DVM PLUS IV

DIGITAL VARIABLE MULTI

DVM Technical Data Book

DVM PLUS Ⅳ Outdoor Unit

SAMSUNG

DVM

DVM Technical Data Book

Outdoor Units

Contents

I. Products

II. Outdoor units

III. Installation

IV. Capacity correction

DVM PLUS IV

I. Products

1 Outdoor units

1-1. Nomenclature

Model name

RD	080	H	H	X	G	A	/	-
①	②	③	④	⑤	⑥	⑦		Buyer

① Classification

R	D	DVM

② CAPA

X 1/10 kW (3digit) HP/KW/BTU/TON

③ Product notation

DVM PLUS III	Compact	V
DVM PLUS IV	High efficiency	A
DVM PLUS IV	Compact	H
Inverter	Non- Module (TOP)	T
	Module	C
SLIM		S
GHP		G
MINI		M
HOME		J
WDVM		D
GEO		E
ECO Heating		P

④ MODE

C/O	C
H/P	H
H/R	R

⑤ Refrigerant

R22	R
R-410A	X

⑥ Rating voltage

220~240V, 50Hz	E
208~230V, 60Hz, 3Ø	F
380~415V, 50Hz, 3Ø	G
380V, 60Hz, 3Ø	H
460V, 60Hz, 3Ø	J

⑦ Version

Export	A ~ Z

1-2. Line-up

HP	High efficiency				
	RD080HHXGA	RD100HHXGA	RD120HHXGA	RD140HHXGA	RD160HHXGA
	RD080HRXGA	RD100HRXGA	RD120HRXGA	RD140HRXGA	RD160HRXGA
8HP	1				
10HP		1			
12HP			1		
14HP				1	
16HP					1
18HP	1	1			
20HP		2			
22HP	1			1	
24HP			2		
26HP			1	1	
28HP			1		1
30HP				1	1
32HP					2
34HP	1	1			1
36HP		2			1
38HP		1	1		1
40HP			2		1
42HP			1	1	1
44HP			1		2
46HP				1	2
48HP					3

Model	RD080/100/120HH(R)XGA

Model	RD140/160/180/200HH(R)XGA

HP	Compact						
	RD080HHXGA	RD100HHXGA	RD120HHXGA	RD140HHXGA	RD160HHXGA	RD180HHXGA	RD200HHXGA
	RD080HRXGA	RD100HRXGA	RD120HRXGA	RD140HRXGA	RD160HRXGA	RD180HRXGA	RD200HRXGA
8HP	1						
10HP		1					
12HP			1				
14HP				1			
16HP					1		
18HP						1	
20HP							1
22HP		1	1				
24HP			2				
26HP			1	1			
28HP			1		1		
30HP			1			1	
32HP			1				1
34HP				1			1
36HP					1		1
38HP						1	1
40HP							2
42HP		1	1				1
44HP			2				1
46HP			1	1			1
48HP			1		1		1
50HP			1			1	1
52HP			1				2
54HP				1			2
56HP					1		2
58HP						1	2
60HP							3

2-1. Nomenclature

Model name

ND	100	H	H	X	E	A	/	-
①	②	③	④	⑤	⑥	⑦		Buyer

① Classification

DVM	ND

② CAPA

X 1/10 kW (3digit)

③ Product notation

Cassette type	1 WAY	1
	2 WAY	2
	MINI 4 WAY	M
	4 WAY	4
Duct type	HSP Duct	H
	MSP Duct	S
	LSP Duct (Slim)	L
Convertible type	Ceiling	C
	Console	J
Wall mounted type	Vivace	B
	Neo-Forte E (with EEV)	V
	Neo-Forte (without EEV)	Q
	Neo-Forte	N

④ MODE

C/O	C
H/P	H
Tender	T
Value	V

⑤ Refrigerant

R22	R
R-410A	X

⑥ Rating voltage

220V, 60Hz	B
208~230V, 60Hz	C
220~240V, 50Hz	E

⑦ Version

Export	A ~ Z

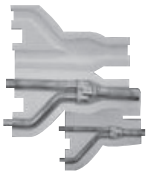
2-2. Line-up

Capacity / Type	2.2kW	2.8kW	3.6kW	4.5kW	5.6kW	6.0kW	7.1kW	9.0kW	11.2kW	12.8kW	14.0kW
Slim 1 way cassette											
2 way cassette											
4 way cassette (S)											
Mini 4 way cassette											
Slim duct											
MSP duct											
HSP duct											
Console											
Ceiling											
Neo Forte											
Neo Forte (E)											
Vivace											

3 Accessory

Classification		Product		Model	Image	Application model
Integrated management system	Controller	DMS 2		MIM-D00A		DVM Series, FJM, CAC, ERV
		S-NET 3		MST-P3P		DVM Series, FJM, CAC, ERV
		S-NET mini		MST-S3W		DVM Series, FJM, CAC, ERV
Centralized control system	Controller	Centralized controller		MCM-A202D		DVM Series, FJM, CAC, ERV
		Function controller		MCM-A100		DVM Series, FJM, CAC
		Operation mode selection switch		MCM-C200		DVM Series(Except HR models)
	Interface module	Centralized controller interface module		MIM-B13E		DVM Series, FJM, CAC, ERV
				MIM-B13D		DVM Series , FJM, CAC, ERV, ERV Plus
Individual control system Controller	Controller	Wireless remote controller		MR-DH00		Cassette, Duct(Receiver needed)
		Wired remote controller (Multi function)		MWR-WE10		Cassette, Wall-mounted, Ceiling, Duct, Console, ERV
		Wired remote controller		MWR-WH00		Cassette, Wall-mounted, Ceiling, Duct, Console
		Simplified wired remote controller		MWR-SH00		Cassette, Wall-mounted, Ceiling, Duct, Console
		ERV CO_2 series		MOS-01		ERV
		ERV Wired remote controller		MWR-VH02		ERV
		Wireless signal re-ceiver kit	Wireless signal receiver	MRK-A00		Duct (For wireless remote controller)
			Receiver wire	MRW-10A		Duct (For wireless remote controller)
		7-day scheduler		MWR-BS00		Cassette, Wall-mounted, Duct
		Remote sensor		MRW-TA		Cassette, Wall-mounted, Ceiling, Duct, Console
Building management system		Lonworks interface module		MIM-B07		DVM Series, FJM
				MIM-B18		DVM Series, FJM, CAC, ERV
		DMS-Bnet (BACnet)		MIM-B17		DVM Series, FJM
Guest room management system		Key-tag interface module		MIM-B02		DVM Series, FJM
		External contact interface module		MIM-B14		Mini DVM(R-410A), DVM PLUS III, FJM
Power distribution				MIM-B16		DVM Series, FJM

※ DVM Series : DVM mini, DVM PLUS III, DVM PLUS III HR, DVM PLUS IV, DVM PLUS IV HR

Classification	Feature	Model	Description	Relevant unit	Remark
Y-joint		MXJ-YA1509K	15.0 kW and below	DVM PLUS III DVM PLUS III HR DVM PLUS IV DVM PLUS IV HR	Requisite
		MXJ-YA2512K	Over 15.0 ~ 40.6 kW and below		
		MXJ-YA2812K	Over 40.6 ~ 46.4 kW and below		
		MXJ-YA2815K	Over 46.4 ~ 69.6 kW and below		
		MXJ-YA3119K	Over 69.6 ~ 98.6 kW and below		
		MXJ-YA3819K	Over 98.6 ~ 139.2 kW and below		
		MXJ-YA4422K	Over 139.2 kW		
Y-joint(High Pressure Gas) for DVM PLUS IV HR module		MXJ-YA1500K	23.2 kW and below	DVM PLUS III HR DVM PLUS IV HR	Requisite
		MXJ-YA2500K	Over 23.2 ~ 69.6 kW and below		
		MXJ-YA3100K	Over 69.6 ~ 139.2 kW and below		
		MXJ-YA3800K	Over 139.2 kW		
Outdoor joint (Outdoor Connection)		MXJ-T3819K	Below 48 HP	DVM PLUS III DVM PLUS III HR(Module) DVM PLUS IV DVM PLUS IV HR	Requisite
		MXJ-T4422K	Over 50 HP		
Outdoor joint (High Pressure Gas) for DVM PLUS IV HR Module		MXJ-T3100K	Below 48 HP	DVM PLUS III HR (Module) DVM PLUS IV HR	Requisite
		MXJ-T3800K	Over 50 HP		
Header joint		MXJ-HA2512K	Below 46.4 kW	DVM PLUS III DVM PLUS III HR DVM PLUS IV DVM PLUS IV HR	Requisite
		MXJ-HA3115K	Below 69.6 kW		
		MXJ-HA3819K	Over 69.7 kW		
EEV kits		MXD-A13K116A	Below 3.6 kW (1 Room) + 5.6 kW ~9.0 kW (1Room)	Wall-mounted & Ceiling indoor unit (For 2 indoor units)	Option
		MXD-A13K200A	Below 3.6 kW (2 Rooms)		
		MXD-A16K200A	5.6 kW~9.0 kW (2Rooms)		
		MXD-A22K200A	Over 9.0 kW (2Rooms)		
		MXD-A13K216A	Below 3.6 kW (2 Rooms) +5.6 kW ~ 9.0 kW (1Room)	Wall-mounted & Ceiling indoor unit (For 3 indoor units)	
		MXD-A13K300A	Below 3.6 kW (3 Rooms)		
		MXD-A16K213A	Below 3.6 kW (1 Room) + 5.6 kW ~ 9.0 kW (2Rooms)		
		MXD-A16K300A	5.6 kW ~ 9.0 kW (3Rooms)		
		MEV-A13SA	Below 3.6 kW (1 Room)	Wall-mounted & Ceiling indoor unit (For single unit)	
		MEV-A16SA	5.6 kW ~ 9.0 kW (1Room)		
Drain pump		MDP-M075SGU1	MSP Duct (9.0/11.2) kW	-	Option
		MDP-M075SGU2	MSP Duct (12.8/14.0) kW		
		MDP-M075SGU3	MSP Duct (5.6/7.1) kW		
		MDP-E075SEE3	SlimDuct (2.0~14.0)kW	-	Option
MCU kits		MCU-4EAE3	Below 4 indoors	DVM PLUS III HR DVM PLUS IV HR	Requisite (HR only)
		MCU-6EAE3	Below 6 indoors		
		MCU-Y4NEE	Below 4 indoors		
		MCU-Y6NEE	Below 6 indoors		
AHU kit		MXD-A16K1X025A	7.0kW~8.75kW	-	Option
		MXD-A22K1X050A	14.0kW~17.5kW		
		MXD-A22K2X075A	21.0kW~26.25kW		
		MXD-A22K2X100A	28.0kW~35.0kW		
Front panel		PSSMA	Slim 1 way cassette	-	Requisite
		P2SMA	2 way cassette		
		PMSMA	Mini 4 way cassette		
		P4SMA	4 way cassette		
		PC4NUSKA	4way cassette - Waffle		
		PC4NUSKE	4way cassette -Classic		
PDM kit		MXD-A38K2A	8~12HP	DVM PLUS IV	Option
		MXD-A12K2A	14~16HP		
		MXD-A58K2A	18~20HP		
Humidifier		MVO-VA050100	RHF050KHEA		
		MVO-VA100100	RHF100KHEA		

DVM PLUS IV

II. Outdoor units

1 Specifications

1-1. DVM Plus IV HP

1) Compact (Single)

Type							
Model Name				RD080HHXGA	RD100HHXGA	RD120HHXGA	RD140HHXGA
				8	10	12	14
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	8	10	12	14
	Capacity (Nominal)	Cooling [1]	kW	22.4	28.0	33.6	39.2
			Btu/h	76,400	95,500	114,600	133,800
		Heating [2]	kW	25.2	31.5	37.8	44.1
			Btu/h	86,000	107,500	129,000	150,500
Power	Power Input (Nominal)	Cooling [1]	kW	5.20	7.04	9.20	10.10
		Heating [2]		5.46	6.89	8.50	9.65
	Current Input (Nominal)	Cooling [1]	A	8.80	13.00	20.00	20.90
		Heating [2]		11.40	12.70	18.40	19.40
	Max. Current Input			18.40	21.50	28.40	29.40
	Circuit Breaker (MCCB+ELB / ELCB)		A	30	30	40	40
COP	Nominal Cooling		-	4.31	3.98	3.65	3.88
	Nominal Heating		-	4.62	4.57	4.45	4.57
FAN	Air Flow Rate		CMM	173	173	210	226
Piping Connections	Liquid Pipe		Ø, mm	9.52	9.52	12.70	12.70
	Gas Pipe		Ø, mm	19.05	22.23	25.40	25.40
	Discharge Gas Pipe		Ø, mm	-	-	-	-
	Oil Equalizing Pipe		Ø, mm	-	-	-	-
	Installation Limitation	Max. Length	m	200	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 1.5	CV 2.5	CV 4	CV 4
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Factory Charging		kg	5.0	5.0	5.0	7.0
Sound [5]	Sound Pressure		dB(A)	57	58	58	58
External Dimension	Net Weight		kg	237	237	240	280
	Shipping Weight		kg	253	253	256	301
	Net Dimensions (WxHxD)		mm	880 x 1695 x 765	880 x 1695 x 765	880 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	948 x 1912 x 832	948 x 1912 x 832	948 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name				RD160HHXGA	RD180HHXGA	RD200HHXGA
				16	18	20
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	16	18	20
	Capacity (Nominal)	Cooling [1]	kW	44.8	50.4	56.0
			Btu/h	152,900	172,000	191,100
		Heating [2]	kW	50.4	56.7	63.0
			Btu/h	172,000	193,500	215,000
Power	Power Input (Nominal)	Cooling [1]	kW	12.00	15.70	17.00
		Heating [2]		11.30	12.90	14.50
	Current Input (Nominal)	Cooling [1]	A	22.00	31.30	32.80
		Heating [2]		27.20	26.70	29.10
	Max. Current Input			38.30	42.5	44.1
	Circuit Breaker (MCCB+ELB / ELCB)		A	50	60	60
COP	Nominal Cooling		-	3.73	3.21	3.29
	Nominal Heating		-	4.46	4.40	4.34
FAN	Air Flow Rate		CMM	250	270	275
Piping Connections	Liquid Pipe		Ø, mm	12.70	15.88	15.88
	Gas Pipe		Ø, mm	28.58	28.58	28.58
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	-	-	-
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 6	CV 6	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	7.0	8.5	8.5
Sound [5]	Sound Pressure		dB(A)	60	60	61
External Dimension	Net Weight		kg	329	340	349
	Shipping Weight		kg	350	361	370
	Net Dimensions (WxHxD)		mm	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	1363 x 1912 x 832	1363 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

2) Compact (Module)

Type						
Model Name	HP			22HP	24HP	26HP
	Compact		RD080HHXGA			
			RD100HHXGA	1		
			RD120HHXGA	1	2	1
			RD140HHXGA			1
			RD160HHXGA			
			RD180HHXGA			
			RD200HHXGA			
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	22	24	26
	Capacity (Nominal)	Cooling [1]	kW	61.6	67.2	72.8
			Btu/h	210,200	229,300	248,400
		Heating [2]	kW	69.3	75.6	81.9
			Btu/h	236,500	258,000	279,500
Power	Power Input (Nominal)	Cooling [1]	kW	16.24	18.4	19.3
		Heating [2]		15.39	17	18.15
	Current Input (Nominal)	Cooling [1]	A	33	40	40.9
		Heating [2]		31.1	36.8	37.8
	Max. Current Input			49.9	56.8	57.8
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	75	75
COP	Nominal Cooling		-	3.79	3.65	3.77
	Nominal Heating		-	4.5	4.45	4.51
FAN	Air Flow Rate		CMM	(173) x 1 + (210) x 1	(210) x 2	(210) x 1 + (226) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	15.88	19.05
	Gas Pipe		Ø, mm	28.58	28.58	31.75
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 10	CV 10	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	10	12
Sound [5]	Sound Pressure		dB(A)	61	61	61
External Dimension	Net Weight		kg	(237) x 1 + (240) x 1	(240) x 2	(240) x 1 + (280) x 1
	Shipping Weight		kg	(253) x 1 + (256) x 1	(256) x 2	(256) x 1 + (301) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			28HP	30HP	32HP
	Compact		RD080HHXGA			
			RD100HHXGA			
			RD120HHXGA	1	1	1
			RD140HHXGA			
			RD160HHXGA	1		
			RD180HHXGA		1	
			RD200HHXGA			1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	28	30	32
	Capacity (Nominal)	Cooling [1]	kW	78.4	84	89.6
			Btu/h	267,500	286,600	305,700
		Heating [2]	kW	88.2	94.5	100.8
			Btu/h	301,000	322,400	343,900
Power	Power Input (Nominal)	Cooling [1]	kW	21.2	24.9	26.2
		Heating [2]		19.8	21.4	23
	Current Input (Nominal)	Cooling [1]	A	42	51.3	52.8
		Heating [2]		45.6	45.1	47.5
	Max. Current Input			66.7	70.9	72.5
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	100	100
COP	Nominal Cooling		-	3.7	3.37	3.42
	Nominal Heating		-	4.45	4.42	4.38
FAN	Air Flow Rate		CMM	(210) x 1 + (250) x 1	(210) x 1 + (270) x 1	(210) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	31.75	31.75
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 16	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	12	13.5	13.5
Sound [5]	Sound Pressure		dB(A)	61	62	63
External Dimension	Net Weight		kg	(240) x 1 + (329) x 1	(240) x 1 + (340) x 1	(240) x 1 + (349) x 1
	Shipping Weight		kg	(256) x 1 + (350) x 1	(256) x 1 + (361) x 1	(256) x 1 + (370) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

2) Compact (Module)

Type						
Model Name	HP			34HP	36HP	38HP
	Compact		RD080HHXGA			
			RD100HHXGA			
			RD120HHXGA			
			RD140HHXGA	1		
			RD160HHXGA		1	
			RD180HHXGA			1
			RD200HHXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	34	36	38
	Capacity (Nominal)	Cooling [1]	kW	95.2	100.8	106.4
			Btu/h	324,800	343,900	363,100
		Heating [2]	kW	107.1	113.4	119.7
			Btu/h	365,400	386,900	408,400
Power	Power Input (Nominal)	Cooling [1]	kW	27.1	29	32.7
		Heating [2]		24.15	25.8	27.4
	Current Input (Nominal)	Cooling [1]	A	53.7	54.8	64.1
		Heating [2]		48.5	56.3	55.8
	Max. Current Input			73.5	82.4	86.6
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	100	100
COP	Nominal Cooling		-	3.51	3.48	3.25
	Nominal Heating		-	4.43	4.4	4.37
FAN	Air Flow Rate		CMM	(226) x 1 + (275) x 1	(250) x 1 + (275) x 1	(270) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	38.1	38.1
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	15.5	15.5	17
Sound [5]	Sound Pressure		dB(A)	63	64	64
External Dimension	Net Weight		kg	(280) x 1 + (349) x 1	(329) x 1 + (349) x 1	(340) x 1 + (349) x 1
	Shipping Weight		kg	(301) x 1 + (370) x 1	(350) x 1 + (370) x 1	(361) x 1 + (370) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			40HP	42HP	44HP
	Compact		RD080HHXGA			
			RD100HHXGA		1	
			RD120HHXGA		1	2
			RD140HHXGA			
			RD160HHXGA			
			RD180HHXGA			
			RD200HHXGA	2	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	40	42	44
	Capacity (Nominal)	Cooling [1]	kW	112	117.6	123.2
			Btu/h	382,200	401,300	420,400
		Heating [2]	kW	126	132.3	138.6
			Btu/h	429,900	451,400	472,900
Power	Power Input (Nominal)	Cooling [1]	kW	34	33.24	35.4
		Heating [2]		29	29.89	31.5
	Current Input (Nominal)	Cooling [1]	A	65.6	65.8	72.8
		Heating [2]		58.2	60.2	65.9
	Max. Current Input			88.2	94.0	100.9
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	125	125
COP	Nominal Cooling		-	3.29	3.54	3.48
	Nominal Heating		-	4.34	4.43	4.4
FAN	Air Flow Rate		CMM	(275) x 2	(173) x 1 + (210) x 1 + (275) x 1	(210) x 2 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1	38.1
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	17	18.5	18.5
Sound [5]	Sound Pressure		dB(A)	64	64	64
External Dimension	Net Weight		kg	(349) x 2	(237) x 1 + (240) x 1 + (349) x 1	(240) x 2 + (349) x 1
	Shipping Weight		kg	(370) x 2	(253) x 1 + (256) x 1 + (370) x 1	(256) x 2 + (370) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

2) Compact (Module)

Type						
Model Name	HP			46HP	48HP	50HP
	Compact		RD080HHXGA			
			RD100HHXGA			
			RD120HHXGA	1	1	1
			RD140HHXGA	1		
			RD160HHXGA		1	
			RD180HHXGA			1
			RD200HHXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	46	48	50
	Capacity (Nominal)	Cooling [1]	kW	128.8	134.4	140
			Btu/h	439,500	458,600	477,700
		Heating [2]	kW	144.9	151.2	157.5
			Btu/h	494,400	515,900	537,400
Power	Power Input (Nominal)	Cooling [1]	kW	36.3	38.2	41.9
		Heating [2]		32.65	34.3	35.9
	Current Input (Nominal)	Cooling [1]	A	73.7	74.8	84.1
		Heating [2]		66.9	74.7	74.2
	Max. Current Input			101.9	110.8	115.0
	Circuit Breaker (MCCB+ELB / ELCB)		A	125	125	150
COP	Nominal Cooling		-	3.55	3.52	3.34
	Nominal Heating		-	4.44	4.41	4.39
FAN	Air Flow Rate		CMM	(210) x 1 + (226) x 1 + (275) x 1	(210) x 1 + (250) x 1 + (275) x 1	(210) x 1 + (270) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	22.23
	Gas Pipe		Ø, mm	38.1	38.1	44.45
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 35	CV 35	CV 35
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	20.5	20.5	22
Sound [5]	Sound Pressure		dB(A)	64	64	65
External Dimension	Net Weight		kg	(240) x 1 + (280) x 1 + (349) x 1	(240) x 1 + (329) x 1 + (349) x 1	(240) x 1 + (340) x 1 + (349) x 1
	Shipping Weight		kg	(256) x 1 + (301) x 1 + (370) x 1	(256) x 1 + (350) x 1 + (370) x 1	(256) x 1 + (361) x 1 + (370) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			52HP	54HP	56HP
	Compact		RD080HHXGA			
			RD100HHXGA			
			RD120HHXGA	1		
			RD140HHXGA		1	
			RD160HHXGA			1
			RD180HHXGA			
			RD200HHXGA	2	2	2
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	52	54	56
	Capacity (Nominal)	Cooling [1]	kW	145.6	151.2	156.8
			Btu/h	496,800	515,900	535,000
		Heating [2]	kW	163.8	170.1	176.4
			Btu/h	558,900	580,400	601,900
Power	Power Input (Nominal)	Cooling [1]	kW	43.2	44.1	46
		Heating [2]		37.5	38.65	40.3
	Current Input (Nominal)	Cooling [1]	A	85.6	86.5	87.6
		Heating [2]		76.6	77.6	85.4
	Max. Current Input			116.6	117.6	126.5
	Circuit Breaker (MCCB+ELB / ELCB)		A	150	150	150
COP	Nominal Cooling		-	3.37	3.43	3.41
	Nominal Heating		-	4.37	4.4	4.38
FAN	Air Flow Rate		CMM	(210) x 1 + (275) x 2	(226) x 1 + (275) x 2	(250) x 1 + (275) x 2
Piping Connections	Liquid Pipe		Ø, mm	22.23	22.23	22.23
	Gas Pipe		Ø, mm	44.45	44.45	44.45
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 35	CV 35	CV 50
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	22	24	24
Sound [5]	Sound Pressure		dB(A)	65	66	66
External Dimension	Net Weight		kg	(240) x 1 + (349) x 2	(280) x 1 + (349) x 2	(329) x 1 + (349) x 2
	Shipping Weight		kg	(256) x 1 + (370) x 2	(301) x 1 + (370) x 2	(350) x 1 + (370) x 2
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

2) Compact (Module)

Type					
Model Name	HP			58HP	60HP
	Compact		RD080HHXGA		
			RD100HHXGA		
			RD120HHXGA		
			RD140HHXGA		
			RD160HHXGA		
			RD180HHXGA	1	
			RD200HHXGA	2	3
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump
Performance	HP		HP	58	60
	Capacity (Nominal)	Cooling [1]	kW	162.4	168
			Btu/h	554,100	573,200
		Heating [2]	kW	182.7	189
			Btu/h	623,400	644,900
Power	Power Input (Nominal)	Cooling [1]	kW	49.7	51
		Heating [2]		41.9	43.5
	Current Input (Nominal)	Cooling [1]	A	96.9	98.4
		Heating [2]		84.9	87.3
	Max. Current Input			130.7	132.3
	Circuit Breaker (MCCB+ELB / ELCB)		A	150	150
COP	Nominal Cooling		-	3.27	3.29
	Nominal Heating		-	4.36	4.34
FAN	Air Flow Rate		CMM	(270) x 1 + (275) x 2	(275) x 3
Piping Connections	Liquid Pipe		Ø, mm	22.23	22.23
	Gas Pipe		Ø, mm	44.45	44.45
	Discharge Gas Pipe		Ø, mm	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35
	Installation Limitation	Max. Length	m	200	200
		Max. Height	m	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 50	CV 50
	Communication cable		mm^2	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A
	Factory Charging		kg	25.5	25.5
Sound [5]	Sound Pressure		dB(A)	66	66
External Dimension	Net Weight		kg	(340) x 1 + (349) x 2	(349) x 3
	Shipping Weight		kg	(361) x 1 + (370) x 2	(370) x 3
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

3) High efficiency (Single)

Type								
Model Name				RD080HHXGA	RD100HHXGA	RD120HHXGA	RD140HHXGA	RD160HHXGA
				8	10	12	14	16
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	8	10	12	14	16
	Capacity (Nominal)	Cooling [1]	kW	22.4	28.0	33.6	39.2	44.8
			Btu/h	76,400	95,500	114,600	133,800	152,900
		Heating [2]	kW	25.2	31.5	37.8	44.1	50.4
			Btu/h	86,000	107,500	129,000	150,500	172,000
Power	Power Input (Nominal)	Cooling [1]	kW	5.20	7.04	9.20	10.10	12.00
		Heating [2]		5.46	6.89	8.50	9.65	11.30
	Current Input (Nominal)	Cooling [1]	A	8.80	13.00	20.00	20.90	22.00
		Heating [2]		11.40	12.70	18.40	19.40	27.20
	Max. Current Input			18.40	21.50	28.40	29.40	38.30
	Circuit Breaker (MCCB+ELB / ELCB)		A	30	30	40	40	50
COP	Nominal Cooling		-	4.31	3.98	3.65	3.88	3.73
	Nominal Heating		-	4.62	4.57	4.45	4.57	4.46
FAN	Air Flow Rate		CMM	173	173	210	226	250
Piping Connections	Liquid Pipe		Ø, mm	9.52	9.52	12.70	12.70	12.70
	Gas Pipe		Ø, mm	19.05	22.23	25.40	25.40	28.58
	Discharge Gas Pipe		Ø, mm	-	-	-	-	-
	Oil Equalizing Pipe		Ø, mm	-	-	-	-	-
	Installation Limitation	Max. Length	m	200	200	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 1.5	CV 2.5	CV 4	CV 4	CV 6
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A	R-410A
	Factory Charging		kg	5.0	5.0	5.0	7.0	7.0
Sound [5]	Sound Pressure		dB(A)	57	58	58	58	60
External Dimension	Net Weight		kg	237	237	240	280	329
	Shipping Weight		kg	253	253	256	301	350
	Net Dimensions (WxHxD)		mm	880 x 1695 x 765	880 x 1695 x 765	880 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	948 x 1912 x 832	948 x 1912 x 832	948 x 1912 x 832	1363 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

4) High efficiency (Module)

Type						
Model Name	HP			18HP	20HP	22HP
	High efficiency		RD080HHXGA	1		1
			RD100HHXGA	1	2	
			RD120HHXGA			
			RD140HHXGA			1
			RD160HHXGA			
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	18	20	22
	Capacity (Nominal)	Cooling [1]	kW	50.4	56	61.6
			Btu/h	172,000	191,100	210,200
		Heating [2]	kW	56.7	63	69.3
			Btu/h	193,500	215,000	236,500
Power	Power Input (Nominal)	Cooling [1]	kW	12.24	14.08	15.3
		Heating [2]		12.35	13.78	15.11
	Current Input (Nominal)	Cooling [1]	A	21.8	26	29.7
		Heating [2]		24.1	25.4	30.8
	Max. Current Input			39.9	43.0	47.8
	Circuit Breaker (MCCB+ELB / ELCB)		A	50	60	60
COP	Nominal Cooling		-	4.12	3.98	4.03
	Nominal Heating		-	4.59	4.57	4.59
FAN	Air Flow Rate		CMM	(173) x 2	(173) x 2	(173) x 1 + (226) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	15.88	15.88
	Gas Pipe		Ø, mm	28.58	28.58	28.58
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	-	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 6	CV 6	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	10	12
Sound [5]	Sound Pressure		dB(A)	60	61	61
External Dimension	Net Weight		kg	(237) x 1 + (237) x 1	(237) x 2	(237) x 1 + (280) x 1
	Shipping Weight		kg	(253) x 1 + (253) x 1	(253) x 2	(253) x 1 + (301) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			24HP	26HP	28HP
	High efficiency		RD080HHXGA			
			RD100HHXGA			
			RD120HHXGA	2	1	1
			RD140HHXGA		1	
			RD160HHXGA			1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	24	26	28
	Capacity (Nominal)	Cooling [1]	kW	67.2	72.8	78.4
			Btu/h	229,300	248,400	267,500
		Heating [2]	kW	75.6	81.9	88.2
			Btu/h	258,000	279,500	301,000
Power	Power Input (Nominal)	Cooling [1]	kW	18.4	19.3	21.2
		Heating [2]		17	18.15	19.8
	Current Input (Nominal)	Cooling [1]	A	40	40.9	42
		Heating [2]		36.8	37.8	45.6
	Max. Current Input			56.8	57.8	67.7
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	75	75
COP	Nominal Cooling		-	3.65	3.77	3.7
	Nominal Heating		-	4.45	4.51	4.45
FAN	Air Flow Rate		CMM	(210) x 2	(210) x 1 + (226) x 1	(210) x 1 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	19.05	19.05
	Gas Pipe		Ø, mm	28.58	31.75	31.75
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 10	CV 10	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	12	12
Sound [5]	Sound Pressure		dB(A)	61	61	61
External Dimension	Net Weight		kg	(240) x 2	(240) x 1 + (280) x 1	(240) x 1 + (329) x 1
	Shipping Weight		kg	(256) x 2	(256) x 1 + (301) x 1	(256) x 1 + (350) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

4) High efficiency (Module)

Type						
Model Name	HP			30HP	32HP	34HP
	High efficiency		RD080HHXGA			1
			RD100HHXGA			1
			RD120HHXGA			
			RD140HHXGA	1		
			RD160HHXGA	1	2	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	30	32	34
	Capacity (Nominal)	Cooling [1]	kW	84	89.6	95.2
			Btu/h	286,600	305,700	324,800
		Heating [2]	kW	94.5	100.8	107.1
			Btu/h	322,400	343,900	365,400
Power	Power Input (Nominal)	Cooling [1]	kW	22.1	24	24.24
		Heating [2]		20.95	22.6	23.65
	Current Input (Nominal)	Cooling [1]	A	42.9	44	43.8
		Heating [2]		46.6	54.4	51.3
	Max. Current Input			67.7	76.6	78.2
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	100	100
COP	Nominal Cooling		-	3.8	3.73	3.93
	Nominal Heating		-	4.51	4.46	4.53
FAN	Air Flow Rate		CMM	(226) x 1 + (250) x 1	(250) x 2	(173) x 2 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	31.75	31.75
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 16	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	14	14	17
Sound [5]	Sound Pressure		dB(A)	62	63	63
External Dimension	Net Weight		kg	(280) x 1 + (329) x 1	(329) x 2	(237) x 1 + (237) x 1 + (329) x 1
	Shipping Weight		kg	(301) x 1 + (350) x 1	(350) x 2	(253) x 1 + (253) x 1 + (350) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			36HP	38HP	40HP
	High efficiency		RD080HHXGA			
			RD100HHXGA	2	1	
			RD120HHXGA		1	2
			RD140HHXGA			
			RD160HHXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump	Heat Pump
Performance	HP		HP	36	38	40
	Capacity (Nominal)	Cooling [1]	kW	100.8	106.4	112
			Btu/h	343,900	363,100	382,200
		Heating [2]	kW	113.4	119.7	126
			Btu/h	386,900	408,400	429,900
Power	Power Input (Nominal)	Cooling [1]	kW	26.08	28.24	30.4
		Heating [2]		25.08	26.69	28.3
	Current Input (Nominal)	Cooling [1]	A	48	55	62
		Heating [2]		52.6	58.3	64
	Max. Current Input			81.3	88.2	95.1
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	100	125
COP	Nominal Cooling		-	3.87	3.77	3.68
	Nominal Heating		-	4.52	4.48	4.45
FAN	Air Flow Rate		CMM	(173) x 2 + (250) x 1	(173) x 1 + (210) x 1 + (250) x 1	(210) x 2 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1	38.1
	Discharge Gas Pipe		Ø, mm	-	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	17	17	17
Sound [5]	Sound Pressure		dB(A)	64	64	64
External Dimension	Net Weight		kg	(237) x 2 + (329) x 1	(237) x 1 + (240) x 1 + (329) x 1	(240) x 2 + (329) x 1
	Shipping Weight		kg	(253) x 2 + (350) x 1	(253) x 1 + (256) x 1 + (350) x 1	(256) x 2 + (350) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-1. DVM Plus IV HP

4) High efficiency (Module)

Type					
Model Name	HP			42HP	44HP
	High efficiency		RD080HHXGA		
			RD100HHXGA		
			RD120HHXGA	1	1
			RD140HHXGA	1	
			RD160HHXGA	1	2
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump
Performance	HP		HP	42	44
	Capacity (Nominal)	Cooling [1]	kW	117.6	123.2
			Btu/h	401,300	420,400
		Heating [2]	kW	132.3	138.6
			Btu/h	451,400	472,900
Power	Power Input (Nominal)	Cooling [1]	kW	31.3	33.2
		Heating [2]		29.45	31.1
	Current Input (Nominal)	Cooling [1]	A	62.9	64
		Heating [2]		65	72.8
	Max. Current Input			96.1	105.0
	Circuit Breaker (MCCB+ELB / ELCB)		A	125	125
COP	Nominal Cooling		-	3.76	3.71
	Nominal Heating		-	4.49	4.46
FAN	Air Flow Rate		CMM	(210) x 1 + (226) x 1 + (250) x 1	(210) x 1 + (250) x 2
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1
	Discharge Gas Pipe		Ø, mm	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35
	Installation Limitation	Max. Length	m	200	200
		Max. Height	m	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 35
	Communication cable		mm^2	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A
	Factory Charging		kg	19	19
Sound [5]	Sound Pressure		dB(A)	64	64
External Dimension	Net Weight		kg	(240) x 1 + (280) x 1 + (329) x 1	(240) x 1 + (329) x 2
	Shipping Weight		kg	(256) x 1 + (301) x 1 + (350) x 1	(256) x 1 + (350) x 2
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type					
Model Name	HP			46HP	48HP
	High efficiency		RD080HHXGA		
			RD100HHXGA		
			RD120HHXGA		
			RD140HHXGA	1	
			RD160HHXGA	2	3
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Pump	Heat Pump
Performance	HP		HP	46	48
	Capacity (Nominal)	Cooling [1]	kW	128.8	134.4
			Btu/h	439,500	458,600
		Heating [2]	kW	144.9	151.2
			Btu/h	494,400	515,900
Power	Power Input (Nominal)	Cooling [1]	kW	34.1	36
		Heating [2]		32.25	33.9
	Current Input (Nominal)	Cooling [1]	A	64.9	66
		Heating [2]		73.8	81.6
	Max. Current Input			106.0	114.9
	Circuit Breaker (MCCB+ELB / ELCB)		A	125	150
COP	Nominal Cooling		-	3.78	3.73
	Nominal Heating		-	4.49	4.46
FAN	Air Flow Rate		CMM	(226) x 1 + (250) x 2	(250) x 3
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1
	Discharge Gas Pipe		Ø, mm	-	-
	Oil Equalizing Pipe		Ø, mm	6.35	6.35
	Installation Limitation	Max. Length	m	200	200
		Max. Height	m	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 35	CV 35
	Communication cable		mm^2	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A
	Factory Charging		kg	21	21
Sound [5]	Sound Pressure		dB(A)	64	64
External Dimension	Net Weight		kg	(280) x 1 + (329) x 2	(329) x 3
	Shipping Weight		kg	(301) x 1 + (350) x 2	(350) x 3
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

1) Compact (Single)

Type							
Model Name				RD080HRXGA	RD100HRXGA	RD120HRXGA	RD140HRXGA
				8	10	12	14
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	8	10	12	14
	Capacity (Nominal)	Cooling [1]	kW	22.4	28.0	33.6	39.2
			Btu/h	76,400	95,500	114,600	133,800
		Heating [2]	kW	25.2	31.5	37.8	44.1
			Btu/h	86,000	107,500	129,000	150,500
Power	Power Input (Nominal)	Cooling [1]	kW	5.20	7.04	9.20	10.10
		Heating [2]		5.46	6.89	8.50	9.65
	Current Input (Nominal)	Cooling [1]	A	8.80	13.00	20.00	20.90
		Heating [2]		11.40	12.70	18.40	19.40
	Max. Current Input			18.40	21.50	28.40	29.40
	Circuit Breaker (MCCB+ELB / ELCB)		A	30	30	40	40
COP	Nominal Cooling		-	4.31	3.98	3.65	3.88
	Nominal Heating		-	4.62	4.57	4.45	4.57
FAN	Air Flow Rate		CMM	173	173	210	226
Piping Connections	Liquid Pipe		Ø, mm	9.52	9.52	12.70	12.70
	Gas Pipe		Ø, mm	19.05	22.23	25.40	25.40
	Discharge Gas Pipe		Ø, mm	15.88	19.05	22.23	22.23
	Oil Equalizing Pipe		Ø, mm	-	-	-	-
	Installation Limitation	Max. Length	m	200	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 1.5	CV 2.5	CV 4	CV 4
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Factory Charging		kg	5.0	5.0	5.0	7.0
Sound [5]	Sound Pressure		dB(A)	57	58	58	58
External Dimension	Net Weight		kg	243	243	243	293
	Shipping Weight		kg	259	259	259	314
	Net Dimensions (WxHxD)		mm	880 x 1695 x 765	880 x 1695 x 765	880 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	948 x 1912 x 832	948 x 1912 x 832	948 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name				RD160HRXGA	RD180HRXGA	RD200HRXGA
				16	18	20
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	16	18	20
	Capacity (Nominal)	Cooling [1]	kW	44.8	50.4	56.0
			Btu/h	152,900	172,000	191,100
		Heating [2]	kW	50.4	56.7	63.0
			Btu/h	172,000	193,500	215,000
Power	Power Input (Nominal)	Cooling [1]	kW	12.00	15.70	17.00
		Heating [2]		11.30	12.90	14.50
	Current Input (Nominal)	Cooling [1]	A	22.00	31.30	32.80
		Heating [2]		27.20	26.70	29.10
	Max. Current Input			38.30	42.5	44.1
	Circuit Breaker (MCCB+ELB / ELCB)		A	50	60	60
COP	Nominal Cooling		-	3.73	3.21	3.29
	Nominal Heating		-	4.46	4.40	4.34
FAN	Air Flow Rate		CMM	250	270	275
Piping Connections	Liquid Pipe		Ø, mm	12.70	15.88	15.88
	Gas Pipe		Ø, mm	28.58	28.58	28.58
	Discharge Gas Pipe		Ø, mm	25.40	25.40	25.40
	Oil Equalizing Pipe		Ø, mm	-	-	-
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 6	CV 6	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	7.0	8.5	8.5
Sound [5]	Sound Pressure		dB(A)	60	60	61
External Dimension	Net Weight		kg	338	349	355
	Shipping Weight		kg	359	369	376
	Net Dimensions (WxHxD)		mm	1295 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	1363 x 1912 x 832	1363 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

