



COMPANY PROFILE 2026

OUR QUALITY OF SERVICE &
EQUIPMENT
ARE CUSTOMER SATISFACTION



INDUSTRIAL ENGINEERING SDN. BHD.



SURUHANJAYA SYARIKAT MALAYSIA
COMPANIES COMMISSION OF MALAYSIA



BORANG 9
AKTA SYARIKAT 1965

[Seksyen 16(4)]

No. Syarikat - MyCoID

1097187

D

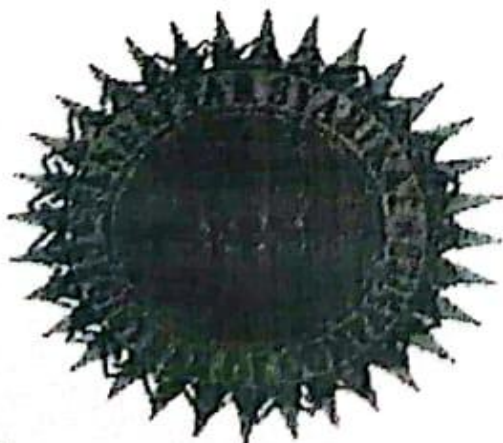
PERAKUAN PEMERBADANAN SYARIKAT SENDIRIAN

Dengan ini diperakui bahawa

SGS INDUSTRIAL ENGINEERING SDN. BHD.

telah diperbadankan di bawah Akta Syarikat 1965, pada dan mulai dari 11 haribulan Jun 2014, dan bahawa syarikat ini adalah sebuah syarikat berhad menurut syer dan bahawa syarikat ini adalah sebuah syarikat sendirian.

Dibuat di bawah tandatangan dan meterai saya di Kuala Lumpur pada 11 haribulan Jun 2014.



DATO' MOHD NAIM DARUWISH
PENDAFTAR SYARIKAT
MALAYSIA

1st April 2026

SGS INDUSTRIAL ENGINEERING SDN.BHD.
No.25, JALAN SERUNAI 16,
TAMAN KLANG JAYA,
41200 KLANG,
SELANGOR DARUL EHSAN,
MALAYSIA

Attention: Mr. Sooria / Mr Sara

Re: Letter of Authorization

This is to certify that SGS Industrial Engineering Sdn. Bhd. with address at No. 25, Jalan Serunai 16, Taman Klang Jaya, 41200 Klang, Selangor Darul Ehsan, Malaysia is authorized dealer by Hitachi Asia Ltd, Singapore to market in Malaysia of the following products:

- 1) Hitachi Bebicon Compressors (Tank Mounted and Package Type)
- 2) Hitachi Scroll Compressors (Package Type)
- 3) Hitachi Screw Compressors (Oil Flooded and Oil-Free Type)
- 4) Hitachi Air Compressors Accessories (Dryers & Filters)
- 5) All related spare parts for the above-mentioned products.
- 6) Third Party Products, Air Dryers, Filters and Parts.

SGS Industrial Engineering Sdn. Bhd. shall be fully responsible for the marketing, sales, and logistics as well as technical and service support to all Hitachi Air Compressor customers.

This letter shall remain valid until 31st March 2027.

Thank you.

Yours faithfully,



Edwin Koh
Deputy General Manager – Air Power Dept.
Industrial Components & Equipment Group
Hitachi Asia Ltd.

Hitachi Asia Ltd.

Registered Address: 20 Pasir Panjang Road, #05-21, Mapletree Business City Singapore 117439 Tel: +65 6535 2100 Fax: +65 6535 1533
Industrial Components & Equipment Sales Office: 30 Pioneer Crescent #10-15 West Park Bizcentral, Singapore 628560 Tel: +65 6305 7400 Fax: +65 6305 7401 |
Company No.: 198900416G | <https://www.hitachi.asia/>



HITACHI
Inspire the Next

Authorised Dealer

This is to certify that

SGS Industrial Engineering Sdn Bhd

having its office at No: 25, Jalan Serunai 16, Taman Klang Jaya, 41200 Klang Selangor.

is our Dealer for Hitachi Air Compressor in Peninsular Malaysia

This certificate is valid until 31-03-2020

Shindo, Manabu
Managing Director
Hitachi Industrial Equipment (Malaysia) Sdn Bhd



HITACHI
Inspire the Next

FY2018 TOP 3 DEALER IN SALES

This is to recognise that

SGS INDUSTRIAL ENGINEERING SDN BHD

having its office at No: No:25 Jalan Serunai 16, Taman Klang Jaya, Klang Selangor 41200 Malaysia

is our Top 3 Dealer for Hitachi Air Compressor in Malaysia for the financial year 2018.

Shindo, Manabu
Managing Director
Hitachi Industrial Equipment (Malaysia) Sdn Bhd



KEMENTERIAN KEWANGAN MALAYSIA
SIJIL AKUAN PENDAFTARAN SYARIKAT

NO. SIJIL : K66488045973739387
NO. RUJUKAN PENDAFTARAN : 357-02273117
TEMPOH SAH LAKU : 26/01/2024 - 25/01/2027

Bahawa dengan ini diperakui syarikat :

SGS INDUSTRIAL ENGINEERING SDN. BHD. (1097187-D)
NO. 25, JALAN SERUNAI 16
TAMAN KLANG JAYA
KLANG
41200 KLANG
SELANGOR, MALAYSIA

Telah berdaftar dengan Kementerian Kewangan Malaysia dalam bidang bekalan/perkhidmatan di bawah sektor, bidang dan sub-bidang seperti di Lampiran A. Kelulusan ini adalah tertakluk kepada syarat-syarat seperti yang dinyatakan di Lampiran B. Individu yang diberi kuasa oleh syarikat bagi urusan perolehan Kerajaan adalah seperti berikut :

SARAVANA MOORTHY A/L MUNIANDY	760301105845	DIRECTOR
ENCIK SOORIA DAYA A/L SOORA NARAYANA	770928086245	DIRECTOR

t.t

DATO' INDERA AB RAHIM BIN AB RAHMAN

Bahagian Perolehan Kerajaan

***b.p.* Ketua Setiausaha Perbendaharaan**

Kementerian Kewangan Malaysia

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 26/01/2024

(Sijil ini adalah cetakan komputer dan tidak memerlukan tandatangan)

NO SIJIL

: K66488045973739387

NO RUJUKAN PENDAFTARAN

: 357-02273117

TEMPOH SAH LAKU

: 26/01/2024 - 25/01/2027

BIL	TARIKH DAFTAR BIDANG	KOD BIDANG	KETERANGAN	STATUS
1	25/01/2024	130101	PERALATAN KEJURUTERAAN DAN MESIN PENGELUARAN/ MESIN, KELENGKAPAN BENGKEL DAN MESIN PENGELUARAN/ MESIN DAN KELENGKAPAN BENGKEL	Aktif
2	25/01/2024	130102	PERALATAN KEJURUTERAAN DAN MESIN PENGELUARAN/ MESIN, KELENGKAPAN BENGKEL DAN MESIN PENGELUARAN/ MESIN DAN KELENGKAPAN KHUSUS	Aktif
3	25/01/2024	130201	PERALATAN KEJURUTERAAN DAN MESIN PENGELUARAN/ JANAKUASA ELEKTRIK DAN PERALATAN GENERATOR/ALAT GANTI DAN BATERI/ JANAKUASA,PERALATAN/ALAT GANTI/AKSESORI(SECONDARY)	Aktif
4	25/01/2024	130202	PERALATAN KEJURUTERAAN DAN MESIN PENGELUARAN/ JANAKUASA ELEKTRIK DAN PERALATAN GENERATOR/ALAT GANTI DAN BATERI/ MESIN DAN KELENGKAPAN KHUSUS	Aktif
5	25/01/2024	220301	PERKHIDMATAN/ PENYELENGGARAAN/PEMBAIKAN ALAT HAWA DINGIN/ ALAT HAWA DINGIN (WINDOW/SPLIT/BERPUSAT)	Aktif

Tarikh Berdaftar Dengan Kementerian Kewangan Malaysia : 26/01/2024

ABOUT THE COMPANY

SGS AIR ENGINEERING, formed in June 2006. However, in 2014 known as SGS INDUSTRIAL ENGINEERING SDN BHD. Currently the equipment serviced by our company are the HITACHI Screw Compressor, Air Dryer, Chain Hoist and all type of screw and piston compressor.

The service team is staffed by technicians and engineers with years of experience. You can be assured of quality workmanship carried out in a timely manner. For over years, **SGS Industrial Engineering Sdn Bhd** has been a reliable partner in providing services for Hitachi industrial products. We are committed to provide best services to our clients.

Industrial equipment's are large, complex pieces of machinery that are vital to the smooth operation of services and factories. To ensure optimal performance and minimise downtime from these equipment's, proper maintenance is required. SGS INDUSTRIAL ENGINEERING SDN BHD has a team of technicians proficient in the service of Hitachi Industrial Equipment's. We specialise in the maintenance and repair of Industrial Air Compressors from 5Hp to 200Hp, as well as the sales of Air Purification Systems and spare parts.



COMPANY PROFILE

Name of Company : SGS INDUSTRIAL ENGINEERING SDN BHD

Head Office : No.25, Jalan Serunai 16, Taman Klang
Jaya, 41200 Klang, Selangor Darul Ehsan.

Penang Branch : No 39, Lrg Binajaya 1, Taman Perindustrian Ringan
Usahajaya 14100 Bukit Mertajam Pulau Pinang

Telephone : 03-3318 4420

Fax : 03-3322 1348

Handphone : 012-3320 461 / 012-3633 455

Directors : Mr. Sooria Daya A/L Soora Narayana
: Mr. Saravana Moorthy A/L Muniandy

Nature of Company : Private Limited

Type of Business : Engineering, Trading and Service

Sales Manager : Mr.Sara

Service Manager : Mr. Sooria Daya @ Roy

Service Engineers : En. Akmal / En. Aris / En. Azwan

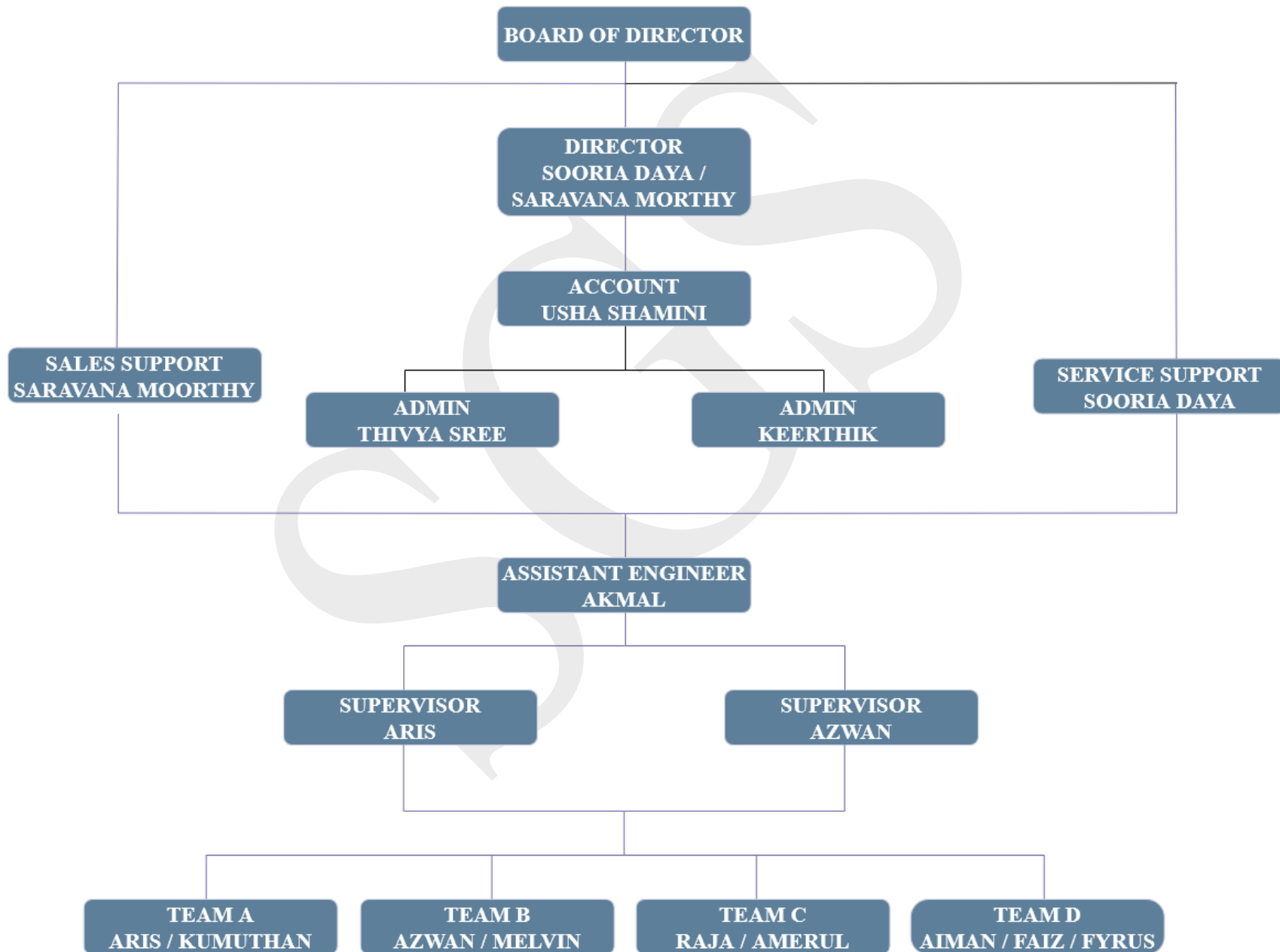
Service Team : Mr Raja / En Aiman / En Amerul / En Faiz / Mr Melvin
Mr. Kumuthan

Admin : Mrs. Thivya Sree / Ms.Tanushah

Accounts : Mrs. Usha Shamini

SGS INDUSTRIAL ENGINEERING SDN BHD

ORGANIZATION CHART 2025



For over years, **SGS Industrial Engineering SDN BHD** has been a reliable partner in providing services for Hitachi industrial products. We are committed to provide best services to our clients.

Vision

We, SGS Industrial Engineering Sdn Bhd aim to become a best Trusted partner in the field of servicing and industrial equipment

Mission

- To support our customer by providing best services and valuable product among competitive
- To provide high quality services that exceed our customer's expectation.
- To emphasising utmost innovation, sincerity, customer satisfaction and safety in every aspect of our services.

Core Values:

- **Support Each Other:** We are committed to building an encouraging, caring, and supportive environment. We share a responsibility to support our team members and enrich their lives.
- **Act with Integrity:** We are honest and forthright in our dealings. Building trust builds a better company.
- **Service.** We do whatever it takes to delight our customers. We support and share responsibility with the members of our team.
- **Innovative:** We are a perceptual work in progress always striving to be better.
- **Customer Centric:** We strive to understand our customers and give them the best

Skills and Fields Expertise in

- **Team work**

The service team is staffed by technicians and engineers with years of experience. You can be assured of quality workmanship carried out in a timely manner



**Placement of new
main motor**



**Use water jet to
clean inside the tank**



**Placement of new
Compressor**

SERVICES

Industrial equipment are large, complex pieces of machinery that are vital to the smooth operation of services and factories. To ensure optimal performance and minimize downtime from these equipment, proper maintenance is required. SGS INDUSTRIAL ENGINEERING SDN BHD has a team of technicians proficient in the service of Hitachi Industrial Equipment's. We specialize in the maintenance and repair of Industrial Air Compressors from 5Hp to 200Hp, as well as the sales of Air Purification Systems and spare parts.

TYPES OF SERVICES

After Sales Services - Periodical services, normally every 2 months, to change compressor oil, inspection of compressor unit and provide technical report on the condition of the unit.

Compressor Unit Overhaul- To be done according to the operation manual.

Emergency breakdown - Our service team will be at customer site anywhere in the country on the same day.

Troubleshooting - To investigate various problems with the system; for example, low air output, High temperature & Etc.

If your Industrial Air Equipment is in need of service, call the professionals at SGS INDUSTRIAL ENGINEERING SDN BHD. We are the best choice for the servicing needs of your Hitachi Industrial Equipment at a competitive cost.



AIR PURIFICATION SYSTEM

Purified, compressed air is widely used in the various industries, from the medical field to mechanical industries. Some examples of the uses of compressed air are :

FOOD PROCESSING

For manufacturing containers, drying noodles, putting products into bags, transporting products with pressurized air.

AUTOMOBILES

For applying coatings, filling tires, sandblasting.

ELECTRONICS

For process controls, nitrogen sealing.

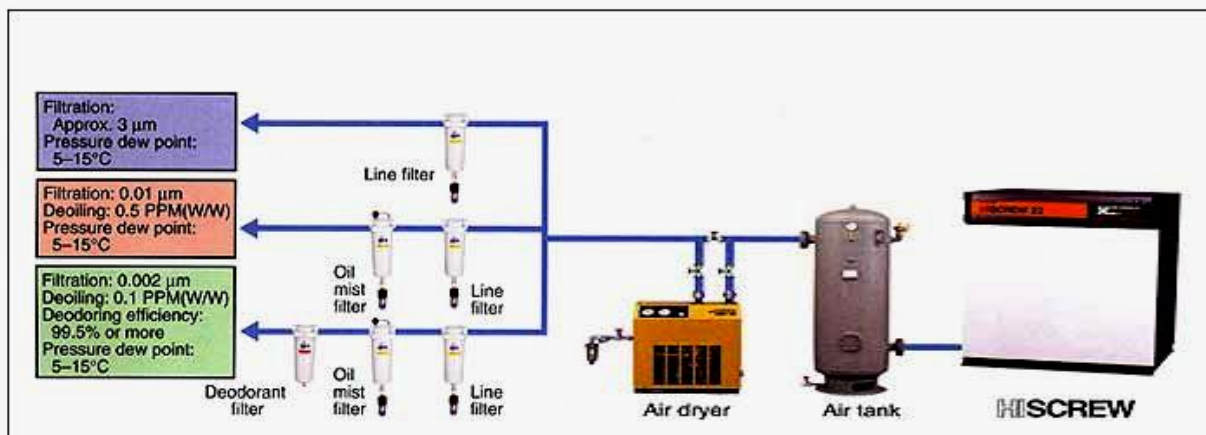
CHEMISTRY

For processing, Oxidizing, Aerating, Culturing. Film-Drying. Plastic Moulding. Hot-Air Welding of vinyl / nylon, nitrogen-based force-feeding, spot cooling.

ELECTRIC POWER

For oxidizing, furnace combustion. To produce purified air, compressors, air dryers and air filters are needed. Air is passed through a compressor to produce high pressure, high temperature air with high levels of condensation. This air is then passed through an air dryer to remove the condensed water in the air. Finally, an air filter will remove dirt particles in the air.

There are various types of compressors in the Hitachi range to suit all requirements. The screw compressors are for large industrial needs and range from 10Hp to 250Hp. For smaller capacities, 1Hp to 20Hp, the Bebicon compressor is perfect. Air Dryers serviced by SGS are Hitachi air dryers and ORION S.M.C Dryers.



AIR PURIFICATION SYSTEM

CORPORATE INFORMATION

DIRECTORS:

MR. SOORIA DAYA

MR. SARAVANA MOORTHY

DATE OF INCORPORATION:

11th JUNE 2014

AUTHORIZED CAPITAL:

RM 150, 000.00

PAID-UP CAPITAL:

RM 320, 002.00

PRINCIPAL BANKERS:

PUBLIC BANK BERHAD

SERVICE WORKS BY STAFF



WE CARRY OUT SERVICE FOR THE RECEIVER TANK WITH
CLEANING OUTSIDE OF TANK, POUR CHEMICAL & WASH
INSIDE TANK.



WE CARRY OUT PLACEMENT NEW MAIN MOTOR, CLEAN,
DISMANTLE OUT BELT AND MAIN MOTOR, CHECK & TEST
RUN

CERTIFICATE

CERTIFICATE

Certificate

No. HAS260103

This is to certify that

Mr. MOHD AKMAL BIN BAKIR

SGS Industrial Engineering Sdn Bhd

Has successfully undergone following course in
Hitachi Global Air Power (Changshu) Co., Ltd.

Course: 1st SDS Auxiliary Training for HAS

Date: From January 12 to January 16, 2026

日立压缩机（常熟）有限公司

日立压缩机（苏州）有限公司

(株) 日立产机系统
空压机技术学校
校长

今泉太郎

*This certificate serves only as confirmation of training completion and does not certify skill proficiency

*This certificate of registration shall be non-transferable

*In the event of change of ownership or management, the establishment shall be surrendered to the authority and the establishment shall apply afresh for grant of certificate of registration.

Certificate

No. HAS260104

This is to certify that

Mr. MOHAMAD ARIS BIN TUKIRAN

SGS Industrial Engineering Sdn Bhd

Has successfully undergone following course in
Hitachi Global Air Power (Changshu) Co., Ltd.

Course: 1st SDS Auxiliary Training for HAS

Date: From January 12 to January 16, 2026

日立压缩机（常熟）有限公司

日立压缩机（苏州）有限公司

(株)日立产机系统
空压机技术学校
校长

今泉太郎

*This certificate serves only as confirmation of training completion and does not certify skill proficiency

*This certificate of registration shall be non-transferable

*In the event of change of ownership or management, the establishment shall be surrendered to the authority and the establishment shall apply afresh for grant of certificate of registration.

Certificate

HITACHI
Inspire the Next

No.AD017

This is to certify that

Mr. Mohd Akmal Bin Bakir

Has successfully undergone following course in Hitachi Industrial Equipment Systems.

【Course : Air Compressor Advanced Training for Hitachi Asia】

Date : From February 10 to February 14, 2025

Air Compressor Technical School

Principal : Taro Imaizumi.

Hitachi Industrial Equipment Systems Co., Ltd.





CERTIFICATE

HITACHI
Inspire the Next

MR. MOHAMAD ARIS BIN TUKIRAN

CERT. NO. DS001

SGS INDUSTRIAL ENGINEERING SDN BHD

You are congratulated on the occasion of completing the Training Course
regarding DSP Next2 Service Training in Singapore

Air Compressor Technical School
Hitachi Industrial Equipment Systems Co., Ltd.



Wong Han Meng
Senior Service Manager
ICE Group/ Hitachi Asia Ltd

***Rules & regulations at the back**

Taro Imaizumi



Taro Imaizumi
Principal
Air Compressor Technical School

Certificate

HITACHI

This is to certify that

No.DS020

Mr. Mohd Azwan Bin Bakir

SGS Industrial Engineering Sdn. Bhd.

Has successfully undergone following course in Hitachi Industrial Equipment Systems.

【Course : DSP Service Training】

Date : From June 16 to June 20, 2025

- * This certificate serves only as confirmation of training completion and does not certify skill proficiency.
- * The certificate of registration shall be non-transferable.
- * In the event of change of ownership or management, the establishment shall be surrendered to the authority and the establishment shall apply afresh for grant of certificate of registration.

Air Compressor Technical School

Principal : Taro Imaizumi

Hitachi Industrial Equipment Systems Co.,





SKILL SOLUTIONS SDN BHD
The Best Company for The Best Organisation

Certificate of Attendance

this is to certify that

MOHD AKMAL BIN BAKIR
900402-10-6013

has successfully completed the following training course

**OCCUPATIONAL SAFETY & HEALTH
COORDINATOR**

(JKKP IKS/SBK127/491/2-1 (27))

at

**SKILL SOLUTIONS ACADEMY, PUTRA HEIGHTS,
SUBANG JAYA, SELANGOR DARUL EHSAN**

on

13, 14 & 15 MAY 2025

Ahmad Safwan Badri Ahmad Nazri
Managing Director
Skill Solutions Sdn Bhd





SKILL SOLUTIONS SDN BHD
The Best Company for The Best Organisation

Certificate of Attendance

this is to certify that

MOHAMAD ARIS BIN TUKIRAN
960412-10-6353

has successfully completed the following training course

**OCCUPATIONAL SAFETY & HEALTH
COORDINATOR**

(JKKP IKS/SBK127/491/2-1 (27))

at

**SKILL SOLUTIONS ACADEMY, PUTRA HEIGHTS,
SUBANG JAYA, SELANGOR DARUL EHSAN**

on

13, 14 & 15 MAY 2025

Ahmad Safwan Badri Ahmad Nazri
Managing Director
Skill Solutions Sdn Bhd





HITACHI
Inspire the Next

CERTIFICATE OF APPRECIATION

Malaysia's Air Compressor Dealers Sales Meeting 2022
8th November 2022
Sunway Resort, Kuala Lumpur

Presented to

SGS INDUSTRIAL ENGINEERING SDN. BHD.

In appreciation for your continued support
and dedicated contribution to our success.



 Hitachi Asia Ltd.



Anthony Ng
General Manager
Industrial Components & Equipment Group

CERTIFICATE

Mr. Mohd Akmal Bin Bakir

SGS Air Engineering

You are congratulated on the occasion of completing the Training Course regarding the oil-flooded rotary screw air compressors and the reciprocating type Compressors in Malaysia.

Air Compressor Technical School
Hitachi Industrial Equipment Systems Co., Ltd.

14, June, 2013



Masayuki Hayashida
Managing Director
Hitachi Industrial Equipment (MALAYSIA)SDN.BHD.

Masanobu Satou

Masanobu Satou
Principal
Air Compressor Technical School



CERTIFICATE

CC079

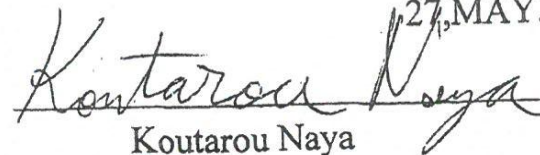
SUMBER DYNAMIC TEAMWORK SDN BHD.

Mr. Sooria Daya Sooria Narayana

You are congratulated on the occasion of completing
the Training Course regarding the oil-free and oil-flooded
rotary screw air compressors, comprising five days.

Shimizu Air Compressor Technical School
Hitachi Industrial Equipment Systems Co., Ltd.

27, MAY., 2005



Koutarou Naya
Principal

Shimizu Air Compressor Technical School



CERTIFICATE

CC001

Mr. Saravana Moorthy

You are congratulated on the occasion of completing the International Course regarding the oil-free rotary screw air compressors and the oil-flooded rotary screw air compressors, comprising five days.

Shimizu Air Compressor Technical School
Hitachi, Ltd., Japan

MAY 21, 1999

Kenji Nakagawa

Kenji Nakagawa
Principal
Shimizu Air Compressor Technical School



No. H2403

Certificate

This is to certify that
Mr. SOORIA DAYA A/L SOORA NARAYANA
SGS Air Engineering

has successfully undergone the technical
training program at Hitachi Plant Technologies,
Ltd. in the field of Installation, testing and
Auxiliary unit maintenance of Hitachi screw
compressor SDS series.

from : Dec. 03 2012
to : Dec. 07 2012

Principal : Rynichi Kimura

Technical Service Training School
Tsuchiura Works
Hitachi Plant Technologies, Ltd.





