

AIR CONDITIONING SYSTEMS

HYBRID
CITY MULTI

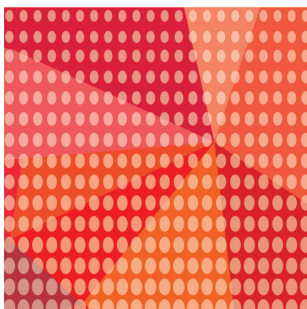


DATA BOOK

MODEL

PKFY-WL-VLM-E

PKFY-WL-VKM-E



PKFY-WL-VLM-E, PKFY-WL-VKM-E

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1. SPECIFICATIONS

Wall mounted

PKFY-WL-VLM-E, VKM-E

Model				PKFY-WL10VLM-E	PKFY-WL15VLM-E	PKFY-WL20VLM-E
Power source				1-phase 220-240V 50Hz, 1-phase 220V 60Hz	1-phase 220-240V 50Hz, 1-phase 220V 60Hz	1-phase 220-240V 50Hz, 1-phase 220V 60Hz
Cooling capacity (Nominal) (220V)	*1	kW		1.2	1.7	2.2
		BTU / h		4,100	5,800	7,500
	Power input	kW		0.02	0.02	0.03
		Current input	A		0.20	0.20
Heating capacity (Nominal) (220V)	*2	kW		1.4	1.9	2.5
		BTU / h		4,800	6,500	8,500
	Power input	kW		0.01	0.01	0.02
		Current input	A		0.15	0.15
External finish				Plastic, MUNSELL (0.7PB 9.2/0.4)	Plastic, MUNSELL (0.7PB 9.2/0.4)	Plastic, MUNSELL (0.7PB 9.2/0.4)
External dimension HxWxD		mm		299x773x237	299x773x237	299x773x237
		in.		11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 30-7/16 x 9-11/32	11-25/32 x 30-7/16 x 9-11/32
Net weight		kg(lbs)		11 (25)	11 (25)	11 (25)
Heat exchanger				Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)	Cross fin (Aluminum fin and copper tube)
			Water Volume	L	0.6	0.6
FAN	Type x Quantity			Line flow fan x 1	Line flow fan x 1	Line flow fan x 1
	External static press.	Pa		0	0	0
		mmH ₂ O		0	0	0
	Motor Type			DC motor	DC motor	DC motor
	Motor output		kW	0.030	0.030	0.030
	Driving mechanism			Direct-driven by motor	Direct-driven by motor	Direct-driven by motor
	Airflow rate (Low-Mid2-Mid1-High)	m ³ / min		3.3-3.8-4.1-4.5	3.3-3.8-4.3-4.9	4.0-5.0-6.0-7.0
		L/s		55-63-68-75	55-63-72-82	67-83-100-117
cfm			117-134-145-159	117-134-152-173	141-177-212-247	
Sound pressure level (measured in anechoic room) (Low-Mid2-Mid1-High)		dB <A>		22-26-28-30	22-26-29-32	22-28-33-36
Insulation material				Polyethylene sheet	Polyethylene sheet	Polyethylene sheet
Air filter				PP honeycomb	PP honeycomb	PP honeycomb
Protection device				Fuse	Fuse	Fuse
Refrigerant control device				-	-	-
Connectable outdoor unit/HBC controller/Hydro unit				HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A	HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A	HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A
Water piping diameter *3 *4	Connection size	Inlet	in.	RC 3/4 screw	RC 3/4 screw	RC 3/4 screw
		Outlet	in.	RC 3/4 screw	RC 3/4 screw	RC 3/4 screw
	Field pipe size	Inlet	mm I.D	20	20	20
		Outlet	mm I.D	20	20	20
Field drain pipe size		mm(in.)		I.D. 16(5/8)	I.D. 16(5/8)	I.D. 16(5/8)
Drawing	External			BT01B059	BT01B059	BT01B059
	Wiring			RH79C061	RH79C061	RH79C061
	Refrigerant cycle			-	-	-
Standard attachment	Document			Installation Manual, Instruction Book	Installation Manual, Instruction Book	Installation Manual, Instruction Book
	Accessory			Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band	Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band	Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band
Optional parts	Drain pump kit			PAC-SK01DM-E	PAC-SK01DM-E	PAC-SK01DM-E
	Valve kit	*5		PAC-SK35VK-E	PAC-SK35VK-E	PAC-SK35VK-E
		6m Lead wire		PAC-SK40LW-E	PAC-SK40LW-E	PAC-SK40LW-E
		Attachment plate		PAC-SK39AP-E	PAC-SK39AP-E	PAC-SK39AP-E
Remarks			* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specification may be subject to change without notice.			

Notes:					Unit converter
1.Nominal cooling conditions Indoor: 27°CDB./19°CWB. (81°FDB./66°FWB.), Outdoor: 35°CDB. (95°FDB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)					BTU/h =kW x 3.412
2.Nominal heating conditions Indoor: 20°CDB. (68°FDB.), Outdoor: 7°CDB./6°CWB. (45°FDB./43°FWB.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)					cfm =m ³ /min x 35.31
3.Be sure to install a valve on the water outlet.					lbs =kg/0.4536
4.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.					
5.Certain restrictions apply to indoor unit combinations. Refer to the section on the valve kit in the chapter "OPTIONAL PARTS" in the DATA BOOK for the restrictions. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.					*Above specification data is subject to rounding variation.
*Please group units that operate on 1 branch.					

1. SPECIFICATIONS

Wall mounted

Model				PKFY-WL25VLM-E		PKFY-WL32VLM-E		PKFY-WL40VLM-E		
Power source				1-phase 220-240V 50Hz, 1-phase 220V 60Hz		1-phase 220-240V 50Hz, 1-phase 220V 60Hz		1-phase 220-240V 50Hz, 1-phase 220V 60Hz		
Cooling capacity (Nominal)		*1	kW	2.8		3.6		4.5		
		*1	BTU / h	9,600		12,300		15,400		
(220V)	Power input		kW	0.04		0.04		0.05		
	Current input		A	0.35		0.35		0.45		
Heating capacity (Nominal)		*2	kW	3.2		4.0		5.0		
		*2	BTU / h	10,900		13,600		17,100		
(220V)	Power input		kW	0.03		0.03		0.04		
	Current input		A	0.30		0.30		0.40		
External finish				Plastic, MUNSELL (0.7PB 9.2/0.4)		Plastic, MUNSELL (0.7PB 9.2/0.4)		Plastic, MUNSELL (0.7PB 9.2/0.4)		
External dimension HxWxD			mm	299x773x237		299x898x237		299x898x237		
			in.	11-25/32 x 30-7/16 x 9-11/32		11-25/32 x 35-3/8 x 9-11/32		11-25/32 x 35-3/8 x 9-11/32		
Net weight			kg(lbs)	11 (25)		13(29)		13(29)		
Heat exchanger					Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)	
			Water Volume		L	0.7		1.0		1.1
FAN	Type x Quantity			Line flow fan x 1		Line flow fan x 1		Line flow fan x 1		
	External static press.		Pa	0		0		0		
			mmH ₂ O	0		0		0		
	Motor Type			DC motor		DC motor		DC motor		
	Motor output		kW	0.030		0.030		0.030		
	Driving mechanism			Direct-driven by motor		Direct-driven by motor		Direct-driven by motor		
	Airflow rate (Low-Mid2-Mid1-High)		m ³ / min	4.0-5.4-7.0-8.4		6.3-7.6-9.0-10.4		6.4-8.2-10.0-11.9		
			L/s	67-90-117-140		105-127-150-173		107-137-167-198		
			cfm	141-191-247-297		222-268-318-367		226-290-353-420		
Sound pressure level (measured in anechoic room) (Low-Mid2-Mid1-High)			dB <A>	22-30-36-41		29-34-38-41		30-36-41-45		
Insulation material				Polyethylene sheet		Polyethylene sheet		Polyethylene sheet		
Air filter				PP honeycomb		PP honeycomb		PP honeycomb		
Protection device				Fuse		Fuse		Fuse		
Refrigerant control device				-		-		-		
Connectable outdoor unit/HBC controller/Hydro unit				HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A		HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A		HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A		
Water piping diameter	Connection size	Inlet	in.	RC 3/4 screw		RC 3/4 screw		RC 3/4 screw		
		Outlet	in.	RC 3/4 screw		RC 3/4 screw		RC 3/4 screw		
	Field pipe size	Inlet	mm I.D	20		20		20		
		Outlet	mm I.D	20		20		20		
Field drain pipe size			mm(in.)	I.D. 16(5/8)		I.D. 16(5/8)		I.D. 16(5/8)		
Drawing	External			BT01B059		BT01B060		BT01B060		
	Wiring			RH79C061		RH79C061		RH79C061		
	Refrigerant cycle			-		-		-		
Standard attachment	Document			Installation Manual, Instruction Book		Installation Manual, Instruction Book		Installation Manual, Instruction Book		
	Accessory			Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band		Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band		Mount board, Screw, Felt tape, Compression joint, L-shape connection pipe A/B, Compression joint ring (ø15), Insulation, Tie band		
Optional parts	Drain pump kit			PAC-SK01DM-E		PAC-SK01DM-E		PAC-SK01DM-E		
	Valve kit		*5		PAC-SK35VK-E		PAC-SK35VK-E		PAC-SK35VK-E	
			6m Lead wire		PAC-SK40LW-E		PAC-SK40LW-E		PAC-SK40LW-E	
			Attachment plate		PAC-SK39AP-E		PAC-SK39AP-E		PAC-SK39AP-E	
Remarks				* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specification may be subject to change without notice.						

