

DIU Series

**Box Type with Invotech DC Inverter Scroll
Compressor and Panasonic DC Inverter Rotary
Compressor**





DIU Series



Box-type Condensing Unit With Inverted DC Inverter
Scroll Compressor and Panasonic DC Inverter Rotary Compressor





SAUVERAIN



SAUVERAIN

DIU Series

Box-type Condensing Unit With Invotech DC Inverter Scroll Compressor and Panasonic DC Inverter Rotary Compressor

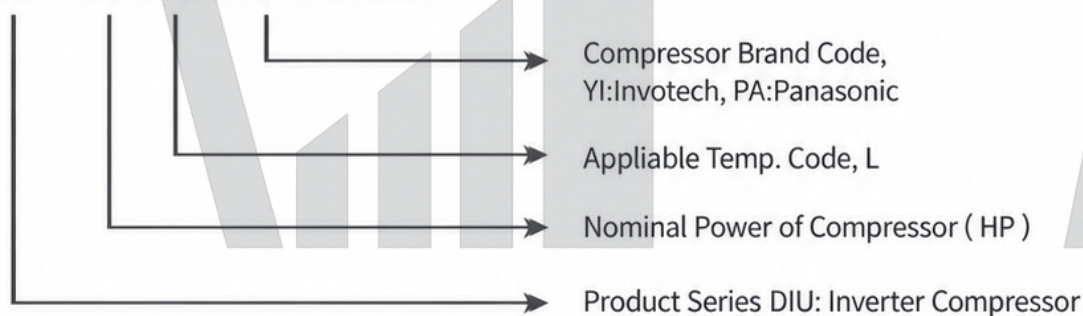


1. Product Description:

- 1 This series of products is mainly developed for commercial and supermarket applications. Can save about 20% of electricity bill every day;
- 2 The unit adopts Invotech YIM DC inverter scroll compressor and Panasonic DC Inverter Rotary Compressor;
- 3 Air conditioning type case is adopted, Adopted EC motor and low noise fan. It is very suitable for residential area;
- 4 The compressor and condenser can be divided into two cases according to the requirements of customers;
- 5 The unit is equipped with oil separator and accumulator, unit control and fan speed regulation, etc. It is especially suitable for convenience store and supermarket refrigeration system;
- 6 With phase sequence, phase loss, over current, discharge temperature, system high and low pressure protection and fault alarm and recording functions;
- 7 It can meet the requirements of R404A, R507A, R448A, R449A and other refrigerants;
- 8 Hot gas system or Electric frost can choose;

2. Model Description:

DIU 05 L YI - R





3. Technical Data

3.1 Invotech DC Inverter Scroll Compressor

Model		DIU 03LYIR	DIU 05LYIR	DIU 08LYIR
Power Supply		380-420V/3~/50Hz or 460V/3~/60Hz		
Apply Temp.		-20°C - 0°C	-20°C - 0°C	-20°C - 0°C
GAS		R404A / R507A / R448A / R449A		
Compressor	Model	YIM38E1G-100	YIM50E1G-100	YIM72E1G-100
	Speed Range RPM	1800 - 5400	1800 - 5400	1800 - 5400
	Max Current (Drive Input Side) A	10	12.5	20
Fan	Power Supply	230V/1/50Hz	230V/1/50Hz	230V/1/50Hz
	Current (A)	1.92	1.45 X2	1.92 X2
	Power (W)	227	227 X2	300 X2
	RPM	500 - 1600	500 - 1600	500 - 1600
Suction Line (mm)		19	19	22
Liquid Line (mm)		16	16	16
dBA		65	65	65
Product Size	L (mm)	1200	1200	1497
	W (mm)	510	510	570
	H (mm)	510	1098	1326
Install A×B mm*mm		715*470	715*470	990*530