Certificate

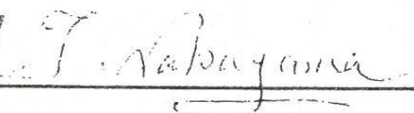
This is to certify that

Mr. Saravana Moorthy A/L Muniandy
Sumber (M)

*has successfully undergone the technical
training program at Hitachi Industries Co.,
Ltd. in the field of Installation, testing
and maintenance of Hitachi screw
compressor SDS series*

from : June 3, 2002

to : June 8, 2002

Principal 

*Technical Service Training School
Hitachi Industries Co., Ltd.
Hitachi Industrial Equipment Systems Co., Ltd.*

SGS

Certificate of Attendance

This is to Certify that

Saravana Moorthy

has successfully completed a 1/2 day Seminar on

Environmental Protection Testing

at

Hotel Armada, Petaling Jaya

on

10th April, 2003



ONG Hai Ching
Course Trainer



TIN Cheek Ping
Course Manager

Certificate No.: EPT/0356/03



SUMMER DYNAMIC TEAMWORK SDN BHD

Testimonial

This is to certify that

Sooria Daya A/L Soora Narayana

I/C No.: 770928-08-6245

*Has completed the Technical and Maintenance Training
for HITACHI OIL FREE AIR COMPRESSOR*

in the field of

SYSTEM OF HISCREW COMPRESSOR

OPEARTION OF HISCREW COMPRESSOR

MAINTENANCE OF COMPRESSOR

PRACTICAL TRAINING ON THE COMPRESSOR

On 1st April 2010 at Toyota Auto Body (M) Sdn. Bhd

HITACHI
Inspire the Next


TECHNICAL ADVISOR



TOYOTA AUTO BODY MALAYSIA SDN BHD



Certificate of Attendance

This is certify that

SOORIA DAYA A/L SOORA NARAYAMA

Company : SGS Industrial Engineering Sdn Bhd

Has successfully completed

Anzen Leader Training

深田正樹

Mr. Masaki Fukada
Managing Director

SUMBER ENGINEERING (M) SDN BHD

Testimonial

This is to certify that

Saravara Moorthy

Has Completed the Technical and Maintenance Training
for **HITACHI ROTARY SCREW AIR COMPRESSOR**

in the field of

**SYSTEM OF HISCREW COMPRESSOR
OPERATION OF HISCREW COMPRESSOR
MAINTENANCE OF COMPRESSOR
PRACTICAL TRAINING ON THE COMPRESSOR**

on July '98 at Wana Sumer

[Signature]

DIRECTOR

[Signature]

SENIOR SERVICE ENGINEER

BROCHUER

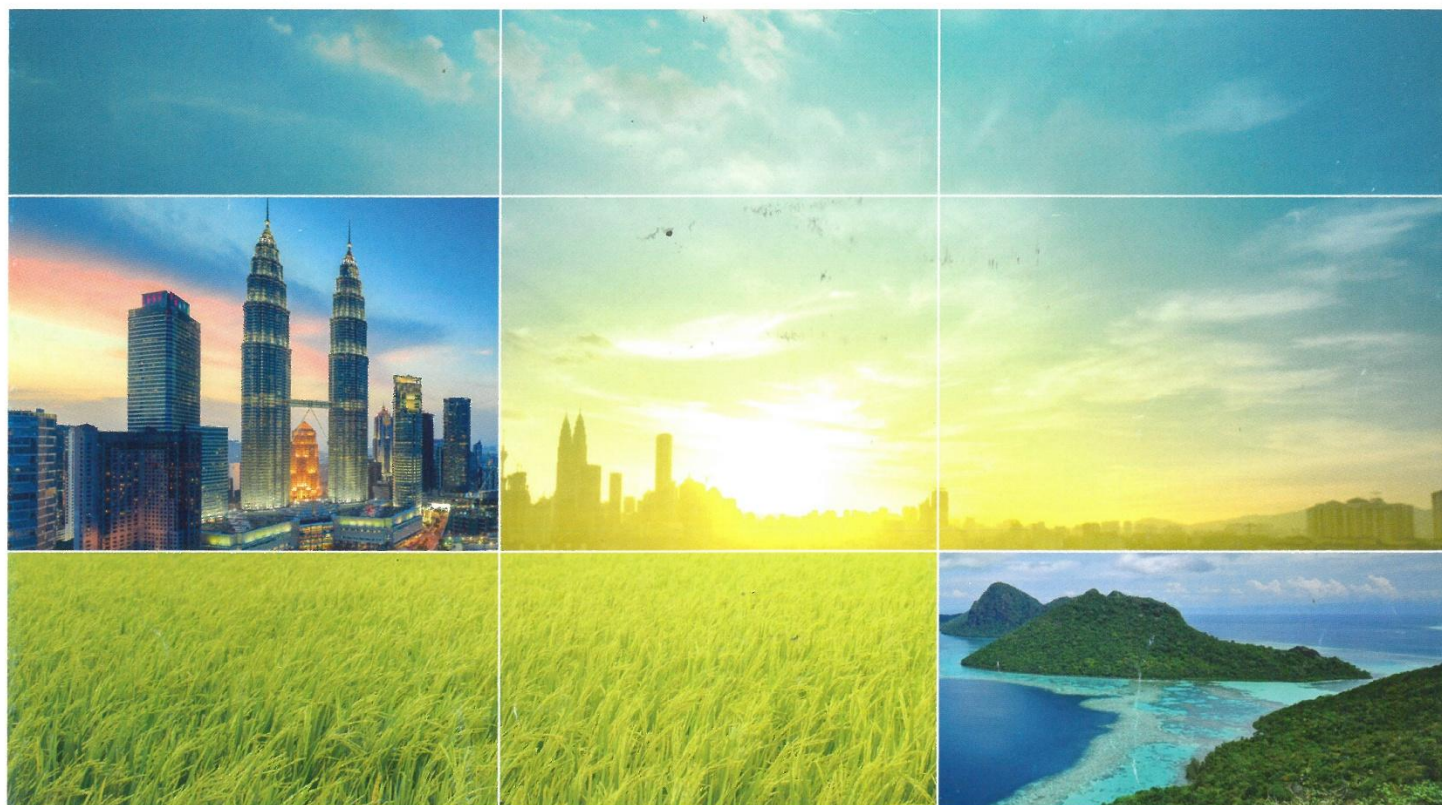
ВРОШНЕР

Hitachi Rotary Screw Compressors

HITACHI
Inspire the Next

HISCREW

NEXT II series (18-75kW)





**More Efficiency
Fit to Improve Productivity
Higher Level of User-friendly**

NEXT II series

Full Range Loaded with High Efficiency Motor

New Developed Air-End

Hitachi Latest Innovation of Air-End Technology

- High efficiency Air-End with low-noise and low-vibration supplies compressed air, constantly.



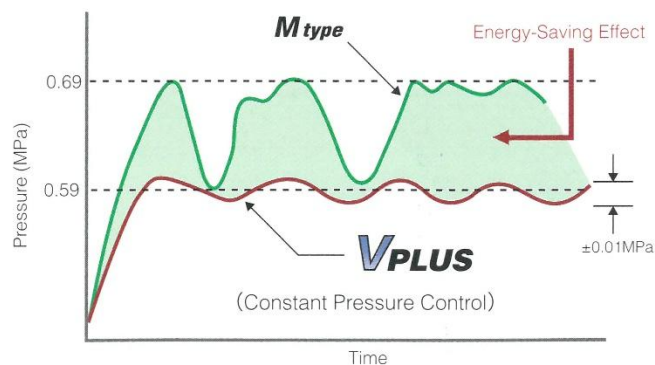
High Efficiency Capacity Control

VPLUS

Since Constant Pressure Control allows highly precise pressure control within range of $\pm 0.01\text{MPa}$, supply of compressed air at necessary pressure is possible with high efficiency.

M type

On M type models, I+P control (purge + motor auto START/STOP) is applicable during partial load operation.



IPC Control (Intelligent Pressure Control)

VPLUS Mtype

By estimating use point pressure in accordance with air consumption, IPC control decreases discharge pressure during low load operation, which enables Energy-Saving.

Patent JP4425768 and others

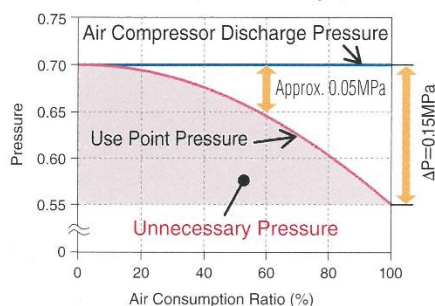
Example of effect by IPC

- Conditions**
- Air compressor: OSP-37VAN2
 - Control pressure setting: 0.70MPa
 - Use point pressure during full load: 0.55MPa
 - Piping pressure loss during full load: 0.15MPa

Graph of pressure change (Theoretical values)

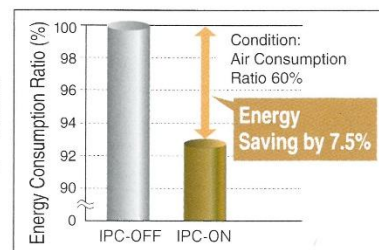
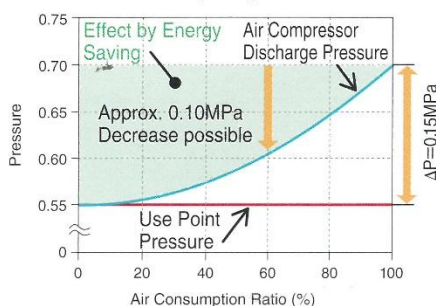
① IPC-OFF (Conventional inverter control model)

- Control the air compressor discharge pressure at 0.70MPa



② IPC-ON (NEXT II series)

- Control the use point pressure at 0.55MPa



*Due to estimation control, use point pressure varies in accordance with use conditions.
*IPC control range of the constant speed unit is air consumption ratio of 50% or more.

Multi-Function Touch Panel*

Significant Improvement of User-friendly



*The image described above has been modified.

Various Functions Available

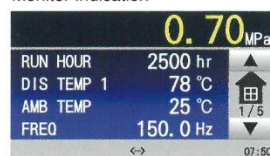


Operation Data Logging

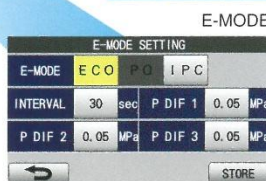
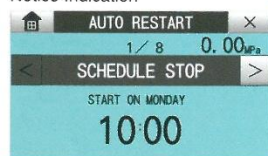
Main Functions

- ① Schedule Operation (Weekly Timer)
- ② Instantaneous Power Interruption (IPI) Restart Function
- ③ Alternate Operation (Option)
- ④ Multi-unit Control (Option)
- ⑤ AUTO Operation
- ⑥ Communication Function
- ⑦ Web Server Function
- ⑧ Display/Store of Operation Data
- ⑨ Store/Load of Settings
- ⑩ Maintenance Time Notification
- ⑪ Operation Data Memory, Display in Graph
- ⑫ Display of Shutdown and Alarm History

Monitor Indication



Notice Indication



*Touch panel less option does NOT have these functions. (Touch panel less option is available only for 18/22/30/37MAN2.)

IT Communication Functions*

USB Flash Memory Possible for Data Logging

*Necessary to prepare a USB flash memory device (5.5 cm or smaller) on user's side.

*Operation data for one day is approximately 400kB. (For reference)

Web Server Function via Bluetooth®

*Necessary to prepare a Bluetooth® USB dongle on your side.

*For setting changes, part of the items are applicable.

Modbus® Communication

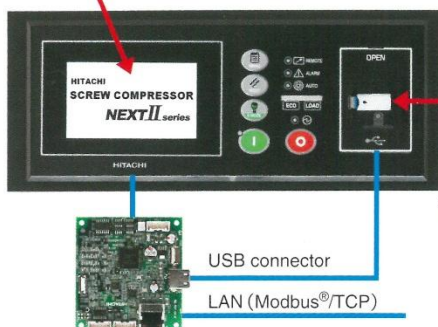
Open network serial communication Modbus®/RTU is supported as standard

*Modbus®/TCP support is optional.

USB flash memory (data retrieving)

(Standard) pressure/temperature/current/history/time

Color Touch Panel



*The image described above has been modified.



Bluetooth® Dongle ↔ Tablet terminal device



*Touch panel less option does NOT have these functions.
(Touch panel less option is available only for 18/22/30/37MAN2.)

*Bluetooth is the registered trademark of Bluetooth SIG, Inc (US).
*Modbus is the registered trademark of Schneider Automation Inc.

Versatility in Hitachi Original Technology

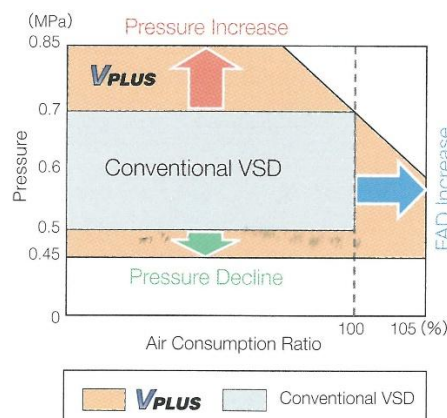
PQ WIDE MODE

PQ WIDE MODE, by automatically adjusting the maximum rotation speed of the compressor, enables to increase the discharge FAD in case that the pressure declines. Compared to conventional VSD, compressor is possible to operate at a wider range of pressure (P) and FAD (Q).

FAD at PQ WIDE MODE

Unit: m³/min.

Model	Discharge Pressure MPa	0.45	0.50	0.60	0.70	0.85
22kW		4.3	4.3	4.3	4.1	3.6
37kW		7.1	7.1	7.1	6.8	6.2
55kW		10.6	10.6	10.6	10.1	9.1
75kW		14.0	14.0	14.0	13.3	12.0



Various System Combinations with VPLUS

To respond to the change of air use, Hitachi provides various system combinations with VSD for further Energy-Saving.

V-M Combination System

If 2 or 3 compressors are necessary, Hitachi V-M combination system is your excellent choice. There is great merit on Hitachi V-M combination system which divides 1 compressor into 2.

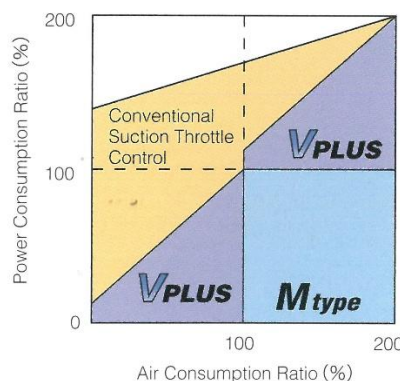
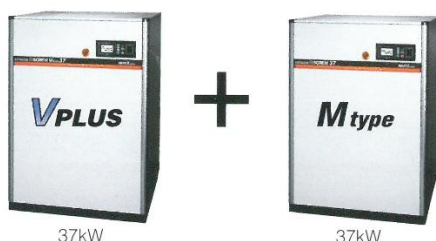
Single-V System/Multi-V System

Besides V-M Combination System, Energy-Saving is also possible with any combination such as Single-V multi-unit control system, or Multi-V multi-unit control system etc.

Example Effect of V-M Combination System

- 1 Energy consumption is similar to the one of 75kW V plus.
- 2 Power consumption is saved by **39%** or **164MWh/year**, when the air consumption ratio is 60% at pressure of 0.6MPa.

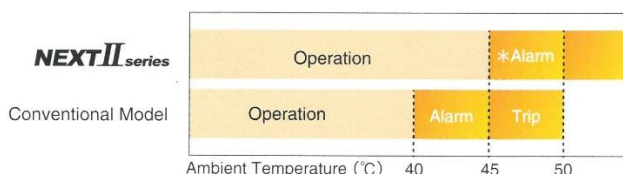
* Calculation condition: 6,000h/year running



High Reliability

Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



* Ambient temperature alarm will be indicated when ambient temperature is over 45°C. Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

AC Reactor*

- Protect Fan Inverter against voltage surge due to unstable power supply.

*For 22/37kW and 55/75kW only

NEW HISCREW OIL NEXT

- Designed for screw air compressor.
- Oil change cycle is every 2 years or 12,000hr which comes first.



Package Filter as Standard

- Easy maintenance
- Maintenance information is indicated on the touch panel periodically.



Standard Specification (18-75kW)

VPLUS

Item • Unit		Model	OSP-22VAN2		OSP-37VAN2		OSP-55VAN2		OSP-75VAN2			
Cooling Method		—	Air-Cooled									
Nominal Output		kW	22		37		55		75			
		HP	30		50		75		100			
Rated	Discharge Pressure	MPa	0.7									
		PSI	102									
	Discharge Capacity	m³/min	4.1		6.8		10.1		13.3			
		CFM	145		240		357		470			
PQ WIDE MODE	Discharge Pressure	MPa	0.6	0.85	0.6	0.85	0.6	0.85	0.6	0.85		
		PSI	87	123	87	123	87	123	87	123		
	Discharge Capacity	m³/min	4.3	3.6	7.1	6.2	10.6	9.1	14.0	12.0		
		CFM	152	127	251	219	374	321	494	424		
		Intake Air Pressure/Temperature		—								
		Discharge Temperature		°C								
Driving Method		—				DCBL Motor Direct Drive				DCBL Motor with Coupling		
Starting Type		—				Soft Start						
Lubricating Oil		—				HITACHI NEW HISCREW OIL NEXT						
Lubricating Oil Quantity		L	10		15		28		39			
Nominal Output of Cooling Fan		kW	1.5 (with Inverter Control)								2.2 (with Inverter Control)	
Discharge Pipe Diameter		—				Rc 1-1/2		Rc 2				
Dimension (WxDxH)		mm	1,000×1,050×1,550		1,200×1,150×1,650		2,000×1,200×1,800					
Weight		kg	450		670		1,230		1,405			
Sound Level		dB [A]	58		60		64		66			

M type

Item + Unit		Model	OSP-18M5AN2	OSP-22M5AN2	OSP-30M5AN2	OSP-37M5AN2
Cooling Method		-	Air-Cooled			
Nominal Output		kW	18	22	30	37
		HP	24	30	40	50
Rated	Discharge Pressure	MPa	0.7 <0.85>	0.7 <0.85> [1.0]	0.7 <0.85>	0.7 <0.85> [1.0]
		PSI	102 <123>	102 <123> [145]	102 <123>	102 <123> [145]
	Discharge Capacity	m³/min	3.4 <3.0>	4.0 <3.7> [3.3]	6.0 <5.4>	7.2 <6.6> [5.8]
		CFM	120 <106>	141 <131> [117]	212 <191>	254 <233> [205]
Intake Air Pressure/Temperature		-	Atmospheric Pressure / 0 to 45°C			
Discharge Temperature		°C	Atmospheric Temperature + 15 or below			
Driving Method		-	4-Pole TEFC Motor with V-Belt Drive			
Starting Type		-	Star-Delta			
Lubricating Oil		-	HITACHI NEW HISCREW OIL NEXT			
Lubricating Oil Quantity		L	10		15	
Nominal Output of Cooling Fan		kW	1.5	1.5 (with Inverter Control)	1.5	1.5 (with Inverter Control)
Discharge Pipe Diameter		-	Rc 1-1/2			
Dimension (WxDxH)		mm	1,000×1,050×1,550		1,200×1,150×1,650	
Weight		kg	670		930	
Sound Level		dB [A]	59		65	

Item • Unit		Model	OSP-55M5AN2		OSP-75M5AN2	
Cooling Method		—	Air-Cooled			
Nominal Output		kW	55		75	
		HP	75		100	
Rated	Discharge Pressure	MPa	0.7 <0.85> [1.0]			
		PSI	102 <123> [145]			
	Discharge Capacity	m³/min	10.0 <9.0> [8.3]		13.2 <11.9> [10.9]	
		CFM	353 <318> [293]		466 <420> [385]	
Intake Air Pressure/Temperature		—	Atmospheric Pressure / 0 to 45°C			
Discharge Temperature		°C	Atmospheric Temperature + 15 or below			
Driving Method		—	2-Pole TEFC Motor with Gear Driving			
Starting Type		—	Star-Delta			
Lubricating Oil		—	HITACHI NEW HISCREW OIL NEXT			
Lubricating Oil Quantity		L	29		40	
Nominal Output of Cooling Fan		kW	1.5 (with Inverter Control)		2.2 (with Inverter Control)	
Discharge Pipe Diameter		—	Rc 2			
Dimension (WxDxH)		mm	2,000×1,200×1,800			
Weight		kg	1,400		1,690	
Sound Level		dB [A]	65		67	

Notes:

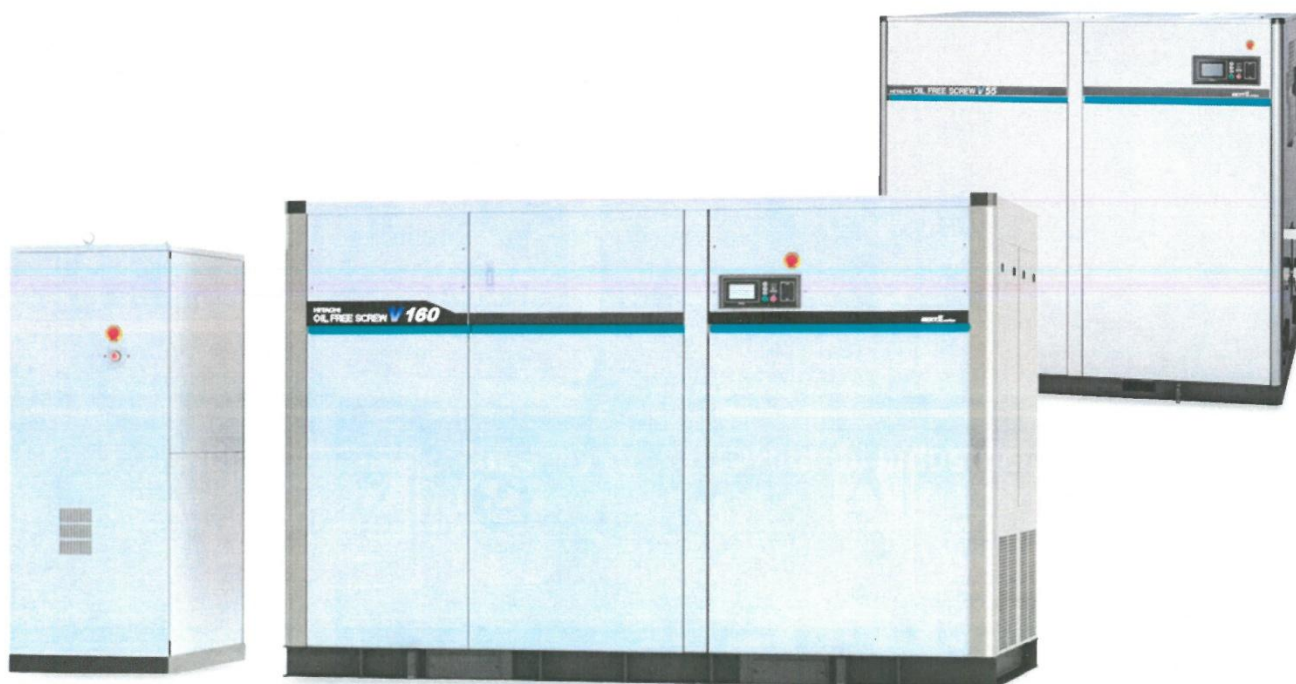
- Capacity is measured according to ISO 1217, Third Edition, Annex C.
- Pressures are indicated as the gauge pressure.
- Sound Level is the converted value under the condition of 1.5m in front and 1m height in an anechoic room.
It may vary in different operating conditions and/or different environment with echo of actual field installations.
Sound Level may be increased by 3dB at PQ WIDEMODE ON.
- Contact the supplier for the dryer and filters selection at PQ WIDEMODE ON.
- Do NOT use any oil other than "HITACHI NEW HISCREW OIL NEXT".
- Install the proper size air receiver tank and the earth leakage circuit breaker which are out of scope of supply from Hitachi.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- < > [] show values of capacity under different discharge pressures.
- 1.0 MPa model is ONLY available on 22/37/55/75kW M type.
For details, contact your nearest dealer of Hitachi local representative office.
- Digital instrument panel can be chosen only for M type (18/22/30/37kW) as Touch Panel less option.

HITACHI OIL-FREE SCREW COMPRESSOR

HITACHI
Inspire the Next

OIL FREE SCREW

SINGLE STAGE / TWO STAGE



Oil-Free Rotary Screw Air Compressor, DSP Series

15–55kW Single-Stage

NEXT II series

MPa: 0.30/0.40/0.70
m³/min: 2.0 - 8.5

- Vtype
- Fixed Speed
- Air-Cooled
- Water-Cooled
- With Built-in Dryer
- Without Dryer



22–120kW Two-Stage

NEXT II series

MPa: 0.70/0.88/0.93/1.0
m³/min: 3.2 - 21.0

- Vtype
- Fixed Speed
- Air-Cooled
- Water-Cooled
- With Built-in Dryer
- Without Dryer



132–240kW Two-Stage

NEXT II series

MPa: 0.75/0.93/1.0
m³/min: 19.0 - 40.5

- Vtype
- Fixed Speed
- Air-Cooled
- Water-Cooled
- Without Dryer



■ OIL FREE SCREW (DSP) Model List

● Fixed Speed Type

Model		Nominal Output (kW)	15	22	30	37	45	55	75	90	100	120	132	145	160	200	240
Single-Stage	Air-Cooled	Built-in Dryer	●	●		●		●									
	Without Dryer		●	●		●		●									
Two-Stage	Water-Cooled	Without Dryer	●	●		●		●									
	Air-Cooled	Built-in Dryer		●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Without Dryer			●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Water-Cooled	Built-in Dryer					●	●	●	●	●	●	●	●	●	●	●
	Without Dryer						●	●	●	●	●	●	●	●	●	●	●

● Vtype

Model		Nominal Output (kW)	15	22	30	37	45	55	75	90	100	120	132	145	160	200	240
Single-Stage	Air-Cooled	Built-in Dryer		●		●		●									
	Without Dryer			●		●		●									
Two-Stage	Water-Cooled	Without Dryer				●		●									
	Air-Cooled	Built-in Dryer				●		●	●		●				●		●
	Without Dryer					●		●	●		●				●		●
	Water-Cooled	Built-in Dryer						●	●		●				●		●
	Without Dryer							●	●		●				●		●

Structure of High Performance Aired

Stainless Steel Rotor

The rotor material, machined by high-precision grinding, is a special stainless steel that excels in corrosion resistance and durability. In addition, to minimize internal leakage, the rotor is mirror finished to ensure proper clearance, taking thermal expansion during operation into consideration.

High Performance Rotor Profile

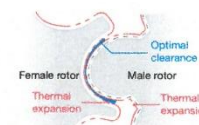
Rotors exposed to discharge temperatures of 300°C or more in single-stage machines and 200°C or more in two-stage machines undergo significant thermal expansion.

Hitachi's own 3D compensation technology is applied to ensure that appropriate clearance is maintained during operation with thermal expansion.

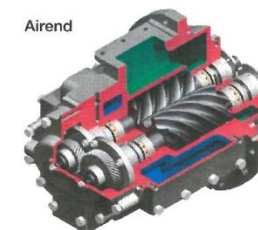
High Performance Coating

Patent JP05416072

The rotor is coated with a solid lubricant to further reduce gaps between rotors and improve performance. This solid lubricant coating has sufficient performance even in harsh environments of over 300°C. Hitachi's unique technology is applied to this coating.



Aired



Shaft Seal To Prevent Oil Leakage

The visco-type seal, designed by Hitachi for oil-free screw compressors, actively repels oil with its internal spiral grooves. The combination of the air seal and visco-type seal prevents oil from entering the compression chamber.



Bearing & Timing Gear

Special ball and roller bearings are used, and jet lubrication is adopted.

In addition, precision-finished timing gears ensure proper clearance between rotors.

DSP NEXT II series Common Features

Premium Air Quality

True Oil-Free Air at Class 0 Level

Test and analysis of condensation of oil in the discharge air of Hitachi Oil-free Screw Compressor (DSP) are implemented by third party (TÜV) based on ISO8573-1 standard. By the test result, oil contained in the discharge air of Hitachi DSP is proved and certified as the highest level of quality air "Class 0".



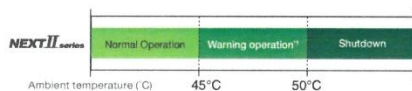
ISO 8573-1:2010 [-:-:0]



45°C Reliability at high temperature operation

Stable continuous operation in ambient temperature of 45°C (Running up to 50°C)

A new unit structure that minimizes temperature rise inside the compressor enables both continuous operation at an ambient temperature of 45°C and a long maintenance cycle, with no abnormal shutdown even at 50°C.



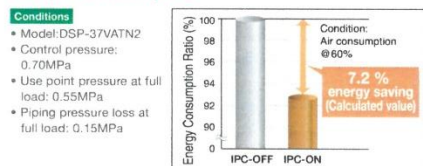
*1: The alarm is displayed when the ambient temperature is over 45°C. In addition, the life of lubricating oil and electrical devices will be shortened in the case of long operation over 45°C.

