

**Project No.
ASSISI AGED CARE CENTRE STAGE 2**

20/06/2011



MITSUBISHI ELECTRIC CORPORATION

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Quotation

Qty	Model	Description	Price
1	AG-150A	Central controller	
1	PAC-SC51KUA	Power supply unit	
2	PAC-YG50ECA	Expansion controller	
52	PAR-30MAA	MA remote controller	
2	PURY-P450YJM-A	R410A R2 Series Outdoor Unit	
1	PURY-P500YSJM-A	R410A R2 Series Outdoor Unit	
-	(PURY-P250YJM-A)		
-	(PURY-P250YJM-A)		
1	PURY-P400YJM-A	R410A R2 Series Outdoor Unit	
1	PURY-P350YJM-A	R410A R2 Series Outdoor Unit	
2	CMB-P1016V-GA1	BC controller main	
1	CMB-P108V-GA1	BC controller main	
1	CMB-P1010V-GA1	BC controller main	
1	CMB-P1013V-G1	BC controller single	
11	PKFY-P25VBM-E	Wall mounted type Indoor Unit	
26	PKFY-P32VHM-E	Wall mounted type Indoor Unit	
4	PLFY-P63VBM-E	Ceiling cassette(4way air flow) type Indoor Unit	
4	(PLP-6BA)	Panel	
1	PLFY-P20VCM-E	Ceiling cassette(4way air flow) type Indoor Unit	
1	(SLP-2AAW / SLP-2ALW)	Panel	
2	PLFY-P100VBM-E	Ceiling cassette(4way air flow) type Indoor Unit	
2	(PLP-6BA)	Panel	
1	PEFY-P200VMH-E	Ceiling concealed type Indoor Unit	
6	PKFY-P50VHM-E	Wall mounted type Indoor Unit	
1	PLFY-P50VBM-E	Ceiling cassette(4way air flow) type Indoor Unit	
1	(PLP-6BA)	Panel	
1	CMY-R100VBK	Twinning kit	
3	CMY-R160-J1	Joint pipe	

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Control System Configuration

Category1	Category2		Category3		Category4		category5		category6		
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
	Model name		Model name		Model name		Model name		Indoor unit Ref.	Model name	M-NET
	PAC-YG50ECA		-		-		-				
	M-NET	000	M-NET	-	M-NET	-	M-NET	-			
	IP add.	192.168.1.212	-	-	-	-	-	-			
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	
v	v									PAR-30MAA	

EC3

>System Configuration

> Outdoor unit / Indoor unit / Controller

Refrigerant system	Outdoor unit		Room	Indoor unit			Controller		Group name
	Ref.	Model name Add.		Ref.	Model name	Add.	Model name	Add.	
VRV-9		PURY-P450YJM-A	AC-A		PKFY-P25VBM-E	001	PAR-30MAA		1
		051	AC-A		PKFY-P25VBM-E	002	PAR-30MAA		2
		CMB-P1016V-GA1	AC-A		PKFY-P25VBM-E	003	PAR-30MAA		3
		052	AC-A		PKFY-P25VBM-E	004	PAR-30MAA		4
			AC-B		PKFY-P32VHM-E	005	PAR-30MAA		5
			AC-B		PKFY-P32VHM-E	006	PAR-30MAA		6
			AC-B		PKFY-P32VHM-E	007	PAR-30MAA		7
			AC-B		PKFY-P32VHM-E	008	PAR-30MAA		8
			AC-B		PKFY-P32VHM-E	009	PAR-30MAA		9
			AC-B		PKFY-P32VHM-E	010	PAR-30MAA		10
			AC-B		PKFY-P32VHM-E	011	PAR-30MAA		11
			AC-B		PKFY-P32VHM-E	012	PAR-30MAA		12
			AC-B		PKFY-P32VHM-E	013	PAR-30MAA		13
			AC-B		PKFY-P32VHM-E	014	PAR-30MAA		14
VRV-10		PURY-P500YSJM-A	AC-23		PLFY-P63VBM-E	015	PAR-30MAA		15
		065 066	AC-29		PLFY-P20VCM-E	016	PAR-30MAA		16
		CMB-P1016V-GA1	AC-30		PLFY-P63VBM-E	017	PAR-30MAA		17
		067	AC-A		PKFY-P25VBM-E	018	PAR-30MAA		18
			AC-A		PKFY-P25VBM-E	019	PAR-30MAA		19
			AC-A		PKFY-P25VBM-E	020	PAR-30MAA		20
			AC-B		PKFY-P32VHM-E	021	PAR-30MAA		21
			AC-B		PKFY-P32VHM-E	022	PAR-30MAA		22

EC3

>System Configuration

> Outdoor unit / Indoor unit / Controller

Refrigerant system	Outdoor unit		Room	Indoor unit			Controller		Group name
	Ref.	Model name Add.		Ref.	Model name	Add.	Model name	Add.	
VRV-10			AC-B		PKFY-P32VHM-E	023	PAR-30MAA		23
			AC-B		PKFY-P32VHM-E	024	PAR-30MAA		24
			AC-B		PKFY-P32VHM-E	025	PAR-30MAA		25
			AC-B		PKFY-P32VHM-E	026	PAR-30MAA		26
			AC-B		PKFY-P32VHM-E	027	PAR-30MAA		27
			AC-B		PKFY-P32VHM-E	028	PAR-30MAA		28
VRV-11		PURY-P450YJM-A	AC-24		PLFY-P63VBM-E	029	PAR-30MAA		29
	079		AC-26		PLFY-P100VBM-E	030	PAR-30MAA		30
		CMB-P108V-GA1	AC-27		PLFY-P100VBM-E	031	PAR-30MAA		31
	080		AC-28		PEFY-P200VMH-E	032	PAR-30MAA		32
VRV-12		PURY-P400YJM-A	AC-25		PLFY-P63VBM-E	033	PAR-30MAA		33
	083		AC-C		PKFY-P32VHM-E	034	PAR-30MAA		34
		CMB-P1010V-GA1	AC-C		PKFY-P32VHM-E	035	PAR-30MAA		35
	084		AC-D		PKFY-P50VHM-E	036	PAR-30MAA		36
			AC-D		PKFY-P50VHM-E	037	PAR-30MAA		37
			AC-D		PKFY-P50VHM-E	038	PAR-30MAA		38
			AC-D		PKFY-P50VHM-E	039	PAR-30MAA		39
			AC-D		PKFY-P50VHM-E	040	PAR-30MAA		40
			AC-D		PKFY-P50VHM-E	041	PAR-30MAA		41

EC3

> Product information

>Controller

Model name	Product image*1	Qty	Description
AG-150A		1	Central controller
PAC-SC51KUA		1	Power supply unit
PAC-YG50ECA		1	Expansion controller
PAR-30MAA		41	MA remote controller


EC3 starts from here

>PI/AI/DIDO controller

Model name	Product image*1	Qty	Description

>Air conditioning unit specifications

1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2	
					Rated	Corrected	Rated	Corrected	Rated	Corrected
VRV-9	PURY-P450YJM-A		1	Cooling	50.00	43.11	14.49	11.59	3.45	3.72
				Heating	56.00	46.08	14.58	15.60	3.84	2.95
					Conditions				Dimension(mm)	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D	
				Cooling	34.5	-	-	-	1,710(1,650 without legs) x 1,750 x 760	
				Heating	3.5	2.5	85	-		
										Net weight (kg)
										320


*1 The product image refers to a representative model. The actual product may differ from the image shown.

