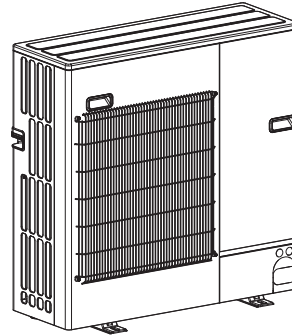


**PUZ-ZM35VKA
PUZ-ZM50VKA**



**PUZ-ZM60VHA
PUZ-ZM71VHA**

CHARGELESS SYSTEM

PRE-CHARGED REFRIGERANT IS SUPPLIED FOR PIPING LENGTH AT SHIPMENT

Maximum 30 m (PUZ-ZM35–71)

The refrigerant circuit with LEV (Linear Expansion Valve) and power receiver always control the optimal refrigerant level regardless of the length (30 m maximum and 5 m minimum) of piping. The additional refrigerant charging work during installation often causes problems. It is completely eliminated by chargeless system. This unique system improves the quality and reliability of the work done. It also helps to speed up the installation time.

Service Ref.				PUZ-ZM35VKA		PUZ-ZM50VKA	
Mode				Cooling	Heating	Cooling	Heating
OUTDOOR UNIT	Power supply (phase, cycle, voltage)			Single, 50Hz, 230V			
	Max. current		A	13		13	
	External finish			Munsell 3Y 7.8/1.1			
	Refrigerant control			Linear Expansion Valve			
	Compressor			Hermetic			
	Model		kW	SVB140FFSM		SVB140FFSM	
	Motor output			0.6		0.9	
	Starter type			Inverter			
	Protection devices			HP switch Comp.shell thermo			
	Crankcase heater		W	—			
	Heat exchanger			Plate fin coil			
	Fan	Fan(drive) × No.		Propeller fan × 1			
		Fan motor output		0.046			
		Airflow		45 (1,590)			
	Defrost method			Reverse cycle			
	Sound pressure level		dB	44			
		Cooling	dB	46			
	Dimensions	Heating	mm (inch)	809 (31-13/16)			
		W	mm (inch)	300 (11-3/16)			
		D	mm (inch)	630 (24-13/16)			
Weight	H	kg (lb)	46 (101)		46 (101)		
Refrigerant			R32				
	Charge		kg (lb)		2.0 (4.4)		
	Oil (Model)		L		0.35 (FW68S)		
REFRIGERANT PIPING	Pipe size O.D.		Liquid	mm (inch)		6.35 (1/4)	
			Gas	mm (inch)		12.7 (1/2)	
	Connection method		Indoor side	Flared			
			Outdoor side	Flared			
	Between the indoor & outdoor unit	Height difference		Maximum 30 m			
		Piping length		Maximum 50 m			

Service Ref.				PUZ-ZM60VHA		PUZ-ZM71VHA		
Mode				Cooling	Heating	Cooling	Heating	
OUTDOOR UNIT	Power supply (phase, cycle, voltage)			Single, 50Hz, 230V				
	Max. current		A	19				
	External finish			Munsell 3Y 7.8/1.1				
	Refrigerant control			Linear Expansion Valve				
	Compressor			Hermetic				
	Model			SVB172FFUM1				
	Motor output		kW	1.1		1.2		
	Starter type			Inverter				
	Protection devices			HP switch Comp.shell thermo				
	Crankcase heater		W	—				
	Heat exchanger			Plate fin coil				
	Fan	Fan(drive) × No.		Propeller fan × 1				
		Fan motor output		kW	0.06			
		Airflow		m²/min (CFM)	55 (1,940)			
	Defrost method			Reverse cycle				
	Sound pressure level	Cooling	dB	47				
		Heating	dB	49				
	Dimensions	W	mm (inch)	950 (37-3/8)				
		D	mm (inch)	330+30 (13+1-3/16)				
		H	mm (inch)	943 (37-1/8)				
Weight		kg (lb)	70 (154)					
Refrigerant			R32					
	Charge		kg (lb)	2.8 (6.2)		0.70 (FW68S)		
	Oil (Model)		L	0.70 (FW68S)		0.70 (FW68S)		
REFRIGERANT PIPING	Pipe size O.D.	Liquid	mm (inch)	9.52 (3/8)				
		Gas	mm (inch)	15.88 (5/8)				
	Connection method	Indoor side		Flared				
		Outdoor side		Flared				
	Between the indoor & outdoor unit	Height difference		Maximum 30 m				
		Piping length		Maximum 55 m				