IPC IPC control (Intelligent Pressure Control)

By estimating use point pressure in accordance with air consumption, IPC control decreases discharge pressure during low load operation, which enables energy-saving.

JP patent No.4425768 and others

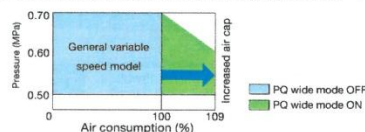
Example of effect by IPC



*Use point pressure is changed according to working condition because of predicted control.

PQ PQ wide mode

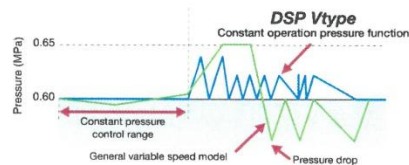
Compared to general variable speed machines, a wider range of operation is possible for both pressure (P) and air volume (Q). Automatic adjustment of the maximum speed allows the amount of air discharged to be increased when the working pressure is reduced.



*The above figure is example of 37kW, 0.7MPa model. Please refer to the specification sheet for the discharge air capacity in each model.

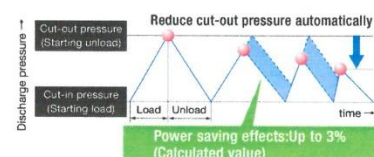
Constant operation pressure function

In general, a variable speed compressor requires a higher pressure setting because pressure drops occur during low-load operation or automatic start/stop. Our unique control maintains the set pressure.



ECO-MODE (Energy-saving operation control)

Automatically reduces the cut-out pressure according to the load ratio. This eliminates wasteful pressure boosting and realizes energy-saving operation.



User-friendly operation interface

USB Flash Memory Possible for Data Logging

*Necessary to prepare a USB flash memory device (5.5cm or smaller) on user's side.
 *Operation data for one day is approximately 400kB. (For reference)

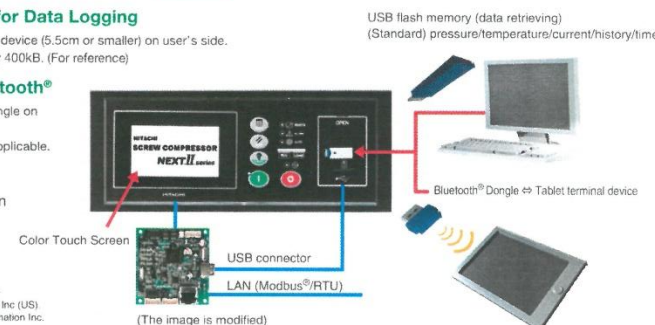
Web Server Function via Bluetooth®

*Necessary to prepare a Bluetooth® USB dongle on your side.
 *For setting changes, part of the items are applicable.

Modbus® Communication

Open network serial communication
 Modbus®/RTU is supported as standard
 *Modbus®/TCP support is optional.

*Bluetooth is the registered trademark of Bluetooth SIG, Inc. (US)
 *Modbus is the registered trademark of Schneider Automation Inc.



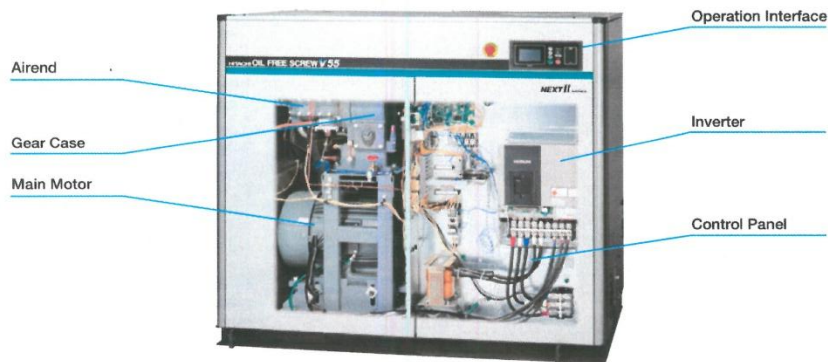
Long cycle and simple maintenance

Hitachi provides global after-sales service with our high quality spare parts and strong engineering experience.



High withstand load type bearing
 6 years long overhaul period

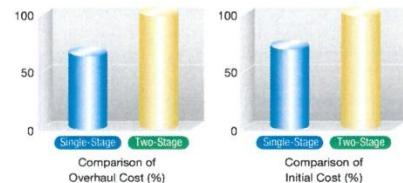
Single-Stage (15-55kW)



*The above picture shows the internal structure of 55kW Air-Cooled model (Vtype).

Cut Down Overhaul and Initial Cost

DSP single-stage has only one airend inside. It makes its initial cost much lower than two-stage model. The overhaul cost, which covers the most of maintenance cost, is about 60% of Two-Stage for the same reason.



*Example of Hitachi 55kW (Single-Stage) and 45kW (Two-Stage), Without Dryer model (Calculated value)

Low Pressure with Higher Air Capacity

0.30MPa model is newly added

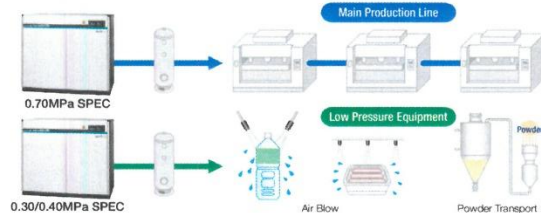
Vtype 0.30MPa and Fixed Speed Model 0.40MPa models are available for low pressure application to save the energy.

Capacity Comparison



Applications

In case that the pressure requirement is higher than blower but lower than standard compressor SPEC, low pressure SPEC DSP can be your solution.



Specifications

Air-Cooled, Fixed Speed Model (15-55kW)

Item-Unit	Model	DSP-15A/R/5N2 DSP-15A/R/6N2	DSP-22A/R/5N2 DSP-22A/R/6N2	DSP-37A/R/5N2 DSP-37A/R/6N2	DSP-55A/R/5N2 DSP-55A/R/6N2
Discharge Pressure	MPa	0.70	0.70	0.70	0.70
Discharge Air Capacity	m³/min	2.0	3.4	5.0	6.4
Nominal Output	kW	15	22	37	55
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C [2 ~ 45°C]			
Discharge Air Temperature	°C	Ambient Temperature +15 or below			
Discharge Pipe Diameter	—	Rc1			
Starting Method	—	Direct On-Line			
Driving Method	—	4-Pole TEFC Motor with V-Belt + Gear Driving			
Lubricating Oil Capacity	L	12 (Not filled)			
Cooling Fan Motor Output	kW	0.4			
Coolant Pump Motor Output (50/60Hz)	kW	0.2/0.3			
P.D.P. °C	°C	[10 (Under Pressure)]	[10 (Under Pressure)]	[10 (Under Pressure)]	[10 (Under Pressure)]
[Dryer] Refrigerator Nominal Output	kW	[0.5]	[1.2]	[1.45]	[1.45]
Refrigerant	—	[R407C]	[R410A]	[R410A]	[R410A]
Weight	kg	770 [800]	850 [910]	1,080 [1,230]	1,330 [1,480]
Dimensions (W×D×H)	mm	1,400×970×1,400			
Noise Level (1.5m from front side)	dB(A)	62	63	64	66

Air-Cooled / Water-Cooled, Vtype Model (22-55kW)

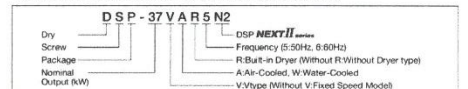
Item-Unit	Model	DSP-22VA/R/5N2 DSP-22VA/R/6N2	DSP-37VA/R/5N2 DSP-37VA/R/6N2	DSP-55VA/R/5N2 DSP-55VA/R/6N2	DSP-37VWN2	DSP-55VWN2
Cooling Method	—	Air-Cooled			Water-Cooled	
Discharge Pressure	MPa	0.70	0.70	0.70	0.70	0.70
Discharge Air Capacity	m³/min	3.4	5.0	6.7	5.0	6.4
PQ Discharge Pressure	MPa	0.60	0.60	0.60	0.60	0.60
PQ Discharge Air Capacity	m³/min	3.7	5.5	7.0	5.5	7.0
WIDEMODE Discharge Pressure	MPa	0.40 [0.50]	0.40 [0.50]	0.40 [0.50]	0.40	0.40
WIDEMODE Discharge Air Capacity	m³/min	4.3 [4.0]	6.4 [6.0]	8.2 [7.6]	6.4	8.2
PQ WIDEMODE Range	MPa	0.40 ~ 0.70 [0.50 ~ 0.70]	0.40 ~ 0.70 [0.50 ~ 0.70]	0.40 ~ 0.70 [0.50 ~ 0.70]	0.40 ~ 0.70	0.40 ~ 0.70
Nominal Output	kW	22	37	55	37	55
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C [2 ~ 45°C]			Atmospheric Pressure / 0 ~ 45°C	
Discharge Air Temperature	°C	Ambient Temperature +15 or below			Cooling Water Temperature +13 or below	
Discharge Pipe Diameter	—	Rc1-1/2			Rc1-1/2	
Starting Method	—	Inverter			Inverter	
Driving Method	—	4-Pole TEFC Motor with V-Belt + Gear Driving			4-Pole TEFC Motor with V-Belt + Gear Driving	
Lubricating Oil Capacity	L	12 (Not filled)			14 (Not filled)	
Cooling Fan Motor Output	kW	0.65			0.2	
Cooling Water Flow Rate	L/min	—			80	
Cooling Water Temperature	°C	—			32 or below	
Cooling Water Pipe Diameter	—	—			Rc1	
Coolant Pump Motor Output (50/60Hz)	kW	0.2/0.3			—	
P.D.P. °C	°C	[10 (Under Pressure)]	[10 (Under Pressure)]	[10 (Under Pressure)]	—	—
[Dryer] Refrigerator Nominal Output	kW	[1.2]	[1.45]	[1.45]	—	—
Refrigerant	—	[R410A]	[R410A]	[R410A]	—	—
Weight	kg	800 [900]	1,140 [1,290]	1,270 [1,420]	1,110	1,240
Dimensions (W×D×H)	mm	1,550×970×1,400	1,830×980×1,580	2,230×980×1,580	1,830×980×1,580	—
Noise Level (1.5m from front side)	dB(A)	63	64	66	64	66

Water-Cooled, Fixed Speed Model (15-55kW)

Item-Unit	Model	DSP-15W5N2 DSP-15W6N2	DSP-22W5N2 DSP-22W6N2	DSP-37W5N2 DSP-37W6N2	DSP-55W5N2 DSP-55W6N2
Discharge Pressure	MPa	0.70	0.70	0.70	0.70
Discharge Air Capacity	m³/min	2.0	3.4	5.0	6.4
Nominal Output	kW	15	22	37	55
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C			
Discharge Air Temperature	°C	Cooling Water Temperature +13 or below			
Discharge Pipe Diameter	—	Rc1			
Cooling Water Flow Rate	L/min	50			
Cooling Water Temperature	°C	35 or below			
Cooling Water Pipe Diameter	—	Rc3/4			
Starting Method	—	Direct On-Line			
Driving Method	—	4-Pole TEFC Motor with V-Belt + Gear Driving			
Lubricating Oil Quantity	L	10 (Not filled)			
Cooling Fan Motor Output	kW	0.05			
Weight	kg	770	830	1,030	1,280
Dimensions (W×D×H)	mm	1,400×970×1,400			
Noise Level (1.5m from front side)	dB(A)	62	63	64	66

NOTE:

- Capacity is measured according to ISO 1217, Annex C.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Noise level is the converted value in an anechoic room measured under the condition that at full load running operation at 1.5m in front and 1m in height, the timing of the closure of cooler drain automatic discharge valve. It could be larger depending on the actual installation and its environment. It is not a guaranteed value. It could increase by approx. 2dB when PQ WIDEMODE is ON.
- P.D.P. (Pressure Dew Point) of a built-in dryer model is measured in ambient temperature 30 °C, inlet temperature 45 °C, and under the rated pressure. For the built-in dryer model, P.D.P. drops at lower operating pressure. When the PQ wide mode is ON and the pressure is 0.7 MPa or less, the outlet P.D.P. increases by approx. 3°C at 0.6MPa.
- Built-in dryer 0.30MPa model is NOT available.
- Discharged air capacity of a built-in dryer model decreases by approximately 3% when drain condensers.
- In case of dust-proof or package filter option, maximum ambient temperature is limited up to 40°C.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Do not use the respiratory equipment to suck the compressed air directly.
- Discharge pressure is gauge pressure.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.



Two-Stage (22-120kW)



Specifications

Water-Cooled, Fixed Speed / Vtype Model (45-75kW)

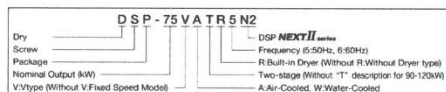
Item-Unit	Model	Fixed Speed Model				Vtype Model	
		DSP-45WT [R] 6N2	DSP-55WT [R] 6N2	DSP-65WT [R] 6N2	DSP-75WT [R] 6N2	DSP-55VWT [R] N2	DSP-75VWT [R] N2
Discharge Pressure	MPa	0.70	0.70	0.70	0.70	0.70	0.70
Discharge Air Capacity (50Hz/60Hz)	m ³ /min	7.5/7.9	6.4/6.7	9.4	7.4/7.9	6.4/6.6	13.2
Discharge Air Capacity at PQ wide ON of 0.6MPa	m ³ /min	—	—	—	—	—	—
Nominal Output	kW	45	55	65	75	55	75
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C [5 ~ 45°C]				Atmospheric Pressure / 0 ~ 45°C [5 ~ 45°C]	
Discharge Air Temperature	°C	Cooling Water Temperature +13 or below				Cooling Water Temperature +13 or below	
Discharge Pipe Diameter	—	2 in (Flange)				2 in (Flange)	
Starting Method	—	Star-Delta (3 contactors)				Star-Delta (3 contactors)	
Driving Method	—	2-Pole TEFC motor with Direct Connection + Gear Driving				2-Pole TEFC motor with Direct Connection + Gear Driving	
Lubricating Oil Capacity	L	15 (Not filled)				15 (Not filled)	
Cooling Fan Motor Output	kW	0.05×2				0.05×2	
Cooling Water Flow Rate	L/min	90				90	
Cooling Water Temperature	°C	35 or below				35 or below	
Cooling Water Pipe Diameter	—	Rc 1-1/4				Rc 1-1/4	
P.D.P.	°C	[10 (Under Pressure)]				[10 (Under Pressure)]	
[Dryer] Refrigerator Nominal Output	kW	[2.2]				[2.2]	
Refrigerant	—	[R407C]				[R407C]	
Weight	kg	1,580 [1,730]				1,320 [1,470]	
Dimensions (W×D×H)	mm	2,000×1,300×1,800				2,000×1,300×1,800	
Noise Level (1.5m from front side)	dB(A)	63				63	

Water-Cooled, Fixed Speed / Vtype Model (90-120kW)

Item-Unit	Model	Fixed Speed Model				Vtype Model	
		DSP-90W5 [L] MN2	DSP-100W5 [L] MN2	DSP-120W5 [L] MN2	DSP-120W6 [L] MN2	DSP-100VW5MN2	DSP-120VW6MN2
Discharge Pressure	MPa	0.70	0.70	0.70	0.70	0.70	0.70
Discharge Air Capacity	m ³ /min	16.8	14.0	18.3	15.6	21.0	17.6
Nominal Output	kW	90	100	120	120	100	120
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C				Atmospheric Pressure / 0 ~ 45°C	
Discharge Air Temperature	°C	Cooling Water Temperature +13 or below				Cooling Water Temperature +13 or below	
Discharge Pipe Diameter	—	2 in (Flange)				2 in (Flange)	
Starting Method	—	Star-Delta (3 contactors)				Star-Delta (3 contactors)	
Driving Method	—	2-Pole TEFC motor with Direct Connection + Gear Driving				2-Pole TEFC motor with Direct Connection + Gear Driving	
Lubricating Oil Capacity	L	16 (Not filled)				16 (Not filled)	
Cooling Fan Motor Output	kW	0.05×3 [0.2×2]				0.05×3	
Cooling Water Flow Rate	L/min	160				160	
Cooling Water Temperature	°C	35 or below				35 or below	
Cooling Water Pipe Diameter	—	Rc 1-1/2				Rc 1-1/2	
Weight	kg	2,050				2,230	
Dimensions (W×D×H)	mm	2,150×1,520×1,825				2,150×1,520×1,825	
Noise Level (1.5m from front side)	dB(A)	66				67	

NOTE:

- Capacity is measured according to ISO 1217, Annex C.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Noise level is the converted value in an anechoic room measured under the condition that at full load running operation at 1.5m in front and 1m in height, the timing of the closure of cooler drain automatic discharge valve. It could be larger depending on the actual installation and its environment. It is not a guaranteed value. It could increase by approx. 2dB when PQ WIDE MODE is ON.
- P.D.P. (Pressure Dew Point) of a built-in dryer model is measured in ambient temperature 30 °C, inlet temperature 45 °C, and under the rated pressure. For the built-in dryer model, P.D.P. drops at lower operating pressure. When the PQ wide mode is ON and the pressure is 0.7 MPa or less, the outlet P.D.P. increases by approx. 3°C at 0.6MPa.
- Discharged air capacity of a built-in dryer model decreases by approximately 3% when drain condensers.
- In case of dust-proof or package filter option, maximum ambient temperature is limited up to 40°C.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Do not use the respiratory equipment to suck the compressed air directly.
- Discharge pressure is gauge pressure.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.



Specifications

Air-Cooled, Fixed Speed / Vtype Model (22-37kW)

Item-Unit	Model	Fixed Speed Model						Vtype Model	
		DSP-22AT [R] 5N2 DSP-22AT [R] 6N2		DSP-30AT [R] 5N2 DSP-30AT [R] 6N2		DSP-37AT [R] 5N2 DSP-37AT [R] 6N2		DSP-37AT [R] 6N2	
Discharge Pressure	MPa	0.70	0.88	0.70	0.88	0.70	0.88	0.70	0.88
Discharge Air Capacity	m³/min	3.7	3.2	4.7	4.0	5.6	4.7	5.5	4.6
Discharge Air Capacity at PQ side ON of 0.6MPa	m³/min							6.0	5.6
Nominal Output	kW	22		30		37		37	
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C [2 ~ 45°C]						Atmospheric Pressure / 0 ~ 45°C [2 ~ 45°C]	
Discharge Air Temperature	°C	Ambient Temperature +15 or below						Ambient Temperature +15 or below	
Discharge Pipe Diameter	—	Rc 1-1/2						Rc 1-1/2	
Starting Method	—	Star-Delta (3 contactors)						Soft Start	
Driving Method	—	4-Pole TEFC Motor with V-Belt + Gear Driving						DCBL Direct Connection + Gear Driving	
Lubricating Oil Capacity	L	15 (Not filled)						15 (Not filled)	
Cooling Fan Motor Output	kW	1.1 (Inverter)						1.1 (Inverter)	
P.D.P.	°C	[10 (Under Pressure)]						[10 (Under Pressure)]	
[Dryer] Refrigerator Nominal Output	kW	[1.45]						[1.45]	
Refrigerant	—	[R410A]						[R410A]	
Weight	kg	1,120 [1,180]		1,230 [1,290]		950 [1,010]		1,530 ± 1,150 ± 1,850	
Dimensions (W×D×H)	mm			1,530 ± 1,150 ± 1,850				1,530 ± 1,150 ± 1,850	
Noise Level (1.5m from front side)	dB(A)	63	64	65	66	66	67	66	67

Air-Cooled, Fixed Speed / Vtype Model (45-75kW)

Item-Unit	Model	Fixed Speed Model						Vtype Model			
		DSP-45AT [R] 5N2 DSP-45AT [R] 6N2		DSP-55AT [R] 5N2 DSP-55AT [R] 6N2		DSP-75AT [R] 5N2 DSP-75AT [R] 6N2		DSP-55VAT [R] N2		DSP-75VAT [R] N2	
Discharge Pressure	MPa	0.70	0.93	0.70	0.93	1.0	0.70	0.93	1.0	0.70	0.93
Discharge Air Capacity	m³/min	7.4/7.8	6.2/6.5	9.2	7.2/7.7	5.9/6.2	13.0	10.5/11.1	9.1	9.3	7.7
Discharge Air Capacity at PQ side ON of 0.6MPa	m³/min										
Nominal Output	kW	45		55		75		55		75	
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45℃ [5 ~ 45℃]						Atmospheric Pressure / 0 ~ 45℃ [2 ~ 45℃]			
Discharge Air Temperature	℃	Ambient Temperature +15 or below						Ambient Temperature +15 or below			
Discharge Pipe Diameter	—	2 in (Flange)						2 in (Flange)			
Starting Method	—	Star-Delta (3 contactors)						Soft Start			
Driving Method	—	2-Pole TEFC motor with Direct Connection + Gear Driving						DCBL Direct Connection + Gear Driving			
Lubricating Oil Capacity	L	25 (Not filled)						25 (Not filled)			
Cooling Fan Motor Output	kW	1.5 (Inverter)			2.2 (Inverter)			1.5 (Inverter)		2.2 (Inverter)	
P.D.P.	℃	[10 (Under Pressure)]			[10 (Under Pressure)]			[10 (Under Pressure)]		[10 (Under Pressure)]	
[Dryer] Refrigerator Nominal Output	kW	[2.2]			[3.0]			[2.2]		[3.0]	
Refrigerant	—	[R407C]			[R410A]			[R407C]		[R410A]	
Weight	kg	1,600 [1,750]		1,600		1,860 [2,030]		1,340 [1,490]		1,560 [1,730]	
Dimensions (W×D×H)	mm	2,000×1,300×1,800		2,000×1,300×1,800		2,250×1,300×1,800		2,000×1,300×1,800		2,250×1,300×1,800	
Noise Level (1.5m from front side)	dB(A)	63	65	63	65	68	68	63	65	67	68

Air-Cooled, Fixed Speed / Vtype Model (90-120kW)

Item-Unit	Model	Fixed Speed Model						Vtype Model	
		DSP-90A5 [L] MN2 DSP-90A6 [L] MN2		DSP-100A5 [L] MN2 DSP-100A6 [L] MN2		DSP-120A5MN2 DSP-120A6MN2		DSP-100VASMN2 DSP-100VABSMN2	
Discharge Pressure	MPa	0.70	0.93	0.70	0.93	0.70	0.93	0.70	0.93
Discharge Air Capacity	m³/min	16.6	13.9	18.0	15.4	20.5	17.3	18.0	15.4
Nominal Output	kW	90		100		120		100	
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C						Atmospheric Pressure / 0 ~ 45°C	
Discharge Air Temperature	°C	Ambient Temperature +15 or below						Ambient Temperature +15 or below	
Discharge Pipe Diameter	—	2 in (Flange)						2 in (Flange)	
Starting Method	—	Star-Delta (3 contactors)						Inverter	
Driving Method	—	2-Pole TEFC motor with Direct Connection + Gear Driving						2-Pole TEFC motor with Direct Connection + Gear Driving	
Lubricating Oil Capacity	L	26 (Not filled)						26 (Not filled)	
Cooling Fan Motor Output	kW	1.5×2						1.5×2	
Weight	kg	2,200		2,150+1,520+1,975		2,380		2,300	
Dimensions (W×D×H)	mm			2,150+1,520+1,975				2,150+1,520+1,975	
Noise Level (1.5m from front side)	dB(A)	68	70	69	71	72	73	69	71

NOTE:

- Capacity is measured according to ISO 1217, Annex C.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Noise level is the converted value in an anechoic room measured under the condition that at full load running operation at 1.5m in front and 1m in height, the timing of the closure of cooler drain automatic discharge valve. It could be larger depending on the actual installation and its environment. It is not a guaranteed value. It could increase by approx. 2dB when PQ WIDE MODE is ON.
- P.D.P. (Pressure Dew Point) of a built-in dryer model is measured in ambient temperature 30 °C, inlet temperature 45 °C, and under the rated pressure. For the built-in dryer model, P.D.P. drops at lower operating pressure. When the PQ wide mode is ON and the pressure is 0.7 MPa or less, the outlet P.D.P. increases by approx. 3°C at 0.6MPa.
- Discharged air capacity of a built-in dryer model decreases by approximately 3% when drain condensers.
- In case of dust-proof or package filter option, maximum ambient temperature is limited up to 40°C.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Do not use the respiratory equipment to suck the compressed air directly.
- Discharge pressure is gauge pressure.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.

Two-Stage (132-240kW)



*The above picture shows the internal structure of 240kW Water-Cooled model (Vtype).

High Capacity by Equipping New NEXT II series Aired

Low Noise Low Vibration

Compact Design by Optimized Layout of Components

High Discharge Pressure Available (up to 1.0MPa)

High Reliability and Easy Maintenance

Totally enclosed flange motor is standard

New totally enclosed flange motor is applied to improve reliability. Motor shaft in direct connection without coupling enables easy maintenance work.

Hi-pre-cooler system (Air-Cooled models)

Hi-pre-cooler system reduces temperature of extremely hot air to aftercooler and Two-Stage cooling structure improves reliability.

High Discharge Pressure Available

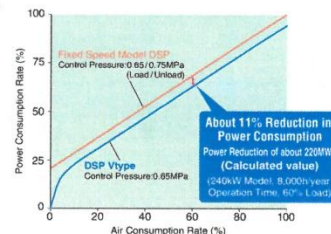
1.0MPa is available with high reliability.

Maintenance Friendly

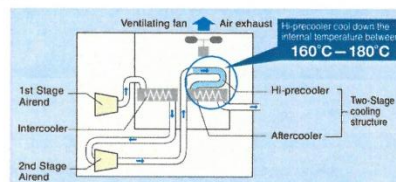
DSP series provides easy accessibility for inspection and maintenance.

Energy-Saving (Vtype)

Further Energy-Saving is achieved by DSP NEXT II series with Built-in Inverter.



