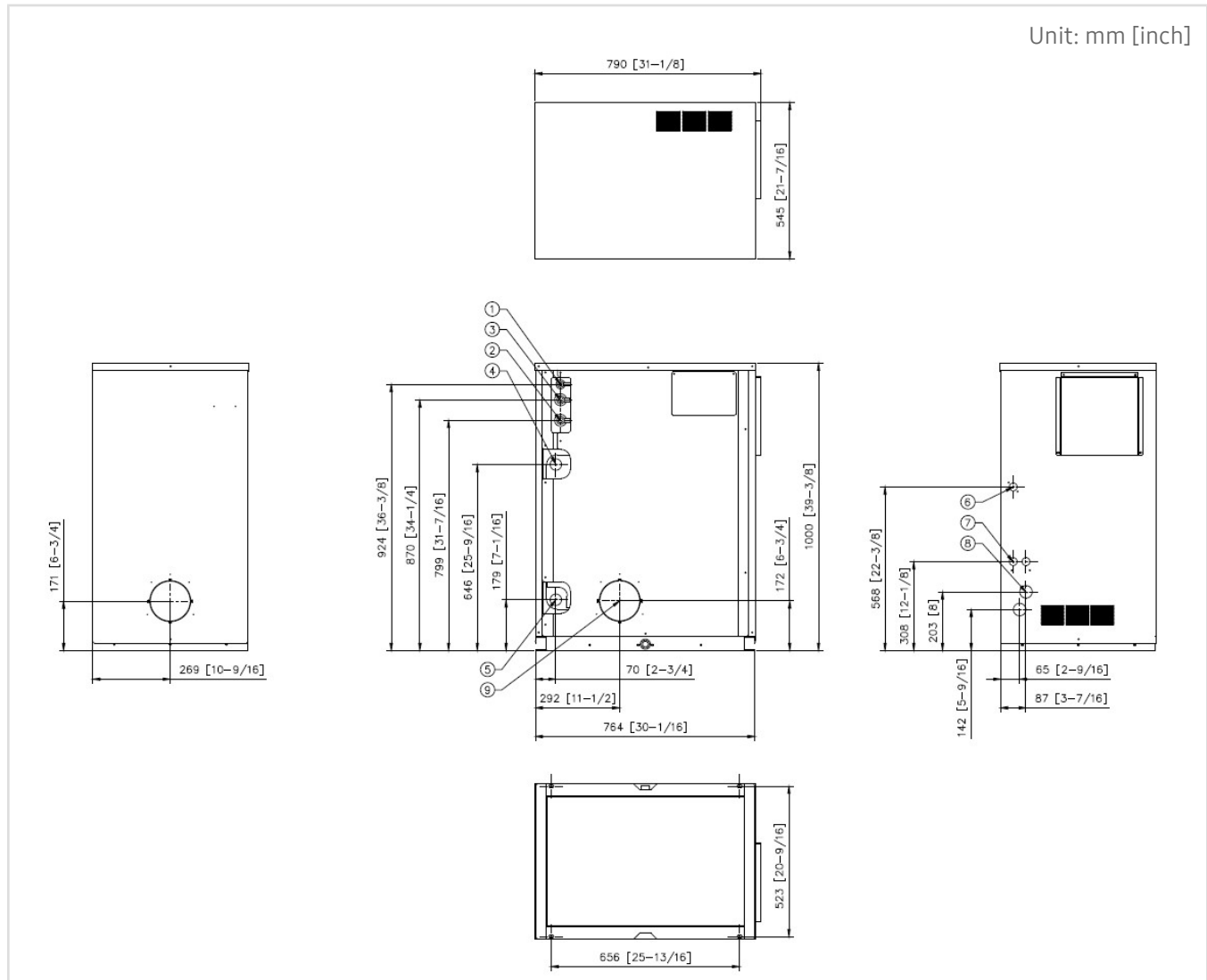


No.	Name	Description
1	Liquid pipe connection	12.7[1/2]
2	Low pressure gas pipe connection	28.58[1-1/8]
3	High pressure gas pipe connection	28.58[1-1/8]
4	Water outlet pipe connection	50 [2]
5	Water inlet pipe connection	50 [2]
6	Communication wiring conduit	-
7	Communication/External contact wiring conduit	-
8	Power wiring conduit	-
9	Duct Hole	-

Dimensional Drawing

Water-Cooled VRF

VRD072W6M-5G, VRD096W6M-5G, VRD120W6M-5G

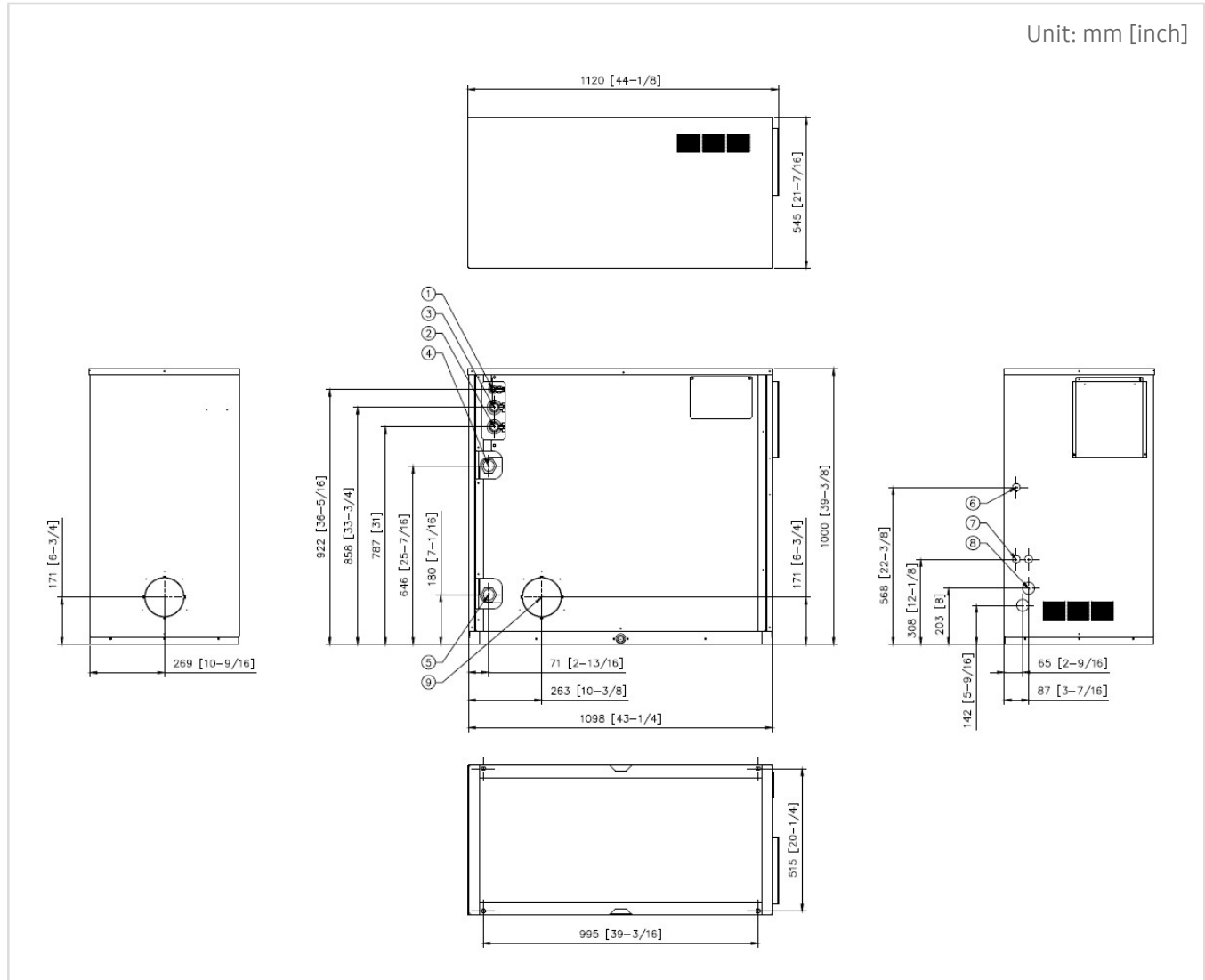


No.	Name	Description		
		VRD072W6M-5G	VRD096W6M-5G	VRD120W6M-5G
1	Liquid pipe connection	9.52 [3/8]		12.7 [1/2]
2	Low pressure gas pipe connection	19.05 [3/4]	22.22 [7/8]	
3	High pressure gas pipe connection	15.88 [5/8]	19.05 [3/4]	
4	Water outlet pipe connection	32 [1-1/4]		
5	Water inlet pipe connection	32 [1-1/4]		
6	Communication wiring conduit	-		
7	Communication/External contact wiring conduit	-		
8	Power supply wiring conduit	-		
9	Duct Hole	-		

Dimensional Drawing

Water-Cooled VRF

VRD192W6M-5G

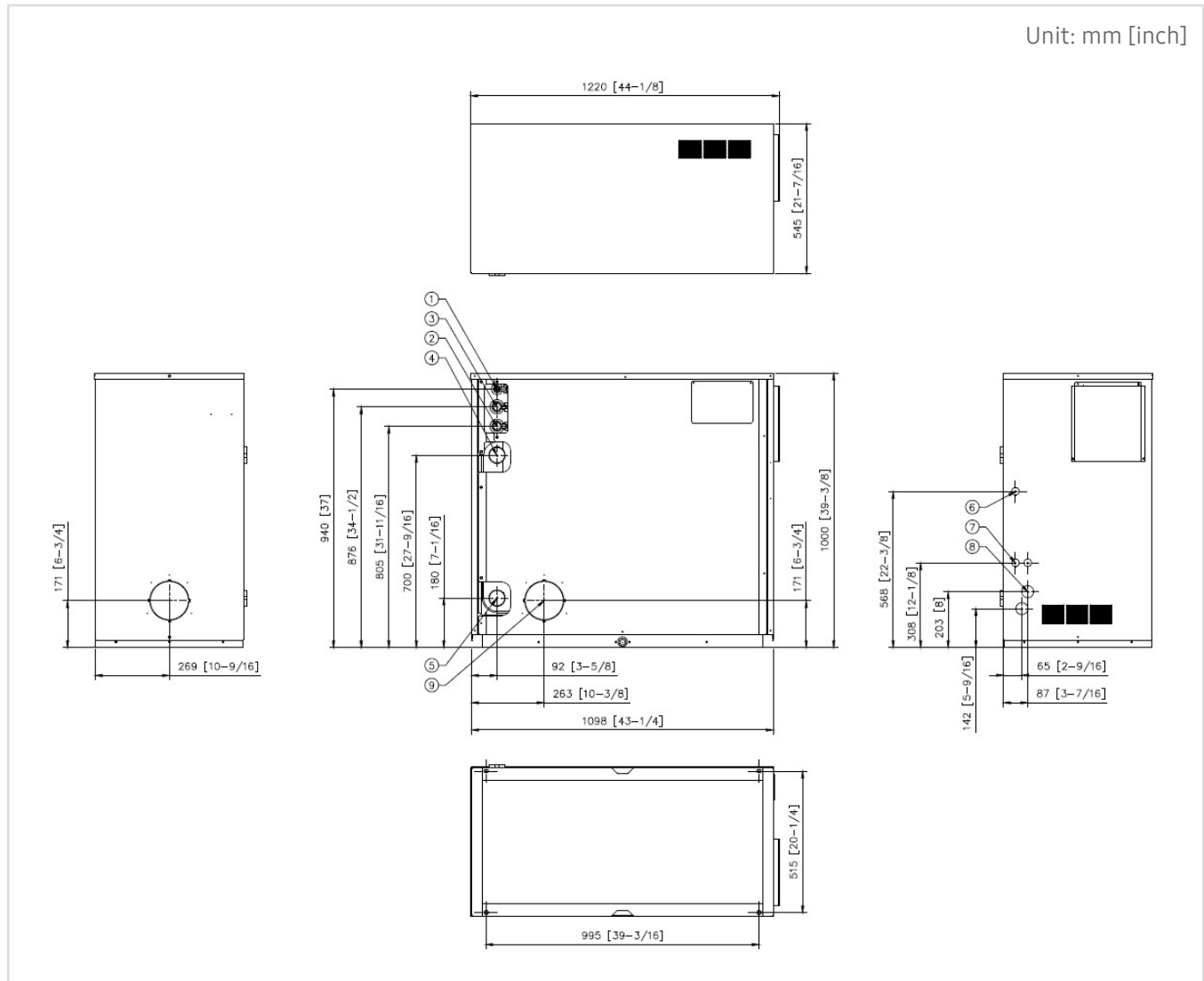


No.	Name	Description
1	Liquid pipe connection	12.7 [1/2]
2	Low pressure gas pipe connection	28.58 [1-1/8]
3	High pressure gas pipe connection	22.22 [7/8]
4	Water outlet pipe connection	50 [2]
5	Water inlet pipe connection	50 [2]
6	Communication wiring conduit	-
7	Communication/External contact wiring conduit	-
8	Power supply wiring conduit	-
9	Duct Hole	-