*2 The COP here is for outdoor unit only. not for whole system.


EC3


> Product information

2. BC controller (R2 series only)

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
VRV-9	CMB-P1016V-GA1		1		Rated	H X W X D	(kg)
				Cooling	0.25	289 x 1,110 x 520	62
				Heating	0.12		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-9	PKFY-P25VBM-E		4		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	2.80	2.56	1.90	1.78	0.04	0.2	4.9-5.9	
				Heating	3.20	2.79			0.04	0.2		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 815 x 225		10		
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-9	PKFY-P32VHM-E		10		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	
				Cooling	3.60	3.29	2.70	2.53	0.04	0.4	9-11	*3
				Heating	4.00	3.49			0.03	0.3		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 898 x 249	13			
				Heating	20.0	-	-					

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

*1 The product image refers to a representative model. The actual product may differ from the image shown.


*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3


> Product information

> Air conditioning unit specifications


1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2	
VRV-10	PURY-P500YSJM-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected
				Cooling	56.00	49.23	14.85	12.47	3.77	3.95
				Heating	63.00	52.99	15.10	16.74	4.17	3.17
					Conditions				Dimension(mm)	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D	
				Cooling	34.5	-	-	-	1,710(1,650 without legs) x 920 x 760(P250)/1,710(1,650 without legs) x 920 x 760(P250)	
				Heating	3.5	2.5	85	-		
									Net weight	
									(kg)	
									240(P250)/240(P250)	

2. BC controller (R2 series only)

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
VRV-10	CMB-P1016V-GA1		1		Rated	H X W X D	(kg)
				Cooling	0.25	289 x 1,110 x 520	62
				Heating	0.12		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-10	PLFY-P63VBM-E		2		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	7.10	6.52	5.10	4.72	0.05	0.36		
				Heating	8.00	7.05			0.04	0.29		
					Conditions				Dimension(mm)		Net weight	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	258 x 840 x 840		23		
				Heating	20.0	-	-					

*1 The product image refers to a representative model. The actual product may differ from the image shown.


*2 The COP here is for outdoor unit only. not for whole system.

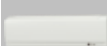
*3 Please refer to the specification sheet in the "Product Features" section at the end.


EC3

> Product information


3. Indoor unit

Sys.	Model name	Product image*1	Qty	Capacity(kW)			Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High) (m3/min)	External static pressure
VRV-10	PLFY-P20VCM-E		1		Rated	Corrected	Rated	Corrected	Rated			
				Cooling	2.20	2.02	1.80	1.75	0.05	0.23	8 - 10	*3
				Heating	2.50	2.20			0.05	0.23		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	208 x 570 x 570	15.5			
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-10	PKFY-P25VBM-E		3		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	2.80	2.57	1.90	1.79	0.04	0.2		
				Heating	3.20	2.82			0.04	0.2		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 815 x 225		10		
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure	
VRV-10	PKFY-P32VHM-E		8		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	9-11	*3
				Cooling	3.60	3.31	2.70	2.54	0.04	0.4			
				Heating	4.00	3.53			0.03	0.3			
					Conditions			Dimension(mm)		Net weight			
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)			
				Cooling	24.0	17.0	50	295 x 898 x 249		13			
				Heating	20.0	-	-						

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
VRV-10	CMY-R100VBK		1	-

*1 The product image refers to a representative model. The actual product may differ from the image shown.


*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3


> Product information

>Air conditioning unit specifications


1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2		
VRV-11	PURY-P450YJM-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected	
				Cooling	50.00	46.04	14.49	13.54	3.45	3.40	
				Heating	56.00	49.23	14.58	17.35	3.84	2.84	
					Conditions				Dimension(mm)		Net weight
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D		(kg)
				Cooling	34.5	-	-	-	1,710(1,650 without legs) x 1,750 x 760		320
				Heating	3.5	2.5	85	-			

2. BC controller (R2 series only)

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
VRV-11	CMB-P108V-GA1		1		Rated	H X W X D	(kg)
				Cooling	0.13	289 x 1,110 x 520	43
				Heating	0.06		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-11	PLFY-P63VBM-E		1		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	
				Cooling	7.10	6.24	5.10	4.59	0.05	0.36		
				Heating	8.00	6.79			0.04	0.29		
					Conditions				Dimension(mm)		Net weight	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	258 x 840 x 840		23		
				Heating	20.0	-	-					

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*2 The COP here is for outdoor unit only. not for whole system.


*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3

> Product information

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High) (m3/min)	External static pressure
VRV-11	PLFY-P100VBM-E		2		Rated	Corrected	Rated	Corrected	Rated			
				Cooling	11.20	9.84	7.80	7.12	0.15	1	21 - 29	*3
				Heating	12.50	10.61			0.14	0.94		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	298 x 840 x 840		27		
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High) (m3/min)	External static pressure
VRV-11	PEFY-P200VMH-E		1		Rated	Corrected	Rated	Corrected	Rated			
				Cooling	22.40	20.11	16.00	16.55	0.99	1.62	58	*3
				Heating	25.00	21.22			0.99	1.62		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	25.9	17.6	44	470 x 1,250 x 1,120		100		
				Heating	20.0	-	-					

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
VRV-11	CMY-R160-J1		3	-

*1 The product image refers to a representative model. The actual product may differ from the image shown.


*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3


> Product information

>Air conditioning unit specifications


1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2		
VRV-12	PURY-P400YJM-A		1		Rated	Corrected	Rated	Corrected	Rated	Corrected	
				Cooling	45.00	42.03	13.55	12.19	3.32	3.45	
				Heating	50.00	45.32	12.75	16.42	3.92	2.76	
					Conditions				Dimension(mm)		Net weight
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D		(kg)
				Cooling	34.5	-	-	-	1,710(1,650 without legs) x 1,220 x 760		270
				Heating	3.5	2.5	85	-			

2. BC controller (R2 series only)

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
VRV-12	CMB-P1010V-GA1		1		Rated	H X W X D	(kg)
				Cooling	0.16	289 x 1,110 x 520	48
				Heating	0.07		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-12	PLFY-P63VBM-E		1		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	7.10	6.23	5.10	4.58	0.05	0.36	14 - 18	
				Heating	8.00	6.74			0.04	0.29		
					Conditions				Dimension(mm)		Net weight	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	258 x 840 x 840		23		
				Heating	20.0	-	-					

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*2 The COP here is for outdoor unit only. not for whole system.