*Compared to conventional Load/Unload Control Type, lower pressure setting is possible due to the stable pressure control. (Calculated value)



Specifications

Air-Cooled, Fixed Speed Model (132-240kW)

Item/Unit	Model	DSP-132ASN2 DSP-132AGN2			DSP-145ASN2 DSP-145AGN2			DSP-160ASN2 DSP-160AGN2			DSP-200ASN2 DSP-200AGN2			DSP-240ASN2 DSP-240AGN2		
Discharge Pressure	MPa	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0
Discharge Air Capacity	m³/min	22.5	20.0	19.0	25.0	21.4	20.0	27.5	23.9	22.5	37.0	32.2	30.0	40.0	35.0	32.5
Nominal Output	kW	132			145			160			200			240		
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 - 45°C														
Discharge Air Temperature	°C	Ambient Temperature +15 or below														
Discharge Air Pipe Diameter	—	2-1/2 in (Flange)										3 in (Flange)				
Starting Method	—	Star-Delta (3 contactors)														
Driving Method	—	4-Pole TEFC motor with Direct Connection + Gear Driving														
Lubricating Oil Capacity	L	50 (Not filled)										60 (Not filled)				
Cooling Fan Motor Output	kW	4.4 (1.1x4)										6.0 (1.5x4)				
Weight	kg	3,860						3,960						5,000		
Dimensions (WxDxH)	mm	2,900x1,700x1,925										3,200x1,890x1,950				
Noise Level (1.5m from front side)	dB(A)	73	74	74	75	74	75	75	76	77	77	77	78	78	78	78

Water-Cooled, Fixed Speed Model (132-240kW)

Item/Unit	Model	DSP-132WSN2 DSP-132WGN2			DSP-145WSN2 DSP-145WGN2			DSP-160WSN2 DSP-160WGN2			DSP-200WSN2 DSP-200WGN2			DSP-240WSN2 DSP-240WGN2		
Discharge Pressure	MPa	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0
Discharge Air Capacity	m³/min	23.4	20.7	19.6	26.0	22.2	20.6	28.5	24.8	23.2	37.0	32.2	30.0	40.5	35.0	32.5
Nominal Output	kW	132			145			160			200			240		
Intake Air Pressure / Temperature	—	Atmospheric Pressure / 0 ~ 45°C														
Discharge Air Temperature	°C	Cooling Water Temperature + 13 or below														
Discharge Air Pipe Diameter	—	2-1/2 in (Flange)									3 in (Flange)					
Starting Method	—	Star-Delta (3 contactors)														
Driving Method	—	4-Pole TEFC motor with Direct Connection + Gear Driving														
Cooling Water Flow Rate	L/min	200			210			240			300			330		
Cooling Water Temperature	°C	35 or below									35 or below					
Cooling Water Pipe Diameter	—	Rp2									50 (Not filled)					
Lubricating Oil Capacity	L	40 (Not filled)									50 (Not filled)					
Cooling Fan Motor Output	kW	0.4									4,600					
Weight	kg	3,760									4,600					
Dimensions (W×D×H)	mm	2,500×1,600×1,925									2,800×1,800×1,950					
Noise Level (1.5m from front side)	dB(A)	68	69	69	70	69	70	69	70	69	70	69	70	70	70	71

Air-Cooled / Water-Cooled, Vtype Model (160-240kW)

Item/Unit		Model	DSP-160VWSN2 DSP-160VWGN2			DSP-240VWSN2 DSP-240VWGN2			DSP-160VWSN2 DSP-160VWGN2			DSP-240VWSN2 DSP-240VWGN2		
Discharge Pressure		MPa	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0	0.75	0.93	1.0
Discharge Air Capacity		m³/min	27.5	24.8	22.5	40.0	35.0	32.5	28.5	24.8	23.2	40.5	35.0	32.5
Nominal Output		kW	160			240			160			240		
Intake Air Pressure / Temperature		—	Atmospheric Pressure / 0 ~ 45°C											
Discharge Air Temperature		°C	Ambient temperature+15 or below						Cooling Water Temperature+13 or below					
Discharge Air Pipe Diameter		—	2-1/2 in (Flange)			3 in (Flange)			2-1/2 in (Flange)			3 in (Flange)		
Starting Method		—	Inverter											
Driving Method		—	4-Pole TEFC motor with Direct Connection + Gear Driving											
Cooling Water Flow Rate		L/min	—			—			240			330		
Cooling Water Temperature		°C	—			—			35 or below					
Cooling Water Pipe Diameter		—	—			—			Rp2					
Lubricating Oil Capacity		L	50 (Not filled)			60 (Not filled)			40 (Not filled)			50 (Not filled)		
Cooling Fan Motor Output		kW	4.4 (1.1 × 4)			6.0 (1.5 × 4)			—			0.4		
Weight	Compressor	kg	3,960			5,000			3,960			4,900		
	Inverter Panel	kg	400			540			—			—		
Dimensions (W×D×H)	Compressor	mm	2,900×1,700×1,925			3,200×1,880×1,950			2,500×1,600×1,925			2,800×1,800×1,950		
	Inverter Panel	mm	690×1,175×1,760			810×1,360×1,760			—			—		
Noise Level (1.5m from front side)		dB(A)	74	75		77	78		70	70		71	71	

NOTE:

- Capacity is measured according to ISO 1217, Annex C.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Noise level is the converted value in an anechoic room measured under the condition that at full load running operation at 1.5m in front and 1m in height, the timing of the closure of cooler drain automatic discharge valve. It could be larger depending on the actual installation and its environment. It is not a guaranteed value.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Do not use the respiratory equipment to suck the compressed air directly.
- Discharge pressure is gauge pressure.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.
- The inverter panel for air-cooled Vtype is placed separately.

Auxiliary Equipment

Air Dryer

HDR series

HFC Refrigerant
R407C·R410A



HDR-22AG1

HFC Refrigerant
R407C



HDR-150AX

Specifications

Item/Unit	Model	HDR-7.5AX2	HDR-15AG1	HDR-22AG1	HDR-37AG1	HDR-55AX	HDR-75AX	HDR-100AX
Capacity (Note 1) 50/60Hz	m ³ /min	1.3/1.4	3.0/3.4	4.9/5.4	7.9/8.4	10.8/11.3	15.0/15.7	19.0/20.0
Max. Inlet Pressure of Compressed Air	MPa	0.3 ~ 0.97	0.3 ~ 1.0	0.3 ~ 1.0	0.3 ~ 1.0	0.3 ~ 1.0	0.3 ~ 1.0	0.3 ~ 1.0
Max. Inlet Temperature of Compressed Air	°C	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40
Ambient Temperature	°C	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40
Dew Point of Outlet Air	°C	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure
Cooling Method of Condenser	—	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube
Refrigerant Control Device	—	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube
Capacity Control Device	—	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube
Refrigerant Used	—	R407C	R407C	R407C	R407C	R407C	R407C	R407C
Charged Quantity	g	250	450	680	1,000	1,650	2,000	2,000
Finish Color	—	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory
Pipe Diameter	mm	Rc 1	Rc 1	Rc 1-1/2	Rc 1-1/2	Rc 2	Rc 2-1/2	Rc 2-1/2
Dimensions (W×D×H)	mm	303×803×720	303×633×840	356×543×1,067	356×543×1,274	356×803×1,489	406×1,400×1,380	406×1,400×1,380
Weight	kg	43	60	84	107	135	170	280
Accessories	—	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts	Auto Drain Trap, Drain Valve, Foundation Bolts

NOTE:
1. The capacity values above are measured at an ambient temperature of 30°C, inlet temperature of 45°C, inlet pressure of 0.70MPa.
2. Dew point gets worse if operated at pressure below the range of operation pressure.
3. Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
4. In case of having solid objects such as rust in the inlet air flow, install a pre-filter on the inlet of dryer.

Item/Unit	Model	HDR-120WX	HDR-150WX	HDR-190WX	HDR-240WX	HDR-300WX	HDR-380WX	HDR-120AX	HDR-150AX	HDR-190AX	HDR-240AX	HDR-300AX	HDR-380AX
Capacity (Note 1) 50/60Hz	m ³ /min	21/25	27/31	35/41	42/49	51/60	64/75	20/23	25/30	32/38	38/45	47/55	59/69
Max. Inlet Pressure of Compressed Air	MPa	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97	0.30 ~ 0.97
Max. Inlet Temperature of Compressed Air	°C	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40
Ambient Temperature	°C	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40	5 ~ 40
Dew Point of Outlet Air	°C	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure	10 Under Pressure
Cooling Method of Condenser	—	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled	Water-Cooled
Refrigerant Control Device	—	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube
Capacity Control Device	—	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube	Capillary Tube
Refrigerant Used	—	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C	R407C
Charged Quantity	g	1,900	2,000	2,700	3,400	4,000	4,000	2,200	3,600	3,500	4,400	5,000	6,000
Finish Color	—	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory	Ivory
Cooling Water Quantity	m ³ /h	2.5/2.9	2.7/3.0	3.0/3.2	3.6/3.8	3.4/4.0	4.3/5.0	—	—	—	—	—	—
Cooling Water Pipe Diameter	mm	Rp 3/4	Rp 3/4	Rp 1	Rp 1	Rc 1-1/2	Rc 1-1/2	—	—	—	—	—	—
Pipe Diameter	mm	2 1/2 in (Flange)	3 in (Flange)	4 in (Flange)	5 in (Flange)	2 1/2 in (Flange)	3 in (Flange)	4 in (Flange)	5 in (Flange)	5 in (Flange)	5 in (Flange)	5 in (Flange)	5 in (Flange)
Dimensions (W×D×H)	mm	672×1,260×1,276	950×1,290×1,332	1,969×905×1,583	2,020×1,100×1,650	672×1,260×1,276	950×1,290×1,332	1,969×905×1,583	2,020×1,100×1,650	2,020×1,100×1,650	2,020×1,100×1,650	2,020×1,100×1,650	2,020×1,100×1,650
Weight	kg	238	346	344	534	792	872	258	372	370	557	792	872
Accessories	—	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve	Auto Drain Trap, Drain Valve

NOTE:
1. The capacity values above are measured at an ambient temperature of 32°C, inlet temperature of 40°C, inlet pressure of 0.69MPa.
2. Dew point gets worse if operated at pressure below the range of operation pressure.
3. Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
4. In case of having solid objects such as rust in the inlet air flow, install a pre-filter on the inlet of dryer.

Multi Unit Controller

MULTI ROLLER C series

- Efficient Control of Multiple Units
- Energy-Saving
- Various Functions Available



Standard Specification

Item	Model	MRQ-4E	MRQ-8E	MRQ-16E
Usage place	—	Indoor (Dust-proof wall-mounted type)	Indoor (Dust-proof wall-mounted type)	Indoor (Dust-proof wall-mounted type)
Ambient Temperature	—	0 ~ 40 deg.C	0 ~ 40 deg.C	0 ~ 40 deg.C
Power supply	—	1-ph. AC85 to 240V 50/60Hz	1-ph. AC85 to 240V 50/60Hz	1-ph. AC85 to 240V 50/60Hz
Controlable compressor	—	4	8	16
Connectable contacts (internal of above)	—	4	8	16
Touch panel	—	7" wide color LCD	7" wide color LCD	7" wide color LCD
Control function	—	Inlet air charge, Selection of preceding machine, Rotary operation, Fan-back operation (only for fixed speed machine), PID control, Pressure prediction control, 2nd pressure, Weekly operation, Forced changeover, Restart at power off, Interlock/individual operation changeover, Central operation, Forced start Long stop, Operation control of auxiliary machine (dryer, purifier), MRQ-N, Load up operation	Inlet air charge, Selection of preceding machine, Rotary operation, Fan-back operation (only for fixed speed machine), PID control, Pressure prediction control, 2nd pressure, Weekly operation, Forced changeover, Restart at power off, Interlock/individual operation changeover, Central operation, Forced start Long stop, Operation control of auxiliary machine (dryer, purifier), MRQ-N, Load up operation	Inlet air charge, Selection of preceding machine, Rotary operation, Fan-back operation (only for fixed speed machine), PID control, Pressure prediction control, 2nd pressure, Weekly operation, Forced changeover, Restart at power off, Interlock/individual operation changeover, Central operation, Forced start Long stop, Operation control of auxiliary machine (dryer, purifier), MRQ-N, Load up operation
Input	—	Discharge pressure Control, Remote Control, Remote Control	Discharge pressure Control, Remote Control, Remote Control	Discharge pressure Control, Remote Control, Remote Control
Output	—	Operation answer, Fault Run, Stop, Load command, PID command	Operation answer, Fault Run, Stop, Load command, PID command	Operation answer, Fault Run, Stop, Load command, PID command
Communication specification	—	RS485 (2-wire) half-duplex synchronous, 9600bps multi-drop	RS485 (2-wire) half-duplex synchronous, 9600bps multi-drop	RS485 (2-wire) half-duplex synchronous, 9600bps multi-drop
Communication contents	—	Run, Stop, Load, Operation answer, Fault, etc.	Run, Stop, Load, Operation answer, Fault, etc.	Run, Stop, Load, Operation answer, Fault, etc.
Set width of control discharge press.	—	Min. ±0.001 MPa settable	Min. ±0.001 MPa settable	Min. ±0.001 MPa settable
Power supply capacity	—	40W or less	50W or less	30W or less
Dimensions W×D×H (mm)	—	400×250×600	500×250×600	400×250×600
Weight	—	25kg	37kg	13kg
Painted color	—	White	White	White

NOTE:
*1 Use flow volume sensor, which is commercially available.
*2 Dimensions excludes joint portion and protrude portion.
*3 Appearance, display design and/or specification may change without notice.

Line Filter

Air Filter*1



Micron Mist Filter*2



Activated Carbon Filter*3



Specifications

Cannon	Item	Model	7.5BX	11BX	15G1	22G1	37G1	55B	75B	100B	125C	160C	200C	240B					
	Air Condition	Capacity (converted to the atmospheric pressure)	m ³ /min	1.2	1.8	2.7	5.2	8.6	10.6	13.8	20	27.6	32	40	50				
		Inlet Air Temperature	℃	32															
		Inlet Air Pressure	MPa	0.69		0.7				0.69									
	Use	Applicable Fluid	—	Compressed Air															
	Condition	Max. Pressure	MPa	1.57		1.0				0.97									
		Connecting Pipe Diameter	—	Rc3/4	Rc1	Rc1-1/2				Rc2		3 in FF (Flange)		3 in FF (Flange)		4 in FF (Flange)			
Air Filter	Item	Model	HAF-7.5BX	HAF-11BX	HAF-15G1	HAF-22G1	HAF-37G1	HAF-55B	HAF-75B	HAF-100B	HAF-125C	HAF-160C	HAF-200C	HAF-240B					
	Use	Inlet Air Temperature Range	℃	5 ~ 60															
	Condition	Ambient Temperature Range	℃	2 ~ 60															
	Filtration Rating	μm	1 ^{※1}																
	Filtration Efficiency	%	99.99																
	Pressure	Initial	MPa	0.005 or below															
	Drop (Loss)	Element Exchange	MPa	0.07															
	Dimension (Max. Diameter×Length)	mm	92×237	130×290.5		170×588		170×673		170×718		173×811		173×968		590×1,511	590×1,511	590×1,511	640×1,735
	Drain Outlet Diameter	—	Rc1/4																
	Weight	kg	1	2	2.1	3.2	3.5	3.7			4.3	6	41	43	43	73			
Micron Mist Filter	Item	Model	HMF-7.5BX	HMF-11BX	HMF-15G1	HMF-22G1	HMF-37G1	HMF-55B	HMF-75B	HMF-100B	HMF-125C	HMF-160C	HMF-200C	HMF-240B					
	Use	Inlet Air Temperature Range	℃	5 ~ 60															
	Condition	Ambient Temperature Range	℃	2 ~ 60															
	Density of Oil in the Discharge Air	wtppm	0.01 ^{※2}																
	Pressure	Initial	MPa	0.01															
	Drop (Loss)	Element Exchange	MPa	0.07															
	Dimension (Max. Diameter×Length)	mm	92×237	130×364		170×660		170×745		170×791		173×884		173×1,041		590×1,511	590×1,511	590×1,511	640×1,735
	Drain Outlet Diameter	—	Rc1/4																
	Weight	kg	1	2	2.1	3.2	3.5	3.7			4.3	6	41	43	43	73			
		Item	Model	HKF-7.5BX <th>HKF-11BX</th> <th>HKF-15G1</th> <th>HKF-22G1</th> <th>HKF-37G1</th> <th>HKF-55B</th> <th>HKF-75B</th> <th>HKF-100B</th> <th>HKF-125C</th> <th>HKF-160C</th> <th>HKF-200C</th> <th>HKF-240B</th>	HKF-11BX	HKF-15G1	HKF-22G1	HKF-37G1	HKF-55B	HKF-75B	HKF-100B	HKF-125C	HKF-160C	HKF-200C	HKF-240B				
Activated Carbon Filter	Use	Inlet Air Temperature Range	℃	5 ~ 60															
	Condition	Ambient Temperature Range	℃	2 ~ 60															
	Density of Oil in the Discharge Air	wtppm	0.003 ^{※3}																
	Pressure Drop (Loss)	MPa	0.009																
	Dimension (Max. Diameter×Length)	mm	92×232	130×281.5		160×362		170×447		170×498		173×591		173×748		590×1,511	590×1,511	590×1,511	640×1,735
	Weight	kg	1	2	3.2	3.5	3.7			4.3	6	41	43	43	43	73			

※1 Make sure to install an air dryer before the filter.
※2 The density of oil in the inlet air is 3wtppm.
※3 According to "Test methods for oil aerosol content" of ISO8573-2, the density of oil in the inlet air is 0.01wtppm.
※4 Can be replaced with Rc1/4 using optional DT adapter (Parts number:59047640).

HITACHI ROTARY COMPRESSOR OIL



Specifications

Item	Unit	Content
ISO Viscosity Grade	—	32
Density @15°C	kg/L	0.88
Viscosity @40°C	mm ² /s	32.6
Viscosity Index	—	102
Flash Point	°C	> 200
Content	L	20
Package	—	Plastic Container Tank
Weight	kg	About 18

Systems and Options

Energy-saving Combinations

3 ways to maximize energy-saving effect

Energy saving operation without external controller

V-M Combination System

Energy saving operation by one Vtype and maximum two Fixed Speed Model

Energy saving operation with external controller

Single-V System

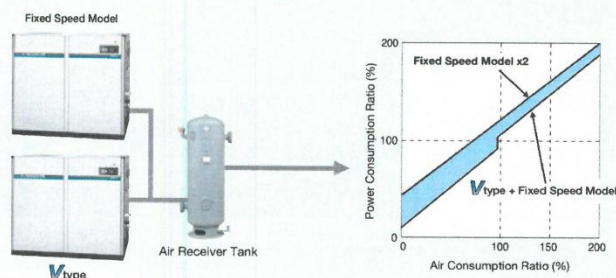
Energy saving operation by one Vtype and multiple Fixed Speed Model with multi-unit controller.

Energy saving operation with multiple Vtype model and external controller

Multi-V System

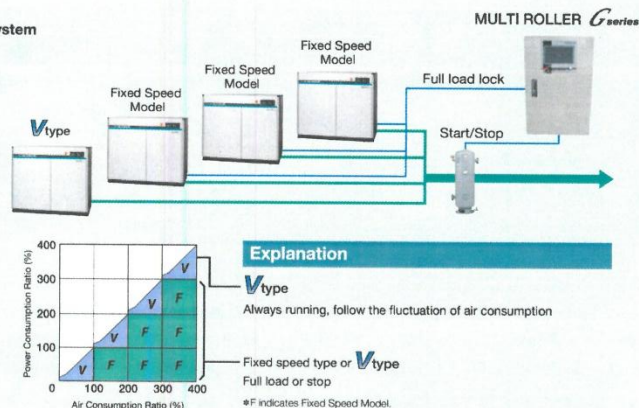
Energy saving operation by multiple Vtype to average Vtype operation hour

Basic Example of V-M Combination System



Single-V / Multi-V Example of Multi-Unit Control System

MULTI ROLLER *Gseries*
DSP Vtype +
DSP Fixed Speed Models



Options

	DSP NEXT II series					
	Single-Stage		Two-Stage		Two-Stage	
	Vtype	Fixed Speed Model	Vtype	Fixed Speed Model	Vtype	Fixed Speed Model
Nominal Output (kW)	22 - 55	15 - 55	37 - 100	22 - 120	180/240	132 - 240
Oil Mist Remover (OMR)	Standard	Standard	Standard	Standard	Standard	Standard
Instantaneous Power Interruption (IPI) Restart	Standard	Standard	Standard	Standard	Standard	Standard
Multi-unit Control (with MULTI ROLLER <i>Gseries</i>)	●	●	●	●	●	●
Alternate Operation (with MULTI ROLLER <i>Gseries</i>)	●	●	●	●	●	●
Alternate Operation ^{*1}	●	●	●	●	●	●
AUTO Operation	Standard	Standard	Standard	Standard	Standard	Standard
V-M Combination	●	— ^{*2}	●	— ^{*2}	●	— ^{*2}
Modbus [®] /TCP	●	●	●	●	●	●
Package Filter	●	●	●	●	●	●
Dust Filter	●	●	●	●	—	—
Specified Color of Sound-Proof Cover	●	●	●	●	●	●
Food Grade Oil	●	●	●	●	●	●

NOTE:

*1 Alternate Operation is possible between same models or models of the same series.

In case of alternate operation between models of different series, connection and control by MULTI ROLLER *Gseries* is necessary.

*2 In case of V-M Combination, modification on the Fixed Speed Model is not necessary.

For other options, contact your nearest dealer or Hitachi local representative office.

Safety Precautions

What compressors are used for

- The compressors listed in this catalog can only compress air. Never use them to compress gases other than air. Doing so may cause fire, damage, etc.
- The compressors cannot be used for respiratory equipment for breathing compressed air.

Installation location

- Install the compressors indoors. Do not use the compressors in a place where it is exposed to moisture such as rain or steam. Doing so may cause fire, electric shock, rusting, or decrease in product life.
- Use the products in a location where there are no explosive or flammable gases (acetylene, propane gas, etc.), organic solvents, explosive dust, or fire nearby. Failure to do so may result in fire or accident.
- Do not use the products in locations where corrosive gases such as ammonia, acid, iron, sulfurous acid gas, etc. are present. It may cause rusting, decrease in product life, or damage.

Terms of use

- Please read the "Instruction Manual" carefully before use and use the products correctly.
- Never modify the products or its parts. Doing so may cause damage or malfunction.

Hitachi Rotary Screw Compressors

HITACHI
Inspire the Next

HISCREW

NEXT II series (11-75kW)





**More Efficiency
Fit to Improve Productivity
Higher Level of User-friendly**

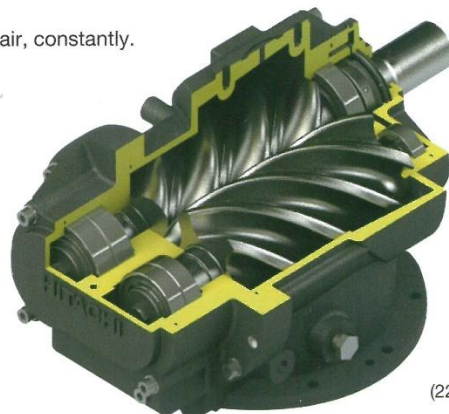
NEXT II series

Full Range Loaded with High Efficiency Motor

New Developed Air-End

Hitachi Latest Innovation of Air-End Technology

- High efficiency Air-End with low-noise and low-vibration supplies compressed air, constantly.



(22/37kW)

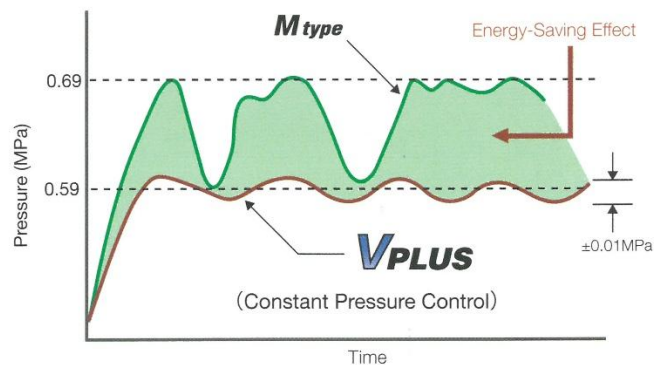
High Efficiency Capacity Control

VPLUS

Since Constant Pressure Control allows highly precise pressure control within range of $\pm 0.01\text{MPa}$, supply of compressed air at necessary pressure is possible with high efficiency.

M type

On M type models, I+P control (purge + motor auto START/STOP) is applicable during partial load operation.



IPC Control (Intelligent Pressure Control)

VPLUS Mtype

By estimating use point pressure in accordance with air consumption, IPC control decreases discharge pressure during low load operation, which enables Energy-Saving.

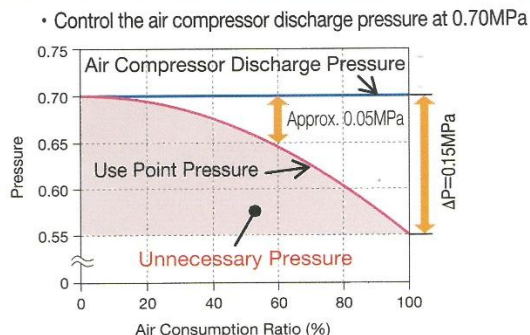
Patent JP4425768 and others

Example of effect by IPC

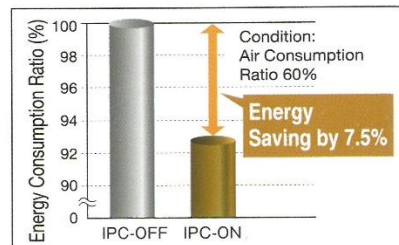
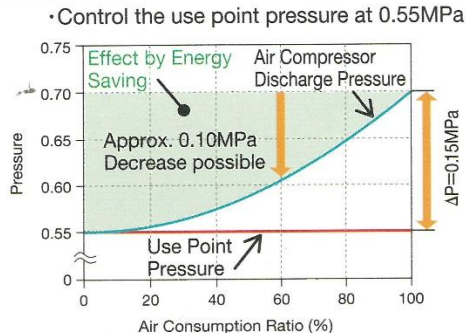
- Conditions**
- Air compressor: OSP-37VAN2
 - Control pressure setting: 0.70MPa
 - Use point pressure during full load: 0.55MPa
 - Piping pressure loss during full load: 0.15MPa

Graph of pressure change (Theoretical values)

① IPC-OFF (Conventional inverter control model)



② IPC-ON (NEXT II series)



*Due to estimation control, use point pressure varies in accordance with use conditions.

Multi-Function Touch Panel*

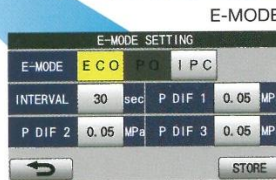
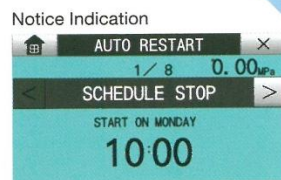
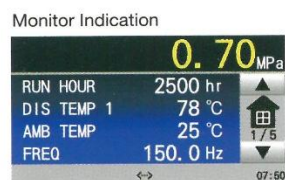
Significant Improvement of User-friendly

Various Functions Available

Operation Data Logging



*The image described above has been modified.



Main Functions

- ① Schedule Operation (Weekly Timer)
- ② Instantaneous Power Interruption (IPI) Restart Function
- ③ Alternate Operation (Option)
- ④ Multi-unit Control (Option)
- ⑤ AUTO Operation
- ⑥ Communication Function
- ⑦ Web Server Function
- ⑧ Display/Store of Operation Data
- ⑨ Store/Load of Settings
- ⑩ Maintenance Time Notification
- ⑪ Operation Data Memory, Display in Graph
- ⑫ Display of Shutdown and Alarm History

*Touch panel less option does NOT have these functions. (Touch panel less option is available only for 18/22/30/37MAN2.)
Touch Panel is NOT available for 11/15kW.

IT Communication Functions*

USB Flash Memory Possible for Data Logging

*Necessary to prepare a USB flash memory device (5.5 cm or smaller) on user's side.
*Operation data for one day is approximately 400kB. (For reference)

Web Server Function via Bluetooth®

*Necessary to prepare a Bluetooth® USB dongle on your side.
*For setting changes, part of the items are applicable.

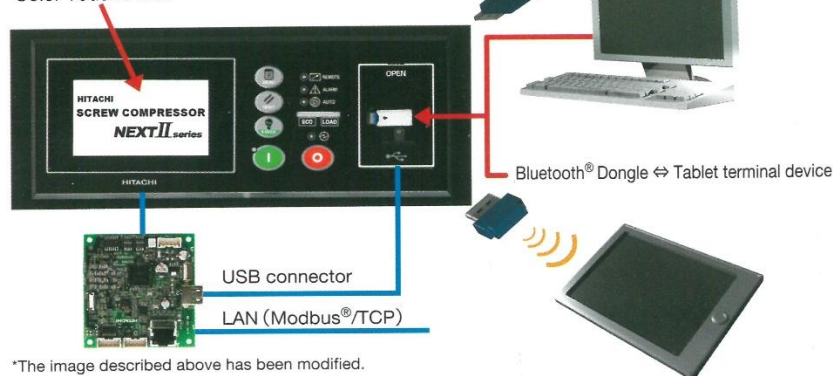
Modbus® Communication

Open network serial communication Modbus®/RTU is supported as standard

*Modbus®/TCP support is optional.

USB flash memory (data retrieving)
(Standard) pressure/temperature/current/history/time

Color Touch Panel



*The image described above has been modified.

*Touch panel less option does NOT have these functions.
(Touch panel less option is available only for 18/22/30/37MAN2.)
Touch Panel is NOT available for 11/15kW.

*Bluetooth is the registered trademark of Bluetooth SIG, Inc (US).
*Modbus is the registered trademark of Schneider Automation Inc.

