PUMY-SM SERIES

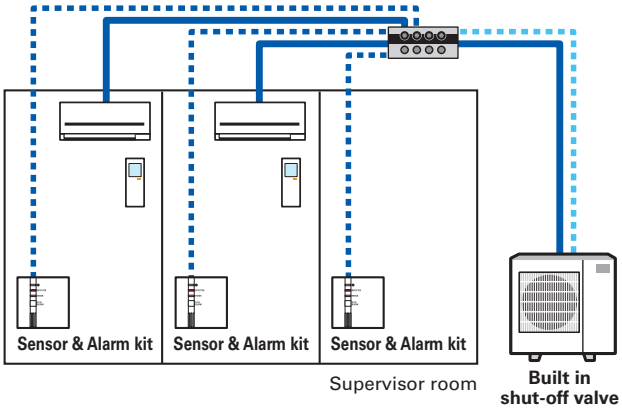
Air conditioning system supports replacement work by simplifying the installation process. Ideal for supporting renewal needs at small offices and stores, home offices, etc.

R32

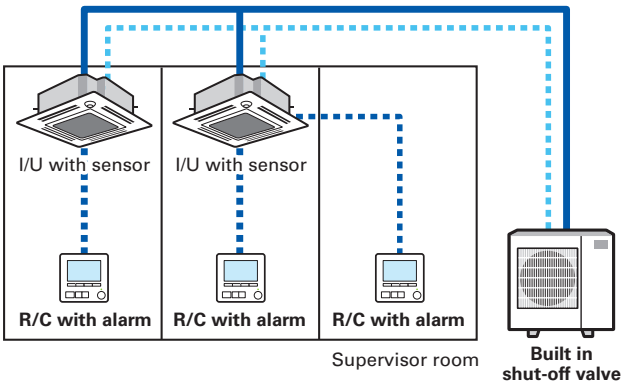
PUMY-SM112/125/140VKM
PUMY-SM112/125/140YKM

System of R32 PUMY

Branch box system



Free plan system



✻ Solid lines are refrigerant piping. Dotted lines are communication lines.

Summary of System Component

■ S&A kit • Remote controller

	Appearance	System	Features
S&A kit	PAC-SK60SA-E 	• Branch box	• Connected from branch box • Sensor and alarm in the device • Have 3 types of LED (operation, detection, error) • Detection of refrigerant leakage, a kit alerts and LED flashes in red • Alarm can be stopped only by a kit in a room that refrigerant leakage occurred
Remote controller	PAR-41MAAB 	• Free Plan	• Connected from indoor unit • Alarm in the device • Have a display • In case of refrigerant leakage, R/C alerts and error code and address of indoor unit is shown • Alarm can be stopped by a R/C in a room that refrigerant leakage occurred and a supervisor room

✻ Can be used as a Wired remote control in a Branch box system. However, in this case, a separate S/A kit connection is required.

■ Branch box

			
Model name		PAC-MMK40BC(B)	PAC-MMK60BC
Number of ports		4 ports	6 ports
Refrigerant		R32	R32
Input(kW)		0.003	0.006
Running current(A)		0.15	0.30
Size(mm)	H	170	170
	W	450	665
	D	372	420
Installation	Ceiling-suspended	✓	✓
	Floor-standing	✓	✓
	Vertical	✓	✓
	No need drainpan	✓	✓
Connection	Flare connection	✓	✓
	Blazing	✓	–

Branch Piping(ø) liquid/gas [mm]		
	1st	6.35/9.52
	2nd	6.35/9.52
	3rd	6.35/12.7
	4th	6.35/9.52
	5th	6.35/9.52
	6th	9.52/15.88

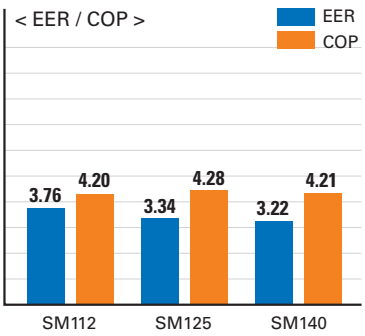
Piping/ Wiring
- Piping connection from both side and wiring connection from one side.
- If necessary, you need to flip over only electrical box to connect from the other side.

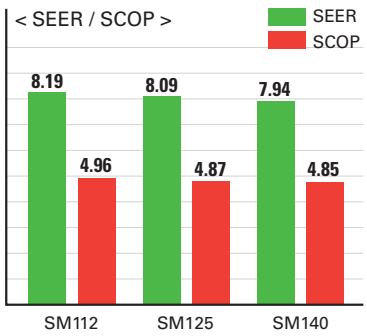
Instability
- Possible to make piping connection from both side.
- Flipping over only electrical box is not difficult for installer.
- ø9.52/ø15.88 can be connected to a large indoor unit placed in a living room or other large room.