5-1. REFILLING REFRIGERANT CHARGE (R32: kg)

Service Ref.	Piping length (one way)							Initial charged
	10 m	20 m	30 m	40 m	50 m	55 m	75 m	
PUZ-ZM35VKA PUZ-ZM50VKA	2.0	2.0	2.0	2.15	2.3	—	—	2.0
PUZ-ZM60VHA PUZ-ZM71VHA	2.8	2.8	2.8	3.2	3.6	3.6	—	2.8

Additional charge is required for pipes longer than 30 m.

5-2. COMPRESSOR TECHNICAL DATA

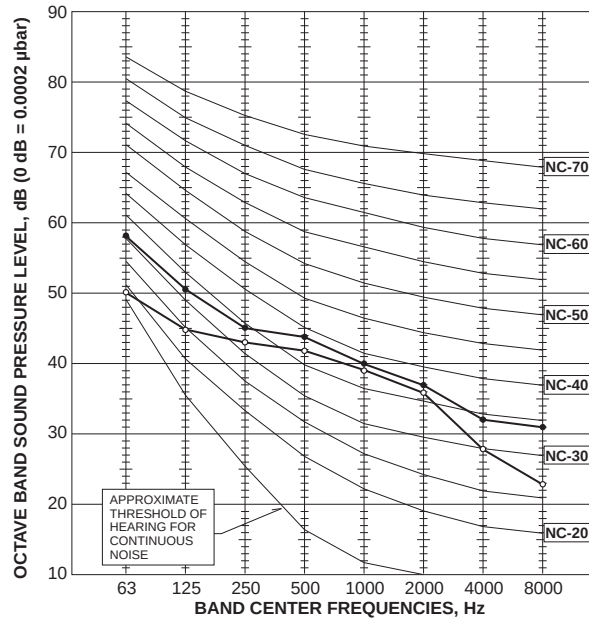
(at 20°C)

Service Ref.		PUZ-ZM35VKA PUZ-ZM50VKA	PUZ-ZM60VHA PUZ-ZM71VHA
Compressor model		SVB140FFSM	SVB172FFUM1
Winding	U-V	1.45	1.16
Resistance	U-W	1.45	1.16
(Ω)	W-V	1.45	1.16

5-3. NOISE CRITERION CURVES

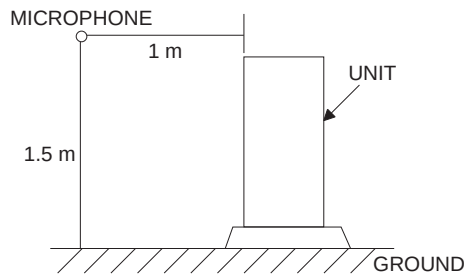
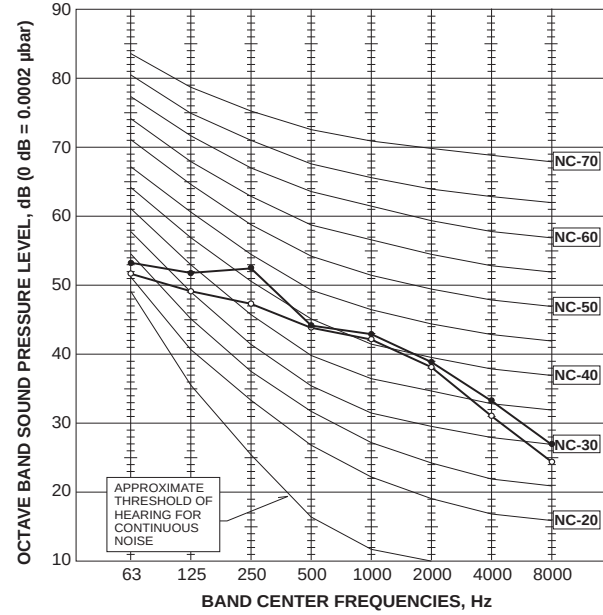
PUZ-ZM35VKA
PUZ-ZM50VKA