*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3

> Product information

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High) (m3/min)	External static pressure
VRV-12	PKFY-P32VHM-E		2		Rated	Corrected	Rated	Corrected	Rated		9-11	*3
				Cooling	3.60	3.16	2.70	2.47	0.04	0.4		
				Heating	4.00	3.37			0.03	0.3		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 898 x 249		13		
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High) (m3/min)	External static pressure
VRV-12	PKFY-P50VHM-E		6		Rated	Corrected	Rated	Corrected	Rated		9-12	*3
				Cooling	5.60	4.91	3.90	3.51	0.04	0.4		
				Heating	6.30	5.31			0.03	0.3		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 898 x 249		13		
				Heating	20.0	-	-					

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

> Ventilators

Model name	Product image*1	Qty	Description
-		-	-

*1 The product image refers to a representative model. The actual product may differ from the image shown.

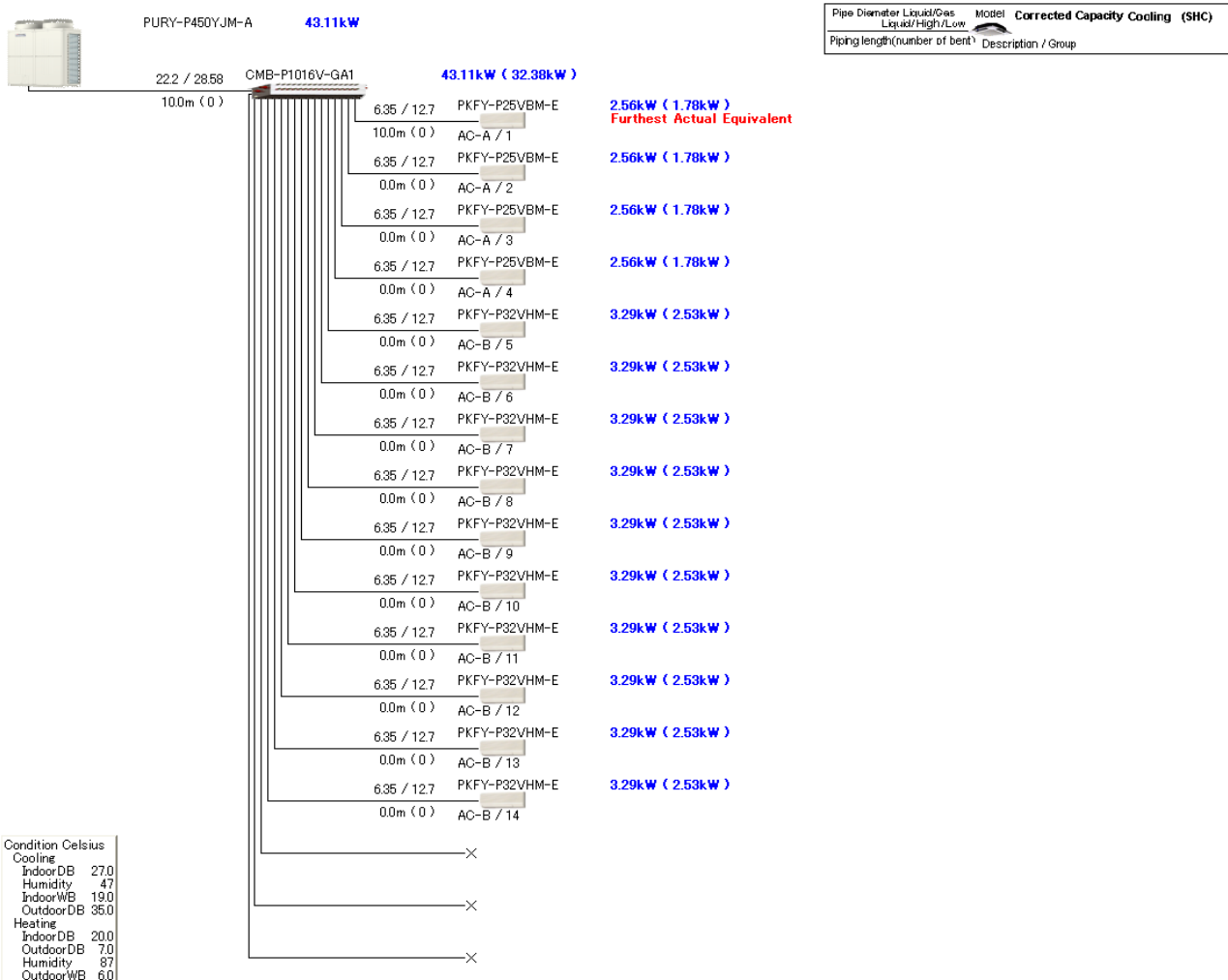
*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC3

VRV-9

> Piping Design

1. Piping diagram



EC3

VRV-9

> Piping Design

2. Piping

	Liquid/High (mm)	Gas/Low (mm)	Low/Gas/Bypass/Oi	Total length(m)	Number of bent
BC controller to Indoor unit	6.35	12.7		10	0
Outdoor Unit to BC controller	22.2	28.58		10	0

3. Summary totals

Pipe Size (mm)	Total length(m)	Number of bent
6.35	10	0
12.7	10	0
22.2	10	0
28.58	10	0

