

MCY-MHP\_HT  
SIDE BLOW



CAPACITY

OPERATION



4HP > 6HP

-20°C > +46°C

Compact, efficient, adaptable, energy saver, the side blow VRF is the solution to cool and heat small/medium size buildings.

Features

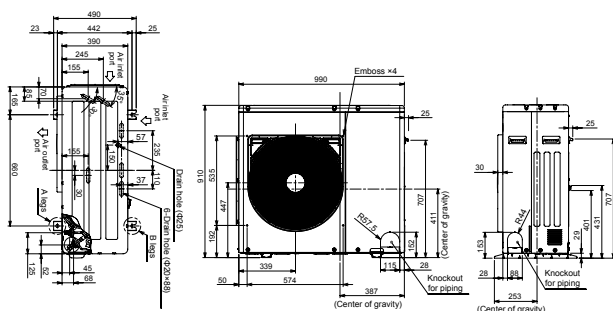
Outdoor unit	HP	MCY-	MHP0406HT-E	MHP0506HT-E1	MHP0604HT-E	
Capacity range	HP		4	5	6	
Cooling capacity	kW		12.1	14.0	15.5	
Heating capacity	kW		12.5	16.0	18.0	
Power supply	V-ph-Hz		220/230/240V-1-50	220/230/240V-1-50	220/230/240V-1-50	
Efficiency	EER rated	W/W	3.73	3.23	3.56	
	EER 50% load	W/W	6.10	4.93	5.74	
	SEER	η/std	320.20%/8.08	307.8%/7.77	365.4%/9.21	
Efficiency	COP rated	W/W	4.42	4.00	4.00	
	COP 50% load	W/W	5.25	5.48	5.88	
	COP -7°C 100% load	W/W	3.88	3.47	3.57	
	SCOP	η/std	150.2%/3.83	152.2%/3.88	165.4%/4.21	
Electrical characteristics	Running current	A	C	14.4/13.8/13.2	20.8/19.9/19.0	20.6 / 19.7 / 18.9
	Power input	kW	C	3.24	4.34	4.35
	Running current	A	H	13.4/12.8/12.3	19.1/18.3/17.5	21.3 / 20.4 / 19.5
	Power input	kW	H	2.83	4.00	4.50
Dimensions (h x w x d)	mm		910x990x390	910x990x390	1235x990x390	
Weight	kg		100	100	116	
Compressor	Type		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output	kW		3.75	3.75	3.75
Fan unit	Type		Propeller fan (Quantity 1)		Propeller fan (Quantity 2)	
	Motor output	W		100	100	100 + 100
	Air volume	m³/h		4020	4260	6410
External static pressure available	Pa				20	
R410A refrigerant charge	kg		3.3	3.3	3.9	
	CO <sub>2</sub> Eq		6.9	6.9	8.1	
Power supply wiring	MCA	A	26.5	28.0	28.0	
	MCOP	A	32.0	32.0	32.0	
Pipe connection	Gas line type - Diameter		Flare - 5/8"		Flare - 3/4"	
	Liquid line type - Diameter		Flare - 3/8"		Flare - 3/8"	
Connectivity	Max. number of connected indoor units		8	10	6	
	Diversity ratio	Min/Max		80/130%	80/130%	
Sound pressure level	Cooling	dB(A)	C	54.0	54.0	52.0
	Heating	dB(A)	H	57.0	58.0	55.0
Sound power level	Cooling	dB(A)	C	73.0	73.0	71.0
	Heating	dB(A)	H	73.0	74.0	70.0
Operation temperature range	Cooling	CDB	C	-5/+46		-5/+43
	Heating	CWB	H		-20/+15	