Energy Efficiency

Even with its compact size and light-weight, it has a high EER and COP. Costs are reduced with the energy saving abilities.

✻ Temperature conditions
EER : Indoor 27°C DB / Outdoor 35°C DB
COP : Indoor 20°C DB / Outdoor 7°C DB
SCOP/SEER: Based on ErP Lot 21/6 calculation method to EN14825.

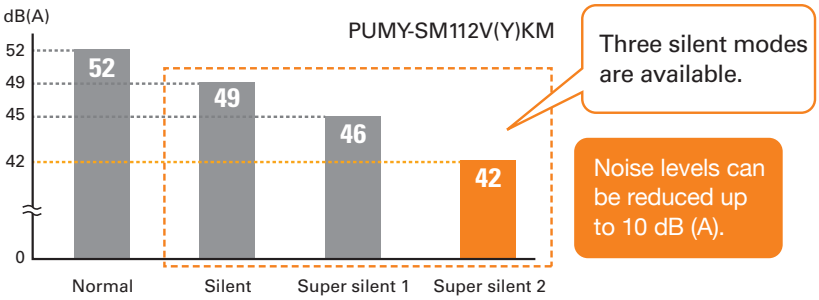




Super Silent Mode*

- Noise level can be reduced up to 10dB(A).
- This allows you to operate the unit even in the night in a residential zone.

✻ Capacity reduction differs by mode setting.
✻ PAC-SC36NA-E is required to activate Super Silent mode.
✻ Cooling mode only.



PUMY-SM SERIES
INVERTER MULTI

Model				PUMY-SM112VKM	PUMY-SM125VKM	PUMY-SM140VKM	PUMY-SM112YKM	PUMY-SM125YKM	PUMY-SM140YKM
Power source				1-phase 220-230-240V 50Hz, 220V 60Hz			3-phase 380-400-415V 50Hz, 380V 60Hz		
Cooling Capacity (Nominal)			kW	12.5	14.0	15.5	12.5	14.0	15.5
	Power Input		kW	3.32	4.19	4.81	3.32	4.19	4.81
	Current Input		A	15.40 - 14.73 - 14.12 / 15.40	19.43 - 18.59 - 17.81 / 19.43	22.45 - 21.47 - 20.58 / 22.45	5.31 - 5.04 - 4.86 / 5.31	6.70 - 6.37 - 6.14 / 6.70	7.74 - 7.35 - 7.09 / 7.74
	EER		kW / kW	3.76	3.34	3.22	3.76	3.34	3.22
Temp. Range of Cooling	Indoor Temp.*1		W.B.	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)	15.0~24.0°C (59~75°F)
	Outdoor Temp.*2*3		D.B.	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)	-5.0~52.0°C (23~126°F)
Heating Capacity (Nominal)			kW	14.0	16.0	17.5	14.0	16.0	17.5
	Power Input		kW	3.33	3.74	4.16	3.33	3.74	4.16
	Current Input		A	15.45 - 14.77 - 14.16 / 15.45	17.30 - 16.55 - 15.86 / 17.30	19.25 - 18.41 - 17.64 / 19.25	5.33 - 5.06 - 4.88 / 5.33	5.97 - 5.67 - 5.46 / 5.97	6.64 - 6.31 - 6.08 / 6.64
	COP		kW / kW	4.20	4.28	4.21	4.20	4.28	4.21
Temp. Range Of Heating	Indoor Temp.		D.B.	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C (59~81°F)	15.0~27.0°C(59~81°F)
	Outdoor Temp.		W.B.	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°F)	-20.0~15.0°C (-4~59°F)
Indoor Unit Connectable	Total Capacity			50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity	50~130 % of outdoor unit capacity
	Model / Quantity		City Multi	10-140/12	10 - 140 / 12	10 - 140 / 12	10 - 140 / 12	10 - 140 / 12	10 - 140 / 12
			Branch Box	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
		Branch box 1unit	City Multi	10 - 140 / 3 or 5*4	10 - 140 / 3 or 5*4	10 - 140 / 3 or 5*4	10 - 140 / 3 or 5*4	10 - 140 / 3 or 5*4	10 - 140 / 3 or 5*4
			Branch Box	15 - 100 / 4 or 6*5	15 - 100 / 4 or 6*5	15 - 100 / 4 or 6*5	15 - 100 / 4 or 6*5	15 - 100 / 4 or 6*5	15 - 100 / 4 or 6*5
		Branch box 2unit	City Multi	10 - 140 / 2 or 3*6	10 - 140 / 2 or 3*6	10 - 140 / 2 or 3*6	10 - 140 / 2 or 3*6	10 - 140 / 2 or 3*6	10 - 140 / 2 or 3*6
			Branch Box	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8	15 - 100 / 8
Sound Presuure Level (Cooling/Heating)			dB <A>	52/54	53/56	54/56	52/54	53/56	54/56
Sound Power Level (Cooling/Heating)			dB <A>	72/74	74/76	74/76	72/74	74/76	74/76
Refrigerant Piping Diameter	Liquid Pipe		mm (in.)	9.52 Flare	9.52 Flare	9.52 Flare	9.52 Flare	9.52 Flare	9.52 Flare
	Gas Pipe		mm (in.)	15.88 Flare	15.88 Flare	15.88 Flare	15.88 Flare	15.88 Flare	15.88 Flare
Fan	Type × Quantity			Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1	Propeller Fan × 1
	Air Flow Rate		m^3/min	77	83	83	77	83	83
			L/s	1,283	1,383	1,383	1,283	1,383	1,383
			cfm	2,719	2,931	2,931	2,719	2,931	2,931
	Motor Output		kW	0.20 × 1	0.20 × 1	0.20 × 1	0.20 × 1	0.20 × 1	0.20 × 1
	External Static Press.			0Pa / 30Pa*7	0Pa / 30Pa*7	0Pa / 30Pa*7	0Pa / 30Pa*7	0Pa / 30Pa*7	0Pa / 30Pa*7
Compressor	Type × Quantity			Twin rotary hermetic compressor × 1					
	Starting Method			Inverter					
	Motor Output		kW	2.3	2.6	3.0	2.3	2.6	3.0
External Dimension H*W*D			mm	981 × 1,050 × 330 (+40)					
			in.	38-5/8 × 41-3/8 × 13 (+1-37/64)					
Net Weight			kg (lbs)	95 (209)*8			97(214) *9		
Pre-Charged Quantity	Weight		kg	3.0	3.0	3.0	3.0	3.0	3.0
	CO_2 equivalent		t	2.03	2.03	2.03	2.03	2.03	2.03
Max System Quantity	Weight		kg	7.5	7.5	7.5	7.5	7.5	7.5
	CO_2 equivalent		t	5.06	5.06	5.06	5.06	5.06	5.06