4. Refrigerant charge

Additional refrigerant	R410A	X	12.1	kg
Total refrigerant amo	R410A	X	23.9	kg

5. Water flow rate (for WY and WR2 only)

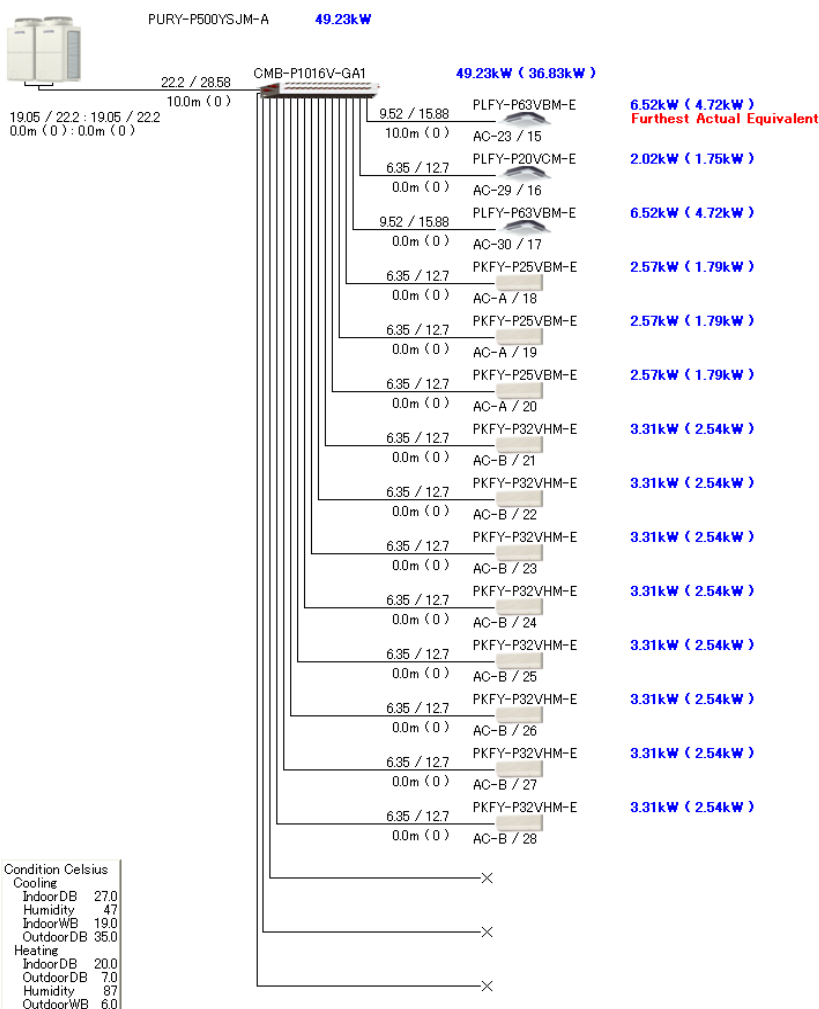
Flow rate(m3/h)	Pressure drop(kPa)
-	-

EC3

VRV-10

> Piping Design

1. Piping diagram



EC3

VRV-10

> Piping Design

2. Piping

	Liquid/High (mm)	Gas/Low (mm)	Low/Gas/Bypass/Oi	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		10	0
BC controller to Indoor unit	6.35	12.7		0	0
Outdoor Unit to BC controller	22.2	28.58		10	0
Outdoor Unit to BC controller	19.05	22.2		0	0

3. Summary totals

Pipe Size (mm)	Total length(m)	Number of bent
6.35	0	0
12.7	0	0
9.52	10	0
15.88	10	0
19.05	0	0
22.2	10	0
28.58	10	0

4. Refrigerant charge

Additional refrigerant	R410A	X	13.4	kg
Total refrigerant amo	R410A	X	32.4	kg

5. Water flow rate (for WY and WR2 only)

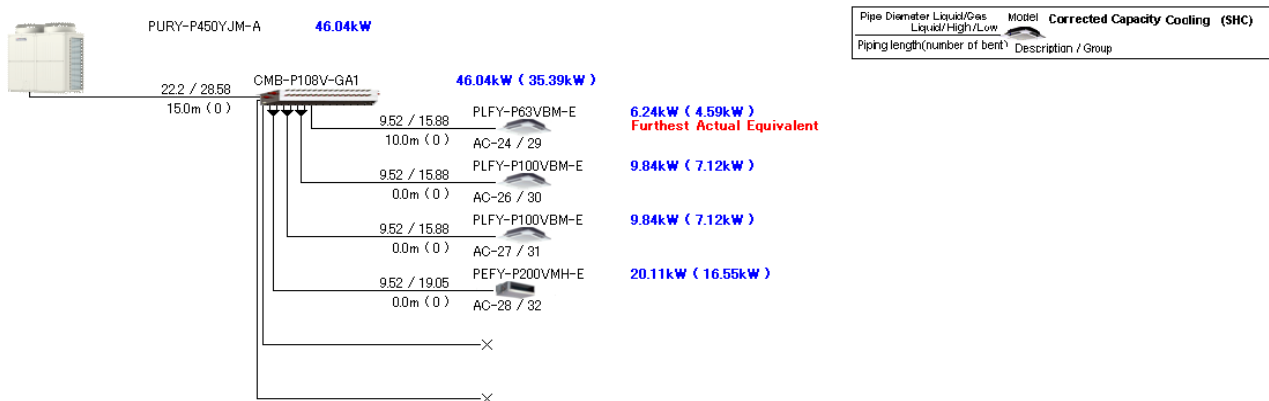
Flow rate(m3/h)	Pressure drop(kPa)
-	-

EC3

VRV-11

> Piping Design

1. Piping diagram



Condition Celsius	
Cooling	
IndoorDB	27.0
Humidity	47
IndoorWB	19.0
OutdoorDB	35.0
Heating	
IndoorDB	20.0
OutdoorDB	7.0
Humidity	87
OutdoorWB	6.0

EC3

VRV-11

> Piping Design

2. Piping

	Liquid/High (mm)	Gas/Low (mm)	Low/Gas/Bypass/Oi	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		10	0
BC controller to Indoor unit	9.52	19.05		0	0
Outdoor Unit to BC controller	22.2	28.58		15	0

3. Summary totals

Pipe Size (mm)	Total length(m)	Number of bent
9.52	10	0
15.88	10	0
22.2	15	0
28.58	15	0
19.05	0	0

