

# The Best Partner of your happy life

Since 1924, Daikin Industries Ltd is established in Japan to manufacturer air movement equipment, Closed attention to product quality, coupled with advanced production techniques, soon leads to soaring sales figures, Daikin's expansion into No.1 supplier of comfort cooling and refrigeration in the world.

More than just a major player on the international air conditioning scene, Daikin also represents an unparalleled combination of mechanical ,electronic and chemical expertise, backed by robust and imaginative research and development capabilities.

Air conditioning accounts for 75% of Daikin group sales, and with international moves to protect the environment growing steadily, remains the foundation for future success, Daikin's prime objective therefore is the continuous improvement in personal comfort levels in the home and in the workplace and in this respect ,the new "greener" refrigerant such as R410a produced by the chemical division have a key role to play, Oil hydraulics too, as well as advanced multimedia systems, electronics, cryogenics and robotics area all areas in which Daikin is poised to harness potential and create stable long — term growth.





**Daikin Industries. Co ltd.** is a global leader in the manufacture of commercial-and industrial use air conditioning systems and holds No.1 position of the A/C market share in world. Daikin is also one of the leaders in the fluorochemicals industry and compressors, with an approximately 22% share of the world market. Daikin boasts an unparalleled combination of mechanical, electronic, and chemical expertise as well as robust R & D capabilities. The company continues to leverage these strengths to create new, innovative products and flexible, highly efficient production systems. Daikin is a dynamic global company with a well-established presence in five major areas: Japan, China, Southeast Asia, Europe, and North America. Thus, Daikin is poised to excel in an increasingly borderless business environment







### DAIKIN CHINA

In China, demand for air conditioning is steadily growing as standards of living rise buoyed by the development of the economy. Daikin has established bases in Beijing, Shanghai, Xi'an, Suzhou and other strategic locations to accurately respond to conditions in this vast nation. In addition, because China is a major producer of air-conditioning and compressors, the big market for refrigeration requirement, a complete line of operations, from materials procurement to production and sales, can be carried out.





#### Daikin AC Compressor Co.

It's set up by Daikin Industries Co. joint venture with Chinese Government, It is located in Xi'an Hi-Tech Industrial Development Zone, with an area of 100 acre. With two workshops and an academy of research. It keeps and develops the techniques of manufacturing compressors of Daikin Industries Co. of Japan

Daikin providing the most advanced compressor research and development facilities in the world; we manufacturer Non-Inverter and Inverter compressors and with 30 year experiences
of manufacturing central, Using DAIKIN technology, we have contrived advanced technology, originality, perfect design and precious manufacturing in world leading position Meanwhile,
it keeps track with the advanced techniques in the world, and takes active part in innovations in management and technology. The technology and the quality of our production reaches
the international advanced standard. So far, we are exporting high efficiency compressors to over 19 countries at 1.12 million units per year

\*Products: R22,R407c,R410a scroll compressors from 3.0HP to 25HP,

\*Investment: 27 million US Dollars;

\*Factory area: With total 28,000 sqmrs of building. \*Production ability: 2.0 million units per year;

\*Employees:1270 \*Engineers: 192

\*Approval: ISO9001, ISO14001, ROHS, CE, TUV, UL





## Why Choose Daikin Compressor

- High Reliability
- High Energy-Efficiency
- Wide Operating Range
- Competitive Price
- Quickly Delivery
- Nice Communication
- Technical Support



# Leading global player in compressors

#### • We are offering you superior compressor technology

#### Research and Development

- Taking the responsibility of developing national compressor Industry and devoting to the leading technology research of cooling field, up-to-date, our research directions include:
- The application research of non-KCFC compressor for air-conditioner
- The research and development of new structured resident and commercial use compressor for air-conditioner
- The research and development of digital direct current frequency-changing compressor for air-conditioner

#### • Research and Development Capability

- The (Group) corporation has a national level technology center which stresses the research and development of advanced refrigerating product.
- The (Group) corporation has established a long cooperation relationship with famous scholars and professionals as technology advisers.
- The (Group) corporation owns a young professional team for research and development. Some of them are of master's degree and of creative minds.

#### Producing Capacity

- High precision and high efficiency equipment of world-famous company.
- The product lines for precise machining are controlled by computer. It enjoys high reliability and accuracy.
- Assembling line adopts automatic transmitting and manipulator siting. The key point is assembled and corrected automatically. This results in high
  efficiency and stability.