Notes:		Unit converter
1.Nominal cooling conditions Indoor: 27°C.D.B./19°C.W.B. (81°F.D.B./66°F.W.B.), Outdoor: 35°C.D.B. (95°F.D.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)		BTU/h =kW x 3,412
2.Nominal heating conditions Indoor: 20°C.D.B. (68°F.D.B.), Outdoor: 7°C.D.B./6°C.W.B. (45°F.D.B./43°F.W.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)		cfm =m ³ /min x 35.31
3.Be sure to install a valve on the water outlet.		lbs =kg/0.4536
4.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.		
5.Certain restrictions apply to indoor unit combinations.		
Refer to the section on the valve kit in the chapter "OPTIONAL PARTS" in the DATA BOOK for the restrictions.		
When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters.		
The maximum allowable piping length between the indoor unit and the valve kit is 5 meters.		
*Please group units that operate on 1 branch.		*Above specification data is subject to rounding variation.

1. SPECIFICATIONS

Wall mounted

PKFY-WL-VLM-E, VKM-E

Model				PKFY-WL50VKM-E		PKFY-WL63VKM-E		PKFY-WL80VKM-E	
Power source				1-phase 220-240V 50Hz, 1-phase 220V 60Hz		1-phase 220-240V 50Hz, 1-phase 220V 60Hz		1-phase 220-240V 50Hz, 1-phase 220V 60Hz	
Cooling capacity (Nominal) (220V)	*1 kW		5.6		7.1		9.0		
	*1 BTU / h		19,100		24,200		30,700		
	Power input kW		0.04		0.05		0.07		
	Current input A		0.46		0.56		0.76		
Heating capacity (Nominal) (220V)	*2 kW		6.3		8.0		10.0		
	*2 BTU / h		21,500		27,300		34,100		
	Power input kW		0.04		0.05		0.07		
	Current input A		0.40		0.50		0.70		
External finish				Plastic, MUNSELL (1.0Y 9.2/0.2)		Plastic, MUNSELL (1.0Y 9.2/0.2)		Plastic, MUNSELL (1.0Y 9.2/0.2)	
External dimension HxWxD			mm	365 x 1170 x 295		365 x 1170 x 295		365 x 1170 x 295	
			in.	14-3/8 x 46-1/16 x 11-5/8		14-3/8 x 46-1/16 x 11-5/8		14-3/8 x 46-1/16 x 11-5/8	
Net weight			kg(lbs)	20 (44)		20 (44)		20 (44)	
Heat exchanger				Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)		Cross fin (Aluminum fin and copper tube)	
				Water Volume	L	2.0		2.0	
FAN	Type x Quantity			Line flow fan x 1		Line flow fan x 1		Line flow fan x 1	
	External static press.		Pa	0		0		0	
			mmH ₂ O	0		0		0	
	Motor Type			DC motor		DC motor		DC motor	
	Motor output		kW	0.069		0.069		0.069	
	Driving mechanism			Direct-driven by motor		Direct-driven by motor		Direct-driven by motor	
	Airflow rate (Low-High)		m ³ / min	18-20		18-22		18-26	
			L/s	300-333		300-367		300-433	
cfm			636-706		636-777		636-918		
Sound pressure level (measured in anechoic room) (Low-High)			dB <A>	39-42		39-45		39-49	
Insulation material				Polyethylene sheet		Polyethylene sheet		Polyethylene sheet	
Air filter				PP honeycomb		PP honeycomb		PP honeycomb	
Protection device				Fuse		Fuse		Fuse	
Refrigerant control device				-		-		-	
Connectable outdoor unit/HBC controller/Hydro unit				HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A		HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A		HYBRID CITY MULTI/ CMB-WM-V-AA, CMB-WM-V-AB/ CMH-WM-V-A	
Water piping diameter *3 *4	Connection size	Inlet	in.	RC 3/4 screw		RC 1-1/4 screw		RC 1-1/4 screw	
		Outlet	in.	RC 3/4 screw		RC 1-1/4 screw		RC 1-1/4 screw	
	Field pipe size	Inlet	mm I.D	20		30		30	
		Outlet	mm I.D	20		30		30	
Field drain pipe size			mm(in.)	I.D. 16(5/8)		I.D. 16(5/8)		I.D. 16(5/8)	
Drawing	External			RK01N845		RK01N845		RK01N845	
	Wiring			BT79B108		BT79B108		BT79B108	
	Refrigerant cycle			-		-		-	
Standard attachment	Document			Installation Manual, Instruction Book		Installation Manual, Instruction Book		Installation Manual, Instruction Book	
	Accessory			Mount board, Screw, Felt tape, L-shape connection pipe A/B, I-shape connection pipe A/B, Insulation, Tie band		Mount board, Screw, Felt tape, L-shape connection pipe A/B, I-shape connection pipe A, Insulation, Tie band		Mount board, Screw, Felt tape, L-shape connection pipe A/B, I-shape connection pipe A, Insulation, Tie band	
Optional parts	Drain pump kit			PAC-SK19DM-E		PAC-SK19DM-E		PAC-SK19DM-E	
	Valve kit	*5		PAC-SK35VK-E		PAC-SK35VK-E		PAC-SK35VK-E	
		6m Lead wire		PAC-SK40LW-E		PAC-SK40LW-E		PAC-SK40LW-E	
		Attachment plate		PAC-SK39AP-E		PAC-SK39AP-E		PAC-SK39AP-E	
Remarks				* Details on foundation work, duct work, insulation work, electrical wiring, power source switch, and other items shall be referred to the Installation Manual. * Due to continuing improvement, above specification may be subject to change without notice.					

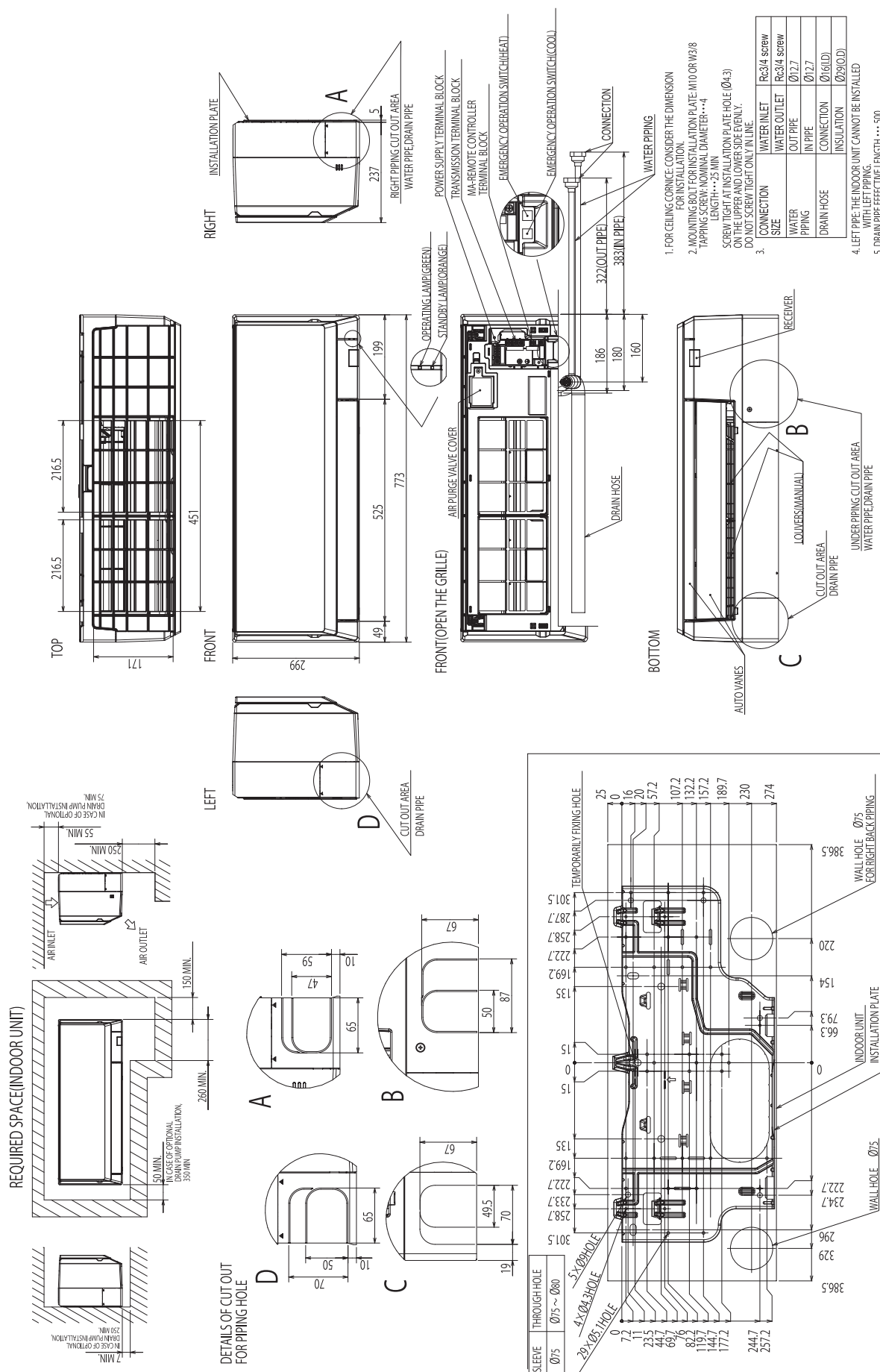
Notes:	Unit converter
1.Nominal cooling conditions Indoor: 27°C.D.B./19°C.W.B. (81°F.D.B./66°F.W.B.), Outdoor: 35°C.D.B. (95°F.D.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	BTU/h =kW x 3,412
2.Nominal heating conditions Indoor: 20°C.D.B. (68°F.D.B.), Outdoor: 7°C.D.B./6°C.W.B. (45°F.D.B./43°F.W.B.) Pipe length: 7.5 m (24-9/16 ft.), Level difference: 0 m (0 ft.)	cfm =m ³ /min x 35.31
3.Be sure to install a valve on the water outlet.	lbs =kg/0.4536
4.Install a strainer (40 mesh or more) on the pipe next to the valve to remove the foreign matters.	
5.Certain restrictions apply to indoor unit combinations. Refer to the section on the valve kit in the chapter "OPTIONAL PARTS" in the DATA BOOK for the restrictions. When the valve kit is installed farther away from the HBC than the distance between the HBC and the WL-model indoor unit, the maximum allowable height difference between the HBC and the valve kit is 15 meters. The maximum allowable piping length between the indoor unit and the valve kit is 5 meters. *Please group units that operate on 1 branch.	*Above specification data is subject to rounding variation.