C = Cooling mode H = Heating mode  
Connected indoor units : MMU-UP\*\*\*1HP-E

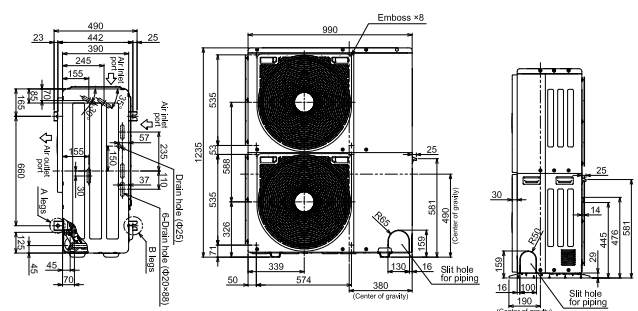
Drawings

Unit: mm

MCY-MHP0406HT-E  
MCY-MHP0506HT-E1



MCY-MHP0604HT-E



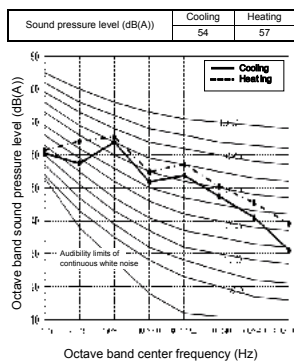
### Piping rules

		Allowable value			
		With PMV kit	Without PMV kit	Piping section	
Piping length	Total extension of pipe (Liquid pipe, real length)	75m	90m	L1 + L2 + L3 + a + b + c + d + e + f	
	Farthest piping length	Equivalent length	50m	60m	L1 + L3 + f
		Real length	40m	50m	
	Max equivalent length of main piping		25m	30m	L1
	Max equivalent length of farthest piping form 1st branching		15m	20m	L3 + f
	Max. real length of indoor unit connecting piping		10m	10m	a, b, c, d, e, f
Real length between PMV kit and indoor unit		-	Between 2m and 10m		
Difference in height	Height between indoor and outdoor units	Upper outdoor unit	15m	15m	
		Lower outdoor unit	15m	15m	
	Height between indoor units		10m	10m	
	Height between indoor unit and PMV kit		10m	-	

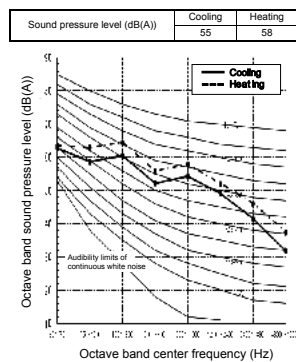
### Sound pressure levels

Unit: dB(A)

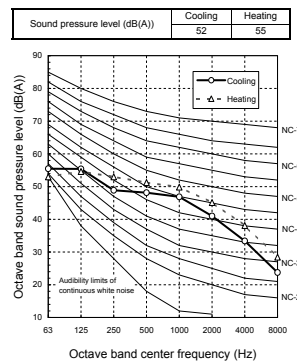
MCY-MHP0406HT-E



MCY-MHP0506HT-E1



MCY-MHP0604HT-E



### Night mode sound pressure levels

Sound reduction and capacity approximation (Reference)

	Type	Night operation sound reduction dB (A)		Capacity	
		Cooling	Heating	Cooling	Heating
Single fan	0406	50	50	Approx. 95%	Approx. 80%
	0506	50	50	Approx. 85%	Approx. 75%
Dual fan	0604	50	50	Approx. 80%	Approx. 70%

### Accessories

	Name	Model name	Capacity	Appearance	Remarks
Branching joints and headers	Y-shape branching joint	RBM-BY55E	Under 6.4HP		
	4-branching header	RBM-HY1043E	Under 14.2HP		
	8-branching header	RBM-HY1083E	Under 14.2HP		
PM kits	PMV Kits	RBM-PMV0361U-E RBM-PMV0901U-E	For 0.6 to 1.3HP IDUs For 1.7 to 3.0HP IDUs		
Optional PCB of outdoor unit	Power peak-cut control board	TCB-PCDM4E			Limit capacity of the VRF outdoor unit at 85%, 75%, 70% or 60% load or stop it. Dry contact
	External master ON/OFF, night mode and priority selection control board	TCB-PCMO4E			Dry contact
	Output control board	TCB-PCIN4E			Operation output: The operation indicator is on while any indoor unit in the system is operating. Error output: The error indicator is on when an error is occurred one of the indoor or outdoor units in the system. Dry contact

MCY-MHP\_HS  
MINI SMMS-e 1PH



CAPACITY OPERATION



4HP > 6HP

-20°C > +46°C

Incorporating all of Toshiba's VRF experience and knowledge into a system that measures no more than 1.2 m high, results in a perfect solution for all small to medium building heating and cooling requirements.