2) Compact (Module)

Type						
Model Name	HP			22HP	24HP	26HP
	Compact		RD080HRXGA			
			RD100HRXGA	1		
			RD120HRXGA	1	2	1
			RD140HRXGA			1
			RD160HRXGA			
			RD180HRXGA			
			RD200HRXGA			
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	22	24	26
	Capacity (Nominal)	Cooling [1]	kW	61.6	67.2	72.8
			Btu/h	210,200	229,300	248,400
		Heating [2]	kW	69.3	75.6	81.9
			Btu/h	236,500	258,000	279,500
Power	Power Input (Nominal)	Cooling [1]	kW	16.24	18.4	19.3
		Heating [2]		15.39	17	18.15
	Current Input (Nominal)	Cooling [1]	A	33	40	40.9
		Heating [2]		31.1	36.8	37.8
	Max. Current Input			49.9	56.8	57.8
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	75	75
COP	Nominal Cooling		-	3.79	3.65	3.77
	Nominal Heating		-	4.5	4.45	4.51
FAN	Air Flow Rate		CMM	(173) x 1 + (210) x 1	(210) x 2	(210) x 1 + (226) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	15.88	19.05
	Gas Pipe		Ø, mm	28.58	28.58	31.75
	Discharge Gas Pipe		Ø, mm	25.4	25.4	28.58
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 10	CV 10	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	10	12
Sound [5]	Sound Pressure		dB(A)	61	61	61
External Dimension	Net Weight		kg	(243) x 1 + (243) x 1	(243) x 2	(243) x 1 + (293) x 1
	Shipping Weight		kg	(259) x 1 + (259) x 1	(259) x 2	(259) x 1 + (314) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			28HP	30HP	32HP
	Compact		RD080HRXGA			
			RD100HRXGA			
			RD120HRXGA	1	1	1
			RD140HRXGA			
			RD160HRXGA	1		
			RD180HRXGA		1	
			RD200HRXGA			1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	28	30	32
	Capacity (Nominal)	Cooling [1]	kW	78.4	84	89.6
			Btu/h	267,500	286,600	305,700
		Heating [2]	kW	88.2	94.5	100.8
			Btu/h	301,000	322,400	343,900
Power	Power Input (Nominal)	Cooling [1]	kW	21.2	24.9	26.2
		Heating [2]		19.8	21.4	23
	Current Input (Nominal)	Cooling [1]	A	42	51.3	52.8
		Heating [2]		45.6	45.1	47.5
	Max. Current Input			66.7	70.9	72.5
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	100	100
COP	Nominal Cooling		-	3.7	3.37	3.42
	Nominal Heating		-	4.45	4.42	4.38
FAN	Air Flow Rate		CMM	(210) x 1 + (250) x 1	(210) x 1 + (270) x 1	(210) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	31.75	31.75
	Discharge Gas Pipe		Ø, mm	28.58	28.58	28.58
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 16	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	12	13.5	13.5
Sound [5]	Sound Pressure		dB(A)	61	62	63
External Dimension	Net Weight		kg	(243) x 1 + (338) x 1	(243) x 1 + (349) x 1	(243) x 1 + (355) x 1
	Shipping Weight		kg	(259) x 1 + (359) x 1	(259) x 1 + (369) x 1	(259) x 1 + (376) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

2) Compact (Module)

Type						
Model Name	HP			34HP	36HP	38HP
	Compact		RD080HRXGA			
			RD100HRXGA			
			RD120HRXGA			
			RD140HRXGA	1		
			RD160HRXGA		1	
			RD180HRXGA			1
			RD200HRXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	34	36	38
	Capacity (Nominal)	Cooling [1]	kW	95.2	100.8	106.4
			Btu/h	324,800	343,900	363,100
		Heating [2]	kW	107.1	113.4	119.7
			Btu/h	365,400	386,900	408,400
Power	Power Input (Nominal)	Cooling [1]	kW	27.1	29	32.7
		Heating [2]		24.15	25.8	27.4
	Current Input (Nominal)	Cooling [1]	A	53.7	54.8	64.1
		Heating [2]		48.5	56.3	55.8
	Max. Current Input			73.5	82.4	86.6
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	100	100
COP	Nominal Cooling		-	3.51	3.48	3.25
	Nominal Heating		-	4.43	4.4	4.37
FAN	Air Flow Rate		CMM	(226) x 1 + (275) x 1	(250) x 1 + (275) x 1	(270) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	38.1	38.1
	Discharge Gas Pipe		Ø, mm	28.58	31.75	31.75
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	15.5	15.5	17
Sound [5]	Sound Pressure		dB(A)	63	64	64
External Dimension	Net Weight		kg	(293) x 1 + (355) x 1	(338) x 1 + (355) x 1	(348) x 1 + (355) x 1
	Shipping Weight		kg	(314) x 1 + (376) x 1	(359) x 1 + (376) x 1	(369) x 1 + (376) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			40HP	42HP	44HP
	Compact		RD080HRXGA			
			RD100HRXGA		1	
			RD120HRXGA		1	2
			RD140HRXGA			
			RD160HRXGA			
			RD180HRXGA			
			RD200HRXGA	2	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	40	42	44
	Capacity (Nominal)	Cooling [1]	kW	112	117.6	123.2
			Btu/h	382,200	401,300	420,400
		Heating [2]	kW	126	132.3	138.6
			Btu/h	429,900	451,400	472,900
Power	Power Input (Nominal)	Cooling [1]	kW	34	33.24	35.4
		Heating [2]		29	29.89	31.5
	Current Input (Nominal)	Cooling [1]	A	65.6	65.8	72.8
		Heating [2]		58.2	60.2	65.9
	Max. Current Input			88.2	94.0	100.9
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	125	125
COP	Nominal Cooling		-	3.29	3.54	3.48
	Nominal Heating		-	4.34	4.43	4.4
FAN	Air Flow Rate		CMM	(275) x 2	(173) x 1 + (210) x 1 + (275) x 1	(210) x 2 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1	38.1
	Discharge Gas Pipe		Ø, mm	31.75	31.75	31.75
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	17	18.5	18.5
Sound [5]	Sound Pressure		dB(A)	64	64	64
External Dimension	Net Weight		kg	(355) x 2	(242) x 1 + (243) x 1 + (355) x 1	(243) x 2 + (355) x 1
	Shipping Weight		kg	(376) x 2	(259) x 1 + (259) x 1 + (376) x 1	(259) x 2 + (376) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

2) Compact (Module)

Type						
Model Name	HP			46HP	48HP	50HP
	Compact		RD080HRXGA			
			RD100HRXGA			
			RD120HRXGA	1	1	1
			RD140HRXGA	1		
			RD160HRXGA		1	
			RD180HRXGA			1
			RD200HRXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	46	48	50
	Capacity (Nominal)	Cooling [1]	kW	128.8	134.4	140
			Btu/h	439,500	458,600	477,700
		Heating [2]	kW	144.9	151.2	157.5
			Btu/h	494,400	515,900	537,400
Power	Power Input (Nominal)	Cooling [1]	kW	36.3	38.2	41.9
		Heating [2]		32.65	34.3	35.9
	Current Input (Nominal)	Cooling [1]	A	73.7	74.8	84.1
		Heating [2]		66.9	74.7	74.2
	Max. Current Input			101.9	110.8	115.0
	Circuit Breaker (MCCB+ELB / ELCB)		A	125	125	150
COP	Nominal Cooling		-	3.55	3.52	3.34
	Nominal Heating		-	4.44	4.41	4.39
FAN	Air Flow Rate		CMM	(210) x 1 + (226) x 1 + (275) x 1	(210) x 1 + (250) x 1 + (275) x 1	(210) x 1 + (270) x 1 + (275) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	22.23
	Gas Pipe		Ø, mm	38.1	38.1	44.45
	Discharge Gas Pipe		Ø, mm	31.75	31.75	38.1
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 35	CV 35	CV 35
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	20.5	20.5	22
Sound [5]	Sound Pressure		dB(A)	64	64	65
External Dimension	Net Weight		kg	(243) x 1 + (293) x 1 + (355) x 1	(243) x 1 + (338) x 1 + (355) x 1	(243) x 1 + (348) x 1 + (355) x 1
	Shipping Weight		kg	(259) x 1 + (314) x 1 + (376) x 1	(259) x 1 + (359) x 1 + (376) x 1	(259) x 1 + (369) x 1 + (376) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			52HP	54HP	56HP
	Compact		RD080HRXGA			
			RD100HRXGA			
			RD120HRXGA	1		
			RD140HRXGA		1	
			RD160HRXGA			1
			RD180HRXGA			
			RD200HRXGA	2	2	2
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	52	54	56
	Capacity (Nominal)	Cooling [1]	kW	145.6	151.2	156.8
			Btu/h	496,800	515,900	535,000
		Heating [2]	kW	163.8	170.1	176.4
			Btu/h	558,900	580,400	601,900
Power	Power Input (Nominal)	Cooling [1]	kW	43.2	44.1	46
		Heating [2]		37.5	38.65	40.3
	Current Input (Nominal)	Cooling [1]	A	85.6	86.5	87.6
		Heating [2]		76.6	77.6	85.4
	Max. Current Input			116.6	117.6	126.5
	Circuit Breaker (MCCB+ELB / ELCB)		A	150	150	150
COP	Nominal Cooling		-	3.37	3.43	3.41
	Nominal Heating		-	4.37	4.4	4.38
FAN	Air Flow Rate		CMM	(210) x 1 + (275) x 2	(226) x 1 + (275) x 2	(250) x 1 + (275) x 2
Piping Connections	Liquid Pipe		Ø, mm	22.23	22.23	22.23
	Gas Pipe		Ø, mm	44.45	44.45	44.45
	Discharge Gas Pipe		Ø, mm	38.1	38.1	38.1
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 35	CV 35	CV 50
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	22	24	24
Sound [5]	Sound Pressure		dB(A)	65	66	66
External Dimension	Net Weight		kg	(243) x 1 + (355) x 2	(293) x 1 + (355) x 2	(338) x 1 + (355) x 2
	Shipping Weight		kg	(259) x 1 + (376) x 2	(314) x 1 + (376) x 2	(359) x 1 + (376) x 2
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

2) Compact (Module)

Type					
Model Name	HP			58HP	60HP
	Compact		RD080HRXGA		
			RD100HRXGA		
			RD120HRXGA		
			RD140HRXGA		
			RD160HRXGA		
			RD180HRXGA	1	
			RD200HRXGA	2	3
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery
Performance	HP		HP	58	60
	Capacity (Nominal)	Cooling [1]	kW	162.4	168
			Btu/h	554,100	573,200
		Heating [2]	kW	182.7	189
			Btu/h	623,400	644,900
Power	Power Input (Nominal)	Cooling [1]	kW	49.7	51
		Heating [2]		41.9	43.5
	Current Input (Nominal)	Cooling [1]	A	96.9	98.4
		Heating [2]		84.9	87.3
	Max. Current Input			130.7	132.3
	Circuit Breaker (MCCB+ELB / ELCB)		A	150	150
COP	Nominal Cooling		-	3.27	3.29
	Nominal Heating		-	4.36	4.34
FAN	Air Flow Rate		CMM	(270) x 1 + (275) x 2	(275) x 3
Piping Connections	Liquid Pipe		Ø, mm	22.23	22.23
	Gas Pipe		Ø, mm	44.45	44.45
	Discharge Gas Pipe		Ø, mm	38.1	38.1
	Oil Equalizing Pipe		Ø, mm	6.35	6.35
	Installation Limitation	Max. Length	m	200	200
		Max. Height	m	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 50	CV 50
	Communication cable		mm^2	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A
	Factory Charging		kg	25.5	25.5
Sound [5]	Sound Pressure		dB(A)	66	66
External Dimension	Net Weight		kg	(348) x 1 + (355) x 2	(355) x 3
	Shipping Weight		kg	(369) x 1 + (376) x 2	(376) x 3
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

3) High efficiency (Single)

Type								
Model Name				RD080HRXGA	RD100HRXGA	RD120HRXGA	RD140HRXGA	RD160HRXGA
				8	10	12	14	16
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	8	10	12	14	16
	Capacity (Nominal)	Cooling [1]	kW	22.4	28.0	33.6	39.2	44.8
			Btu/h	76,400	95,500	114,600	133,800	152,900
		Heating [2]	kW	25.2	31.5	37.8	44.1	50.4
			Btu/h	86,000	107,500	129,000	150,500	172,000
Power	Power Input (Nominal)	Cooling [1]	kW	5.20	7.04	9.20	10.10	12.00
		Heating [2]		5.46	6.89	8.50	9.65	11.30
	Current Input (Nominal)	Cooling [1]	A	8.80	13.00	20.00	20.90	22.00
		Heating [2]		11.40	12.70	18.40	19.40	27.20
	Max. Current Input			18.40	21.50	28.40	29.40	38.30
	Circuit Breaker (MCCB+ELB / ELCB)		A	30	30	40	40	50
COP	Nominal Cooling		-	4.31	3.98	3.65	3.88	3.73
	Nominal Heating		-	4.62	4.57	4.45	4.57	4.46
FAN	Air Flow Rate		CMM	173	173	210	226	250
Piping Connections	Liquid Pipe		Ø, mm	9.52	9.52	12.70	12.70	12.70
	Gas Pipe		Ø, mm	19.05	22.23	25.40	25.40	28.58
	Discharge Gas Pipe		Ø, mm	15.88	19.05	22.23	22.23	25.40
	Oil Equalizing Pipe		Ø, mm	-	-	-	-	-
	Installation Limitation	Max. Length	m	200	200	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 1.5	CV 2.5	CV 4	CV 4	CV 6
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A	R-410A
	Factory Charging		kg	5.0	5.0	5.0	7.0	7.0
Sound [5]	Sound Pressure		dB(A)	57	58	58	58	60
External Dimension	Net Weight		kg	243	243	243	293	338
	Shipping Weight		kg	259	259	259	314	359
	Net Dimensions (WxHxD)		mm	880 x 1695 x 765	880 x 1695 x 765	880 x 1695 x 765	1295 x 1695 x 765	1295 x 1695 x 765
	Shipping Dimensions (WxHxD)		mm	948 x 1912 x 832	948 x 1912 x 832	948 x 1912 x 832	1363 x 1912 x 832	1363 x 1912 x 832
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

4) High efficiency (Module)

Type						
Model Name	HP			18HP	20HP	22HP
	High efficiency		RD080HRXGA	1		1
			RD100HRXGA	1	2	
			RD120HRXGA			
			RD140HRXGA			1
			RD160HRXGA			
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	18	20	22
	Capacity (Nominal)	Cooling [1]	kW	50.4	56	61.6
			Btu/h	172,000	191,100	210,200
		Heating [2]	kW	56.7	63	69.3
			Btu/h	193,500	215,000	236,500
Power	Power Input (Nominal)	Cooling [1]	kW	12.24	14.08	15.3
		Heating [2]		12.35	13.78	15.11
	Current Input (Nominal)	Cooling [1]	A	21.8	26	29.7
		Heating [2]		24.1	25.4	30.8
	Max. Current Input			39.9	43.0	47.8
	Circuit Breaker (MCCB+ELB / ELCB)		A	50	60	60
COP	Nominal Cooling		-	4.12	3.98	4.03
	Nominal Heating		-	4.59	4.57	4.59
FAN	Air Flow Rate		CMM	(173) x 2	(173) x 2	(173) x 1 + (226) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	15.88	15.88
	Gas Pipe		Ø, mm	28.58	28.58	28.58
	Discharge Gas Pipe		Ø, mm	25.4	25.4	25.4
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 6	CV 6	CV 10
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	10	12
Sound [5]	Sound Pressure		dB(A)	60	61	61
External Dimension	Net Weight		kg	(243) x 1 + (243) x 1	(243) x 2	(243) x 1 + (293) x 1
	Shipping Weight		kg	(259) x 1 + (259) x 1	(259) x 2	(259) x 1 + (313) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			24HP	26HP	28HP
	High efficiency		RD080HRXGA			
			RD100HRXGA			
			RD120HRXGA	2	1	1
			RD140HRXGA		1	
			RD160HRXGA			1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	24	26	28
	Capacity (Nominal)	Cooling [1]	kW	67.2	72.8	78.4
			Btu/h	229,300	248,400	267,500
		Heating [2]	kW	75.6	81.9	88.2
			Btu/h	258,000	279,500	301,000
Power	Power Input (Nominal)	Cooling [1]	kW	18.4	19.3	21.2
		Heating [2]		17	18.15	19.8
	Current Input (Nominal)	Cooling [1]	A	40	40.9	42
		Heating [2]		36.8	37.8	45.6
	Max. Current Input			56.8	57.8	67.7
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	75	75
COP	Nominal Cooling		-	3.65	3.77	3.7
	Nominal Heating		-	4.45	4.51	4.45
FAN	Air Flow Rate		CMM	(210) x 2	(210) x 1 + (226) x 1	(210) x 1 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	15.88	19.05	19.05
	Gas Pipe		Ø, mm	28.58	31.75	31.75
	Discharge Gas Pipe		Ø, mm	25.4	28.58	28.58
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 10	CV 10	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	10	12	12
Sound [5]	Sound Pressure		dB(A)	61	61	61
External Dimension	Net Weight		kg	(243) x 2	(243) x 1 + (293) x 1	(243) x 1 + (338) x 1
	Shipping Weight		kg	(259) x 2	(259) x 1 + (314) x 1	(259) x 1 + (359) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

4) High efficiency (Module)

Type						
Model Name	HP			30HP	32HP	34HP
	High efficiency		RD080HRXGA			1
			RD100HRXGA			1
			RD120HRXGA			
			RD140HRXGA	1		
			RD160HRXGA	1	2	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	30	32	34
	Capacity (Nominal)	Cooling [1]	kW	84	89.6	95.2
			Btu/h	286,600	305,700	324,800
		Heating [2]	kW	94.5	100.8	107.1
			Btu/h	322,400	343,900	365,400
Power	Power Input (Nominal)	Cooling [1]	kW	22.1	24	24.24
		Heating [2]		20.95	22.6	23.65
	Current Input (Nominal)	Cooling [1]	A	42.9	44	43.8
		Heating [2]		46.6	54.4	51.3
	Max. Current Input			67.7	76.6	78.2
	Circuit Breaker (MCCB+ELB / ELCB)		A	75	100	100
COP	Nominal Cooling		-	3.8	3.73	3.93
	Nominal Heating		-	4.51	4.46	4.53
FAN	Air Flow Rate		CMM	(226) x 1 + (250) x 1	(250) x 2	(173) x 2 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	31.75	31.75	31.75
	Discharge Gas Pipe		Ø, mm	28.58	28.58	28.58
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 16	CV 16	CV 16
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	14	14	17
Sound [5]	Sound Pressure		dB(A)	62	63	63
External Dimension	Net Weight		kg	(293) x 1 + (338) x 1	(338) x 2	(242) x 1 + (242) x 1 + (338) x 1
	Shipping Weight		kg	(314) x 1 + (359) x 1	(359) x 2	(259) x 1 + (259) x 1 + (359) x 1
	Net Dimensions (WxHxD)		mm	(1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

Type						
Model Name	HP			36HP	38HP	40HP
	High efficiency		RD080HRXGA			
			RD100HRXGA	2	1	
			RD120HRXGA		1	2
			RD140HRXGA			
			RD160HRXGA	1	1	1
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	36	38	40
	Capacity (Nominal)	Cooling [1]	kW	100.8	106.4	112
			Btu/h	343,900	363,100	382,200
		Heating [2]	kW	113.4	119.7	126
			Btu/h	386,900	408,400	429,900
Power	Power Input (Nominal)	Cooling [1]	kW	26.08	28.24	30.4
		Heating [2]		25.08	26.69	28.3
	Current Input (Nominal)	Cooling [1]	A	48	55	62
		Heating [2]		52.6	58.3	64
	Max. Current Input			81.3	88.2	95.1
	Circuit Breaker (MCCB+ELB / ELCB)		A	100	100	125
COP	Nominal Cooling		-	3.87	3.77	3.68
	Nominal Heating		-	4.52	4.48	4.45
FAN	Air Flow Rate		CMM	(173) x 2 + (250) x 1	(173) x 1 + (210) x 1 + (250) x 1	(210) x 2 + (250) x 1
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1	38.1
	Discharge Gas Pipe		Ø, mm	31.75	31.75	31.75
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 25	CV 25
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A
	Factory Charging		kg	17	17	17
Sound [5]	Sound Pressure		dB(A)	64	64	64
External Dimension	Net Weight		kg	(242) x 2 + (338) x 1	(242) x 1 + (243) x 1 + (338) x 1	(243) x 2 + (338) x 1
	Shipping Weight		kg	(259) x 2 + (359) x 1	(259) x 1 + (259) x 1 + (359) x 1	(259) x 2 + (359) x 1
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1	(880 x 1695 x 765) x 2 + (1295 x 1695 x 765) x 1
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1	(948 x 1912 x 832) x 2 + (1363 x 1912 x 832) x 1
Operating Temp. Range	Cooling		°C	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		°C	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

1-2. DVM Plus IV HR

4) High efficiency (Module)

Type							
Model Name	HP			42HP	44HP	46HP	48HP
	High efficiency		RD080HRXGA				
			RD100HRXGA				
			RD120HRXGA	1	1		
			RD140HRXGA	1		1	
			RD160HRXGA	1	2	2	3
Power Supply			Ø, #, V, Hz	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50	3, 4, 380~415, 50
Mode			-	Heat Recovery	Heat Recovery	Heat Recovery	Heat Recovery
Performance	HP		HP	42	44	46	48
	Capacity (Nominal)	Cooling [1]	kW	117.6	123.2	128.8	134.4
			Btu/h	401,300	420,400	439,500	458,600
		Heating [2]	kW	132.3	138.6	144.9	151.2
			Btu/h	451,400	472,900	494,400	515,900
Power	Power Input (Nominal)	Cooling [1]	kW	31.3	33.2	34.1	36
		Heating [2]		29.45	31.1	32.25	33.9
	Current Input (Nominal)	Cooling [1]	A	62.9	64	64.9	66
		Heating [2]		65	72.8	73.8	81.6
	Max. Current Input			96.1	105.0	106.0	114.9
	Circuit Breaker (MCCB+ELB / ELCB)		A	125	125	125	150
COP	Nominal Cooling		-	3.76	3.71	3.78	3.73
	Nominal Heating		-	4.49	4.46	4.49	4.46
FAN	Air Flow Rate		CMM	(210) x 1 + (226) x 1 + (250) x 1	(210) x 1 + (250) x 2	(226) x 1 + (250) x 2	(250) x 3
Piping Connections	Liquid Pipe		Ø, mm	19.05	19.05	19.05	19.05
	Gas Pipe		Ø, mm	38.1	38.1	38.1	38.1
	Discharge Gas Pipe		Ø, mm	31.75	31.75	31.75	31.75
	Oil Equalizing Pipe		Ø, mm	6.35	6.35	6.35	6.35
	Installation Limitation	Max. Length	m	200	200	200	200
		Max. Height	m	110(40)*	110(40)*	110(40)*	110(40)*
Field Wiring	Power cable		mm^2	CV 25	CV 35	CV 35	CV 35
	Communication cable		mm^2	0.75~1.5	0.75~1.5	0.75~1.5	0.75~1.5
Refrigerant	Type		-	R-410A	R-410A	R-410A	R-410A
	Factory Charging		kg	19	19	21	21
Sound [5]	Sound Pressure		dB(A)	64	64	64	64s
External Dimension	Net Weight		kg	(243) x 1 + (293) x 1 + (338) x 1	(243) x 1 + (338) x 2	(293) x 1 + (338) x 2	(338) x 3
	Shipping Weight		kg	(259) x 1 + (314) x 1 + (359) x 1	(259) x 1 + (359) x 2	(314) x 1 + (359) x 2	(359) x 3
	Net Dimensions (WxHxD)		mm	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(880 x 1695 x 765) x 1 + (1295 x 1695 x 765) x 2	(1295 x 1695 x 765) x 3	(1295 x 1695 x 765) x 3
	Shipping Dimensions (WxHxD)		mm	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(948 x 1912 x 832) x 1 + (1363 x 1912 x 832) x 2	(1363 x 1912 x 832) x 3	(1363 x 1912 x 832) x 3
Operating Temp. Range	Cooling		℃	-5 ~ 48	-5 ~ 48	-5 ~ 48	-5 ~ 48
	Heating		℃	-20 ~ 24	-20 ~ 24	-20 ~ 24	-20 ~ 24

If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

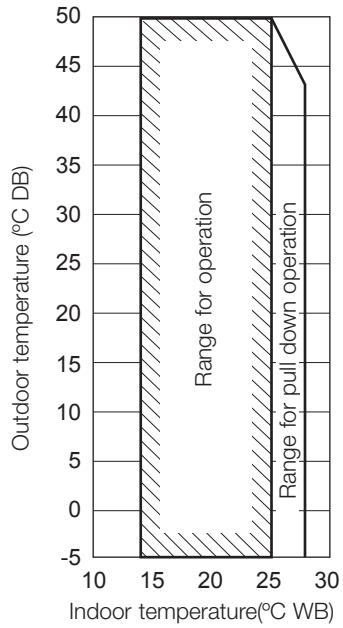
1) Nominal cooling capacities are based on;
Indoor temperature : 27°C DB, 19°C WB / Outdoor temperature : 35°C DB, Equivalent refrigerant piping : 7.5m , Level differences : 0m

2) Nominal heating capacities are based on;
Indoor temperature : 20°C DB, 15°C WB / Outdoor temperature : 7°C DB, 6°C WB, Equivalent refrigerant piping : 7.5m, Level differences : 0m

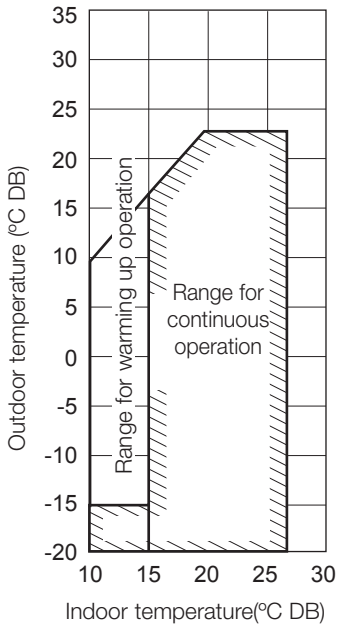
3) Sound level was acquired in a dead room. Thus actual noise level may be different depending on the installation conditions.

2 Operation limit

2-1. Cooling



2-2. Heating

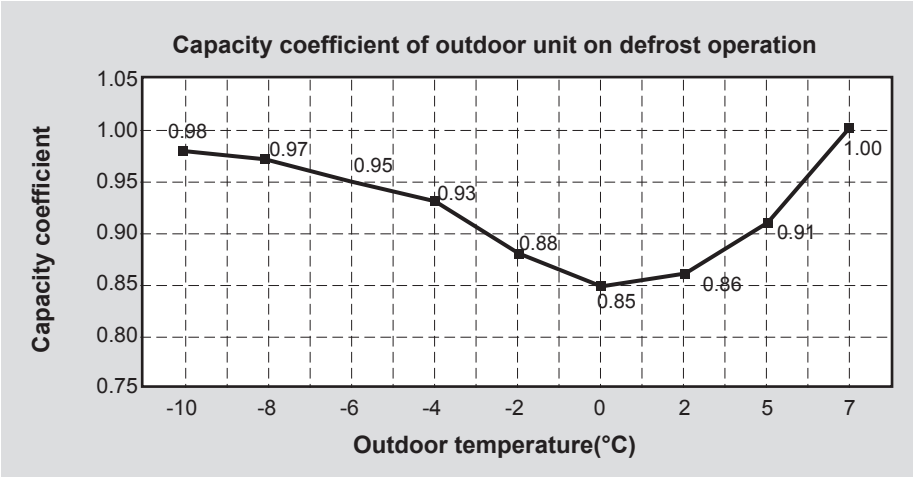


2-3. Defrosting correction factor

◆ On heating operation, frost can be formed on heat exchanger according to outdoor temperature.
(Frost on heat exchanger results in decreasing the performance.)
To remove frost on heat exchanger of outdoor unit, defrost operation is carried out periodically.
During defrost operation, capacity of outdoor unit may decrease.
The decrement is not considered to the individual capacity tables

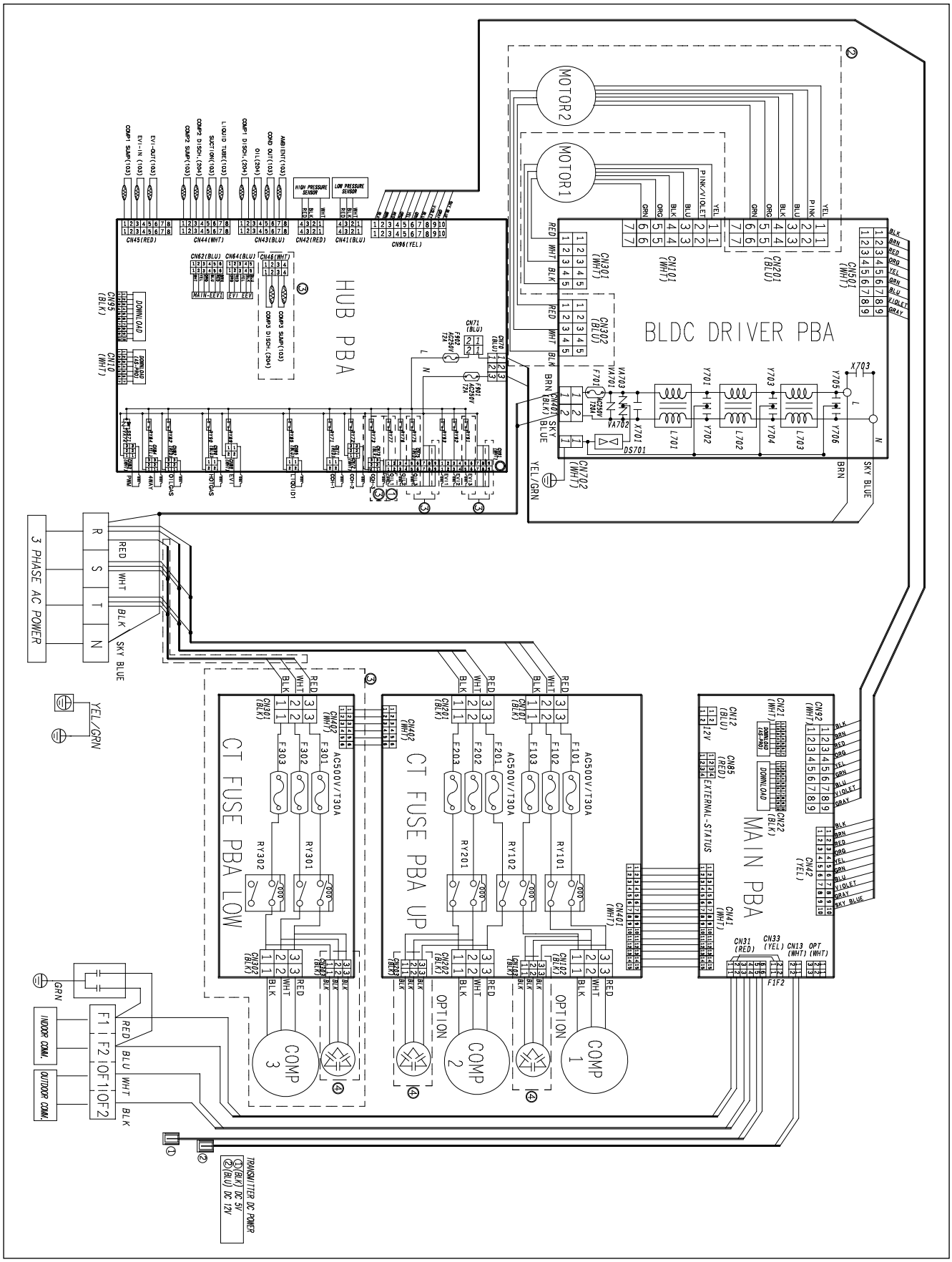
Outdoor temperature (°C, DB)	-10	-8	-6	-4	-2	0	3	5	7
Capacity coefficient	0.98	0.97	0.95	0.93	0.88	0.85	0.86	0.91	1

Corrected Heating Capacity = heating Capacity X Capacity coefficient

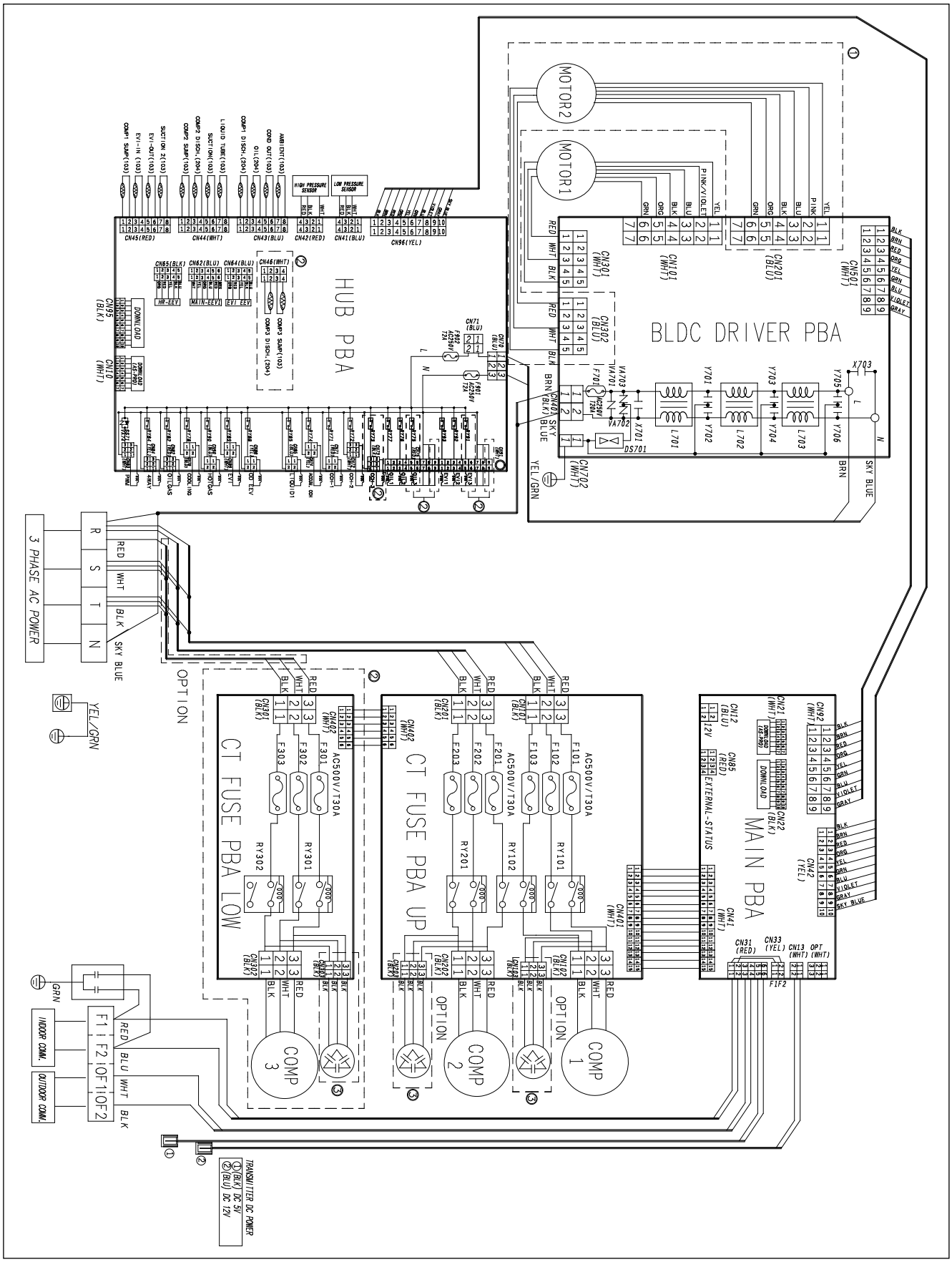


3 Electrical wiring diagram

3-1. Heat Pump

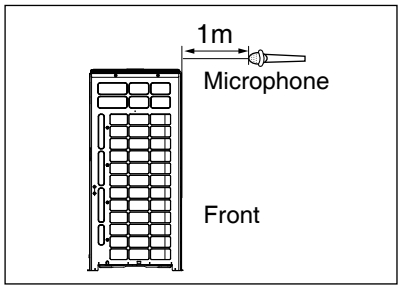


3-2. Heat Recovery



4 Sound pressure level

4-1. Operation sound level



Unit: dB(A)

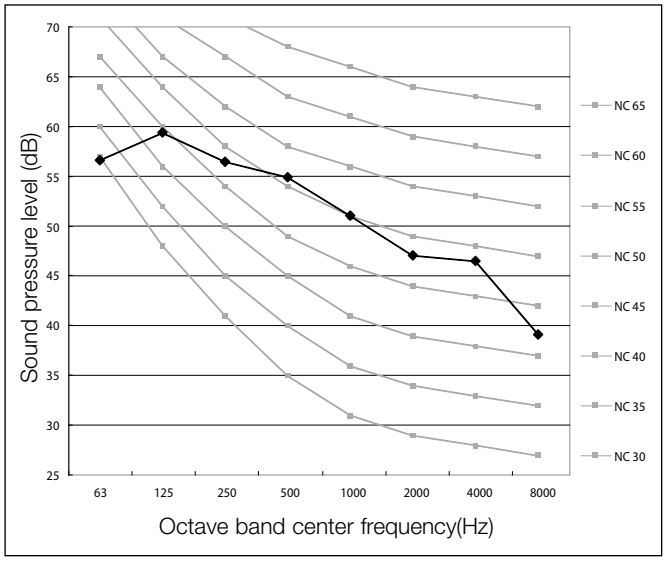
Model	High
RD080HHXGA/RD080HRXGA	57
RD100HHXGA/RD100HRXGA	58
RD120HHXGA/RD120HRXGA	58
RD140HHXGA/RD140HRXGA	58
RD160HHXGA/RD160HRXGA	60
RD180HHXGA/RD180HRXGA	60
RD200HHXGA/RD200HRXGA	61

Note

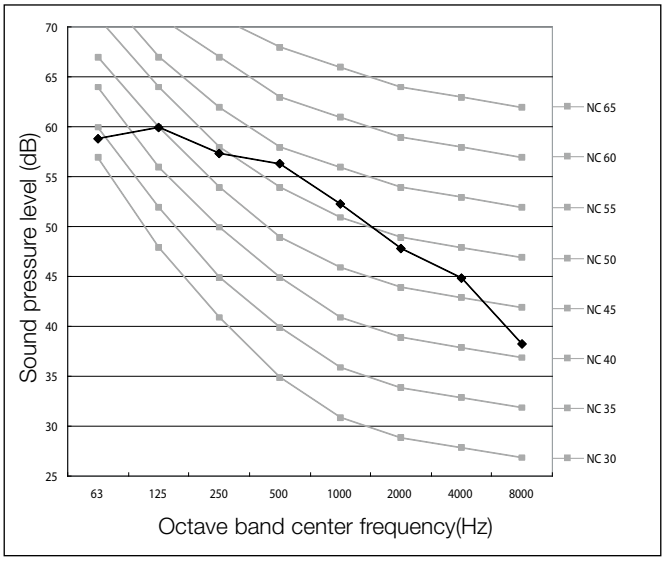
- These operation values were obtained in a dead room. Sound pressure level will vary depending on a range of factors such as the construction of the particular room where the equipment is installed.
- Operation sound level may differ depending on operation and ambient conditions.