MODE	SPL(dB)	LINE
COOLING	44	○—○
HEATING	46	●—●



PUZ-ZM60VHA
PUZ-ZM71VHA

MODE	SPL(dB)	LINE
COOLING	47	○—○
HEATING	49	●—●



5-4. STANDARD OPERATION DATA

Representative matching				PLA-ZM35EA		PLA-ZM50EA		PLA-ZM60EA		PLA-ZM71EA		
Mode				Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating	
Total	Capacity		W	3,600	4,100	5,000	6,000	6,100	7,000	7,100	8,000	
	Input		kW	0.71	0.82	1.11	1.36	1.45	1.71	1.65	1.82	
Electrical circuit	Indoor unit			PLA-ZM35EA		PLA-ZM50EA		PLA-ZM60EA		PLA-ZM71EA		
	Phase , Hz			1 , 50		1 , 50		1 , 50		1 , 50		
	Voltage		V	230		230		230		230		
	Current		A	0.21	0.19	0.22	0.20	0.22	0.20	0.34	0.32	
	Outdoor unit			PUZ-ZM35VKA		PUZ-ZM50VKA		PUZ-ZM60VHA		PUZ-ZM71VHA		
	Phase , Hz			1 , 50		1 , 50		1 , 50		1 , 50		
	Voltage		V	230		230		230		230		
	Current		A	3.17	3.53	4.80	5.85	5.66	6.77	6.70	7.46	
Refrigerant circuit	Discharge pressure		MPaG	2.51	2.04	2.68	2.44	2.62	2.54	2.72	2.32	
	Suction pressure		MPaG	1.12	0.74	1.02	0.69	1.00	0.72	1.03	0.70	
	Discharge temperature		℃	65	72	76	87	79	85	77	81	
	Condensing temperature		℃	42	34	44	41	44	43	45	39	
	Suction temperature		℃	15	9	13	6	15	4	13	4	
	Ref. pipe length		m	5	5	5	5	5	5	5	5	
Indoor side	Intake air temperature		D.B.	℃	27	20	27	20	27	20	27	20
			W.B.	℃	19	15	19	15	19	15	19	15
	Discharge air temperature		D.B.	℃	17.5	30.8	15.5	35.5	13.4	38.9	14.5	35.9
Outdoor side	Intake air temperature		D.B.	℃	35	7	35	7	35	7	35	7
			W.B.	℃	24	6	24	6	24	6	24	6
SHF				0.97	—	0.81	—	0.73	—	0.82	—	
BF				0.18	—	0.17	—	0.13	—	0.10	—	

The unit of pressure has been changed to MPaG based on international SI system.
The conversion factor is : 1(MPaG)=10.2(kgf/cm²)