Features

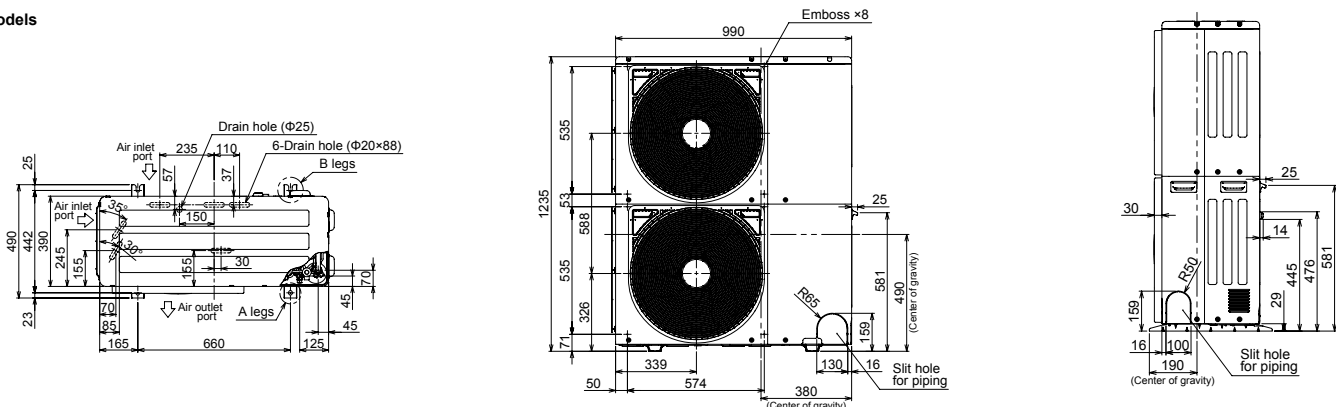
Outdoor unit	HP	MCY-	MHP0404HS-E	MHP0504HS-E	MHP0604HS-E	
Capacity range	HP		4	5	6	
Cooling capacity	kW		12.1	14.0	15.5	
Heating capacity	kW		12.5	16.0	18.0	
Power supply	V-ph-Hz		220/230/240V-1-50	220/230/240V-1-50	220/230/240V-1-50	
Efficiency	EER rated	W/W	4.28	4.00	3.61	
	EER 50% load	W/W	6.93	6.86	6.78	
	SEER	η/std	373.8%/9.42	366.2%/9.23	384.2%/9.68	
Efficiency	COP rated	W/W	4.83	4.27	4.18	
	COP 50% load	W/W	6.63	6.20	6.16	
	COP -7°C 100% load	W/W	4.29	3.80	3.72	
	SCOP	η/std	163.8%/4.17	166.6%/4.24	171.8%/4.37	
Electrical characteristics	Running current	A	C	13.5/13.0/12.4	16.6/15.9/15.2	20.1/19.2/18.4
	Power input	kW	C	2.83	3.50	4.29
	Running current	A	H	12.5/12.0/11.5	17.8/17.0/16.3	20.2/19.3/18.5
	Power input	kW	H	2.59	3.75	4.31
Dimensions (h x w x d)	mm			1235x990x390		
Weight	kg		127	127	127	
Compressor	Type		Hermetic twin rotary compressor		Hermetic twin rotary compressor	
	Motor output	kW		3.75	3.75	3.75
Fan unit	Type		Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	
	Motor output	W	100+100	100+100	100+100	
	Air volume	m³/h	5660	5820	6050	
External static pressure available	Pa		30	30	30	
R410A refrigerant charge	kg		6.4	6.4	6.4	
	CO <sub>2</sub> Teq		13.363	13.363	13.363	
Power supply wiring	MCA	A	23.5	26.5	28.0	
	MCOP	A	32.0	32.0	32.0	
Pipe connection	Gas line type - Diameter		Flare - 5/8"	Flare - 5/8"	Flare - 3/4"	
	Liquid line type - Diameter		Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	
Connectivity	Max. number of connected indoor units		8	10	13	
	Diversity ratio	Min/Max		80/130%		
Sound pressure level	Cooling	dB(A)	C	49	50	51
	Heating	dB(A)	H	52	53	54
Sound power level	Cooling	dB(A)	C	66	68	68
	Heating	dB(A)	H	69	70	71
Operation temperature range	Cooling	CDB	C	-5 to 46	-5 to 46	-5 to 46
	Heating	CWB	H	-20 to 15	-20 to 15	-20 to 15