2. EXTERNAL DIMENSIONS

Wall mounted

PKFY-WL10, 15, 20, 25VLM-E

Unit: mm



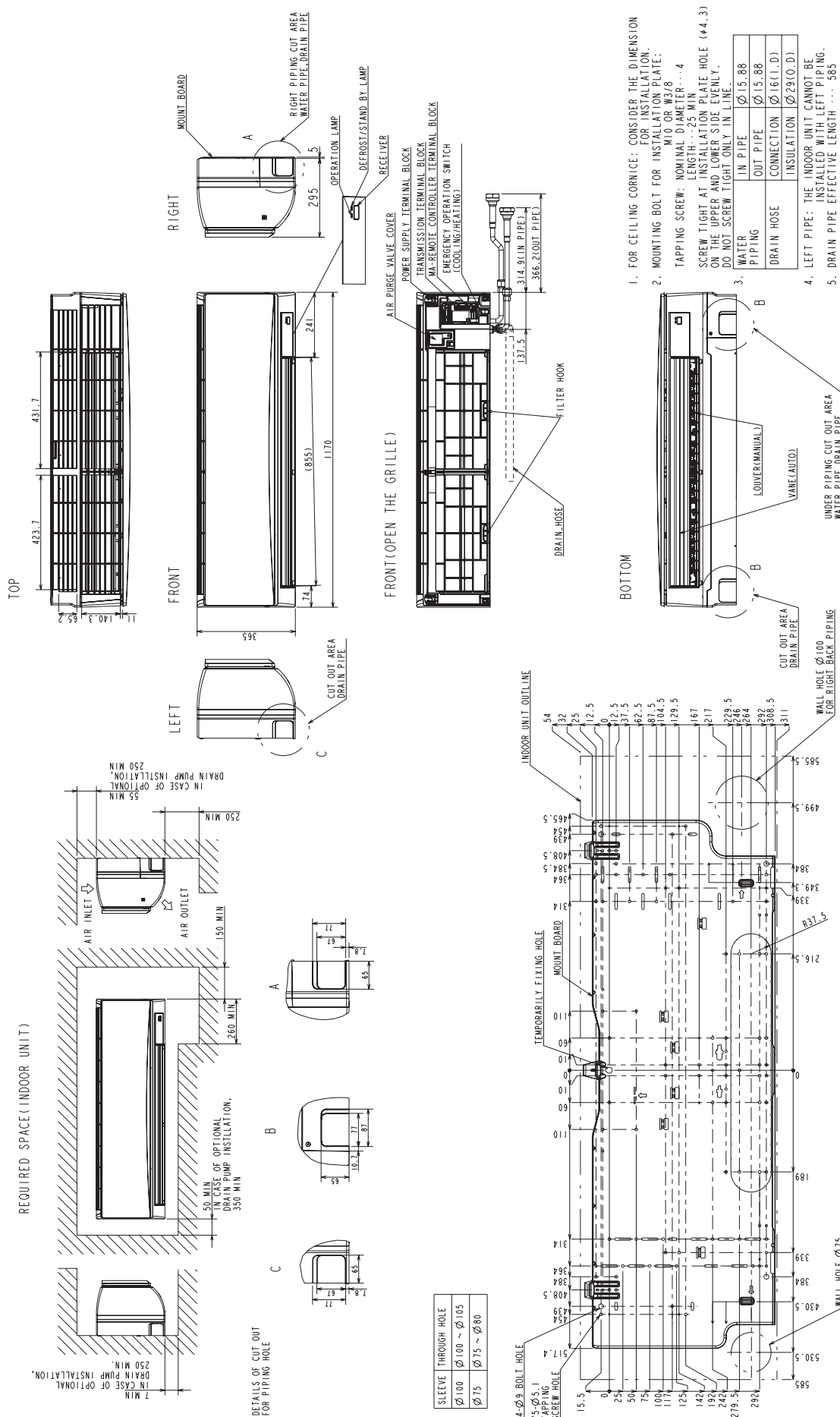
PKFY-WL-VLM-E, VKM-E

Unit: mm



PKFY-WL50, 63, 80VKM-E

Unit: mm

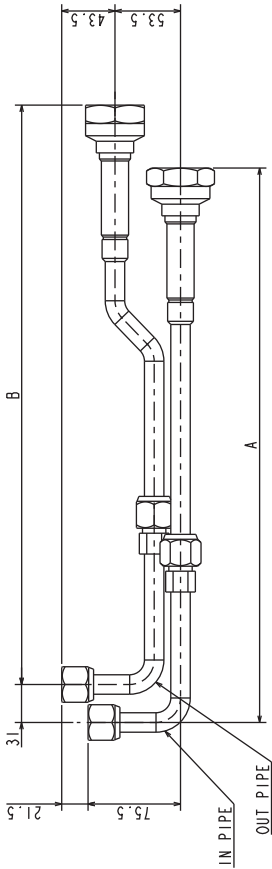


PKFY-WL50, 63, 80VKM-E

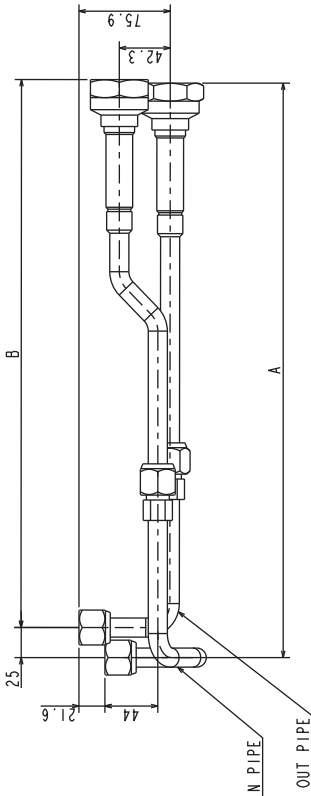
Unit: mm

DETAILS OF WATER PIPE

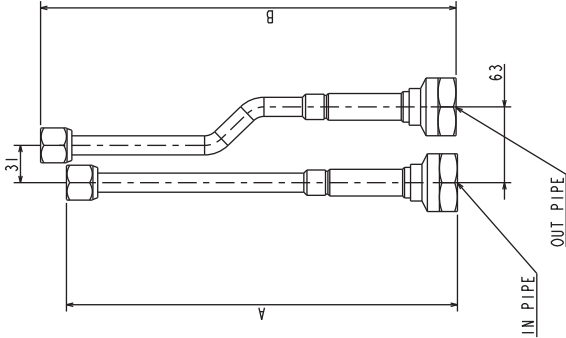
FOR RIGHT PIPING WORK



FOR RIGHT REAR PIPING WORK



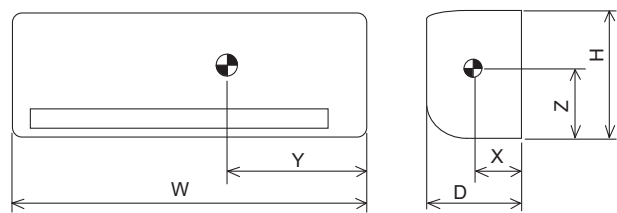
FOR RIGHT BOTTOM PIPING WORK



DIMENSIONAL CHANGE DUE TO JOINT (mm)

A/B	FOR RIGHT BOTTOM PIPING WORK		FOR RIGHT REAR PIPING WORK		FOR RIGHT REAR PIPING WORK	
	A	B	A	B	A	B
WL50(RC3/4)	319	339.4	446.6	466.9	471.5	449.4
WL63/80(RC1-1/4)	325	345.4	452.6	472.9	477.5	455.4