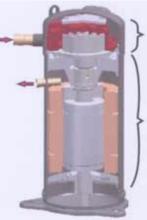
#### Measurement and Testing

- Owning the most advanced testing and noise analyzing system for compressor's performance and kinds of reliable test measurements.
- Owning testing, matching and detecting means for air-conditioning system.
- Owning comparatively complete length, temperature, mechanics and electricity measurement.

#### Daikin Scroll Compressor Advance Technology

We always maintain No.1 energy-efficient in the industry, Daikin is providing to you through the use of advanced scroll technology, through the smooth transfer to achieve a strong power and quiet operation and further improve the reliability of the new scroll compressor

#### **Compressor Structure**



Low Pressure Cavity

Refrigerant has been compressed directly in low pressure cavity (scrolls area ) before entering the high pressure cavity (motor's area), which inhibit the second expansion of the refrigerant, reducing energy loss, and improves efficiency

**High Pressure Cavity** 

Inner Cavity

#### **Proprietary Technology**

#### Oil Level Control Technology

#### In Low Pressure Cavity:

Using pressure difference in compressor internal low pressure area and installation balance tubing to stabilize oil level

#### In High Pressure Cavity:

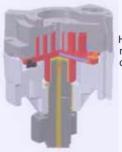
By controlling compressor oil volume to stabilize the oil level, oil surface rises oil increased, oil surface decreases oil to reduce

#### Refrigerant Control Technology

General Scroll Compressor Problem: When large amounts of liquid refrigerant back to the small capacity of the compressor cavity, easily lead to liquid attack so as to cause compressor scrolls broken, and sleeve burned fault

#### **Daikin's Scroll Compressor Solution:**

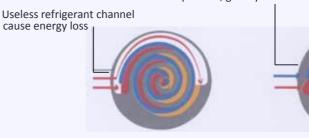
Technology to escape sleeve burned fault: High strength rare earth alloy sleeve Technology to escape liquid attack: Pressure relief valve axial flexible structure



High pressure oil injection conducted reaction force reduces the friction of when orbiting scroll rotate, improves efficiency

Scrolls

By eliminating useless refrigerant channel, reduce refrigerant second expansion, greatly increased efficiency





General Scroll Technology



Daikin Scroll

#### **Advantages**

#### \* High Energy Efficiency

- Highly efficient motor: adopting peculiar designs of there rare earth iron core and winding, thus realizing the high efficiency of motors
- Optimal inter space: optimal designs of the inter space between components and parts in motion, thus realizing the high efficiency of pumps
- Best matching of motors and pumps: adopting analog techniques of computers, thus realizing best matching of motors and pumps, and improving the efficiency of compressors in an all-round way

#### \* Low Noise

- Optimal design of noise reduction: adopting Helmetholz noise reduction equipments and complex noise reduction hood, thus reducing the noise of the specific frequency
- Reducing the noise of exhausts: optimizing the designs of the exhaust valves, thus reducing the noise of exhausts
- Weakening the noise of air-breathing: optimizing designs of air-breathing system, thus reducing the noise of air-breathing.
- Raising precision of processing and assembling: raising precision of processing and assembling, ameliorating the noises of compressors.

#### \* Low Vibration

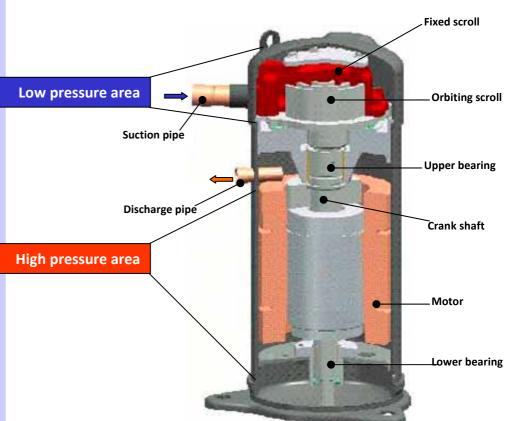
- Pumps with high rigidity: improving the high rigidity, and reducing machinery vibration and noises.
- Precise dynamic balance: precise design of dynamic balance ensures the small vibration of the compressors.

