



Inverter Condensing Unit



BEIJER REF

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Inverter Condensing Unit

Key Benefits



Dramatic reduction in power consumption

Power consumption caused by On/Off cycles is greatly reduced



No complaint about operational noise level

Compressor and fan motor run at optimal levels according to desired conditions



Optimal temperature control to meet various operating conditions

Compressor speed can be varied up to 90Hz and down to 30Hz to meet various desired conditions



Smart remote control

Real-time remote control with mobile app



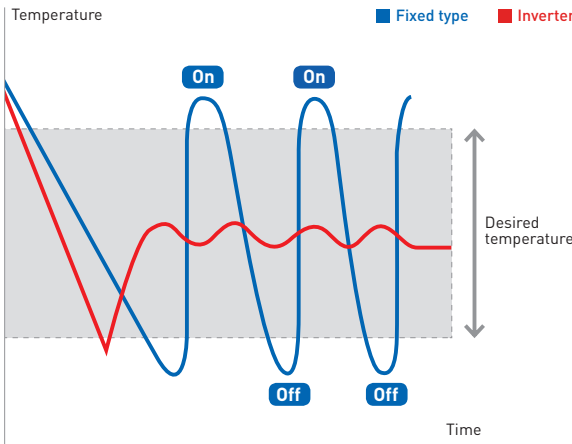
Electrical cost reduction up to

39%

Noise level reduction up to

20%

Comparison Graph of Inverter and Fixed Type



Comparison Table of Inverter and Fixed Type

Section	Fixed type	Inverter type
Compressor Speed	Constant speed at 50/60Hz	At variable speed ranges from 30 to 90Hz
Desired room temperature	It could take a longer time to achieve desired room temperature due to constant compressor speed	Temperature could be achieved sooner
Desired temperature interval control	On/Off cycles result in higher power consumption and inaccurate temperature control	Variable compressor speed to maintain accurate temperature control



Medium Temperature

Section		Unit	Inverter Air-Cooled Type					
			CIR020SMAI(D)	CIR030SMAI(D)	CIR040SMAI(D)	CIR050SMAI(D)	CIS080SMAI(D)	CIS100SMAI(D)
Nominal Output		HP	2	3	4	5	8	10
Refrigeration Ton		RT	0.55	0.92	1.10	1.58	2.0	2.5
Electrical Supply			220V-60/50Hz-1Ph		380V-60/50Hz-1Ph/3Ph	380V-60/50Hz-3Ph	380-400V~, 60/50Hz, 3Ph	
Refrigerant Type, Evaporating Temperature		°C	R410A, +10 ~ -10					
Operating Ambient Temperature		°C	-20 ~ +40					
Compressor	Type		Inverter BLDC Twin Rotary				Inverter BLDC Scroll	
	Rated Output	kW	1.5	2.2	3.0	3.7	5.5	7.5
	Displacement	m³/h	3.13	5.26	6.26	8.98	11.23	14.21
	Rated Ampere	Amp	6	13	13.7	14	19.5	25.0
Condenser	Type		Corrugated FIN & CU Tube					
	Fan Diameter	mm	500		500 x 2EA			550 x 2EA
	Motor Output	W	BLDC 64		BLDC 64 x 2EA			BLDC 178 x 2EA
Refrigeration Oil	Model		POE				PVE OIL (FVC68D)	
	Oil Charge	ℓ	0.5	0.7	1.2	1.7	1.7	1.7
Receiver Tank		ℓ	2.4	2.4	4.2	4.2	7.8	10
Accumulator			Installation					
Safety Equipment			High & Low Pressure Sensor, Temperature Sensor					
Inner Parts			Solenoid Valve, Filter Drier, Sight Glass, Check Valve(Independent Type)					
Control Panel Parts			Inverter, Terminal Block, Harness					
Connection Tube	Suction line	mm	Φ12.7	Φ12.7	Φ15.88	Φ19.05	Φ25.4	Φ28.58
	Liquid line	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Ext. Dimension	L	mm	907	907	907	907	1287	1287
	W	mm	320	320	320	320	565	565
	H	mm	820	820	1360	1360	1442	1699
Weight		kg	55	57	84	89	126	145

Low Temperature

Section		Unit	Inverter Air-Cooled Type					
			CIR020SLZI(D)	CIR030SLZI(D)	CIR040SLZI(D)	CIR050SLZI(D)	CIS080SMAI(D)	CIS100SMAI(D)
Nominal Output		HP	2	3	4	5	8	10
Refrigeration Ton		RT	0.35	0.58	1.11	1.45	2.0	2.5
Power			220V-60/50Hz-1Ph				380-400V~, 60/50Hz, 3Ph	
Refrigerant Type, Evaporating Temperature		°C	R410A, -5 ~ -40				R410A, -5 ~ -32	
Operating, Ambient Temperature		°C	20 ~ +40					
Compressor	Type		Inverter BLDC Twin Rotary				Inverter BLDC Scroll	
	Displacement	m³/h	2.83	4.77	9.14	11.92	11.23	14.21
	Rated Ampere	Amp	6.3	10.1	11.2	14.6	19.5	25
Condenser	Type		Corrugated FIN & CU Tube					
	Fan Diameter	mm	500		500 x 2EA			550 x 2EA
	Motor Output	W	BLDC 64		BLDC 64 x 2EA			BLDC 178 x 2EA
Refrigeration Oil	Model		POE(VG74)				PVE OIL (FVC68D)	
	Oil Charge	ℓ	0.65	0.9	1.9		1.7	
Receiver Tank		ℓ	2.4	2.4	4.2	4.2	7.8	10
Accumulator			Installation					
Safety Equipment			Pressure Sensor, Temperature Sensor, Comp. Thermometer					
Inner Parts			Solenoid Valve, Filter Drier, Sight Glass, Injection System, Check Valve					
Control Panel Parts			Inverter, Terminal Block, Harness					
Connection Tube	Suction line	mm	Φ12.7	Φ15.88	Φ15.88	Φ19.05	Φ25.4	Φ28.58
	Liquid line	mm	Φ9.52	Φ9.52	Φ9.52	Φ12.7	Φ12.7	Φ12.7
Ext. Dimension	L	mm	907	907	907	907	1287	1287
	W	mm	320	320	320	320	565	565
	H	mm	820	820	1360	1360	1442	1699
Weight		Kg	56	58	86	90	126	145