3.2 Cooling Capacity Data

Model	Rps	Cooling capacity Q / input power P (W/W)													
		-30°C		-25°C		-20°C		-15°C		-10°C		-5°C		0°C	
		Q	P	Q	P	Q	P	Q	P	Q	P	Q	P	Q	P
DIU03LYIR	30	903	1496	1166	1533	1478	1564	1848	1591	2287	1614	2805	1634	3411	1653
	60	1563	2197	2019	2255	2558	2305	3200	2347	3959	2384	4856	2416	5907	2447
	75	2401	3127	3101	3214	3930	3288	4915	3351	6082	3406	7459	3454	9073	3499
	90	2903	3723	3749	3829	4751	3918	5942	3995	7353	4061	9018	4119	10969	4174
DIU05LYIR	30	1194	1948	1543	1994	1955	2033	2445	2067	3026	2096	3711	2122	4514	2145
	60	2079	2852	2684	2925	3403	2988	4254	3042	5266	3088	6458	3130	7855	3168
	75	3135	4078	4049	4189	5132	4284	6417	4365	7942	4435	9740	4498	11847	4555
	90	3749	4883	4843	5019	6138	5135	7675	5234	9499	5320	11649	5397	14169	5466
DIU08LYIR	30	1608	2694	2077	2758	2632	2813	3292	2859	4074	2900	4996	2936	6077	2969
	60	2784	3921	3596	4023	4558	4110	5700	4184	7054	4248	8650	4305	10522	4358
	75	4277	5550	5524	5701	7001	5831	8755	5941	10835	6037	13288	6122	16163	6200
	90	5171	6594	6679	6777	8464	6935	10585	7068	13100	7184	16065	7287	19541	7382

Test Conditions: Cond. temp. 45°C, superheat 10K, subcooling 0K.



4.1 Panasonic DC Inverter Rotary Compressor

Model		DIU	DIU	DIU
		03LPAR	05LPAR	08LPAR
Voltage and Frequency		380 - 420V / 3~ / 50Hz or 460V / 3~ / 60Hz		
Temperature		-20°C to 0°C	-20°C to 0°C	-20°C to 0°C
Gas		R410A	R410A	R410A
Compressor	Model	9RD220ZAA2J	9KD420ZAA2J	H550D5VZAAJ2
	Speed Range (RPM)	1800 -- 5400	1800 -- 5400	1800 -- 5400
	Maximum Current (Driver Input Side) A	10	12.5	20
Condenser Fan	Voltage and Frequency	230V / 1 / 50Hz	230V / 1 / 50Hz	230V / 1 / 50Hz
	Current (A)	1.92	1.45 x 2	1.92 x 2
	Power (W)	227	227 x 2	300 x 2
	Rotational Speed (RPM)	500 -- 1500	500 -- 1500	500 -- 1500
Suction Line (mm)		19	19	22
Liquid Line (mm)		16	16	16
Noise (dBA)		/	/	/
Size	L (mm)	1200	1200	1497
	W (mm)	510	510	570
	H (mm)	698	1098	1326
Installation Dimensions (mm * mm)		715 * 470	715 * 470	990 * 530



4.2 Cooling Capacity Data

Condensing Unit Model	Capacity Q / Input Power P (W/W) The data is based on a condensation temperature of 45°C.								
	Compressor Speed (RPS)		Evaporation Temperature °C						
			-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C
03LPAR	30	Q	1033	1021	1251	1521	1833	2188	2591
		P	909	785	822	844	855	862	868
	50	Q	1831	2262	2773	3371	4062	4850	5743
		P	1432	1547	1620	1663	1684	1697	1711
	75	Q	2746	3393	4160	5056	6092	7275	8615
		P	2148	2321	2430	2494	2527	2546	2566
	90	Q	3284	4058	4975	6047	7286	8701	10303
		P	2625	2836	2970	3048	3088	3111	3136
05LPAR	30	Q	1971	1948	2389	2903	3499	4178	4947
		P	1735	1499	1570	1611	1632	1645	1658
	50	Q	3495	4318	5294	6435	7754	9259	10964
		P	2734	2954	3093	3174	3216	3240	3266
	75	Q	5243	6477	7941	9653	11631	13889	16446
		P	4101	4431	4640	4761	4824	4860	4899
	90	Q	6270	7746	9497	1154	13911	16611	19669
		P	5011	5415	5669	5818	5895	5939	5987
08LPAR	30	Q	2581	2551	3128	3802	4581	5471	6478
		P	2271	1963	2056	2110	2138	2154	2171
	50	Q	4577	5655	6933	8427	10154	12125	14358
		P	3580	3868	4051	4157	4211	4243	4277
	75	Q	6866	8482	10399	12641	15231	18187	21537
		P	5370	5802	6076	6235	6317	6365	6416
	90	Q	8211	10144	12438	15118	18216	21752	25758
		P	6562	7090	7425	7620	7719	7777	7840