#### \* High Reliability

- Daikin's priority technology: unique high and low pressure cavities design with advanced oil level and refrigerant control technology ensure the compressor with lower liquid attack rate and better full load work resistance in tropical area.
- Reasonable design: optimizing structure parameter, selecting protective equipments, adopting raw materials of high quality, and thus guaranteeing the reliability.
- Strict experiments on reliability: adopting advanced foreign experimental standards, and carrying out overall check on experiments in order to ensure the high reliability of operation of compressors.
- Advanced techniques of producing: importing processing and assembling equipments of famous factories in the world, adopting advanced techniques to guarantee the integrity of precision of parts, function of compressors, and products.
- The complete system of quality guaranteeing: setting up the complete system of quality guaranteeing, and being identified through ISO9001 system

#### \* Wide Application

- Diversified outlines: the entire triangular chassis divided from the middle, or triangular base not divided from the middle can fulfill the users' requirements on different outlines of compressors
- Diversified power-supply patterns: able to supply the whole world with compressors of different power-supply patterns.





# There is still much we can do for the Earth's environment



• Daikin's unique position as a manufacturer of air conditioning equipment, compressor and refrigerants had led to its close involvement in environmental issues, For several years Daikin has had the intention to become a leader in the provision of environmental friendly productions, This challenge demands the eco design and development of a wide range of products and energy management systems ,which involves energy conservation and reduction of waste, thus for this purpose Daikin stuff is trying the best to developing more and more advance HVAC technology with lower energy conservation, lower pollution productions to assures an effective environmental management system in order to help and protect human health and the environment from the potential impact of our activities, products and service and the assist in maintaining and improving the quality of the environment. Therefore all of our productions were identified by Eurovent certification and all of them have obtained the certificate of ROHS. The whole system of machining, assembling and debugging is established by the gaze of ISO14001





# In all of us, a green heart











Main Process of Manufacturing Compressor

Quality components







Shaft fixing



3D measure testing

6



Moment testing



SCR M C machining



Airproof testing



**Running testing** 



Final testing



**Packing** 

#### G MODEL HIGH-EFFICIENCY SCROLL COMPRESSOR

#### G model pertormance features

#### Advantage in high efficiency

Maximum thermal insulation of suction gas Maximum sealing by compliance mechanism and oil film sealing effect Asymmetric scroll

#### Wide operating voltage range

Our compressors are guaranteed within voltage range (± 10%)

#### Advantage in high reliability

Compliance mechanism to with stand liquid attack Low noise and high adaptability to the ambient temperature Dry type journal bearing