Dimensional Drawing

Water-Cooled VRF

VRD240W6M-5G

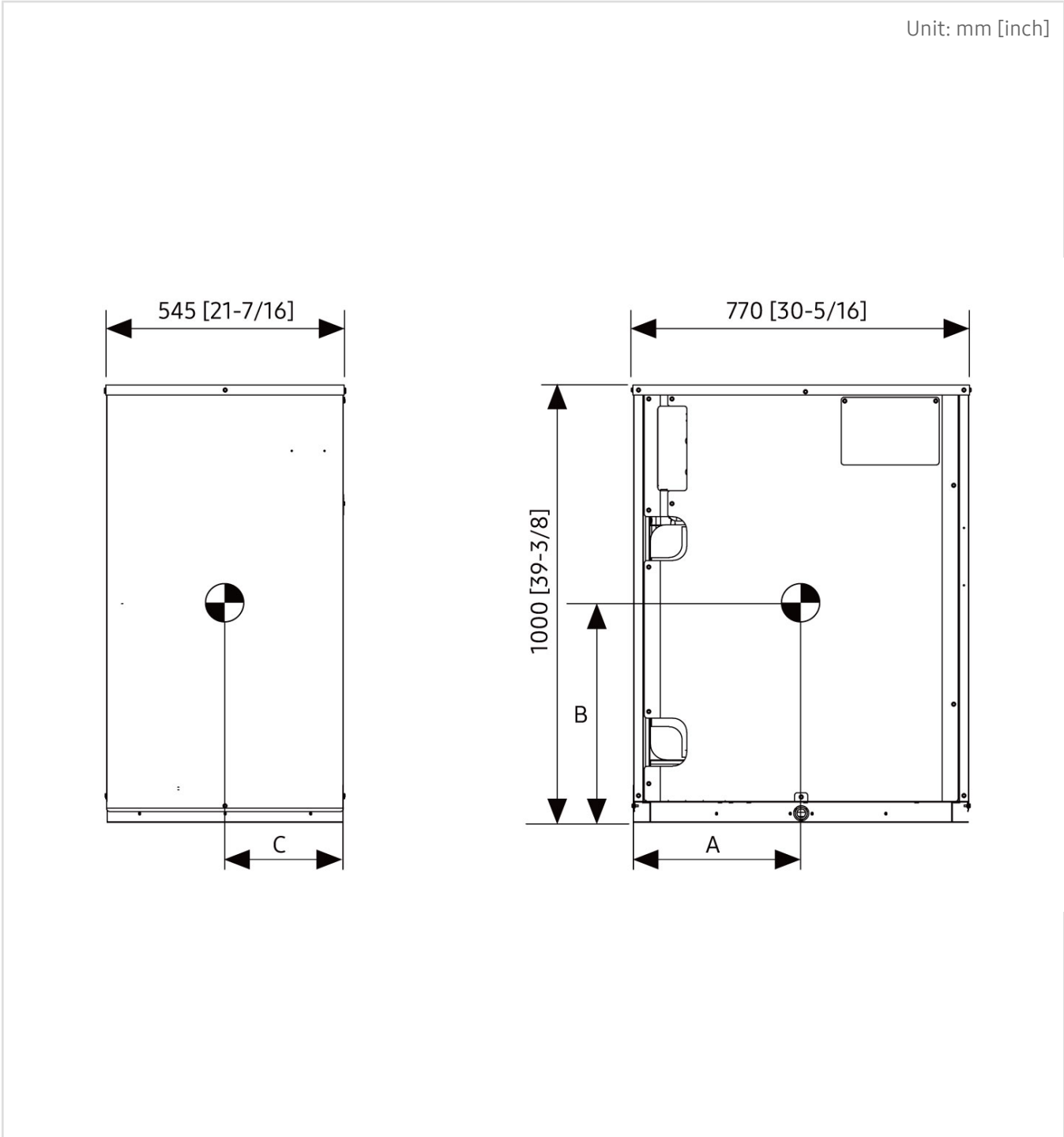


No.	Name	Description
1	Liquid pipe connection	12.7 [1/2]
2	Low pressure gas pipe connection	28.58 [1-1/8]
3	High pressure gas pipe connection	28.58 [1-1/8]
4	Water outlet pipe connection	50 [2]
5	Water inlet pipe connection	50 [2]
6	Communication wiring conduit	-
7	Communication/External contact wiring conduit	-
8	Power wiring conduit	-
9	Duct Hole	-

Center of Gravity

Water-Cooled VRF

VRD072W6M-5Y, VRD096W6M-5Y, VRD120W6M-5Y

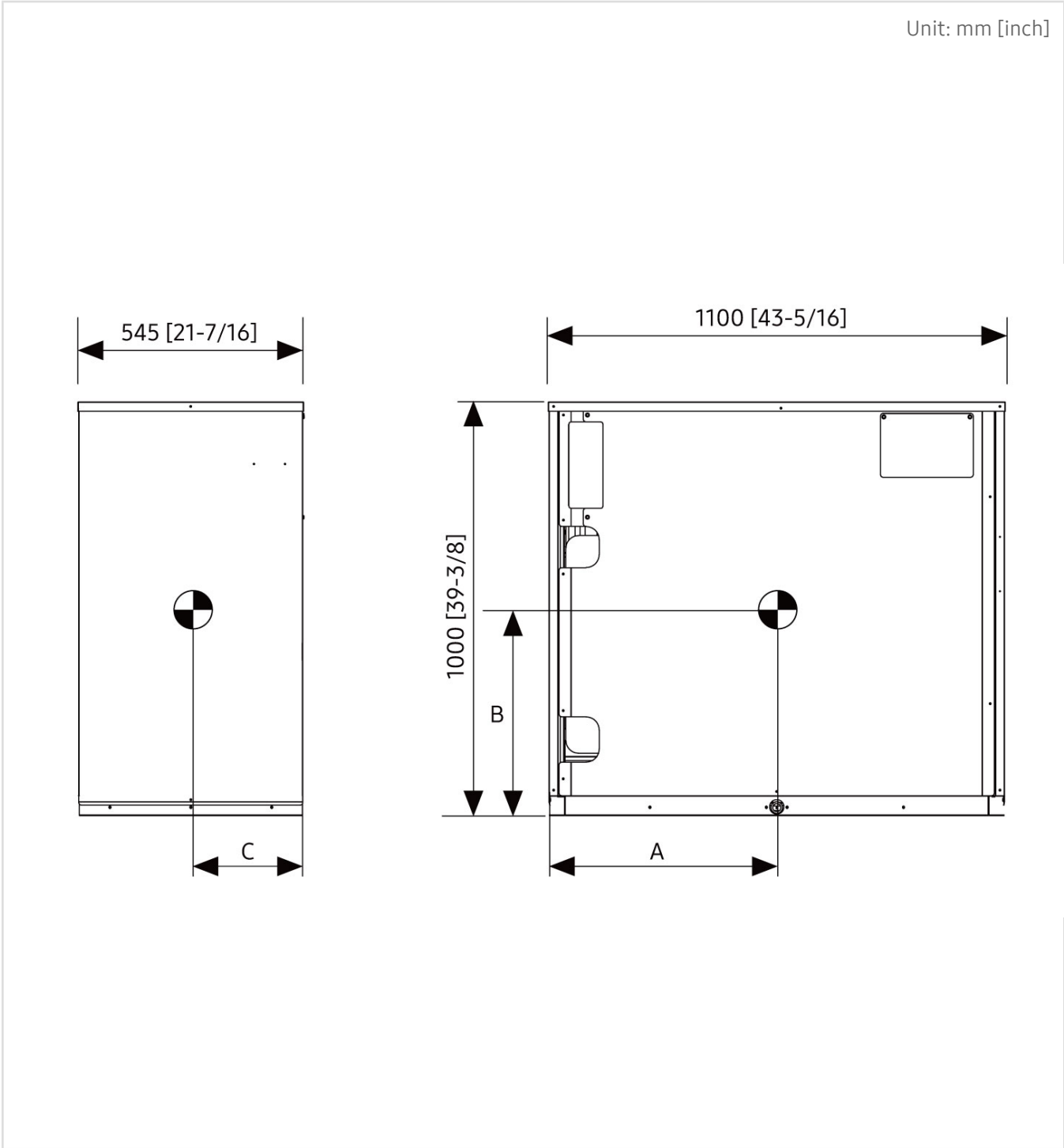


Model	A	B	C
VRD072W6M-5Y VRD096W6M-5Y VRD120W6M-5Y	345 [13-9/16]	353 [13-7/8]	211 [8-5/16]

Center of Gravity

Water-Cooled VRF

VRD192W6M-5Y, VRD240W6M-5Y

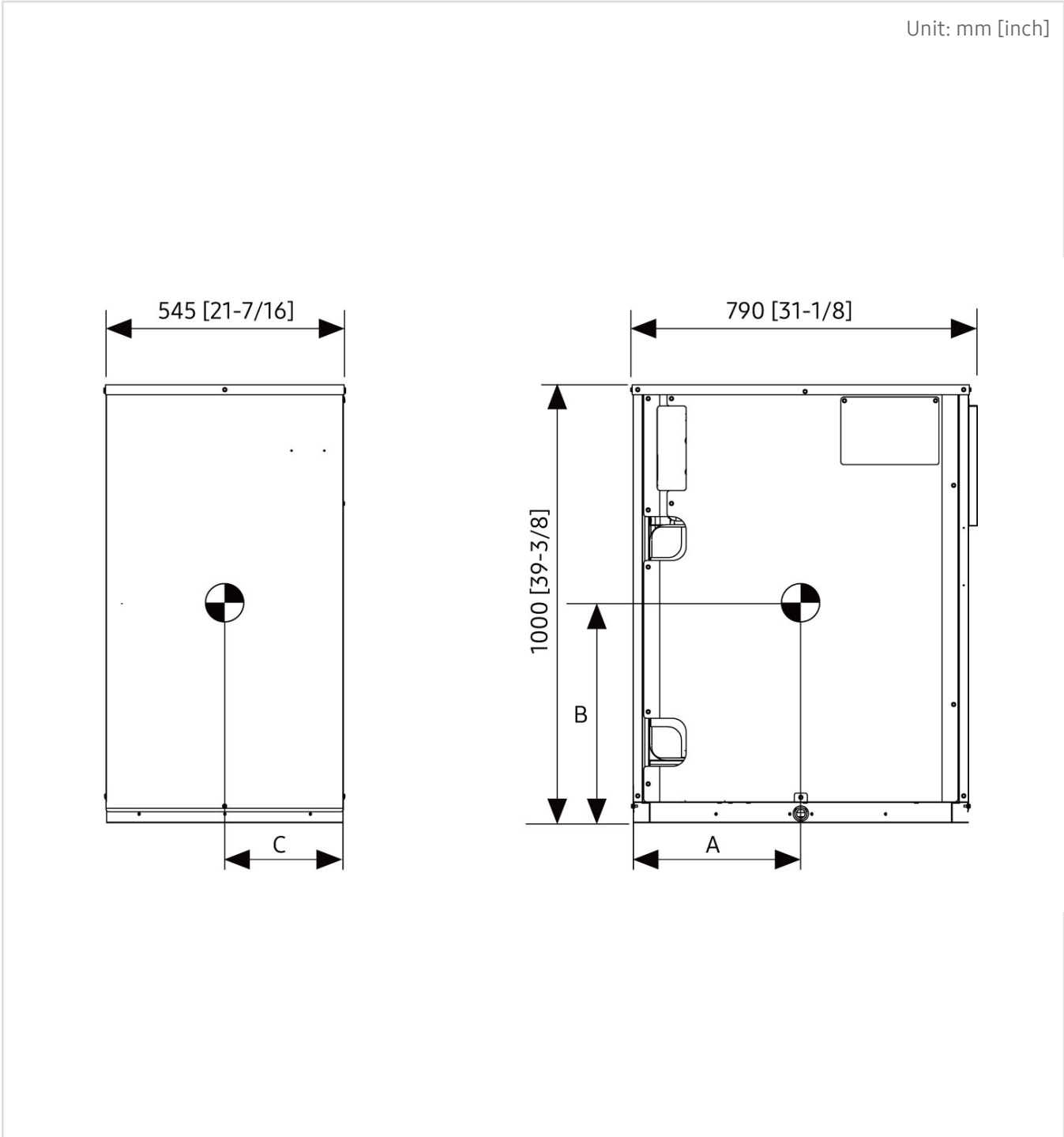


Model	A	B	C
VRD192W6M-5Y	476 [18-3/4]	353 [13-7/8]	210 [8-1/4]
VRD240W6M-5Y	461 [18-1/8]	390 [15-3/8]	206 [8-1/8]