Versatility in Hitachi Original Technology

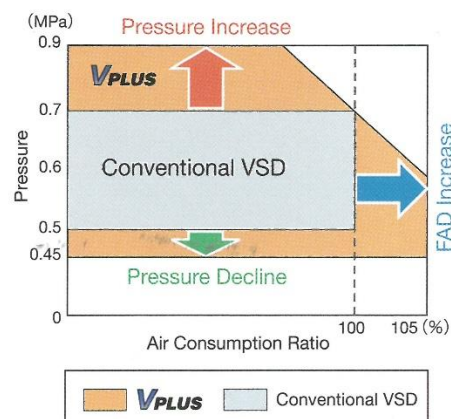
PQ WIDE MODE

PQ WIDE MODE, by automatically adjusting the maximum rotation speed of the compressor, enables to increase the discharge FAD in case that the pressure declines. Compared to conventional VSD, compressor is possible to operate at a wider range of pressure (P) and FAD (Q).

FAD at PQ WIDE MODE

Unit: m³/min.

Model	Discharge Pressure MPa	0.45	0.50	0.60	0.70	0.85	0.90
11kW	-	-	1.79	1.79	1.79	1.63	1.53
15kW	-	-	2.4	2.4	2.4	2.15	2.04
22kW	4.3	4.3	4.3	4.1	3.6	-	-
37kW	7.1	7.1	7.1	6.8	6.2	-	-
55kW	10.6	10.6	10.6	10.1	9.1	-	-
75kW	14.0	14.0	14.0	13.3	12.0	-	-



Various System Combinations with VPLUS

To respond to the change of air use, Hitachi provides various system combinations with VSD for further Energy-Saving.

V-M Combination System

If 2 or 3 compressors are necessary, Hitachi V-M combination system is your excellent choice. There is great merit on Hitachi V-M combination system which divides 1 compressor into 2.

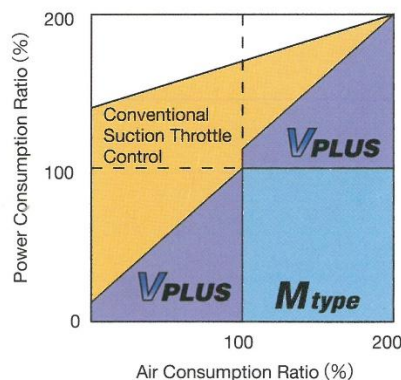
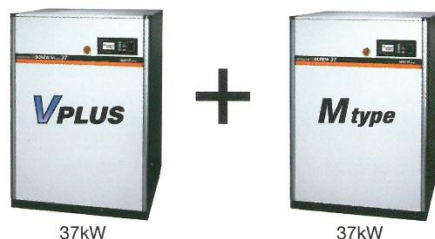
Single-V System/Multi-V System

Besides V-M Combination System, Energy-Saving is also possible with any combination such as Single-V multi-unit control system, or Multi-V multi-unit control system etc.

Example Effect of V-M Combination System

- 1 Energy consumption is similar to the one of 75kW Vplus.
- 2 Power consumption is saved by 39% or 164MWh/year, when the air consumption ratio is 60% at pressure of 0.6MPa.

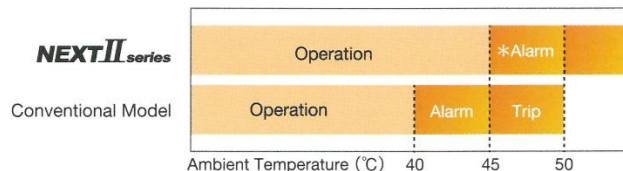
* Calculation condition: 6,000h/year running



High Reliability

Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



* Ambient temperature alarm will be indicated when ambient temperature is over 45°C. Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

AC Reactor*

- Protect Fan Inverter against voltage surge due to unstable power supply.

*For 22/37kW and 55/75kW only

NEW HISCREW OIL NEXT

- Designed for screw air compressor.
- Oil change cycle is every 2 years or 12,000hr which comes first.



Package Filter as Standard

- Easy maintenance
- Maintenance information is indicated on the touch panel periodically.



Evolution of Air Compressor

- Economic Efficient, High Standard Oil-Flooded Rotary Screw Compressor **HISCREW series**

How to realize higher economic efficiency and reduction of environmental burden has become a great CHALLENGE for the air compressor industry in the 21st century.

Hitachi, with long-year-accumulated technology, offers a perfect answer to this challenge.

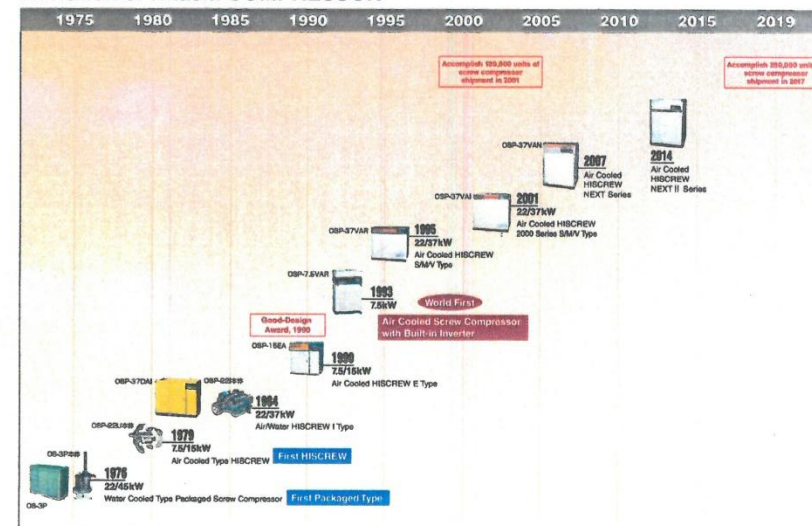
Hitachi, to pursue the ultimate goal of higher Energy-Saving performance together with less environmental burdens, adds **NEXT II series** to the highly-reputed **HISCREW** as a new line-up.

Hitachi, aiming to further development, provides solutions for different industries.

Hitachi, by developing new core technology, will continue providing highly-advanced screw air compressors to satisfy the needs of every customer.



Evolution of Hitachi COMPRESSOR



From Small to Large, Extensive Line-Up of High Economic Efficiency and Environmental Performance, Solution for Diversified High-Level Demands

7.5-15kW Class

NEXT II series VPLUS, M type

Pursuit of Energy-Saving and Easy-to-use,
Economic Small Class

- VSD
- Fixed Speed Type
- Air-Cooled
- Water-Cooled
- Built-in Dryer
- Without Dryer

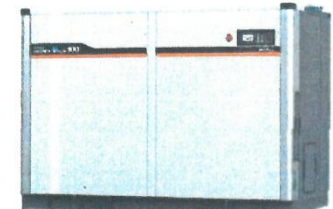


100kW Class

NEXT II series VPLUS, M type

High Reliability and Maintenance Friendly

- VSD
- Fixed Speed Type
- Air-Cooled
- Water-Cooled
- Built-in Dryer
- Without Dryer



22/37kW Class

NEXT II series VPLUS, M type

Highly Improved Energy-Saving, Widely-Used
Class with great variation

- VSD
- Fixed Speed Type
- Air-Cooled
- Water-Cooled
- Built-in Dryer
- Without Dryer



150kW Class

NEXT II series Dual type

2 Units of 75kW Compressor in 1 Package

- VSD
- Fixed Speed Type
- Air-Cooled
- Water-Cooled
- Built-in Dryer
- Without Dryer



55/75kW Class

NEXT II series VPLUS, M type

Pursuit of Energy-Saving and Environmental
Performance, Middle Class

- VSD
- Fixed Speed Type
- Air-Cooled
- Water-Cooled
- Built-in Dryer
- Without Dryer



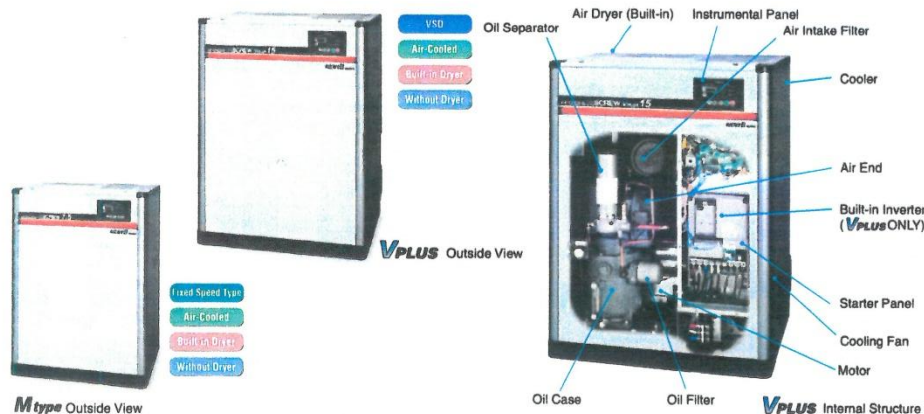
List of Model NEXT II series

Model	VSD				Fixed Speed Type			
	Vplus (Vtype)				Mtype			
	Air-Cooled		Water-Cooled		Air-Cooled		Water-Cooled	
Model	Built-in Dryer	Without Dryer	Built-in Dryer	Without Dryer	Built-in Dryer	Without Dryer	Built-in Dryer	Without Dryer
7.5	○	○			○	○		
11	○	○			○	○		
15	○	○			○	○		
22	○	○			○	○	○	○
37	○	○			○	○		○
55	○	○	○	○	○	○	○	○
75	○	○	○	○	○	○	○	○
100		○		○		○		○
150(75×2)		○		○		○		

HISCREW NEXT II series (7.5-15kW)

VPLUS, M type

Compact type with inherited **NEXT series** technology
Pursuit of Excellent Economic Efficiency,
Environmental Performance, Easy Maintenance



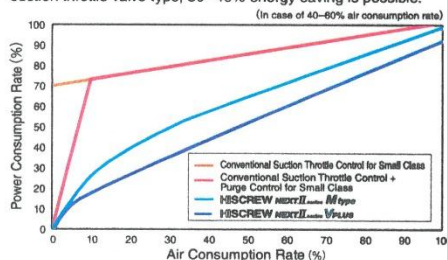
M type Outside View

VPLUS Outside View

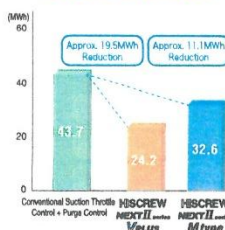
VPLUS Internal Structure

Energy-Saving

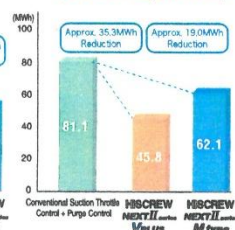
In addition to high performance of the compressor itself, overall energy-saving can be achieved. Compared with the common suction throttle valve type, 30~40% energy-saving is possible.



Example of Annual Power Consumption (7.5kW, air consumption rate 50%)



Example of Annual Power Consumption (15kW, air consumption rate 50%)



Calculation Condition: (1) Pressure Setting: NEXT-Vplus 0.73MPa Others 0.83MPa
(2) 8,000hr/year Operation

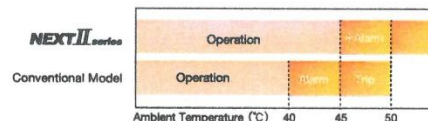
New Developed Air-End

Hitachi Latest Innovation of Air-End Technology.



Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



* Ambient temperature alarm will be indicated when ambient temperature is over 45°C.
Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

Long Cycle, Easy Maintenance

Overhaul Cycle - 8 years

The overhaul cycle of Air-End is every 8 years, since the combination of high-performance bearing and high-precision oil filtration system is adopted.



*Condition: 6,000hr or less Operation Time.

Possible of Oil Change Every 2 years

Designed for Hitachi Oil-injected Screw Air Compressor Oil change cycle is every 2 years or 12,000hr which comes first.*



*Condition: 6,000hr or less Operation Time.

Package Filter as Standard

- Easy maintenance
- Maintenance information is indicated on the touch panel periodically.



Standard Specification

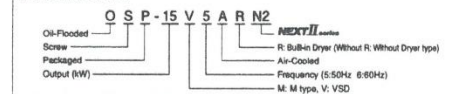
7.5-15kW (VPLUS, M type)

Item / Unit	Model	OSP-7.5VAIR/N2	OSP-11VAIR/N2	OSP-15VAIR/N2	OSP-7.5MAIR/N2	OSP-11MAIR/N2	OSP-15MAIR/N2	
Cooling Method		Air-Cooled						
Nominal Output	kW	7.5	11	15	7.5	11	15	
Rated	Discharge Pressure				0.83			
	Discharge Capacity	m³/min	1.05	1.63	2.15	1.05	1.63	2.15
PQ WIDE MODE	Discharge Pressure	MPa	0.7	0.9	0.7	0.9	—	
	Discharge Capacity	m³/min	1.17	0.98	1.79	1.53	2.4	2.04
Intake Air Pressure/Temperature		Atmospheric Pressure / 0~45℃ (2~45℃)						
Discharge Temperature	℃	Ambient Temperature / +15 or below						
Driving Method	—	Inverter + 4-Pole TEFC Motor with V-Belt Drive			4-Pole TEFC Motor with V-Belt Drive			
Starting Type	—	Soft Start			Direct-on-line			
Lubricating Oil	—	NEW HISCREW OIL NEXT						
Lubricating Oil Quantity	L	5	6	7	5	6	7	
P.D.P	℃	[10 (Under Pressure)]						
(Dryer)	Refrigerator Nominal Output	kW	[0.3]	[0.5]	[0.3]	[0.5]		
	Refrigerant	[R407C]						
Discharge Pipe Diameter	—	Rc 3/4		Rc 1		Rc 3/4		
Dimension (WxDxH)	mm	860x770x1,175		950x780x1,250		950x770x1,175		
Weight	kg	300 (320)	360 (385)	390 (415)	295 (315)	355 (380)	375 (400)	
Sound Level	dB [A]	53	55	56	53	55	56	

Notes:

- Capacity is measured according to ISO 1217, Third Edition, Annex C.
- Capacity after the built-in dryer is decreased by 3%.
- Pressures are indicated as the gauge pressure.
- Sound Level is the converted value under the condition of 1.5m in front and 1m height in an anechoic room. It may vary in different operating conditions and/or different environments with echo of actual field installations. Sound level may be increased by 3dB at PQ WIDE MODE ON.
- P.D.P is measured at 30 degree C of the ambient temperature, 45 degree C of the dryer inlet temperature and rated discharge pressure. P.D.P may be 13 degree C at PQ WIDE MODE ON and 0.7MPa of discharge pressure. P.D.P may be worth at the lower discharge pressure than above conditions at PQ WIDE MODE ON.
- Contact the supplier for the dryer and filters selection at PQ WIDE MODE ON.
- The transformer installation space is required for the built-in dryer for the model other than 200V/50Hz, 200-220V/60Hz.
- Do NOT use any oil other than "NEW HISCREW OIL NEXT".
- Install the proper size air receiver tank and the earth leakage circuit breaker which are out of scope of supply from Hitachi.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.

Model Introduction

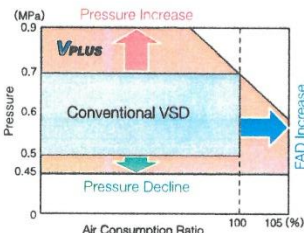
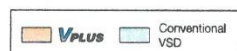


HISCREW NEXT II series (22-75kW)

Versatility in Hitachi Original Technology

PQ WIDE MODE

PQ WIDE MODE, by automatically adjusting the maximum rotation speed of the compressor, enables to increase the discharge FAD in case that the pressure declines. Compared to conventional VSD, compressor is possible to operate at a wider range of pressure (P) and FAD (Q).



FAD at PQ WIDE MODE

Model	0.45	0.50	0.55	0.60	0.65	0.70	0.75
22/37kW							
22kW	4.3	4.3	4.3	4.1	3.6		
37kW	7.1	7.1	7.1	6.8	6.2		
55/75kW							
55kW	10.6	10.6	10.6	10.1	9.1		
75kW	14.0	14.0	14.0	13.3	12.0		

Unit: m³/min

Various System Combinations with VPLUS

To respond to the change of air use, Hitachi provides various system combinations with VSD for further Energy-Saving.

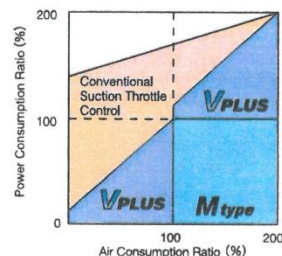
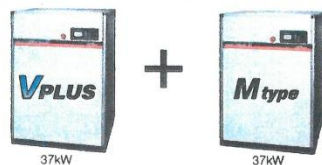
V-M Combination System

If 2 or 3 compressors are necessary, Hitachi V-M combination system is your excellent choice. There is great merit on Hitachi V-M combination system which divides 1 compressor into 2.

Example Effect of V-M Combination System

- Energy consumption is similar to the one of 75kW V plus.
- Power consumption is saved by 39% or 164MWh/year, when the air consumption ratio is 60% at pressure of 0.6MPa.

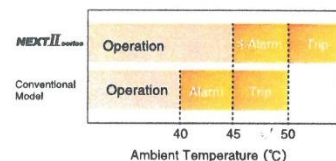
* Calculation condition: 6,000h/year running



High Reliability

Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



* Ambient temperature alarm will be indicated when ambient temperature is over 45°C. Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

Package Filter as Standard

- Easy maintenance
- Maintenance information is indicated on the touch panel periodically.



NEW HISCREW OIL NEXT

- Designed for screw air compressor.
- Oil change cycle is every 2 years or 12,000hr which comes first.



Standard Specification

22/37kW (VPLUS, Mtype)

Item/Unit	Model	OSP-22VA(R)N2	OSP-37VA(R)N2	OSP-22MSA(R)N2 OSP-22MSA(R)N2	OSP-37MSA(R)N2 OSP-37MSA(R)N2
Cooling Method	—	Air-Cooled			
Nominal Output	kW	22	37	22	37
Rated Discharge Pressure	MPa	0.7	0.7	0.7	0.7
Rated Discharge Capacity	m³/min	4.1	6.8	4.0 <3.5> [3.2]	6.7 <6.0> [5.4]
PQ WIDE MODE Discharge Pressure	MPa	0.6	0.85	0.6	0.85
PQ WIDE MODE Discharge Capacity	m³/min	4.3	3.6	7.1	6.2
Intake Air Pressure/Temperature	—	Atmospheric Pressure / 0-45°C (2-45°C)			
Discharge Temperature	°C	Ambient Temperature +15 or below			
Driving Method	—	DCBL Direct Drive			
Starting Type	—	Soft Start			
Lubricating Oil	—	NEW HISCREW OIL NEXT			
Lubricating Oil Quantity	L	10	15	10	15
P.D.P.	°C	10 (Under Pressure)			
(Dryer) Refrigerator Nominal Output	kW	[1.2]	[1.45]	[1.2]	[1.45]
Refrigerant	—	[R410A]			
Discharge Pipe Diameter	mm	Rc 1-1/2			
Dimension (WxDxH)	mm	1,000x1,050x1,550	1,200x1,150x1,650	1,000x1,050x1,550	1,200x1,150x1,650
Weight	kg	450 [510]	670 [740]	470 [530]	670 [740]
Sound Level	dB [A]	56	60	57	60

55/75kW (VPLUS)

Item/Unit	Model	OSP-55VA(R)N2	OSP-75VA(R)N2	OSP-55VW(R)N2	OSP-75VW(R)N2
Cooling Method	—	Air-Cooled		Water-Cooled	
Nominal Output	kW	55	75	55	75
Rated Discharge Pressure	MPa	0.7			
Rated Discharge Capacity	m³/min	10.1	13.3	10.1	13.3
PQ WIDE MODE Discharge Pressure	MPa	0.6	0.85	0.6	0.85
PQ WIDE MODE Discharge Capacity	m³/min	10.6	9.1	14.0	12.0
Intake Air Pressure/Temperature	—	Atmospheric Pressure / 0-45°C (2-45°C)			
Discharge Temperature	°C	Ambient Temperature +15 or below			
Driving Method	—	DCBL Direct Drive			
Starting Type	—	Soft Start			
Lubricating Oil	—	NEW HISCREW OIL NEXT			
Lubricating Oil Quantity	L	28 (Not filled)	39 (Not filled)	17 (Not filled)	26 (Not filled)
P.D.P.	°C	10 (Under Pressure)			
(Dryer) Refrigerator Nominal Output	kW	[2.2]	[1.9]	[2.2]	[1.9]
Refrigerant	—	[R410A]			
Temperature	°C	35 or below			
Cooling Water Quantity	L/min	100			
Discharge Pipe Diameter	B	Rc 2			
Discharge Pipe Diameter	B	Rc 2			
Dimension (WxDxH)	mm	2,000x1,200x1,800			
Weight	kg	1,230 (1,350)	1,405 (1,555)	1,070 (1,190)	1,240 (1,390)
Sound Level	dB [A]	64	66	63	65

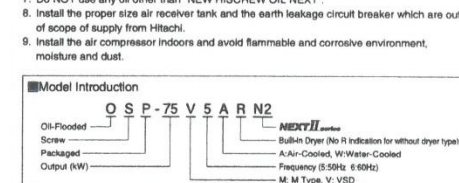
55/75kW (Mtype)

Item/Unit	Model	OSP-55MSA(R)N2 OSP-55MSA(R)N2	OSP-75MSA(R)N2 OSP-75MSA(R)N2	OSP-55MSW(R)N2 OSP-55MSW(R)N2	OSP-75MSW(R)N2 OSP-75MSW(R)N2
Cooling Method	—	Air-Cooled		Water-Cooled	
Nominal Output	kW	55	75	55	75
Rated Discharge Pressure	MPa	0.7 <0.85> [1.0]			
Rated Discharge Capacity	m³/min	10.0 <9.0> [8.3]	13.2 <11.9> [10.9]	10.0 <9.0> [8.3]	13.2 <11.9> [10.9]
Intake Air Pressure/Temperature	—	Atmospheric Pressure / 0-45°C (2-45°C)			
Discharge Temperature	°C	Ambient Temperature +15 or below			
Driving Method	—	2-Pole TEFC Motor with Gear Driving			
Starting Type	—	Star-Delta			
Lubricating Oil	—	NEW HISCREW OIL NEXT			
Lubricating Oil Quantity	L	29 (Not filled)	40 (Not filled)	17 (Not filled)	26 (Not filled)
P.D.P.	°C	10 (Under Pressure)			
(Dryer) Refrigerator Nominal Output	kW	[2.2]	[1.9]	[2.2]	[1.9]
Refrigerant	—	[R410A]			
Temperature	°C	35 or below			
Cooling Water Quantity	L/min	100			
Discharge Pipe Diameter	B	Rc 2			
Discharge Pipe Diameter	B	Rc 2			
Dimension (WxDxH)	mm	2,000x1,200x1,800			
Weight	kg	1,500 (1,620)	1,755 (1,905)	1,340 (1,460)	1,580 (1,740)
Sound Level	dB [A]	65	67	64	66

Notes:

- Capacity is measured according to ISO 1217, Third Edition, Annex C. Capacity after the built-in dryer is decreased by 3%.
- Pressures are indicated as the gauge pressure.
- Sound Level is the converted value under the condition of 1.5m in front and 1m height in an anechoic room. It may vary in different operating conditions and/or different environments with echo of actual field installations. Sound level may be increased by 3dB at PQ WIDE MODE ON.
- P.D.P. is measured at 30 degree C of the ambient temperature, 45 degree C of the dryer inlet temperature and rated discharge pressure. P.D.P. may be 15 degree C at PQ WIDE MODE ON and 0.6MPa of discharge pressure. P.D.P. may be worth at the lower discharge pressure than above conditions at PQ WIDE MODE ON.
- Contact the supplier for the dryer and filters selection at PQ wide mode ON.
- The transformer installation space is required for the built-in dryer for the model other than 200V/50Hz, 200-220V/60Hz.

Model Introduction



HISCREW NEXT II series (100kW)

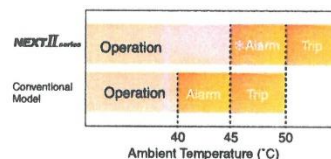


VSD Fixed Speed Type Air-Cooled Water-Cooled Without Dryer

High Reliability & Maintenance Friendly

Up to 50°C

- Standard up to 45°C
- Operation is possible under 50°C



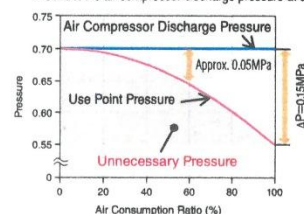
* Ambient temperature alarm will be indicated when ambient temperature is over 45°C.
Continuous operation at higher than 45°C may shorten lifetime of lubricating oil and electric parts.

IPC Control (Intelligent Pressure Control)

By estimating use point pressure in accordance with air consumption, IPC control decreases discharge pressure during low load operation, which enables Energy-Saving.

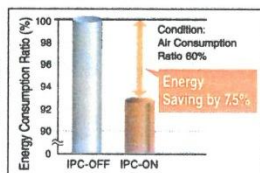
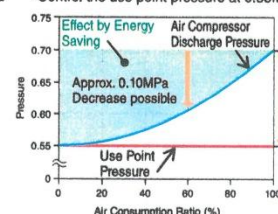
1 IPC-OFF

- Control the air compressor discharge pressure at 0.70MPa



2 IPC-ON

- Control the use point pressure at 0.55MPa



* The graph of pressure change above shows the theoretical values with piping pressure loss of 0.15MPa at full load.
* Due to estimation control, use point pressure varies in accordance with use conditions.

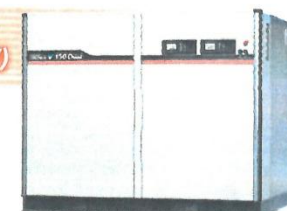
Standard Specification

Item Unit	Model	OSP-100VAN2	OSP-100M5AN2 OSP-100M6AN2	OSP-100VWN2	OSP-100M5WN2 OSP-100M6WN2
Cooling Method	—	Air-cooled		Water-Cooled	
Nominal Output	kW	100			
Rated	Discharge Pressure	0.7	0.7 <0.85>	0.7	0.7 <0.85>
	Discharge Capacity	18.9	19.6 <17.6>	18.9	19.6 <17.6>
PQ WIDE Mode	Discharge Pressure	0.8-0.85	—	0.8-0.85	—
	Discharge Capacity	19.6-16.8	—	19.6-16.8	—
Intake Air Pressure/Temperature	—	Atmospheric pressure / 0-45°C			
Discharge Temperature	°C	Atmospheric Temperature + 15 or below		Temperature of Cooling Water +13 or below	
Driving Method	—	Gear Drive			
Starting Type	—	Inverter	Star-delta	Inverter	Star-delta
Lubricating Oil	—	NEW HISCREW OIL NEXT			
Lubricating Oil Quantity	L	50 (Not filled)		37 (Not filled)	
Nominal Output of Cooling Fan	kW	1.1x2 (with Inverter Control)		0.05x3	
Discharge Pipe Diameter	B	2-1/2			
Cooling Water	Temperature	—		35 or below	
	Quantity	L/min		150	
Dimension (WxDxH)	mm	2,550x1,500x1,800			
Weight	kg	3,000	2,900	2,900	2,800

- Note:
- Capacity is measured according to ISO 1217, Third Edition, Annex C.
 - Pressure is indicated as the gauge pressure.
 - Temperature of discharge air may vary from different environments.
 - Contact the supplier for the dryer and filters selection at PQ WIDEMODE ON.
 - Install the proper size air receiver tank and the earth leakage circuit breaker which are out of scope of supply from Hitachi.

- Earth leakage circuit breaker need to be installed separately for each unit.
- Do NOT use any oil other than "NEW HISCREW OIL NEXT".
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- < > show values of capacity under different discharge pressures.

