

BEIJER REF

Singapore



INVERTER CONDENSING UNIT

 **Muller**

Inverter Condensing Unit Key Benefits



Dramatic reduction in power consumption

Power consumption caused by On/Off cycles is greatly reduced

Electrical cost reduction up to
15-25%*



No complaint about operational noise level

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

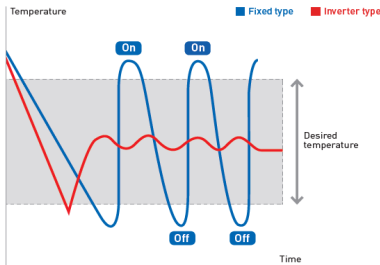
Noise level reduction up to
20%*



Optimal temperature control to meet various operating conditions

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

Comparison Graph 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

* Based on the factory's laboratory tests.

Nomenclature

B(1)D(2)(3)030(4)M(5)R1(6)Y(7)C-S(8)

Manufacturer Brand	1	B	Beijer Ref
Codensing unit	2	D	CDU
Series	3	I	Inverter
Nominal HP	4	030	030/10=3HP
Temp	5	M	Medium Temp.
		L	Low Temp.
Generation index	6	R1	Generation index
Oils	7	Y	POE oil
Power	8	C-S	1~220V,50/60Hz
		D-S	3~380V,50/60Hz

Technical Data

Unit model	Compressor model	RLA Amps	MCC Amps	Oil Separator Precharge (L)	Compressor Oil Quantity (L)	Air Flow (m3/h)	Fan Motor (mm)	Max. Total Fan Power (W)	Receiver (L)	Suction Tube Size	Liquid Tube Size	Weight (kg)
BDI020LR2YC-S	DTH254LDPC9EQ	12.0	15.0	0.45	1.65	3550	1 x 480	120	2.5	5/8"	1/2"	81
BDI030LR2YC-S	DTH356LDPC9EQ	15.3	23.0	0.45	1.65	3400	1 x 480	120	2.5	3/4"	1/2"	83
BDI040LR2YC-S	DTH356LDPC9EQ	18.7	23.5	0.45	1.65	3400	1 x 480	120	2.5	3/4"	1/2"	83
BDI050LR2YC-S	DTH420LDPC9EQ	21.9	27.0	0.45	1.65	3400	1 x 480	120	2.5	7/8"	1/2"	84
BDI060LR2YC-S	DTH420LDPC9EQ	23.6	27.0	0.45	1.65	3400	1 x 480	120	2.5	7/8"	1/2"	84
BDI080LR2YD-S	DTE752LKTQ9JK	10.5	18.0	0.60	2.00	10000	2 x 560	500	6.0	1-1/8"	5/8"	185
BDI100LR2YD-S	DTE752LKTQ9JK	14.5	18.6	0.60	2.00	10000	2 x 560	500	6.0	1-1/8"	5/8"	185
BDI020MR1YC-S	DTH254LDPC9EQ	9.3	16.6	0.50	1.65	3400	1 x 480	120	2.5	5/8"	1/2"	77
BDI030MR1YC-S	DTH254LDPC9EQ	12.8	17.1	0.50	1.65	3400	1 x 480	120	2.5	5/8"	1/2"	77
BDI040MR1YC-S	DTH356LDPC9EQ	17.7	26.5	0.50	1.65	6800	2 x 480	240	6.0	3/4"	1/2"	115
BDI050MR1YC-S	DTH356LDPC9EQ	19.9	26.5	0.50	1.65	6800	2 x 480	240	6.0	3/4"	1/2"	115
BDI060MR1YC-S	DTH420LDPC9EQ	20.8	30.0	0.50	1.65	6800	2 x 480	240	6.0	7/8"	1/2"	116
BDI100MR1YD-S	DTE752LKTQ9JK	11.6	18.3	0.60	2.00	10000	2 x 560	500	6.0	1-1/8"	5/8"	165
BDI120MR1YD-S	DTE752LKTQ9JK	16.0	22.0	0.60	2.00	10000	2 x 560	500	6.0	1-1/8"	5/8"	165