Center of Gravity

Water-Cooled VRF

VRD072W6M-5G, VRD096W6M-5G, VRD120W6M-5G

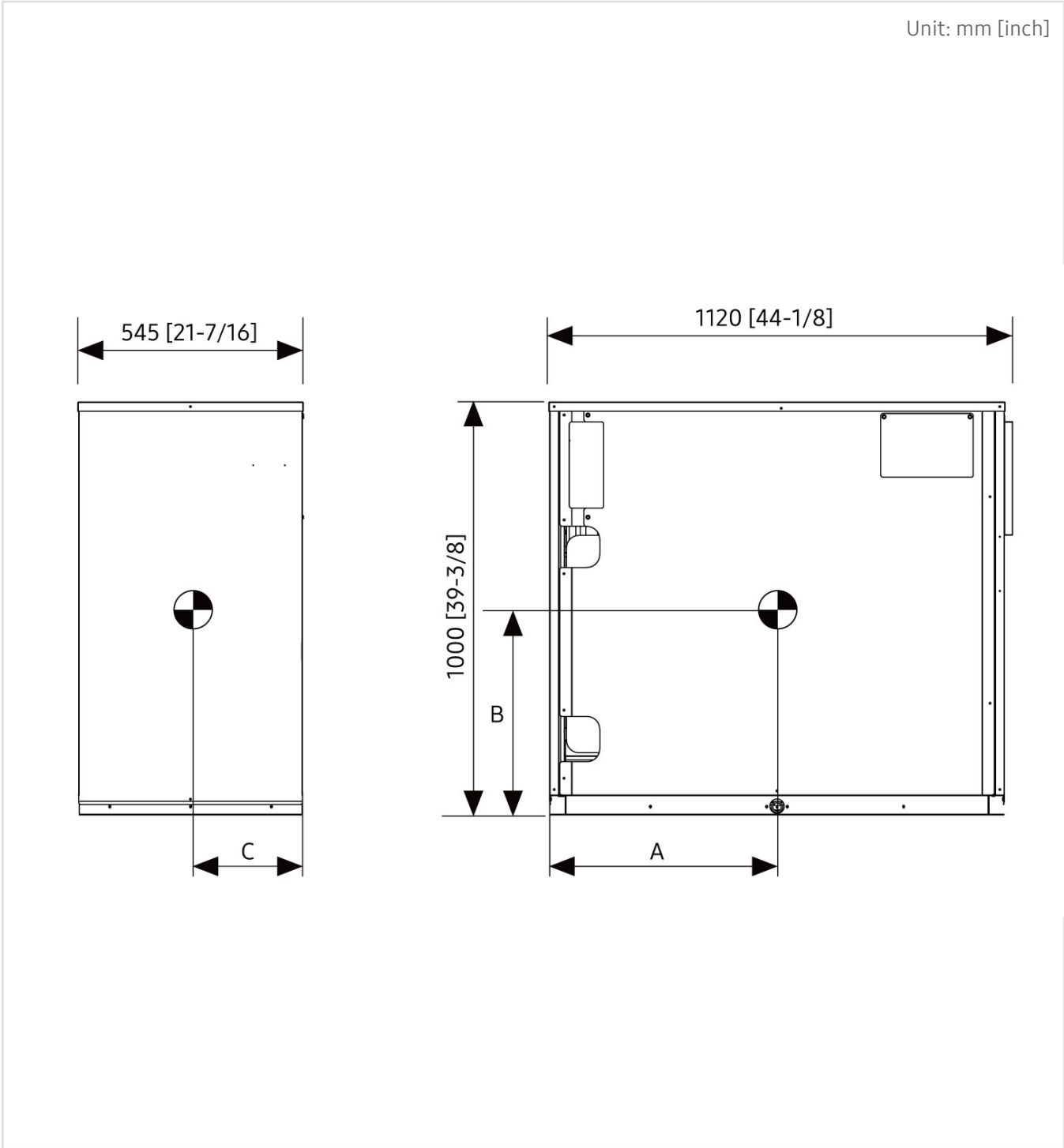


Model	A	B	C
VRD072W6M-5G VRD096W6M-5G VRD120W6M-5G	345 [13-9/16]	353 [13-7/8]	211 [8-5/16]

Center of Gravity

Water-Cooled VRF

VRD192W6M-5G, VRD240W6M-5G

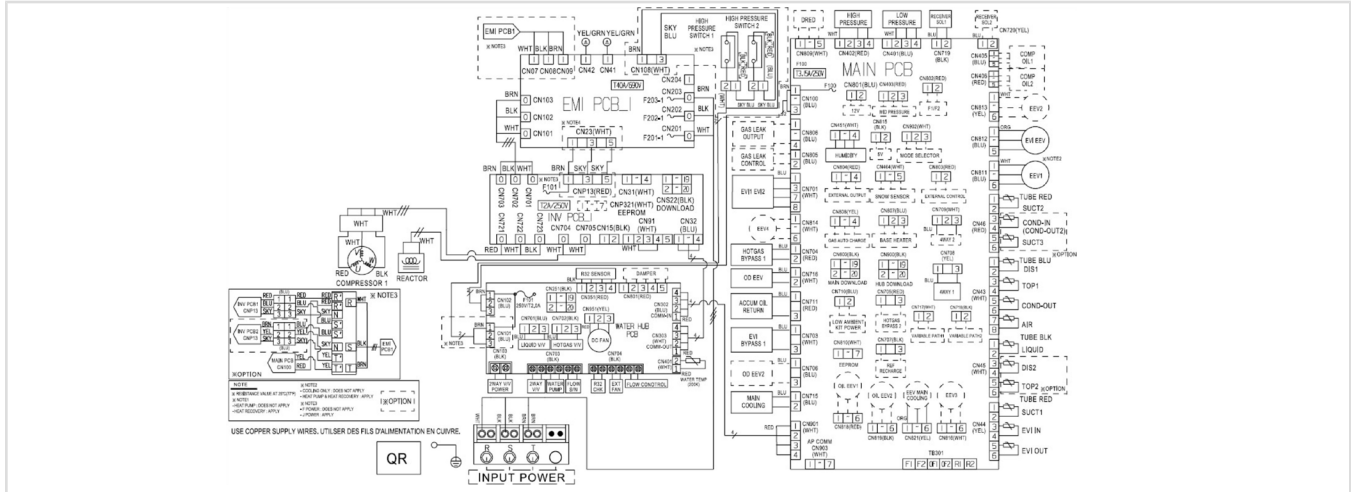


Model	A	B	C
VRD192W6M-5G	476 [18-3/4]	353 [13-7/8]	210 [8-1/4]
VRD240W6M-5G	461 [18-1/8]	390 [15-3/8]	206 [8-1/8]

Electrical Wiring Diagram

Water-Cooled VRF

VRD072W6M-5Y, VRD096W6M-5Y, VRD120W6M-5Y
VRD072W6M-5G, VRD096W6M-5G, VRD120W6M-5G



EMI PCB1	Printed circuit board (emi1)	REACTOR	REACTOR
MAIN PCB	Printed circuit board (main)	EEPROM	Printed circuit board (EEPROM PCB)
INV PCB1	Printed circuit board (inverter1)	VARIABLE PATH1	Solenoid valve (VARIABLE PATH1)
COMPRESSOR1	Motor (compressor1)	VARIABLE PATH2	Solenoid valve (VARIABLE PATH2)
EVI V/V1	Solenoid valve (EVI1)	HOTGAS1 BYPASS V/V	Solenoid valve (Hot Gas Bypass1)
EVI V/V2	Solenoid valve (EVI2)	DRED	Printed circuit board (DRED PCB)
EVI EEV	Electronic expansion valve (EVI)	EVI BYPASS1 V/V	Solenoid valve (EVI BYPASS)
EEV1	Electronic expansion valve 1	ACCUM OIL RETURN V/V	Solenoid valve (Accumulator Oil Return)
EEV2	Electronic expansion valve 2	MAIN COOLING	Solenoid valve (Main cooling)
EEV3	Electronic expansion valve 3	HOTGAS2 BYPASS V/V	Solenoid valve (Hot Gas Bypass2)
EEV4	Electronic expansion valve 4	OD EEV V/V	Electronic expansion valve (Outdoor EEV)
4WAY1 V/V	Solenoid valve (4 Way valve1)	OD EEV2 V/V	Electronic expansion valve (Outdoor EEV)
4WAY2 V/V	Solenoid valve (4 Way valve2)	F101	FUSE (INV PCB)
OIL EEV1	Electronic expansion valve (OIL1)	690V/40A	FUSE (EMI PCB)
OIL EEV2	Electronic expansion valve (OIL2)	MODE SELECTOR	Connector (Remote switching cool/heat selector)
EEV MAIN COOLING	Electronic expansion valve (EEV MAIN COOLING)	EXTERNAL CONTROL	Connector (Output EXTERNAL CONTROL)
SNOW SENSOR	SNOW SENSOR	EXTERNAL OUTPUT	Connector (Output EXTERNAL)
EVI-OUT(10K)	Thermistor (EVI-out_10kohm)	F1/F2	Communication
EVI-IN(10K)	Thermistor (EVI-in_10kohm)	HIGH PRESSURE	PRESSURE SENSOR
SUCT1(10K)	Thermistor (Suction Temp.1_10Kohm)	MID PRESSURE	PRESSURE SENSOR
SUCT2(10K)	Thermistor (Suction Temp.2_10Kohm)	LOW PRESSURE	PRESSURE SENSOR
SUCT3(10K)	Thermistor (Suction Temp.2_10Kohm)	RECEIVER SOL1	Solenoid valve (RECEIVER1)
COND IN(10K)	Thermistor (Cond In Temp._10Kohm)	RECEIVER SOL2	Solenoid valve (RECEIVER2)
AIR(10K)	Thermistor (Ambient Temp._10Kohm)	BASE HEATER	HEATER
COND(10K)	Thermistor (Cond Out Temp._10Kohm)	R32 SENSOR	R32 SENSOR
TOP1(200K)	Thermistor (Compressor Top 1_200Kohm)	WATER TEMP	Thermistor (WATER Temp._200Kohm)
TOP2(200K)	Thermistor (Compressor Top 2_200Kohm)	DC FAN	DC FAN MOTOR_ WATER HUB
DIS1(200K)	Thermistor (Discharge Temp.1_200Kohm)	LIQUID V/V	Solenoid valve (LIQUID)_ WATER HUB
DIS2(200K)	Thermistor (Discharge Temp.2_200Kohm)	HOTGAS V/V	Solenoid valve (HOTGAS)_ WATER HUB
LIQUID(10K)	Thermistor (Liquid Tube Temp._10Kohm)	DAMPER	DAMPWER_ WATER HUB

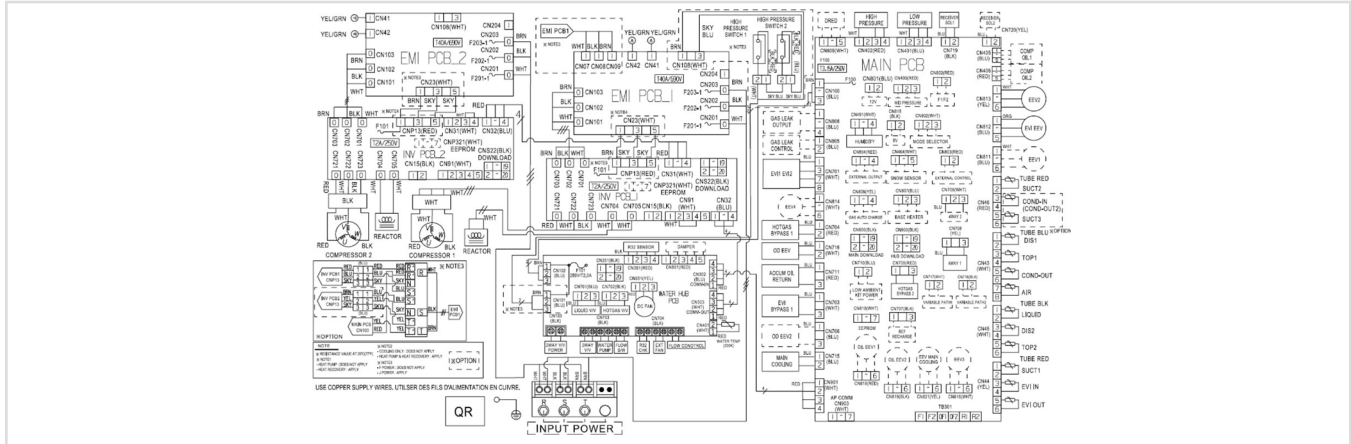
NOTE

- This wiring diagram applies only to the Water-Cooled VRF.
- Colors BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue, ORG: orange, GRN: green
- When operating, don't short circuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation
- Protective earth (screw), : Connector, : The wire quantity