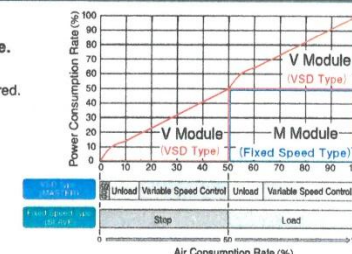
HISCREW NEXT II series (150kW)



VSD Fixed Speed Type Air-Cooled Water-Cooled Without Dryer

Improvement of Energy-Saving Performance

- Evolved Energy-Saving feature is possible by loading 2 units of 75kW inside together with V-M combination control in V type.
- VSD type with inverter as MASTER is preferred during operation.
- In case of increase in used air, the operation of Fixed Speed Type will be triggered.
- The change of load can be balanced by the revolution control of VSD type.



New Developed Air-End

Large capacity and high efficiency thanks to the improvement of rotor profile and optimization of oil lubricating method.

Automatic Switch-Over of Operation in case of Trouble

In case that operation of one compressor stops due to trouble, the total operation continues by automatically switching over to the other.

Maintenance Friendly

- Overhaul cycle is every 8 years. (2 years longer than the conventional model)
- Package filter on the suction port is standard.

High Reliability

- Standard up to 45°C
- Operation is possible under 50°C

Standard Specification

Item Unit	Model	OSP-150V5ADN2 OSP-150V6ADN2	OSP-150M5ADN2 OSP-150M6ADN2	OSP-150V5WDN2 OSP-150V6WDN2	OSP-150M5WDN2 OSP-150M6WDN2	
Cooling Method	—	Air-cooled		Water-Cooled		
Nominal Output	kW	150 (75×2)				
Rated	Discharge Pressure	0.7 <0.85>				
	Discharge Capacity	m³/min	26.5 <23.9>	26.4 <23.8>	26.5 <23.9>	26.4 <23.8>
Intake Air Pressure/Temperature	—	Atmospheric pressure / 0—45℃				
Discharge Temperature	℃	Atmospheric Temperature + 15 or below		Temperature of Cooling Water +13 or below		
Driving Method	—	V module: coupling M module: Gear Drive	Gear Drive	V module: coupling M module: Gear Drive	Gear Drive	
Starting Type	—	V module: Inverter soft start M module: Star-delta	Star-delta	V module: Inverter soft start M module: Star-delta	Star-delta	
Lubricating Oil	—	NEW HISCREW OIL NEXT				
Lubricating Oil Quantity	L	79 (Not filled)	80 (Not filled)	52 (Not filled)	52 (Not filled)	
Nominal Output of Cooling Fan	kW	2.2×2 (with Inverter Control)		0.05×4		
Discharge Pipe Diameter	B	3				
Cooling Temperature	℃	35 or below				
Water Quantity	L/min	250				
Dimension (W×D×H)	mm	2,350×1,850×1,900				
Weight	kg	3,300	3,650	2,970	3,320	

- Note:
- Capacity is measured according to ISO 1217, Third Edition, Annex C.
 - Pressure is indicated as the gauge pressure.
 - Temperature of discharge air may vary from different environments.
 - Install the proper size air receiver tank and the earth leakage circuit breaker which are out of scope of supply from Hitachi.

- Earth leakage circuit breaker need to be installed separately for each unit.
- Do NOT use any oil other than "NEW HISCREW OIL NEXT".
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- < > show values of capacity under different discharge pressures.

Auxiliary Equipment

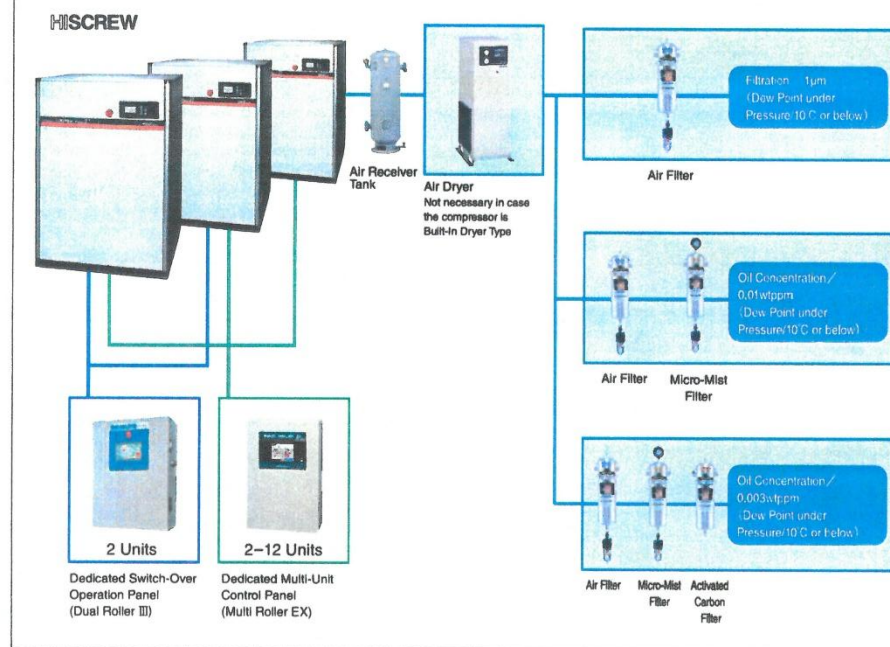
Environment Protection, Energy-Saving, Labor-Saving A Wide Variety of Auxiliary Equipment for Improving the Quality of Air

We recommend using the following auxiliary equipment with your compressors for effective and systematic use of your facilities.

Example of Oil-Flooded Screw Compressed Air System

For Hitachi Oil-Flooded Screw Compressor, V plus of Variable Speed Control and M type (possible to response to significant pressure change) are provided as various HISCREW series.

As solutions for higher demand of diversity, optional specifications and a wide variety of auxiliary equipment are provided.



Control Panel

Multi Unit Controller (MULTI ROLLER EX)

- Designed for Hitachi Air Compressor
- Efficient Control of Multiple Units
- Energy-Saving
- Various Functions Available



Alternate Operation Controller (Dual Roller III)

- Designed for Hitachi Air Compressor
- Efficient Control of 2 Units
- Energy-Saving



Standard Specification

Item	Model	Unit	MR 26-4	MR 26-8	MR 26-12
Power Supply	—	—	Single-phase AC100/200V (Common)		
Frequency	—	—	50/60Hz (Common)		
Controlled Unit	—	—	4	8	12
Discharge Pressure	MPa	—	0 ~ 1 (Digital Indication)		
Control	—	—	Answer (Operation), Failure		
External	—	—	Start, Stop, Forced Start-up, Remote		
Control	—	—	Run, Stop, Load, PID Command		
External	—	—	Start, Shutdown, Auto		
Controlled Discharge Pressure	—	—	Minimum ±0.001MPa setting		
Dimensions (WxDxH)	mm	—	400x200x600	500x200x900	500x200x1,200
Weight	kg	—	19	32	37

Standard Specification

Item	Model	Unit	SDR-3
Power Supply	—	—	AC100V (—10%+10%) [Possible for AC200V by switching connector]
Power Supply Frequency	—	—	AC100 to 240V±10% 50/60Hz [Single-phase]
Controllable Number of Units	—	—	2
Frequency x2	—	mA	4 ~ 20 (2500)
Remote-Set (Remote) x2	—	—	—
Run (Operation) x2	—	—	Connection using the contacts to which no voltage is applied [Power supply DC24V]
Failure (Shut down) x2	—	—	—
ElectricPulse x Extra x2	—	—	Optional terminals
Run x2	—	1500ms w/out voltage	"a"contact
Stop x2	—	Pulse AC250V0.3A	"b"contact
Load/Unload Command x2	—	Dry contact	"c"contact
Status x2	—	AC250V0.3A	"a"contact
Pressure Detection	—	—	Built-in pressure sensor [0 ~ 1 MPa]
Operation Method	—	—	Following control [pressure/failure], Switching time [LAP/GAP], Schedule
Standard Function	—	—	Initial pump-up operation, Err. history, IPS restart, Remote operation
Dimensions (WxDxH)	mm	—	300x180x400
Weight	kg	—	10

Safety Precautions

- Regarding compressor application
 - The compressor described in this catalog utilizes only air as a gas. Absolutely avoid using it for compression of a gas other than air — this could result in a fire hazard or damage to the equipment.
 - Never use compressed air for human breathing.
- Regarding installation site
 - Install this compressor indoors. Avoid using it at a place susceptible to moisture such as precipitation or vapors — this could result in a fire hazard, electric shock, rusting or shortened life of parts.
 - There should be no explosive or flammable gas (acetylene, propane, etc.), organic solvent, explosive powder or flame used near the compressor — otherwise there is a fire hazard.
 - Avoid using the compressor at a place where there is corrosive gas such as ammonia, acid, salt sulfurous acid gas, etc. — this could result in rusting, shortened life, or damage to the equipment.
- Regarding usage
 - Before use, be sure to read the instruction manual thoroughly for correct use of the compressor.
 - Absolutely avoid modifying the compressor or its components—this could result in damage or malfunction.

Auxiliary Equipment

Hitachi Air Dryer

Hitachi Air Dryer HDR (Medium Size) series

HFC Refrigerant
R407C



HDR-7.5AXI

Specifications

Item/Unit	Model	HDR-7.5AXI	HDR-15AXI	HDR-27AXI	HDR-37AXI	HDR-55AX	HDR-75AX	HDR-105AX							
Capacity (Note 1) 50/60Hz	m³/min	1.3/1.4	2.5/2.9	4.0/4.3	6.8/7.4	10.8/11.3	15.0/15.7	19.0/20.0							
Inlet Pressure of Compressed Air	MPa	0.30 - 0.97		0.30 - 0.97		0.30 - 0.97		0.40 - 0.97							
Max. Inlet Temperature of Compressed Air	°C	80													
Ambient Temperature	°C	5 - 40													
Dew Point of Outlet Air	°C	10 Under Pressure													
Cooling Method of Condenser	-	Air-Cooled													
Refrigerant Control Device	-	Capillary Tube		Ejector											
Capacity Control Device	-	Hot Gas Bypass Valve													
Refrigerant Used	-	R407C													
Charged Quantity	g	250	380	600	1,000	1,650	2,000								
Finish Color	-	Ivory (Munsell No. 5Y8.5/1)													
Pipe Diameter	B	Rc 1		Rc 1-1/2		Rc 2	Rc 2-1/2								
Dimensions (WxDxH) (200V Model)	mm	303x603x720		356x513x1,067		356x513x1,274	356x603x1,274	356x603x1,489	406x1,400x1,380						
Dimensions (WxDxH) (400V Model)	mm	303x833x720		356x826x1,067		356x826x1,274	356x903x1,274	356x903x1,489	406x1,400x1,385						
Weight (200V Model)	kg	44	46	74	87	135	170	280							
Weight (400V Model)	kg	59	75	126	139	140	176	286							
Accessories	-	Auto Drain Trap, Drain Valve													

NOTE:

1. The capacity values above are measured at an ambient temperature of 30°C, inlet temperature of 45°C, inlet pressure of 0.70MPa.
2. Dew point gets worse if operated at pressure below the range of operation pressure.
3. The dimensions do NOT include protruding objects.
4. In case of having solid objects such as rust in the inlet air flow, install a pre-filter on the inlet of dryer.

Hitachi Air Dryer HDR (Large Size) series

HFC Refrigerant
R407C



HDR-150AX

Specifications

Item/Unit	Model	HDR-120	HDR-150WX	HDR-190WX	HDR-240WX	HDR-300WX	HDR-360WX	HDR-420WX	HDR-480WX	HDR-540WX	HDR-600WX	HDR-660WX	HDR-720WX	HDR-780WX	HDR-840WX	HDR-900WX	HDR-960WX	HDR-1020WX	HDR-1080WX	HDR-1140WX	HDR-1200WX	HDR-1260WX	HDR-1320WX	HDR-1380WX	HDR-1440WX	HDR-1500WX	HDR-1560WX	HDR-1620WX	HDR-1680WX	HDR-1740WX	HDR-1800WX	HDR-1860WX	HDR-1920WX	HDR-1980WX	HDR-2040WX	HDR-2100WX	HDR-2160WX	HDR-2220WX	HDR-2280WX	HDR-2340WX	HDR-2400WX	HDR-2460WX	HDR-2520WX	HDR-2580WX	HDR-2640WX	HDR-2700WX	HDR-2760WX	HDR-2820WX	HDR-2880WX	HDR-2940WX	HDR-3000WX	HDR-3060WX	HDR-3120WX	HDR-3180WX	HDR-3240WX	HDR-3300WX	HDR-3360WX	HDR-3420WX	HDR-3480WX	HDR-3540WX	HDR-3600WX	HDR-3660WX	HDR-3720WX	HDR-3780WX	HDR-3840WX	HDR-3900WX	HDR-3960WX	HDR-4020WX	HDR-4080WX	HDR-4140WX	HDR-4200WX	HDR-4260WX	HDR-4320WX	HDR-4380WX	HDR-4440WX	HDR-4500WX	HDR-4560WX	HDR-4620WX	HDR-4680WX	HDR-4740WX	HDR-4800WX	HDR-4860WX	HDR-4920WX	HDR-4980WX	HDR-5040WX	HDR-5100WX	HDR-5160WX	HDR-5220WX	HDR-5280WX	HDR-5340WX	HDR-5400WX	HDR-5460WX	HDR-5520WX	HDR-5580WX	HDR-5640WX	HDR-5700WX	HDR-5760WX	HDR-5820WX	HDR-5880WX	HDR-5940WX	HDR-6000WX	HDR-6060WX	HDR-6120WX	HDR-6180WX	HDR-6240WX	HDR-6300WX	HDR-6360WX	HDR-6420WX	HDR-6480WX	HDR-6540WX	HDR-6600WX	HDR-6660WX	HDR-6720WX	HDR-6780WX	HDR-6840WX	HDR-6900WX	HDR-6960WX	HDR-7020WX	HDR-7080WX	HDR-7140WX	HDR-7200WX	HDR-7260WX	HDR-7320WX	HDR-7380WX	HDR-7440WX	HDR-7500WX	HDR-7560WX	HDR-7620WX	HDR-7680WX	HDR-7740WX	HDR-7800WX	HDR-7860WX	HDR-7920WX	HDR-7980WX	HDR-8040WX	HDR-8100WX	HDR-8160WX	HDR-8220WX	HDR-8280WX	HDR-8340WX	HDR-8400WX	HDR-8460WX	HDR-8520WX	HDR-8580WX	HDR-8640WX	HDR-8700WX	HDR-8760WX	HDR-8820WX	HDR-8880WX	HDR-8940WX	HDR-9000WX	HDR-9060WX	HDR-9120WX	HDR-9180WX	HDR-9240WX	HDR-9300WX	HDR-9360WX	HDR-9420WX	HDR-9480WX	HDR-9540WX	HDR-9600WX	HDR-9660WX	HDR-9720WX	HDR-9780WX	HDR-9840WX	HDR-9900WX	HDR-9960WX	HDR-10020WX	HDR-10080WX	HDR-10140WX	HDR-10200WX	HDR-10260WX	HDR-10320WX	HDR-10380WX	HDR-10440WX	HDR-10500WX	HDR-10560WX	HDR-10620WX	HDR-10680WX	HDR-10740WX	HDR-10800WX	HDR-10860WX	HDR-10920WX	HDR-10980WX	HDR-11040WX	HDR-11100WX	HDR-11160WX	HDR-11220WX	HDR-11280WX	HDR-11340WX	HDR-11400WX	HDR-11460WX	HDR-11520WX	HDR-11580WX	HDR-11640WX	HDR-11700WX	HDR-11760WX	HDR-11820WX	HDR-11880WX	HDR-11940WX	HDR-12000WX	HDR-12060WX	HDR-12120WX	HDR-12180WX	HDR-12240WX	HDR-12300WX	HDR-12360WX	HDR-12420WX	HDR-12480WX	HDR-12540WX	HDR-12600WX	HDR-12660WX	HDR-12720WX	HDR-12780WX	HDR-12840WX	HDR-12900WX	HDR-12960WX	HDR-13020WX	HDR-13080WX	HDR-13140WX	HDR-13200WX	HDR-13260WX	HDR-13320WX	HDR-13380WX	HDR-13440WX	HDR-13500WX	HDR-13560WX	HDR-13620WX	HDR-13680WX	HDR-13740WX	HDR-13800WX	HDR-13860WX	HDR-13920WX	HDR-13980WX	HDR-14040WX	HDR-14100WX	HDR-14160WX	HDR-14220WX	HDR-14280WX	HDR-14340WX	HDR-14400WX	HDR-14460WX	HDR-14520WX	HDR-14580WX	HDR-14640WX	HDR-14700WX	HDR-14760WX	HDR-14820WX	HDR-14880WX	HDR-14940WX	HDR-15000WX	HDR-15060WX	HDR-15120WX	HDR-15180WX	HDR-15240WX	HDR-15300WX	HDR-15360WX	HDR-15420WX	HDR-15480WX	HDR-15540WX	HDR-15600WX	HDR-15660WX	HDR-15720WX	HDR-15780WX	HDR-15840WX	HDR-15900WX	HDR-15960WX	HDR-16020WX	HDR-16080WX	HDR-16140WX	HDR-16200WX	HDR-16260WX	HDR-16320WX	HDR-16380WX	HDR-16440WX	HDR-16500WX	HDR-16560WX	HDR-16620WX	HDR-16680WX	HDR-16740WX	HDR-16800WX	HDR-16860WX	HDR-16920WX	HDR-16980WX	HDR-17040WX	HDR-17100WX	HDR-17160WX	HDR-17220WX	HDR-17280WX	HDR-17340WX	HDR-17400WX	HDR-17460WX	HDR-17520WX	HDR-17580WX	HDR-17640WX	HDR-17700WX	HDR-17760WX	HDR-17820WX	HDR-17880WX	HDR-17940WX	HDR-18000WX	HDR-18060WX	HDR-18120WX	HDR-18180WX	HDR-18240WX	HDR-18300WX	HDR-18360WX	HDR-18420WX	HDR-18480WX	HDR-18540WX	HDR-18600WX	HDR-18660WX	HDR-18720WX	HDR-18780WX	HDR-18840WX	HDR-18900WX	HDR-18960WX	HDR-19020WX	HDR-19080WX	HDR-19140WX	HDR-19200WX	HDR-19260WX	HDR-19320WX	HDR-19380WX	HDR-19440WX	HDR-19500WX	HDR-19560WX	HDR-19620WX	HDR-19680WX	HDR-19740WX	HDR-19800WX	HDR-19860WX	HDR-19920WX	HDR-19980WX	HDR-20040WX	HDR-20100WX	HDR-20160WX	HDR-20220WX	HDR-20280WX	HDR-20340WX	HDR-20400WX	HDR-20460WX	HDR-20520WX	HDR-20580WX	HDR-20640WX	HDR-20700WX	HDR-20760WX	HDR-20820WX	HDR-20880WX	HDR-20940WX	HDR-21000WX	HDR-21060WX	HDR-21120WX	HDR-21180WX	HDR-21240WX	HDR-21300WX	HDR-21360WX	HDR-21420WX	HDR-21480WX	HDR-21540WX	HDR-21600WX	HDR-21660WX	HDR-21720WX	HDR-21780WX	HDR-21840WX	HDR-21900WX	HDR-21960WX	HDR-22020WX	HDR-22080WX	HDR-22140WX	HDR-22200WX	HDR-22260WX	HDR-22320WX	HDR-22380WX	HDR-22440WX	HDR-22500WX	HDR-22560WX	HDR-22620WX	HDR-22680WX	HDR-22740WX	HDR-22800WX	HDR-22860WX	HDR-22920WX	HDR-22980WX	HDR-23040WX	HDR-23100WX	HDR-23160WX	HDR-23220WX	HDR-23280WX	HDR-23340WX	HDR-23400WX	HDR-23460WX	HDR-23520WX	HDR-23580WX	HDR-23640WX	HDR-23700WX	HDR-23760WX	HDR-23820WX	HDR-23880WX	HDR-23940WX	HDR-24000WX	HDR-24060WX	HDR-24120WX	HDR-24180WX	HDR-24240WX	HDR-24300WX	HDR-24360WX	HDR-24420WX	HDR-24480WX	HDR-24540WX	HDR-24600WX	HDR-24660WX	HDR-24720WX	HDR-24780WX	HDR-24840WX	HDR-24900WX	HDR-24960WX	HDR-25020WX	HDR-25080WX	HDR-25140WX	HDR-25200WX	HDR-25260WX	HDR-25320WX	HDR-25380WX	HDR-25440WX	HDR-25500WX	HDR-25560WX	HDR-25620WX	HDR-25680WX	HDR-25740WX	HDR-25800WX	HDR-25860WX	HDR-25920WX	HDR-25980WX	HDR-26040WX	HDR-26100WX	HDR-26160WX	HDR-26220WX	HDR-26280WX	HDR-26340WX	HDR-26400WX	HDR-26460WX	HDR-26520WX	HDR-26580WX	HDR-26640WX	HDR-26700WX	HDR-26760WX	HDR-26820WX	HDR-26880WX	HDR-26940WX	HDR-27000WX	HDR-27060WX	HDR-27120WX	HDR-27180WX	HDR-27240WX	HDR-27300WX	HDR-27360WX	HDR-27420WX	HDR-27480WX	HDR-27540WX	HDR-27600WX	HDR-27660WX	HDR-27720WX	HDR-27780WX	HDR-27840WX	HDR-27900WX	HDR-27960WX	HDR-28020WX	HDR-28080WX	HDR-28140WX	HDR-28200WX	HDR-28260WX	HDR-28320WX	HDR-28380WX	HDR-28440WX	HDR-28500WX	HDR-28560WX	HDR-28620WX	HDR-28680WX	HDR-28740WX	HDR-28800WX	HDR-28860WX	HDR-28920WX	HDR-28980WX	HDR-29040WX	HDR-29100WX	HDR-29160WX	HDR-29220WX	HDR-29280WX	HDR-29340WX	HDR-29400WX	HDR-29460WX	HDR-29520WX	HDR-29580WX	HDR-29640WX	HDR-29700WX	HDR-29760WX	HDR-29820WX	HDR-29880WX	HDR-29940WX	HDR-30000WX	HDR-30060WX	HDR-30120WX	HDR-30180WX	HDR-30240WX	HDR-30300WX	HDR-30360WX	HDR-30420WX	HDR-30480WX	HDR-30540WX	HDR-30600WX	HDR-30660WX	HDR-30720WX	HDR-30780WX	HDR-30840WX	HDR-30900WX	HDR-30960WX	HDR-31020WX	HDR-31080WX	HDR-31140WX	HDR-31200WX	HDR-31260WX	HDR-31320WX	HDR-31380WX	HDR-31440WX	HDR-31500WX	HDR-31560WX	HDR-31620WX	HDR-31680WX	HDR-31740WX	HDR-31800WX	HDR-31860WX	HDR-31920WX	HDR-31980WX	HDR-32040WX	HDR-32100WX	HDR-32160WX	HDR-32220WX	HDR-32280WX	HDR-32340WX	HDR-32400WX	HDR-32460WX	HDR-32520WX	HDR-32580WX	HDR-32640WX	HDR-32700WX	HDR-32760WX	HDR-32820WX	HDR-32880WX	HDR-32940WX	HDR-33000WX	HDR-33060WX	HDR-33120WX	HDR-33180WX	HDR-33240WX	HDR-33300WX	HDR-33360WX	HDR-33420WX	HDR-33480WX	HDR-33540WX	HDR-33600WX	HDR-33660WX	HDR-33720WX	HDR-33780WX	HDR-33840WX	HDR-33900WX	HDR-33960WX	HDR-34020WX	HDR-34080WX	HDR-34140WX	HDR-34200WX	HDR-34260WX	HDR-34320WX	HDR-34380WX	HDR-34440WX	HDR-34500WX	HDR-34560WX	HDR-34620WX	HDR-34680WX	HDR-34740WX	HDR-34800WX	HDR-34860WX	HDR-34920WX	HDR-34980WX	HDR-35040WX	HDR-35100WX	HDR-35160WX	HDR-35220WX	HDR-35280WX	HDR-35340WX	HDR-35400WX	HDR-35460WX	HDR-35520WX	HDR-35580WX	HDR-35640WX	HDR-35700WX	HDR-35760WX	HDR-35820WX	HDR-35880WX	HDR-35940WX	HDR-36000WX	HDR-36060WX	HDR-36120WX	HDR-36180WX	HDR-36240WX	HDR-36300WX	HDR-36360WX	HDR-36420WX	HDR-36480WX	HDR-36540WX	HDR-36600WX	HDR-36660WX	HDR-36720WX	HDR-36780WX	HDR-36840WX	HDR-36900WX	HDR-36960WX	HDR-37020WX	HDR-37080WX	HDR-37140WX	HDR-37200WX	HDR-37260WX	HDR-37320WX	HDR-37380WX	HDR-37440WX	HDR-37500WX	HDR-37560WX	HDR-37620WX	HDR-37680WX	HDR-37740WX	HDR-37800WX	HDR-37860WX	HDR-37920WX	HDR-37980WX	HDR-38040WX	HDR-38100WX	HDR-38160WX	HDR-38220WX	HDR-38280WX	HDR-38340WX	HDR-38400WX	HDR-38460WX	HDR-38520WX	HDR-38580WX	HDR-38640WX	HDR-38700WX	HDR-38760WX	HDR-38820WX	HDR-38880WX	HDR-38940WX	HDR-39000WX	HDR-39060WX	HDR-39120WX	HDR-39180WX	HDR-39240WX	HDR-39300WX	HDR-39360WX	HDR-39420WX	HDR-39480WX	HDR-39540WX	HDR-39600WX	HDR-39660WX	HDR-39720WX	HDR-39780WX	HDR-39840WX	HDR-39900WX	HDR-39960WX	HDR-40020WX	HDR-40080WX	HDR-40140WX	HDR-40200WX	HDR-40260WX	HDR-40320WX	HDR-40380WX	HDR-40440WX	HDR-40500WX	HDR-40560WX	HDR-40620WX	HDR-40680WX	HDR-40740WX	HDR-40800WX	HDR-40860WX	HDR-40920WX	HDR-40980WX	HDR-41040WX	HDR-41100WX	HDR-41160WX	HDR-41220WX	HDR-41280WX	HDR-41340WX	HDR-41400WX	HDR-41460WX	HDR-41520WX	HDR-41580WX	HDR-41640WX	HDR-41700WX	HDR-41760WX	HDR-41820WX	HDR-41880WX	HDR-41940WX	HDR-42000WX	HDR-42060WX	HDR-42120WX	HDR-42180WX	HDR-42240WX	HDR-42300WX	HDR-42360WX	HDR-42420WX	HDR-42480WX	HDR-42540WX	HDR-42600WX	HDR-42660WX	HDR-42720WX	HDR-42780WX	HDR-42840WX	HDR-42900WX	HDR-42960WX	HDR-43020WX	HDR-43080WX	HDR-43140WX	HDR-43200WX	HDR-43260WX	HDR-43320WX	HDR-43380WX	HDR-43440WX	HDR-43500WX	HDR-43560WX	HDR-43620WX	HDR-43680WX	HDR-43740WX	HDR-43800WX	HDR-43860WX	HDR-43920WX	HDR-43980WX	HDR-44040WX	HDR-44100WX	HDR-44160WX	HDR-44220WX	HDR-44280WX	HDR-44340WX	HDR-44400WX	HDR-44460WX	HDR-44520WX	HDR-44580WX	HDR-44640WX	HDR-44700WX	HDR-44760WX	HDR-44820WX	HDR-44880WX	HDR-44940WX	HDR-45000WX	HDR-45060WX	HDR-45120WX	HDR-45180WX	HDR-45240WX	HDR-45300WX	HDR-45360WX	HDR-45420WX	HDR-45480WX	HDR-45540WX	HDR-45600WX	HDR-45660WX	HDR-45720WX	HDR-45780WX	HDR-45840WX	HDR-45900WX	HDR-45960WX	HDR-46020WX	HDR-46080WX	HDR-46140WX	HDR-46200WX	HDR-46260WX	HDR-46320WX	HDR-46380WX	HDR-46440WX	HDR-46500WX	HDR-46560WX	HDR-46620WX	HDR-46680WX	HDR-46740WX	HDR-46800WX	HDR-46860WX	HDR-46920WX	HDR-46980WX	HDR-47040WX	HDR-47100WX	HDR-47160WX	HDR-47220WX	HDR-47280WX	HDR-47340WX	HDR-47400WX	HDR-47460WX	HDR-47520WX	HDR-47580WX	HDR-47640WX	HDR-47700WX	HDR-47760WX	HDR-47820WX	HDR-47880WX	HDR-47940WX	HDR-48000WX	HDR-48060WX	HDR-48120WX	HDR-48180WX	HDR-48240WX	HDR-48300WX	HDR-48360WX	HDR-48420WX	HDR-48480WX	HDR-48540WX	HDR-48600WX	HDR-48660WX	HDR-48720WX	HDR-48780WX	HDR-48840WX	HDR-48900WX	HDR-48960WX	HDR-49020WX	HDR-49080WX	HDR-49140WX	HDR-49200WX	HDR-49260WX	HDR-49320WX	HDR-49380WX	HDR-49440WX	HDR-49500WX	HDR-49560WX	HDR-49620WX	HDR-49680WX	HDR-49740WX	HDR-49800WX	HDR-49860WX	HDR-49920WX	HDR-49980WX	HDR-50040WX	HDR-50100WX	HDR-50160WX	HDR-50220WX	HDR-50280WX	HDR-50340WX	HDR-50400WX	HDR-50460WX	HDR-50520WX	HDR-50580WX	HDR-50640WX	HDR-50700WX	HDR-50760WX	HDR-50820WX	HDR-50880WX	HDR-50940WX	HDR-51000WX	HDR-51060WX	HDR-51120WX	HDR-51180WX	HDR-51240WX	HDR-51300WX	HDR-51360WX	HDR-51420WX	HDR-51480WX	HDR-51540WX	HDR-51600WX	HDR-51660WX	HDR-51720WX	HDR-51780WX	HDR-51840WX	HDR-51900WX	HDR-51960WX	HDR-52020WX	HDR-52080WX	HDR-52140WX	HDR-52200WX	HDR-52260WX	HDR-52320WX	HDR-52380WX	HDR-52440WX	HDR-52500WX	HDR-52560WX	HDR-52620WX	HDR-52680WX	HDR-52740WX	HDR-52800WX	HDR-52860WX	HDR-52920WX	HDR-52980WX	HDR-53040WX	HDR-53100WX	HDR-53160WX	HDR-53220WX	HDR-53280WX	HDR-53340WX	HDR-53400WX	HDR-53460WX	HDR-53520WX	HDR-53580WX	HDR-53640WX	HDR-53700WX	HDR-53760WX	HDR-53820WX	HDR-53880WX	HDR-53940WX	HDR-54000WX	HDR-54060WX	HDR-54120WX	HDR-54180WX	HDR-54240WX	HDR-54300WX	HDR-54360WX	HDR-54420WX	HDR-54480WX	HDR-54540WX	HDR-54600WX	HDR-54660WX	HDR-54720WX	HDR-54780WX	HDR-54840WX	HDR-54900WX	HDR-54960WX	HDR-55020WX	HDR-55080WX	HDR-55140WX	HDR-55200WX	HDR-55260WX	HDR-55320WX	HDR-55380WX	HDR-55440WX	HDR-55500WX	HDR-55560WX	HDR-55620WX	HDR-55680WX	HDR-55740WX	HDR-55800WX	HDR-55860WX	HDR-55920WX	HDR-55980WX	HDR-56040WX	HDR-56100WX	HDR-56160WX	HDR-56220WX	HDR-56280WX	HDR-56340WX	HDR-56400WX	HDR-56460WX	HDR-56520WX	HDR-56580WX	HDR-56640WX	HDR-56700WX	HDR-56760WX	HDR-56820WX	HDR-56880WX	HDR-56940WX	HDR-57000WX	HDR-57060WX	HDR-57120WX	HDR-57180WX	HDR-57240WX	HDR-57300WX	HDR-57360WX	HDR-57420WX	HDR-57480WX	HDR-57540WX	HDR-57600WX	HDR-57660WX	HDR-57720WX	HDR-57780WX	HDR-57840WX	HDR-57900WX	HDR-
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System Optimization