Technical Data

LT range:

LT Inverter

Unit model	Power Supply	Parameter	Ambient Temp (° C)	-40	-35	-30	-25	-23	-20
BDIO20LR2YC-S	1~220V - 50/60Hz	Capacity (kW)	32	1.87	2.35	2.88	3.55	3.90	4.31
			38	1.72	2.26	2.67	3.35	3.71	4.15
			43	1.64	2.08	2.59	3.29	3.49	3.73
		Power Input (kW)	32	2.17	2.31	2.36	2.44	2.62	2.82
			38	2.34	2.40	2.55	2.66	2.82	2.99
			43	2.60	2.70	2.86	2.99	3.15	3.24
BDIO30LR2YC-S	1~220V - 50/60Hz	Capacity (kW)	32	2.43	3.04	3.72	4.58	4.87	5.47
			38	2.24	2.92	3.48	4.33	4.65	5.10
			43	2.09	2.64	3.24	4.11	4.30	4.76
		Power Input (kW)	32	2.78	2.95	3.06	3.16	3.35	3.41
			38	2.99	3.06	3.28	3.46	3.56	3.74
			43	3.28	3.46	3.66	3.82	3.99	4.18
BDIO40LR2YC-S	1~220V - 50/60Hz	Capacity (kW)	32	2.98	3.68	4.67	5.52	5.89	6.61
			38	2.84	3.62	4.38	5.18	5.55	6.09
			43	2.67	3.40	4.03	4.86	5.07	5.62
		Power Input (kW)	32	3.20	3.41	3.45	3.77	3.87	3.92
			38	3.46	3.61	4.15	4.32	4.16	4.38
			43	3.74	3.88	4.15	4.39	4.58	4.80
BDIO50LR2YC-S	1~220V - 50/60Hz	Capacity (kW)	32	3.22	4.03	4.89	5.82	6.32	6.97
			38	3.20	3.83	4.60	5.54	5.93	6.52
			43	2.91	3.61	4.32	5.24	5.54	6.25
		Power Input (kW)	32	2.45	3.68	3.99	4.31	4.47	4.72
			38	3.93	4.23	4.46	4.83	4.97	5.20
			43	4.15	4.46	4.91	5.32	5.55	5.82
BDIO60LR2YC-S	1~220V - 50/60Hz	Capacity (kW)	32	3.49	4.37	5.31	6.42	6.86	7.55
			38	3.47	4.16	4.99	6.01	6.43	7.07
			43	3.16	3.92	4.69	5.68	6.01	6.77
		Power Input (kW)	32	4.13	4.36	4.56	4.72	4.89	5.15
			38	4.30	4.62	4.87	5.28	5.43	5.69
BDIO80LR2VD-S	3~380V - 50/60Hz	Capacity (kW)	32	4.29	5.61	6.98	8.43	8.98	9.98
			38	4.19	5.36	6.50	7.81	8.44	9.54
			43	4.01	5.08	6.15	7.46	8.12	9.07
		Power Input (kW)	32	4.40	4.87	5.10	5.32	5.43	5.52
			38	4.97	5.36	5.58	5.94	5.99	6.16
			43	5.33	5.68	6.00	6.39	6.46	6.61
BDIO100LR2VD-S	3~380V - 50/60Hz	Capacity (kW)	32	5.14	6.72	8.37	10.1	10.77	11.97
			38	4.95	6.43	7.79	9.36	10.12	11.44
			43	4.28	6.09	7.37	8.94	9.74	10.87
		Power Input (kW)	32	6.26	6.93	7.26	7.57	7.72	7.86
			38	7.07	7.63	7.94	8.45	8.52	8.77
			43	7.57	8.08	8.54	9.10	9.19	9.40