#### G Model Scroll Compressor List

REF.	POWER	MODEL	OUTPUT	PERFORMANCE						DISPLACEMENT	TUBE CONNECTION	
				TESTING POWER SOURCE	NOMINAL (KW)	CAPACITY (BTU/H)	INPUT (KW)	CURRENT (A)	C O P (w/w)	(cm²/r)	SUCTION TUBE (mm)	DISCHARGE TUBE (mm)
	3Ph	JT125GA-TAL	4	220V/50Hz	13.23	45150	3.82	12.0	3.5	63.2	Ф 22.35	Ф16
	220V-240V/50Hz	JT160GA-TAL	5	220V/50Hz	16.71	57020	4.82	15.2	3.5	79.2	Ф 22.35	Ф16
	220V-240V/60Hz	JT170GA-TAL	6	220V/50Hz	17.88	61020	5.18	16.1	3.5	84.0	Ф 22.35	Ф16
		JT90GABY1L	3	380V/50Hz	8.96	30580	2.58	4.4	3.5	45.8	Ф 22.1	Ф16
	3Ph	JT95GABY1L	3.5	380V/50Hz	10.45	35620	3.01	4.6	3.5	49.4	Φ 22.1	Ф16
R22	380v-420v/50Hz 380v-440v/60Hz	JT125GABY1L	4	380V/50Hz	13.25	45210	3.82	6.0	3.5	63.2	Ф 22.1	Ф16
		JT160GABY1L	5	380V/50Hz	16.76	57190	4.80	7.5	3.5	79.2	Ф 22.1	Ф16
		JT170GABY1L	6	380V/50Hz	17.90	61100	5.12	8.1	3.5	84.0	Ф 22.1	Ф16
		JT200B-BYE	7	380V/50Hz	21.35	72850	6.19	10.0	3.5	108.5	Ф 22.2	Ф12.7
	1Ph 220V-240V/50Hz 220V-240V/60Hz	JT90GABV1L	3	220V/50Hz	8.90	30370	2.65	11.9	3.4	45.8	Ф 22.1	Ф16
		JT95GABV1L	3.5	220V/50Hz	10.39	35450	3.07	12.8	3.4	49.4	Ф 22.1	Ф16
		JT125GA-V1	4	220V/50Hz	13.22	45110	3.77	17.6	3.5	63.2	Ф 22.35	Ф16
	1Ph 220V-240V/50Hz 220V-240V/60Hz	JT90GBBV1L	3	220V/50Hz	8.85	30220	2,77	12.7	3.2	45.8	Ф 22.1	Ф16
		JT95GBBV1L	3.5	220V/50Hz	10.45	35650	3.26	13.6	3.2	49.4	Ф 22.1	Ф16
		JT90GBBY1L	3	380V/50Hz	8.98	30650	2.78	4.6	3.3	45.8	0.22.1	Ф16
R407C	3Ph	JT95GBBY1L	3.5	380V/50Hz	10.49	35790	3.25	4.9	3.3	49.4	Ф 22.1	Ф16
	380v-420v/50Hz	JT125GBBY1L	4	380V/50Hz	13.25	45200	3.99	6.3	3.3	63.2	Ф 22.1	Ф16
	380v-440v/60Hz	JT160GBBY1L	5	380V/50Hz	16.77	57220	4.70	8.0	3.5	79.2	Ф 22.1	Ф16
	RESERVICE ASSESSED.	JT170GBBY1L	6	380V/50Hz	17.89	61050	5.35	8.5	3,4	84.0	Φ22.1	Ф16
R410A	1Ph 220V-240V/50Hz	JT90G-P8V1N	3	220V/50Hz	9.13	31170	2.75	13.2	3.4	33.1	Ф 19.17	Ф16
	220V-240V/50Hz	JT125G-P8V1N	4	220V/50Hz	13.35	45570	4.01	19.9	3.4	46.0	Ф 19.17	Ф16
	3Ph	JT90G-P8Y1	3	380V/50Hz	9.15	31170	2.69	4.7	3.5	33.1	Ф 19.17	Ф16
		JT125G-P8Y1	4	380V/50Hz	13.36	45570	3.92	6.5	3.5	46.0	Ф 19.17	Ф16
	380v-420v/50Hz 380v-440v/60Hz	JT160G-P8Y1	5	380V/50Hz	16.69	56970	4.85	8.3	3.5	56.8	Ф 19.17	Ф16
	3337 1107100112	JT170G-P8Y1	6	380V/50Hz	17.91	61120	5.19	8.9	3.5	60.5	Ф 19.17	Ф16

#### B MODEL HIGH-EFFICIENCY SCROLL COMPRESSOR

#### B model pertormance features

#### High efficiency

We provide high efficiency compressors by greater accurate machining, particular assembling and oil seal technology.

#### Low sound levels

Using un-contact scroll, we have accomplished low sound power levels and low vibration

High reliability, long operating life

Our scroll compressors have fewer moving parts, low reiteration impulsion and low sliding velocity.

#### Wide operating voltage range

Our compressors are guaranteed within voltage range (± 10%)

#### Special value

Due to simplifying system design and saving cost, it would enhance your product competitive in marker to use DAIKIN compressors.