Electrical Wiring Diagram

Water-Cooled VRF

VRD192W6M-5Y, VRD240W6M-5Y, VRD192W6M-5G, VRD240W6M-5G



EMI PCB1	Printed circuit board (emi1)	LIQUID(10K)	Thermistor (Liquid Tube Temp._10Kohm)
EMI PCB2	Printed circuit board (emi2)	REACTOR	REACTOR
MAIN PCB	Printed circuit board (main)	EEPROM	Printed circuit board(EEPROM PCB)
INV PCB1	Printed circuit board (inverter1)	VARIABLE PATH1	Solenoid valve(VARIABLE PATH1)
INV PCB2	Printed circuit board (inverter2)	VARIABLE PATH2	Solenoid valve(VARIABLE PATH2)
COMPRSSOR1	Motor (compressor1)	HOTGAS1 BYPASS V/V	Solenoid valve (Hot Gas Bypass1)
COMPRSSOR2	Motor (compressor2)	DRED	Printed circuit board(DRED PCB)
EVI V/V1	Solenode valve (EVI1)	EVI BYPASS1 V/V	Solenoid valve (EVI BYPASS)
EVI V/V2	Solenode valve (EVI2)	ACCUM OIL RETURN V/V	Solenoid valve (Accumulator Oil Return)
EVI EEV	Electronic expansion valve (EVI)	MAIN COOLING	Solenoid valve (Main cooling)
EEV1	Electronic expansion valve 1	HOTGAS2 BYPASS V/V	Solenoid valve (Hot Gas Bypass2)
EEV2	Electronic expansion valve 2	OD EEV V/V	Electronic expansion valve (Outdoor EEV)
EEV3	Electronic expansion valve 3	OD EEV2 V/V	Electronic expansion valve (Outdoor EEV)
EEV4	Electronic expansion valve 4	F101	FUSE (INV PCB)
4WAY1 V/V	Solenoid valve (4 Way valve1)	690V/40A	FUSE (EMI PCB)
4WAY2 V/V	Solenoid valve (4 Way valve2)	MODE SELECTOR	Connector (Remote switching cool/heat selector)
OIL EEV1	Electronic expansion valve(OIL1)	EXTERNAL CONTROL	Connector (Output EXTERNAL CONTROL)
OIL EEV2	Electronic expansion valve(OIL2)	EXTERNAL OUTPUT	Connector (Output EXTERNAL)
EEV MAIN COOLING	Electronic expansion valve (EEV MAIN COOLING)	F1/F2	Communication
SNOW SENSOR	SNOW SENSOR	HIGH PRESSURE	PRESSURE SENSOR
EVI-OUT(10K)	Thermistor (EVI-out_10kohm)	MID PRESSURE	PRESSURE SENSOR
EVI-IN(10K)	Thermistor (EVI-in_10kohm)	LOW PRESSURE	PRESSURE SENSOR
SUCT1(10K)	Thermistor (Suction Temp.1_10Kohm)	RECEIVER SOL1	Solenoid valve(RECEIVER1)
SUCT2(10K)	Thermistor (Suction Temp.2_10Kohm)	RECEIVER SOL2	Solenoid valve(RECEIVER2)
SUCT3(10K)	Thermistor (Suction Temp.2_10Kohm)	BASE HEATER	HEATER
COND IN(10K)	Thermistor (Cond In Temp._10Kohm)	R32 SENSOR	R32 SENSOR
AIR(10K)	Thermistor (Ambient Temp._10Kohm)	WATER TEMP	Thermistor (WATER Temp._200Kohm)
COND(10K)	Thermistor (Cond Out Temp._10Kohm)	DC FAN	DC FAN MOTOR _WATER HUB
TOP1(200K)	Thermistor (Compressor Top 1_200Kohm)	LIQUID V/V	Solenoid valve (LIQUID)_WATER HUB
TOP2(200K)	Thermistor (Compressor Top 2_200Kohm)	HOTGAS V/V	Solenoid valve (HOTGAS)_WATER HUB
DIS1(200K)	Thermistor (Discharge Temp.1_200Kohm)	DAMPER	DAMPWER _WATER HUB
DIS2(200K)	Thermistor (Discharge Temp.2_200Kohm)	-	-

NOTE

- This wiring diagram applies only to the Water-Cooled VRF.
- Colors BLK: black, RED: red, BLU: blue, WHT: white, YEL: yellow, BRN: brown, SKY: skyblue, ORG: orange, GRN: green
- When operating, don't short circuit the protection device (High Pressure switch)
- For connection wiring indoor-outdoor transmission F1-F2, outdoor-outdoor transmission OF1-OF2, refer to the installation
- Protective earth(screw), : Connector, : The wire quantity

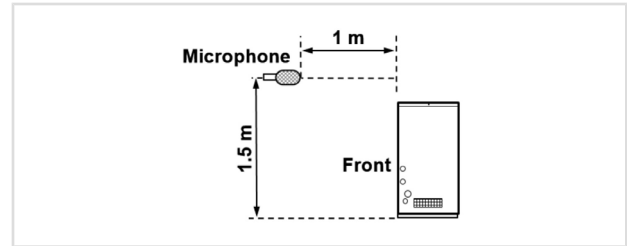
Sound Data

Water-Cooled VRF

Sound Pressure Level

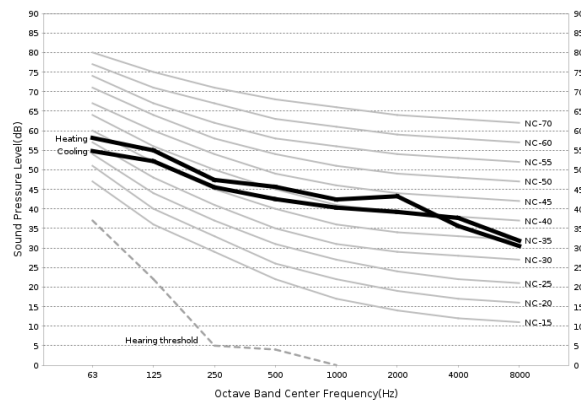
Unit : dB(A)

Model	Cooling	Heating
VRD072W6M-5Y	48.0	51.0
VRD096W6M-5Y	48.0	51.0
VRD120W6M-5Y	50.0	52.0
VRD192W6M-5Y	51.0	52.0

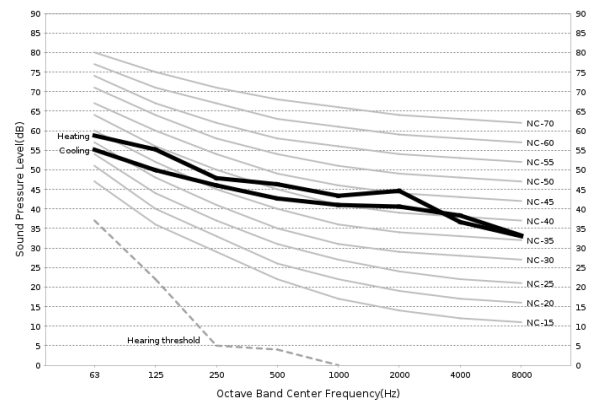


• NC CURVE

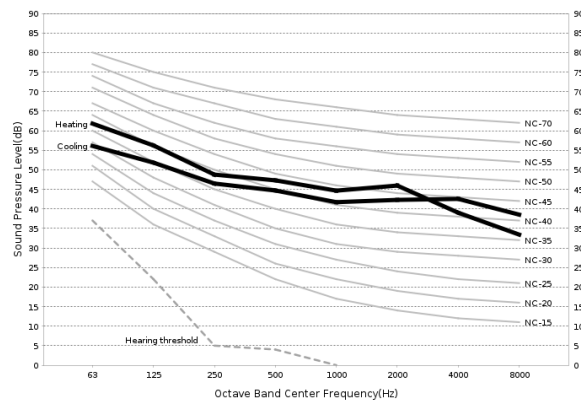
(1) VRD072W6M-5Y



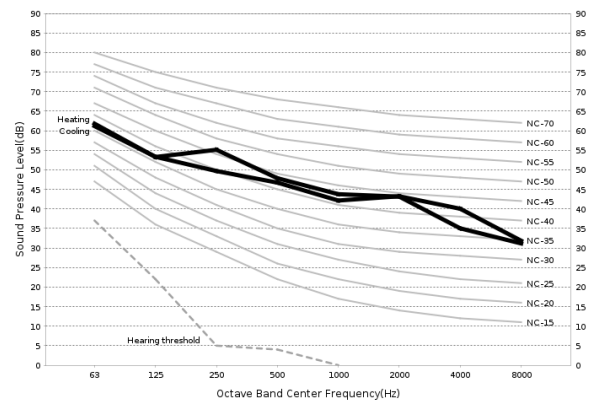
(2) VRD096W6M-5Y



(3) VRD120W6M-5Y



(4) VRD192W6M-5Y



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dB(A) = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20μPa

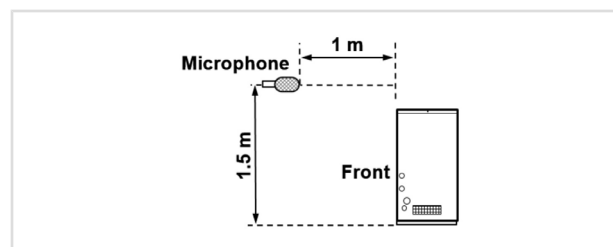
Sound Data

Water-Cooled VRF

Sound Pressure Level

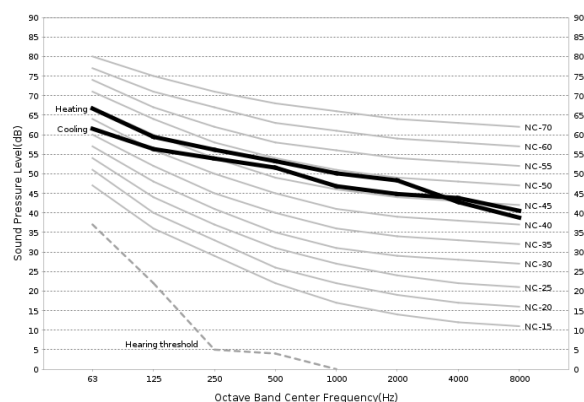
Unit : dB(A)

Model	Cooling	Heating
VRD240W6M-5Y	55.0	57.0
VRD072W6M-5G	48.0	51.0
VRD096W6M-5G	48.0	51.0
VRD120W6M-5G	50.0	52.0

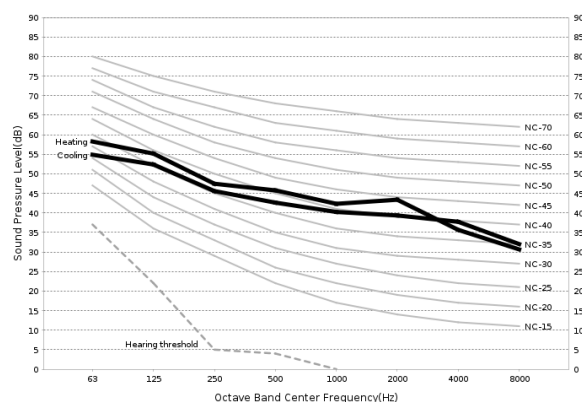


• NC CURVE

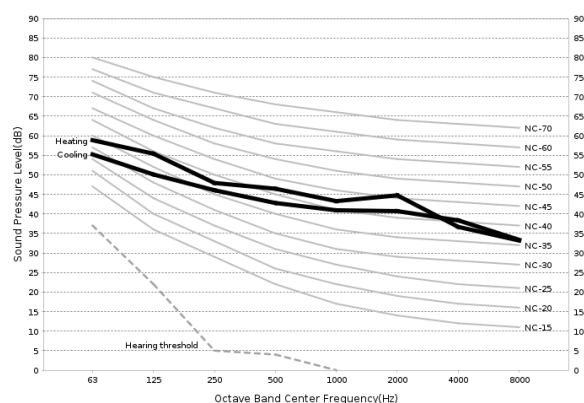
(1) VRD240W6M-5Y



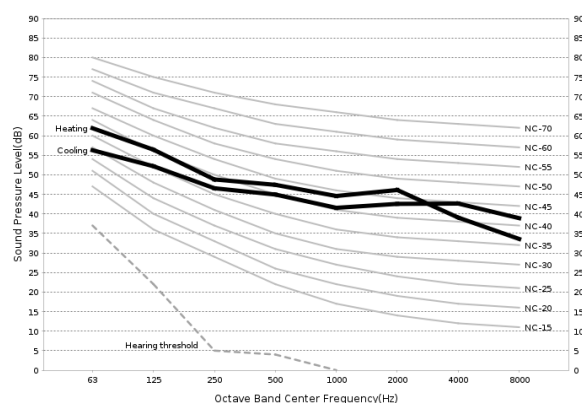
(2) VRD072W6M-5G



(3) VRD096W6M-5G



(4) VRD120W6M-5G



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dB(A) = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20μPa

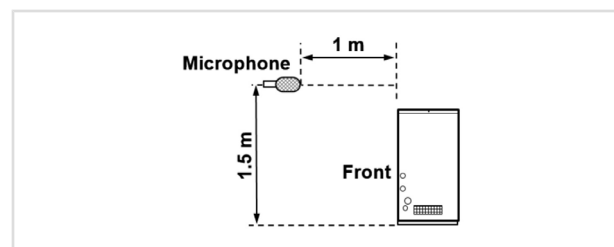
Sound Data

Water-Cooled VRF

Sound Pressure Level

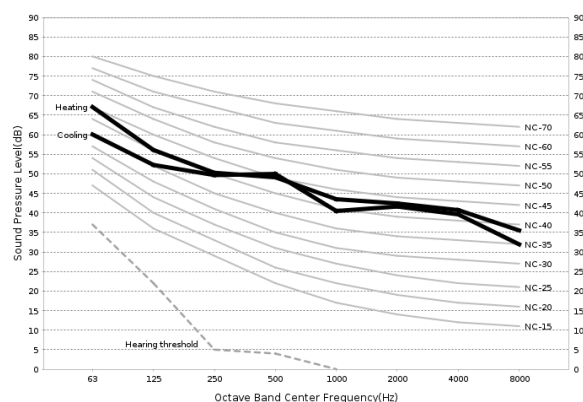
Unit : dB(A)