4. Refrigerant charge

Additional refrigerant	R410A	X	13.6	kg
Total refrigerant amo	R410A	X	25.4	kg

5. Water flow rate (for WY and WR2 only)

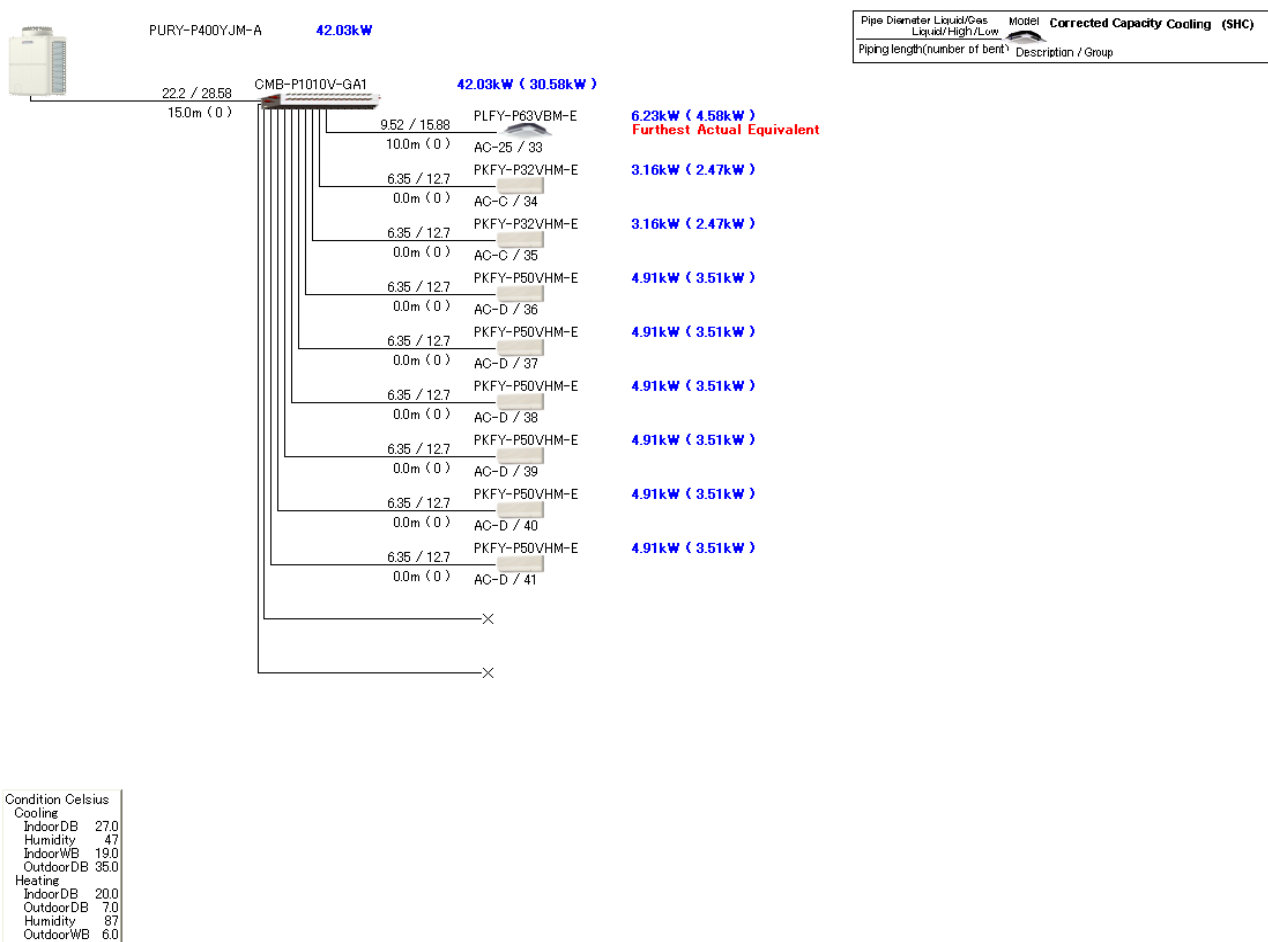
Flow rate(m3/h)	Pressure drop(kPa)
-	-

EC3

VRV-12

> Piping Design

1. Piping diagram



EC3

VRV-12

> Piping Design

2. Piping

	Liquid/High (mm)	Gas/Low (mm)	Low/Gas/Bypass/Oi	Total length(m)	Number of bent
BC controller to Indoor unit	9.52	15.88		10	0
BC controller to Indoor unit	6.35	12.7		0	0
Outdoor Unit to BC controller	22.2	28.58		15	0

3. Summary totals

Pipe Size (mm)	Total length(m)	Number of bent
6.35	0	0
12.7	0	0
9.52	10	0
15.88	10	0
22.2	15	0
28.58	15	0

4. Refrigerant charge

Additional refrigerant	R410A	X	13.1	kg
Total refrigerant amo	R410A	X	24.9	kg

5. Water flow rate (for WY and WR2 only)

Flow rate(m3/h)	Pressure drop(kPa)
-	-

EC3

> Electrical Wiring Information

Sys.	1	x	AG-150A
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	"M-NET(A,B,S) or CN1"	
	Transmission cable:	Shielding wire (2-core) CVVS or CPEVS	
	size	1.2-2mm2	
		-	

Sys.	1	x	PAC-SC51KUA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	TB1(L,N),ground	
	Power supply cable:	Sheathed vinyl cord or cable	
	size	0.75-2mm2	
		-	
		-	
Transmission info.			
	Connection:	A,B	
	Transmission cable:	Sheathed vinyl cord or cable CVVS or CPEVS	
	size	1.2-2mm2	
		-	

EC3 starts from here

Sys.	1	x	PAC-YG50ECA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	TB1(L,N),ground	
	Power supply cable:	Sheathed vinyl cord or cable	
	size	0.75-2mm2	
		-	
		-	
Transmission info.			
	Connection:	M-NET(A,B,S)	
	Transmission cable:	Shielding wire (2-core) CVVS or CPEVS	
	size	1.2-2mm2	
		-	

Sys.	41	x	PAR-30MAA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	A,B	
	Transmission cable:	Sheathed 2-core cable	
		-	
	size	0.3mm2	
		-	

Sys.	1	x	PURY-P450YJM-A
Power supply info.			
	Power source:	3-phase 4-wire 380/400/415V 50Hz	
	MCA(A):	37.76	
	Max.Fuse(A):	-	
	Connection:	TB1(L1,L2,L3,N),ground	
	Power supply cable:	Metal conduit wire	
	size	10.0mm2 or thicker(main) 10.0mm2 or thicker(ground)	
		-	
		-	
Transmission info.			
	Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2	
	Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	

Sys.	1	x	CMB-P1016V-GA1
Power supply info.			
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	1.63	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	-	
	Transmission cable:	-	
		-	
	size	-	
		-	

*2 TB7 is used for centralized controller.

EC3

> Electrical Wiring Information

Sys.	4	x	PKFY-P25VBM-E
VRV-9	Power supply info.		
	Power source:	1-phase 220-240V 50Hz	
	MCA(A):	0.25	
	Max.Fuse(A):	-	
	Connection:	TB2(L,N),ground	
	Power supply cable:	Metal conduit wire	
	size	1.5mm2 or thicker(main) *3	
		1.5mm2 or thicker(ground) *3	
		-	
	Transmission info.		
	Connection:	TB5(M1,M2,CN3A(1,3) *4	
	Transmission cable:	Shielding wire (2-core)	
		CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	

Sys.	10	x	PKFY-P32VHM-E
VRV-9	Power supply info.		
	Power source:	1-phase 220-240V 50Hz	
	MCA(A):	0.38	
	Max.Fuse(A):	-	
	Connection:	TB2(L,N),ground	
	Power supply cable:	Metal conduit wire	
	size	1.5mm2 or thicker(main) *3	
		1.5mm2 or thicker(ground) *3	
		-	
	Transmission info.		
	Connection:	TB5(M1,M2,S)TB15(1,2) *4	
	Transmission cable:	Shielding wire (2-core)	
		CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	

Sys.	1	x	PURY-P500YSJM-A
VRV-10	Power supply info.		
	Power source:	3-phase 4-wire 380/400/415V 50Hz	
	MCA(A):	37.2	
	Max.Fuse(A):	-	
	Transmission info.		
	Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2	
	Transmission cable:	Shielding wire (2-core)	
		CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	

Sys.	1	x	CMB-P1016V-GA1
VRV-10	Power supply info.		
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	1.63	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
	Transmission info.		
	Connection:	-	
	Transmission cable:	-	
		-	
	size	-	
		-	

Sys.	2	x	PLFY-P63VBM-E
VRV-10	Power supply info.		
	Power source:	1-phase 220-240V 50Hz	
	MCA(A):	0.45	
	Max.Fuse(A):	-	
	Connection:	TB2(L,N),ground	
	Power supply cable:	Metal conduit wire	
	size	1.5mm2 or thicker(main) *3	
		1.5mm2 or thicker(ground) *3	
		-	
	Transmission info.		
	Connection:	TB5(M1,M2,S)TB15(1,2) *4	
	Transmission cable:	Shielding wire (2-core)	
		CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	


*2 TB7 is used for centralized controller.