#### **B Model Scroll Compressor List**

REF.	POWER	MODEL	OUTPUT	PERFORMANCE						DISPLACEMENT	TUBE COM	TUBE CONNECTIONS	
	SOURCE		(HP)	TESTING POWER Source	NOMINAL	CAPACITY (BTU/H)	INPUT (KW)	CURRENT (A)	C 0 P (w/w)	(cm /r)	SUCTIONTUBE (mm)	DISCHARGE TUBE (mm)	
	1Ph	JT90BCBV1L	3	220V/50Hz	8.98	30650	2.82	13.1	3.2	48.6	Ф22.2	Ф9.5	
	220V-240V/50Hz 220V-240V/60Hz	JT95BCBV1L	3.5	220V/50Hz	10.35	35290	3.25	13.7	3,2	51.2	Φ22.2	Ф9.5	
		JT90BHBV1L	3	220V/50Hz	9.58	32700	2.82	12.4	3.4	48.2	Ф22.2	Ф9.5	
		JT95BHB∨1L	3.5	220V/50Hz	10.45	36170	3.07	13.5	3.4	51.8	Ф22.2	Ф9.5	
	3Ph 380v-420v/50Hz	JT90BCBY1L	3	380V/50Hz	9.10	31060	2.82	4.8	3.3	48.6	<b>Ф</b> 19.1	Ф9.5	
		JT95BCBY1L	3.5	380V/50Hz	10.11	34500	3.12	4.9	3.3	51.2	<b>Ф</b> 19.1	Ф9.5	
R22		JT90BHBY1L	3	380√/50Hz	9.73	33200	2.83	4.6	3.5	48.2	Φ19.1	Ф9.5	
	380v-440v/60Hz	JT95BHBY1L	3.5	380V/50Hz	10.60	36170	3.08	4.8	3.5	51.8	<b>Ф</b> 19.1	Ф9.5	
		JT150BCBY1L	4.75	380V/50Hz	15.29	52170	4.61	8.1	3.4	78.1	<b>Ф</b> 19.1	Ф12.7	
	100	JT125BC-Y1L	4	380V/50Hz	13.39	45700	4.02	7.0	3.4	67.0	Ф19.1	Ф12.7	
	3Ph 380v-420v/50Hz 380v-440v/60Hz	JT125BCBY1L	4	380V/50Hz	13.39	45700	4.02	7.0	3,4	67.0	<b>Ф</b> 19.1	Ф 12.7	
		JT160BC-Y1L	5	380√/50Hz	16.78	57270	5.05	8.6	3.4	83.1	Ф19.1	Ф 12.7	
	0007 4407/00112	JT160BCBY1L	5	380V/50Hz	16.78	57270	5.05	8.6	3,4	83.1	<b>Ф</b> 19.1	Ф12.7	

#### D MODEL HIGH-EFFICIENCY SCROLL COMPRESSOR

#### D model pertormance features

#### 3 factors in high efficiency

Proper distribution of suction gas Asymmetric scroll Low distortion of fixed scroll

#### 3 factors in high reliability

Proper cooling motor Ball bearing Dry type journal bearing

#### Wide operating voltage range

Our compressors are guaranteed within voltage range (± 10%)

#### Application

D model compressors are installed in DAIKIN Air Packaged Water Chillers. They are ideally used in combination with the Fan Coil Units and/or the Air Handling Units for air conditioning of offces, hotels, restaurants and hospitals.