VPLUS

Maximized Effect of Energy-Saving by Combination with V plus centered

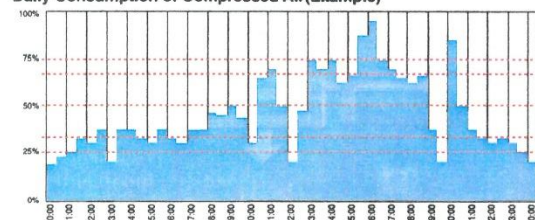
Method of Energy-Saving in case of multiple compressors setting

To respond to the change of used air, 3 patterns of optimal capacity control for air compressor are provided.

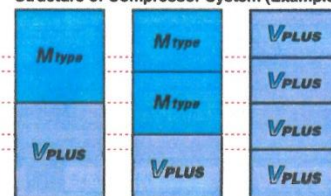
In case of setting multiple air compressors, install at least 1 unit of V plus is the key-point to achieve Energy-Saving.

In case of installing 1 unit of V plus with variable speed control, it is possible to adjust the capacity with the V plus. And part of the load operation on the fixed speed type is significantly reduced so as to achieve efficient operation.

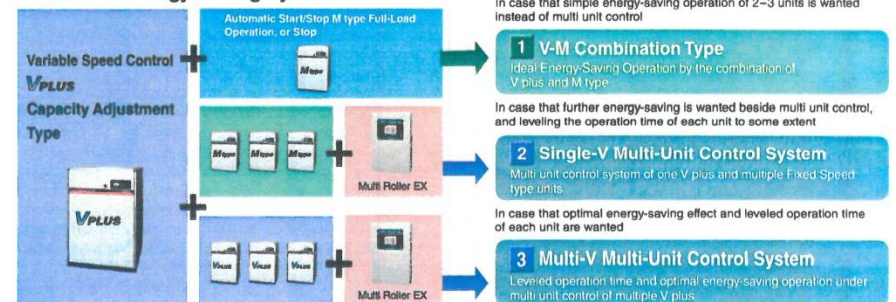
Daily Consumption of Compressed Air(Example)



Structure of Compressor System (Example)



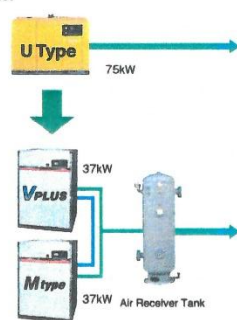
3 Patterns of Energy-Saving System



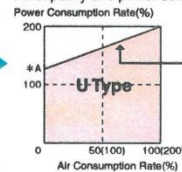
1 V-M Combination Type (JP 3547314) (2-3 units)

Conventional System

Conventional Compressor of Suction Throttle Type 1 unit



Air capacity and power consumption of 1 unit of 37kW is displayed as 100%.

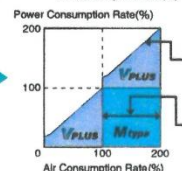
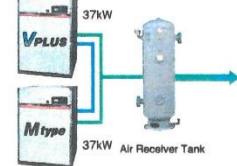


Explanation

U Type
Air Capacity Adjustment under U Type Control
Energy-Saving effect is not much
* A: Discharge Air Capacity→0%
Power Consumption→140%

V-M Combination Type

HISCREW VPLUS + HISCREW Mtype



Explanation

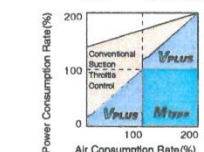
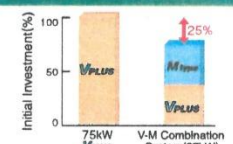
VPLUS
All-time operation, all-time capacity adjustment, responding to the air consumption at all area for power reduction

Mtype
Full load or automatic stop

Example of Energy-Saving Effect

- Power consumption is same featured as 75kW V plus.
- Reduction of **25%** in initial investment is possible.
- Reduction of power consumption up to **39%**, or about **165MWh/year** when the air consumption rate is 60%.

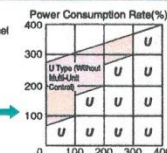
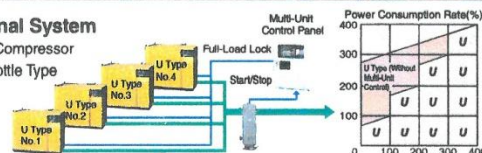
* Calculation condition: operation time is 6,000h/year, discharge pressure is 0.6MPa



2 Single-V 3 Multi-V Multi-unit Control Type (3-12 units)

Conventional System

Conventional Compressor of Suction Throttle Type (U Type)

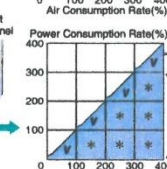
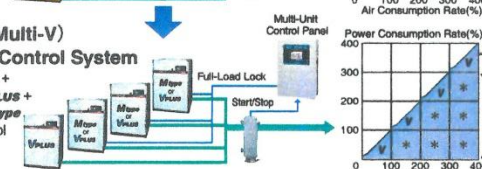


Explanation

Air Capacity Adjustment under U Type Control
Power reduction is possible, but can NOT reach the same level as Single-V.

Single-V (Multi-V) Multi-Unit Control System

Multi Roller EX + HISCREW VPLUS + HISCREW Mtype multi unit control or VPLUS

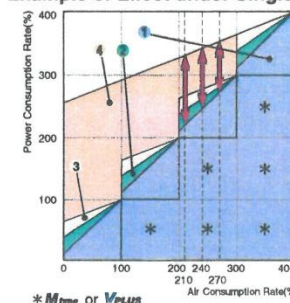


Explanation

VPLUS
All-time operation, all-time capacity adjustment, responding to air consumption at all area for power reduction

Mtype or VPLUS
Full load or automatic stop
* Mtype or VPLUS

Example of Effect under Single-V Multi Unit Control



- Multi-Unit Control of Single-V / Multi-V
- Fixed Speed Type (M type) under Multi-Unit Control
- Suction Throttle Type under Multi-Unit Control
- Suction Throttle Type under Parallel Control (without Multi-Unit Control)

Air Consumption Rate	Energy-Saving Effect		Unit: MWh
	4 → 1	4 → 2	
270%	164	147	
240%	205	171	
210%	243	195	

* Calculation Condition: 37kW air compressor without built-in air dryer x4 units
(Same in efficiency and performance)
Operation time is 6,000h/year



Asia & Oceania

China

Hitachi Industrial Equipment Systems (China) Co., Ltd.

(Shanghai Branch)
Room 2201, Rui Jin Building, No. 205
Maoming Road(S) Shanghai 200020
TEL : +86 (21) 5489-2378
FAX : +86 (21) 3356-5070

(Beijing Branch)
Room 1420, Beijing Fortune Building,
No 5 Dong San Huan Bei Road,
Chao Yang District, Beijing 100004
TEL : +86 (10) 6590-8180
FAX : +86 (10) 6590-8189
(Guangzhou Branch)
Room 3003, HNA Tower,
8# Linhezhong Road, Tianhe District,
Guangzhou 510610
TEL : +86 (20) 3877-0438
FAX : +86 (20) 2735-3820

Hitachi Industrial Equipment Systems
(Hong Kong) Co., Ltd.
8/F, Building 20E, Phase 3, Hong Kong
Science Park, Pak Shek Kok,
New Territories, Hong Kong
TEL : +852 2735-9218
FAX : +852 2735-6793

Taiwan Hitachi Asia Pacific Co., Ltd
3rd Floor, No. 167, Tun Hwa N. Road,
Hung-Kuo Building, Taipei 10512, Taiwan
TEL : +886 (2) 2718-3666
FAX : +886 (2) 2514-7664

Indonesia

PT Hitachi Asia Indonesia
International Financial Centre Tower 2
39th floor Suite #03-04, Jl.
Jenderal Sudirman Kav 22-23,
Jakarta Selatan, 12920, Indonesia
TEL : +62 (21) 2528470
FAX : +62 (21) 2358 6755

Malaysia

Hitachi Asia (Malaysia) Sdn. Bhd.
Suite 17.3, Level 17, Menara IMC
(Letter Box No 5) No. 8 Jalan Sultan
Ismail, 50250, Kuala Lumpur
TEL : +60 (3) 2031-8751
FAX : 160 (3) 2031-8758

Philippines

Hitachi Asia Ltd. Philippine Branch
Unit 8, 11th Floor Zuellig Bldg.,
Makati Avenue corner Paseo de Roxas
Makati City, Philippines 1225
TEL : +632 886-9018
FAX : +632 887-3794

Singapore

Hitachi Asia Ltd.
(Industrial Components & Equipment
Group)
7 Tampines Grande, #08-01
Hitachi Square, Singapore 528736
TEL : +65-6305-2100
FAX : +65-6305-2100

Thailand

Hitachi Asia (Thailand) Co., Ltd.
12th Floor, Ramaland Bldg., No. 952,
Rama IV Road, Sunyawongse, Bangkok
Bangkok 10500, Thailand
TEL : +66 (2) 632-9292
FAX : +66 (2) 632-9299

Viet Nam

Hitachi Asia Ltd.
(Ho Chi Minh City Office)
Room 8-9-10A 4th Floor, The Landmark,
5B Ton Duc Thang Street, Ben Nghe Ward,
District 1, Ho Chi Minh City, Vietnam
TEL : +84 (8) 3829-9725
FAX : +84 (8) 3829-9729
(Ha Noi Office)
Room 2302, 23th West, Lotte Center,
54 Lieu Giai street, Cong Vi Ward,
Ba Dinh District, Hanoi, Vietnam
TEL : +84 (4) 3933-3123
FAX : +84 (4) 3933-3125

Hitachi Two-Stage Oil Flooded Rotary Screw Compressor

HITACHI
Inspire the Next

OIL-FLOODED SCREW **NX2**series 90-250kW



Hitachi Global Air Power (Changshu) Co., Ltd.

For more information, please consult Hitachi dealer nearest to you.

Due to product improvements, the specifications, appearance, etc. of the samples described in the manual are subject to change without notice.
The samples are presented in printed form and sometimes slightly different from actual products in color.

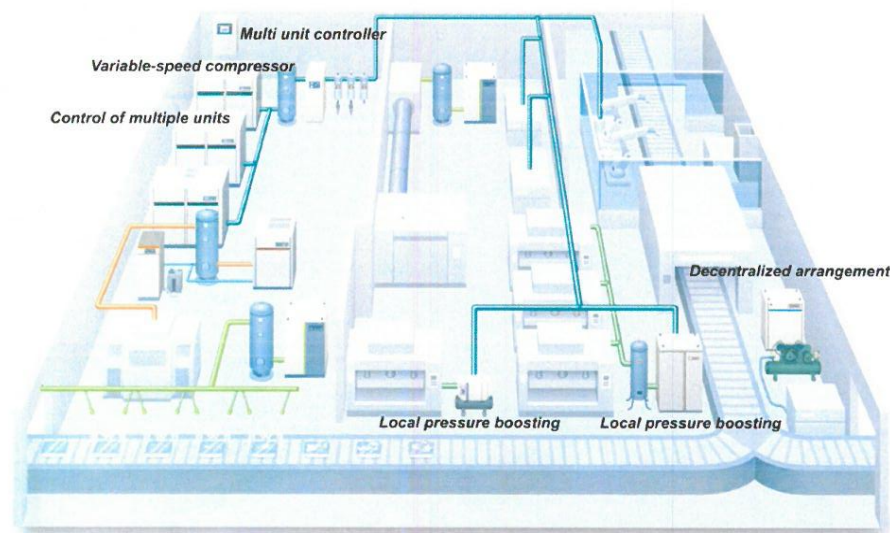
Hitachi – A Trusted Expert in Air Compressors

With a history of more than a century, Hitachi Compressor has always treated 100% customer satisfaction as the source of enterprise development.

As the leading compressor manufacturer in Japan, we are committed to continuous technological innovation and development of air compressors to meet each customer's requirements. Our products are available in power from 0.2kW to 770kW and types of piston, scroll, screw, etc.

Hitachi can provide customers with the most suitable compressed air systems in both oil-flooded and oil-free applications.

We believe, with our high-quality and efficient air compressor products, multiple compressed air solutions and perfect pre-sales and after-sales services, Hitachi will become your most trusted compressed air expert.



History of Hitachi Air Compressor



The latest interpretation of Hitachi air compressor's energy-saving technology

OSP **NX2** series two-stage compressor

Features of two-stage compressor

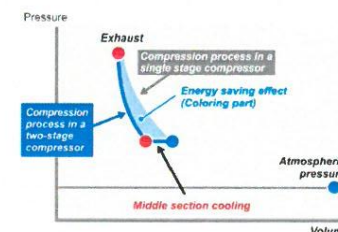


Take the 0.8MPa specification machine as an example

- Single-stage compressor compresses the air from 0MPa (atmospheric pressure) to about 0.8MPa.
- Two-stage compressor compresses the air from 0MPa (atmospheric pressure) to 0.2MPa at the first stage airtend, subsequently, the air is compressed from 0.2MPa to 0.8MPa at the second stage airtend.

Compared with the single-stage compressor, the leakage between the rotors caused by the pressure difference in the respective airtends is small because the two-stage compressor compresses the air in two-stages, thereby achieving the effect of energy saving.

*Pressure is gauge pressure.



In terms of cooling, the two-stage compressor cools the compressed air at the outlet of first stage airtend.

After reducing the volume, it is sent to the second stage airtend for second compression.

By reducing the volume, the load on the second stage airtend is smaller than that of the uncooled load.

Compared with the one-time compressed air of the single-stage compressor,

the two-stage compressor cools the compressed air in the middle section. It makes the volume smaller, reduces the load of the second stage airtend, and also achieves the effect of high efficiency and energy saving.

Model list

Nominal Output (kW)			90	110	132	160	185	200	220	250
Model										
Variable speed type	V type	Air-cooled	○	○	○	○	○	○	○	○
		Water-cooled	○	○	○	○	○	○	○	○
Fixed speed type	M type	Air-cooled	○	○	○	○	○	○	○	○
		Water-cooled	○	○	○	○	○	○	○	○

OSP **NX2** series

Variable speed type has been added to Hitachi's lineup of high performance, high efficiency two-stage compressor.

OSP *NX2 series* (90-250kW)

High-efficiency and Energy-saving Screw Airend

Optimal design of rotor profile can maximize volumetric efficiency and improve Energy-Saving performance. Reliability of compressor is guaranteed by high level of processing and assembly precision in addition to large, high-precision, heavy-duty bearings



Industry-leading High Reliability

Equipped with high-quality motor

IP55 Protection Grade

- Effectively protect motor from dust and moisture.
- Enhance the reliability of motor and compressor.

Equipped with standard dust-proof suction filter

Efficient gear drive for high reliability

New Intelligent Control System

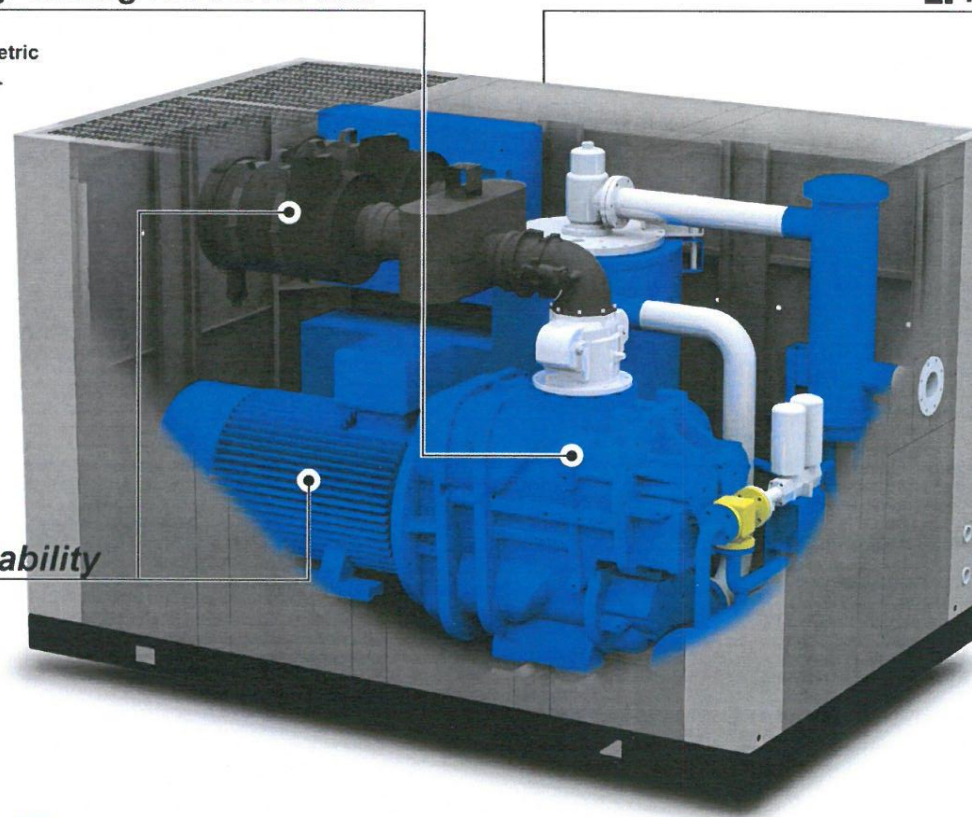
- Equipped with new LCD touch screen
- Easier operation
- Higher expandability

Dedicated Synthetic Oil

NEW HISCREW OIL NEXT

Dedicated synthetic oil developed for Hitachi screw compressors

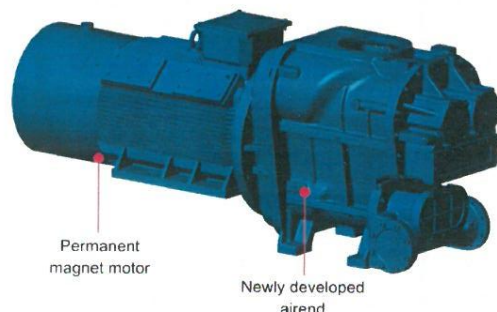
- High-quality dedicated lubricating oil ensures stable operation of air compressors and improves the overall efficiency and reliability.
- Replacement cycle up to 2 years or 12,000 hours (subject to first reach) reduces operating costs.



OSP-250M5WTX2



Efficient motor and airend



Airend

- Equipped with newly developed airend(*)
- High efficiency and high performance
- (*)Excluding some models.

Main motor

- Permanent magnet motor for all models of inverter compressor
- Efficiency class: Equivalent to IE4
- Protection class: IP55

Multi-function touch screen

The new color touch screen comes standard and is easy to operate, allowing you to see the contents at a glance.

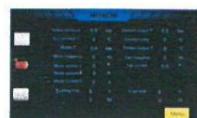
Simple operation of the touch screen allows you to obtain a wide range of information such as compressor operation information(discharge air pressure/discharge air temperature/current value), remaining time for maintenance, and fault history, as well as to set and change operating parameters.



Default interface after power on



Main interface



Operating conditions
(Pressure, temperature, current value)



Remaining time for maintenance



Parameter setting

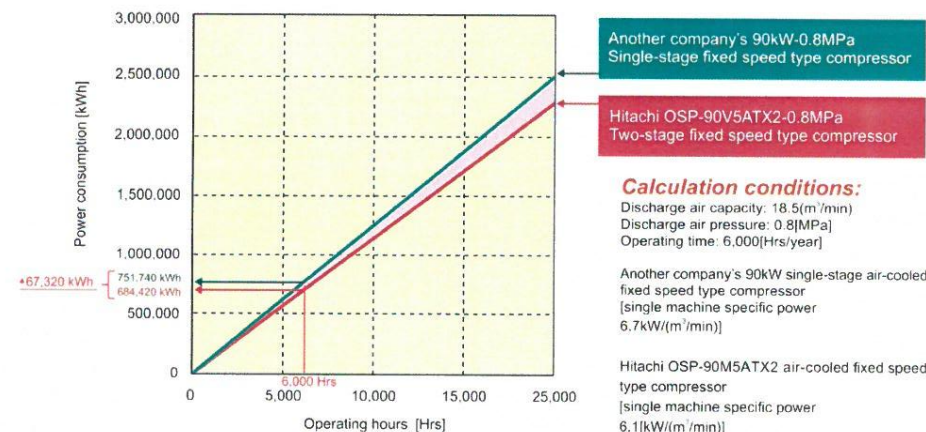


Fault history

Energy saving effect

Two-stage compressor vs Single-stage compressor

Replace the existing single-stage compressor with an efficient two-stage compressor, which reduces the cost of electricity. For example, in the case of a 90kW compressor as shown in the figure below, the maximum annual energy saving effect of **67,320kWh(Calculated value)**.



Variable speed type compressor vs Fixed speed type compressor

Taking Hitachi 132kW two-stage variable speed type compressor to replace other brands' 132kW two-stage fixed speed type compressor.

As an example, the maximum power saving effect is **111,714kWh per year(Calculated value)**.

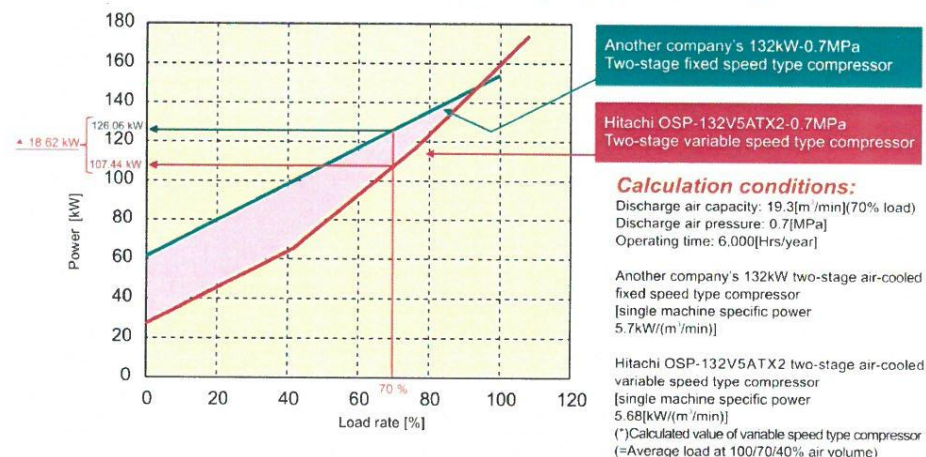


Table of Standard Specifications

90-132 kW *M* type

Item	Model	OSP-90M5ATX2	OSP-90M5WTX2	OSP-110M5ATX2	OSP-110M5WTX2	OSP-132M5ATX2	OSP-132M5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled		Air-Cooled	
Voltage(50Hz)	V	380		380		380	
Nominal Output	kW	90 ± 1		110 ± 1		132 ± 1	
Rated Discharge Pressure	MPa	0.7	0.8	0.7	0.8	0.7	0.8
Rated Discharge Air Capacity	m ³ /min	20.0	18.7	20.0	18.7	23.4	22.1
Intake Air Pressure / Temperature	-	Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature	℃	Ambient Temperature +15 or below		Cooling Water Temperature +13 or below		Ambient Temperature +15 or below	
Starting Method	-	Star-Delta		Star-Delta		Star-Delta	
Driving Method	-	Gear drive		Gear drive		Gear drive	
Lubricating Oil	-	NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity	L	105		105		105	
Cooling Water Temperature	℃	32 or below		32 or below		32 or below	
Cooling Water Flow Rate	L/min	167		200		234	
Discharge Pipe Diameter	-	DN80		DN80		DN80	
Dimensions (Width x Depth x Height)	mm	3,050 X 1,850 X 2,120		3,050 X 1,850 X 2,120		3,050 X 1,850 X 2,120	
Weight	kg	3,700		4,100		4,200	
Recommended Air Receiver Volume	m ³	3.0 or bigger		3.0 or bigger		4.0 or bigger	

160-185 kW *M* type

Item	Model	OSP-160M5ATX2	OSP-160M5WTX2	OSP-185M5ATX2	OSP-185M5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled	
Voltage(50Hz)	V	380		380	
Nominal Output	kW	160 ± 1		185 ± 1	
Rated Discharge Pressure	MPa	0.7	0.8	0.7	0.8
Rated Discharge Air Capacity	m ³ /min	33.5	32.7	33.5	32.7
Intake Air Pressure / Temperature	-	Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature	℃	Ambient Temperature +15 or below		Cooling Water Temperature +13 or below	
Starting Method	-	Star-Delta		Star-Delta	
Driving Method	-	Gear drive		Gear drive	
Lubricating Oil	-	NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity	L	150		150	
Cooling Water Temperature	℃	32 or below		32 or below	
Cooling Water Flow Rate	L/min	300		334	
Discharge Pipe Diameter	-	DN100		DN100	
Dimensions (Width x Depth x Height)	mm	3,600 X 1,850 X 2,150		3,600 X 1,850 X 2,150	
Weight	kg	5,300		5,600	
Recommended Air Receiver Volume	m ³	4.0 or bigger		5.0 or bigger	

Note:

- Capacity is measured according to ISO 1217, Annex C.
- For guaranteed capacity values, please contact your nearest sales representative.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Discharge pressure is gauge pressure.
- Temperature of discharge air may vary from different environments.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Be sure to install an air tank with more than the recommended capacity.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.