4-2. NC curves

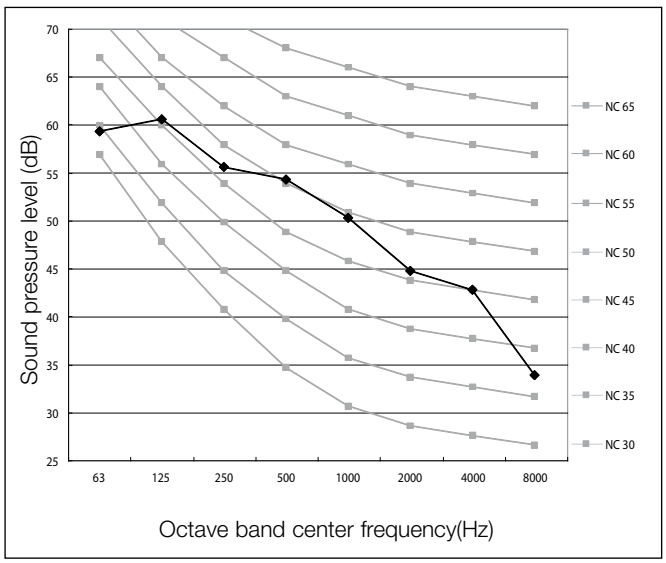
1) RD080HHXGA/RD080HRXGA



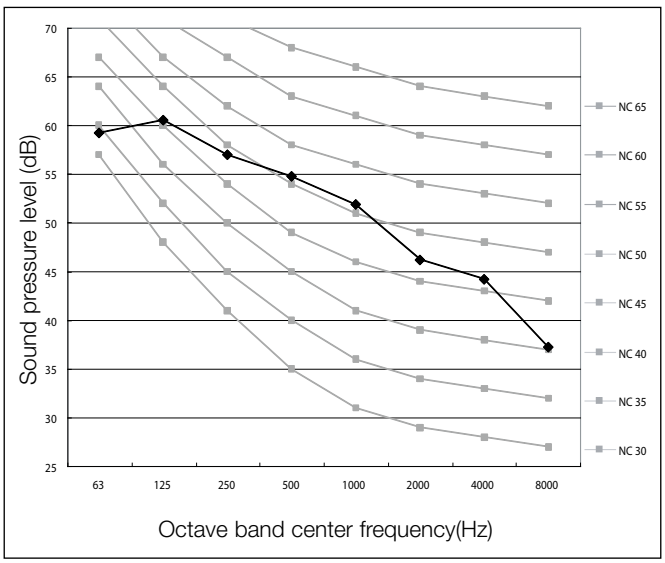
2) RD100HHXGA/RD100HRXGA



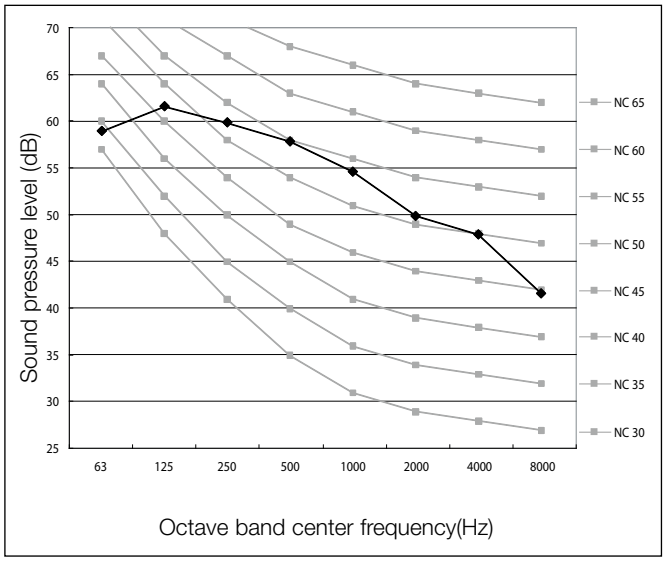
3) RD120HHXGA/RD120HRXGA



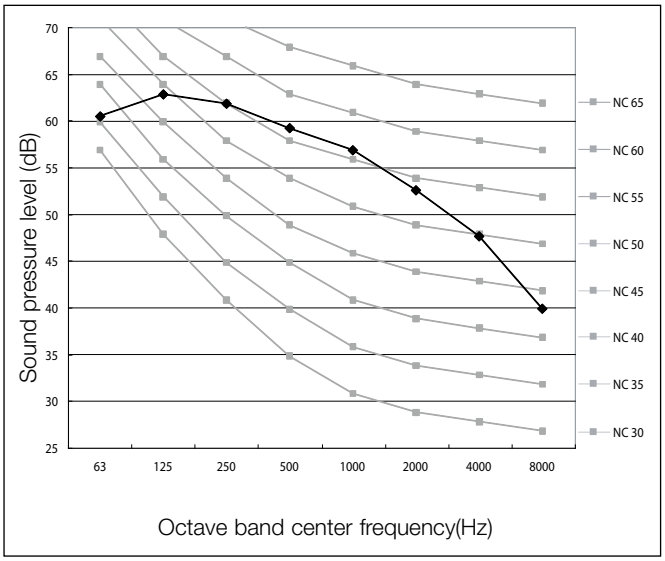
4) RD140HHXGA/RD140HRXGA



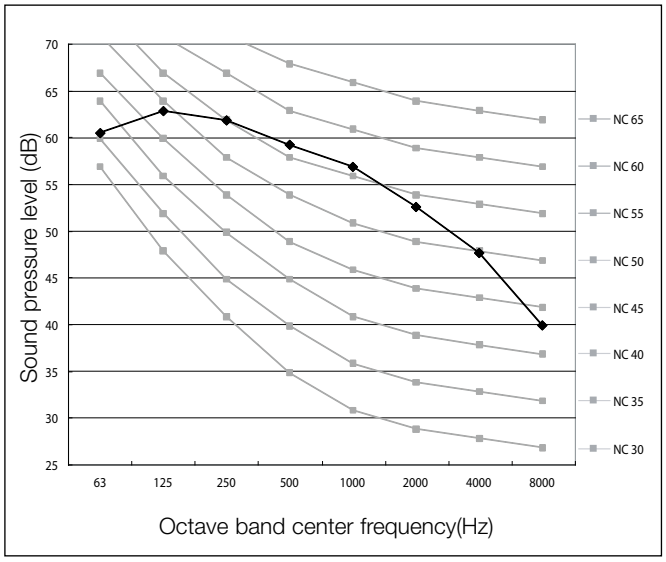
5) RD160HHXGA/RD160HRXGA



6) RD180HHXGA/RD180HRXGA



7) RD200HHXGA/RD200HRXGA



5 Cycle diagrams

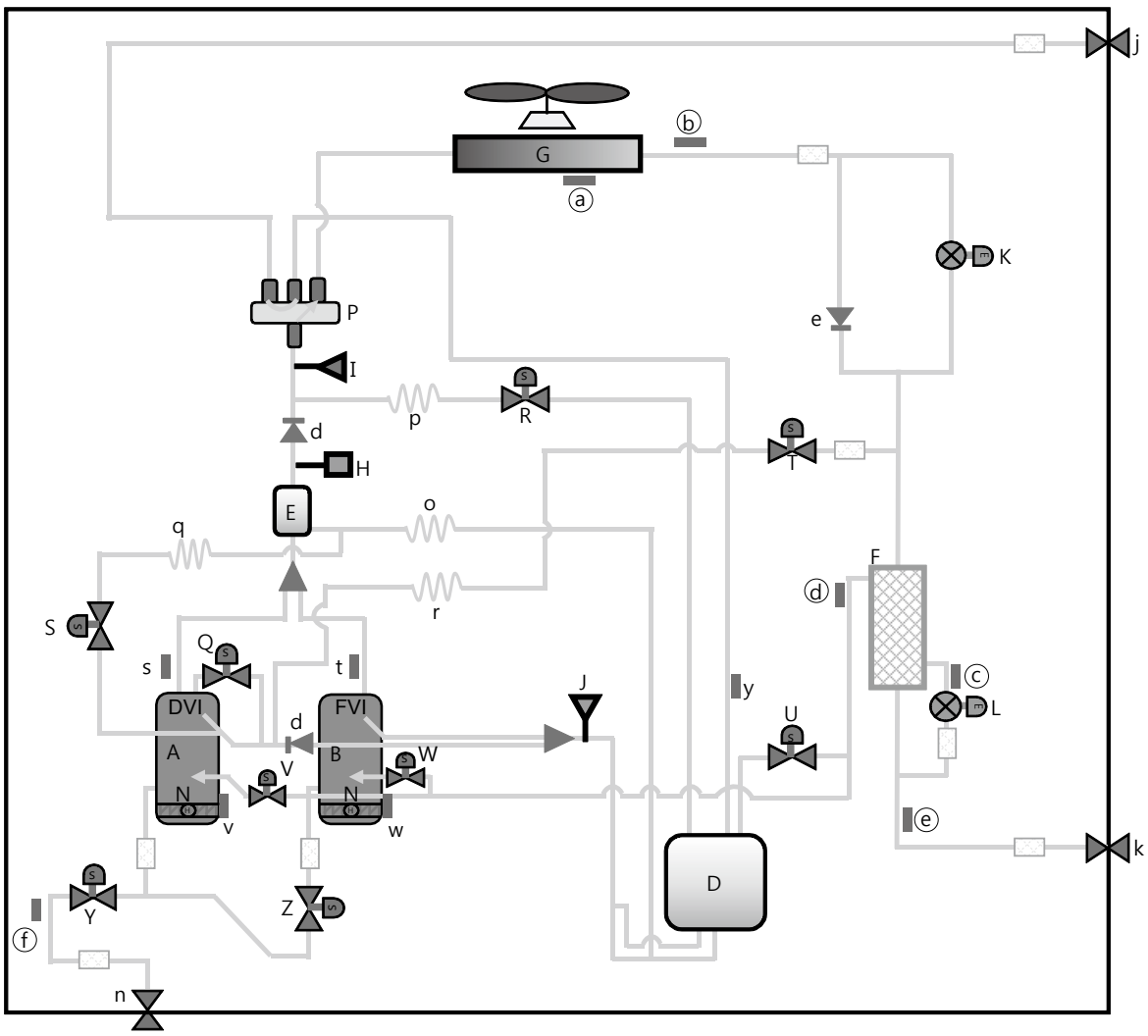
5-1. Description of parts

No	Classification	Description
1	A	DVI (Digital Vapor Injection) compressor
2	B	FVI (Fixed Vapor Injection) compressor 1
3	C	FVI (Fixed Vapor Injection) compressor 2
4	D	Accumulator
5	E	Oil separator
6	F	Turbo Intercooler
7	G	Heat exchanger of outdoor unit(Condensing unit)
8	H	High pressure switch
9	I	High pressure sensor
10	J	Low pressure sensor
11	K	Main EEV (For heating operation)
12	L	EVI EEV
13	M	HR EEV
14	N	Crank case heater of compressor
15	O	Crank case heater of accumulator
16	P	Reversing solenoid valve (4Way valve)
17	Q	PWM solenoid valve
18	R	Hot gas bypass solenoid valve
19	S	Oil gas bypass solenoid valve
20	T	Liquid bypass solenoid valve
21	U	EVI bypass solenoid valve
22	V	EVI solenoid valve of DVI compressor
23	W	EVI solenoid valve of FVI compressor 1
24	X	EVI solenoid valve of FVI compressor 2
25	Y	Oil solenoid valve 1
26	Z	Oil solenoid valve 2
27	a	Oil solenoid valve 3
28	b	Main cooling pilot solenoid valve
29	c	Outdoor pilot solenoid valve
30	d	Suction check valve
31	e	Discharge check valve
32	f	EEV bypass check valve
33	g	Main cooling check valve
34	h	HR check valve
35	i	HR EEV check valve

No	Classification	Description
36	j	High pressure gas service valve
37	k	High pressure liquid service valve
38	m	Low pressure gas service valve only for HR/MCU unit
39	n	Oil balancing service valve between units
40	o	Capillary tube from oil separator
41	p	Capillary tube from hot gas bypass valve
42	q	Capillary tube from oil gas bypass valve
43	r	Capillary tube from liquid bypass valve
44	s	Discharge temperature sensor of DVI compressor
45	t	Discharge temperature sensor of FVI compressor 1
46	u	Discharge temperature sensor of FVI compressor 2
47	v	Sump(Base) temperature sensor of DVI compressor
48	w	Sump(Base) temperature sensor of FVI compressor 1
49	x	Sump(Base) temperature sensor of FVI compressor 2
50	y	Suction 1 temperature sensor
51	z	Suction 2 temperature sensor
52	ⓐ	Ambient air temperature sensor
53	ⓑ	Cond out temperature sensor
54	ⓒ	EVI in temperature sensor
55	ⓓ	EVI out temperature sensor
56	ⓔ	Liquid tube temperature sensor
57	ⓕ	Oil temperature sensor

5-2. Parts of outdoor unit (HP)

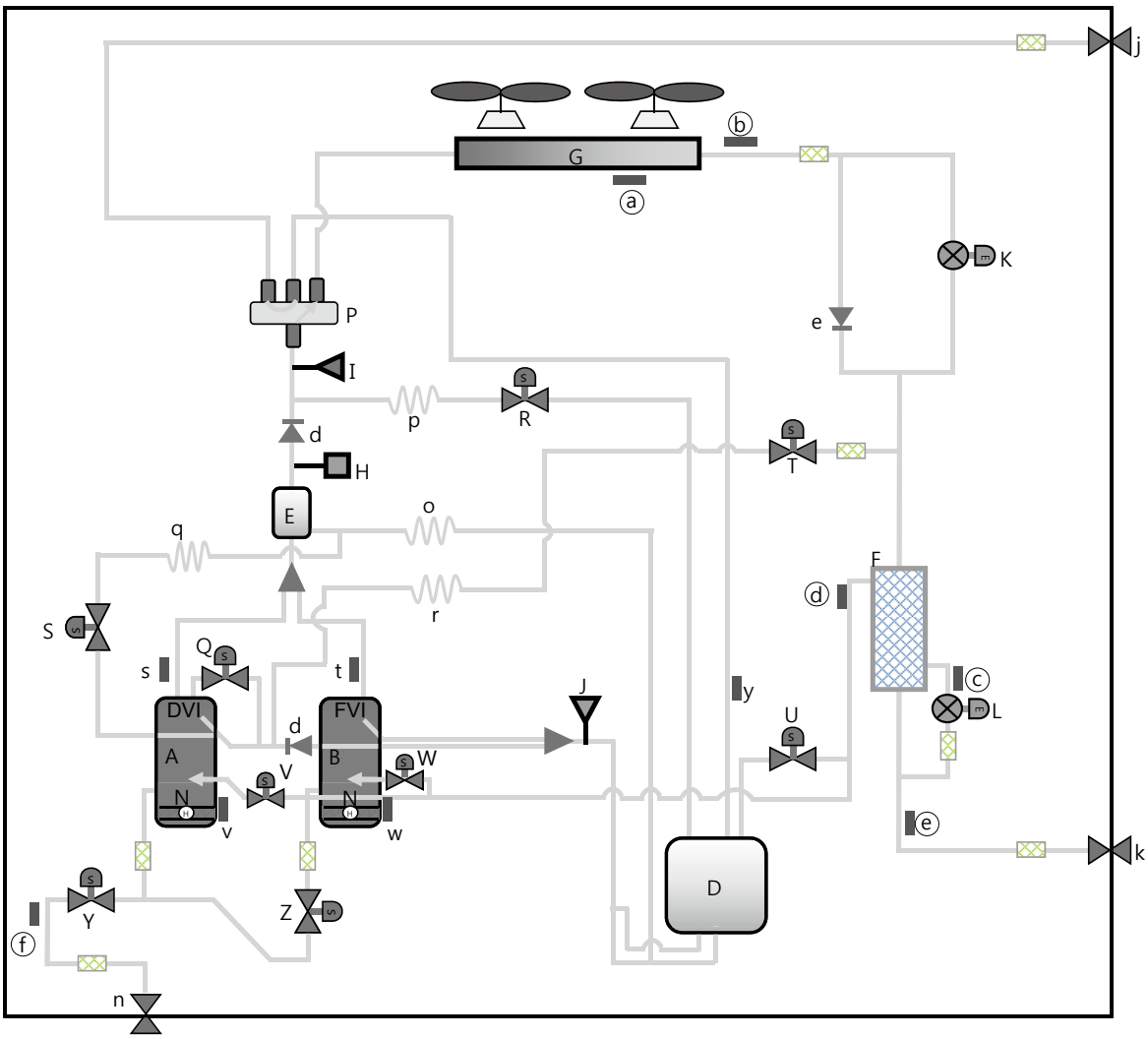
1) RD080/100/120HHXGA(DVM PLUS IV - 8/10/12HP)



Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

2) RD140HHXGA(DVM PLUS IV - 14HP)

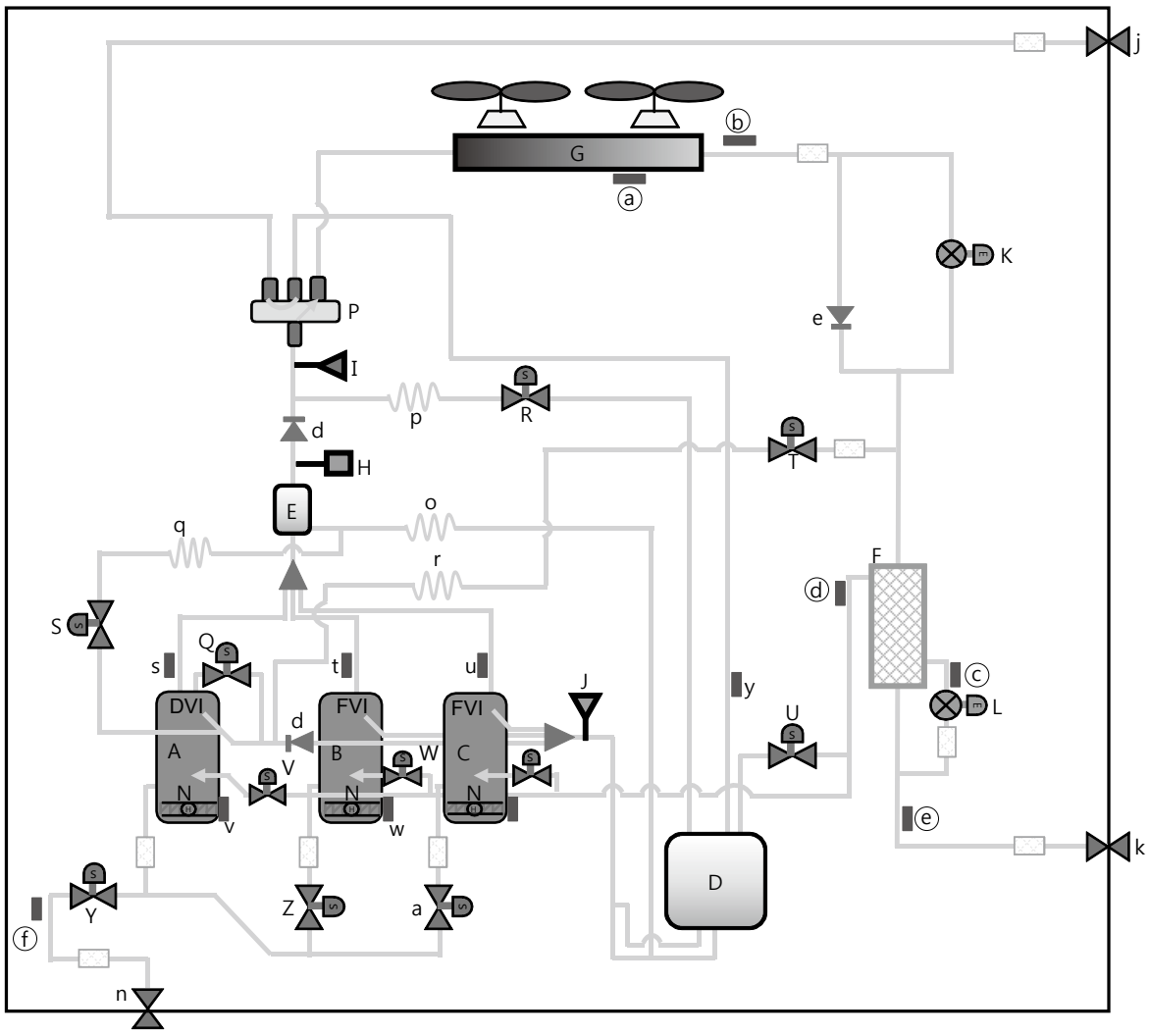


Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

5-2. Parts of outdoor unit (HP)

3) RD160/180/200HHXGA (DVM PLUS IV - 16/18/20HP)

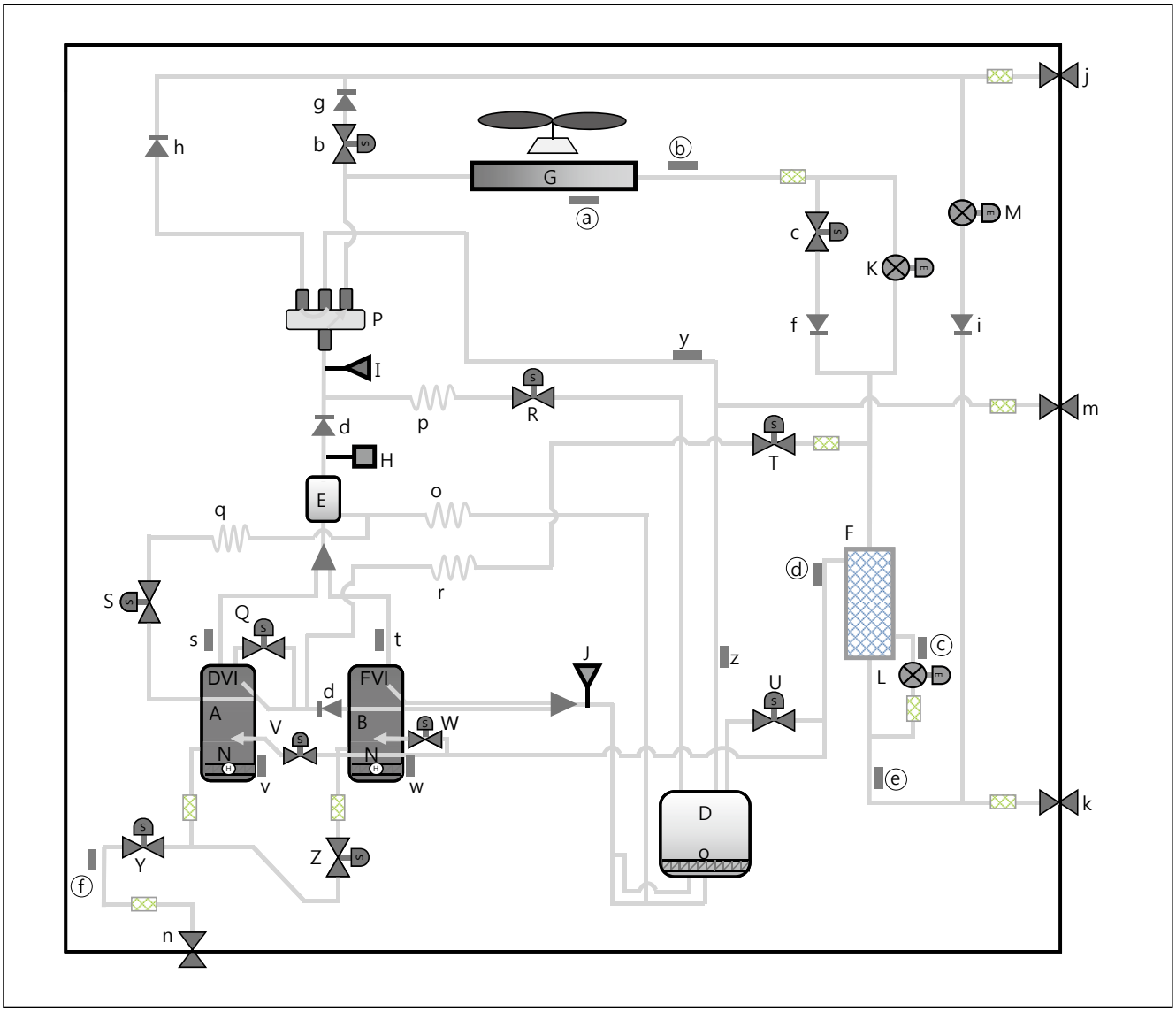


Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

5-3. Parts of outdoor unit (HR)

1) RD080/100/120HRXGA(DVM PLUS IV HR - 8/10//12HP)

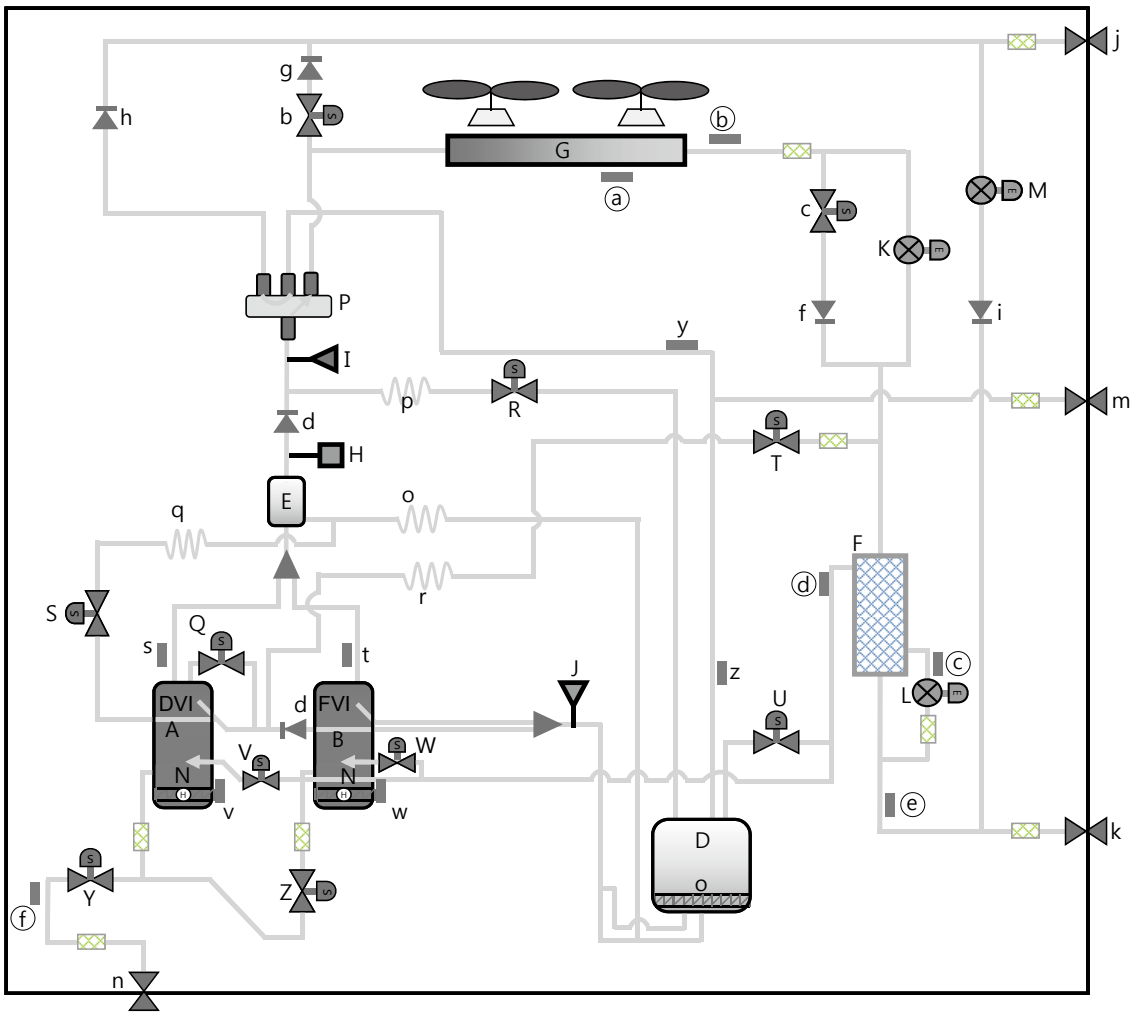


Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

5-3. Parts of outdoor unit (HR)

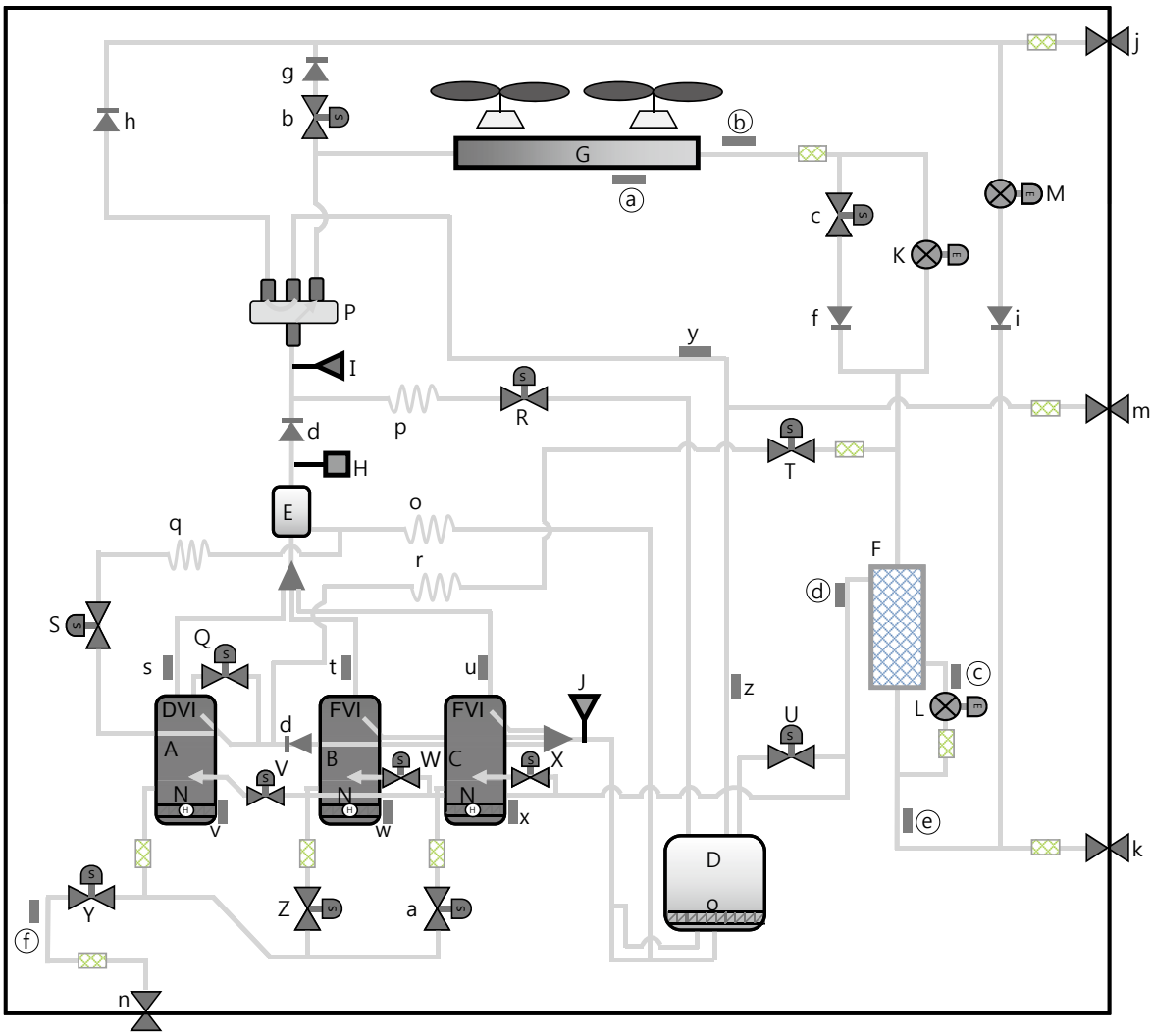
2) RD140HRXGA(DVM PLUS IV HR - 14HP)



Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

3) RD160/180/200HRXGA (DVM PLUS IV HR - 16/18/20HP)

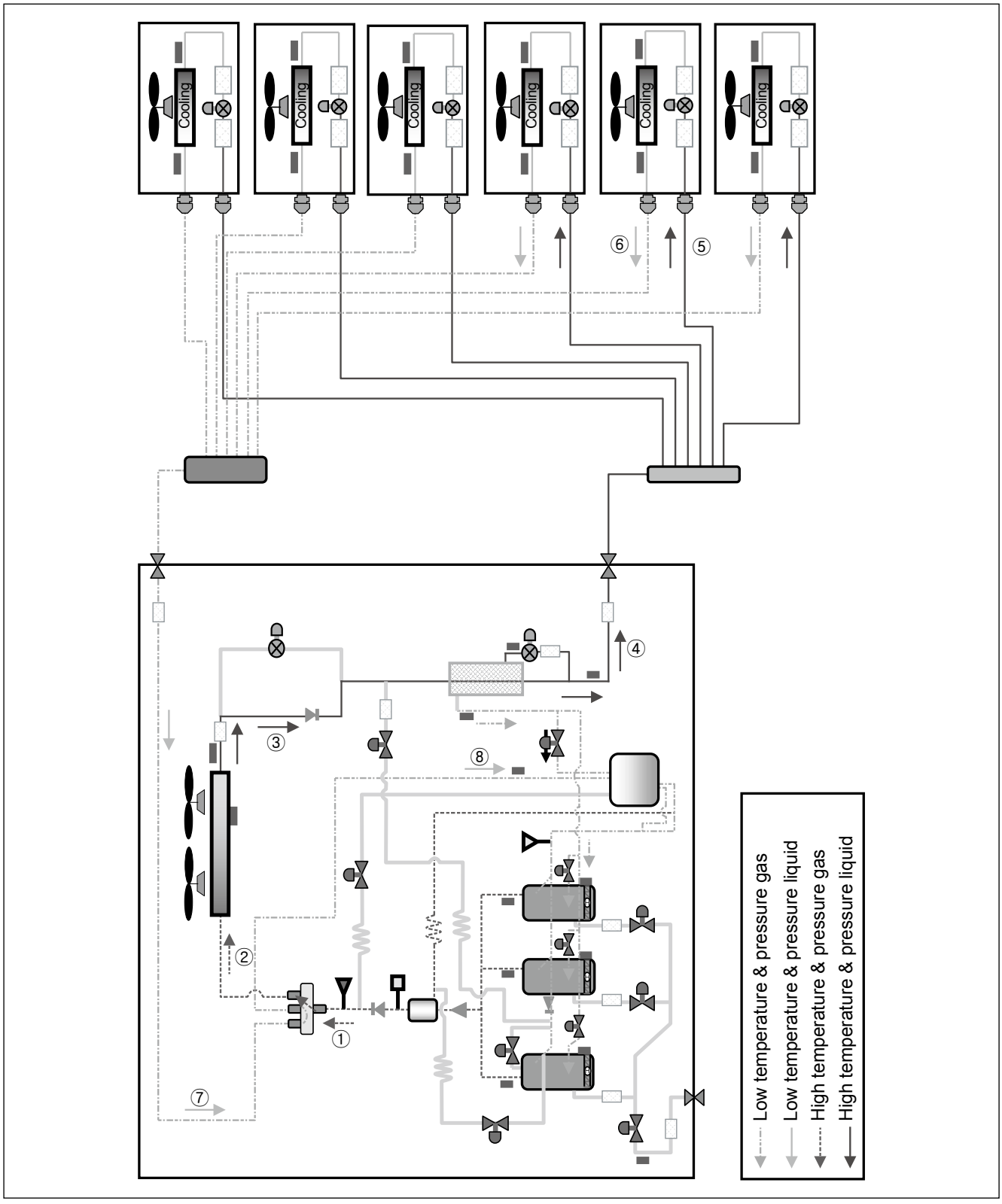


Category		Description	
Sensor	Temperature		Temperature sensor
	Pressure		High / Low Pressure sensor
Valve	Solenoid		Solenoid valve
	Pressure Regulation		Pressure Regulation Valve
	Expansion		Electronic Expansion Valve (EEV)
	Reversing		Reversing valve
	Check		Check valve
	Service		Service valve (Angle & ball type)

Category		Description	
Switch & Heater	Pressure Switch		High pressure switch (Mechanical type)
	Heater		Electric heater
Others	Compressor		DVI (Digital Vapor Injection) Compressor FVI (Fixed Vapor Injection) Compressor
	Accumulator		Accumulator
	Heat Exchanger		Condensing or Evaporating unit
	Sub cooler		Turbo Intercooler or Sub cooler
	Capillary		Capillary tube

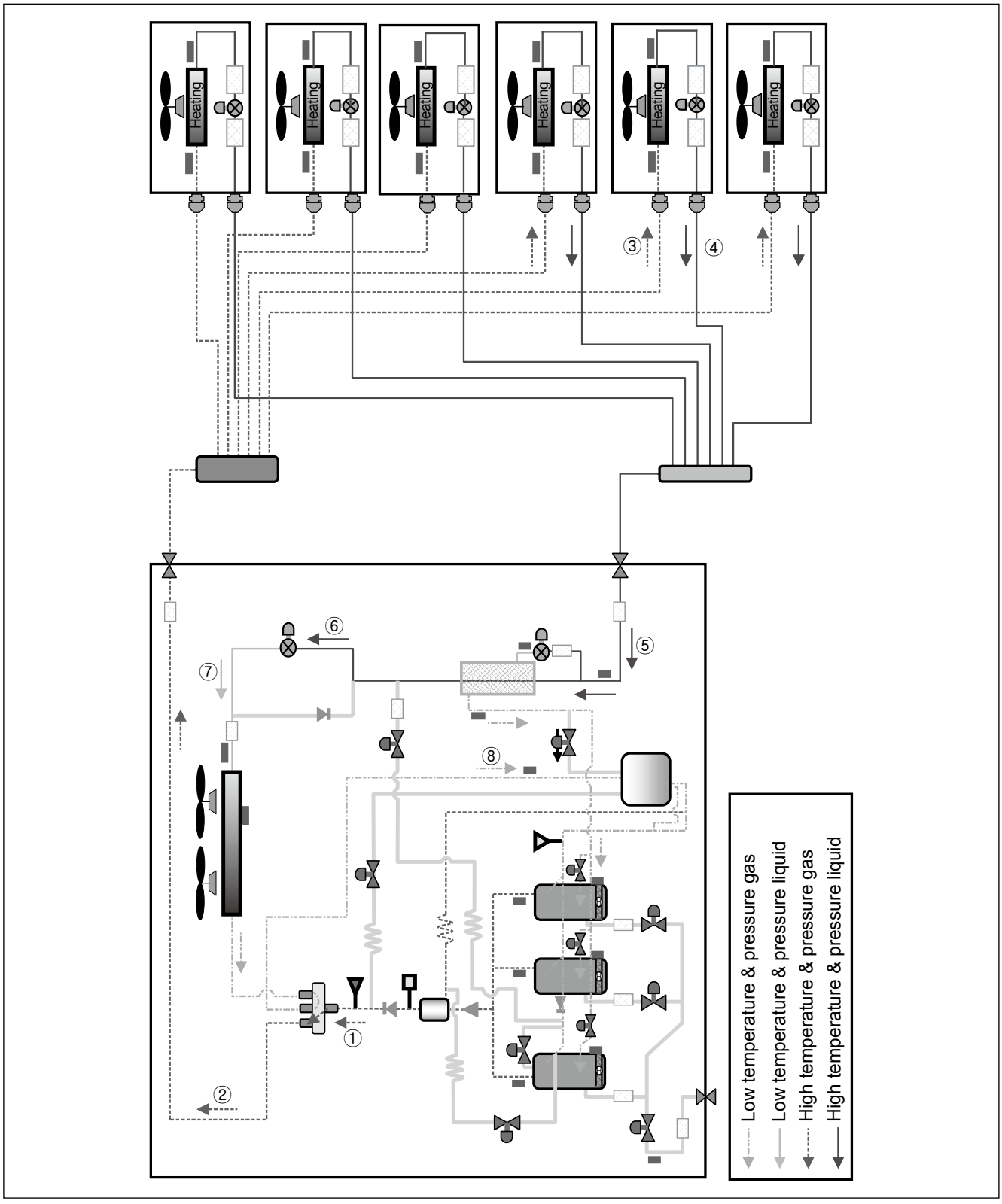
5-4. Cycle operation mode (HP)