Paukin SW ATTAINANT SW ATTAINAN

D	Model So	croll Comp	oress	or List								
REF.	POWER	MODEL	OUTPUT	PERFORMANCE							TUBE CONNECTIONS	
	SOURCE		( HP )	TESTING POWER SOURCE	NOMINAL (KW)	CAPACITY (BTU/H)	INPUT (KW)	CURRENT (A)	C O P (w/w)	OISPLACEMENT (cm²/r)	SUCTIONTUBE (mm)	DISCHARGE TUBE (mm)
											(min)	(mm)
		JT212D-YE	7.5	380V/50Hz 400V/60Hz	23.87 28.41	81460 96950	6.99 8.32	11.2	3.5 3.5	117.3	Ф25.4	Ф19.1
	3Ph 380v-420v/50Hz 380v-440v/60Hz	JT236D-YE	8	380V/50Hz 400V/60Hz	26.64 31.69	90920 108120	7.72 9.17	12.3	3.5 3.5	131.0	<b>Ф</b> 25.4	Ф19.1
		JT265D-YE	9	380V/50Hz 400V/60Hz	29.64 35.35	101160 120610	8.56 10.29	13.6 14.5	3.5 3.5	144.7	Ф31.8	Ф19.1
		JT300D-YE	10	380V/50Hz 400V/60Hz	33.19 39.51	113270 134800	9.52 11.27	15.0	3.5	163.0	Ф31.8	Ф19.1
R22		JT335D-YE	12	380V/50Hz 400V/60Hz	37.71 44.85	128700	10.79 12.87	17.0 18.2	3.5 3.5	184.2	Ф31.8	Ф19.1
	7	JT212D-Y1L	7	380V/50Hz	23.87	152990 81460	6.99	11.2	3.5	117.3	<b>Ф</b> 25.4	Ф19.1
	3Ph	JT236D-Y1L	8	380V/50Hz	26.64	90920	7.72	12.3	3.5	131.0	<b>Ф</b> 25.4	Ф19.1
	The second secon	JT265D-Y1L	9	380V/50Hz	29.64	101160	8,56	13.6	3.5	144.7	Ф31.8	Ф19.1
1	380v-420v/50Hz	JT300D-Y1L	10	380V/50Hz	33.19	113270	9.52	15.0	3.5	163.0	Ф31.8	Ф19.1
		JT315D-Y1L	11	380V/50Hz	35.19	120120	10.09	15.5	3.5	169.5	Φ31.8	Ф19.1
		JT335D-Y1L	12	380V/50Hz	37.71	128700	10.79	17.0	3.5	184.2	<b>Ф</b> 31.8	<b>Ф</b> 19.1
		JT212DA-Y1	7.5	380V/50Hz	23.65	80700	6.95	11.7	3.4	117.3	<b>Ф</b> 25.4	<b>Φ</b> 19.1
D.407.0	3 Ph 380v-420v/50Hz 380v-440v/60Hz	JT265DA-Y1	9	380 <i>V/</i> 50Hz	29.35	100150	8.63	14.1	3.4	144.7	<b>Φ</b> 31.8	Ф19.1
R407C		JT300DA-Y1L	10	380V/50Hz	32.79	111890	9.81	16.2	3.4	163.0	Ф31.8	Ф19.1
		JT335DA-Y1L	12	380√/50Hz	37.25	127 100	11.02	18.1	3.4	184.2	<b>Ф</b> 31.8	Ф19.1

#### HIGH-EFFICIENCY MULTI-PARALLELED SCROLL COMPRESSOR

- Multi-paralleled compressors which of the same or the different standard can be paralleled to a large unit.
- · Increasing reliability.
- · Low replacement charge.
- · Freely assembled.

- · Controlling capability efficiently.
- · Reducing starting load.
- · Standby performance.



#### D Model Scroll Compressor List

REF.	POWER SOURCE	MODEL	OUTPUT ( HP )	PERFORMANCE							TUBE CONNECTIONS	
				TESTING POWER SOURCE	NOMINAL (KW)	CAPACITY (BTU/H)	INPUT (KW)	CURRENT (A)	C 0 P (w/w)	(cm²/r)	SUCTIONTUBE (mm)	DISCHARGE TUBE (mm)
	Inverter Power	JT100BAVTYE	5	383V/90Hz	15.98	54550	5.32	10.6	3.00	53.9	Ф22.2	Ф12.7
	3Ph	JT100BATYE	3.75	380√/50Hz	10.56	36020	3.32	5.3	3.2	53.9	Ф19.1	Ф12.7
		JT160BATYE	5	380√/50Hz	16.78	57270	5.05	8.6	3.4	83.1	Φ19.1	Ф12.7
		JT160BATY1L	5	380√/50Hz	16.78	57270	5.05	8.6	3.4	83.1	Ф19.1	Ф12.7
R22		JT212D-TY1L	7	380V/50Hz	23.87	81460	6.99	11.2	3.5	117.3	Ф25.4	Ф19.1
	380v-420v/50Hz 380v-440v/60Hz	JT236D-TY1L	8	380V/50Hz	26.64	90920	7.72	12.3	3.5	131.0	Φ25.4	Ф19.1
		JT265D-TY1L	9	380V/50Hz	29.64	101160	8.56	13.6	3.5	144.7	Ф31.8	Ф19.1
		JT300D-TY1L	10	380√/50Hz	33.19	113270	9.52	15.0	3.5	163.0	Ф31.8	Ф19.1
		JT350D-TY1L	12	380V/50Hz	37.71	128700	10.79	17.0	3.5	184.2	Ф31.8	Ф19,1

#### Testing condition

MODEL	EVAPORATING TEMPERATURE	CONDENSING TEMPERATURE	SUBCOOLING DEGREE	SUPERHEAT DEGREE	ENVIRONMENT TEMPERATURE
Inverter Power	5℃	<b>55</b> ℃	5℃	8℃	35℃
Fixed Power	7.2℃	54.4℃	8.3℃	27.8℃	35℃