Model	Cooling	Heating
VRD192W6M-5G	51.0	52.0
VRD240W6M-5G	55.0	57.0

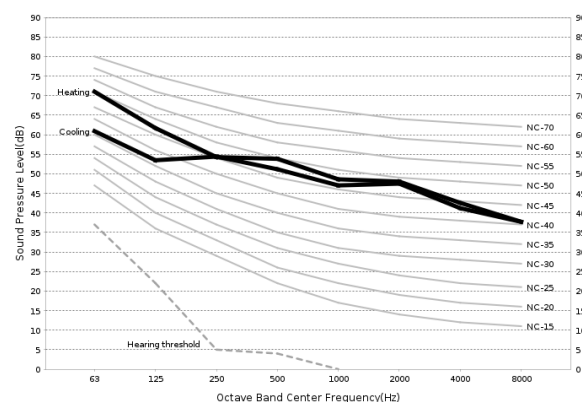


• NC CURVE

(1) VRD192W6M-5G



(2) VRD240W6M-5G



NOTE

- Specifications may be subject to change without prior notice.
- Sound pressure level is obtained in an anechoic room.
- Sound pressure level is a relative value, depending on the distance and acoustic environment.
- Sound pressure level may differ depending on operation condition.
- dBA = A-weighted sound pressure level
- Reference acoustic pressure 0 dB = 20μPa

Sound Data

Water-Cooled VRF

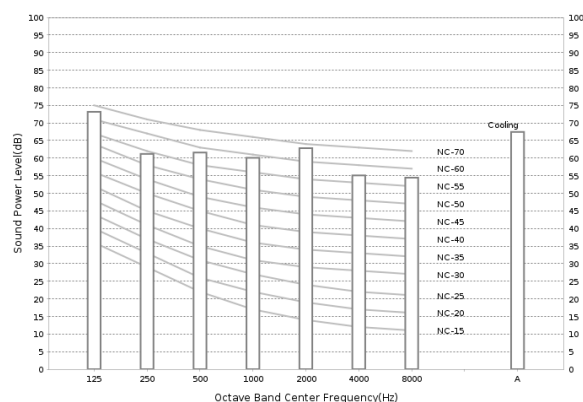
Sound Power Level

Unit : dB(A)

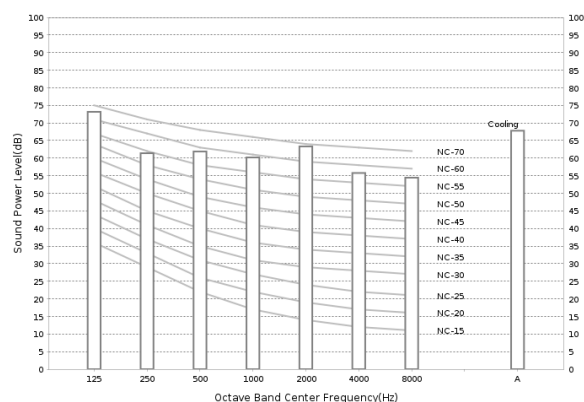
Model	Cooling
VRD072W6M-5Y	70.0
VRD096W6M-5Y	70.0
VRD120W6M-5Y	70.0
VRD192W6M-5Y	73.0

• NC CURVE

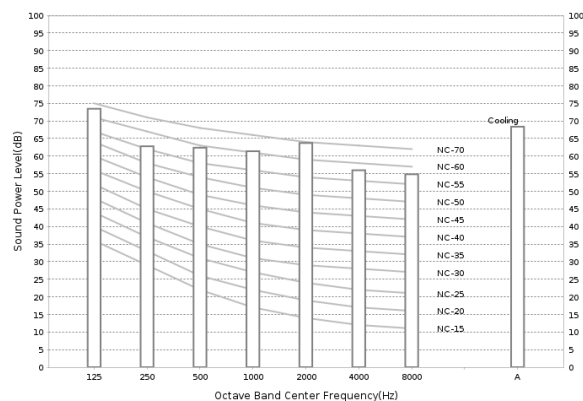
(1) VRD072W6M-5Y



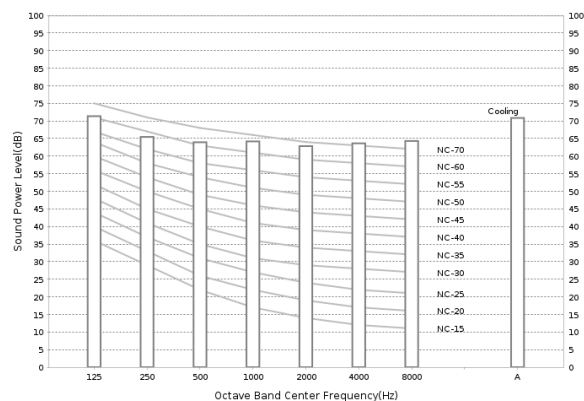
(2) VRD096W6M-5Y



(3) VRD120W6M-5Y



(4) VRD192W6M-5Y



NOTE

- Specifications may be subject to change without prior notice
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level.
- Reference power : 1pW.
- Measured according to ISO 3741.

Sound Data

Water-Cooled VRF

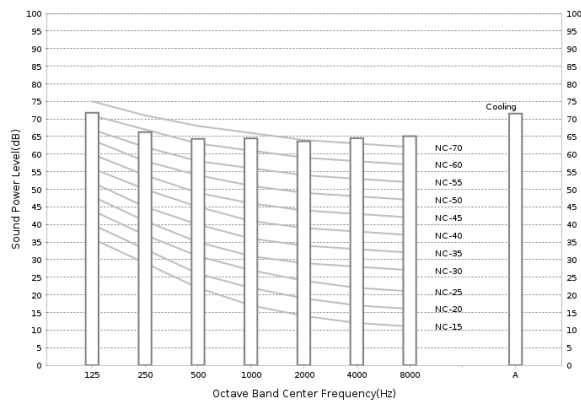
Sound Power Level

Unit : dB(A)

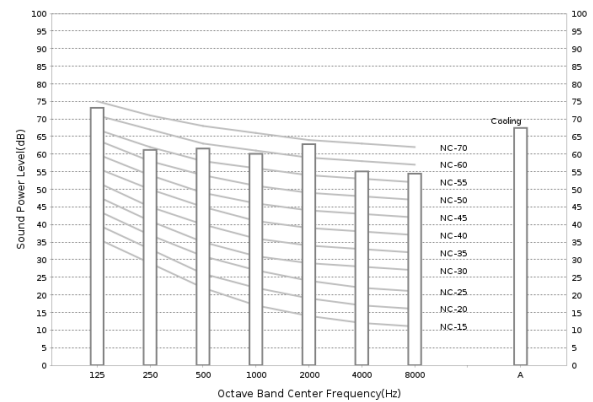
Model	Cooling
VRD240W6M-5Y	74.0
VRD072W6M-5G	70.0
VRD096W6M-5G	70.0
VRD120W6M-5G	70.0

• NC CURVE

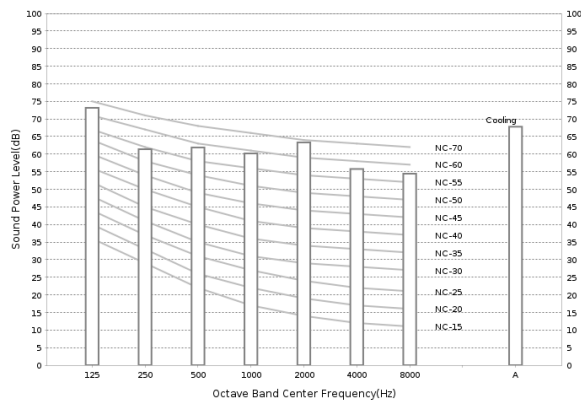
(1) VRD240W6M-5Y



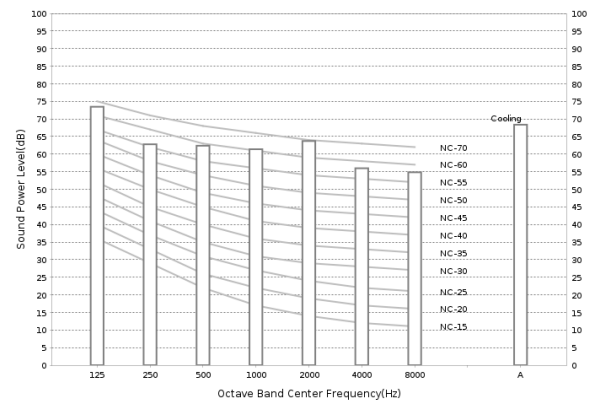
(2) VRD072W6M-5G



(3) VRD096W6M-5G



(4) VRD120W6M-5G



NOTE

- Specifications may be subject to change without prior notice
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level.
- Reference power : 1pW.
- Measured according to ISO 3741.

Sound Data

Water-Cooled VRF

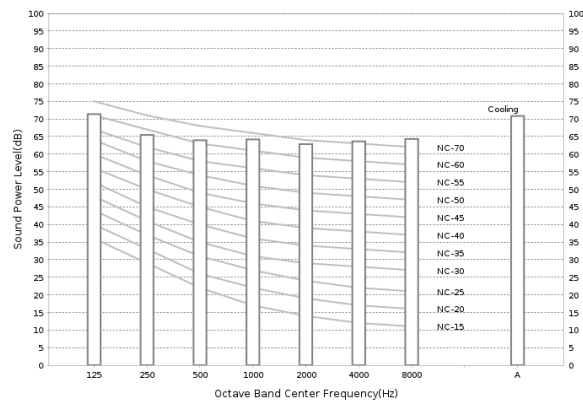
Sound Power Level

Unit : dB(A)

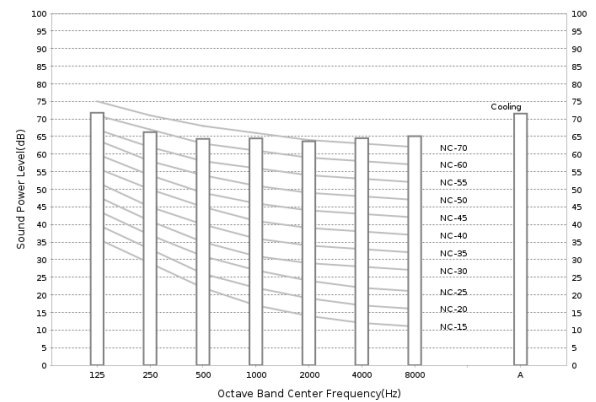
Model	Cooling
VRD192W6M-5G	73.0
VRD240W6M-5G	74.0

• NC CURVE

(1) VRD192W6M-5G



(2) VRD240W6M-5G



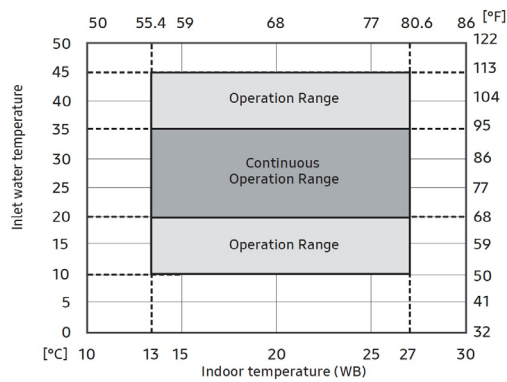
NOTE

- Specifications may be subject to change without prior notice
- Sound power level is an absolute value that a sound source generates.
- dBA = A-weighted sound power level.
- Reference power : 1pW.
- Measured according to ISO 3741.