*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm2 or thicker(16A or less), 2.5mm2 or thicker(25A or less), 4.0mm2 or thicker(32A or less)


*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.


EC3


> Electrical Wiring Information


Sys.	1	x	PLFY-P20VCM-E
VRV-10		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.29
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	3	x	PKFY-P25VBM-E
VRV-10		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.25
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,CN3A(1,3) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	8	x	PKFY-P32VHM-E
VRV-10		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.38
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	1	x	PURY-P450YJM-A
VRV-11		Power supply info.	
		Power source:	3-phase 4-wire 380/400/415V 50Hz
		MCA(A):	37.76
		Max.Fuse(A):	-
		Connection:	TB1(L1,L2,L3,N),ground
		Power supply cable:	
		size	Metal conduit wire
			10.0mm2 or thicker(main)
			10.0mm2 or thicker(ground)
			-
		Transmission info.	
		Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	1	x	CMB-P108V-GA1
VRV-11		Power supply info.	
		Power source:	1-phase 220/230/240V 50Hz
		MCA(A):	0.85
		Max.Fuse(A):	-
		Connection:	-
		Power supply cable:	
		size	-
			-
			-
			-
		Transmission info.	
		Connection:	-
		Transmission cable:	-
			-
		size	-
		Transmission cable:	
		size	-
			-

Sys.	1	x	PLFY-P63VBM-E
VRV-11		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.45
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-


*2 TB7 is used for centralized controller.


*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm2 or thicker(16A or less), 2.5mm2 or thicker(25A or less), 4.0mm2 or thicker(32A or less)


*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.


EC3


> Electrical Wiring Information


Sys.	2	x	PLFY-P100VBM-E
VRV-11		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	1.25
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	1	x	PEFY-P200VMH-E
VRV-11		Power supply info.	
		Power source:	3-phase 4-wire 380-415V 50Hz
		MCA(A):	2.03
		Max.Fuse(A):	-
		Connection:	TB2(L1,L2,L3,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	1	x	PURY-P400YJM-A
VRV-12		Power supply info.	
		Power source:	3-phase 4-wire 380/400/415V 50Hz
		MCA(A):	33.04
		Max.Fuse(A):	-
		Connection:	TB1(L1,L2,L3,N),ground
		Power supply cable:	
		size	Metal conduit wire
			10.0mm2 or thicker(main)
			10.0mm2 or thicker(ground)
			-
		Transmission info.	
		Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	1	x	CMB-P1010V-GA1
VRV-12		Power supply info.	
		Power source:	1-phase 220/230/240V 50Hz
		MCA(A):	1.04
		Max.Fuse(A):	-
		Connection:	-
		Power supply cable:	
		size	-
			-
			-
			-
		Transmission info.	
		Connection:	-
		Transmission cable:	-
			-
		size	-
		Transmission cable:	
		size	-
			-

Sys.	1	x	PLFY-P63VBM-E
VRV-12		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.45
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-

Sys.	2	x	PKFY-P32VHM-E
VRV-12		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.38
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	
		size	Metal conduit wire
			1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	-
		Transmission cable:	
		size	1.25mm2 or thicker
			-


*2 TB7 is used for centralized controller.

*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm2 or thicker(16A or less), 2.5mm2 or thicker(25A or less), 4.0mm2 or thicker(32A or less)

*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.

EC3

> Electrical Wiring Information

Sys.	6	x	PKFY-P50VHM-E
VRV-12		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.38
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	Metal conduit wire
		size	1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
		size	1.25mm2 or thicker

*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm2 or thicker(16A or less), 2.5mm2 or thicker(25A or less), 4.0mm2 or thicker(32A or less)

*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.

EC4

>System Configuration




> Outdoor unit / Indoor unit / Controller

Refrigerant system	Outdoor unit		Room	Indoor unit			Controller		Group name
	Ref.	Model name Add.		Ref.	Model name	Add.	Model name	Add.	
VRV-13		PURY-P350YJM-A	AC-55		PLFY-P50VBM-E	001	PAR-30MAA		1
		051	AC-A		PKFY-P25VBM-E	002	PAR-30MAA		2
		CMB-P1013V-G1	AC-A		PKFY-P25VBM-E	003	PAR-30MAA		3
		052	AC-A		PKFY-P25VBM-E	004	PAR-30MAA		4
			AC-A		PKFY-P25VBM-E	005	PAR-30MAA		5
			AC-B		PKFY-P32VHM-E	006	PAR-30MAA		6
			AC-B		PKFY-P32VHM-E	007	PAR-30MAA		7
			AC-B		PKFY-P32VHM-E	008	PAR-30MAA		8
			AC-B		PKFY-P32VHM-E	009	PAR-30MAA		9
			AC-B		PKFY-P32VHM-E	010	PAR-30MAA		10
			AC-B		PKFY-P32VHM-E	011	PAR-30MAA		11

EC4

> Product information

>Controller

Model name	Product image*1	Qty	Description
AG-150A		1	Central controller
PAC-SC51KUA		1	Power supply unit
PAC-YG50ECA		1	Expansion controller
PAR-30MAA		11	MA remote controller


EC4 starts from here

>PI/AI/DIDO controller

Model name	Product image*1	Qty	Description

>Air conditioning unit specifications

1. Outdoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Power input (kW)		COP (kW/kW)*2	
					Rated	Corrected	Rated	Corrected	Rated	Corrected
VRV-13	PURY-P350YJM-A		1	Cooling	40.00	36.56	11.33	9.65	3.53	3.79
				Heating	45.00	38.02	10.89	13.67	4.13	2.78
					Conditions				Dimension(mm)	
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	Water inlet(deg C)	H X W X D	
				Cooling	34.5	-	-	-	1,710(1,650 without legs) x 1,220 x 760	
				Heating	3.5	2.5	85	-		
										Net weight (kg)
										270


*1 The product image refers to a representative model. The actual product may differ from the image shown.

*2 The COP here is for outdoor unit only. not for whole system.