C = Cooling mode H = Heating mode  
Connected indoor units : MMU-UP\*\*\*1HP-E

Drawings

Unit: mm

All models



### Piping rules

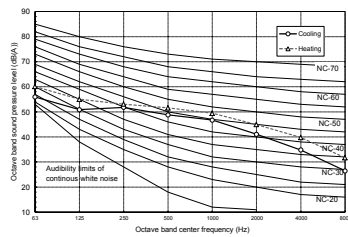
				Allowable value		
				With PMV kit	Without PMV kit	Piping section
Piping length	Total extension of pipe (Liquid pipe, real length)			150m	180m	L1 + L2 + L3 + a + b + c + d + e + f
	Farthest piping length	Equivalent length		80m	125m	L1 + L3 + f
		Real length		65m	100m	
	Max equivalent length of main piping			50m	65m	L1
	Max equivalent length of farthest piping form 1st branching			15m	35m	L3 + f
	Max. real length of indoor unit connecting piping			15m	15m	a, b, c, d, e, f
Real length between PMV kit and indoor unit			Between 2m and 10m	-		
Difference in height	Height between indoor and outdoor units	Upper outdoor unit		30m	30m	
		Lower outdoor unit		20m	20m	
	Height between indoor units		15m	15m		
	Height between indoor unit and PMV kit		15m	-		

### Sound pressure levels

Unit: dB(A)

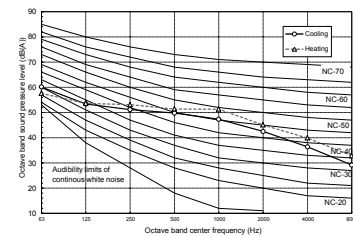
#### MCY-MHP0404HS-E

Sound pressure level (dB(A))	Cooling	Heating
	49	52



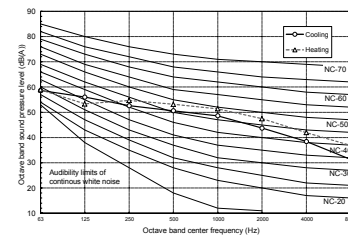
#### MCY-MHP0504HS-E

Sound pressure level (dB(A))	Cooling	Heating
	50	53



#### MCY-MHP0604HS-E

Sound pressure level (dB(A))	Cooling	Heating
	51	54



### Night mode sound pressure levels

Sound reduction and capacity approximation (Reference)

Outdoor unit (base unit)	Night operation sound reduction dB (A)		Capacity*	
	Cooling	Heating	Cooling	Heating
Model 0404*	46	48	approx. 90 %	approx. 95 %
Model 0504*	46	48	approx. 80 %	approx. 80 %
Model 0604*	47	49	approx. 80 %	approx. 75 %

\*Relative to maximum capacity

### Accessories

Name	Model name	Capacity	Appearance	Remarks	
Branching joints and headers	Y-shape branching joint	RBM-BY55E	Under 6.4HP		
	4-branching header	RBM-HY1043E	Under 14.2HP		
	8-branching header	RBM-HY1083E	Under 14.2HP		
PM kits	PMV Kits	RBM-PMV0361U-E	For 0.6 to 1.3HP IDUs		
		RBM-PMV0901U-E	For 1.7 to 3.0HP IDUs		
Optional PCB of outdoor unit	Power peak-cut control board	TCB-PCDM4E			Limit capacity of the VRF outdoor unit at 85%, 75%, 70% or 60% load or stop it. Dry contact
	External master ON/OFF, night mode and priority selection control board	TCB-PCMO4E			Dry contact
	Output control board	TCB-PCIN4E			Operation output: The operation indicator is on while any indoor unit in the system is operating. Error output: The error indicator is on when an error is occurred on even one of the indoor or outdoor units in the system. Dry contact

MCY-MHP\_HS8  
MINI SMMS-e 3PH



CAPACITY

OPERATION



4HP > 10HP

-20°C > +46°C

Up to 10HP capacity using compact sideblow chassis, the MINI SMMS-e 3PH is particularly adapted to projects downtown the cities.