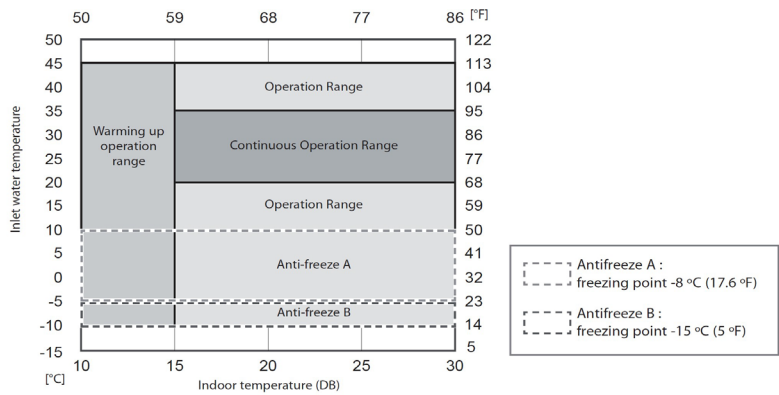
Operation Range

Water-Cooled VRF

• Cooling



• Heating



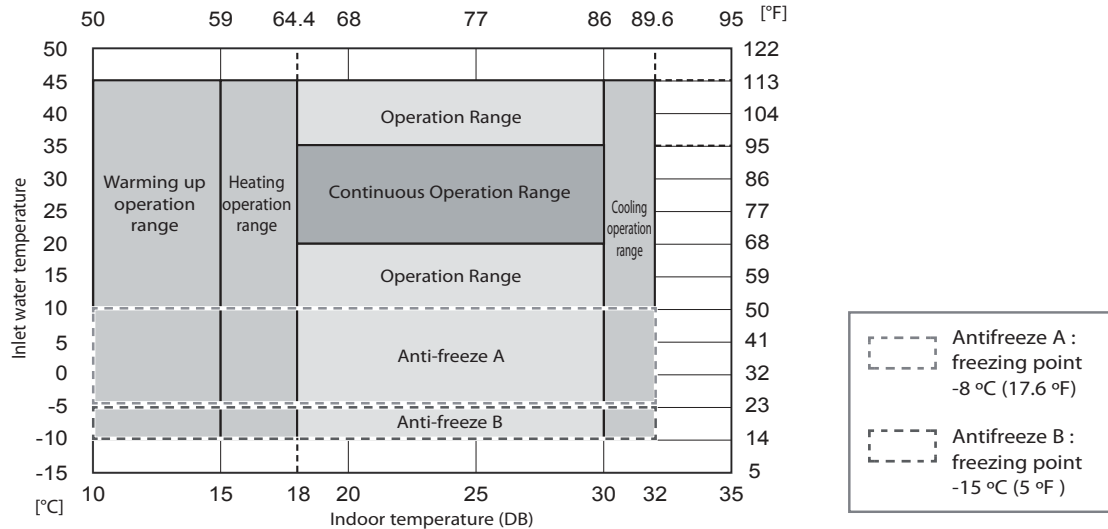
NOTE

- In the range except for the continuous operation range, the protection control can be active depending on the heat source flow rate. (It is not a failure but a way of cycle protection against hot or cold water.)
- For use in the antifreeze condition, the antifreeze concentration must be rigidly managed.

Operation Range

Water-Cooled VRF

Heat Recovery



NOTE

- In the range except for the continuous operation range, the protection control can be active depending on the heat source flow rate. (It is not a failure but a way of cycle protection against hot or cold water.)
- For use in the antifreeze condition, the antifreeze concentration must be rigidly managed.

Design condition

Type	Circulating water	Operation	Intel water temperature (°C)	
			Main usage range	Usage range limit Note 3)
Heat source water	Water loop	Cooling	20 ~ 35 °C (68 ~ 95 °F)	10 ~ 45 °C (50 ~ 113 °F)
		Heating		
Ground heat source ¹⁾	Ground loop	Cooling	15 ~ 35 °C (59 ~ 95 °F)	10 ~ 45 °C (50 ~ 113 °F)
		Heating	5 ~ 25	-5 ~ 45 °C (23 ~ 113 °F) -10 ~ 45 °C (14 ~ 113 °F) Note 2)

Note 1): Anti-freeze must be used when temperature of water inlet for heating is below 10 °C (50 °F) or ground heat source is used. Maintain appropriate concentration level of anti-freeze according to temperature of water inlet.

Note 2): Strict management of anti-freeze concentration level is required. Consult Lennox before application.

Note 3): When inlet water temperature is outside of limit, consult Lennox before application.

Standard data for status of Anti-freeze [Based on temperature of anti-freeze at 15 °C (59 °F)]

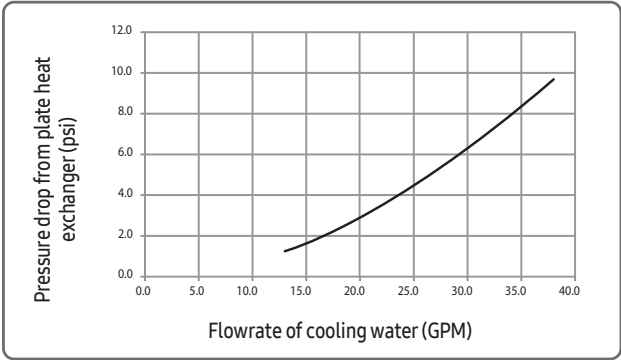
Type of anti-freeze [Based on 15 °C (59 °F)]	Concentration [% Wt.]	Freezing temperature [°C]		Density [kg/m ³]	
		°C	°F	kg/m ³	lb/ft ³
Ethylene glycol	10	-3.2	26.2	1014.87	63.4
	20	-7.8	18.0	1031.39	64.4
	30	-14.1	6.6	1047.07	65.4
	40	-22.3	-8.1	1061.65	66.3
Propylene glycol	10	-3.3	26.1	1009.75	63.0
	20	-7.1	19.2	1020.91	63.7
	30	-12.7	9.1	1030.51	64.3
	40	-21.1	-6.0	1038.65	64.8

Operation Range

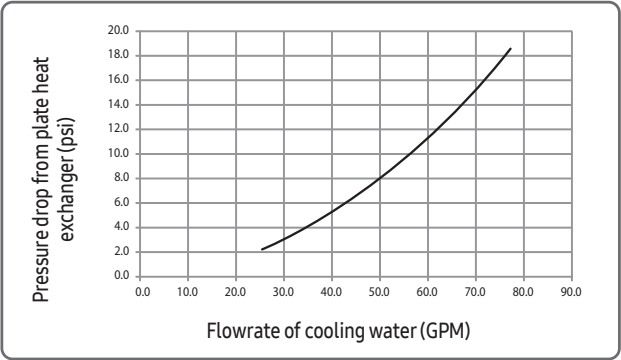
Water-Cooled VRF

Flowrate of cooling water (GPM)						
Model name		VRD072W6M-5*	VRD096W6M-5*	VRD120W6M-5*	VRD192W6M-5*	VRD240W6M-5*
Standard condition	Cooling/Heating	21.1	25.4	30.1	50.2	60.2
Operation range	Cooling/Heating	12.7 ~ 25.4	15.3 ~ 30.4	18 ~ 36.2	30.1 ~ 60.2	35.9 ~ 72.4