*1 15 to 23°C when using branch box(M/S/P series)
*2 10 to 52°C: incase of connecting PKFY-MS*VKM, PKFY-MS*VLM indoor unit and M series, S series and P series type indoor unit with branch box.
*3 -15 to 52:, when using an optional air protect guide [PAC-SH95AG-E]. However, this condition does not apply to the indoor unit listed in*1.
*4 When connected branch box is PAC-MMK60BC, connectable City Multi indoor units are 3; connected branch box is PAC-MMK40BC(B), connectable City Multi indoor units are 5.
*5 When connected branch box is PAC-MMK40BC(B), connectable indoor units via branch box are 4; connected branch box is PAC-MMK60BC, connectable indoor units via branch box are 6.
*6 When connected branch boxes are PAC-MMK40BC(B) and PAC-MMK60BC, connectable City Multi indoor units are 2; connected branch boxes are PAC-MMK40BC(B) and PAC-MMK40BC(B), connectable City Multi indoor units are 3; connected branch boxes are PAC-MMK60BC and PAC-MMK60BC are not allowed.
*7 0 Pa as initial setting
*8 96 (212), for PUMY-SM112/125/140VKM-BS
*9 98 (216), for PUMY-SM112/125/140YKM-BS

Indoor unit connectable table

Model		PUMY-SM112V(Y)KM	PUMY-SM125V(Y)KM	PUMY-SM140V(Y)KM
CM Indoor Only		12	12	12
Branch Box Only		8	8	8
Mix System	CM Indoor	3	3	3
Branch Box 1unit	Branch Box	6	6	6
PAC-MMK60BC		9	9	9
Mix System	CM Indoor	5	5	5
Branch Box 2unit	Branch Box	4	4	4
PAC-MMK40BC(B)		9	9	9
Mix System	CM Indoor	2	2	2
Branch Box 2unit	Branch Box	8	8	8
PAC-MMK60BC + PAC-MMK40BC(B)		10	10	10
Mix System	CM Indoor	3	3	3
Branch Box 2unit	Branch Box	8	8	8
PAC-MMK40BC(B) 2unit		11	11	11