1) Cooling Operation



Unit	Outdoor Unit	Indoor Unit	Outdoor Unit
Cooling operation	①②③④	⑤⑥	⑦⑧
Heating operation			

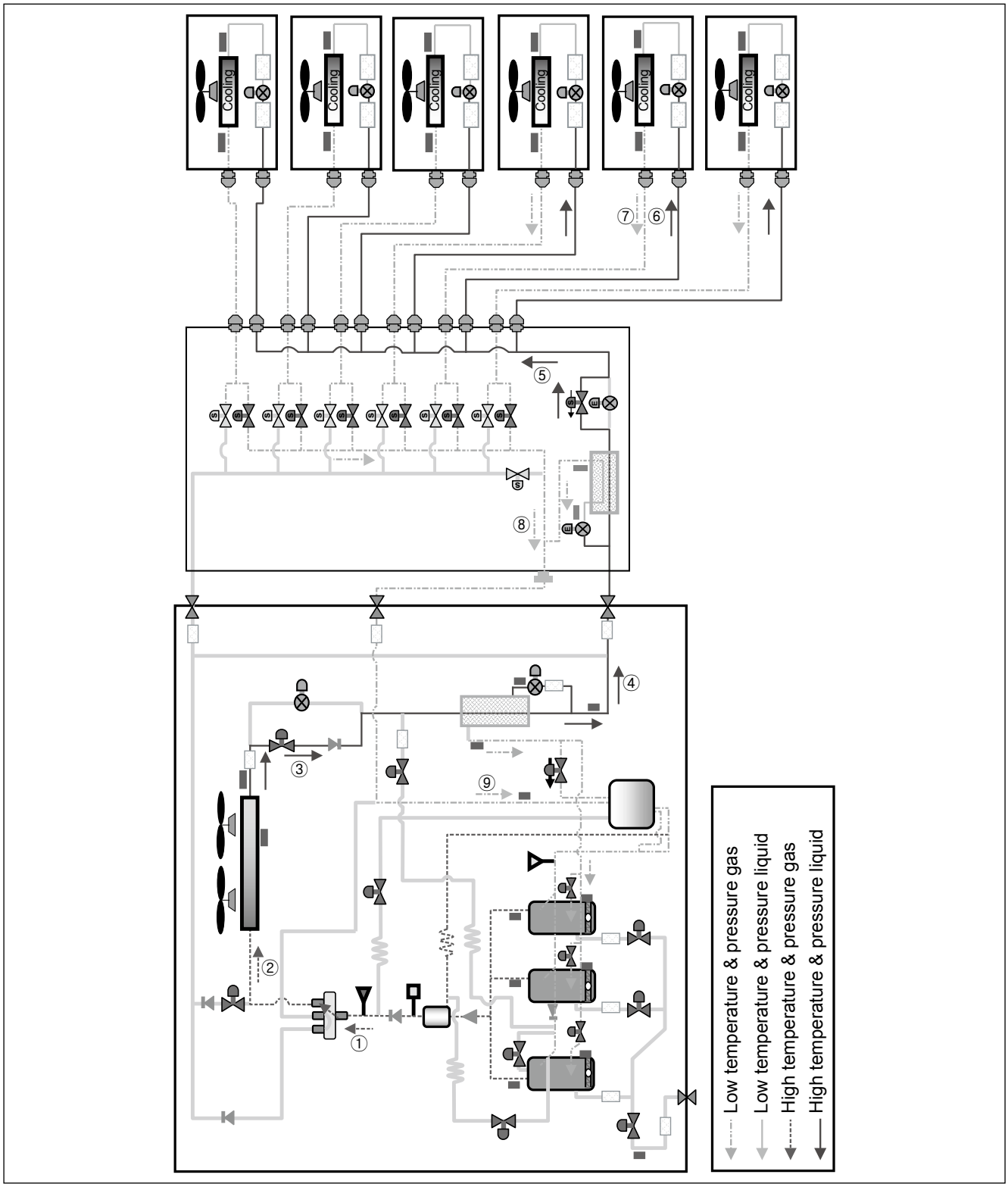
2) Heating Operation



Unit	Outdoor Unit	Indoor Unit	Outdoor Unit
Cooling operation			
Heating operation	①②	③④	⑤⑥⑦⑧

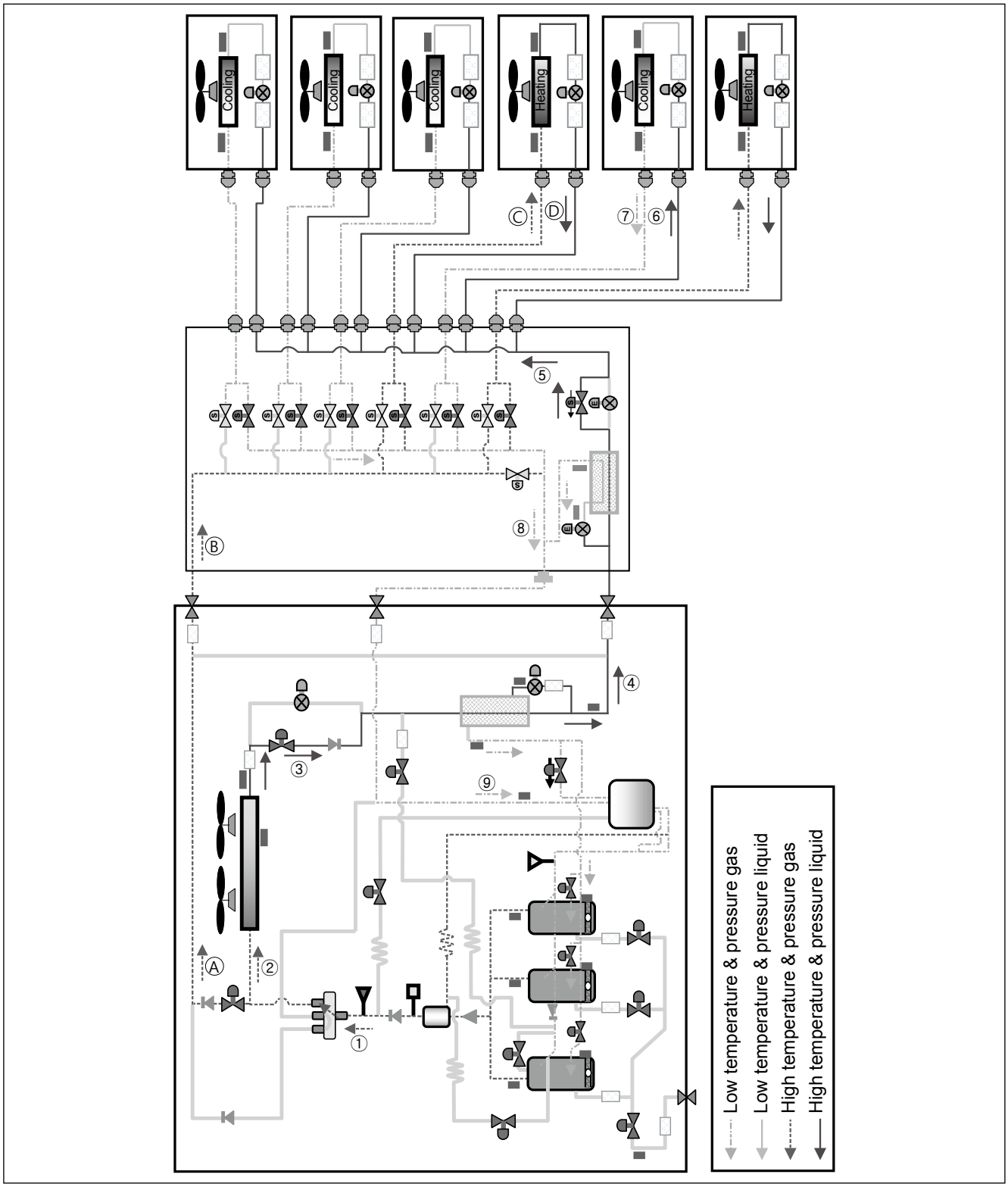
5-5. Cycle operation mode (HR)

1) Cooling operation



Unit	Outdoor Unit	MCU	Indoor Unit	MCU	Outdoor Unit
Cooling operation					
Main cooling operation	①②③④(Ⓐ)	⑤(Ⓑ)	⑥⑦(ⒸⒹ)	⑧	⑨
Heating operation					
Main heating operation					

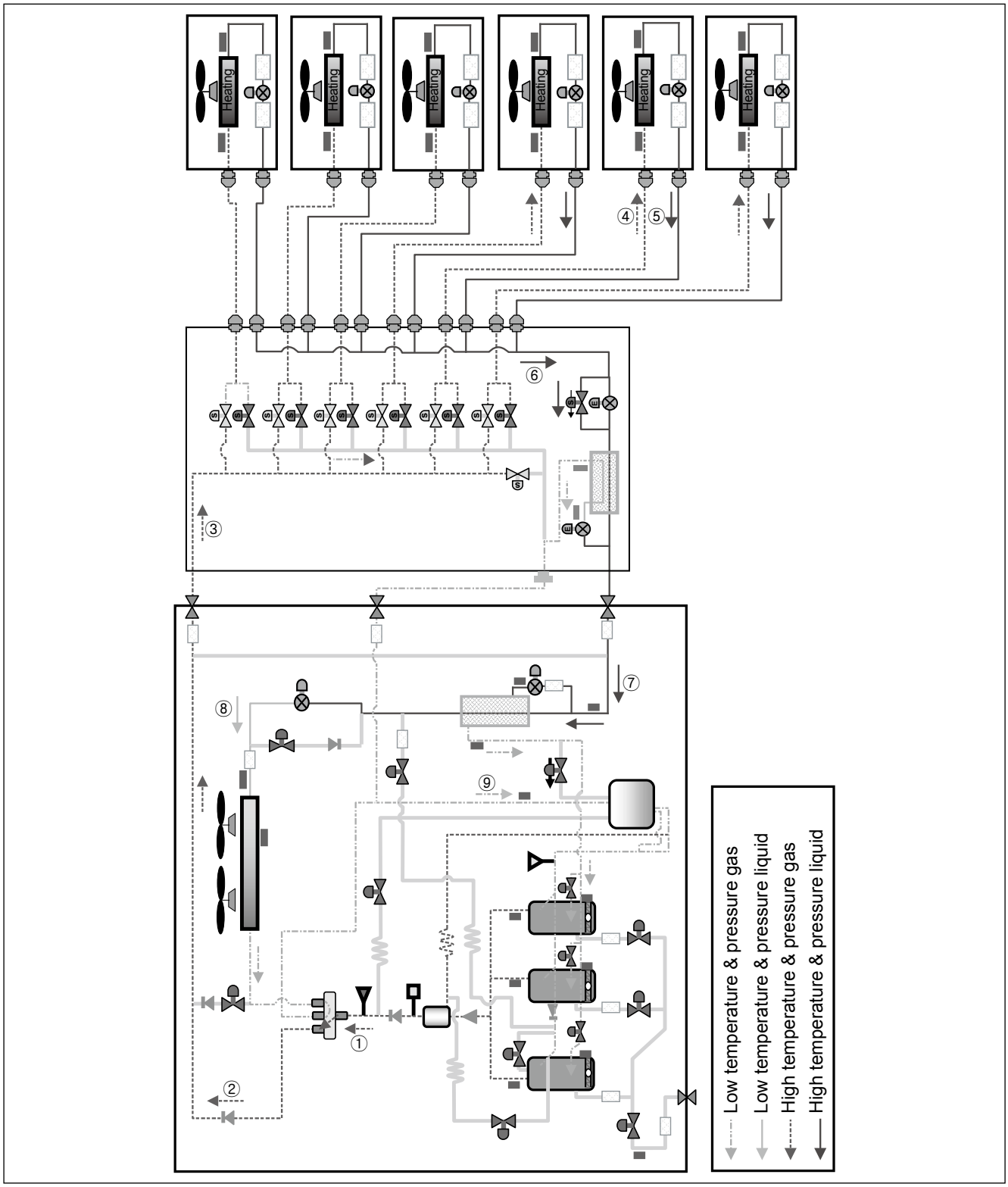
2) Main cooling operation



Unit	Outdoor Unit	MCU	Indoor Unit	MCU	Outdoor Unit
Cooling operation					
Main cooling operation	①②③④(Ⓐ)	⑤(Ⓑ)	⑥⑦(ⒸⒹ)	⑧	⑨
Heating operation					
Main heating operation					

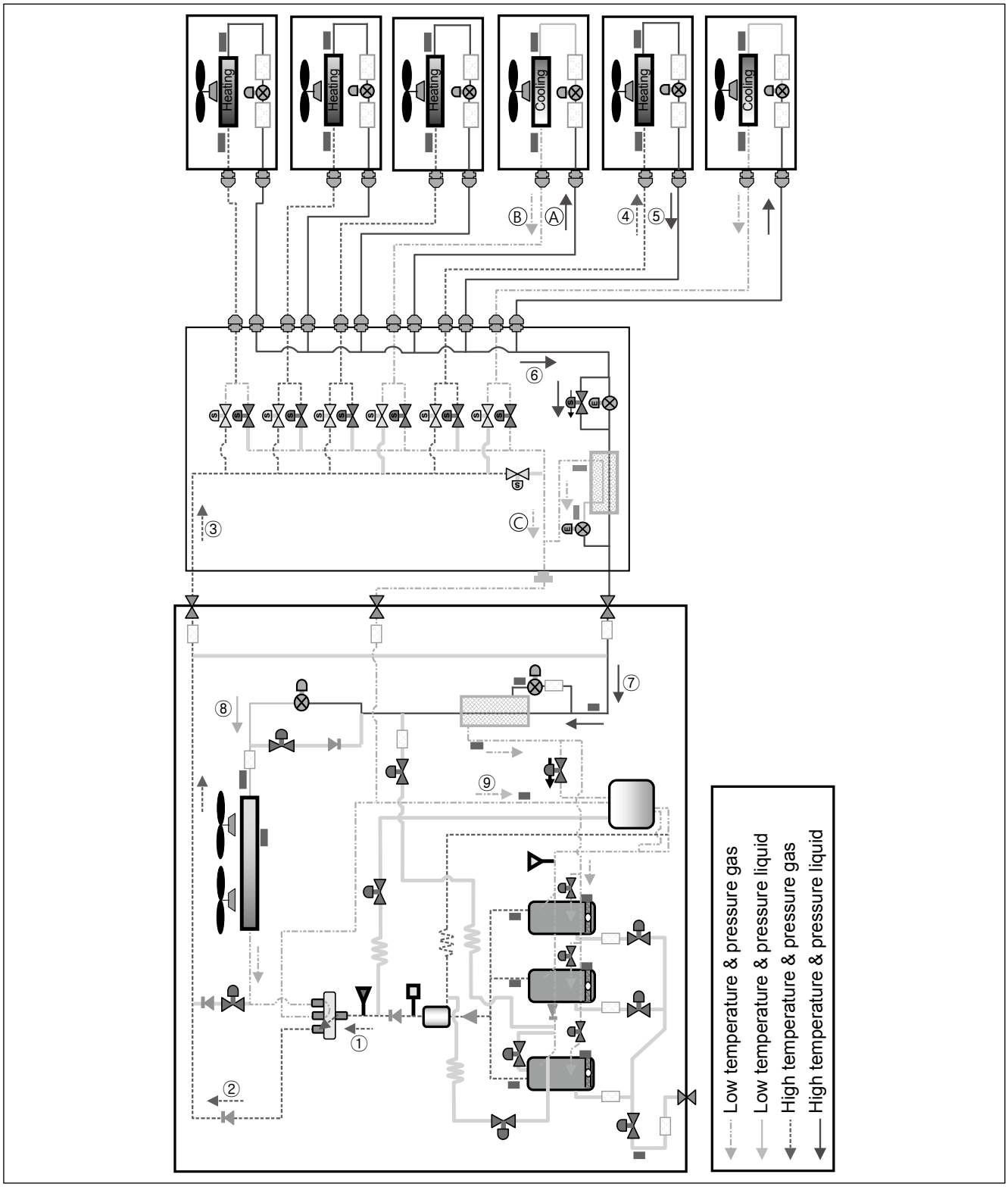
5-5. Cycle operation mode (HR)

3) Heating operation



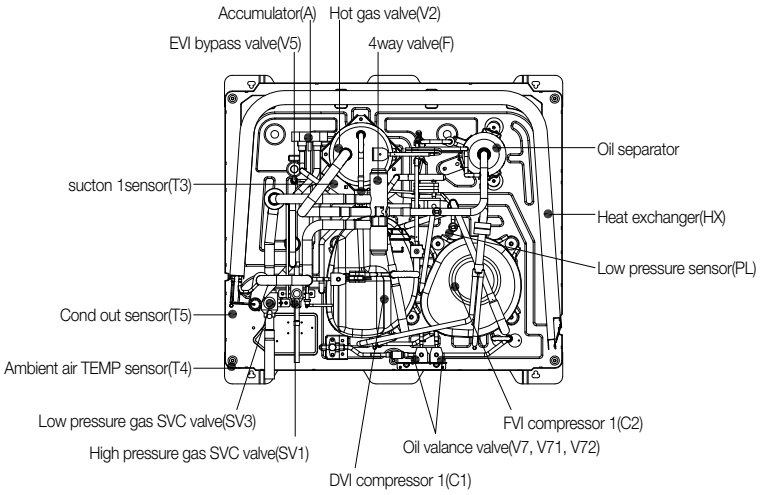
Unit	Outdoor Unit	MCU	Indoor Unit	MCU	Outdoor Unit
Cooling operation					
Main cooling operation					
Heating operation	①②	③	④⑤	⑥	⑦⑧⑨
Main heating operation					

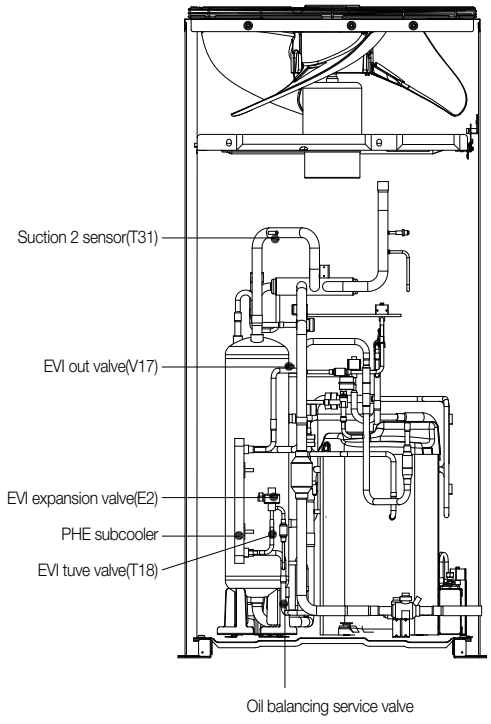
4) Main heating operation

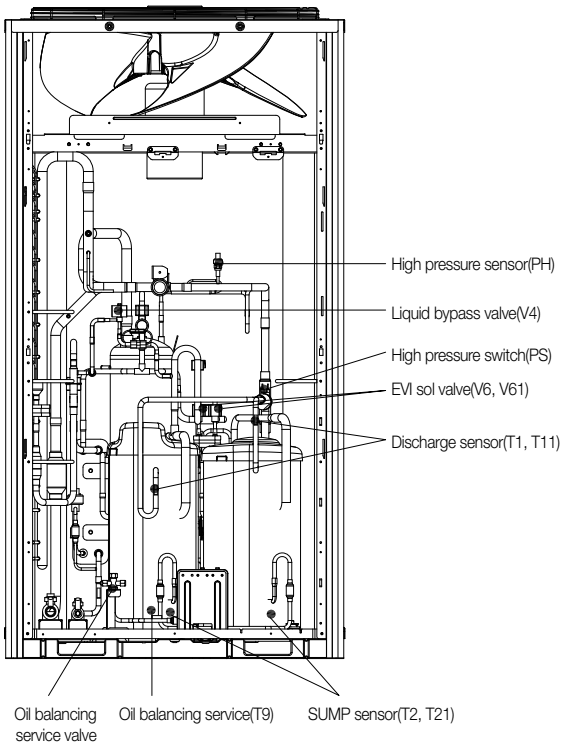


Unit	Outdoor Unit	MCU	Indoor Unit	MCU	Outdoor Unit
Cooling operation					
Main cooling operation					
Heating operation					
Main heating operation	①②	③	④⑤(Ⓐ Ⓑ)	⑥(Ⓒ)	⑦⑧⑨

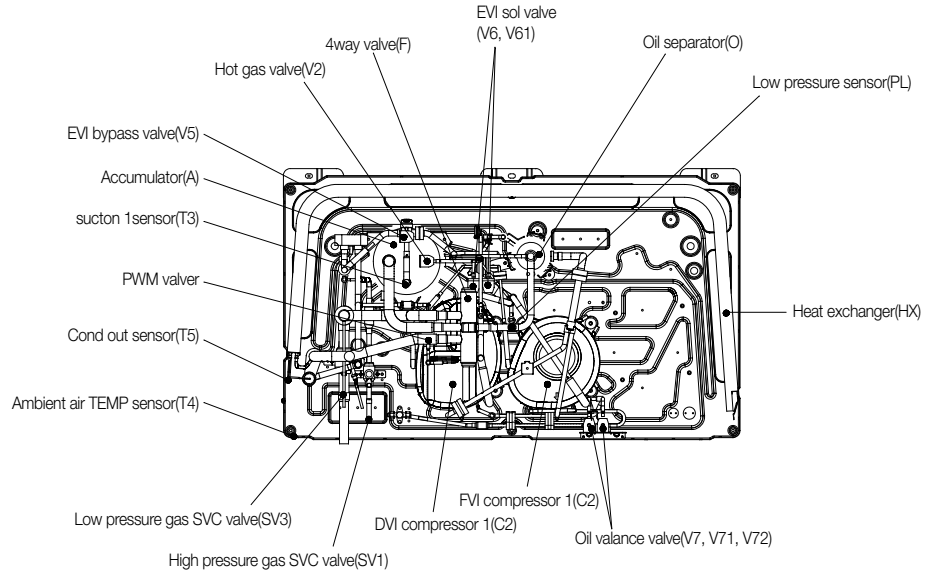
6-1. RD080/100/120HHXGA

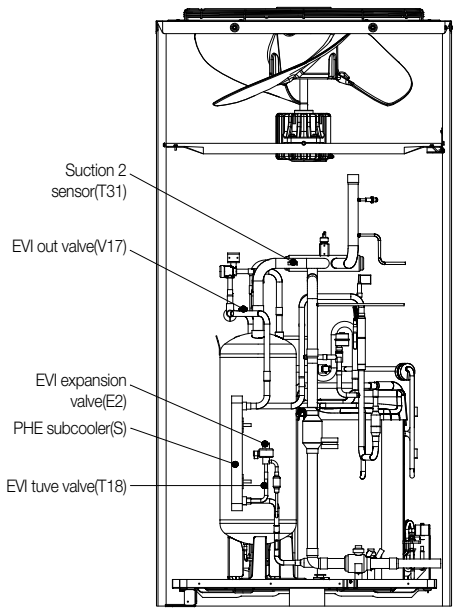


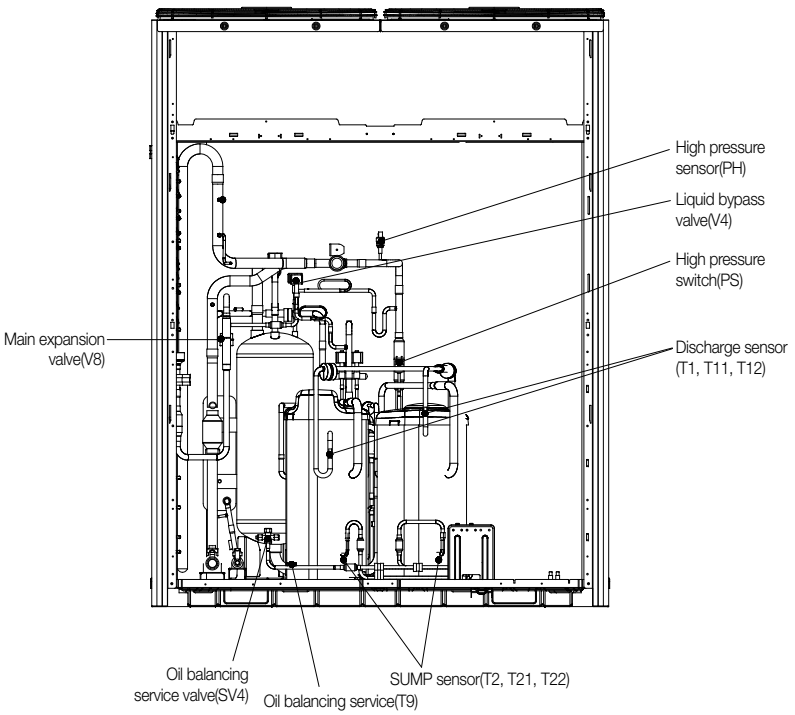




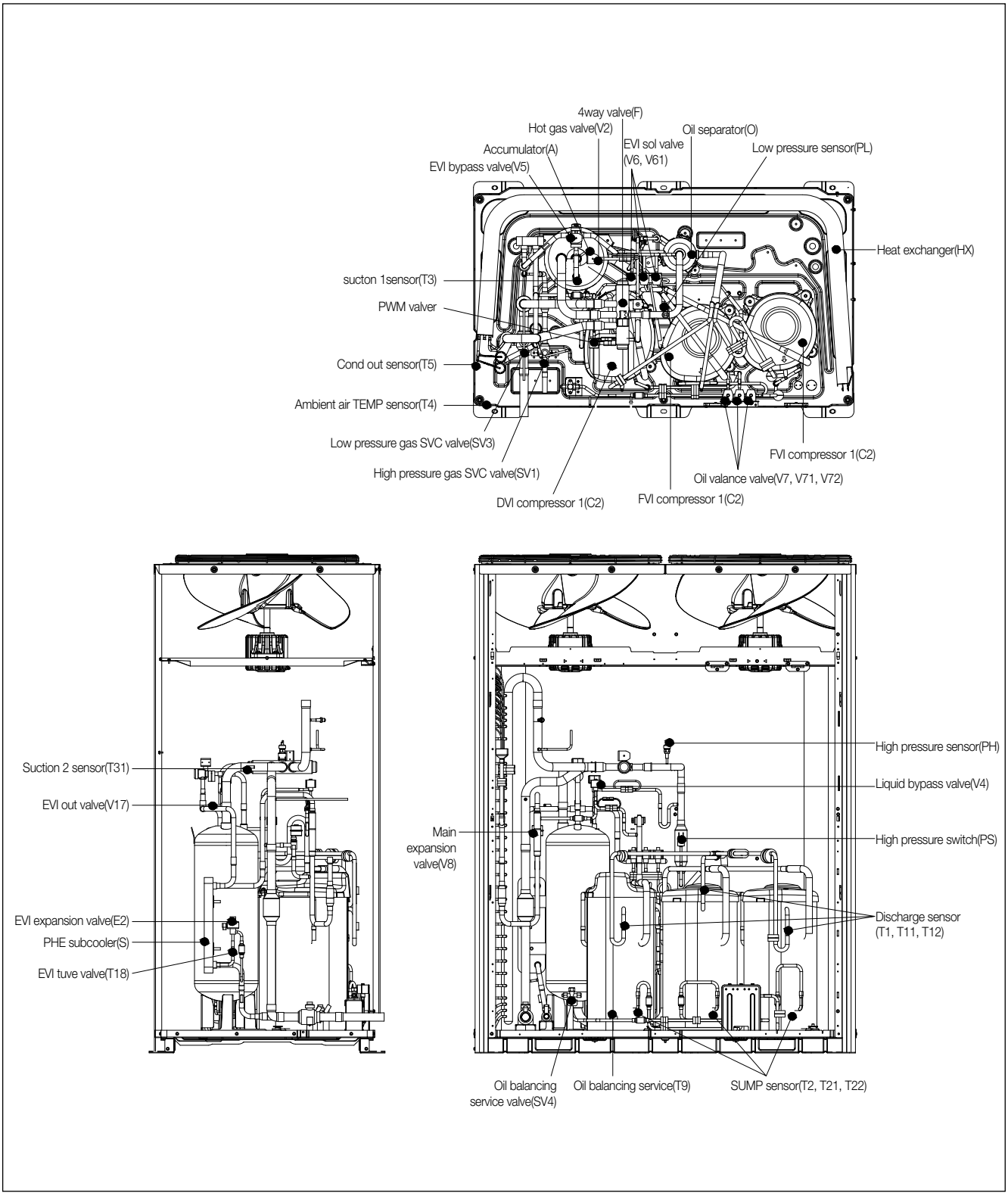
6-2. RD140HHXGA



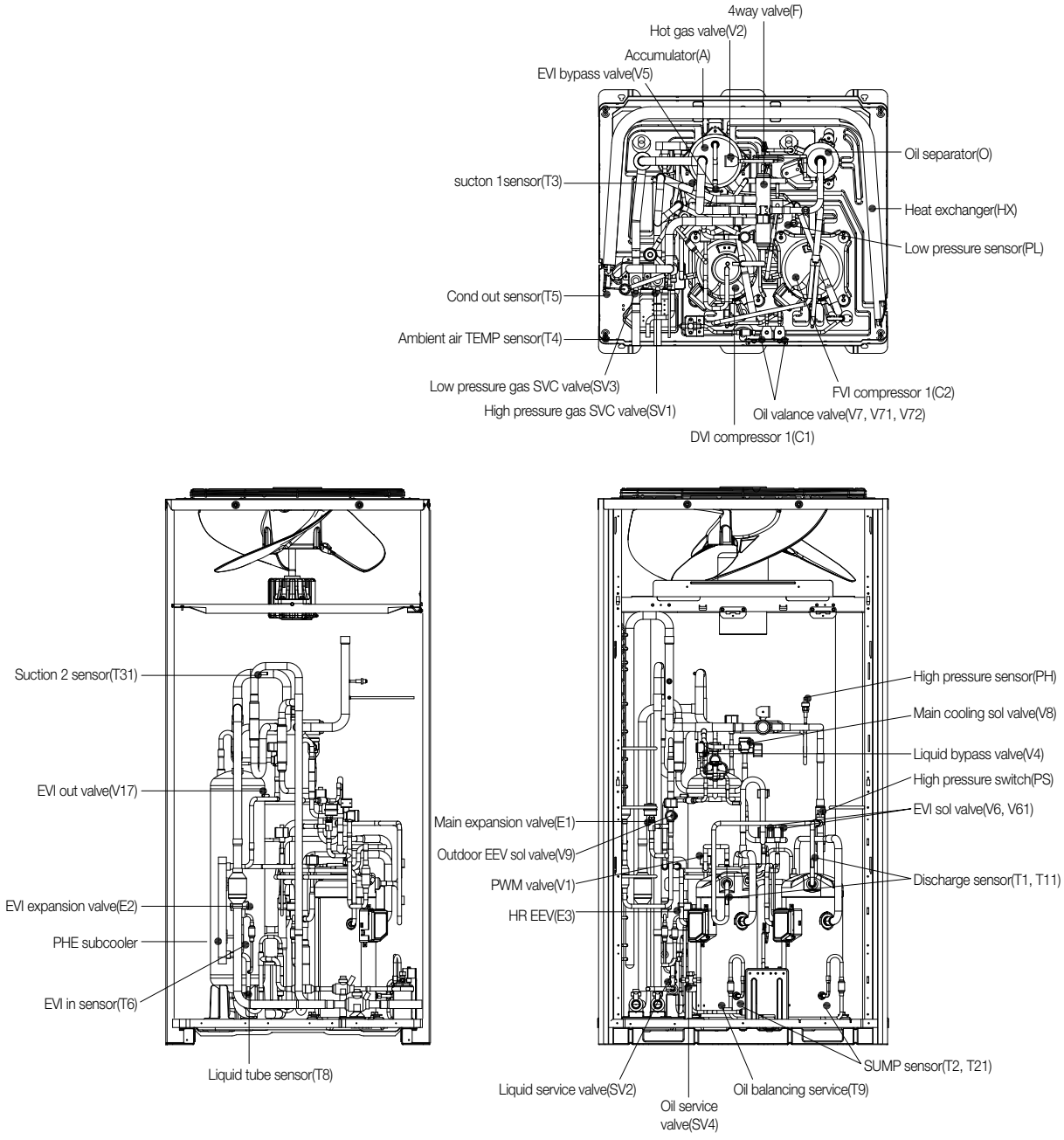




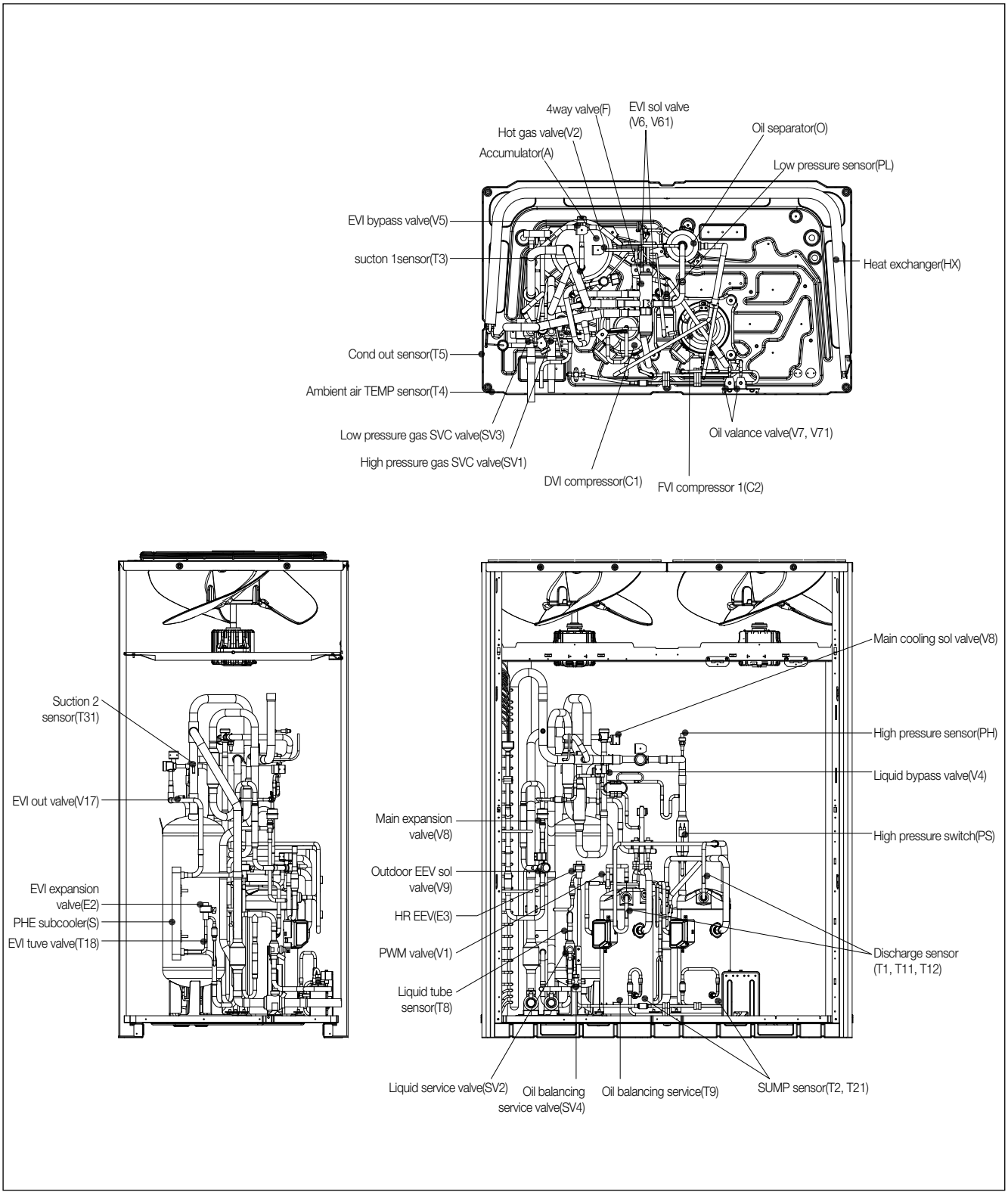
6-3. RD160/180/200HHXGA



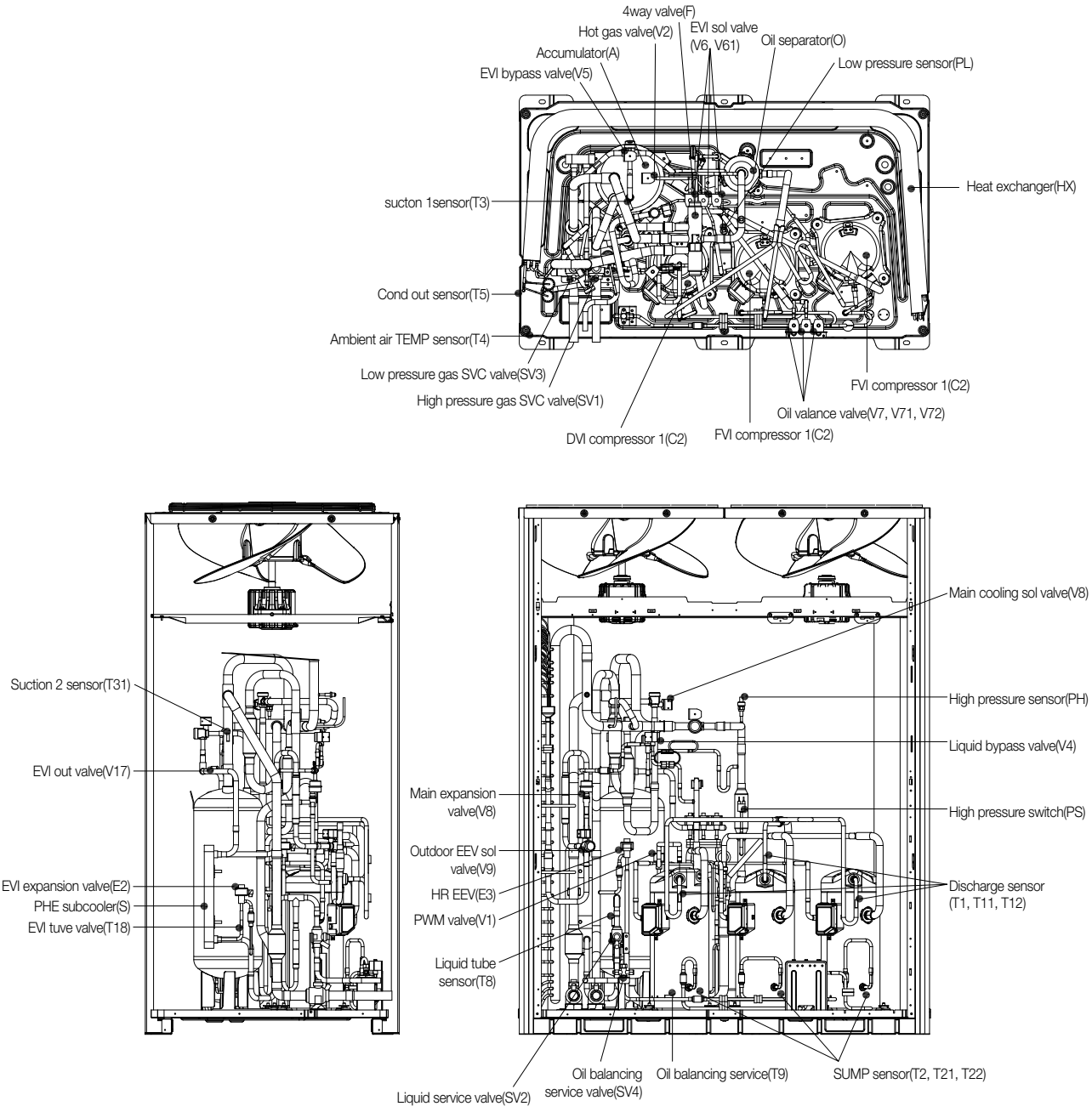
6-4. RD080/100/120HRXGA



6-5. RD140HRXGA



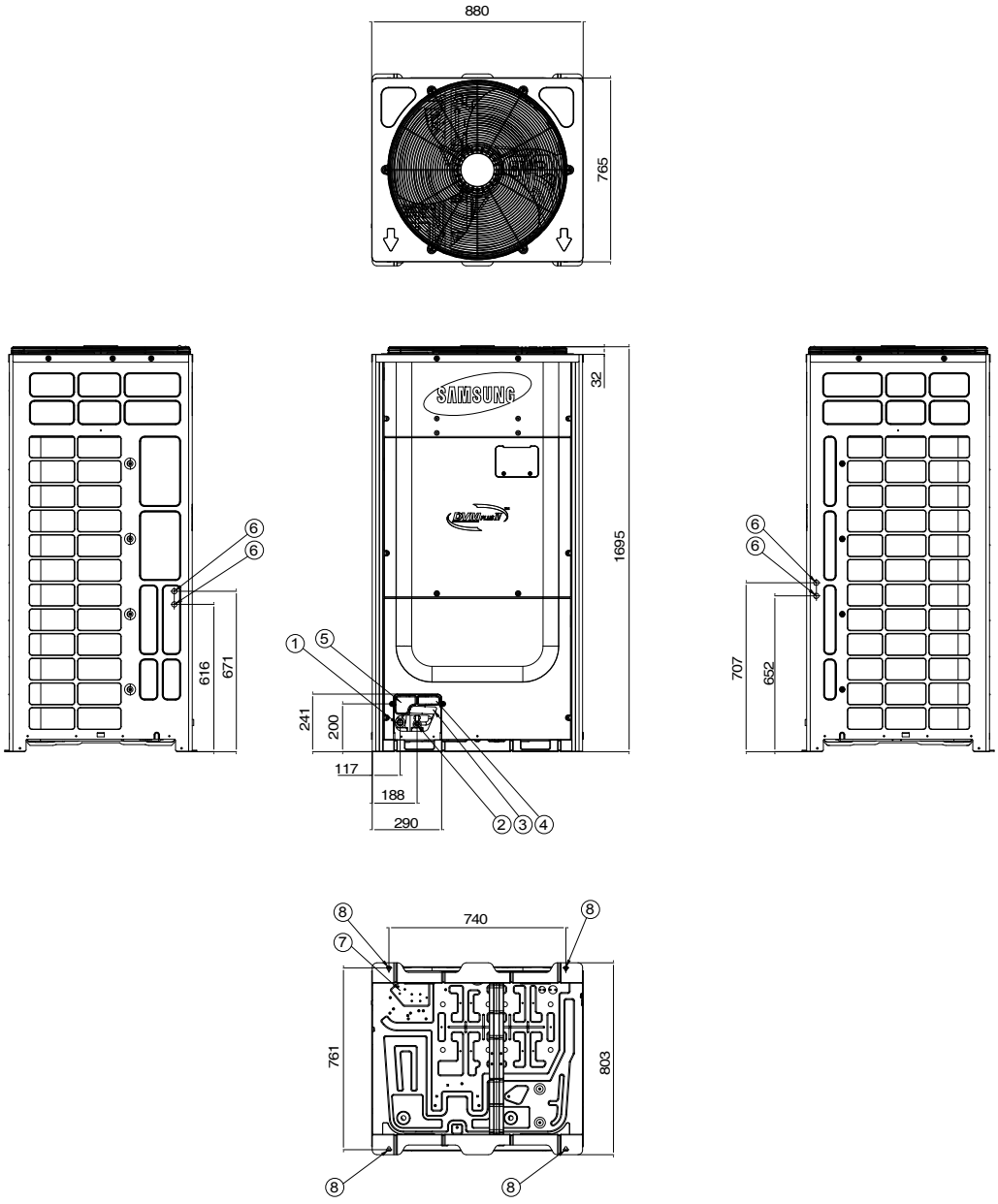
6-6. RD160/180/200HRXGA



7 Dimensional drawing

7-1. RD080/100/120HH/HRXGA(HP/HR)