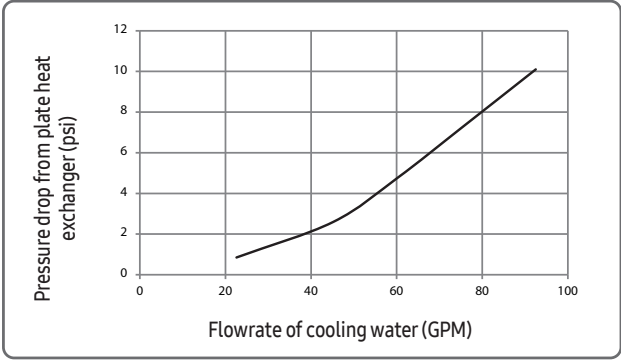
- VRD072/096/120W6M-5*



- VRD192W6M-5*



- VRD240W6M-5*

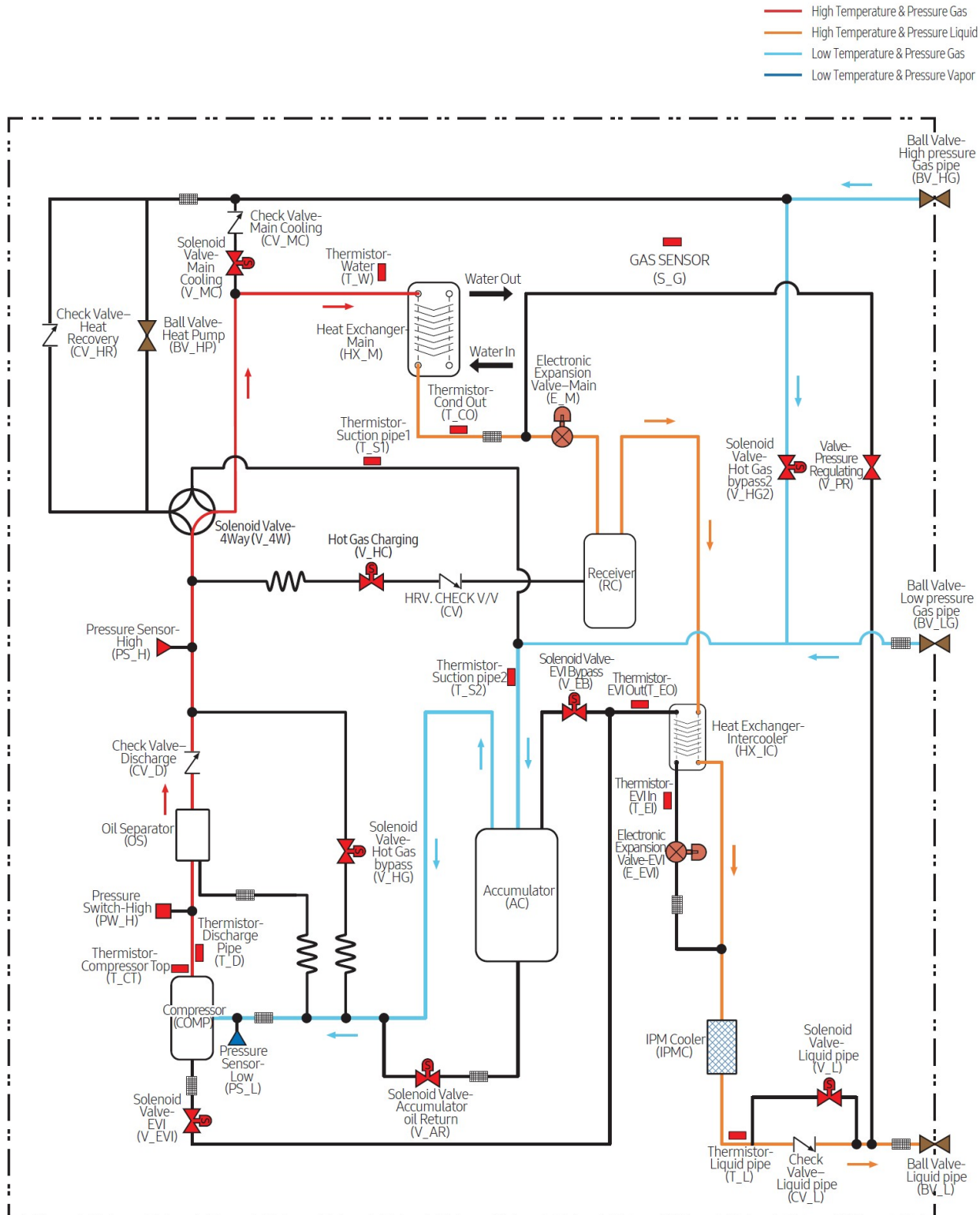


Piping Diagram

Water-Cooled VRF

VRD072W6M-5Y, VRD096W6M-5Y, VRD120W6M-5Y
VRD072W6M-5G, VRD096W6M-5G, VRD120W6M-5G

• Cooling

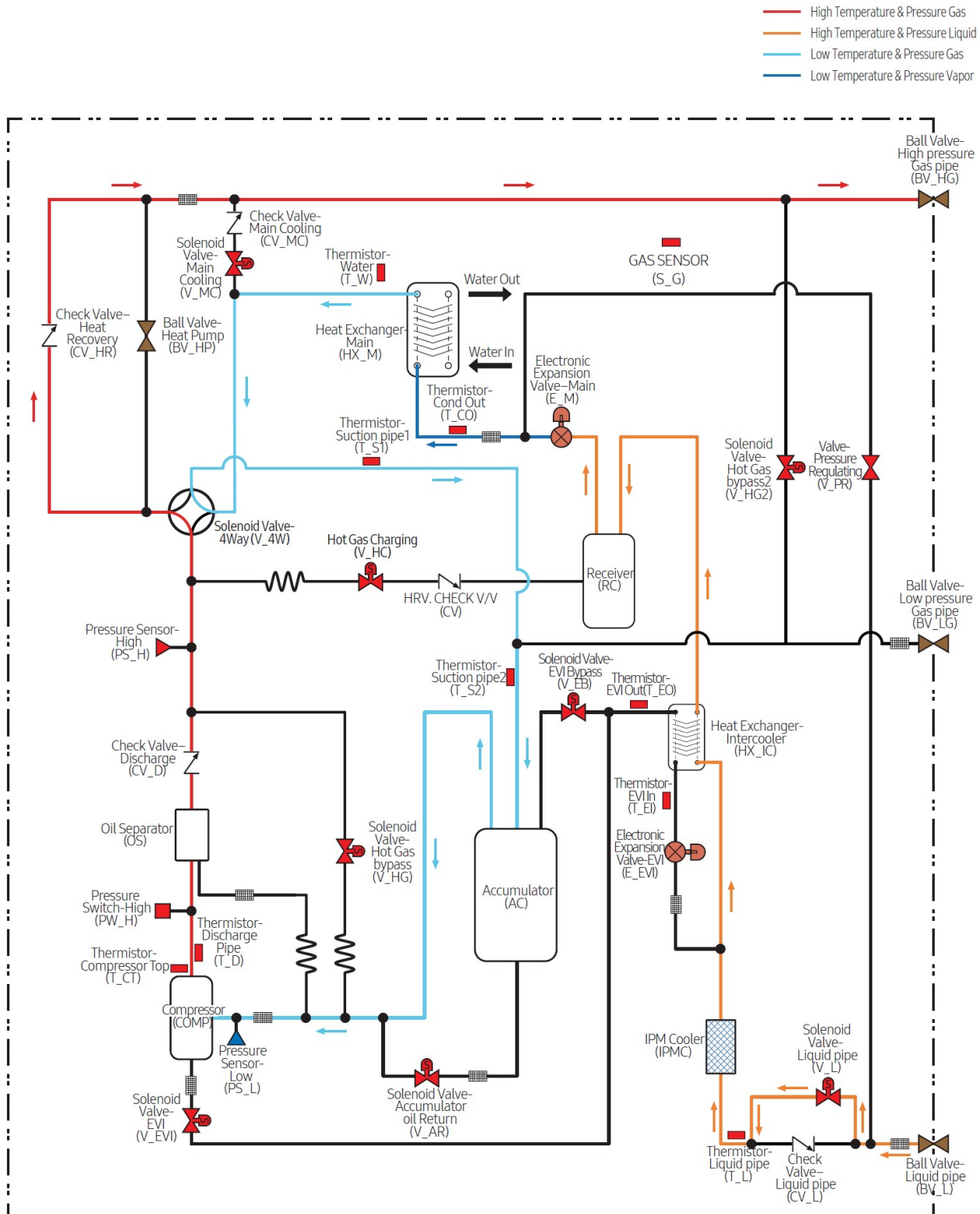


Piping Diagram

Water-Cooled VRF

VRD072W6M-5Y, VRD096W6M-5Y, VRD120W6M-5Y
VRD072W6M-5G, VRD096W6M-5G, VRD120W6M-5G

• Heating



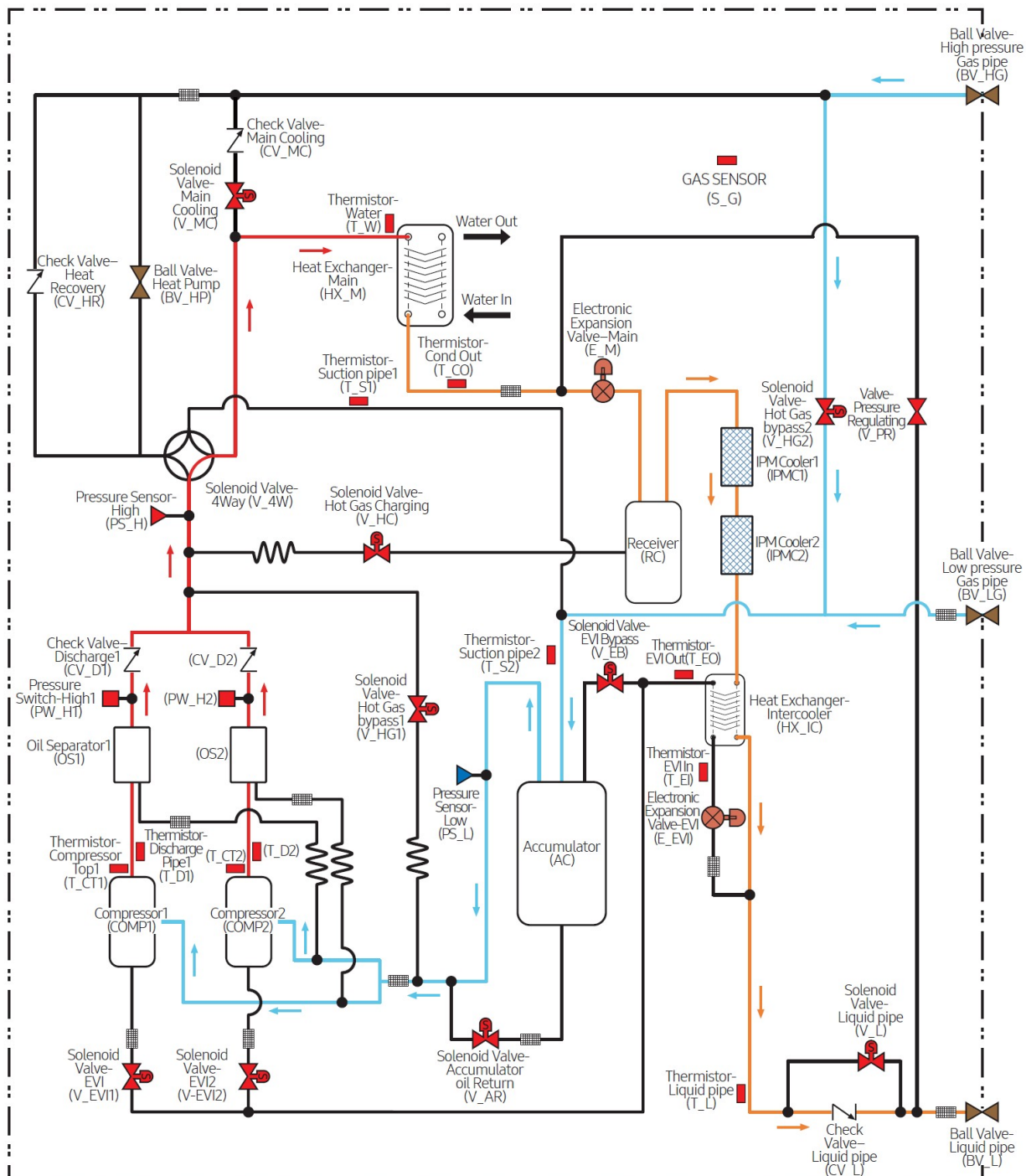
Piping Diagram

Water-Cooled VRF

VRD192W6M-5Y, VRD192W6M-5G

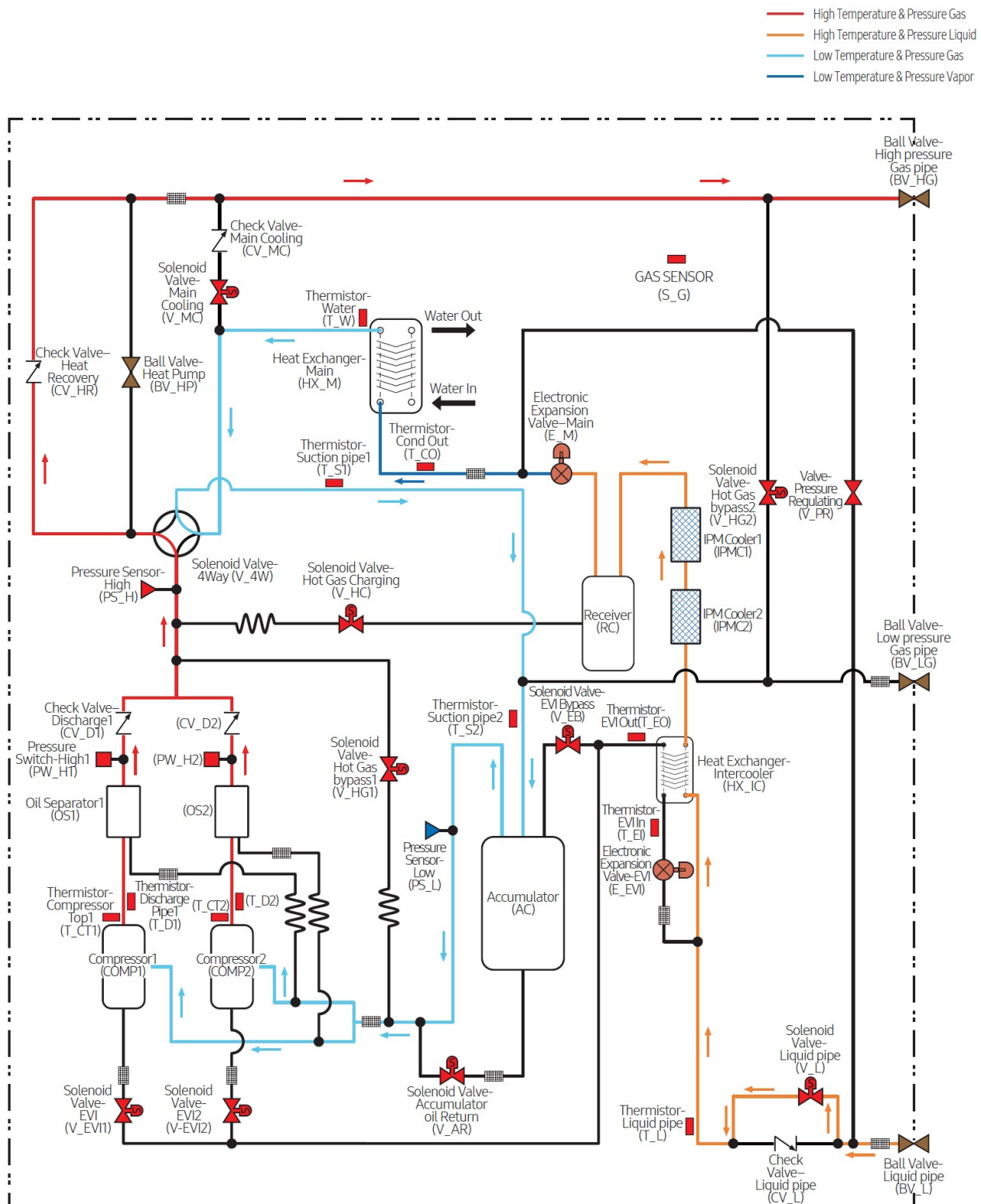
• Cooling

- High Temperature & Pressure Gas
- High Temperature & Pressure Liquid
- Low Temperature & Pressure Gas
- Low Temperature & Pressure Vapor



Water-Cooled VRF

- Heating



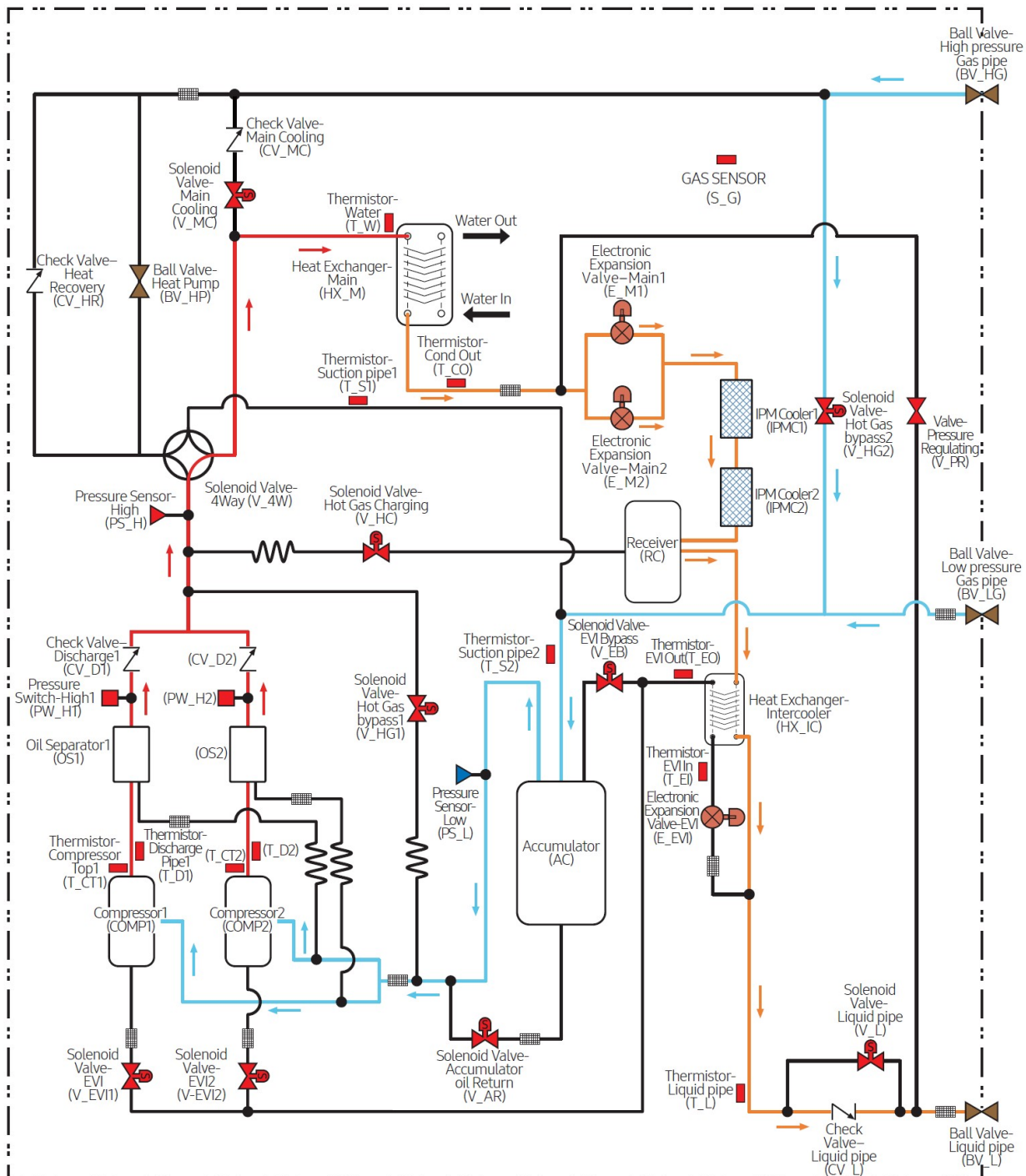
Piping Diagram

Water-Cooled VRF

VRD240W6M-5Y, VRD240W6M-5G

• Cooling

- High Temperature & Pressure Gas
- High Temperature & Pressure Liquid
- Low Temperature & Pressure Gas
- Low Temperature & Pressure Vapor