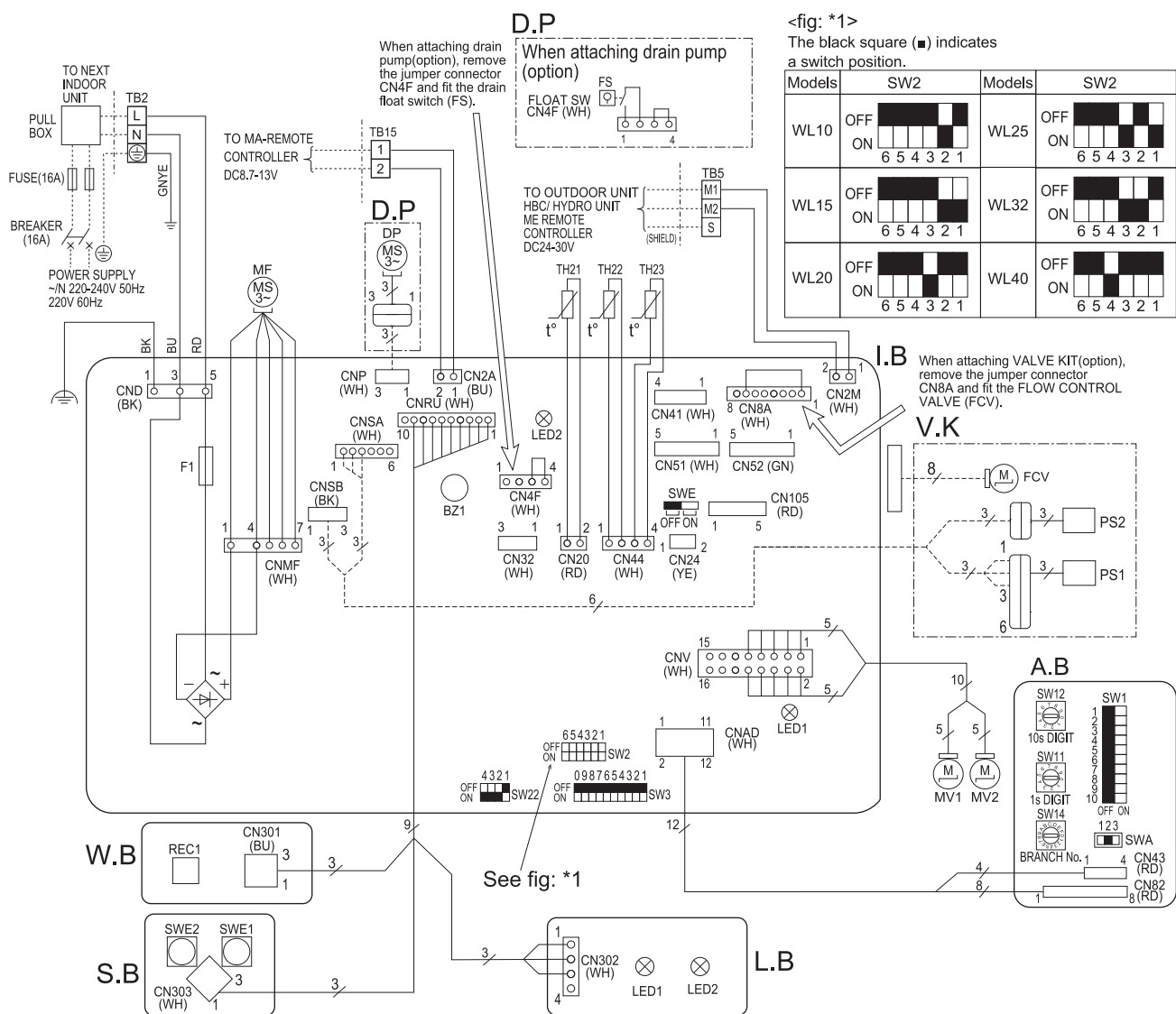
PKFY-WL-VLM-E, VKM-E



(mm)						
Model	W	D	H	X	Y	Z
PKFY-WL10VLM-E	773	237	299	130	340	150
PKFY-WL15VLM-E	773	237	299	130	340	150
PKFY-WL20VLM-E	773	237	299	130	340	150
PKFY-WL25VLM-E	773	237	299	130	340	150
PKFY-WL32VLM-E	898	237	299	120	390	150
PKFY-WL40VLM-E	898	237	299	120	390	150
PKFY-WL50VKM-E	1170	295	365	190	460	190
PKFY-WL63VKM-E	1170	295	365	190	460	190
PKFY-WL80VKM-E	1170	295	365	190	460	190

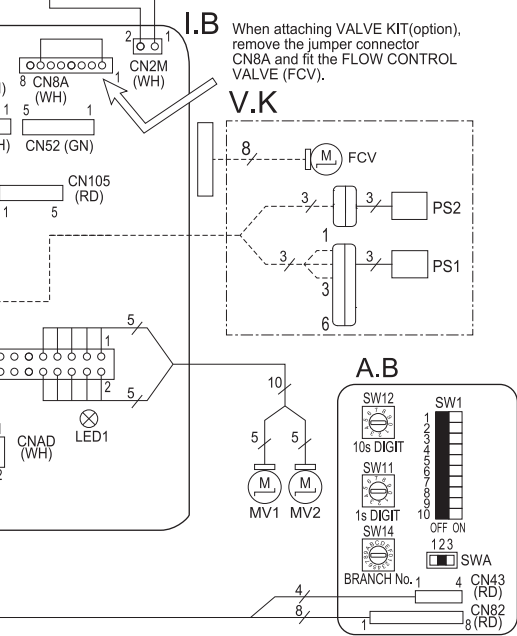
PKFY-WL-VLM-E, VKM-E

PKFY-WL10, 15, 20, 25, 32, 40VLM-E



<fig: *1>
The black square (■) indicates a switch position.

Models	SW2	Models	SW2
WL10	OFF ON	WL25	OFF ON
WL15	OFF ON	WL32	OFF ON
WL20	OFF ON	WL40	OFF ON



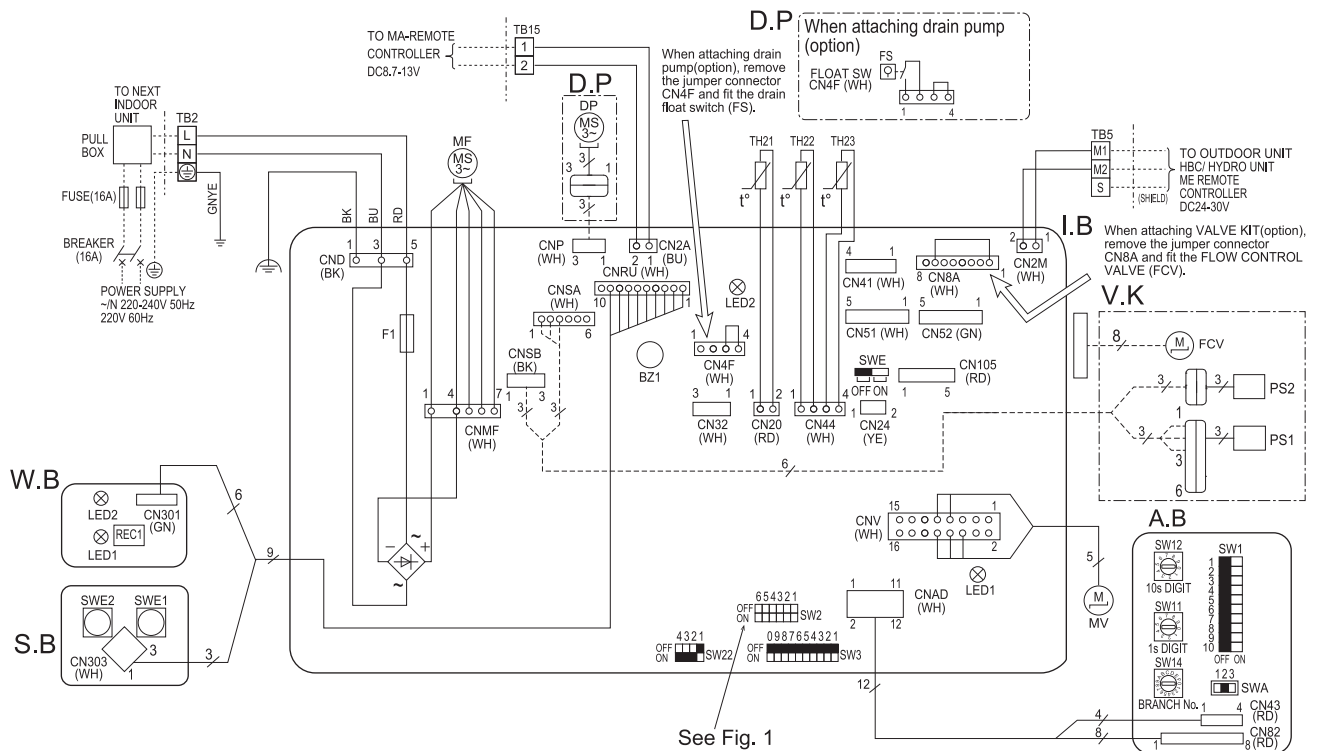
SYMBOL	NAME	SYMBOL	NAME
I.B	INDOOR CONTROLLER BOARD	TH21	THERMISTOR ROOM TEMP. DETECTION (0°C/15kΩ, 25°C/5.4kΩ)
CN32	CONNECTOR REMOTE SWITCH	TH22	PIPE TEMP. DETECTION / INLET WATER (0°C/15kΩ, 25°C/5.4kΩ)
CN51	CENTRALLY CONTROL	TH23	PIPE TEMP. DETECTION / OUTLET WATER (0°C/15kΩ, 25°C/5.4kΩ)
CN52	REMOTE INDICATION		
CN105	IT TERMINAL		
BZ1	BUZZER	A.B	ADDRESS BOARD
F1	FUSE (T3.15A/250V)	SW1	SWITCH MODE SELECTION
LED1	POWER SUPPLY (I.B)	SW11	ADDRESS SETTING 1s DIGIT
LED2	POWER SUPPLY (MA-REMOTE CONTROLLER)	SW12	ADDRESS SETTING 10s DIGIT
SW2	SWITCH CAPACITY CODE	SW14	BRANCH No.
SW3	MODE SELECTION		
SW22	PAIR NO. SETTING	S.B	SWITCH BOARD
SWE	FAN-DRAIN PUMP (TEST MODE)	SWE1	EMERGENCY OPERATION(HEAT)
MF	FAN MOTOR	SWE2	EMERGENCY OPERATION(COOL)
MV1	VANE MOTOR (UPPER)	W.B	PCB FOR WIRELESS REMOTE CONTROLLER
MV2	VANE MOTOR (LOWER)	REC1	RECEIVING UNIT
TB2	TERMINAL POWER SUPPLY	L.B	LED BOARD
TB5	BLOCK TRANSMISSION	LED1	LED(OPERATING INDICATOR:GREEN)
TB15	MA-REMOTE CONTROLLER	LED2	LED(STANDBY FOR HEATING : ORANGE)
V.K	VALVE KIT (OPTION)	D.P	DRAIN PUMP KIT (OPTION)
FCV	FLOW CONTROL VALVE	FS	DRAIN FLOAT SWITCH
PS1	PRESSURE SENSOR 1 (INLET WATER)	DP	DRAIN PUMP
PS2	PRESSURE SENSOR 2 (OUTLET WATER)		

- NOTES:
- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
 - In case of using MA-Remote controller, please connect to TB15. (Remote controller wire is non-polar.)
 - In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
 - Symbol [S] of TB5 is the shield wire connection.
 - Symbols used in wiring diagram above are, [] : terminal block, [] : connector.
 - The setting of the SW2 dip switches differs in the capacity. For the detail, refer to the fig: *1.