Features

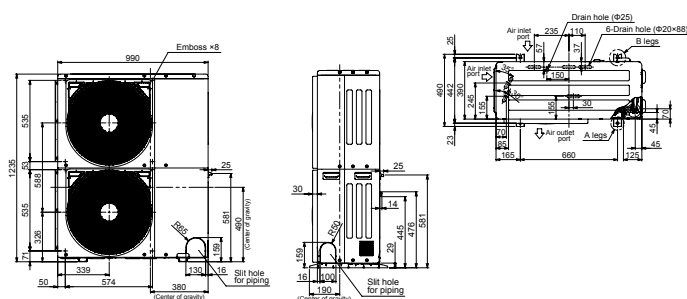
Outdoor unit	HP	MCY-	MHP0404HS8-E	MHP0504HS8-E	MHP0604HS8-E	MHP0806HS8-E	MHP1006HS8-E	
Capacity range	HP		4	5	6	8	10	
Cooling capacity	kW		12.1	14.0	15.5	22.4	28.0	
Heating capacity (rated/max)	kW		12.5	16.0	18.0	22.4/25.0	28.0/31.5	
Power supply	V-ph-Hz		380/400/415V-3-50	380/400/415V-3-50	380/400/415V-3-50	380/400/415V-3-50	380/400/415V-3-50	
Efficiency	EER rated	W/W	4.29	4.03	3.65	3.36	3.00	
	EER 50% load	W/W	6.93	6.48	5.91	5.69	5.19	
	SEER	η/std	375.8%/9.47	368.6%/9.29	386.6%/9.74	320.6%/8.09	293.0%/7.40	
Efficiency	COP rated	W/W	4.86	4.30	4.22	4.31	4.00	
	COP 50% load	W/W	6.70	6.25	6.25	6.05	5.62	
	COP -7°C 100% load	W/W	4.32	3.83	3.75	3.51	3.27	
	SCOP	η/std	164.6%/4.19	167.0%/4.25	172.2%/4.38	177.0%/4.50	179.8%/4.57	
Electrical characteristics	Running current	A	C	4.8/4.5/4.4	5.7/5.4/5.2	7.0/6.7/6.4	11.1/10.6/10.2	15.3/14.5/14.0
	Power input	kW	H	2.82	3.47	4.25	6.67	9.34
	Running current	A	C	4.4/4.2/4.0	6.1/5.8/5.6	7.0/6.6/6.4	8.7/8.2/7.9	11.4/10.9/10.5
	Power input	kW	H	2.57	3.72	4.27	5.20	7.00
Dimensions (h x w x d)	mm			1235x990x390		1740x990x390		
Weight	kg		125	125	125	147	147	
Compressor	Type		Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	Hermetic twin rotary compressor	
	Motor output	kW		3.75	3.75	3.75	6.60	6.60
Fan unit	Type		Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	Propeller fan (Quantity 2)	
	Motor output	W		100+100	100+100	100+100	100+100	
	Air volume	m³/h		5660	5820	6050	8460	8820
External static pressure available	Pa		30	30	30	20	20	
R410A refrigerant charge	kg		6.4	6.4	6.4	4.4	4.4	
	CO <sub>2</sub> Teq		13.4	13.4	13.4	9.2	9.2	
Power supply wiring	MCA	A	12.5	12.5	12.5	17.0	20.0	
	MCOP	A	16.0	16.0	16.0	20.0	25.0	
Pipe connection	Gas line type - Diameter		Flare - 5/8"	Flare - 5/8"	Flare - 3/4"	Flare - 3/4"	Flare - 7/8"	
	Liquid line type - Diameter		Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	Flare - 3/8"	
Connectivity	Max. number of connected indoor units		8	10	13	12	16	
	Diversity ratio	Min/Max			80/130%			
Sound pressure level	Cooling	dB(A)	C	49	50	51	58	59
	Heating	dB(A)	H	52	53	54	59	60
Sound power level	Cooling	dB(A)	C	66	68	68	75	77
	Heating	dB(A)	H	67	69	70	75	77
Operation temperature range	Cooling	CDB	C	-5 to 46	-5 to 46	-5 to 46	-5 to 46	-5 to 46
	Heating	CWB	H	-20 to 15	-20 to 15	-20 to 15	-20 to 15	-20 to 15