Technical Data

MT range:

MT Inverter

Unit model	Power Supply	Parameter	Ambient Temp (° C)	-15	-10	-7	-5	0	5
BDI020MR1YC-S	1~220V - 50/60Hz	Capacity (kW)	32	3.28	3.92	4.36	4.64	5.44	6.24
			38	3.05	3.64	4.01	4.28	5.00	5.81
			43	2.84	3.46	3.84	4.11	4.78	5.30
		Power Input (kW)	32	1.57	1.72	1.78	1.85	2.00	2.18
			38	1.69	1.84	1.92	1.98	2.17	2.38
			43	1.80	1.95	2.04	2.12	2.30	2.46
BDI030MR1YC-S	1~220V - 50/60Hz	Capacity (kW)	32	4.60	5.49	6.10	6.50	7.61	8.73
			38	4.26	5.09	5.61	6.01	7.08	8.27
			43	3.97	4.85	5.37	5.75	6.68	7.41
		Power Input (kW)	32	2.38	2.61	2.70	2.79	3.03	3.31
			38	2.56	2.78	2.90	2.99	3.28	3.61
			43	2.73	2.95	3.09	3.21	3.48	3.73
BDI040MR1YC-S	1~220V - 50/60Hz	Capacity (kW)	32	6.28	7.47	8.29	8.81	10.32	11.67
			38	5.83	6.93	7.71	8.17	9.33	10.71
			43	5.35	6.49	7.06	7.57	8.64	9.95
		Power Input (kW)	32	3.18	3.46	3.64	3.75	4.03	4.34
			38	3.40	3.70	3.84	4.01	4.31	4.69
			43	3.59	3.92	4.10	4.25	4.58	5.00
BDI050MR1YC-S	1~220V - 50/60Hz	Capacity (kW)	32	6.98	8.30	9.21	9.79	11.13	12.96
			38	6.48	7.70	8.57	9.08	10.36	11.9
			43	5.94	7.21	7.84	8.41	9.60	11.06
		Power Input (kW)	32	3.65	3.97	4.18	4.30	4.63	4.99
			38	3.91	4.25	4.47	4.65	4.95	5.39
			43	4.12	4.51	4.71	4.89	5.27	5.74
BDI060MR1YC-S	1~220V - 50/60Hz	Capacity (kW)	32	7.44	8.96	10.02	10.77	12.08	14.88
			38	6.82	8.22	9.21	9.86	11.68	13.67
			43	6.32	7.61	8.47	9.11	10.81	12.67
		Power Input (kW)	32	4.15	4.45	4.56	4.79	5.12	5.62
			38	4.56	4.98	5.22	5.43	5.74	6.15
BDI100MR1YD-S	3~380V - 50/60Hz	Capacity (kW)	32	10.72	12.41	13.84	14.78	17.15	19.18
			38	9.85	11.61	12.80	13.76	16.18	18.23
			43	9.01	11.18	11.98	12.96	15.44	17.44
		Power Input (kW)	32	5.28	5.30	5.44	5.50	5.54	5.66
			38	5.93	6.01	6.03	6.08	6.16	6.28
			43	6.03	6.51	6.56	6.58	6.77	6.91
BDI120MR1YD-S	3~380V - 50/60Hz	Capacity (kW)	32	12.85	14.88	16.81	17.73	20.56	22.99
			38	11.82	13.92	15.34	16.50	19.40	21.86
			43	10.80	13.41	14.37	15.54	18.51	20.92
		Power Input (kW)	32	7.51	7.55	7.65	7.83	7.89	8.05
			38	8.44	8.55	8.57	8.65	8.77	8.94
			43	8.59	9.27	9.34	9.37	9.64	9.83

Note:

Refrigerant: R404A.

Oil Type: RL68-H.