LED on indoor controller board for service

Symbol	Meaning	Function
LED1	Main power supply	Main power supply (Indoor unit:220-240V) Power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

PKFY-WL50, 63, 80VKM-E



[LEGEND]

SYMBOL	NAME	SYMBOL	NAME
I.B	INDOOR CONTROLLER BOARD	TH21	THERMISTOR
CN32	CONNECTOR	TH22	ROOM TEMP. DETECTION (0°C/15kΩ, 25°C/5.4kΩ)
CN51	REMOTE SWITCH	TH23	PIPE TEMP. DETECTION / INLET WATER (0°C/15kΩ, 25°C/5.4kΩ)
CN52	CENTRALLY CONTROL		PIPE TEMP. DETECTION / OUTLET WATER (0°C/15kΩ, 25°C/5.4kΩ)
CN105	REMOTE INDICATION		
BZ1	BUZZER	A.B	ADDRESS BOARD
F1	FUSE (T3.15A/250V)	SW1	SWITCH
LED1	POWER SUPPLY (I.B)	SW11	MODE SELECTION
LED2	POWER SUPPLY (MA-REMOTE CONTROLLER)	SW12	ADDRESS SETTING 1s DIGIT
SW2	SWITCH	SW14	ADDRESS SETTING 10s DIGIT
SW3	CAPACITY CODE		BRANCH No.
SW22	MODE SELECTION	S.B	SWITCH BOARD
SW22	PAIR NO. SETTING	SWE1	EMERGENCY OPERATION(HEAT)
SWE	FAN+DRAIN PUMP (TEST MODE)	SWE2	EMERGENCY OPERATION(COOL)
MF	FAN MOTOR	W.B	PCB FOR WIRELESS REMOTE CONTROLLER
MV	VANE MOTOR	LED1	LED(OPERATION INDICATOR:GREEN)
TB2	TERMINAL	LED2	LED(PREPARATION FOR HEATING : ORANGE)
TB5	BLOCK	REC1	RECEIVING UNIT
TB15	MA-REMOTE CONTROLLER	D.P	DRAIN PUMP KIT (OPTION)
V.K	VALVE KIT (OPTION)	FS	DRAIN FLOAT SWITCH
FCV	FLOW CONTROL VALVE	DP	DRAIN PUMP
PS1	PRESSURE SENSOR 1 (INLET WATER)		
PS2	PRESSURE SENSOR 2 (OUTLET WATER)		

NOTES:

- At servicing for outdoor unit, always follow the wiring diagram of outdoor unit.
- In case of using MA-Remote controller, please connect to TB15. (Remote controller wire is non-polar.)
- In case of using M-NET, please connect to TB5. (Transmission line is non-polar.)
- Symbol [S] of TB5 is the shield wire connection.
- Symbols used in wiring diagram above are, : terminal block, : connector.
- The setting of the SW2 dip switches differs in the capacity. For the detail, refer to the Fig. 1.

LED on indoor controller board for service

Symbol	Meaning	Function
LED1	Main power supply	Main power supply (Indoor unit: 220-240V) Power on → lamp is lit
LED2	Power supply for MA-Remote controller	Power supply for MA-Remote controller on → lamp is lit

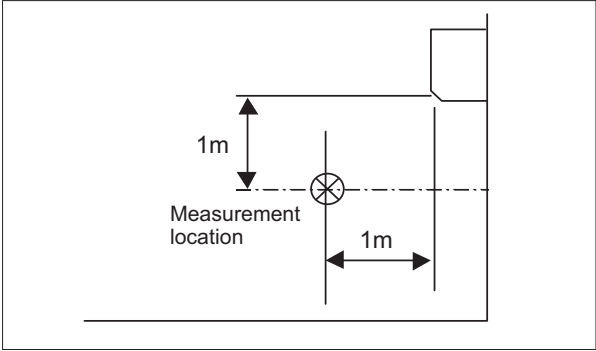
<Fig.1>
The black square(■) indicates a switch position.

Models	SW2
WL50	OFF ON
WL63	OFF ON
WL80	OFF ON

PKFY-WL-VLM-E, VKM-E

5-1. Sound levels

Wall mounted



* Measured in anechoic room.

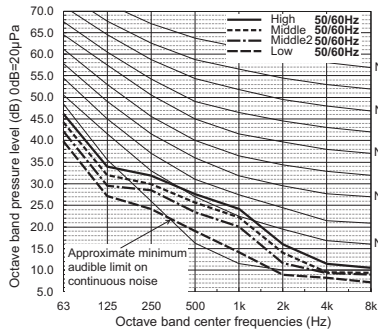
Sound level at anechoic room: Low-(Middle2-Middle1)-High

Model	Sound level dB (A)
PKFY-WL10VLM-E	22-26-28-30
PKFY-WL15VLM-E	22-26-29-32
PKFY-WL20VLM-E	22-28-33-36
PKFY-WL25VLM-E	22-30-36-41
PKFY-WL32VLM-E	29-34-38-41
PKFY-WL40VLM-E	30-36-41-45
PKFY-WL50VKM-E	39-42
PKFY-WL63VKM-E	39-45
PKFY-WL80VKM-E	39-49

5-2. NC curves

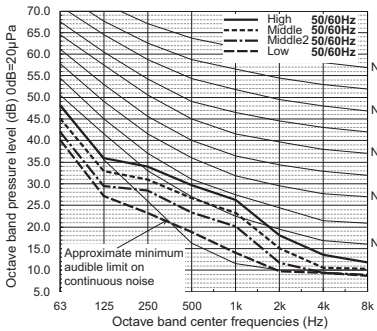
PKFY-WL10VLM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



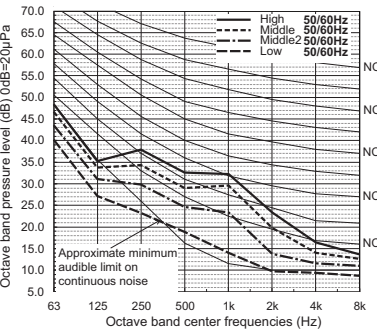
PKFY-WL15VLM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



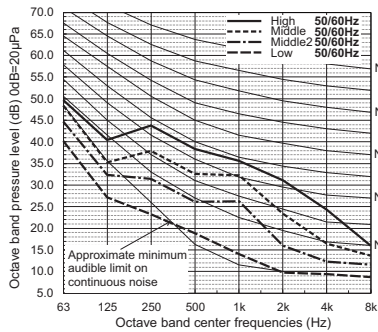
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External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



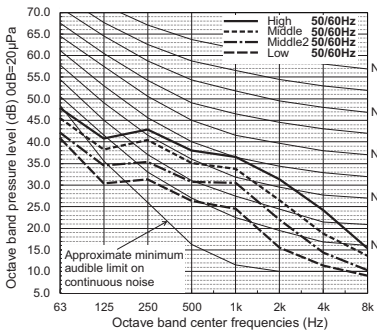
PKFY-WL25VLM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



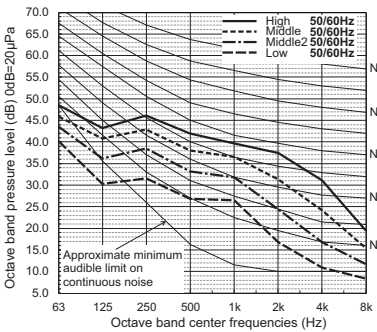
PKFY-WL32VLM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



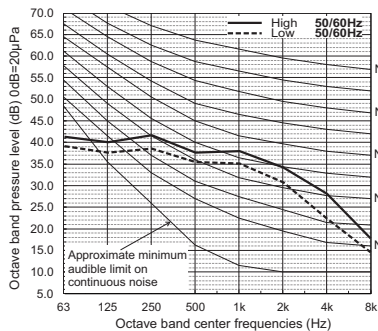
PKFY-WL40VLM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



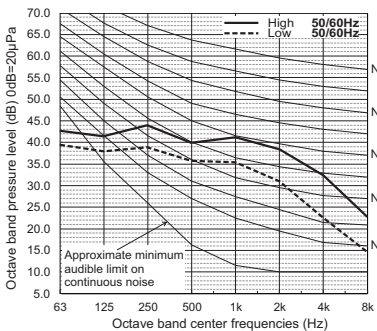
PKFY-WL50VKM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



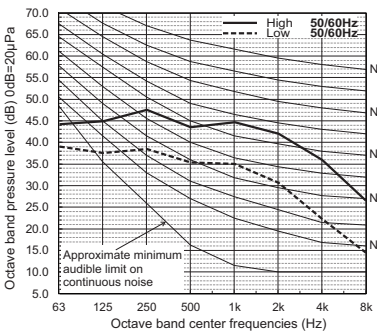
PKFY-WL63VKM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz



PKFY-WL80VKM-E

External Static Pressure: 0Pa [0.00in.WG]
Power Source: 220-230-240V 50Hz/220V 60Hz