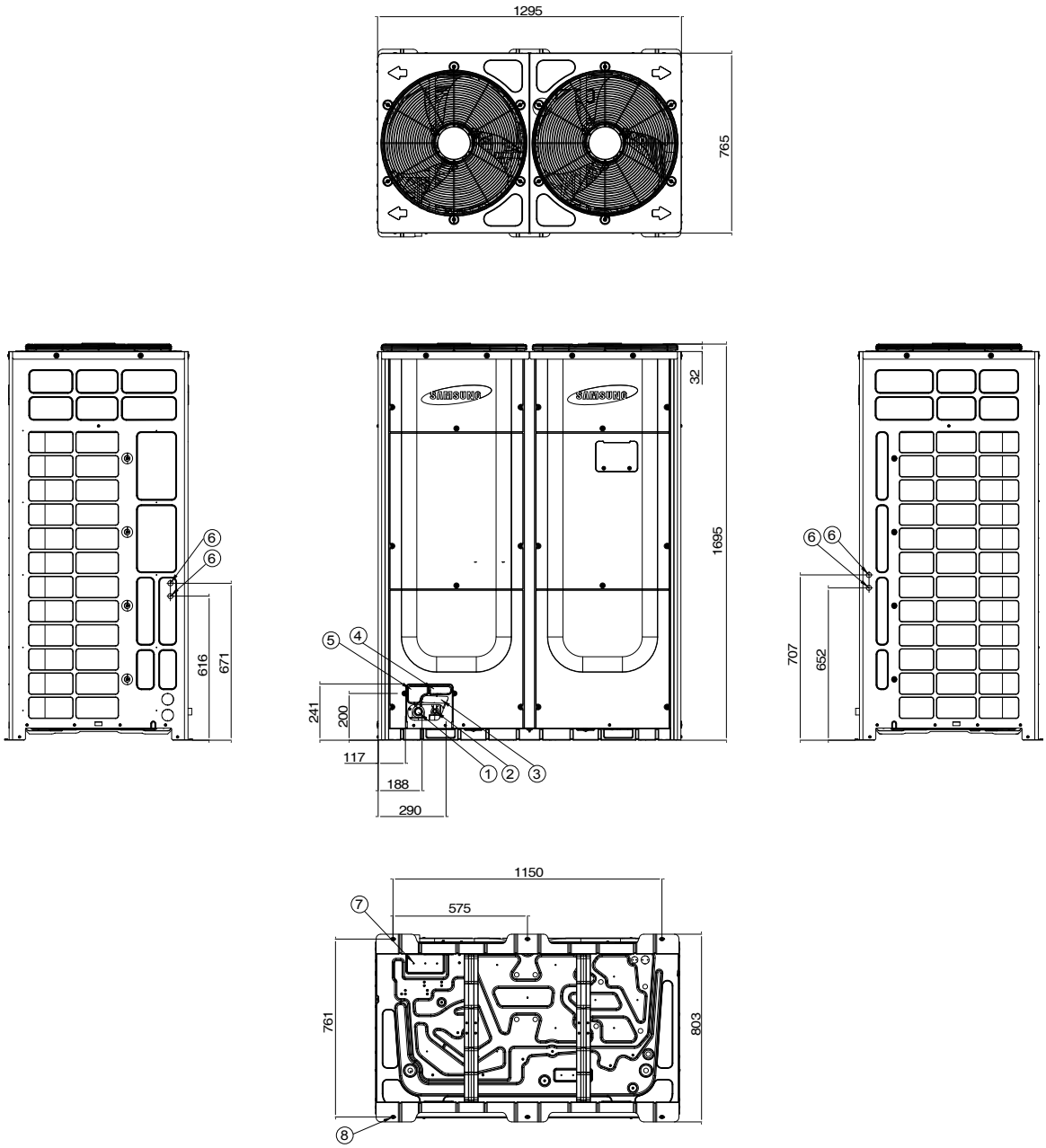
Unit : mm



No.	Name	No.	Name
①	Gas pipe connection	⑤	Power & communication wiring conduit
②	High pressure gas pipe connection	⑥	Power & communication wiring conduit
③	Liquid pipe connection	⑦	Power & communication wiring conduit
④	Oil balance pipe connection between units	⑧	Power & communication wiring conduit

7-2. RD140/160/180/200HH/HRXGA(HP/HR)

Unit : mm



No.	Name	No.	Name
①	Gas pipe connection	⑤	Power & communication wiring conduit
②	High pressure gas pipe connection	⑥	Power & communication wiring conduit
③	Liquid pipe connection	⑦	Power & communication wiring conduit
④	Oil balance pipe connection between units	⑧	Power & communication wiring conduit

DVM PLUS IV

Ⅲ. Installation

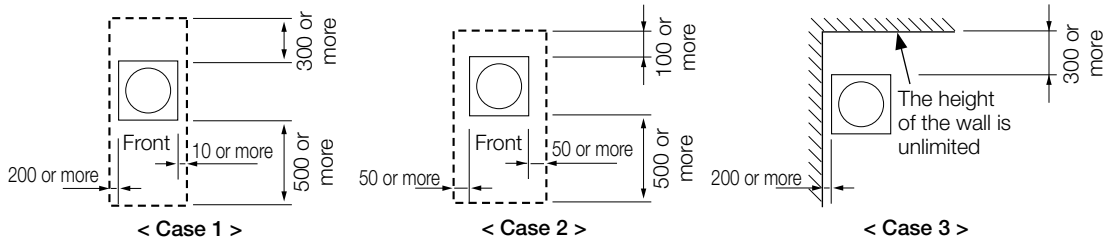
1 Space Requirements

1-1. When installing 1 outdoor unit

-------- Wall height restricted

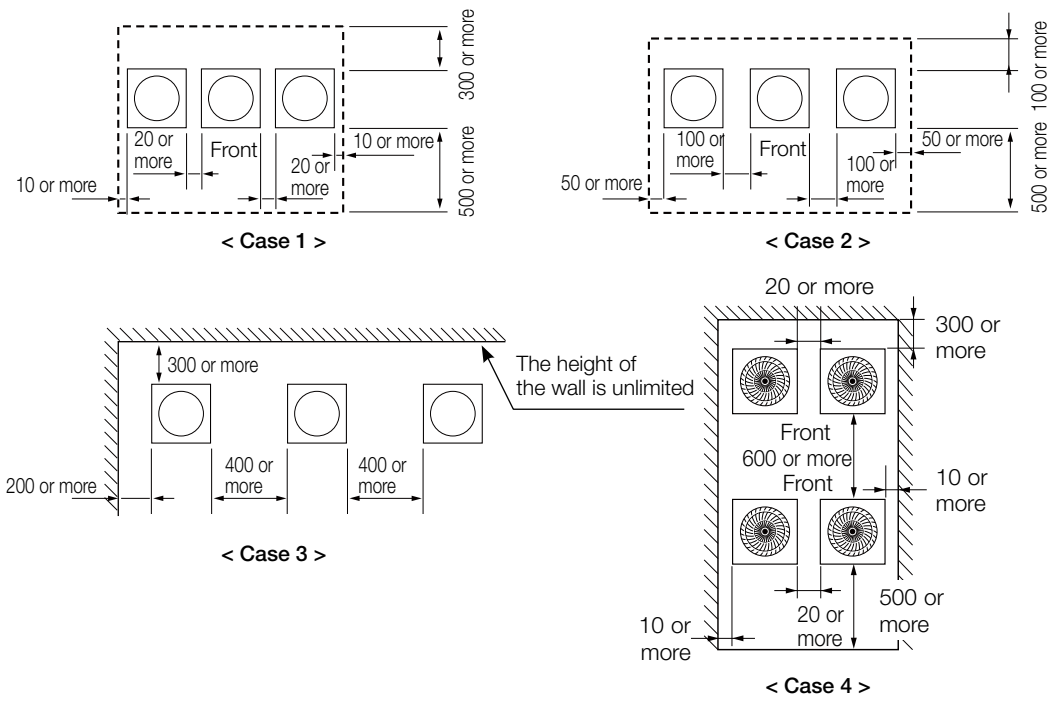
////// Wall height unrestricted

(Unit: mm)



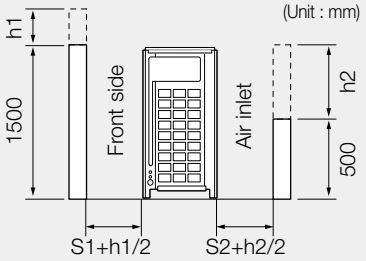
1-2. When installing more than 1 outdoor unit

(Unit: mm)



❊ In case of 'Case 1' and 'Case 2'

- The height of the wall should be 1500mm or less in the front side.
- The height of the wall should be 500mm or less in the air inlet side.
- The height of the wall is unlimited in the side.
- If the height of the wall exceeds the above value, the additional height (h1)/2, (h2)/2 should be added to the service space(S1), (S2) individually.



☑ *Note*

- ◆ The installation space mentioned above is minimum suggested clearance.
- ◆ To secure enough service space and performance of system, take account of more sufficient space.
- ◆ The required minimum space between outdoor units for service and performance of system is at least 100mm.

2 Electric specifications

2-1. Outdoor combination

1) Compact (Single)

Capacity(HP)	Model	MCCB(A)	ELB	Wiring(CV, mm^2)
8	RD080HHXGA RD080HRXGA	30	25A, 30mA, ≤100ms	1.5
10	RD100HHXGA RD100HRXGA	30	30A, 30mA, ≤100ms	2.5
12	RD120HHXGA RD120HHXGA	40	40A, 30mA, ≤100ms	4
14	RD140HHXGA RD140HRXGA	40	40A, 30mA, ≤100ms	4
16	RD160HHXGA RD160HRXGA	50	50A, 30mA, ≤100ms	6
18	RD180HHXGA RD180HRXGA	60	50A, 30mA, ≤100ms	6
20	RD200HHXGA RD200HRXGA	60	60A, 100mA, ≤100ms	10

2) High efficiency (Module)

Capacity (HP)	Combination					MCCB (A)	ELB	Wiring (CV, mm^2)
	RD080HHXGA RD080HRXGA	RD100HHXGA RD100HRXGA	RD120HHXGA RD120HRXGA	RD140HHXGA RD140HRXGA	RD160HHXGA RD160HRXGA			
18	1	1				50	50A, 30mA, ≤100ms	6
20		2				60	60A, 100mA, ≤100ms	6
22	1			1		60	60A, 100mA, ≤100ms	10
24			2			75	75A, 100mA, ≤100ms	10
26			1	1		75	75A, 100mA, ≤100ms	10
28			1		1	75	75A, 100mA, ≤100ms	16
30				1	1	75	75A, 100mA, ≤100ms	16
32					2	100	100A, 100mA, ≤100ms	16
34	1	1			1	100	100A, 100mA, ≤100ms	16
36		2			1	100	100A, 100mA, ≤100ms	25
38		1	1		1	100	100A, 100mA, ≤100ms	25
40			2		1	125	125A, 100mA, ≤100ms	25
42			1	1	1	125	125A, 100mA, ≤100ms	25
44			1		2	125	125A, 100mA, ≤100ms	35
46				1	2	125	125A, 100mA, ≤100ms	35
48					3	150	125A, 100mA, ≤100ms	35

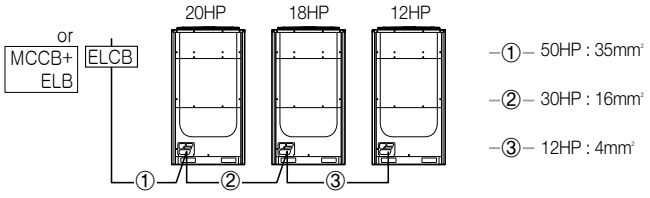
2-1. Outdoor combination

3) Compact (Module)

Capacity (HP)	Combination							MCCB (A)	ELB	Wiring (CV, mm^2)
	RD080HHXG✳ RD080HRXG✳	RD100HHXG✳ RD100HRXG✳	RD120HHXG✳ RD120HHXG✳	RD140HHXG✳ RD140HRXG✳	RD160HHXG✳ RD160HRXG✳	RD180HHXG✳ RD180HRXG✳	RD200HHXG✳ RD200HRXG✳			
22		1	1					75	75A, 100mA, ≤100ms	10
24			2					75	75A, 100mA, ≤100ms	10
26			1	1				75	75A, 100mA, ≤100ms	10
28			1		1			75	75A, 100mA, ≤100ms	16
30			1			1		100	100A, 100mA, ≤100ms	16
32			1				1	100	100A, 100mA, ≤100ms	16
34				1			1	100	100A, 100mA, ≤100ms	16
36					1		1	100	100A, 100mA, ≤100ms	25
38						1	1	100	100A, 100mA, ≤100ms	25
40							2	100	100A, 100mA, ≤100ms	25
42		1	1				1	125	125A, 100mA, ≤100ms	25
44			2				1	125	125A, 100mA, ≤100ms	25
46			1	1			1	125	125A, 100mA, ≤100ms	35
48			1		1		1	125	125A, 100mA, ≤100ms	35
50			1			1	1	150	150A, 100mA, ≤100ms	35
52			1				2	150	150A, 100mA, ≤100ms	35
54				1			2	150	150A, 100mA, ≤100ms	35
56					1		2	150	150A, 100mA, ≤100ms	50
58						1	2	150	150A, 100mA, ≤100ms	50
60							3	150	150A, 100mA, ≤100ms	50

✳ When installing combined indoor units, select the power supply cable according to the sum of outdoor unit capacity.

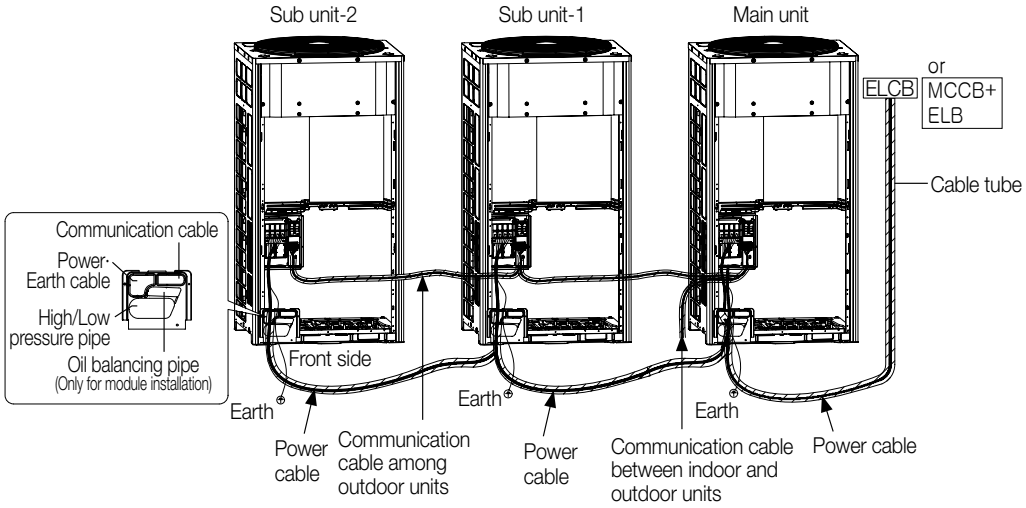
Ex) Compact combination 50HP



3 Wiring works

3-1. Power supply and communication cable configuration

- Install the main power cable and grounding cable through the knock-out hole that is in the middle (or in the bottom) of the side of the unit and at the bottom of the front of the unit.
- Install the power and communication cable using the cable tube separately.
- Fix a cable tube using a CD connector(Wire conduit) and bushing at the knock-out hole of the outdoor unit.

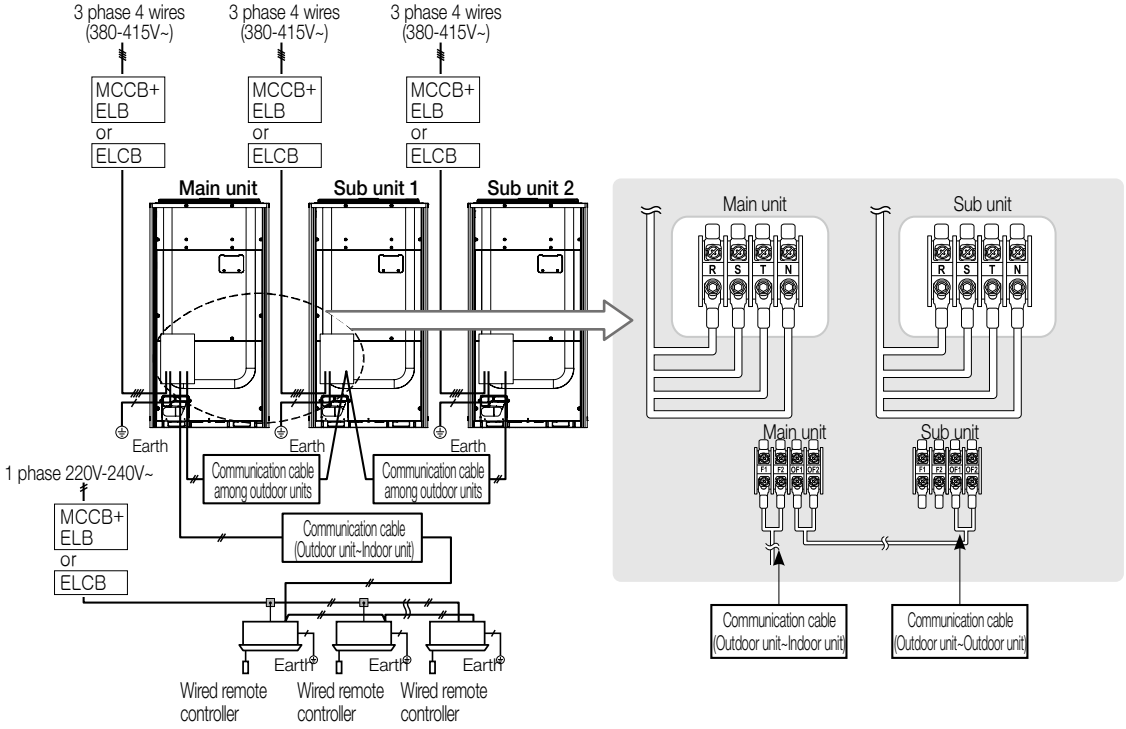


3-2. Specifications of the cable tube

Name	Material	Description
CD tube	PVC	- When the unit is installed indoors - When the unit is not exposed outdoors because of concrete construction
Single power cable tube	Galvanized steel sheet	- When the unit is installed indoors - When the unit is exposed outdoors and then the protection for a power cable is needed
Single vinyl tube for a power cable	Galvanized steel sheet + Soft PVC compound	- When the unit is installed indoors - When the unit is exposed outdoors and then the protection for a power cable or waterproof function is needed

3-3. Power wiring diagram

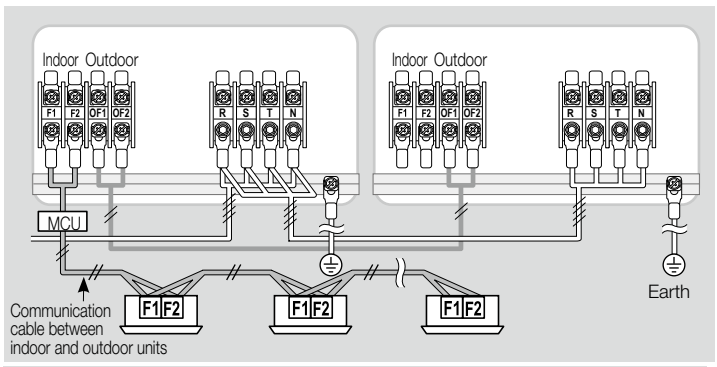
1) External connection diagram of DVM PLUS IV

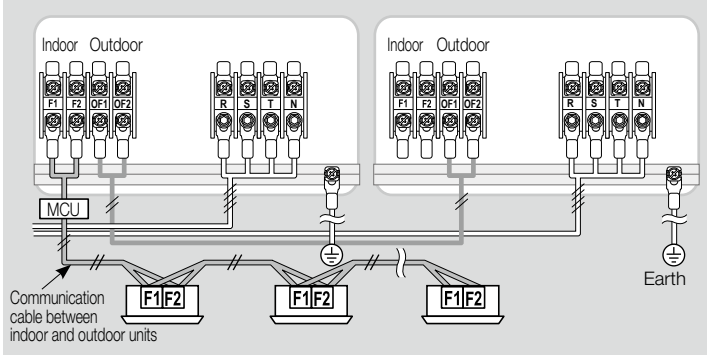


- Connect the power cable of the outdoor unit after checking that R-S-T-N(3 phase 4 wire) is properly connected. Even if 380~415V power cable is connected to phase N, PCB and other components are protected by an electric protection system.
- The communication cable between indoor and outdoor units has no polarity.
- Arrange the cables using cable ties.

2) External connection diagram of DVM PLUS IV HR

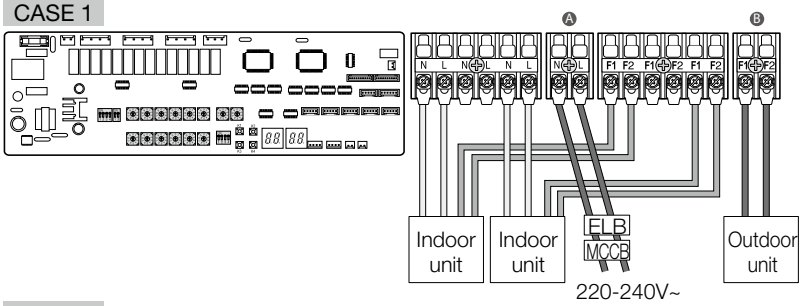
3 phase 4 wires



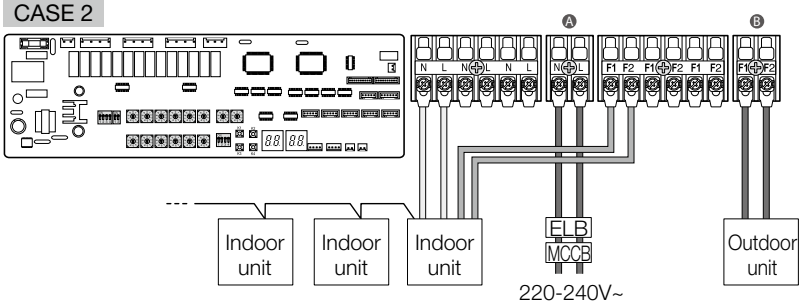


► **MCU**

CASE 1



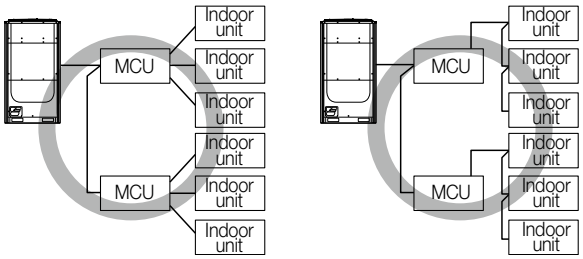
CASE 2



- Ⓐ Supply the 220-240V power to L, N of MCU separately from outdoor unit.
- Ⓑ Connect the communication cable from the outdoor unit to F1, F2 of MCU. the cables using cable ties.

CAUTION

◆ Connect the power cable using the compressed ring terminal.

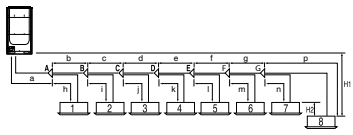
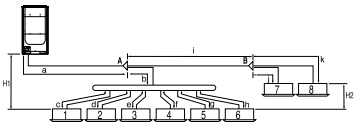
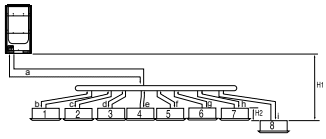
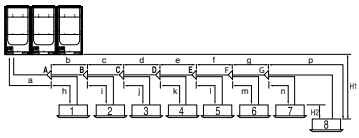
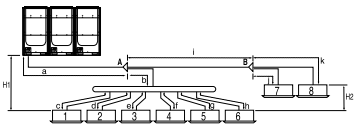
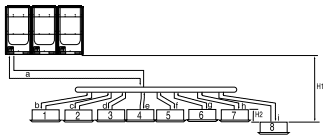


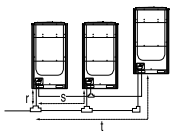
☑ ***Note***

◆ Communication cables are connected as shown above when installing MCU.

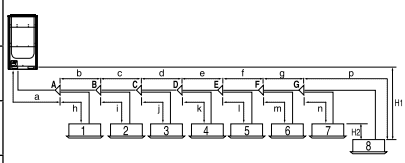
4-1. Piping examples

1) Heat Pump model

	Branch with Y-joint	Branch with Y and Header joint	Branch with Header joint
One outdoor unit installed			
Multiple outdoor units installed			

Items				Examples		Remarks
Max. piping length	Outdoor ~ Indoor unit	Piping (Equivalent piping)	200m below (220m below)	Branch with Y-joint	a+b+c+d+e+f+g+p ≤ 200m (220m)	Equivalent pipe length Y-joint : 0.5m, Header : 1m
				Branch with Y-joint and Header joint	a+i+k ≤ 200m (220m) a+b+h ≤ 200m (220m)	
				Branch with header joint	a+i ≤ 200m (220m)	
		Total piping	1000m below	Branch with Y-joint	a+b+c+d+e+f+g+p+h+i+j+k+l+m+n ≤ 1000m	
				Branch with Y-joint and Header joint	a+b+c+d+e+f+g+p+h+i+j+k ≤ 1000m	
				Branch with Header joint	a+b+c+d+e+f+g+p+h+i ≤ 1000m	
	Outdoor ~ Outdoor unit	Piping	10m below	r ≤ 10, s ≤ 10, t ≤ 10m		
		Equivalent piping	13m below	r ≤ 13, s ≤ 13, t ≤ 13m		
Level difference	Outdoor ~ Indoor unit	Piping	110m/40m[2)]	H1 ≤ 110m/40m		
	Indoor ~ Indoor unit	Piping	15m below	H2 ≤ 15m		
	Outdoor ~ Outdoor unit	Piping	15m below	H3 ≤ 5m		
Allowable length after branch	The first branch ~ the farthest indoor unit	Piping	45m below	b+c+d+e+f+g+p ≤ 5m, i ≤ 45m		
			90m below[*1)]	It needs to satisfy required conditions		Only apply to DVM PLUS IV (DVM PLUS IV HR exclusion)

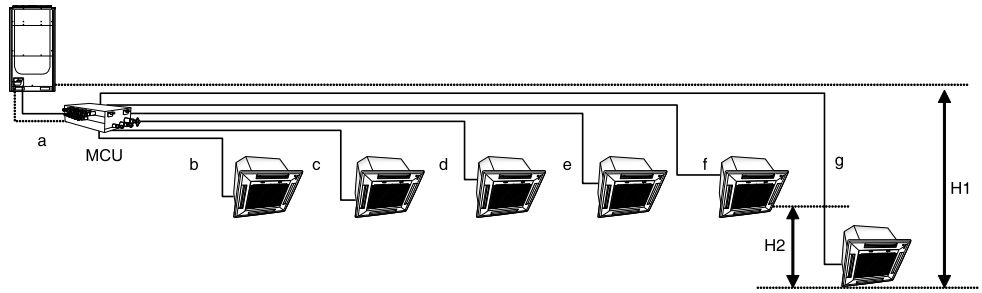
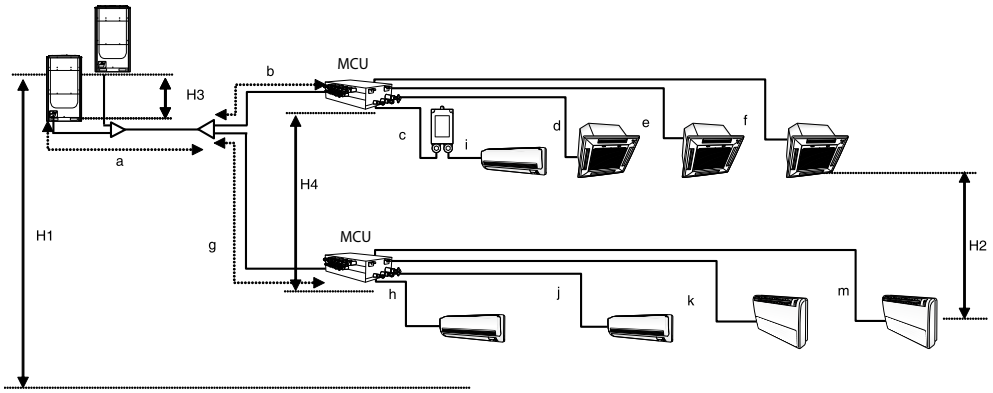
Distribution kit			Model	Remarks
Allowable	From distribution kit to indoor unit	3m	MEV-A13SA / MEV-A16SA (For 1 indoor unit)	For wall-mounted & ceiling indoor unit
	From distribution kit to indoor unit	20m	MXD-A13K116E / MXD-A13K200E / MXD-A16K200E / MXD-A22K200E (For 2 indoor units) MXD-A13K216E / MXD-A13K300E / MXD-A16K213E / MXD-A16K300E (For 3 indoor units)	

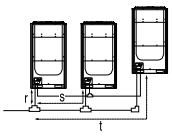
	Required condition	Example
The first branch joint ~ the farthest indoor unit	If the sum of pipe length (b+c+d+e+f+g+p) is over 45m,(but not exceed : 90m) Increase pipe size of b, c, d, e, f, g. (b, c, d, e, f, g : pipe 1 size up)	
Total pipe length size	If main pipe size is not increased, a+bx2+cx2+dx2+ex2+fx2+gx2+h+i+j+k+l+m+n+p ≤ 1000m	
	If main pipe size is increased, ax2+bx2+cx2+dx2+ex2+fx2+gx2+h+i+j+k+l+m+n+p ≤ 1000m	
Each Y-joint ~ each indoor	h, i, j,...p ≤ 45m	
Between indoor units	The difference between the distance of the outdoor unit to the farthest indoor unit and the distance of the outdoor unit to the nearest indoor unit ≤ 45m (a+b+c+d+e+f+g+p) - (a+h) ≤ 45m	

*1) Required condition *2) As an outdoor unit is located in a lower position than indoor unit, level difference is 40m. If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

❋ The refrigerant amount of the system must be less than 100kg.

2) Heat Recovery model

	Branch with Y-joint
Using MCU only	
Using Y- joint and MCU	

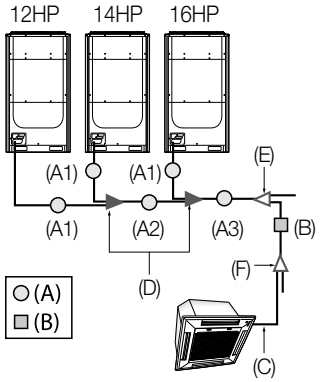
Items				Examples		Remarks
Max. piping length	Outdoor ~ Outdoor unit	Piping (Equivalent piping)	200m below (220m below)	Using MCU only	a+g ≤ 200m (220m)	Equivalent pipe length. Y joint : 0.5m, Header : 1m, MCU : 1m
				Using Y-joint and MCU	a+g+m ≤ 200m (220m)	
		Total piping	1000m below	Using MCU only	a+b+c+d+e+f+g ≤ 1000m	
				Using Y-joint and MCU	a+b+c+d+e+f+g+p+ h+i+j+k+m ≤ 1000m	
		Piping	10m below	r ≤ 10, s ≤ 10, t ≤ 10m		
		Equivalent piping	13m below	r ≤ 13, s ≤ 13, t ≤ 13m		
Level difference	Outdoor ~ Indoor unit	Piping	110m/40m	H1 ≤ 110m/40m		
	Indoor ~ Indoor unit	Piping	15m below	H2 ≤ 15m		
	Outdoor ~ Outdoor unit	Piping	5m below	H3 ≤ 5m		
	MCU~MCU	Piping	15m below	H4 ≤ 15m		
Allowable length after branch	The first branch ~ the farthest Indoor unit	Piping	45m below	Using MCU only	45m	
				Using Y-joint and MCU	g+m ≤ 45m	
	MCU(Included EEV)	Piping	20m below	m ≤ 20m		

Distribution kit			Model	Remarks
Allowable	From distribution kit to indoor unit	3m	MEV-A13SA/MEV-A16SA (For 1 indoor unit)	For wall-mounted & ceiling Indoor unit

*2) As an outdoor unit is located in a lower position than indoor unit, level difference is 40m. If outdoor unit is located in a higher position than indoor unit, level difference is 110m or under. (If the level difference is higher than 50m, make a decision simulating by PDM kit installation Guide software whether the PDM kit should be installed or not.) *PDM kit: Pressure Drop Modulation kit

❇ Total refrigerant amount of the system must be less than 100kg. If total refrigerant amount of system is over 100kg, the system has to be divided into smaller system,each containing less than 100kg.
ex) 22HP outdoor refrigerant is already charged 10kg, so the additional refrigerant must not be over 90kg.

4-2. Pipe selection for DVM PLUS IV



- Example) 42HP of compact combinations

HP	Mark	Pipe size (O. D.mm)	
		Liquid	Gas
12	(A1)	Ø12.70	Ø25.40
14	(A1)	Ø12.70	Ø25.40
16	(A1)	Ø12.70	Ø28.58
26	(A2)	Ø19.05	Ø31.75
42	(A3)	Ø19.05	Ø38.10

Outdoor unit connection pipe size : (A1), (A2), (A3)

A1 : Select the pipes according to the outdoor unit capacity with following table.
A2 : Select the pipes according to sum of outdoor unit capacities behind the outdoor joint with following table.
A3 : Select the main pipe of outdoor units with the following table.

Outdoor unit	Pipe size (O.D. mm), (A)		Oil balancing pipe size
	Liquid	Gas	
8HP	Ø9.52	Ø19.05	Ø6.35
10HP		Ø22.23	
12HP	Ø12.70	Ø25.40	
14HP			
16HP		Ø28.58	
18HP	Ø15.88		
20HP			
22HP			
24HP			
26~30HP	Ø19.05	Ø31.75	
32~34HP			
36~48HP		Ø38.10	
50~60HP	Ø22.23	Ø44.45	

*A1 : Pipes to the outdoor unit (Liquid, Gas)
*A2 : Pipes between outdoor joint kits (Liquid, Gas)
*A3 : Main pipes (Liquid, Gas)

Pipe size between branch joints : (B)

Select the pipe size according to the capacity sum of indoor units which are connected below this pipe.

Total indoor unit's capacity	Pipe size (O. D. mm)	
	Liquid	Gas
15.0kW and below	Ø9.52	Ø15.88
Over 15.0~23.2kW and below		Ø19.05
Over 23.2~29.0kW and below		Ø22.23
Over 29.0~40.6kW and below	Ø12.70	Ø25.40
Over 40.6~46.4kW and below		Ø28.58
Over 46.4~69.6kW and below	Ø15.88	
Over 69.6~98.6kW and below	Ø19.05	Ø31.75
Over 98.6~139.2kW and below		Ø38.10
Over 139.2kW	Ø22.23	Ø44.45

Pipe size between branch joints and indoor unit (C)

Select the pipe size according to the indoor unit's capacity.

Indoor unit's capacity	Pipe size (O. D. mm)	
	Liquid	Gas
2.0~5.6kW	Ø6.35	Ø12.70
7.2~14.5kW	Ø9.52	Ø15.88

Branch joint : (D), (E), (F)

■ Branch joint of outdoor unit's multi connection (D)

Outdoor multi connection branch joint (D)	Model	Capacity of outdoor
	MXJ-T3819K	Below 48 HP
	MXJ-T4422K	Above 50 HP

■ First branch joint (E)
Select branch joint according to the outdoor unit's capacity.