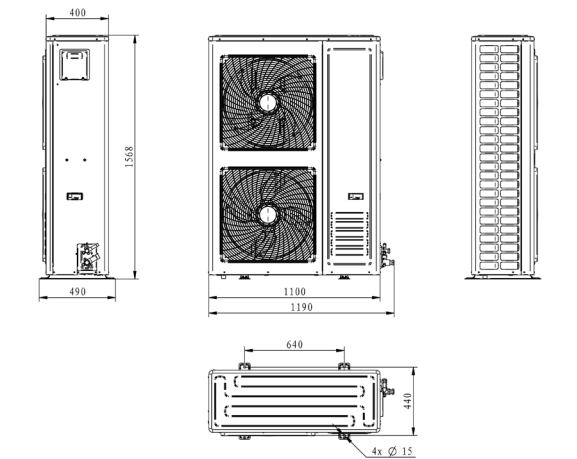
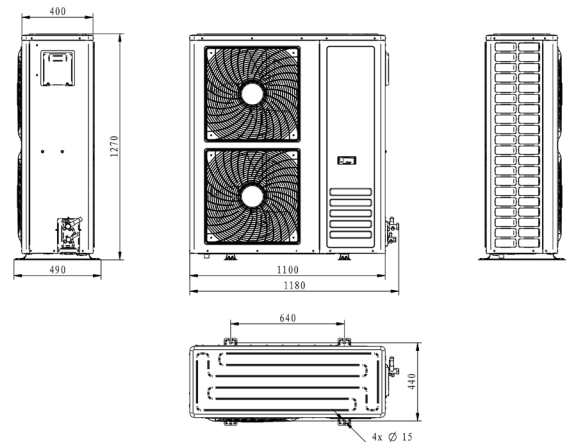
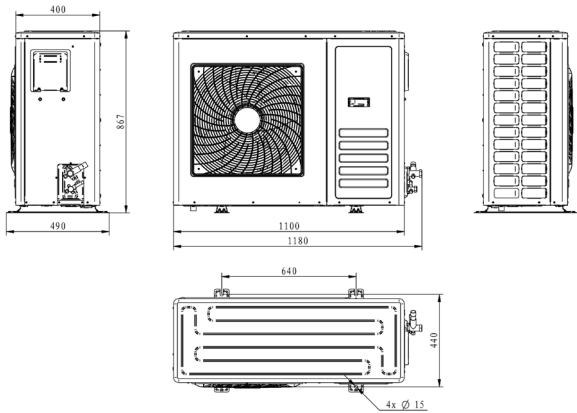
The rated values are maximum cooling capacity and power input.

The rated values for the LT range are based on a return gas temperature of 5°C . The rated values for the MT range are based on a return gas temperature of 18 °C .

(While the technical data above is specified for R404A, the unit can be configured for other refrigerant types upon request. Available options are for R507A, R448A, R449A & R410A)

Dimensions

Inverter



TYPE I

Model	Liquid Line	Suction Line	Net Weight(kg)
BDI020LR2YC-S	1/2"	5/8"	81
BDI030LR2YC-S	1/2"	3/4"	83
BDI040LR2YC-S	1/2"	3/4"	83
BDI050LR2YC-S	1/2"	7/8"	84
BDI060LR2YC-S	1/2"	7/8"	84
BDI020MR1YC-S	1/2"	5/8"	77
BDI030MR1YC-S	1/2"	5/8"	77

TYPE II

Model	Liquid Line	Suction Line	Net Weight(kg)
BDI040MR1YC-S	1/2"	3/4"	115
BDI050MR1YC-S	1/2"	3/4"	115
BDI060MR1YC-S	1/2"	7/8"	116

TYPE III

Model	Liquid Line	Suction Line	Net Weight(kg)
BDI080LR2YD-S	5/8"	1-1/8"	185
BDI100LR2YD-S	5/8"	1-1/8"	185
BDI100MR1YD-S	5/8"	1-1/8"	165
BDI120MR1YD-S	5/8"	1-1/8"	165

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