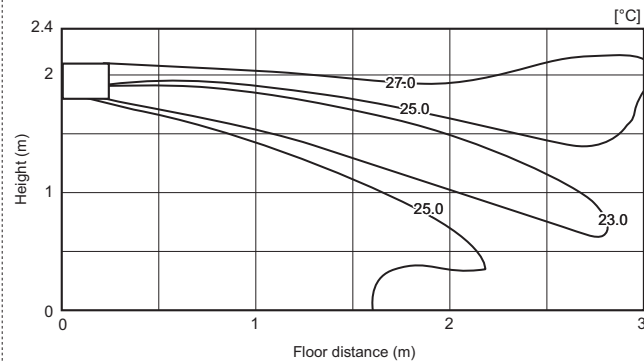


6-1. Temperature distributions

PKFY-WL10VLM-E

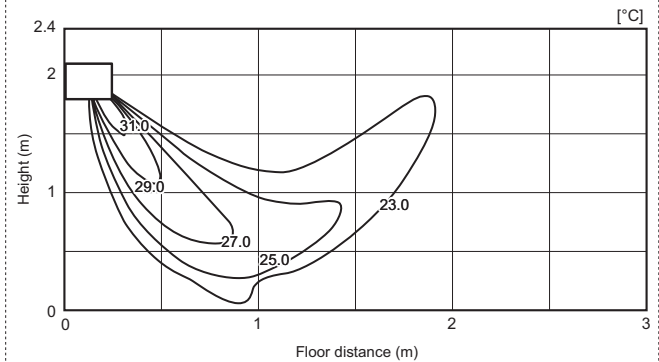
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Horizontal air flow



<Heating mode>

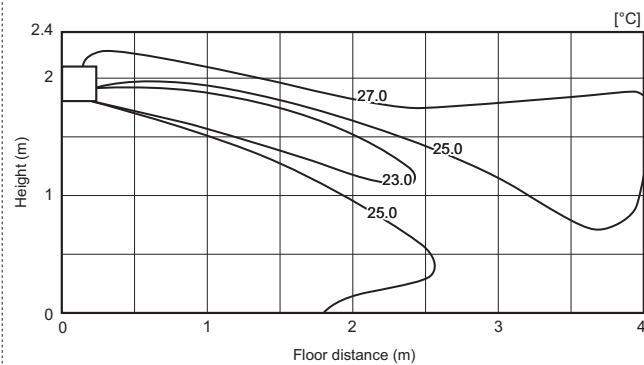
Downward air flow



PKFY-WL15VLM-E

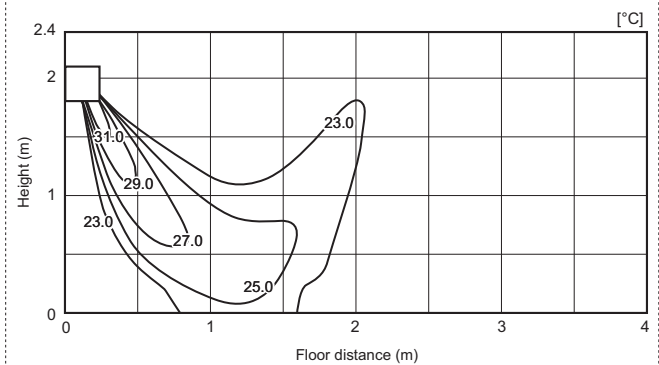
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Horizontal air flow



<Heating mode>

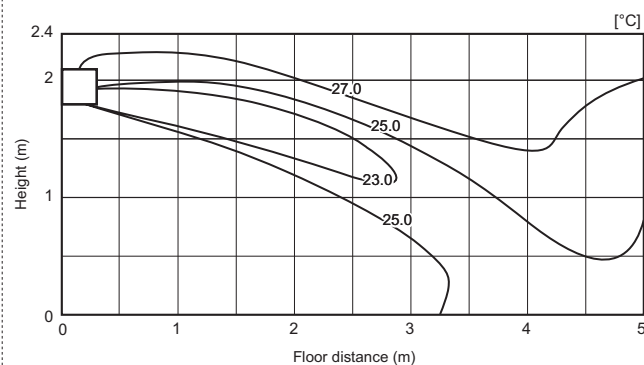
Downward air flow



PKFY-WL20VLM-E

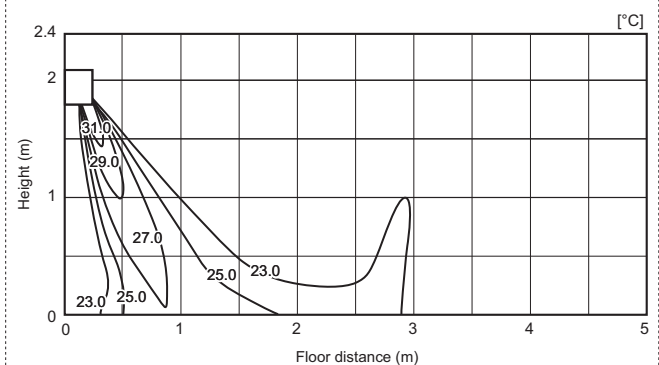
<Cooling mode>

Horizontal air flow



<Heating mode>

Downward air flow

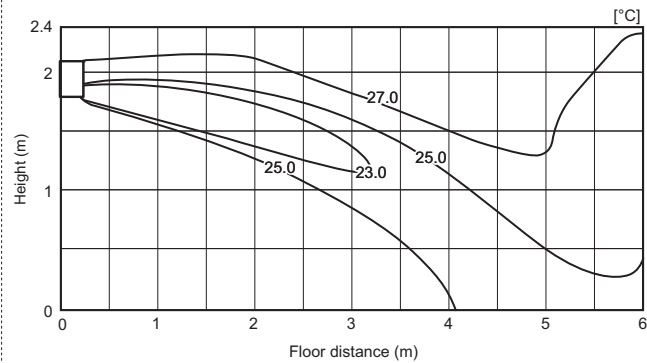


Note : These figures show typical temperature distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