	Outdoor unit	Model
Y-joint (E)	8~14HP	MXJ-YA2512K
	16HP	MXJ-YA2812K
	18~24HP	MXJ-YA2815K
	26~34HP	MXJ-YA3119K
	36~48HP	MXJ-YA3819K
	50~60HP	MXJ-YA4422K

■ Branch joint (F)
Select the pipe size according to the capacity sum of indoor units which are connected below this pipe.

1) Y-joint

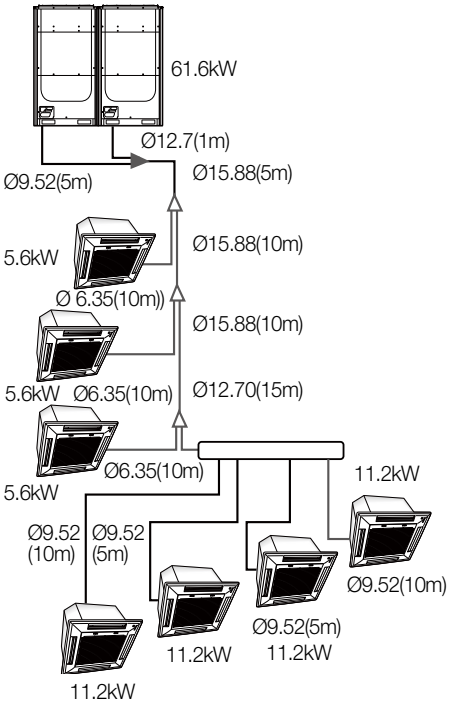
	Model	Total indoor unit's capacity
Y-joint (F)	MXJ-YA1509K	15.0kW and below
	MXJ-YA2512K	Over 15.0~40.6kW and below
	MXJ-YA2812K	Over 40.6~46.4kW and below
	MXJ-YA2815K	Over 46.4~69.6kW and below
	MXJ-YA3119K	Over 69.6~98.6kW and below
	MXJ-YA3819K	Over 98.6~139.2kW and below
	MXJ-YA4422K	Over139.2kW

2) Header joint

	Model	Total indoor unit's capacity	The connectable quantity of indoor units
Header joint (F)	MXJ-HA2512K	0~46.4kW and below	4
	MXJ-HA3115K	0~69.6kW and below	8
	MXJ-HA3819K	Over 69.6kW	8

Additional refrigerant charging

• Example) Additional refrigerant charging



■ Additional refrigerant has to be charged according to the length and size of liquid pipe.

Liquid pipe size (O.D. mm)	Additional refrigerant charging (kg/m)
ø6.35	0.02
ø9.52	0.06
ø12.70	0.125
ø15.88	0.18
ø19.05	0.27
ø22.23	0.35
ø25.40	0.53

■ The amount of the refrigerant that is already placed in

Classification	080	100	120	140	160	180	200
Standard	5.0	5.0	5.0	7.0	7.0	8.5	8.5

■ For the indoor unit connected to the distribution kit, the additional refrigerant charging is 0.01kg per meter regardless of the pipe size.

■ Charge the additional refrigerant according to the indoor unit capacity. The amount of the additional refrigerant charging for each indoor unit capacity = 0.046kg/kW

■ The method to calculate the total amount of the refrigerant.

- The amount of the refrigerant according to the pipe size and length (ⓐ)
- The amount of additional refrigerant charging for each indoor unit (ⓑ) = ∑ (Indoor unit capacity) x 0.046
- The total amount of the additional refrigerant charging = ⓐ + ⓑ

Additional refrigerant charging of distribution kit (kg/m)		Remarks
Regardless of the liquid pipe size, additional refrigerant charging is 0.01 kg per meter after distribution kit	0.01	For wall-mounted & ceiling indoor unit

■ Example of additional refrigerant charging. Pipe length is as below.

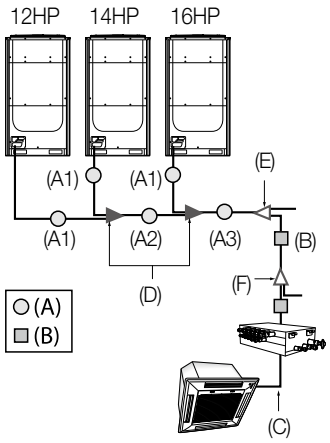
Liquid pipe size (O.D. mm)	Ø6.35	Ø9.52	Ø12.70	Ø15.88
Length (m)	30	35	16	25

❋ ⓐ = 30x0.02 + 35x0.06 + 16x0.125 + 25x0.18 = 9.2kg
ⓑ = (5.6x3 + 11.2x4)x0.046 = 2.834kg
The total amount of the additional refrigerant charging:
ⓐ + ⓑ = 9.2 + 2.834 = 12.034Kg

❋ Total refrigerant amount of the system must be less than 100kg. If total refrigerant amount of system is over 100kg, the system has to be divided into smaller system, each containing less than 100kg.

ex) 20HP outdoor refrigerant is already charged 8.5kg, so the additional refrigerant must not be over 91.5kg.

4-3. Pipe selection for DVM PLUS IV HR



• Example) 42HP of compact combinations

HP	Mark	Pipe size (O. D.mm)		
		Liquid	Low gas	High gas
12	(A1)	Ø12.70	Ø25.40	Ø22.23
14	(A1)	Ø12.70	Ø25.40	Ø22.23
16	(A1)	Ø12.70	Ø28.58	Ø22.23
26	(A2)	Ø19.05	Ø31.75	Ø28.58
42	(A3)	Ø19.05	Ø38.10	Ø31.75

Outdoor unit connection pipe size : (A1), (A2), (A3)

A1 : Select the pipes according to the outdoor unit capacity with following table.
A2 : Select the pipes according to sum of outdoor unit capacities behind the outdoor joint with following table.
A3 : Select the main pipe of outdoor units with the following table.

Outdoor unit	Pipe size (O.D. mm), (A)			Oil balancing pipe size
	Liquid	Gas	High gas	
8HP	Ø9.52	Ø19.05	Ø15.88	Ø6.35
10HP		Ø22.23	Ø19.05	
12HP	Ø12.70	Ø25.40	Ø22.23	
14HP				
16HP		Ø28.58		
18HP	Ø15.88		Ø25.40	
20HP				
22HP				
24HP				
26~30HP	Ø19.05	Ø31.75	Ø28.58	
32~34HP				
36~48HP		Ø38.10	Ø31.75	
50~60HP	Ø22.23	Ø44.45	Ø38.10	

*A1 : Pipes to the outdoor unit (Liquid, Gas, High pressure gas)
*A2 : Pipes between outdoor joint kits (Liquid, Gas, High pressure gas)
*A3 : Main pipes (Liquid, Gas, High pressure gas)

Pipe size between branch joints : (B)

Select the pipe size according to the capacity sum of indoor units which are connected below this pipe.

Total indoor unit's capacity	Pipe size (O.D. mm)		
	Liquid	Gas	High gas
15.0kW and below	Ø9.52	Ø15.88	Ø15.88
Over 15.0~23.2kW and below		Ø19.05	
Over 23.2~29.0kW and below		Ø22.23	Ø19.05
Over 29.0~40.6kW and below	Ø12.70	Ø25.40	Ø22.23
Over 40.6~46.4kW and below		Ø28.58	
Over 46.4~69.6kW and below	Ø15.88		Ø25.40
Over 69.6~98.6kW and below	Ø19.05	Ø31.75	Ø28.58
Over 98.6~139.2kW and below		Ø38.10	Ø31.75
Over 139.2kW	Ø22.23	Ø44.45	Ø38.10

Pipe size between branch joints and indoor unit : (C)

Select the pipe size according to the indoor unit's capacity.

Indoor unit's capacity	Pipe size (O. D. mm)	
	Liquid	Gas
2.2~5.6kW	Ø6.35	Ø12.70
7.1~14.0kW	Ø9.52	Ø15.88

Branch joint : (D), (E), (F)

■ Branch joint of outdoor unit's multi connection (D)

	Model	Capacity of outdoor
Liquid & Low gas pipe	MXJ-T3819K	Below 48 HP
	MXJ-T4422K	Above 50 HP
High gas pipe	MXJ-T3100K	Below 48 HP
	MXJ-T3800K	Above 50 HP

■ First branch joint (E)
Select branch joint according to outdoor unit's capacity.

	Outdoor unit	Model
Liquid & Low pressure gas Y-joint (E)	8~14HP	MXJ-YA2512K
	16HP	MXJ-YA2812K
	18~24HP	MXJ-YA2815K
	26~34HP	MXJ-YA3119K
	36~48HP	MXJ-YA3819K
	50~60HP	MXJ-YA4422K

	Outdoor unit	Model
High pressure gas Y-joint (E)	8HP	MXJ-YA1500K
	10~24HP	MXJ-YA2500K
	26~48HP	MXJ-YA3100K
	50~60HP	MXJ-YA3800K

■ Branch joint (F)

	Model	Total indoor unit's capacity
Liquid & low pressure gas Y-joint (F)	MXJ-YA1509K	15.0kW and below
	MXJ-YA2512K	Over 15.0~40.6kW and below
	MXJ-YA2812K	Over 40.6~46.4kW and below
	MXJ-YA2815K	Over 46.4~69.6kW and below
	MXJ-YA3119K	Over 69.6~98.6kW and below
	MXJ-YA3819K	Over 98.6~139.2kW and below
	MXJ-YA4422K	Over 139.2kW

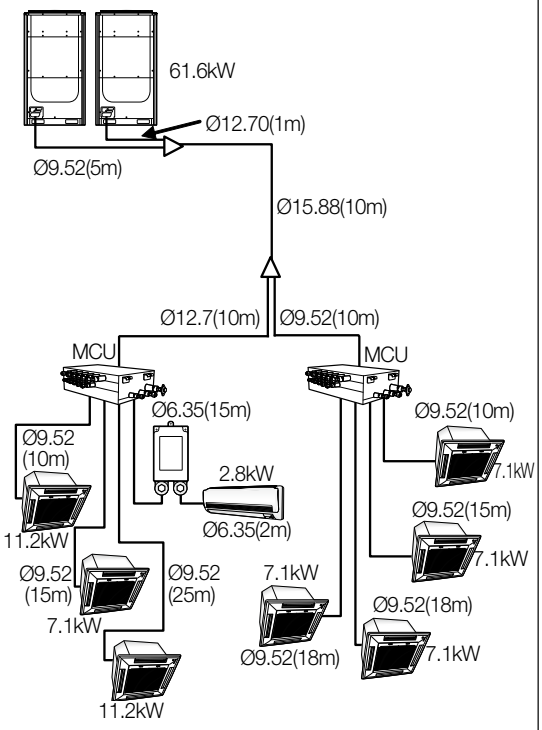
	Model	Total indoor unit's capacity
High pressure gas Y-joint (F)	MXJ-YA1500K	23.2kW and below
	MXJ-YA2500K	Over 23.2~69.6kW and below
	MXJ-YA3100K	Over 69.6~139.2kW and below
	MXJ-YA3800K	Over 139.2kW

CAUTION

◆ The sum of the total capacity of the indoor units connected to a MCU should not be over the max. 44.8kW.

Additional refrigerant charging

• Example) Additional refrigerant charging



■ Additional refrigerant is charged according to the length and size of liquid pipe.

Liquid pipe size (O.D. mm)	Additional refrigerant charging (kg/m)
Ø6.35	0.02
Ø9.52	0.06
Ø12.70	0.125
Ø15.88	0.18
Ø19.05	0.27
Ø22.23	0.35
Ø25.40	0.53

■ Factory charged refrigerant is already placed in

Classification	080	100	120	140	160	180	200
Standard	5.0	5.0	5.0	7.0	7.0	8.5	8.5

Additional refrigerant charging of MCU kit	(kg/unit)
Additional refrigerant charging of MCU is 0.5kg for every MCU kit	0.5

Additional refrigerant charging of distribution kit (kg/m)		Remarks
Regardless of the liquid pipe size, additional refrigerant charging is 0.01kg per meter after distribution kit	0.01	For wall-mounted & ceiling indoor unit

■ Charge the additional refrigerant according to the indoor unit capacity. The amount of the additional refrigerant charging for each indoor unit capacity = 0.046kg/kW

■ The method to calculate the total amount of the refrigerant.

- The amount of the refrigerant according to the pipe size and length (ⓐ)
- The amount of additional refrigerant charging for each indoor unit (ⓑ) = ∑ (Indoor unit capacity) x 0.046
- The amount of other additional refrigerant charging (ⓒ) = ∑(The number of MCU Kit installed) x 0.5
- The total amount of the additional refrigerant charging = ⓐ + ⓑ + ⓒ

■ Example of additional refrigerant charging.
Pipe length is as below.

Liquid pipe size (O.D. mm)	Ø6.35	Ø9.52	Ø12.70	Ø15.88
Length (m)	15	126	11	10

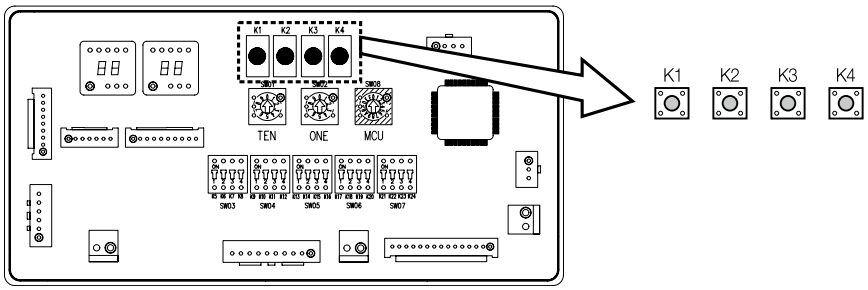
MCU	Pipe length after distribution kit (m)
2 Ea	2

❊ ⓐ = 15x0.02 + 126x0.06 + 11x0.125 + 10x0.18 = 11.035Kg
ⓑ = ∑(11.2x2 + 7.1x5 + 2.8x1)x0.046 = 2.7922kg
ⓒ = 2x0.01 + 2x0.5 = 1.02
The total amount of the additional refrigerant charging:
ⓐ + ⓑ + ⓒ = 11.035 + 2.792 + 1.02 = 14.847Kg

❊ Total refrigerant amount of the system must be less than 100kg.
If total refrigerant amount of system is over 100kg, the system has to be divided into smaller system, each containing less than 100kg.
ex) 20HP outdoor refrigerant is already charged 8.5kg, so the additional refrigerant must not be over 91.5kg.

5 Option switches & function keys

5-1. Key function



K1 (Push time)	KEY operation	7-Segment Display
1	Heating refrigerant charging	"K" "1" "BLANK" "BLANK"
2	Heating trial operation	"K" "2" "BLANK" "BLANK"
3	Heating Pump Out (Outdoor unit address 1)	"K" "3" "BLANK" "1"
4	Heating Pump Out (Outdoor unit address 2)	"K" "3" "BLANK" "2"
5	Heating Pump Out (Outdoor unit address 3)	"K" "3" "BLANK" "3"
6	Heating Pump Out (Outdoor unit address 4)	"K" "3" "BLANK" "4"
7	Vacuum mode (Outdoor unit address 1)	"K" "4" "BLANK" "1"
8	Vacuum mode (Outdoor unit address 2)	"K" "4" "BLANK" "2"
9	Vacuum mode (Outdoor unit address 3)	"K" "4" "BLANK" "3"
10	Vacuum mode (Outdoor unit address 4)	"K" "4" "BLANK" "4"
11	Vacuum mode (All outdoor units)	"K" "4" "BLANK" "A"
12	End KEY operation	-

K2 (Push time)	KEY operation	7-Segment Display
1	Cooling refrigerant charging	"K" "5" "BLANK" "BLANK"
2	Cooling trial operation	"K" "6" "BLANK" "BLANK"
3	Cooling Pump Down (All outdoor units)	"K" "7" "BLANK" "BLANK"
4	Pipe checking	"K" "8" "BLANK" "BLANK"
5	Checking the amount of refrigerant	"K" "9" "BLANK" "BLANK"
6	End KEY operation	

K3	KEY operation	7-Segment Display
1	Initializing(Reset)operation	The same as initializing operation

K4	KEY operation	Display	
		SEG 1	SEG 2, 3, 4
1	Outdoor capacity	1	Ex) 16 HP → Off, 1, 6
2	Digital COMP Loading Time	2	Ex) Loading 13 sec → Off, 1, 3
3	High pressure (kg/cm^2)	3	Ex) High pressure 15.2 (kg/cm^2) → 1, 5, 2
4	Low pressure (kg/cm^2)	4	Ex) Low pressure 4.3 (kg/cm^2) → 0, 4, 3
5	Discharge temperature COMP1	5	Ex) 87℃ → 0, 8, 7
6	Discharge temperature COMP2	6	Ex) 87℃ → 0, 8, 7
7	Discharge temperature COMP3	7	Ex) 87℃ → 0, 8, 7
8	CT sensor value COMP 1	8	Ex) 2A → 0, 0, 2
9	CT sensor value COMP 2	9	Ex) 2A → 0, 0, 2
10	CT sensor value COMP 3	A	Ex) 2A → 0, 0, 2
11	Suction 1 temperature	B	Ex) -5 ℃ → -, 0, 5
12	Cond Out temperature	C	Ex) 35℃ → 0, 3, 5
13	Liquid pipe temperature	C	Ex) 35℃ → 0, 3, 5
14	Oil temperature	C	Ex) 35℃ → 0, 3, 5
15	Sump temperature COMP 1	F	Ex) 35℃ → 0, 3, 5
16	Outdoor temperature	G	Ex) 35℃ → 0, 3, 5
17	EVI inlet temperature	H	Ex) 35℃ → 0, 3, 5
18	EVI outlet temperature	I	Ex) 35℃ → 0, 3, 5
19	Main EEV 1 step	J	Ex) 2000 steps → 2, 0, 0
20	Main EEV 2 step	K	Ex) 2000 steps → 2, 0, 0
21	EVI EEV step	L	Ex) 300 steps → 3, 0, 0
22	HR EEV step	M	Ex) 300 steps → 3, 0, 0
23	Fan step (SSR or BLDC)	N	Ex) 13 steps → Off, 1, 3
24	Sump temperature COMP 2	O	-42℃ → -42
25	Sump temperature COMP 3	P	-42℃ → -42
26	Result of checking the amount of refrigerant	Q	NUL: no result NG: Failure 80%: or less 120 or more%: 80~120: Display number
27	Suction2 temperature	R	Ex) 87℃ → 0, 8, 7
28	S/W version	S	Month, day (ex: 2010. 11. 20 → 0B20)

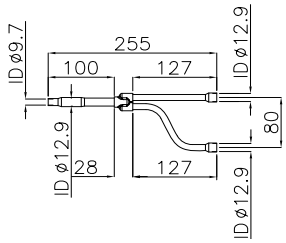
6-1. Y-joints

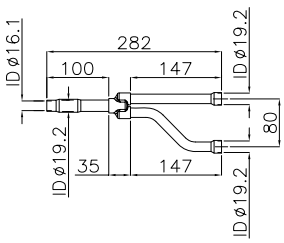
1) Models

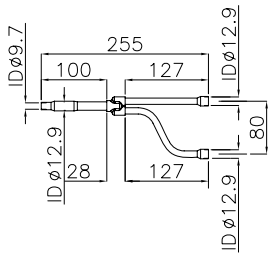
Model name	Total indoor unit's capacities
MXJ-YA1509✳	15.0 kW and below
MXJ-YA2512✳	Over 15.0~40.6 kW and below
MXJ-YA2812✳	Over 40.6~46.4 kW and below
MXJ-YA2815✳	Over 46.4~69.6 kW and below
MXJ-YA3119✳	Over 69.6~98.6 kW and below
MXJ-YA3819✳	Over 98.6~139.2 kW and below
MXJ-YA4422✳	Over 139.2 kW

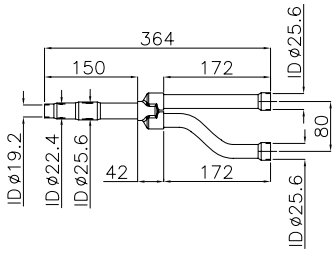
2) Dimensional drawing

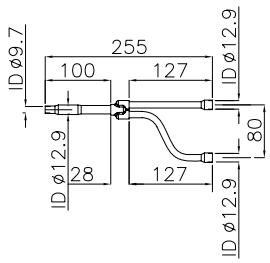
(Unit: mm)

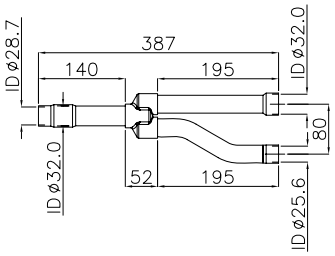
<table>
<tr><th colspan="2">Y-joint for indoor unit</th></tr>
<tr><td colspan="2">MXJ-YA1509✳</td></tr>
<tr><td>Liquid
 

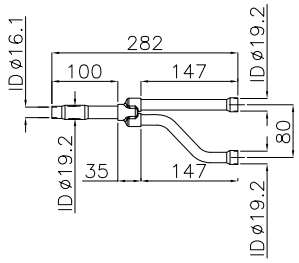
①x2 EA</td><td>Gas
 

②x 2 EA</td></tr>
<tr><td colspan="2">MXJ-YA2512✳</td></tr>
<tr><td>Liquid
 

①x2 EA</td><td>Gas
 

③x 2 EA</td></tr>
<tr><td colspan="2">MXJ-YA2812✳</td></tr>
<tr><td>Liquid
 

①x2 EA</td><td>Gas
 

③x 1 EA
⑦x 1 EA</td></tr>
<tr><td colspan="2">MXJ-YA2815✳</td></tr>
<tr><td>Liquid
 

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 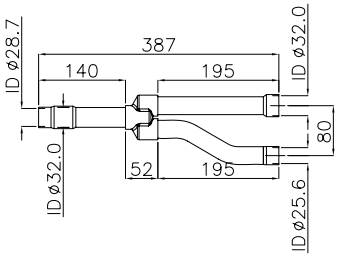

③x 1 EA
⑦x 1 EA</td></tr>
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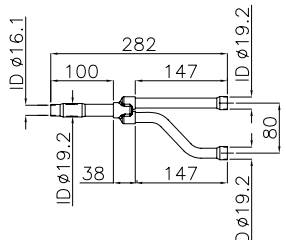
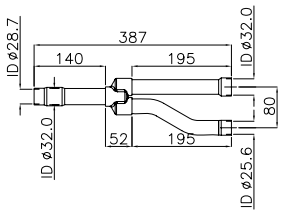
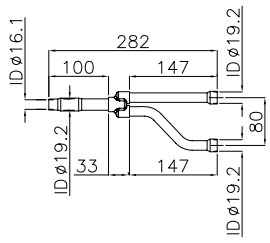
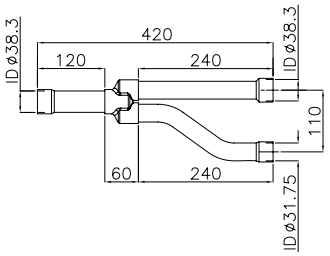
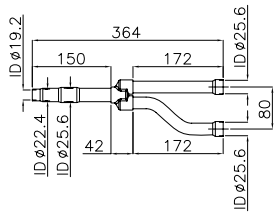
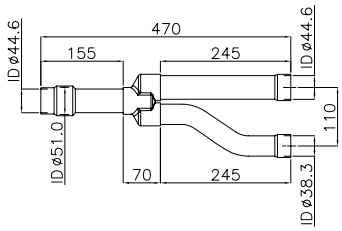
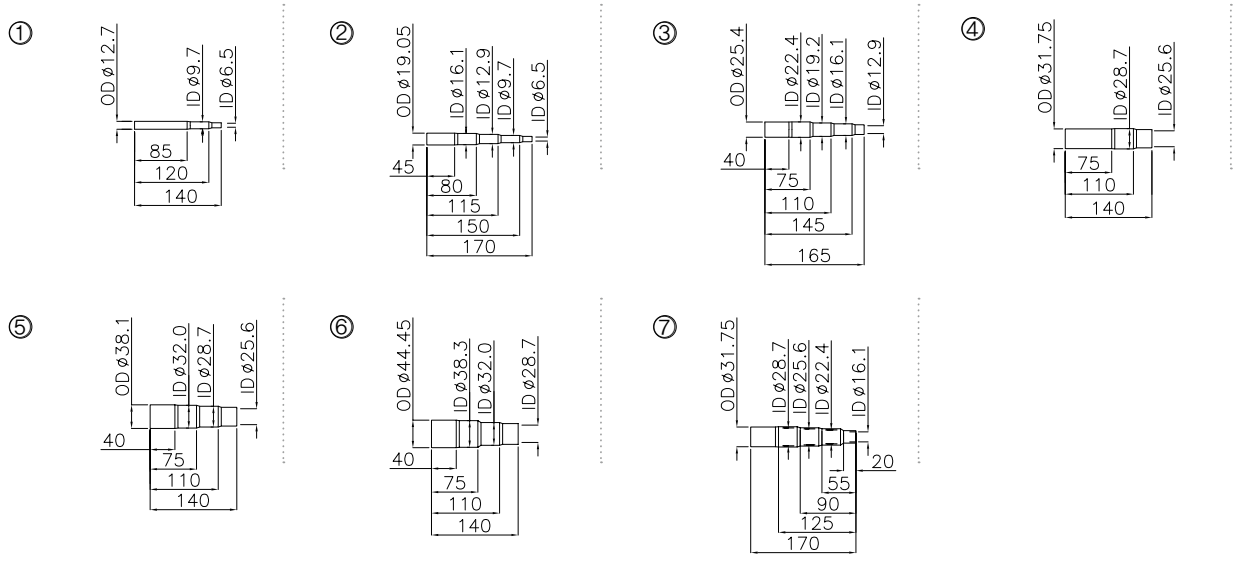
6-1. Y-joints

2) Dimensional drawing

(Unit: mm)

Y-joint for indoor unit	
MXJ-YA3119✳	
Liquid  ②x 2 EA	Gas  ③x 1 EA ④x 1 EA
MXJ-YA3819✳	
Liquid  ②x 2 EA	Gas  ③x 1 EA ④x 1 EA ⑤x 1 EA
MXJ-YA4422✳	
Liquid  ①x 1 EA ③x 2 EA	Gas  ③x 1 EA ⑤x 1 EA ⑥x 1 EA

Reducer



6-2. Header joints

1) Models

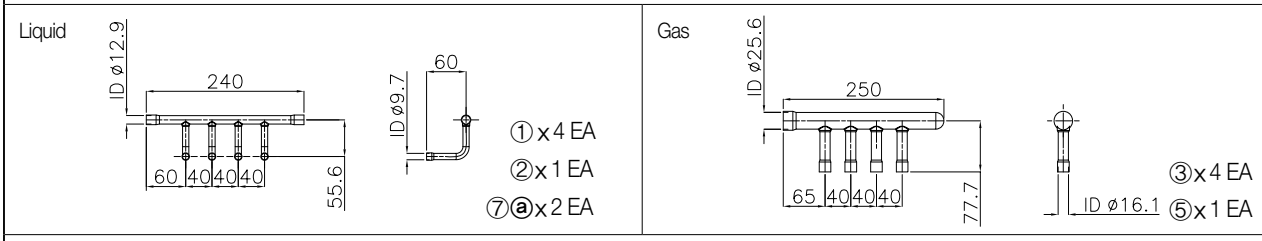
Model name	Total indoor unit's capacities	The maximum quantity of connection
MXJ-HA2512✳	46.4 kW and below	4
MXJ-HA3115✳	Over 46.4 kW~below 69.6 kW	8
MXJ-HA3819✳	Over 69.6 kW	8

2) Dimensional drawing

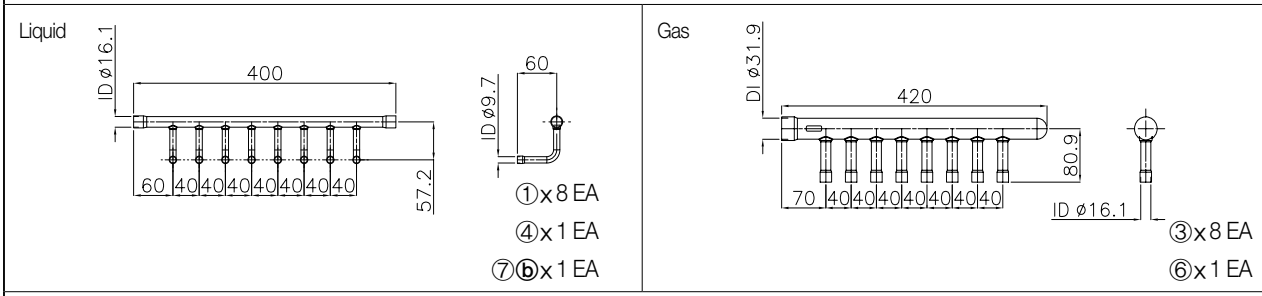
(Unit: mm)

Header joint

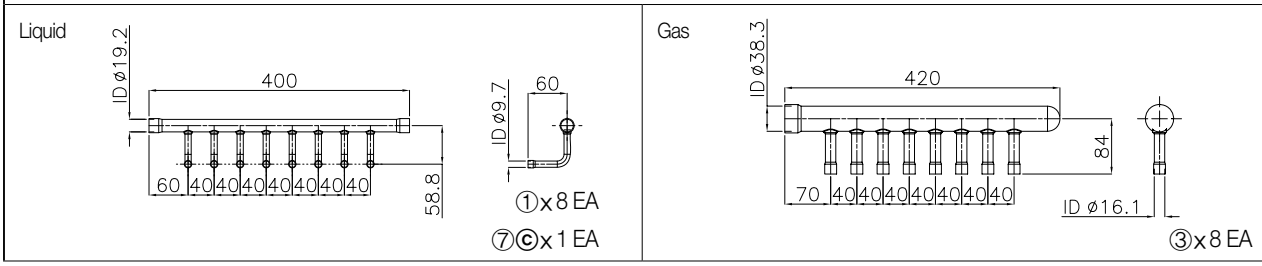
MXJ-HA2512✳



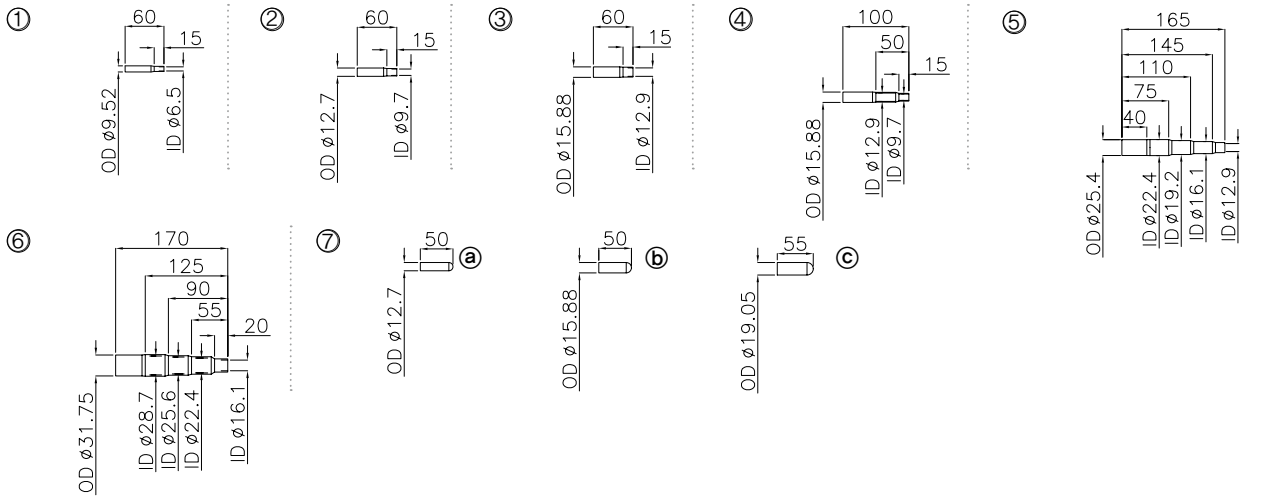
MXJ-HA3115✳



MXJ-HA3819✳



Reducer



6-3. Outdoor joints

1) Models

Model name	Total indoor unit's capacities
MXJ-T3819✳	Below 48 HP
MXJ-T4422✳	Above 50 HP

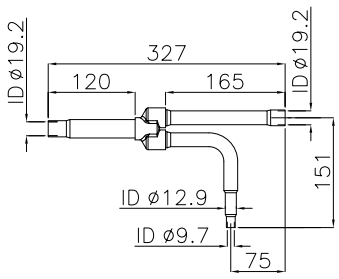
2) Dimensional drawing

(Unit: mm)

Outdoor joint

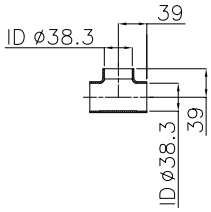
MXJ-T3819✳

Liquid



①x2 EA

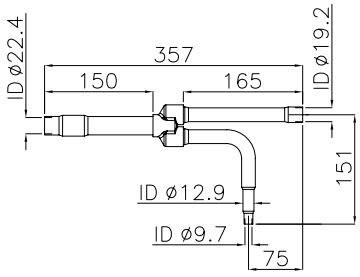
Gas



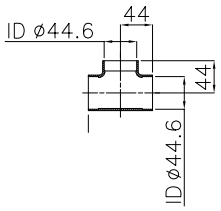
②x1 EA
③x2 EA

MXJ-T4422✳

Liquid



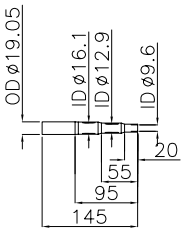
Gas



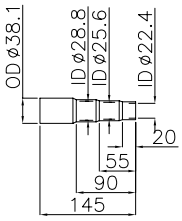
④x4 EA
⑤x1 EA
⑥x1 EA

Reducer

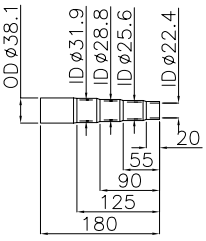
①



②



③



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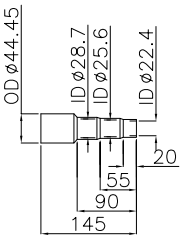

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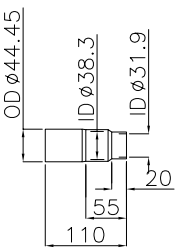

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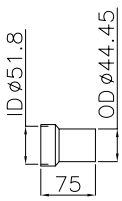


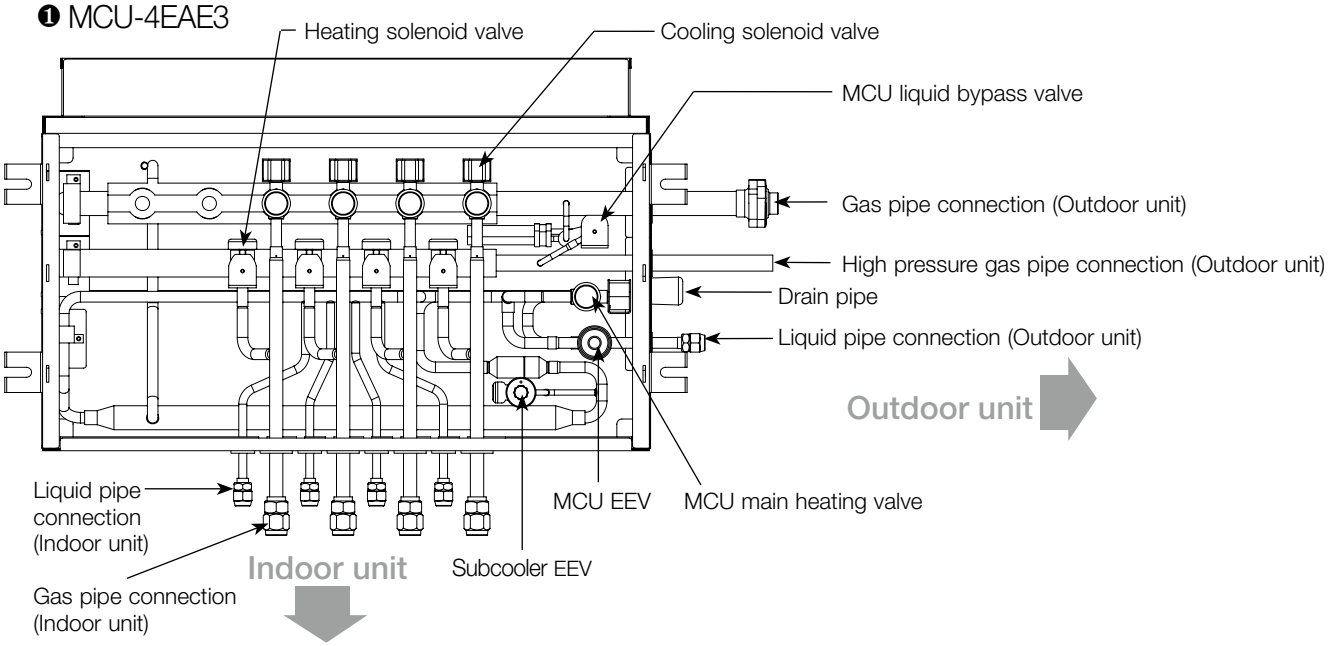
6-4. MCU kits

1) Models

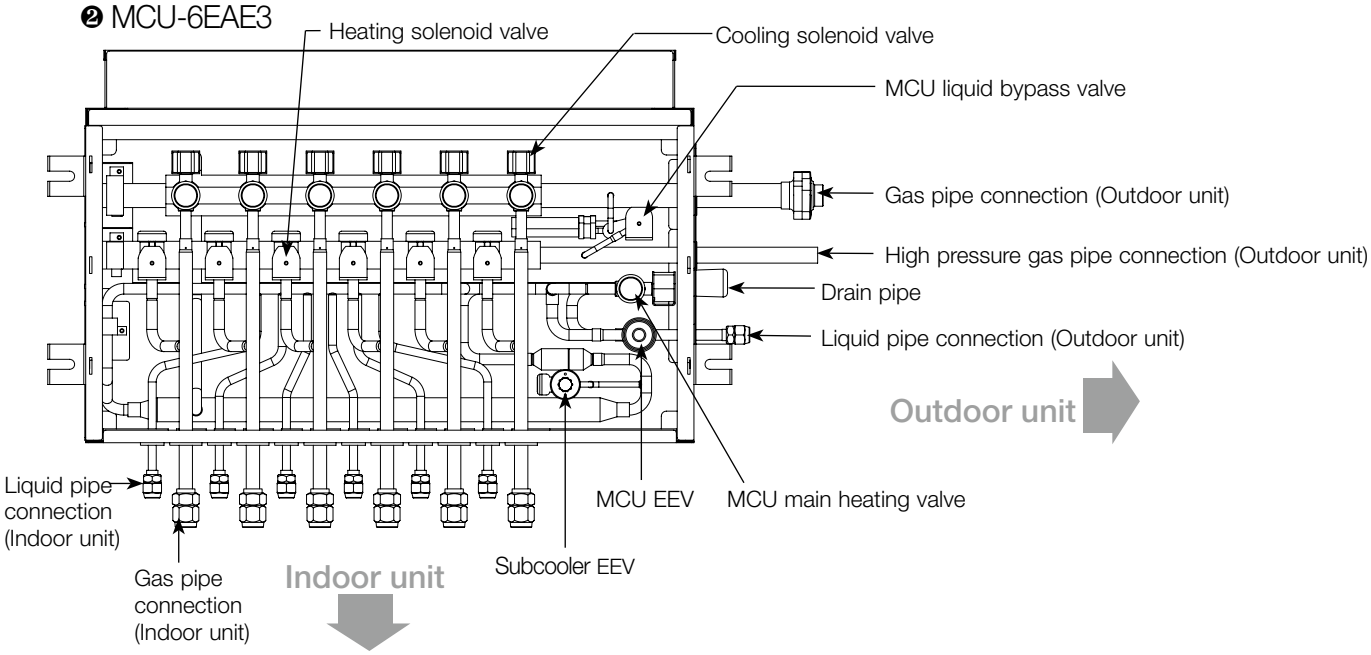
Model name	Description			
	Quantity of connectable indoor units	Weight (Net)	Total capacity	EEV
MCU-4EAE3	Up to 4 units	24kg	Up to 44.8kW (16HP)	Not included
MCU-6EAE3	Up to 6 units	27kg		