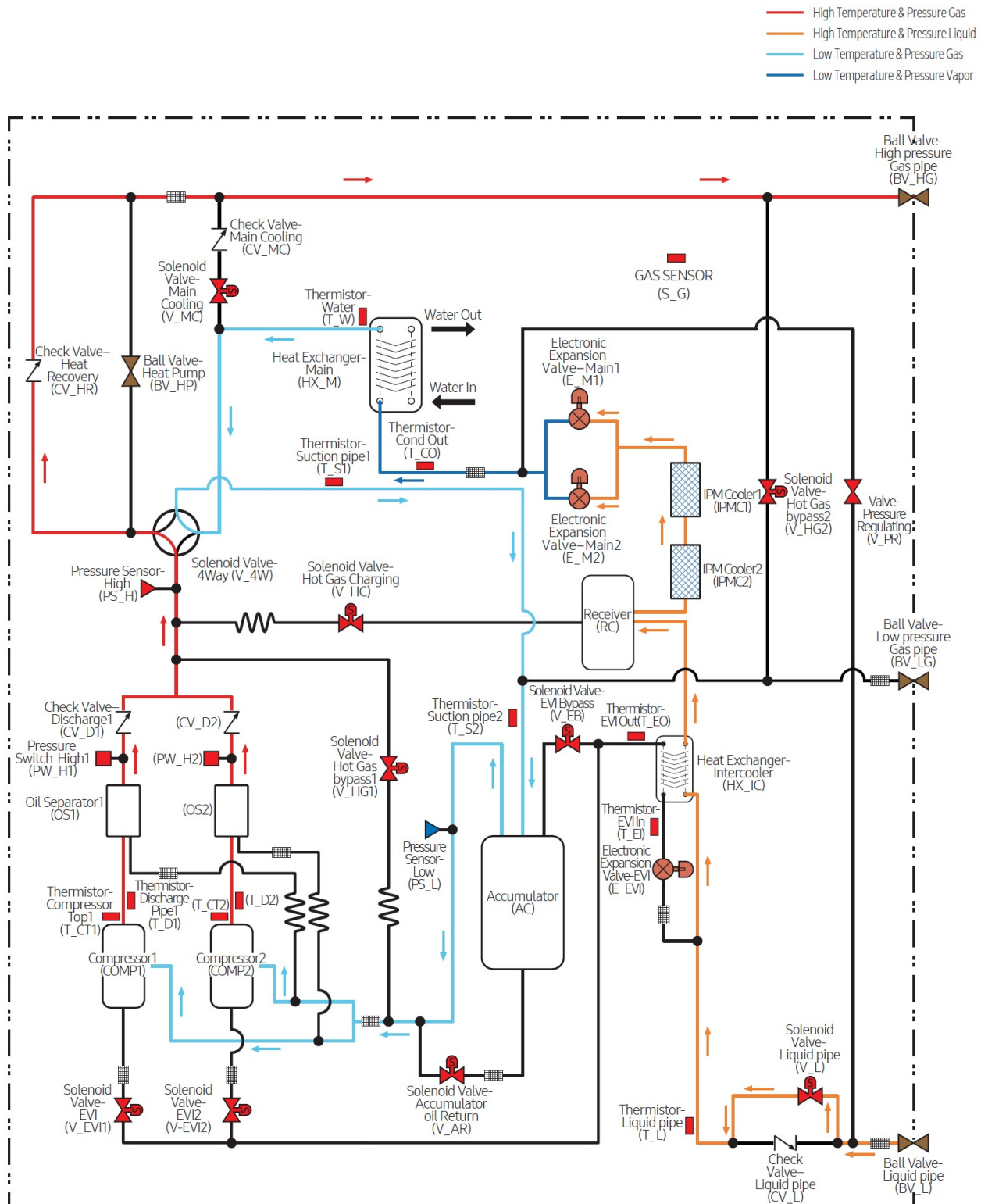


Piping Diagram

Water-Cooled VRF

VRD240W6M-5Y, VRD240W6M-5G

• Heating



Installation Clearances

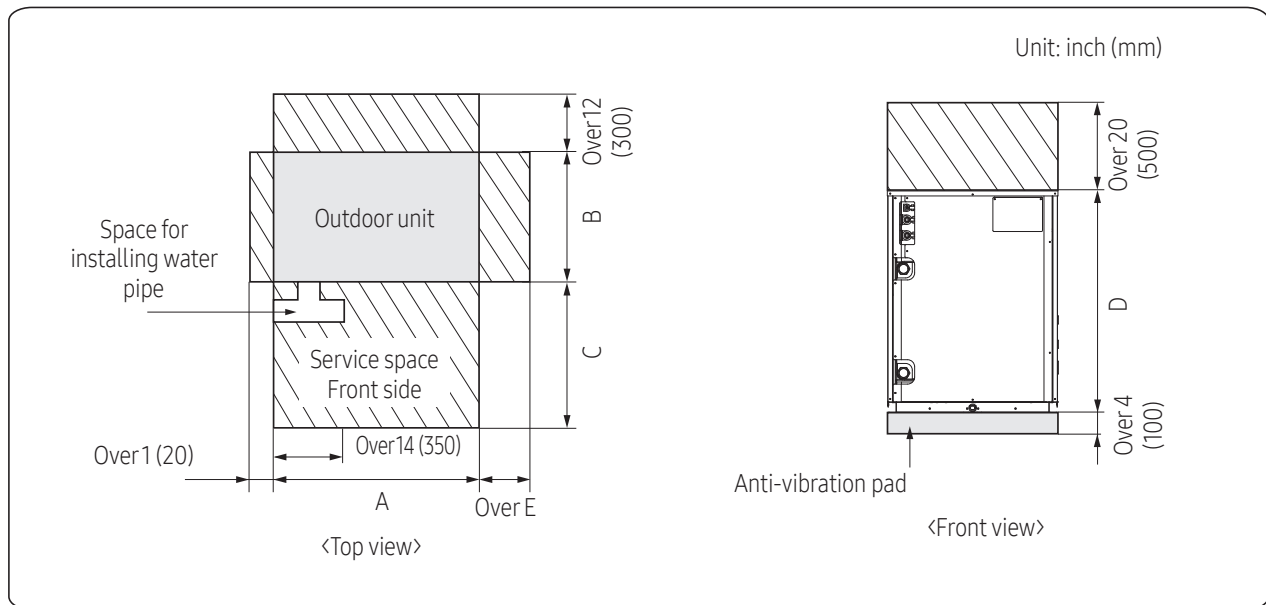
Space requirement for installation

Minimum space requirement for installation

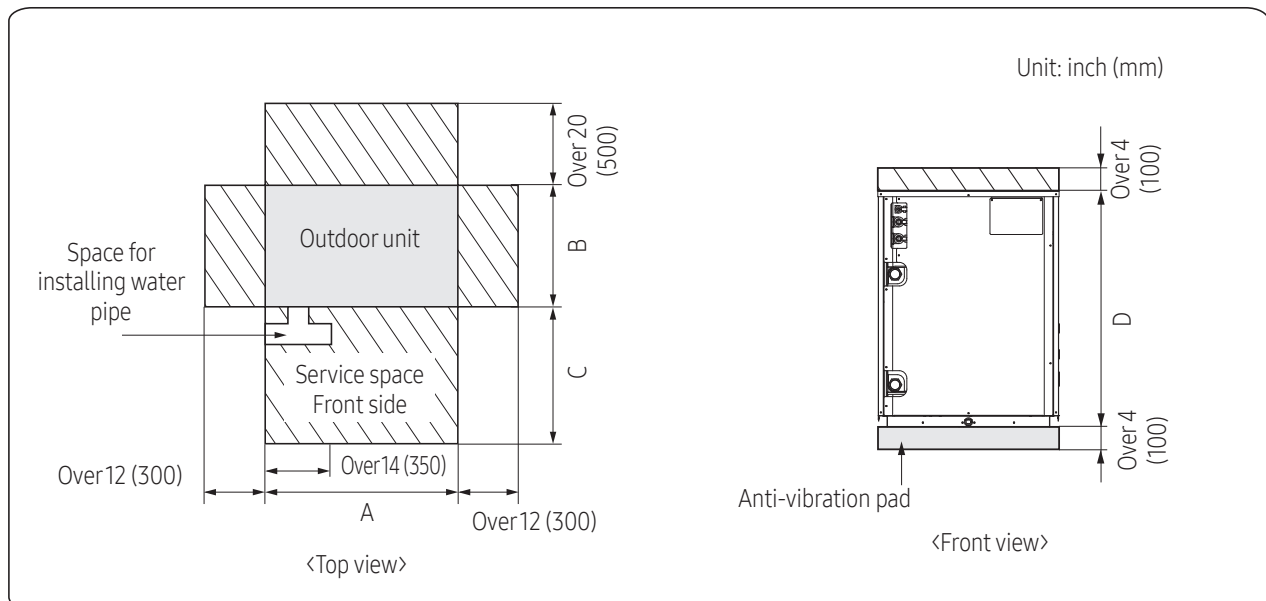
- Secure minimum installation space as shown in the following figures, considering service area and path for people etc.
 - If the installation space is narrow, installer or other worker may get injured during work and may also cause problem to the product.
- If the conditions does not meet the space requirement in this manual, please contact qualified installation agent.
- You must check the required service clearance since it is different for each model.

Single installation

When the water pipe passes through top of the product



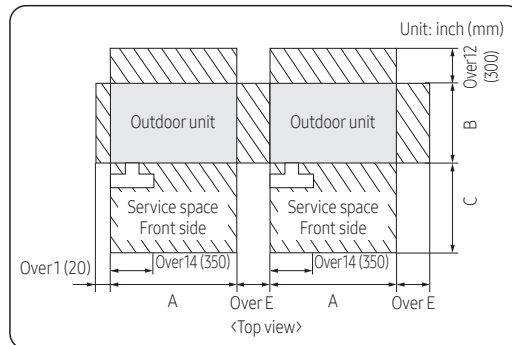
When the water pipe passes through back of the product



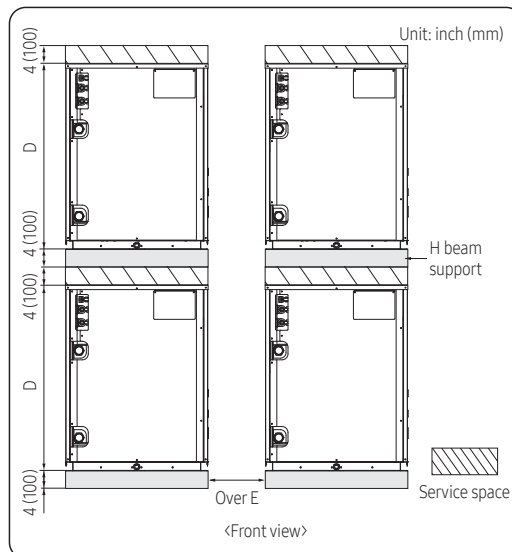
Installation Clearances

Space requirement for installation

Module or continuous installation



Double installation



- For the double installation, service space is required for the front, rear, and sides of the product. For the size of the service space, refer to the service space size of single, module or continuous installation.
- Clear enough space for E (space between outdoor units), so that water pipes connected to outdoor units does not block the front side of the outdoor units next to it.

Unit: inch (mm)

Model name of outdoor unit	A	B	C	D	E
VPD038/048/055W6M-5P	29.5 (750)	13 (330)	19.7 (500)	31.5 (800)	4 (100)
VRD072/096/120W6M-5Y	30.3 (770)	21.5 (545)	23.6 (600)	39.4 (1000)	4 (100)
VRD192/240W6M-5Y	43.3 (1100)	21.5 (545)	23.6 (600)	39.4 (1000)	4 (100)
VRD072/096/120W6M-5G	31.1 (790)	21.5 (545)	23.6 (600)	39.4 (1000)	12 (300)
VRD192/240W6M-5G	44.1 (1120)	21.5 (545)	23.6 (600)	39.4 (1000)	12 (300)

⚠ CAUTION

- If the outdoor unit is needed to be installed close to the walls unavoidably, prevent the vibration from being transferred to the walls with cushioning materials etc.



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NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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