PKFY-WL25VLM-E

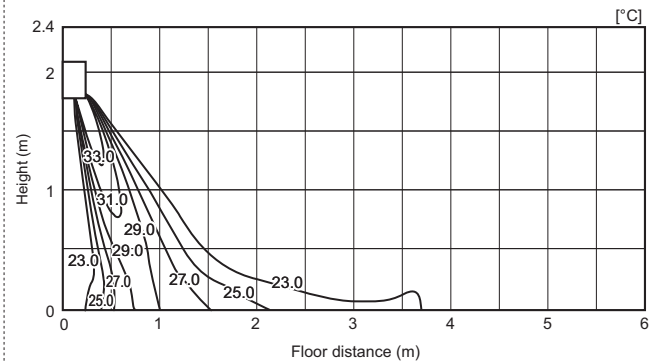
<Cooling mode>

Horizontal air flow



<Heating mode>

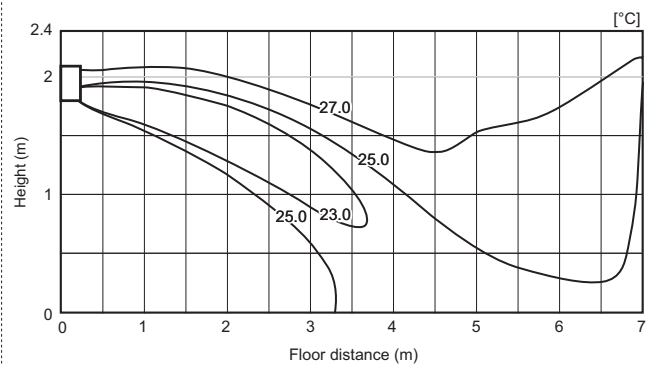
Downward air flow



PKFY-WL32VLM-E

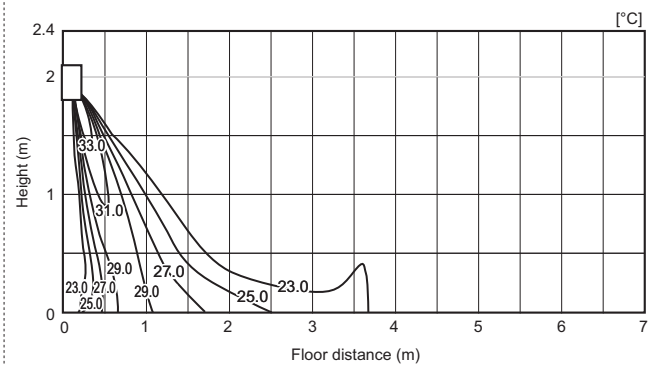
<Cooling mode>

Horizontal air flow



<Heating mode>

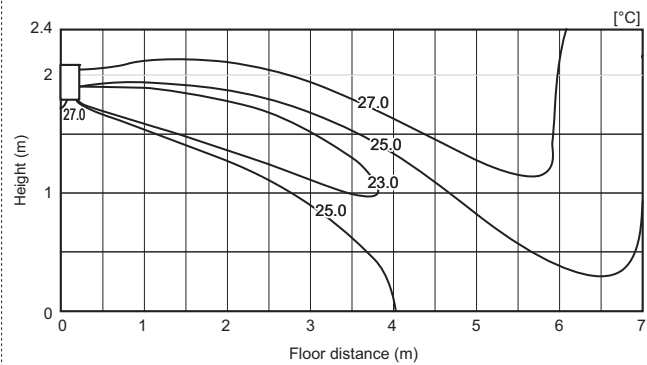
Downward air flow



PKFY-WL40VLM-E

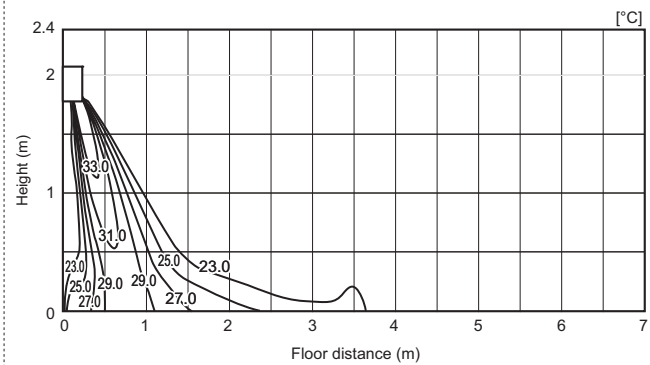
<Cooling mode>

Horizontal air flow



<Heating mode>

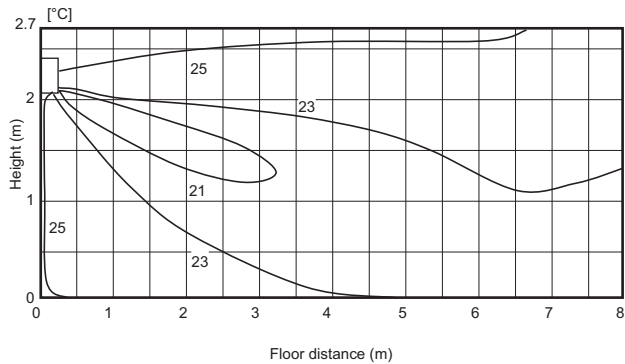
Downward air flow



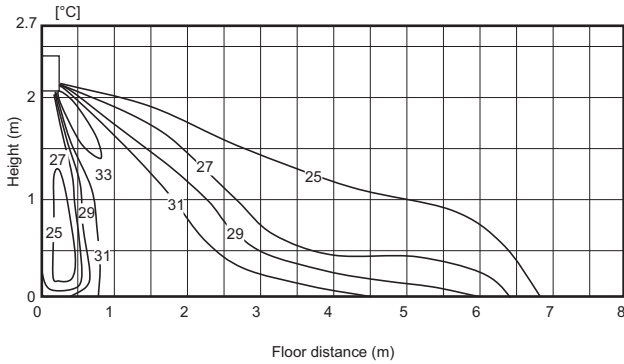
Note : These figures show typical temperature distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

PKFY-P50, 63, 80VKM-E

<Cooling mode>
Horizontal air flow



<Heating mode>
Downward air flow



Note : These figures show typical temperature distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

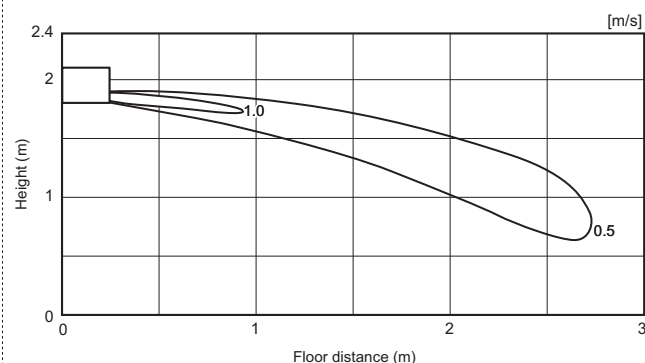
PKFY-WL-VLM-E, VKM-E

6-2. Airflow distributions

PKFY-WL10VLM-E

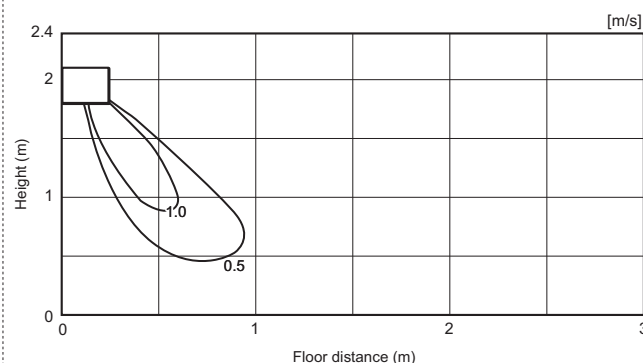
<Cooling mode>

Horizontal air flow



<Heating mode>

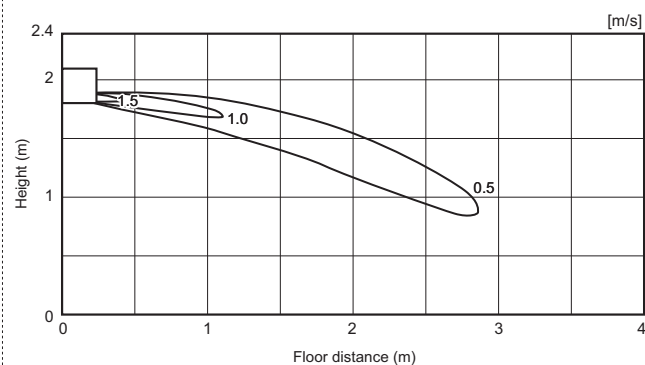
Downward air flow



PKFY-WL15VLM-E

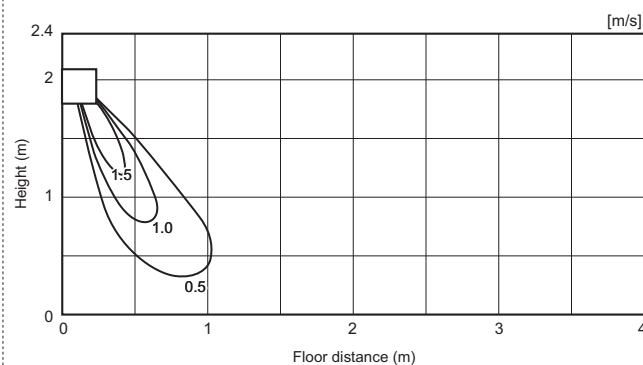
<Cooling mode>

Horizontal air flow



<Heating mode>

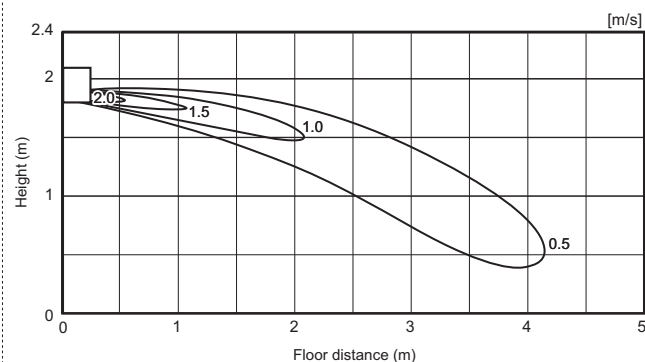
Downward air flow



PKFY-WL20VLM-E

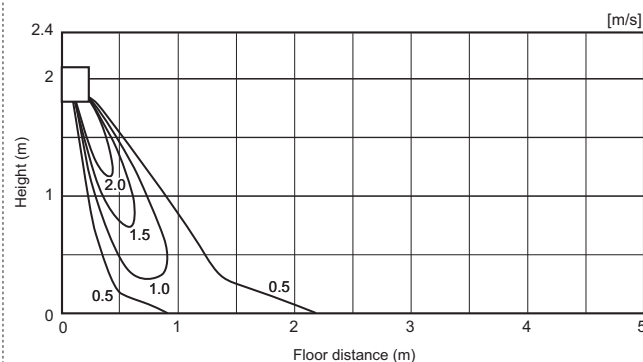
<Cooling mode>

Horizontal air flow



<Heating mode>

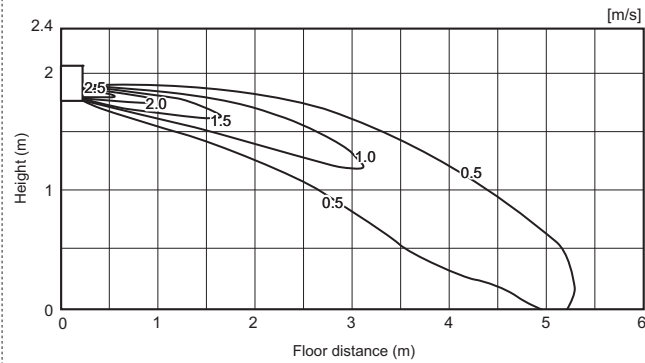
Downward air flow



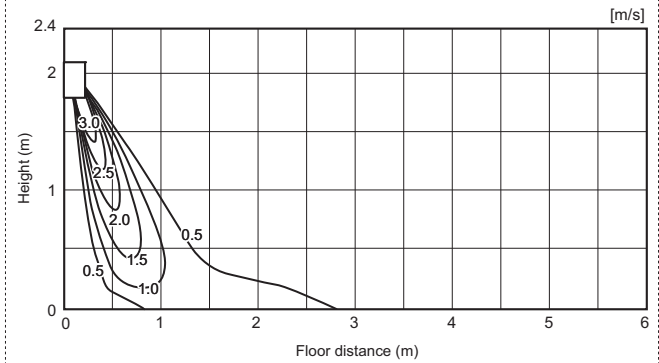
Note : These figures show typical airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