The parameters are for reference only



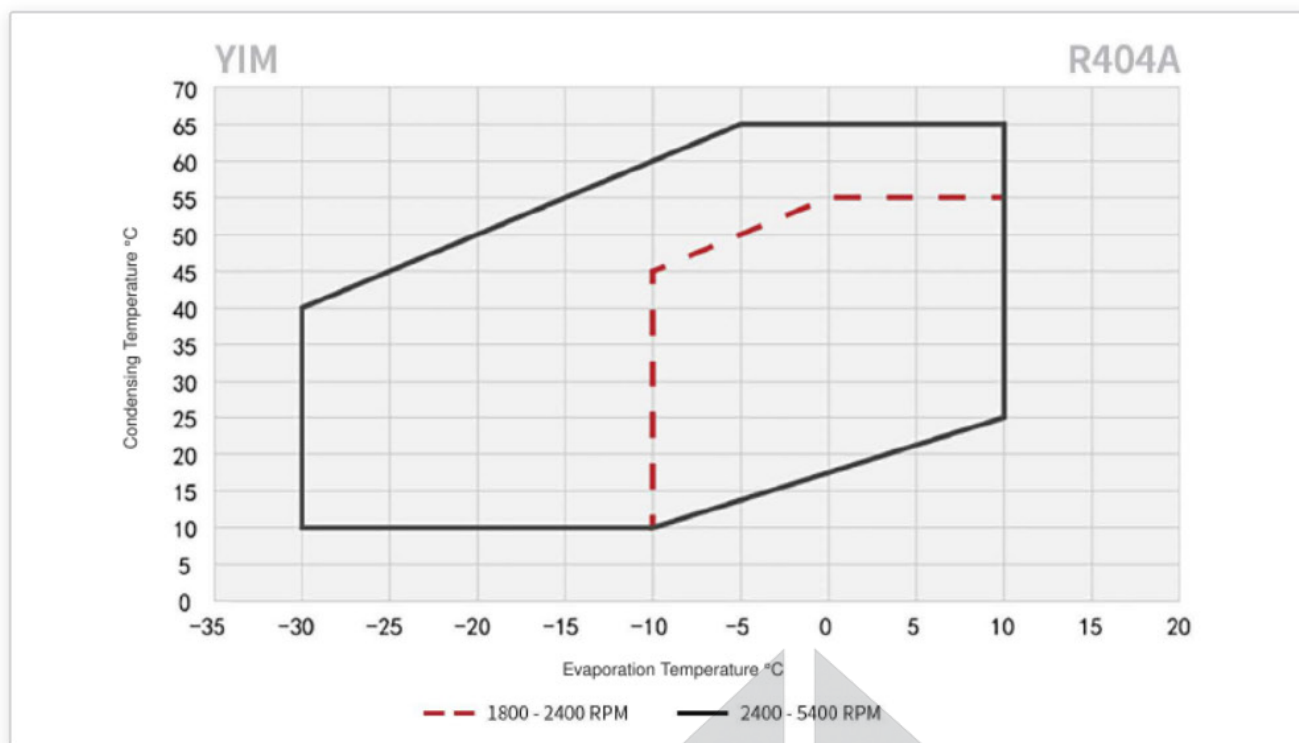
SAUVERAIN



SAUVERAIN

DIU Series

5. Unit Operation Envelope Diagram



6. Dimension Drawing