2) Cycle function parts

❶ MCU-4EAE3



❷ MCU-6EAE3



6-5. EEV kits

1) Model

❶ Single

Model	Description				
	Connectable capacity of indoor units	Quantity of connectable indoor units	Weight (Net)	Indoor units	Remarks
MEV-A13SA	up to 3.6kW units	1	1kg	Wall-mounted & Ceiling indoor unit	Extension wire included
MEV-A16SA	5.6 ~ 9.0kW units	1			

❷ Two rooms

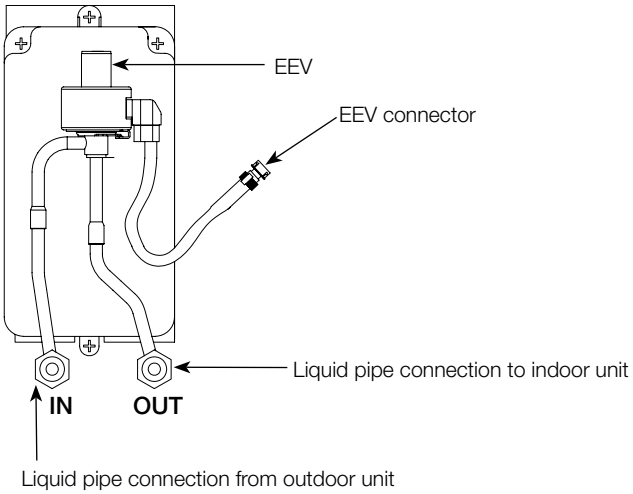
Model	Description				
	Connectable capacity of indoor units	Quantity of connectable indoor units	Weight (Net)	Indoor units	Remarks
MXD-A13K116A	Up to 3.6kW units	1	7.3kg	Wall-mounted & Ceiling indoor unit	-
	5.6~9.0kW units	1			
MXD-A13K200A	Up to 3.6kW units	2			
MXD-A16K200A	5.6~9.0kW units	2			
MXD-A22K200A	Over 9.0kW units	2			

❸ Three rooms

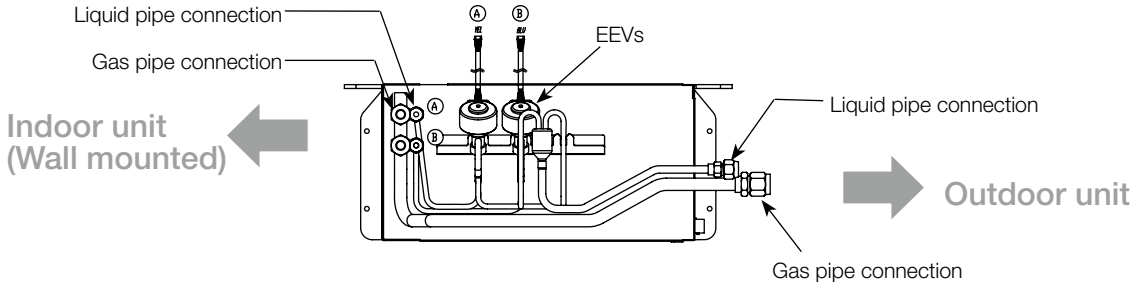
Model	Description				
	Connectable capacity of indoor units	Quantity of connectable indoor units	Weight (Net)	Indoor units	Remarks
MXD-A13K216A	Up to 3.6kW units	2	7.6kg	Wall-mounted & Ceiling indoor unit	-
	5.6~9.0kW units	1			
MXD-A13K300A	Up to 3.6kW units	3			
MXD-A16K213A	Up to 3.6kW units	1			
	5.6~9.0kW units	2			
MXD-A16K300A	5.6~9.0kW units	3			

2) Cycle function parts

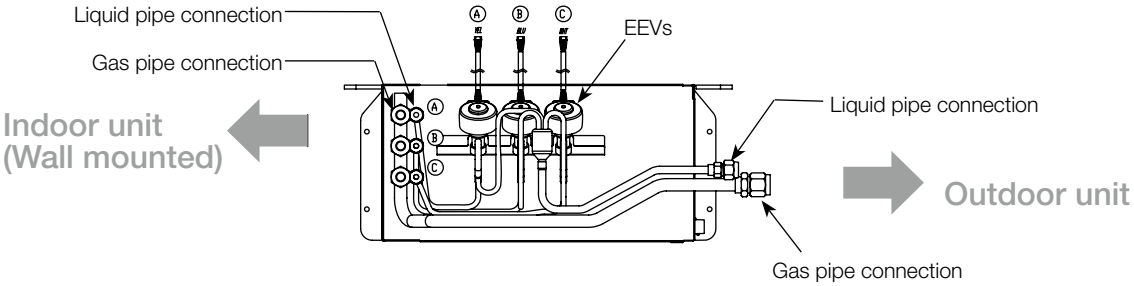
❶ Single



❷ Two rooms



❸ Three rooms



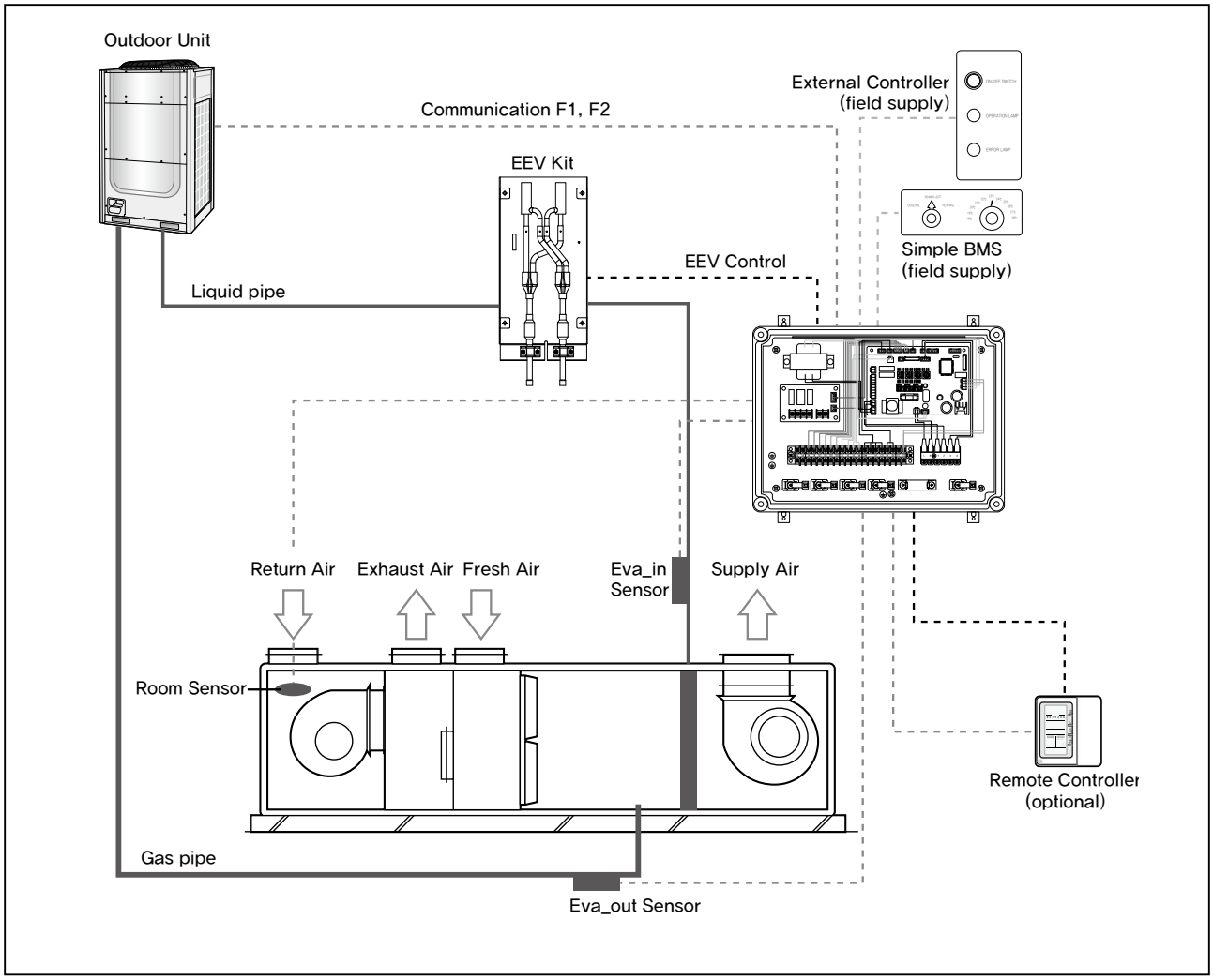
6-6. AHU kit

1) Models

AHU-KIT MODEL	AHU Capacity Allowance (kW)		AHU Internal Heat Exchanger Volume Allowance (㎤)	
	Minimum	Maximum	Minimum	Maximum
MXD-A16K1X025A	7	8.75	1,200	1,500
MXD-A22K1X050A	14	17.5	2,150	2,688
MXD-A22K2X075A	21	26.25	3,100	3,875
MXD-A22K2X100A	28	35	4,000	5,000

※ Evaporating Temperature : 7˚C, Superheat : 1˚C, Air temperature : 27˚CDB/19˚CWB

2) Dimensional drawing



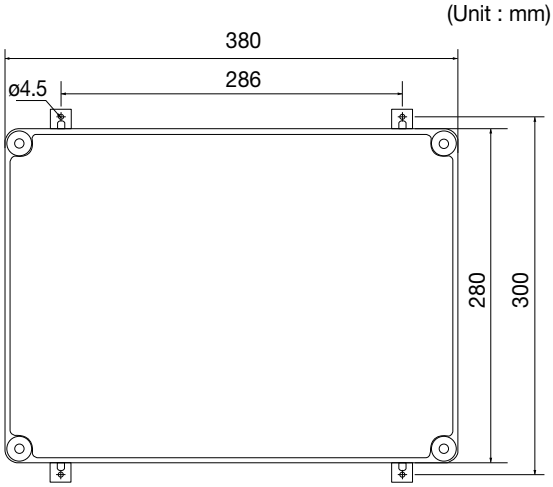
CAUTION

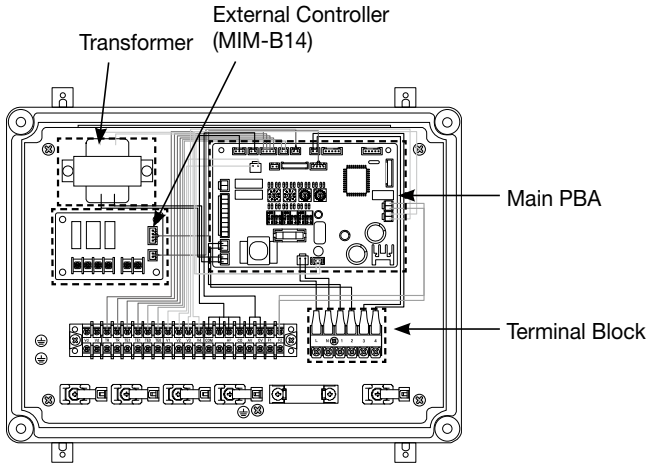
◆ When the controllers (External Controller, simple BMS, Remote Controller) are installed simultaneously, AHU-KIT doesn't have the priority of control and operates according to the final signal. (SIMPLE BMS may indicate the different condition of AHU, if AHU was controlled by other controller finally.)

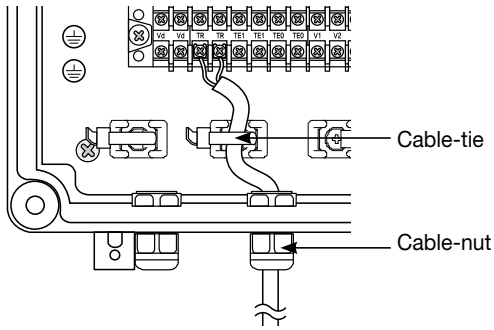
3) Control-KIT Installation

① Drill 4 holes on the correct position of the wall and fix the Control-KIT securely.
(refer to the dimension of figure below.)
② Open the box and connect the cables according to the diagram.
(Wires should be pulled through the Cable-nut, before connecting to the terminal. Refer to the figure below.)
③ Fix the cable firmly with Cable-tie after connecting.
④ Close the box.

(Unit : mm)



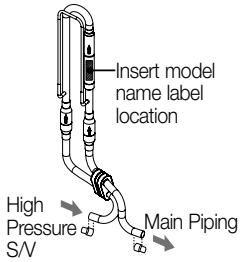
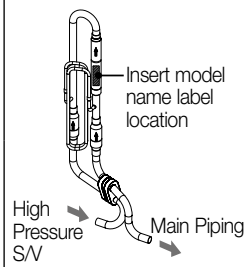
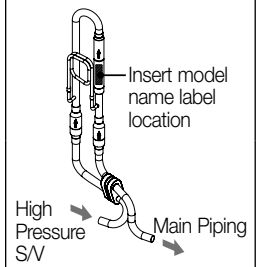




CAUTION

- Make sure that Control-KIT should be installed within 5m from the EEV-KIT.
  (Supplied wire in the Accessory box is 10m.)
- Close the box with the cover and cable-nut securely so that Control-KIT is fireproofed.

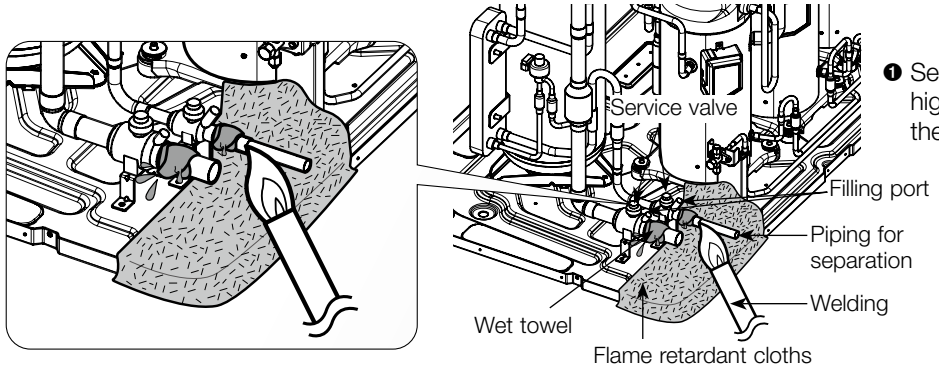
6-7. PDM kit

KIT model name	MXD-A38K2A	MXD-A12K2A	MXD-A58K2A
	RD080~120✶✶	RD140~160✶✶✶	RD180~220✶✶✶
SET application model name			
Image			

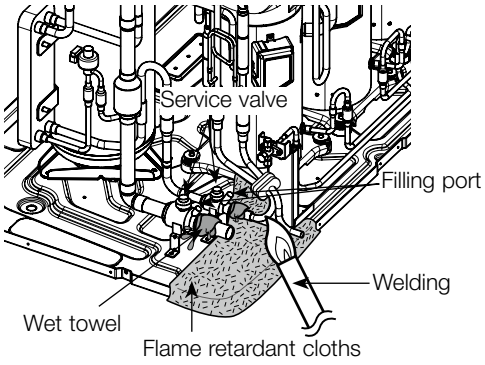
Parts

Cable tie	Pipe connection socket (Only MXD-A38K2A is provided)
	

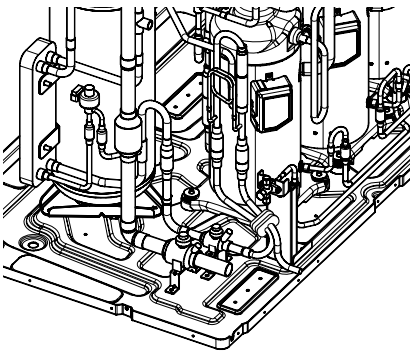
❊ When assembling RD080✶✶ ~ 100✶✶, make sure to install by using the separately packaged part (socket).



❶ Separate the front pipe of the high-pressure pipe in order to assemble the high head KIT.



❷ Weld after assembling the prepared high head KIT.



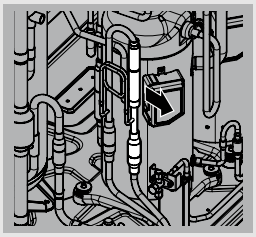
❸ The above is the completed image, make sure to check for gas leak before test operation.

❊ Use the designated product for the liquid used for detecting leakages after welding. If the liquid contains sulfur, it can cause pipe corrosion.

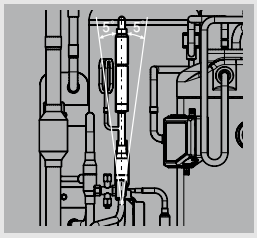
CAUTION

Cautions while assembling KIT

◆ Assemble so that the check valve faces forward.



◆ Make sure to install vertically.
(Install within ±5° to the left and to the right)



Ⅳ. Capacity correction

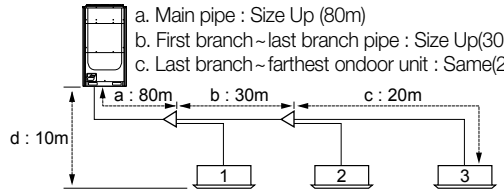
1 Capacity correction

1-1. DVM PLUS IV

1. Correction coefficient(α) represents the capacity change rate of the system during the maximum load operation in the standard condition. (The correction coefficient(α) value is not much different from that of the standard condition.)
2. When the equivalent length of main pipe is 90m or more between the outdoor unit and the farthest indoor unit, the diameter of the main gas and liquid pipes must be increased by one grade larger. (refer to the 80 page)
3. When the pipe length after the first refrigerant branch kit is 45m or more, the diameter of the gas and liquid pipes between first and final branch kit must be increased by one grade larger. (refer to the 80 page)
4. In this cases, correction coefficient(α) is measured as below based on the overall equivalent length.
   → The overall equivalent length = (Equivalent length of main pipe x correction factor) +
   (Equivalent length of first branch ~ last branch pipe x correction factor) +
   (Equivalent length of last branch ~ farthest indoor unit)

	Correction Factor	
	Standard Size	Size increase
Cooling	1.0	0.5
Heating	1.0	0.2

ex) When the condition is System 8HP.



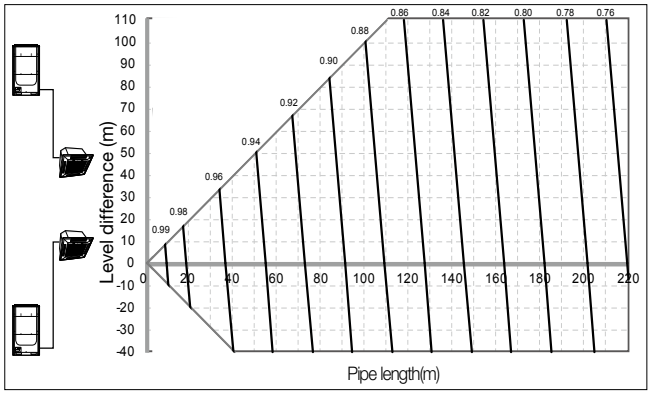
① Cooling : The overall equivalent length = 80 x 0.5 + 30 x 0.5 + 20 = 75(m)
cooling correction coefficient(α) = 0.91

② Heating : The overall equivalent length = 80 x 0.2 + 30 x 0.2 + 20 = 42(m)
heating correction coefficient(α) = 0.99

5. The correction coefficient(α) can be reduced according to the condition of pipe insulation.

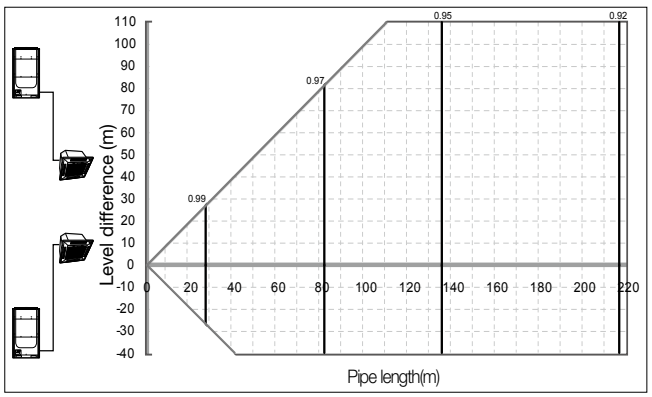
1) 8HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77	0.76	0.75
100	-	-	-	-	-	-	-	-	-	-	-	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	0.75
90	-	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.80	0.79	0.78	0.77	0.76	0.75	
80	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	0.75	
70	-	-	-	-	-	-	-	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76	0.75	
60	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76	0.75	
50	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.77	0.76	0.75	
40	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.76	0.75	
30	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.75	
20	-	-	0.98	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76	
10	-	0.99	0.98	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76	
0	0.99	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	0.99	0.99	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76	
-10	-	0.99	0.98	0.97	0.96	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77	0.76	
-20	-	-	0.98	0.97	0.96	0.95	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	
-30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.80	0.79	0.78	0.77	0.76	
-40	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	

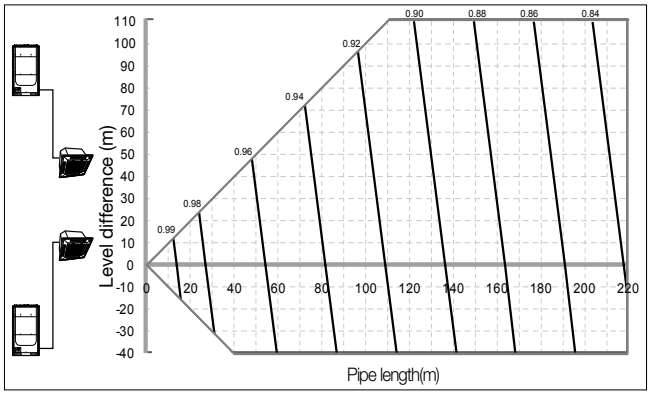
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
100	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
90	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
80	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
70	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
60	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
50	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
40	-	-	-	-	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
30	-	-	-	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
20	-	-	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
-30	-	-	-	0.99	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	
-40	-	-	-	-	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92	0.92	

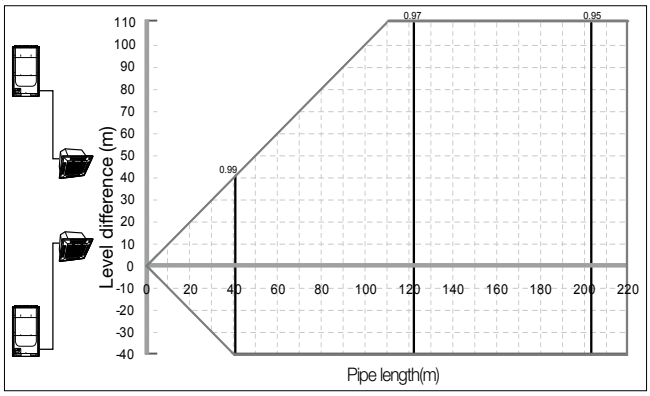
2) 10HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83
100	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
90	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84	0.83
80	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
70	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
60	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
50	-	-	-	-	-	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
40	-	-	-	-	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.84
30	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
20	-	-	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
10	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
-10	-	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
-20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84
-30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84
-40	-	-	-	-	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84

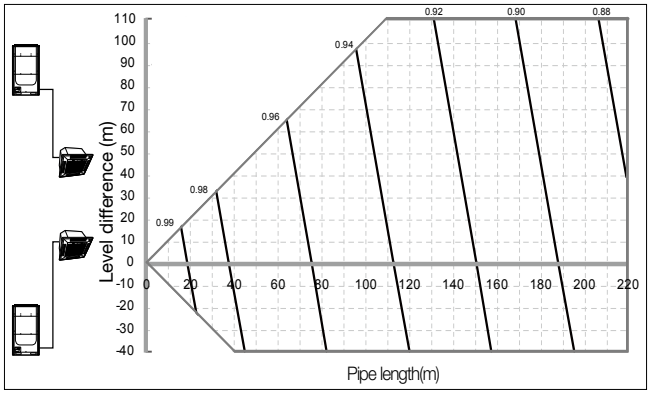
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95

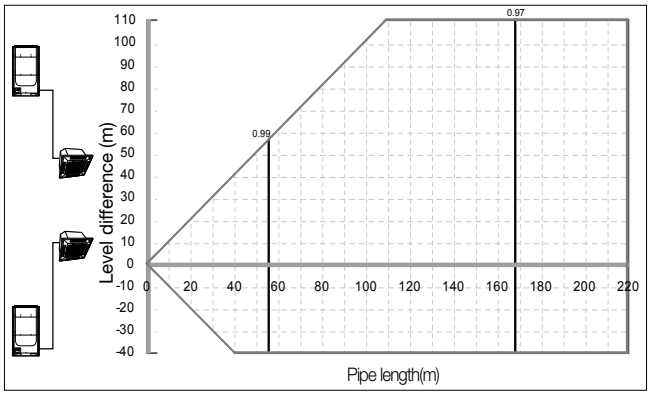
3) 12HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
100	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
90	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87
80	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
70	-	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
60	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
50	-	-	-	-	-	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88
40	-	-	-	-	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88
30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
10	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88
-10	-	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88
-20	-	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
-40	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89

Heating



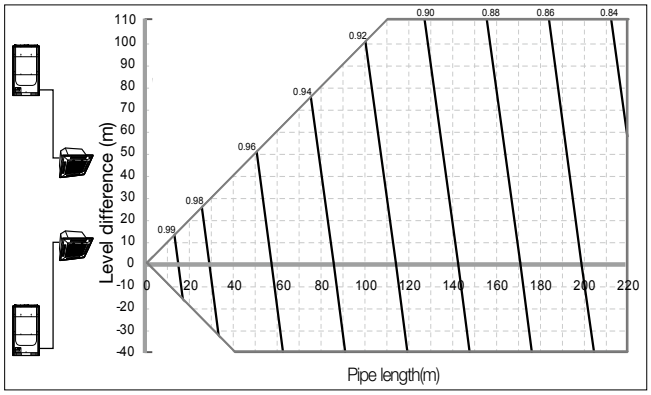
110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
80	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96

1 Capacity correction

1-1. DVM PLUS IV

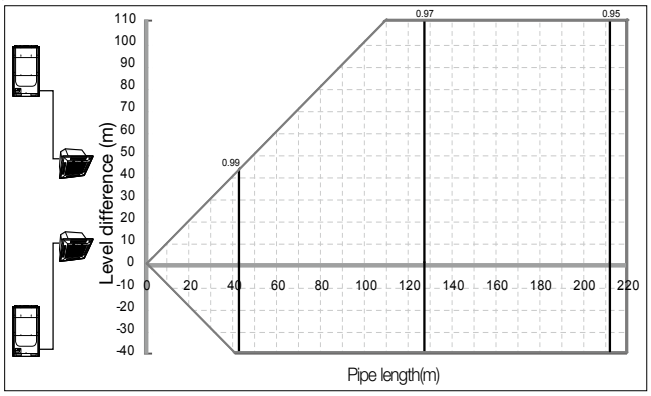
4) 14HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
100	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.84
90	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.84
80	-	-	-	-	-	-	-	-	-	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
70	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84
60	-	-	-	-	-	-	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84	
50	-	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	
40	-	-	-	-	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	
30	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	
20	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	
10	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85	
-10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	
-20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	
-30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	
-40	-	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	

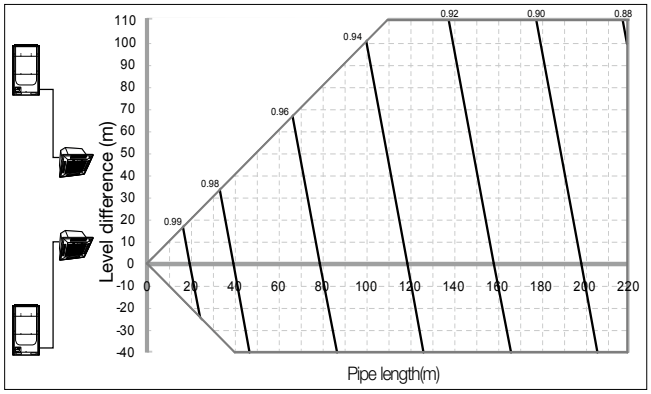
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95

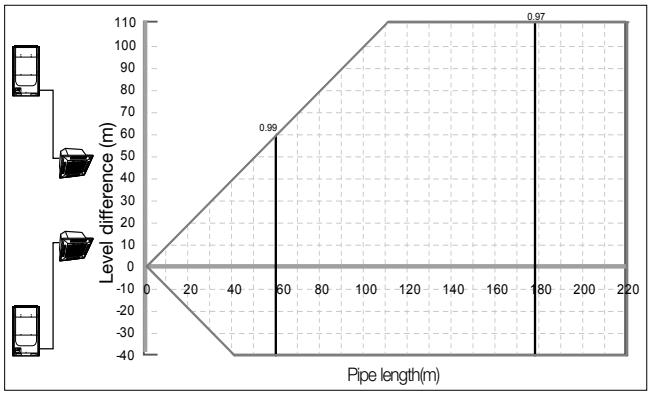
5) 16HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
100	-	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88
90	-	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
80	-	-	-	-	-	-	-	-	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
70	-	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
60	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
50	-	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
40	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
10	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
-10	-	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-20	-	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-40	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89

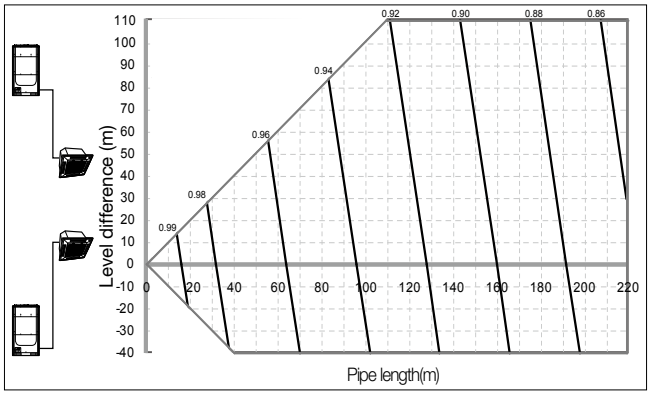
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
80	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96

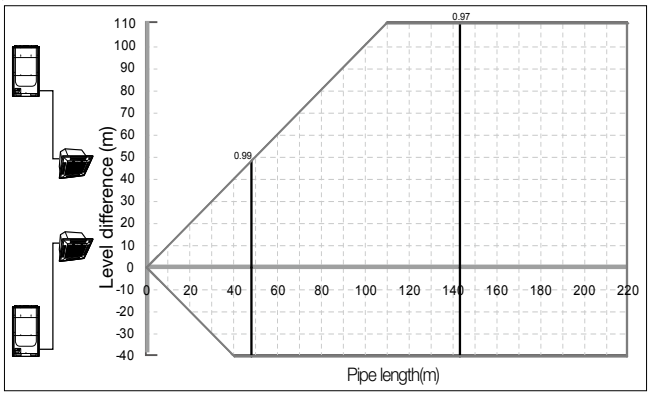
6) 18HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
100	-	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86	0.85
90	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
80	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.86
70	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.86
60	-	-	-	-	-	-	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86	0.86
50	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
40	-	-	-	-	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
-10	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
-20	-	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86
-30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87
-40	-	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87

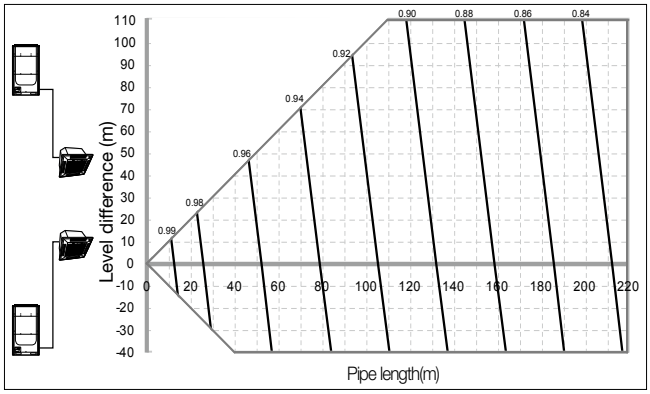
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
70	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
60	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
50	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95

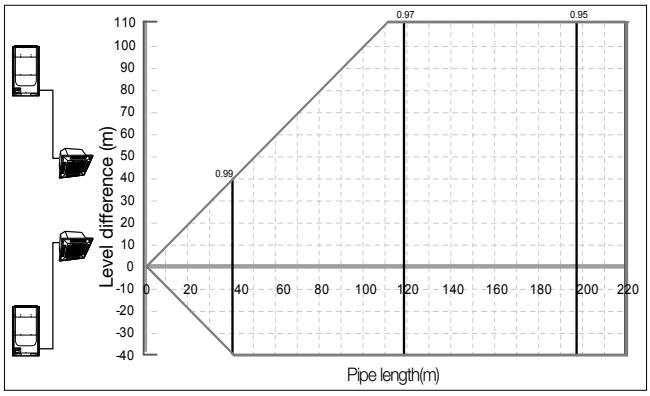
7) 20HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
100	-	-	-	-	-	-	-	-	-	-	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
90	-	-	-	-	-	-	-	-	-	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.83
80	-	-	-	-	-	-	-	-	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.83
70	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.83
60	-	-	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83
50	-	-	-	-	-	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83
40	-	-	-	-	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83
30	-	-	-	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
20	-	-	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
10	-	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
-10	-	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
-20	-	-	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
-30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
-40	-	-	-	-	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84

Heating



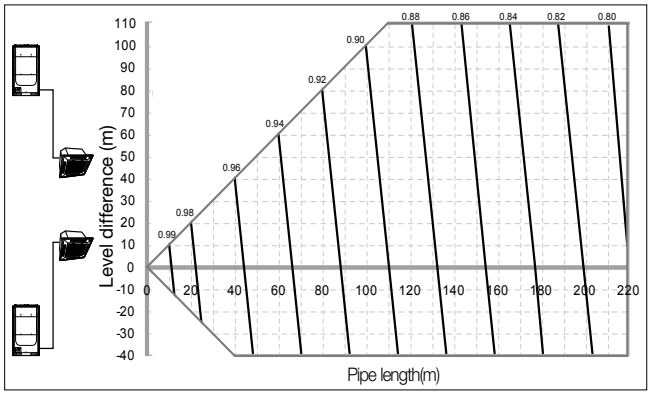
110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
90	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
80	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
60	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
50	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94

1 Capacity correction

1-1. DVM PLUS IV

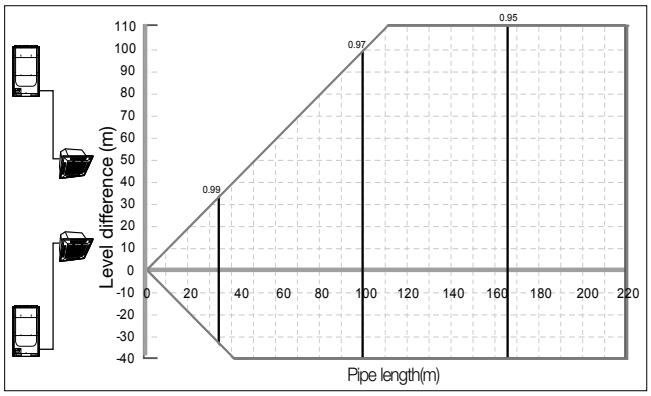
8) 22HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
100	-	-	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
90	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
80	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
70	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.80
60	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	
50	-	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.80	
40	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80	
30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80	
20	-	-	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80	
10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80	
0	0.99	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	0.99	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	
-10	-	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	
-20	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	
-30	-	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	
-40	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	

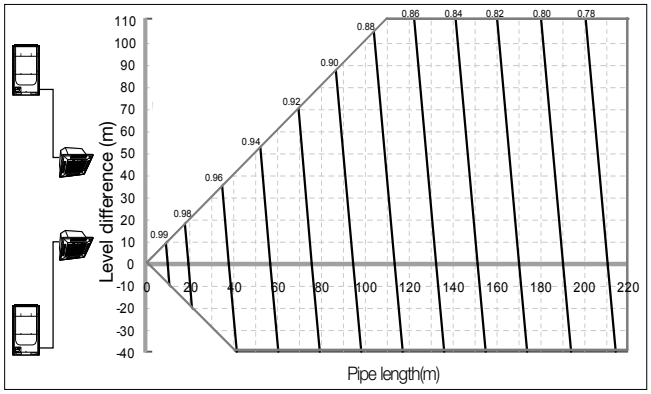
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
90	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
80	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
70	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
60	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
50	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93

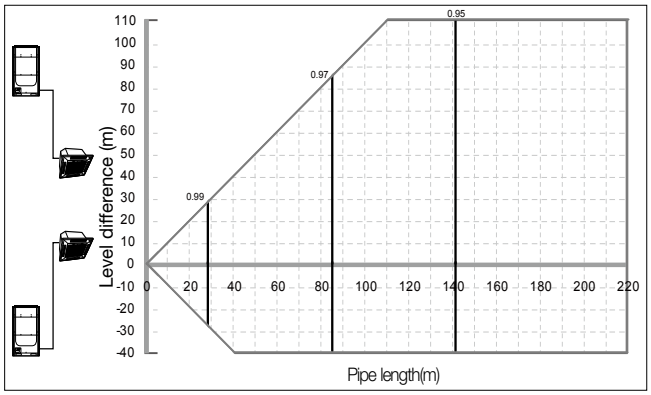
9) 24HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
100	-	-	-	-	-	-	-	-	-	-	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
90	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
80	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
70	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
60	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76
50	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76
40	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76
30	-	-	-	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.76
20	-	-	0.98	0.97	0.96	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
-10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
-20	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
-30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
-40	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79	0.78	0.77

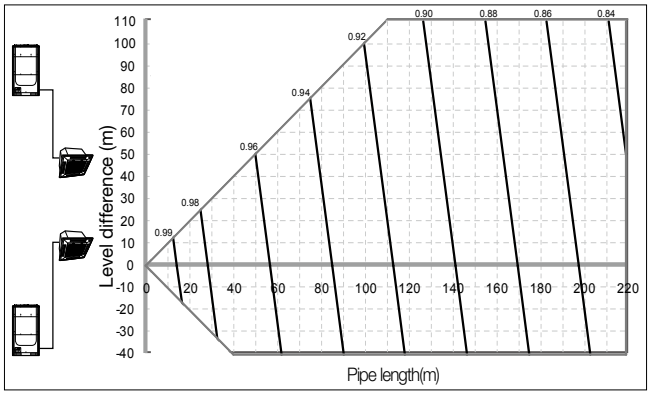
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
100	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
90	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
80	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
70	-	-	-	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
60	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
50	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
40	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-40	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92

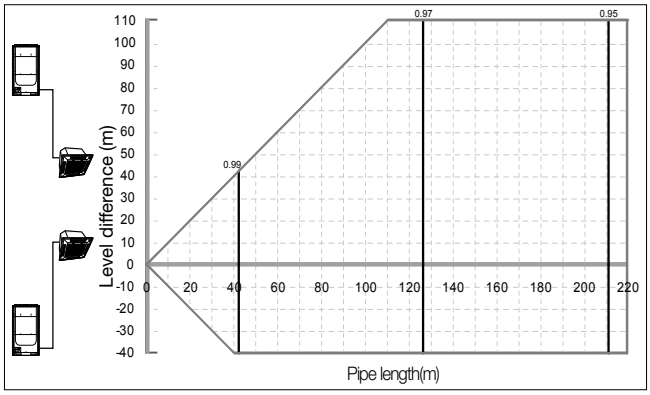
10) 26HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
100	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
90	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.84
80	-	-	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
70	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
60	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84
50	-	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
40	-	-	-	-	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
30	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84
20	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84
10	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84
-10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
-20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85
-30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85
-40	-	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85