EC4


> Product information


2. BC controller (R2 series only)

Sys.	Model name	Product image*1	Qty		Power input (kW)	Dimension(mm)	Net weight
VRV-13	CMB-P1013V-G1		1		Rated	H X W X D	(kg)
				Cooling	0.20	284 x 1,098 x 432	45
				Heating	0.10		

3. Indoor unit

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure	
					Rated	Corrected	Rated	Corrected	Rated		(m3/min)		
VRV-13	PLFY-P50VBM-E		1									12 - 16	*3
				Cooling	5.60	5.33	4.10	3.94	0.04	0.29			
				Heating	6.30	5.56			0.03	0.22			
					Conditions			Dimension(mm)		Net weight			
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)			
				Cooling	24.0	17.0	50	258 x 840 x 840		22			
				Heating	20.0	-	-						

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-13	PKFY-P25VBM-E		4		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	2.80	2.67	1.90	1.83	0.04	0.2		
				Heating	3.20	2.82			0.04	0.2		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 815 x 225		10		
				Heating	20.0	-	-					

Sys.	Model name	Product image*1	Qty		Capacity(kW)		Sensible capacity(kW)		Power input (kW)	Current (A)	Airflow rate (Low-High)	External static pressure
VRV-13	PKFY-P32VHM-E		6		Rated	Corrected	Rated	Corrected	Rated		(m3/min)	*3
				Cooling	3.60	3.43	2.70	2.59	0.04	0.4		
				Heating	4.00	3.53			0.03	0.3		
					Conditions			Dimension(mm)		Net weight		
					D.B.(deg C)	W.B.(deg C)	Humidity(%)	H X W X D		(kg)		
				Cooling	24.0	17.0	50	295 x 898 x 249		13		
				Heating	20.0	-	-					

*1 The product image refers to a representative model. The actual product may differ from the image shown.

*3 Please refer to the specification sheet in the "Product Features" section at the end.

EC4

> Product information

4. Branch/Header/Twinning kit

Sys.	Model name	Product image*1	Qty	Description
-	-		-	-

> Ventilators

Model name	Product image*1	Qty	Description
-		-	-

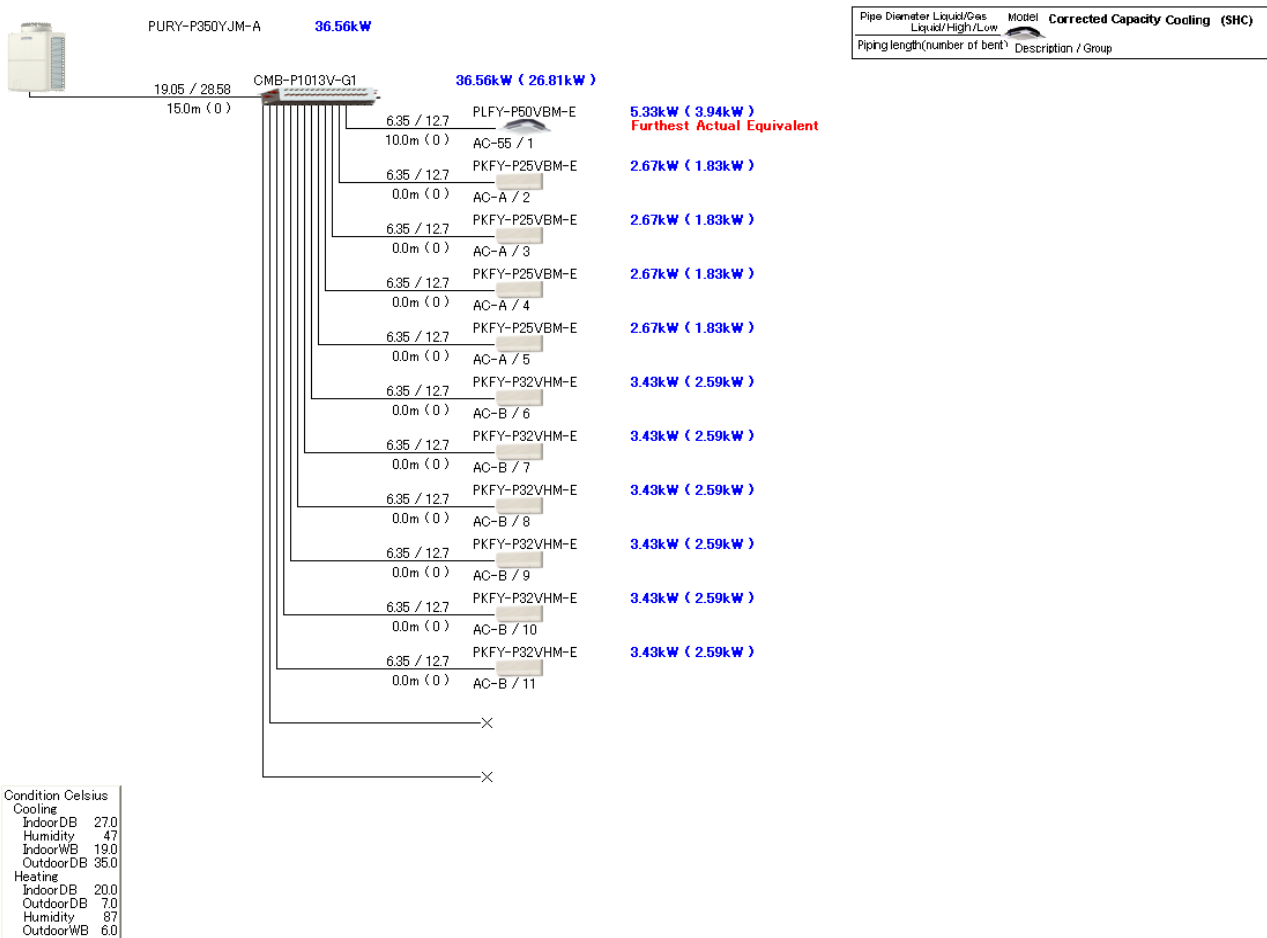
*1 The product image refers to a representative model. The actual product may differ from the image shown.

EC4

VRV-13

> Piping Design

1. Piping diagram



EC4

VRV-13

> Piping Design

2. Piping

	Liquid/High (mm)	Gas/Low (mm)	Low/Gas/Bypass/Oi	Total length(m)	Number of bent
BC controller to Indoor unit	6.35	12.7		10	0
Outdoor Unit to BC controller	19.05	28.58		15	0

3. Summary totals

Pipe Size (mm)	Total length(m)	Number of bent
6.35	10	0
12.7	10	0
19.05	15	0
28.58	15	0

4. Refrigerant charge

Additional refrigerant	R410A	X	10.7	kg
Total refrigerant amo	R410A	X	22.5	kg

5. Water flow rate (for WY and WR2 only)

Flow rate(m3/h)	Pressure drop(kPa)
-	-

EC4

> Electrical Wiring Information

Sys.	1	x	AG-150A
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	"M-NET(A,B,S) or CN1"	
	Transmission cable:	Shielding wire (2-core) CVVS or CPEVS	
	size	1.2-2mm2	
		-	

Sys.	1	x	PAC-SC51KUA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	TB1(L,N),ground	
	Power supply cable:	Sheathed vinyl cord or cable	
	size	0.75-2mm2	
		-	
		-	
Transmission info.			
	Connection:	A,B	
	Transmission cable:	Sheathed vinyl cord or cable CVVS or CPEVS	
	size	1.2-2mm2	
		-	