C = Cooling mode H = Heating mode  
Connected indoor units : MMU-UP\*\*\*1HP-E

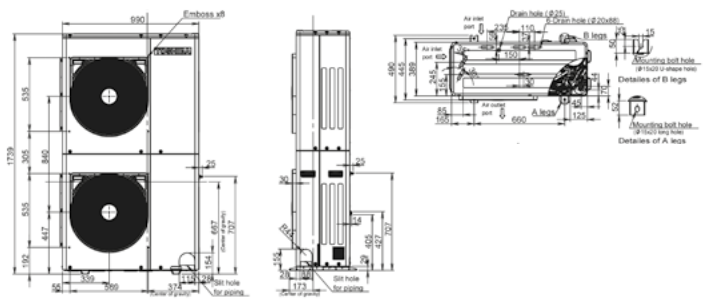
Drawings

Unit: mm

MCY-MHP\_4HS8-E



MCY-MHP\_6HS8-E

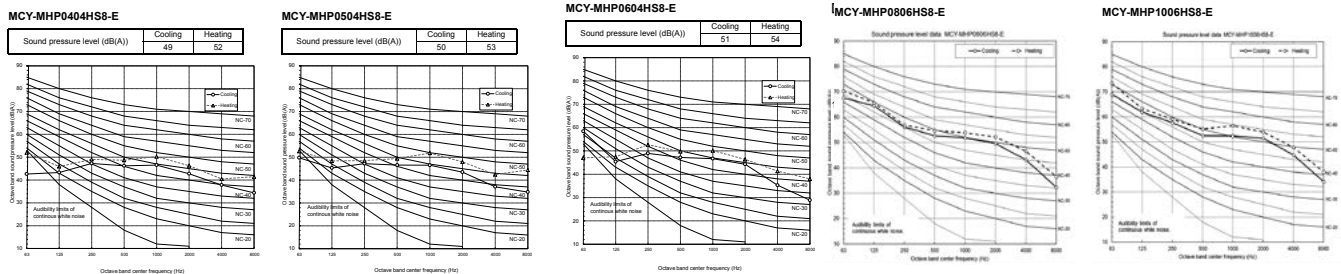


### Piping rules

			Allowable value				Piping section L1 + L2 + L3 + a + b + c + d + e + f
			With PMV kit		Without PMV kit		
			4 to 6HP	8 & 10HP	4 to 6HP	8 & 10HP	
Piping length	Total extension of pipe (Liquid pipe, real length)		150m	250m	180m	300m	L1 + L3 + f
	Farthest piping length	Equivalent length	80m	130m	125m	150m	
		Real length	65m	100m	100m	120m	L1
	Max equivalent length of main piping		50m	70m	65m	80m	L3 + f
	Max equivalent length of farthest piping from 1st branching		15m	30m	35m	40m	a, b, c, d, e, f
	Max. real length of indoor unit connecting piping		15m		15m		
Real length between PMV kit and indoor unit	Between 2m and 10m		-				
Difference in height	Height between indoor and outdoor units	Upper outdoor unit	30m		30m		
		Lower outdoor unit	20m	30m	20m	30m	
	Height between indoor units	15m		15m			
	Height between indoor unit and PMV kit	15m		-			

### Sound pressure levels

Unit: dB(A)



### Night mode sound pressure levels

Sound reduction and approximation capacity (Reference)

Outdoor unit (base unit)	Night operation sound reduction dB(A)		Capacity*	
	Cooling	Heating	Cooling	Heating
Model 0404*	46	48	approx. 90%	approx. 95%
Model 0504*	46	48	approx. 80%	approx. 80%
Model 0604*	47	49	approx. 80%	approx. 75%
Model 0806*	50	50	approx. 80%	approx. 75%
Model 1006*	50	50	approx. 65%	approx. 60%

\*Relative to maximum capacity

### Accessories

Name	Model name	Capacity	Appearance	Remarks
Branching joints and headers	Y-shape branching joint	RBM-BY55E	under 6.4hHP	
		RBM-BY105E	between 6.4 and 20.2HP	
	4-branching header	RBM-HY1043E	under 14.2hHP	
	8-branching header	RBM-HY1083E	under 14.2HP	
PM kits	PMV Kits	RBM-PMV0361U-E	for 0.6 to 1.3HP IDUs	
		RBM-PMV0901U-E	for 1.7 to 3.0HP IDUs	
Optional PCB of outdoor unit	Power peak-cut control board	TCB-PCDM4E		"Limit capacity of the VRF outdoor unit at 85%, 75%, 70% or 60% load or stop it. Dry contact"
	External master ON/OFF, night mode and priority selection control board	TCB-PCMO4E		Dry contact
	Output control board	TCB-PCIN4E		"Operation output: The operation indicator is on while any indoor unit in the system is operating. Error output: The error indicator is on when an error is occurred on even one of the indoor or outdoor units in the system. Dry contact"