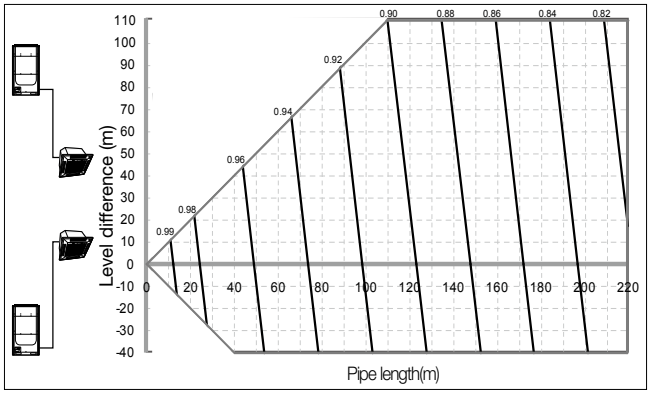
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.96	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95

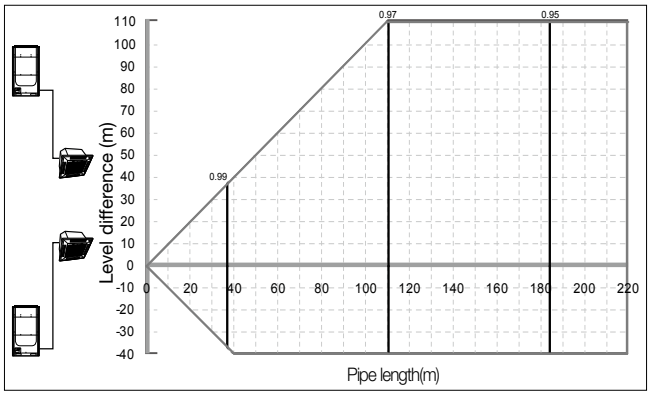
11) 28HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81
100	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81
90	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81
80	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81
70	-	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.82
60	-	-	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.82
50	-	-	-	-	-	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.83	0.82
40	-	-	-	-	0.96	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.83	0.82
30	-	-	-	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82
20	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82
10	-	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
-10	-	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82
-20	-	-	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82
-30	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82
-40	-	-	-	-	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.83

Heating



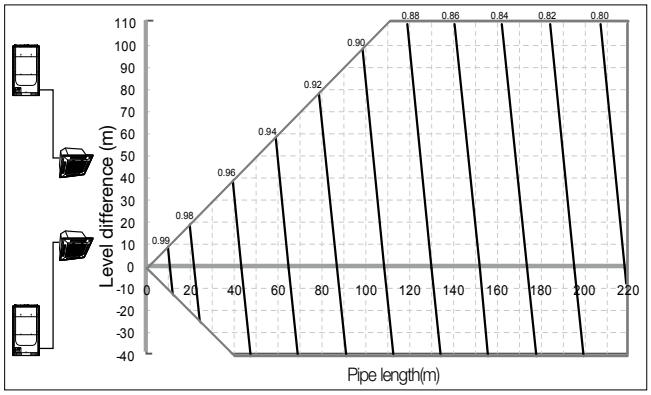
110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
90	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
80	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
60	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
50	-	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
-10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
-20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
-30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94
-40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94

1 Capacity correction

1-1. DVM PLUS IV

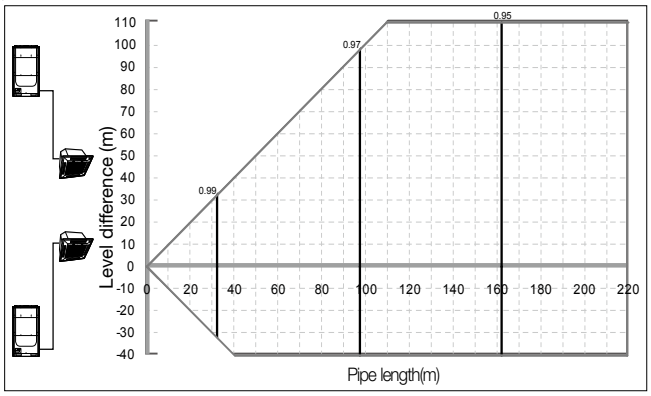
12) 30HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80	0.79
100	-	-	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80	0.79
90	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79
80	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80	0.79
70	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
60	-	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
50	-	-	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
40	-	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
20	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80
10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.80
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80
-10	-	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80
-20	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80
-30	-	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80
-40	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80

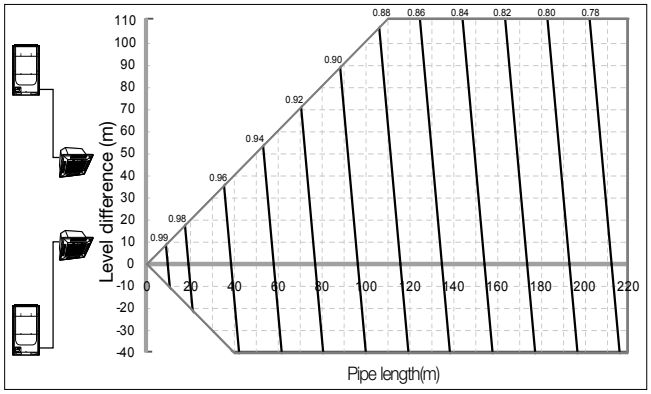
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
90	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
80	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
70	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
60	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
50	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
-30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93
-40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.93

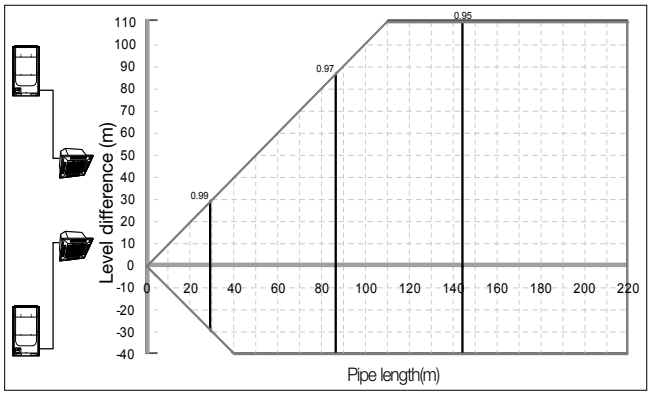
13) 32HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77	0.76
100	-	-	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77	0.76
90	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76
80	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.76
70	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
60	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
50	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
40	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
30	-	-	-	0.97	0.96	0.95	0.94	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
20	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.77
-10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77
-20	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77
-30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78
-40	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78

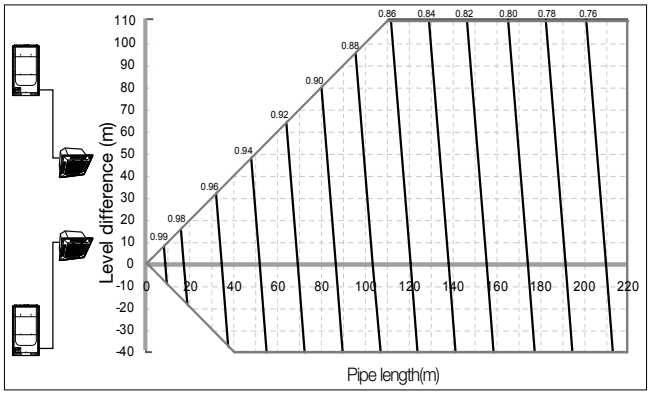
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
100	-	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
90	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
80	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
70	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
60	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
50	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
40	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92
-40	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.93	0.92

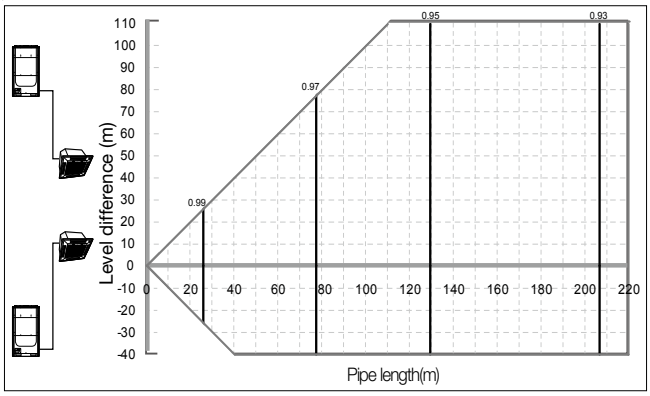
14) 34HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.86	0.85	0.84	0.83	0.82	0.80	0.79	0.78	0.77	0.76	0.75	0.74
100	-	-	-	-	-	-	-	-	-	-	-	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	0.75	0.74
90	-	-	-	-	-	-	-	-	-	-	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	0.75	0.74
80	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76	0.75	0.74
70	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.77	0.76	0.75	0.74
60	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.77	0.76	0.75	0.74	
50	-	-	-	-	-	0.94	0.93	0.91	0.90	0.89	0.88	0.87	0.86	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.76	0.75	0.74	
40	-	-	-	-	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.83	0.82	0.81	0.80	0.79	0.78	0.76	0.75	0.74	
30	-	-	-	0.96	0.95	0.94	0.93	0.92	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77	0.75	0.74	
20	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.82	0.81	0.80	0.79	0.78	0.77	0.76	0.74	
10	-	0.99	0.98	0.96	0.95	0.94	0.93	0.92	0.91	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	0.74	
0	0.99	0.99	0.98	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	0.75	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	0.99	0.99	0.98	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.88	0.87	0.86	0.85	0.84	0.83	0.81	0.80	0.79	0.78	0.77	0.76	0.75	
-10	-	0.99	0.98	0.97	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.80	0.79	0.78	0.77	0.76	0.75	
-20	-	-	0.98	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	0.75	
-30	-	-	-	0.97	0.96	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.79	0.78	0.77	0.76	0.75	
-40	-	-	-	-	0.96	0.95	0.93	0.92	0.91	0.90	0.89	0.88	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.78	0.77	0.76	0.75	

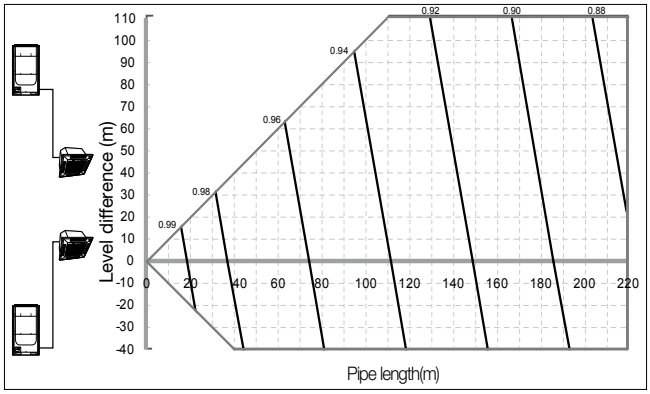
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
100	-	-	-	-	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
90	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
80	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
70	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
60	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
50	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
40	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
30	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
20	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
10	-	1.00	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
0	1.00	1.00	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
-10	-	1.00	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
-20	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
-30	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91
-40	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91

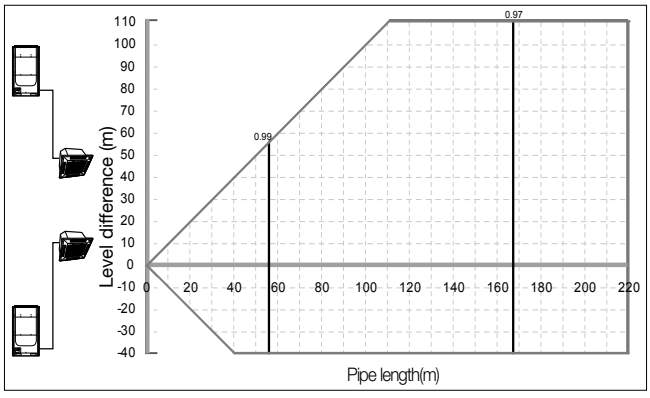
15) 36HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
100	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
90	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87
80	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87
70	-	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
60	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
50	-	-	-	-	-	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
40	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88
30	-	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88
20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
10	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
-10	-	1.00	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88
-20	-	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88
-40	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89

Heating



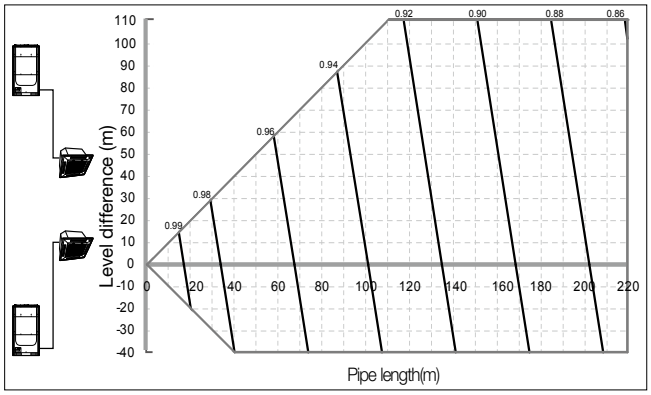
110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
80	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96

1 Capacity correction

1-1. DVM PLUS IV

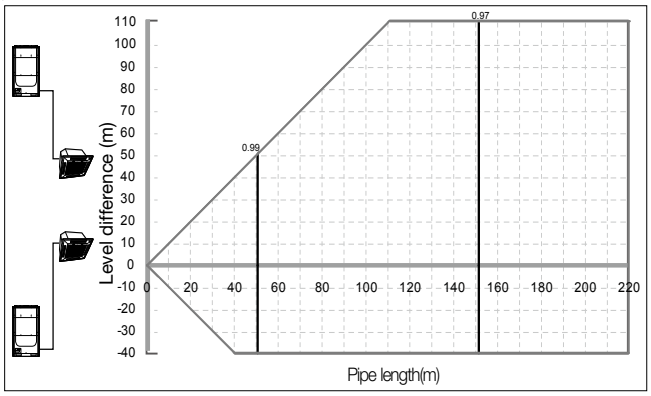
16) 38HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.87	0.86
100	-	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
90	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
80	-	-	-	-	-	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
70	-	-	-	-	-	-	-	-	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87	0.86
60	-	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
50	-	-	-	-	-	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86	
40	-	-	-	-	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	
30	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	
20	-	-	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	
10	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	
-10	-	1.00	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	
-20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	
-30	-	-	-	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	
-40	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87	

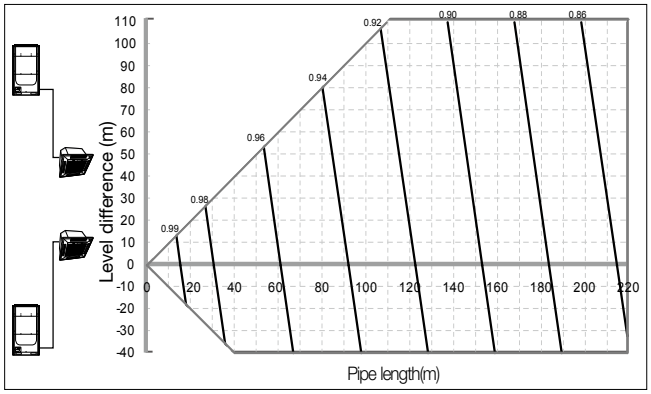
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96

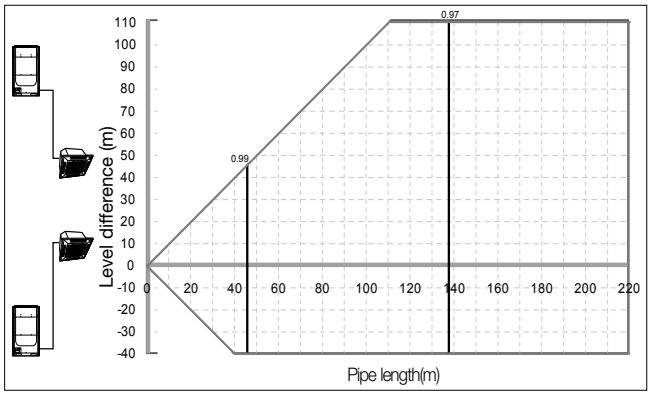
17) 40HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
100	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
90	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
80	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86	0.86	0.85
70	-	-	-	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
60	-	-	-	-	-	-	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
50	-	-	-	-	-	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86	0.85
40	-	-	-	-	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
30	-	-	-	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86	0.86
0	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
-10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
-20	-	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
-30	-	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
-40	-	-	-	-	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86

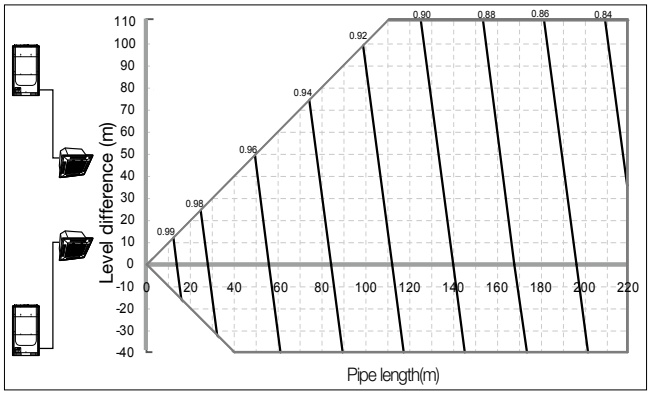
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95

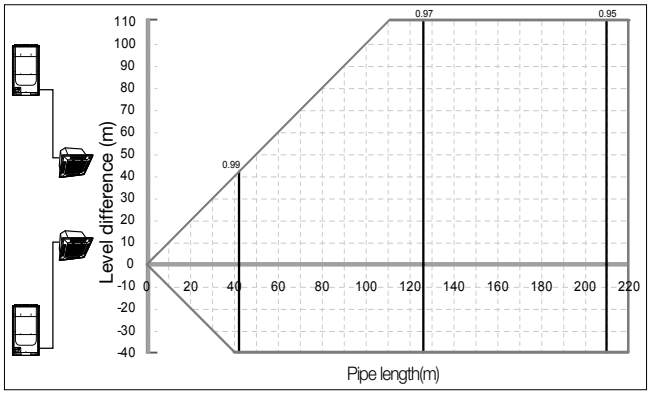
18) 42HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
100	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
90	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84	0.83
80	-	-	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.84
70	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
60	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84
50	-	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85	0.84
40	-	-	-	-	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
30	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84
20	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85	0.84
10	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84
-10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.84
-20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85
-30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.85
-40	-	-	-	-	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85

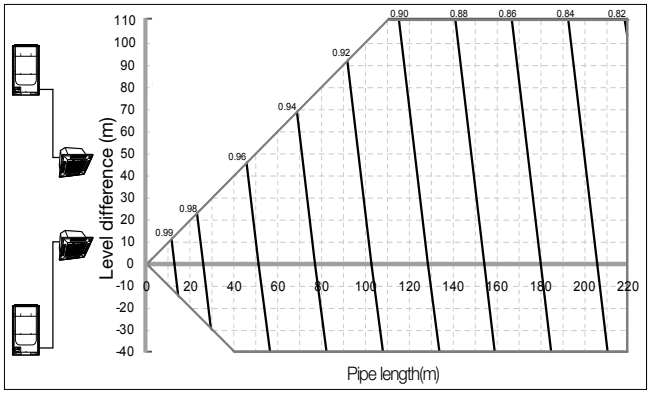
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95

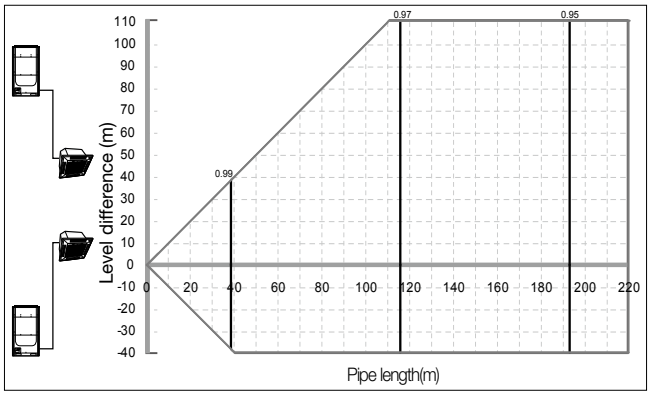
19) 44HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.83	0.82
100	-	-	-	-	-	-	-	-	-	-	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83	0.82
90	-	-	-	-	-	-	-	-	-	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82
80	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
70	-	-	-	-	-	-	-	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
60	-	-	-	-	-	-	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82
50	-	-	-	-	-	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82
40	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.83
30	-	-	-	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.83
20	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83
10	-	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.84	0.83
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.84	0.83
-10	-	0.99	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.85	0.84	0.83
-20	-	-	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83
-30	-	-	-	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83
-40	-	-	-	-	0.97	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83

Heating



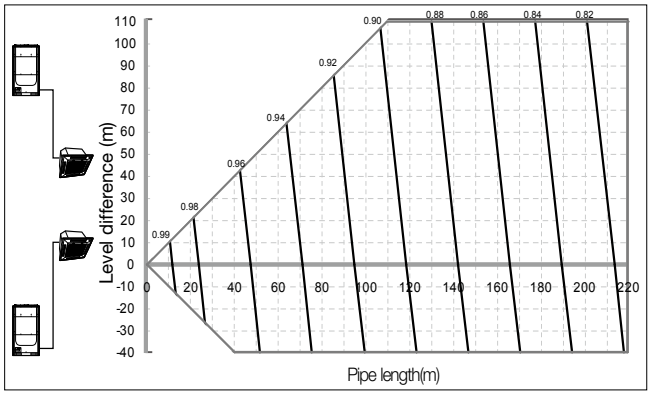
110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
90	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
80	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
60	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
50	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94
-40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94

1 Capacity correction

1-1. DVM PLUS IV

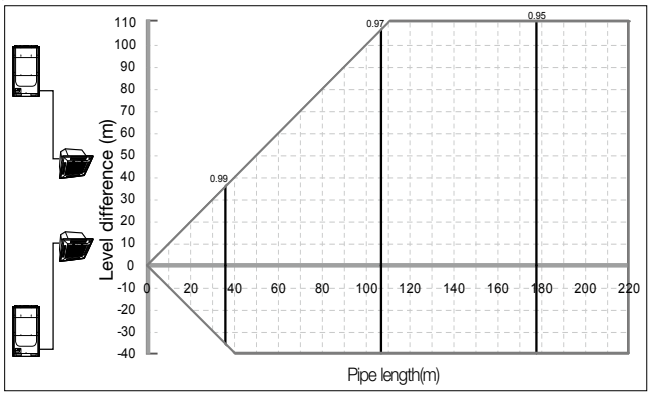
20) 46HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80
100	-	-	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.81
90	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81
80	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81
70	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81
60	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81
50	-	-	-	-	-	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.81
40	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.81
30	-	-	-	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.81
20	-	-	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.81
10	-	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.81
0	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	
-10	-	0.99	0.98	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.82	
-20	-	-	0.99	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	
-30	-	-	-	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	
-40	-	-	-	-	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	

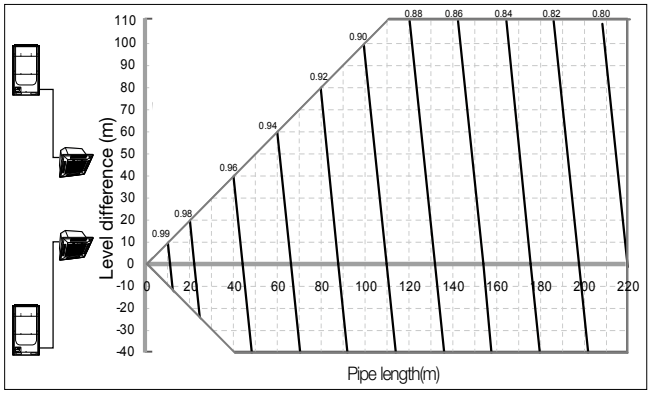
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
90	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
80	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
70	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
60	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
50	-	-	-	-	-	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
-10	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
-20	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
-30	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94
-40	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.94

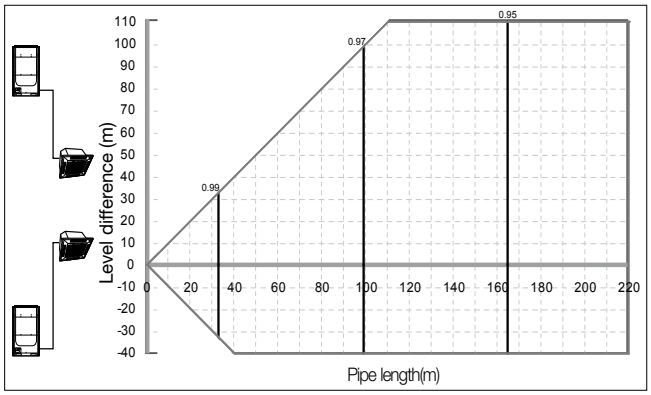
21) 48HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80	0.79
100	-	-	-	-	-	-	-	-	-	-	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80	0.79
90	-	-	-	-	-	-	-	-	-	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
80	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
70	-	-	-	-	-	-	-	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
60	-	-	-	-	-	-	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79
50	-	-	-	-	-	0.95	0.94	0.93	0.92	0.91	0.90	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.80
40	-	-	-	-	0.96	0.95	0.94	0.93	0.92	0.91	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.81	0.80
30	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.82	0.81	0.80
20	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.83	0.82	0.81	0.80
10	-	0.99	0.98	0.97	0.96	0.95	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.80
0	0.99	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	0.99	0.99	0.98	0.97	0.96	0.95	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.85	0.85	0.84	0.83	0.82	0.81	0.80
-10	-	0.99	0.98	0.97	0.96	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.86	0.86	0.85	0.84	0.83	0.82	0.81	0.80
-20	-	-	0.98	0.97	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80
-30	-	-	-	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.88	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80
-40	-	-	-	-	0.97	0.96	0.95	0.94	0.93	0.92	0.91	0.90	0.89	0.89	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80

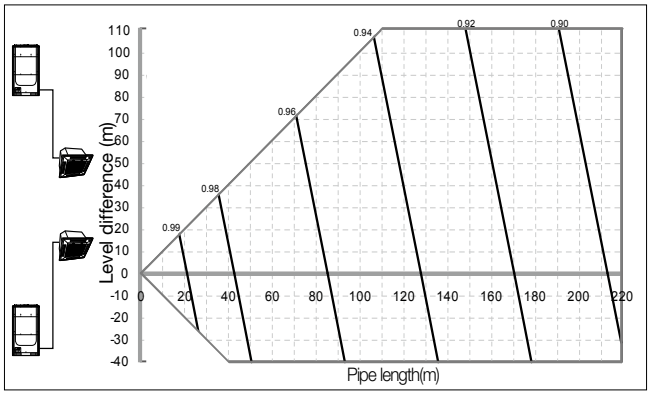
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
100	-	-	-	-	-	-	-	-	-	-	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
90	-	-	-	-	-	-	-	-	-	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
80	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
70	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
60	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
50	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-10	-	1.00	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-20	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-30	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93
-40	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.93

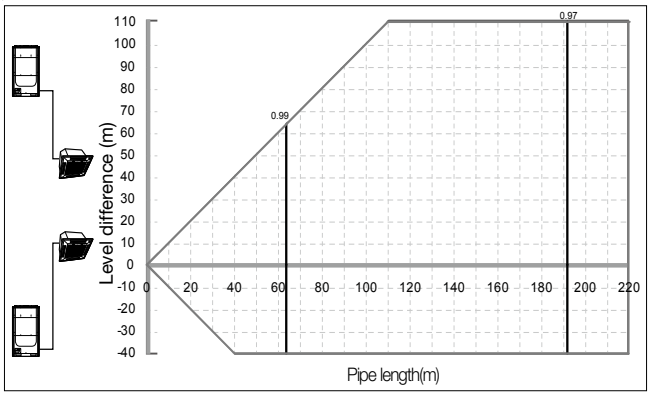
22) 50HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.89	0.89
100	-	-	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
90	-	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
80	-	-	-	-	-	-	-	-	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
70	-	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.90	0.89
60	-	-	-	-	-	-	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.89
50	-	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
40	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
20	-	-	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.90
10	-	0.99	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.90	0.90
0	1.00	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90
-10	-	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90
-20	-	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90
-40	-	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.90

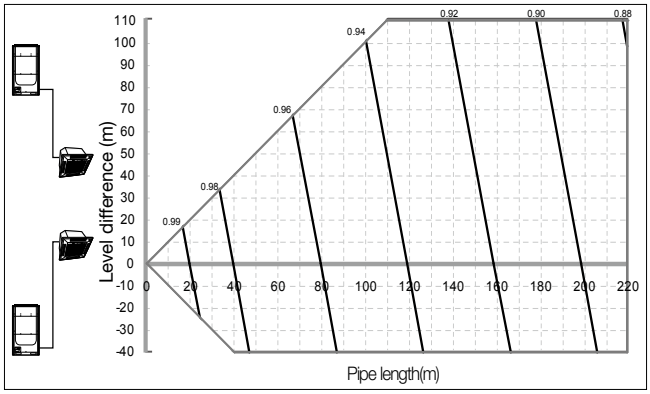
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
90	-	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
80	-	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
70	-	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
60	-	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
30	-	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
20	-	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
10	-	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
0	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
-10	-	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
-20	-	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
-30	-	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97

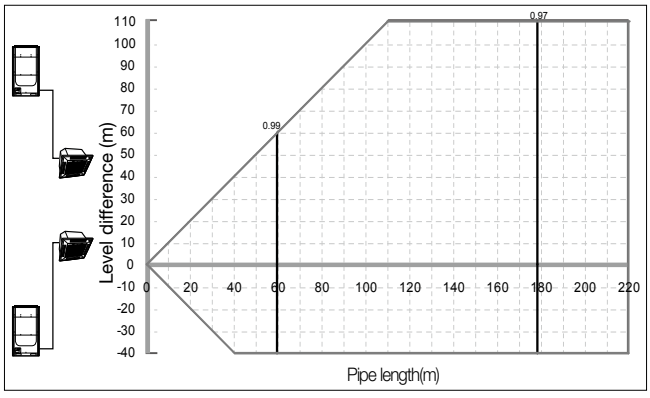
23) 52HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88
100	-	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88
90	-	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
80	-	-	-	-	-	-	-	-	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
70	-	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
60	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
50	-	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
40	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
10	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89
-10	-	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-20	-	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89
-40	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89

Heating



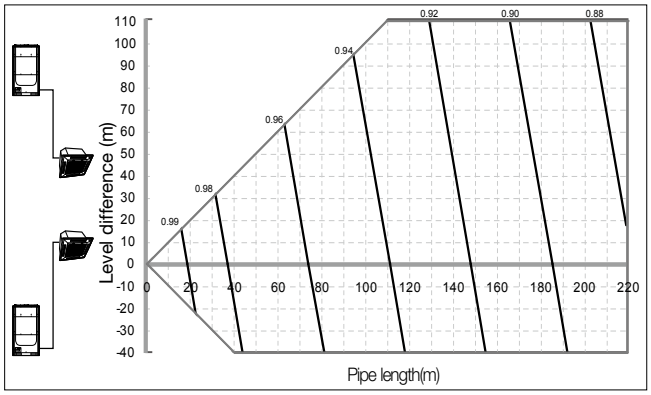
110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
80	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96

1 Capacity correction

1-1. DVM PLUS IV

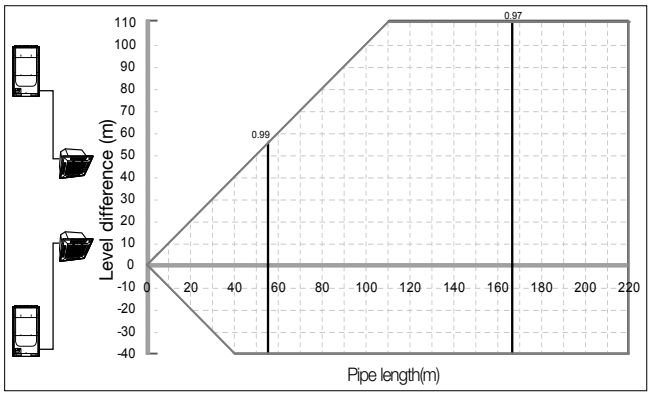
24) 54HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
100	-	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
90	-	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87
80	-	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
70	-	-	-	-	-	-	-	-	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87
60	-	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	
50	-	-	-	-	-	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.88	
40	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	
30	-	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	
20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	
10	-	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	
-10	-	1.00	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	
-20	-	-	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	
-30	-	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	
-40	-	-	-	-	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.89	

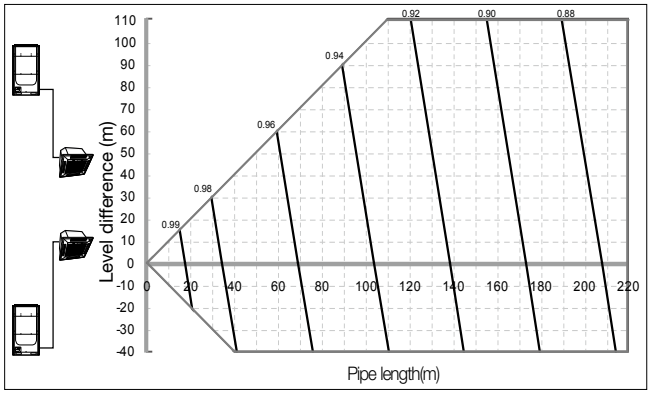
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
80	-	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96

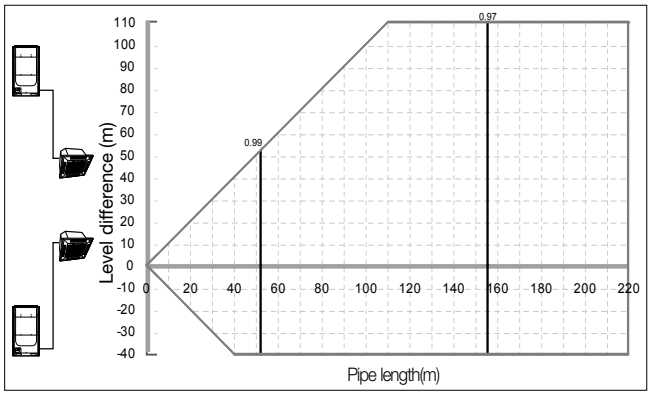
25) 56HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
100	-	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87	0.86
90	-	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
80	-	-	-	-	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.87
70	-	-	-	-	-	-	-	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87
60	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87
50	-	-	-	-	-	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87
40	-	-	-	-	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
30	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88	0.87
20	-	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87
10	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
-10	-	1.00	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87
-20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88
-30	-	-	-	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.88
-40	-	-	-	-	0.98	0.97	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88

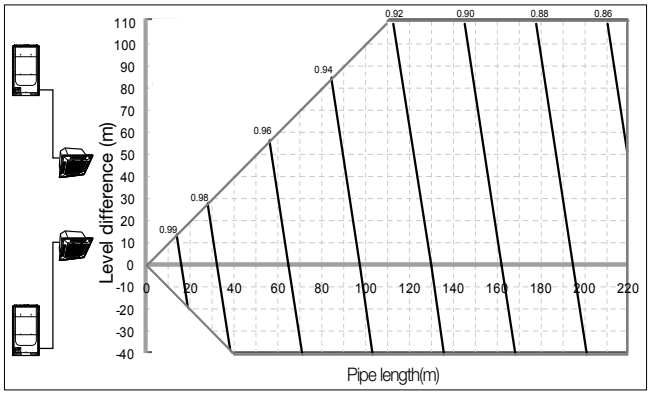
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
70	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
60	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
50	-	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
40	-	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96

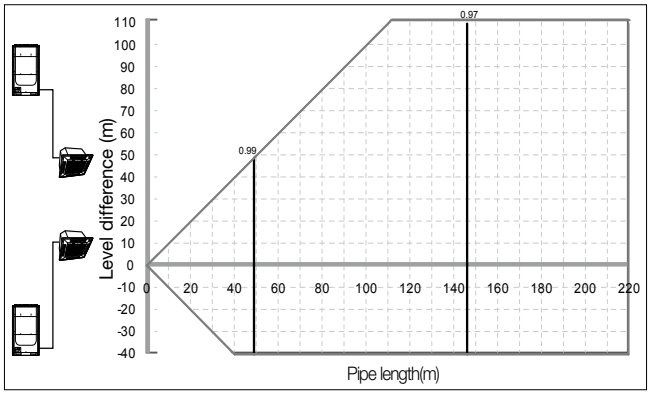
26) 58HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
100	-	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
90	-	-	-	-	-	-	-	-	-	-	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86
80	-	-	-	-	-	-	-	-	-	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
70	-	-	-	-	-	-	-	-	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86
60	-	-	-	-	-	-	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
50	-	-	-	-	-	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86
40	-	-	-	-	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
30	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
20	-	-	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.88	0.87	0.86
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86
-10	-	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87
-20	-	-	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87
-30	-	-	-	0.98	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87
-40	-	-	-	-	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87

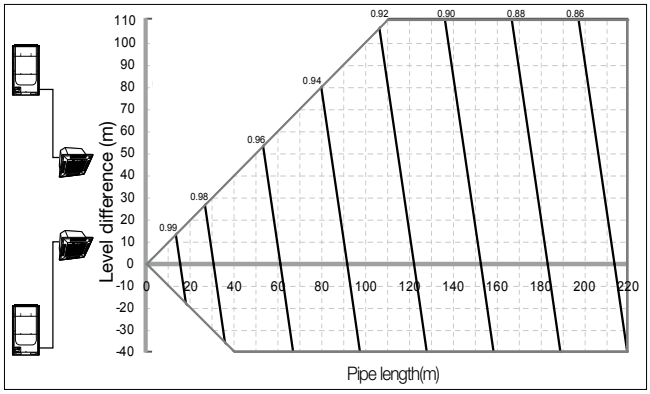
Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
70	-	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
60	-	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
50	-	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95

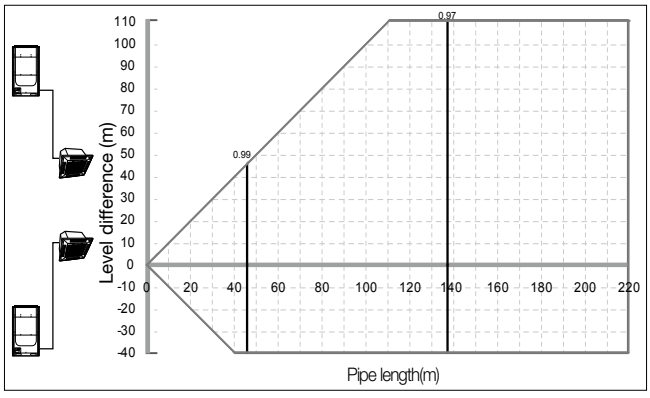
27) 60HP

Cooling



110	-	-	-	-	-	-	-	-	-	-	-	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86	0.85	0.85
100	-	-	-	-	-	-	-	-	-	-	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
90	-	-	-	-	-	-	-	-	-	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85	0.85
80	-	-	-	-	-	-	-	-	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.86	0.85
70	-	-	-	-	-	-	-	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
60	-	-	-	-	-	-	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
50	-	-	-	-	-	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86	0.85
40	-	-	-	-	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.87	0.86	0.85
30	-	-	-	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
20	-	-	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.85
10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86	0.86
0	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	0.99	0.99	0.98	0.97	0.97	0.96	0.95	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
-10	-	0.99	0.99	0.98	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
-20	-	-	0.99	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.88	0.88	0.87	0.86	0.86
-30	-	-	-	0.98	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.89	0.89	0.88	0.87	0.87	0.86
-40	-	-	-	-	0.98	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.89	0.89	0.88	0.87	0.87	0.86

Heating



110	-	-	-	-	-	-	-	-	-	-	-	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
100	-	-	-	-	-	-	-	-	-	-	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
90	-	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
80	-	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
70	-	-	-	-	-	-	-	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
60	-	-	-	-	-	-	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
50	-	-	-	-	-	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
0	7.5	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
0	1.00	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-10	-	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-20	-	-	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-30	-	-	-	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95
-40	-	-	-	-	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.95	0.95

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