EC4 starts from here

Sys.	1	x	PAC-YG50ECA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	TB1(L,N),ground	
	Power supply cable:	Sheathed vinyl cord or cable	
	size	0.75-2mm2	
		-	
		-	
Transmission info.			
	Connection:	M-NET(A,B,S)	
	Transmission cable:	Shielding wire (2-core) CVVS or CPEVS	
	size	1.2-2mm2	
		-	

Sys.	11	x	PAR-30MAA
Power supply info.			
	Power source:	-	
	MCA(A):	-	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	A,B	
	Transmission cable:	Sheathed 2-core cable	
	size	0.3mm2	
		-	


Sys.	1	x	PURY-P350YJM-A
Power supply info.			
	Power source:	3-phase 4-wire 380/400/415V 50Hz	
	MCA(A):	29.18	
	Max.Fuse(A):	-	
	Connection:	TB1(L1,L2,L3,N),ground	
	Power supply cable:	Metal conduit wire	
	size	6.0mm2 or thicker(main) 6.0mm2 or thicker(ground)	
		-	
		-	
Transmission info.			
	Connection:	TB3(M1,M2,S)TB7(M1,M2,S) *2	
	Transmission cable:	Shielding wire (2-core) CVVS, CPEVS or MVVS	
	size	1.25mm2 or thicker	
		-	


Sys.	1	x	CMB-P1013V-G1
Power supply info.			
	Power source:	1-phase 220/230/240V 50Hz	
	MCA(A):	1.34	
	Max.Fuse(A):	-	
	Connection:	-	
	Power supply cable:	-	
	size	-	
		-	
		-	
Transmission info.			
	Connection:	-	
	Transmission cable:	-	
	size	-	
		-	


*2 TB7 is used for centralized controller.

EC4

> Electrical Wiring Information

Sys.	1	x	PLFY-P50VBM-E
VRV-13		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.36
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	Metal conduit wire
		size	1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
			-
		size	1.25mm2 or thicker
			-

Sys.	4	x	PKFY-P25VBM-E
VRV-13		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.25
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	Metal conduit wire
		size	1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2)CN3A(1,3) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
			-
		size	1.25mm2 or thicker
			-

Sys.	6	x	PKFY-P32VHM-E
VRV-13		Power supply info.	
		Power source:	1-phase 220-240V 50Hz
		MCA(A):	0.38
		Max.Fuse(A):	-
		Connection:	TB2(L,N),ground
		Power supply cable:	Metal conduit wire
		size	1.5mm2 or thicker(main) *3
			1.5mm2 or thicker(ground) *3
			-
		Transmission info.	
		Connection:	TB5(M1,M2,S)TB15(1,2) *4
		Transmission cable:	Shielding wire (2-core)
			CVVS, CPEVS or MVVS
			-
		size	1.25mm2 or thicker
			-

*3 The wiring size differs depending on the total operating current of the indoor unit. 1.5mm2 or thicker(16A or less), 2.5mm2 or thicker(25A or less), 4.0mm2 or thicker(32A or less)

*4 TB5 is used for ME remote controller. TB15 is used for MA remote controller.

Summary List

> Equipment list

1. Controller

Model name	Quantity
AG-150A	1
PAC-SC51KUA	1
PAC-YG50ECA	2
PAR-30MAA	52

2. PI/AI/DIDO controller

Model name	Quantity
-	-

3. Outdoor unit

Model name	Quantity
PURY-P450YJM-A	2
PURY-P500YSJM-A	1
(PURY-P250YJM-A)	-
(PURY-P250YJM-A)	-
PURY-P400YJM-A	1
PURY-P350YJM-A	1

4. BC controller

Model name	Quantity
CMB-P1016V-GA1	2
CMB-P108V-GA1	1
CMB-P1010V-GA1	1
CMB-P1013V-G1	1

5. Indoor unit

Model name	Quantity
PKFY-P25VBM-E	11
PKFY-P32VHM-E	26
PLFY-P63VBM-E	4
PLFY-P20VCM-E	1
PLFY-P100VBM-E	2
PEFY-P200VMH-E	1
PKFY-P50VHM-E	6
PLFY-P50VBM-E	1

Summary List

> Equipment list

6. Branch/Header/Twinning kit

Model name	Quantity
CMY-R100VBK	1
CMY-R160-J1	3

7. Lossnay

Model name	Quantity
-	-

8. HUB (Field supply)

Model name	Quantity
5-port switching HUB	1

9. Air volume controller (Field supply)

Model name	Quantity
-	-

Summary List

> Field providing list

1. Piping Materials

Pipe Size(mm)	Total length(m)	Number of bent
6.35	20	0
12.7	20	0
22.2	50	0
28.58	65	0
9.52	30	0
15.88	30	0
19.05	15	0

2. Refrigerant charge

Additional refrigerant required	R410A	X	62.9	kg
Total refrigerant amount	R410A	X	129.1	kg

3. Electrical cables

Power supply cable size	Cable type	Usage
0.75-2mm ²	Sheathed vinyl cord or cable	Power supply unit power supply cable (main and ground wire) Expansion controller power supply cable (main and ground wire)
1.5mm ² or thicker *4	Metal conduit wire *1 *2 *3	Indoor unit power supply cable (main and ground wire)
4.0mm ² or thicker	Metal conduit wire *1 *2 *3	Outdoor unit power supply cable (main and ground)
6.0mm ² or thicker	Metal conduit wire *1 *2 *3	Outdoor unit power supply cable (main and ground)
10.0mm ² or thicker	Metal conduit wire *1 *2 *3	Outdoor unit power supply cable (main and ground)
Transmission cable size	Cable type	Usage
0.3mm ²	Sheathed 2-core cable (unshielded)	MA remote controller transmission cable
1.2-2mm ²	Shielding wire (2-core) CVVS or CPEVS	Centralized control transmission cable
1.2-2mm ²	Sheathed vinyl cord or cable CVVS or CPEVS	Centralized control transmission cable
1.25mm ² or thicker	Shielding wire (2-core) CVVS, CPEVS or MVVS	Indoor/outdoor transmissin cable

*1 The wire size is the minimum value for metal conduit wiring. If the voltage drops, use a wire that is one rank thicker in diameter.
Make sure the power-supply voltage does not drop more than 10%.

*2 Specific wiring requirements should adhere to the wiring regulations of the region.

*3 Power supply cords of parts of appliances for outdoor use shall not be lighter than polychloroprene sheathed flexible cord (design 245 IEC57). For example, use wiring such as YZW.

Summary List

> Field providing list

*4 The wiring size differs depending on the total operating current of the indoor unit.
1.5mm² or thicker(16A or less), 2.5mm² or thicker(25A or less), 4.0mm² or thicker(32A or less)

CVVS,MVVS : PVC insulated PVC jacketed shielded control cable
CPEVS : PE insulated PVC jacketed shielded communication cable
CVV : PVC insulated PVC sheathed control cable

MEMO

MEMO