PUZ-ZM35VKA

PUZ-ZM50VKA

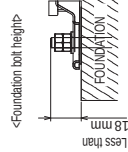
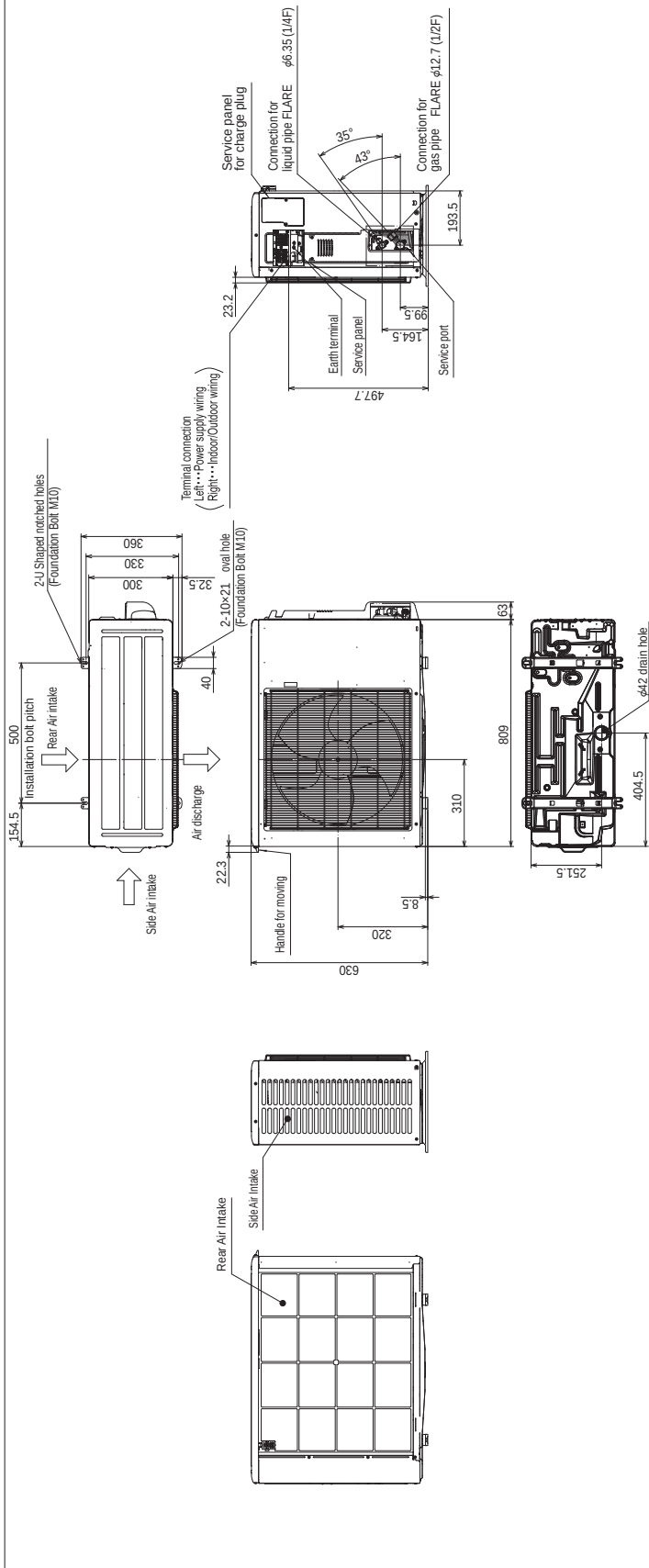
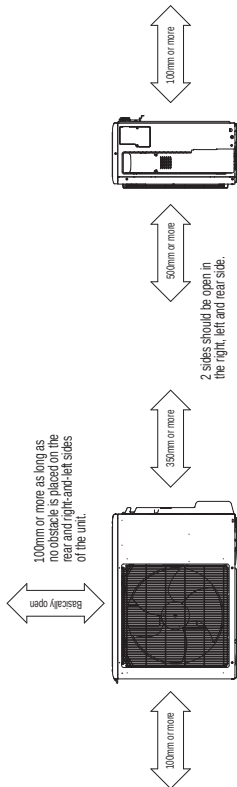
Unit: mm (inch)

PIPING-WIRING DIRECTION

Piping and wiring connection can be made from the rear direction only.

FOUNDATION BOLTS

Please secure the unit firmly with 4 foundation (M10) bolts. (Bolts, washers and nut must be purchased locally).

Free space around the outdoor unit
(basic example)

PUZ-ZM60VHA

PUZ-ZM71VHA

Unit: mm (inch)