PKFY-WL25VLM-E**<Cooling mode>**

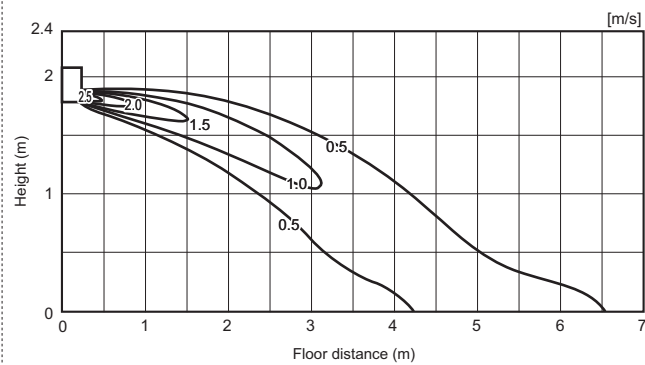
Horizontal air flow

**<Heating mode>**

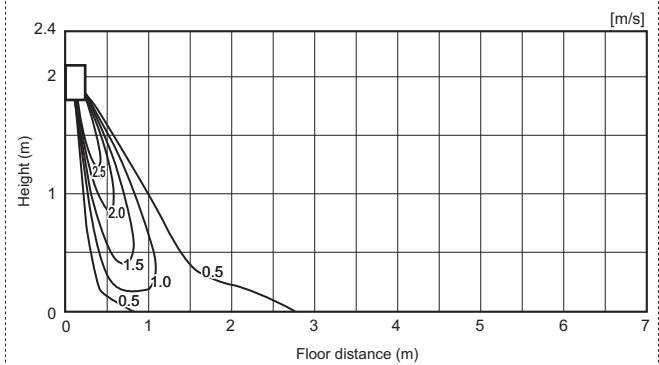
Downward air flow

**PKFY-WL32VLM-E****<Cooling mode>**

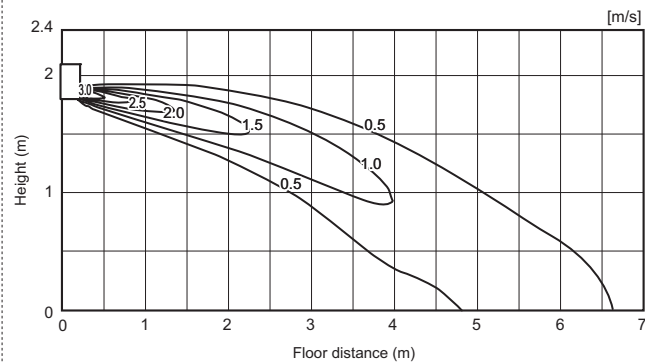
Horizontal air flow

**<Heating mode>**

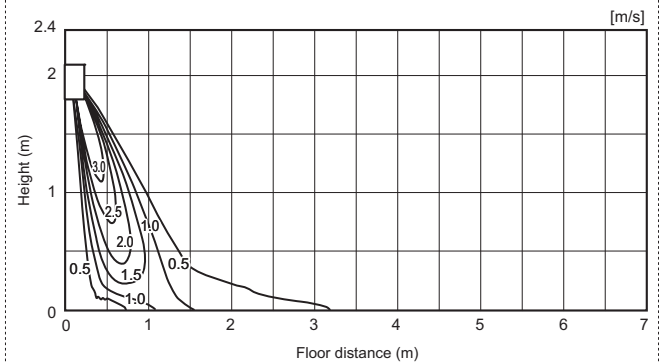
Downward air flow

**PKFY-WL40VLM-E****<Cooling mode>**

Horizontal air flow

**<Heating mode>**

Downward air flow

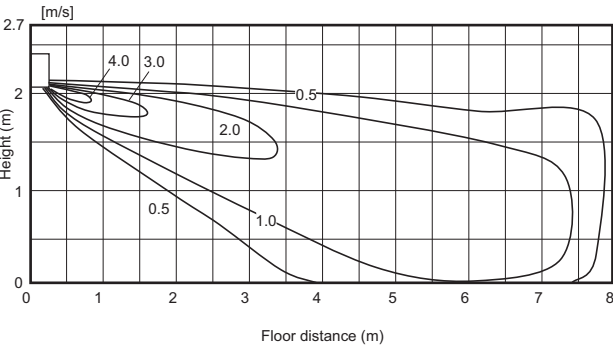


Note : These figures show typical airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

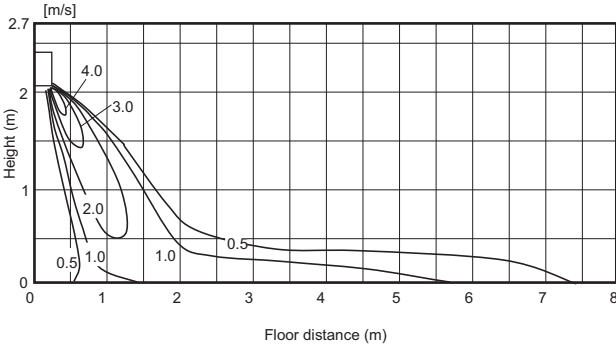
PKFY-WL-VLM-E, VKM-E

PKFY-P50, 63, 80VKM-E

<Fan mode>
Horizontal air flow



<Fan mode>
Downward air flow



Note : These figures show typical airflow distributions in the conditions above. In the actual installation, they may differ from these figures under the influence of air temperature conditions, ceiling height, cooling/heating load, obstacles, etc.

Symbols: MCA (Max.Circuit Amps =1.25xFLA), FLA (Full Load Amps)
IFM (Indoor Fan Motor), Output (Fan motor rated output)

	Power supply			IFM	
	Volts/Hz	Range +-10%	MCA(A)	Output (kW)	FLA(A)
PKFY-WL10VLM-E	220-240V/50Hz 220V/60Hz	Max.: 264V Min.: 198V	0.25	0.030	0.20
PKFY-WL15VLM-E			0.25	0.030	0.20
PKFY-WL20VLM-E			0.32	0.030	0.25
PKFY-WL25VLM-E			0.44	0.030	0.35
PKFY-WL32VLM-E			0.44	0.030	0.35
PKFY-WL40VLM-E			0.57	0.030	0.45
PKFY-WL50VKM-E			0.58	0.069	0.46
PKFY-WL63VKM-E			0.70	0.069	0.56
PKFY-WL80VKM-E			0.95	0.069	0.76

PKFY-WL-VLM-E, VKM-E

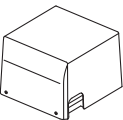
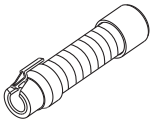
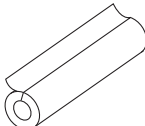
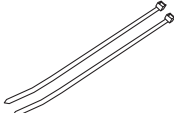
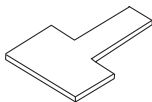
8-1. Optional parts line up for the Indoor unit

	Description	Model
PKFY-WL-VLM-E	Drain pump kit	PAC-SK01DM-E
	Valve kit	PAC-SK35VK-E
	Attachment plate	PAC-SK39AP-E
	6m Lead wire	PAC-SK40LW-E
PKFY-WL-VKM-E	Drain pump kit	PAC-SK19DM-E
	Valve kit	PAC-SK35VK-E
	Attachment plate	PAC-SK39AP-E
	6m Lead wire	PAC-SK40LW-E

8-2. Drain pump

PAC-SK01DM-E

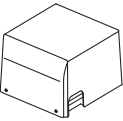
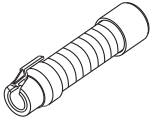
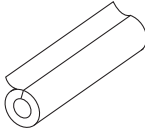
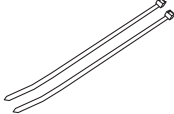
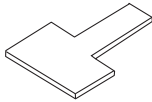
If drain water can not flow out the Indoor unit by gravity and gradient, a Drain-pump for draining is needed.
 Drain pump PAC-SK01DM-E can pump water up to 850mm [33-1/2 in.] high from the drain pan.

Item	① Drain pump	② Screw	③ Drain hose	④ Flexible hose cover	⑤ Band
Quantity	1	(M4×16)×1, (M4×35)×6	1	1	2
Shape					
Item	⑥ Paper gauge				
Quantity	1				
Shape					

Detailed installation information should be referred to its Installation Manual.

PAC-SK19DM-E

If drain water can not flow out the Indoor unit by gravity and gradient, a Drain-pump for draining is needed.
 Drain pump PAC-SK19DM-E can pump water up to 850mm [33-1/2 in.] high from the drain pan.

Item	① Drain pump	② Screw	③ Drain hose	④ Flexible hose cover	⑤ Band
Quantity	1	(M4×16)×1, (M4×35)×6	1	1	2
Shape					
Item	⑥ Paper gauge				
Quantity	1				
Shape					

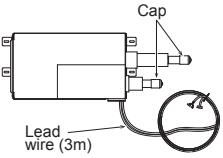
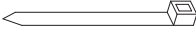
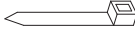
Detailed installation information should be referred to its Installation Manual.

8-3. Valve kit

Valve kit is necessary for using HVRF-Y system

In an HVRF-R2 system, if a valve kit is connected to any of the WL indoor units, all other indoor units must also have a valve.

The table below summarizes the connectability of different combinations of indoor units.

Item	VALVE KIT	Band (large)	Band (small)	Screw
Quantity	1	1	1	8
Shape				

Outdoor Unit	Indoor Unit			Connection
	A	B	C	
HVRF-R2 System	WLV	WLV	-	Connectable
	WLV	W	-	Connectable
	WLV	WL	-	Not connectable
	WLV	WP	-	Not connectable
	WLV	WL	W	Not connectable
	WLV	WL	WP	Not connectable
	WLV	W	WP	Not connectable
	WL	WL	-	Connectable
	WL	WP	-	Connectable
	WL	W	-	Not connectable
	WL	WP	W	Not connectable
	W	WP	-	Not connectable

WLV = (E)WL-Type (With an optional valve kit)

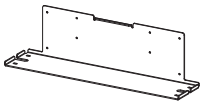
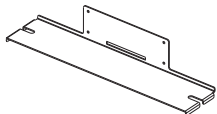
WL = (E)WL-Type (Without an optional valve kit)

WP = WP-Type (Without a built-in valve and not compatible with the optional valve kit)

W = W-Type (With a built-in valve)

8-4. Attachment plate

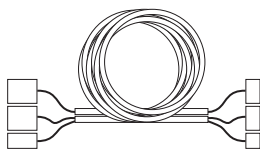
When installing the valve kit on the ceiling plate or hanging it from the ceiling, the use of an attachment plate (PAC-SK39AP-E) is recommended.

Item	Attachment-1	Attachment-2
Quantity	1	1
Shape		

8-5. 6m Lead wire

The lead wire attached to the valve kit is 3 meters. If a longer lead wire is needed, use an optional part PAC-SK40LW-E (6m).

Note that the maximum allowable piping distance between the valve kit and the indoor unit is 5 meters.

Item	Lead wire (6m)	Band (large)
Quantity	1	
Shape		



for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

⚠ Warning

- Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
 - Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
 - It may also be in violation of applicable laws.
 - MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.
- Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A/R32.

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