200-250 kW *M* type

Item	Model	OSP-200M5ATX2	OSP-200M5WTX2	OSP-220M5ATX2	OSP-220M5WTX2	OSP-250M5ATX2	OSP-250M5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled		Air-Cooled	
Voltage(50Hz)	V	380		380		380	
Nominal Output	kW	200 ± 1		220 ± 1		250 ± 1	
Rated Discharge Pressure	MPa	0.7	0.8	0.7	0.8	0.7	0.8
Rated Discharge Air Capacity	m ³ /min	44.0	41.5	35.5	44.0	41.5	35.5
Intake Air Pressure / Temperature	-	Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature	℃	Intake Air Temp +15 or less		Cooling water temperature +13 or less		Intake Air Temp +15 or less	
Starting Method	-	Star-Delta		Star-Delta		Star-Delta	
Driving Method	-	Gear drive		Gear drive		Gear drive	
Lubricating Oil	-	NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity	L	170		170		170	
Cooling Water Temperature	℃	32 or less		32 or less		32 or less	
Cooling Water Flow Rate	L/min	334		383		416	
Discharge Pipe Diameter	-	DN125		DN125		DN125	
Dimensions (Width x Depth x Height)	mm	4,200 X 2,150 X 2,250		4,200 X 2,150 X 2,250		4,200 X 2,150 X 2,250	
Weight	kg	7,600		7,850		8,000	
Recommended Air Receiver Volume	m ³	5.0 or bigger		6.0 or bigger		6.0 or bigger	

Note:

- Capacity is measured according to ISO 1217, Annex C.
- For guaranteed capacity values, please contact your nearest sales representative.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Discharge pressure is gauge pressure.
- Temperature of discharge air may vary from different environments.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Be sure to install an air tank with more than the recommended capacity.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.

Model Implication

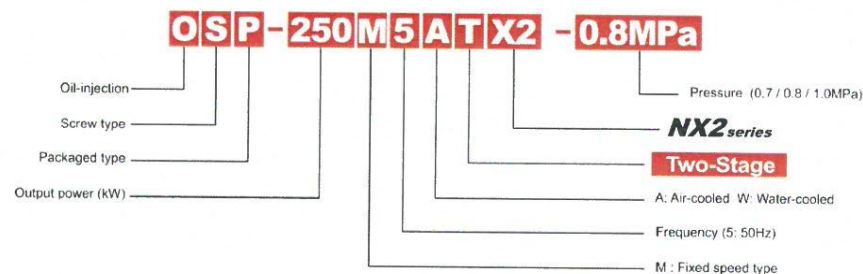


Table of Standard Specifications

90-132 kW V type

Item	Model	OSP-90V5ATX2	OSP-90V5WTX2	OSP-110V5ATX2	OSP-110V5WTX2	OSP-132V5ATX2	OSP-132V5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled		Air-Cooled	
Voltage(50Hz)	V	380		380		380	
Nominal Output	kW	90 ± 1		110 ± 1		132 ± 1	
Rated	Discharge Pressure	MPa	0.7 0.8	0.7 0.8	0.7 0.8 1.0	0.7 0.8 1.0	0.7 0.8 1.0
	Discharge Air Capacity	m³/min	20.0 18.7	20.0 18.7	23.4 22.1 18.9	23.4 22.1 18.9	29.0 26.8 22.0
Intake Air Pressure / Temperature		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature		℃ Intake temperature +15 or less		℃ Intake temperature +15 or less		℃ Intake temperature +15 or less	
Starting Method		Frequency conversion		Frequency conversion		Frequency conversion	
Driving Method		Gear drive		Gear drive		Gear drive	
Lubricating Oil		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity		L 105		105		105	
Cooling Water Temperature		℃ -		32 or less		-	
Cooling Water Flow Rate		L/min -		167		200	
Discharge Pipe Diameter		DN80		DN80		DN80	
Dimensions (Width x Depth x Height)		mm 3,200 X 1,850 X 2,120		3,000 X 1,850 X 2,120		3,200 X 1,850 X 2,120	
Weight		kg 3,750		3,550		4,180	
Recommended Air Receiver Volume		m³ 3.0 or bigger		3.0 or bigger		4.0 or bigger	

160-185 kW V type

Item	Model	OSP-160V5ATX2	OSP-160V5WTX2	OSP-185V5ATX2	OSP-185V5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled	
Voltage(50Hz)	V	380		380	
Nominal Output	kW	160 ± 1		185 ± 1	
Rated	Discharge Pressure	MPa	0.7 0.8 1.0	0.7 0.8 1.0	0.7 0.8 1.0
	Discharge Air Capacity	m³/min	33.5 32.7 26.4	33.5 32.7 26.4	38.5 37.5 32.5
Intake Air Pressure / Temperature		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature		℃ Intake temperature +15 or less		℃ Intake temperature +15 or less	
Starting Method		Frequency conversion		Frequency conversion	
Driving Method		Gear drive		Gear drive	
Lubricating Oil		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity		L 150		105	
Cooling Water Temperature		℃ -		32 or less	
Cooling Water Flow Rate		L/min -		300	
Discharge Pipe Diameter		DN100		DN100	
Dimensions (Width x Depth x Height)	0.7/0.8MPa	mm 3,900 X 1,850 X 2,150		3,350 X 1,850 X 2,150	
	1.0MPa	3,200 X 1,850 X 2,120		3,000 X 1,850 X 2,120	
Weight	0.7/0.8MPa	kg 5,560		5,260	
	1.0MPa	4,400		4,200	
Recommended Air Receiver Volume		m³ 4.0 or bigger		5.0 or bigger	

Note:

- Capacity is measured according to ISO 1217, Annex C.
- For guaranteed capacity values, please contact your nearest sales representative.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Discharge pressure is gauge pressure.
- Temperature of discharge air may vary from different environments.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Be sure to install an air tank with more than the recommended capacity.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.

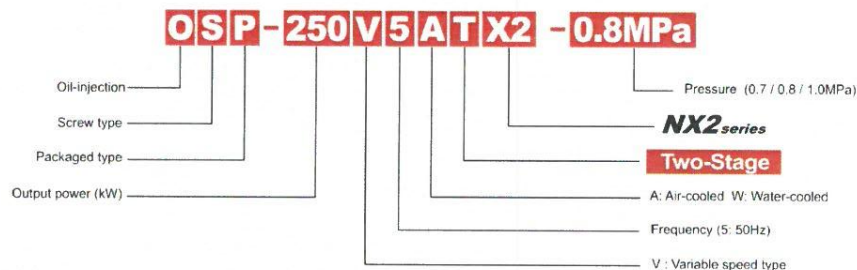
200-250 kW V type

Item	Model	OSP-200V5ATX2	OSP-200V5WTX2	OSP-220V5ATX2	OSP-220V5WTX2	OSP-250V5ATX2	OSP-250V5WTX2
Cooling Method	-	Air-Cooled		Water-Cooled		Air-Cooled	
Voltage(50Hz)	V	380		380		380	
Nominal Output	kW	200 ± 1		220 ± 1		250 ± 1	
Rated	Discharge Pressure	MPa	0.7 0.8 1.0	0.7 0.8 1.0	0.7 0.8 1.0	0.7 0.8 1.0	0.7 0.8 1.0
	Discharge Air Capacity	m³/min	44.0 41.5 35.5	44.0 41.5 35.5	50.5 46.0 40.7	50.5 46.0 40.7	53.5 49.0 46.0
Intake Air Pressure / Temperature		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃		Atmospheric Pressure / 0~45℃	
Discharge Air Temperature		℃ Intake Air Temp. +15 or less		℃ Intake Air Temp. +15 or less		℃ Intake Air Temp. +15 or less	
Starting Method		Frequency conversion		Frequency conversion		Frequency conversion	
Driving Method		Gear drive		Gear drive		Gear drive	
Lubricating Oil		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT		NEW HISCREW OIL NEXT	
Lubricating Oil Capacity	0.7/0.8MPa	L 170		170		170	
	1.0MPa	150		-		-	
Cooling Water Temperature		℃ -		32 or less		-	
Cooling Water Flow Rate		L/min -		334		383	
Discharge Pipe Diameter		DN125		DN100		DN125	
Dimensions (Width x Depth x Height)	0.7/0.8MPa	mm 4,200 X 2,150 X 2,250		3,400 X 2,150 X 2,250		4,200 X 2,150 X 2,250	
	1.0MPa	3,900 X 1,850 X 2,150		3,350 X 1,850 X 2,150		-	
Weight	0.7/0.8MPa	kg 8,000		7,600		8,100	
	1.0MPa	6,100		5,800		7,700	
Recommended Air Receiver Volume		m³ 5.0 or bigger		6.0 or bigger		6.0 or bigger	

Note:

- Capacity is measured according to ISO 1217, Annex C.
- For guaranteed capacity values, please contact your nearest sales representative.
- Nominal output is a numerical value for the rough compressor capacity. Refer to installation drawings when you plan the compressor shaft power, installed motor output, and power supply equipment.
- Discharge pressure is gauge pressure.
- Temperature of discharge air may vary from different environments.
- Install the air compressor indoors and avoid flammable and corrosive environment, moisture and dust.
- Be sure to install an air tank with more than the recommended capacity.
- Earth leakage breaker is not built in the compressor. Prepare by customer.
- Dimensions do not include the pipes and protruding parts. Refer to the drawing for more details.
- Appearance and specifications are subject to change without notice.

Model Implication



HITACHI

Inspire the Next

OIL-FREE BEBICON AIR COMPRESSORS

(0.45-11kW)

HIGH PERFORMANCE

DURABLE DESIGN

LONG OVERHAUL CYCLE

OIL LESS STRUCTURE



3.70P - 9.5G5A

ASIA
Frequency (50Hz)
GREEN Series
Pressure (0.93MPa [9.5kgf/cm²])
Pressure Switch
Oil Free
Power (3.7kW)



Specifications (HORIZONTAL TANK MOUNT TYPE)

Operation Systems	Motor Output kW	Model	Maximum Pressure MPa	Cylinder Diameter mm X Stroke mm X Number of Cylinders	Compressor Speed min ⁻¹	Displacement L/min	Capacity at Maximum Pressure L/min	Air tank Capacity L	Power Source PH	Standard Accessories	External Dimensions Width X Depth X Height mm	Weight Kg	Noise Level dB[A]	
Automatic unloader type	1.5	1.5OU-9.5GS5/6A	0.93	82X60X1	880	278	165	80	1PH	Pressure gauge, Safety valve, Hose joint, V-belt, Belt cover Silencer Stop valve	1,155X393X909	105	71	
		1.5OU-9.5G5/6A						3PH	93					
	2.2	2.2OU-9.5GS5/6A		82X60X2	650	412	240	90	1PH		1,283X403X841	139	71	
		2.2OU-9.5G5/6A						3PH	122					
	3.7	3.7OU-9.5G5/6A		82X72X2	850	646	405	125	3PH		1,477X424X909	163	74	
	5.5	5.5OU-9.5G5/6A		82X72X3	860	981	605	150	3PH		1,518X502X1,009	208	75	
	7.5	7.5OU-8.5GA5/6A		105X85X2	915	1,347	880	235	3PH		1,674X550X1,076	278	80	
11		11OU-8.5GA5/6A	105X85X3	900	1,987	1,285	290	3PH	2,014X665X1,153		385	82		
Pressure-switch type	0.75	0.75OP-9.5GS5/6A	0.93	60X50X1	980	139	75	80	1PH		Air out let 1/4BX1 for 0.75, 1.5 & 2.2kW, 3/8BX1 for 3.7 & 5.5kW, 3/4BX1 for 7.5 & 11kW	1,155X380X850	84	69
		0.75OP-9.5G5/6A						3PH	77					
	1.5	1.5OP-9.5GS5/6A		82X60X1	880	278	165	80	1PH			1,155X393X897	105	71
		1.5OP-9.5G5/6A						3PH	93					
	2.2	2.2OP-9.5GS5/6A		82X60X2	650	412	240	90	1PH			1,283X403X824	139	71
		2.2OP-9.5G5/6A						3PH	122					
	3.7	3.7OP-9.5G5/6A		82X72X2	850	646	405	125	3PH			1,477X424X880	163	74
	5.5	5.5OP-9.5G5/6A		82X72X3	860	981	605	150	3PH			1,518X502X995	208	75
	7.5	7.5OP-8.5GA5/6A		105X85X2	915	1,347	880	235	3PH	1,674X550X1,076		278	80	
		11		11OP-8.5GA5/6A	105X85X3	900	1,987	1,285	290	3PH		2,014X665X1,153	385	82

- Note: 1. Use the compressor at a place where ambient temperature is 0 to 40 degrees C.
 2. The noise level shown are those obtained at a distance of 1.5m from the front of the compressor operating under full load in a reverberation-free room.
 3. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms air suction (under the atmospheric pressure).
 4. These compressor series is not available for direct use of breathing air.

SUPER OIL-FREE BEBICON LE Series

Specifications

Motor Output (kW) (50Hz/60Hz)	Model	Compressor					Air tank Capacity (L)	Dimensions Width X Depth X Height (mm)	Motor	Weight (kg)	Noise Level dB[A] (50Hz)
		Max. Pressure (MPa)	Control Pressure ON-OFF (MPa)	Cylinder diameter (mm) X Stroke (mm)	Rotating Speed (min ⁻¹)	Capacity (L/min)					
0.4LE-8S5A	0.4LE-8S5A	0.8	0.6-0.8	Ø63X20X1	50 Hz 1,360	42	20	600X322X608	220V-230V 1PH	30	60

- Note: 1. Use the compressor at a place where ambient temperature is 0 to 40 degrees C.
 2. The noise level shown are those obtained at a distance of 1.5m from the front of the compressor operating under full load in a reverberation-free room.
 3. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms air suction (under the atmospheric pressure).
 4. This compressor is not available for direct use of breathing air.



HITACHI BEBICON AIR COMPRESSORS

(0.75~15kW)

HIGH PERFORMANCE

HIGH RELIABILITY

COMPACT & LIGHT

EASY TO MAINTAIN



2.2P - 9.5VSL 5A



HORIZONTAL



VERTICAL

Asia
Frequency (50Hz)
Large Tank
Single Phase
New V Series
Pressure (0.93MPa [9.5kgf/cm²])
Pressure Switch Type
Power (2.2kW)

Specifications (HORIZONTAL & VERTICAL TANK MOUNT TYPE)

Tank Type	Operation Systems	Motor Output kW	Model	Maximum Pressure MPa	Cylinder Diameter mm X Stroke mm X Number of Cylinders	Compressor Speed min ⁻¹	Displacement L/min	Capacity at Maximum Pressure L/min	Air tank Capacity L	Power Source PH	Standard Accessories	External Dimensions Width X Depth X Height mm	Weight Kg	Noise Level dB[A]
Horizontal	Automatic unloader type	0.75	0.75U-9.5VS5/6A 0.75U-9.5V5/6A	0.93	50X65X1	990	126	80	62	1PH 3PH	Pressure gauge, Safety valve, Hose joint, V-belt, Belt cover, Silencer Stop valve	931X376X816	79 72	70
		1.5	1.5U-9.5VS5/6A 1.5U-9.5V5/6A		72X65X1	970	257	165	80	1PH 3PH		1,173X380X867	102 90	72
		2.2	2.2U-9.5VS5/6A 2.2U-9.5V5/6A		72X65X2	730	386	265	90	1PH 3PH		1,283X403X808	134 117	72
		3.7	3.7U-9.5V5/6A		L) 90X85X1 H) 50X85X1	1,000	541	440	125	3PH		1,345X428X948	158	74
		5.5	5.5U-9.5V5/6A		L) 105X85X1 H) 60X85X1	1,080	795	630	150	3PH		1,470X482X979	203	76
		7.5	7.5U-9.5V5/6A		L) 90X85X2 H) 72X85X1	950	1,027	840	235	3PH		1,643X547X1,103	280	79
		11	11U-9.5V5/6A		L) 105X85X2 H) 82X85X1	1,050	1,546	1,200	260	3PH		1,793X611X1,103	340	83
		15	15U-9.5V5/6A		L) 110X110X2 H) 82X110X1	1,000	2,091	1,650	290	3PH		Air out let 1/4BX1 for 0.75 & 1.5 kW, 1/4BX2 for 2.2 kW, 1/4BX1 & 3/8BX1 for 3.7 & 5.5 kW 1/4BX1 & 3/4BX1 for 7.5 & 11 kW 1BX1 for 15 kW	1,983X794X1,221	462
	Pressure-switch type	0.75	0.75P-9.5VS(L)5/6A 0.75P-9.5V(L)5/6A		50X65X1	990	126	80	62 (92)	1PH 3PH	931X376X804 (1,296X376X804)	79 (82) 72 (75)	70	
		1.5	1.5P-9.5VS(L)5/6A 1.5P-9.5V(L)5/6A		72X65X1	970	257	165	80 (150)	1PH 3PH	1,173X380X855 (1,470X380X855)	102 (109) 90 (97)	72	
		2.2	2.2P-9.5VS(L)5/6A 2.2P-9.5V(L)5/6A		72X65X2	730	386	265	90 (170)	1PH 3PH	1,283X403X808 (1,775X403X808)	134 (150) 117 (133)	72	
		3.7	3.7P-9.5V(L)5/6A		L) 90X85X1 H) 50X85X1	1,000	541	440	125 (170)	3PH	1,345X428X923 (1,775X428X923)	158 (174)	74	
		5.5	5.5P-9.5V5/6A		L) 105X85X1 H) 60X85X1	1,080	795	630	150	3PH	1,470X482X932	203	76	
		7.5	7.5P-9.5V5/6A		L) 90X85X2 H) 72X85X1	950	1,027	840	235	3PH	1,643X556X1,094	280	79	
		11	11P-9.5V5/6A		L) 105X85X2 H) 82X85X1	1,050	1,546	1,200	260	3PH	1,793X611X1,098	340	83	
		3.7	3.7P-14VH5/6A		L) 90X85X1 H) 50X85X1	900	487	400	230	3PH	Pressure gauge, Safety valve, Hose joint, V-belt, Belt cover, Silencer Stop valve 3/8BX1 for 3.7 & 5.5 kW 3/4BX1 for 7.5 kW	1,690X525X799	187	74
		5.5	5.5P-14VH5/6A	L) 105X85X1 H) 60X85X1	970	714	550	230	3PH	1,690X573X1,000		244	76	
		7.5	7.5P-14VH5/6A	L) 90X85X2 H) 72X85X1	900	973	760	230	3PH	1,690X853X1,084		290	79	
3.7	3.7P-12.5(14)V5A	L) 90X85X1 H) 50X85X1	900	487	400	300	3PH	957X590X1,732	260	75				
Vertical		5.5	5.5P-12.5(14)V5A	1.23/ 1.37	L) 105X85X1 H) 60X85X1	970	714	550	300	3PH		1,025X611X1,734	317	76
		7.5	7.5P-12.5(14)V5A	L) 90X85X2 H) 72X85X1	900	973	760	300	3PH		1,102X634X1,814	363	80	

- Note: 1. Use the compressor at a place where ambient temperature is 0 to 40 degrees C.
2. The noise level shown are those obtained at a distance of 1.5m from the front of the compressor operating under full load in a reverberation-free room.
3. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms air suction (under the atmospheric pressure).
4. These compressor series is not available for direct use of breathing air.

For further information, Please contact your nearest sales representative

Hitachi Industrial Equipment (Malaysia) Sdn. Bhd.

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<http://www.hiem.hitachi.com.my>



Refrigerated Air Dryer

Series IDU(A) ■ E

Air Flow Capacity

Increased up to the

max **40%**
(SMC comparison)

Power Consumption

Decreased up to the

max **40%**
(SMC comparison)

Refrigerant

R134a (HFC)
R407C (HFC)

(Coefficient of destruction
for ozone is zero)

High temperature air inlet type
(Rated inlet air temperature: 55°C)

Improved corrosion resistance with the use
of stainless steel, plate type heat exchanger

Call us for
details:

IDU8E

IDU15E

IDU22E

SMC PNEUMATICS (SEA) SDN BHD

Lot 36, Jalan Delima 1/1, Subang Hi-Tech Industrial Park,
Batu Tiga, 40000 Shah Alam, Selangor.

Tel: 03-56350590 Fax: 03-56350601

Email: sales@smcmy.com.my

<http://www.smcmy.com.my>

Distributor name / address:

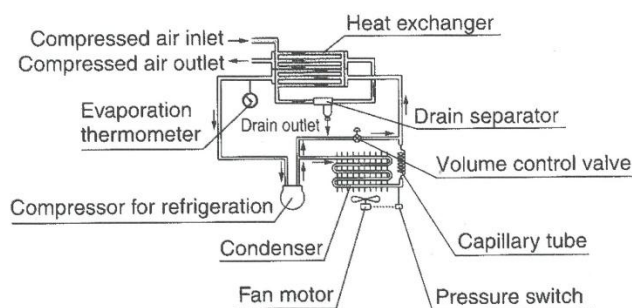
Model			IDUA3E	IDUA4E	IDUA6E	IDU8E	IDU11E	IDU15E	IDU22E	IDU37E	IDU55E	IDU75E
Specification			-23	-23	-23	-23	-23	-23	-23	-23	-23	-23
Rated Condition	Air Flow Capacity ℓ/min	Standard ^{Note 1)} condition (ANR) (50Hz)	320	520	750	1100	1500	2600	3900	5700	8400	11000
	Inlet air pressure (Mpa)		0.7									
	Inlet Air Temperature (°C)		55									
	Ambient Temperature (°C)		32									
	Outlet air pressure dew point (°C)		10									
Operating Range	Working Fluid		Compressed Air									
	Inlet Air Temperature (°C)		5 to 80									
	Inlet Air Pressure (MPa)		0.15 to 1.0									
	Ambient Temperature (humidity) (°C)		2 to 40 (Relative Humidity of 85% or less)									
Electric Specification	Power supply voltage frequency) ^{Note 4)}		Single -phase 230VAC ±10% 50Hz									
	Operating Current (A) 50Hz		1.5	1.6	2.9	1.7	3.0	3.4	4.3	7.5	10.7	
	Power Consumption (W) 50Hz		210	220	400	260	425	550	960	1600	2300	
Circuit Breaker (Note 2) (A)			5					10				20
Refrigerant			R134a (HFC)						R407C (HFC)			
Auto drain			Float type (normally open)									
Port size			Rc 3/8	Rc 1/2	Rc 3/4			Rc 1	R1	R 1.½	R 2	
Weight (kg)			23	27	28	44	47	71	90	130	160	166
Coating color			Body panel: Urban white 1, Base : Urban gray 2									
Applicable Compressor kW (Standard)			2.2	3.7	5.5	7.5	11	15	22	37	55	75

Note 1: The data for ℓ/min (ANR) is referring to the conditions of 20°C, 1atm. Pressure & relative humidity of 65%.

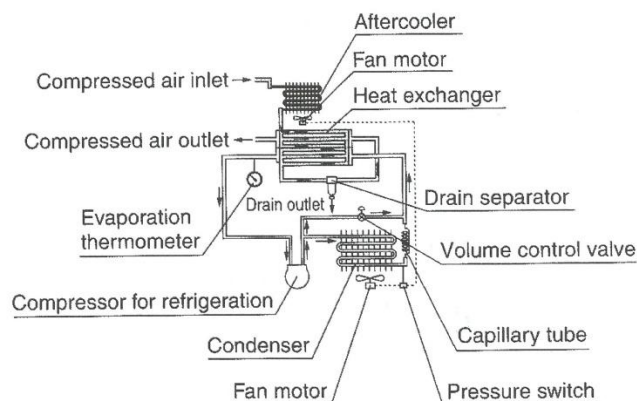
Note 2: Install circuit breaker that comes with sensivity of 30mA.

Construction Principle (Circuit for Air / Refrigerant)

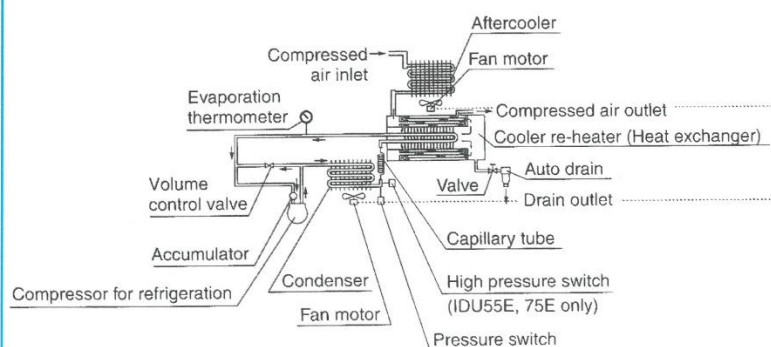
IDUA3E TO 6E



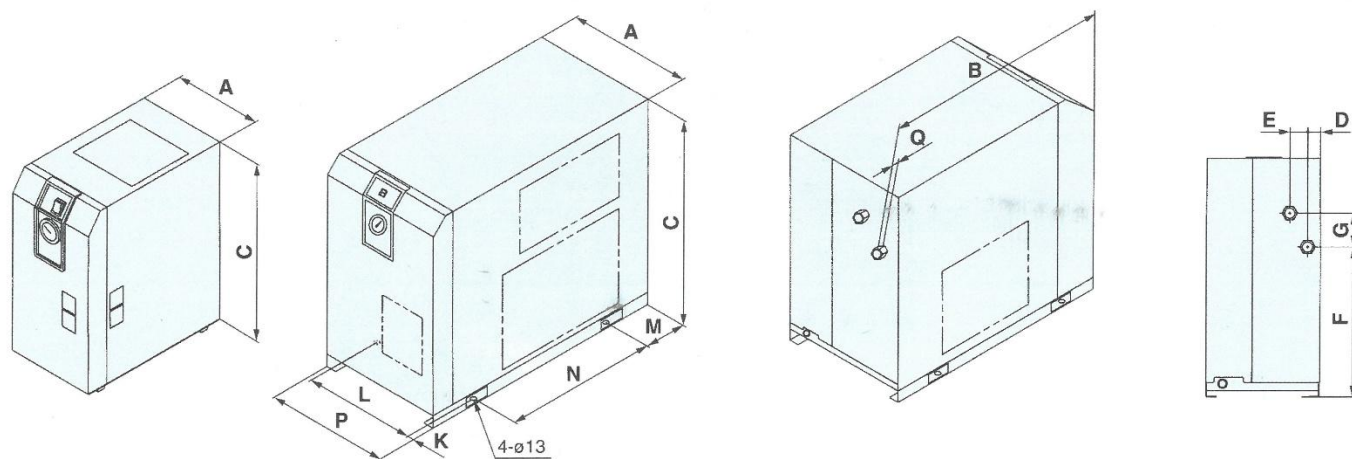
IDU8E to 15E



IDU22E TO 75E



IDUA3E to 6E

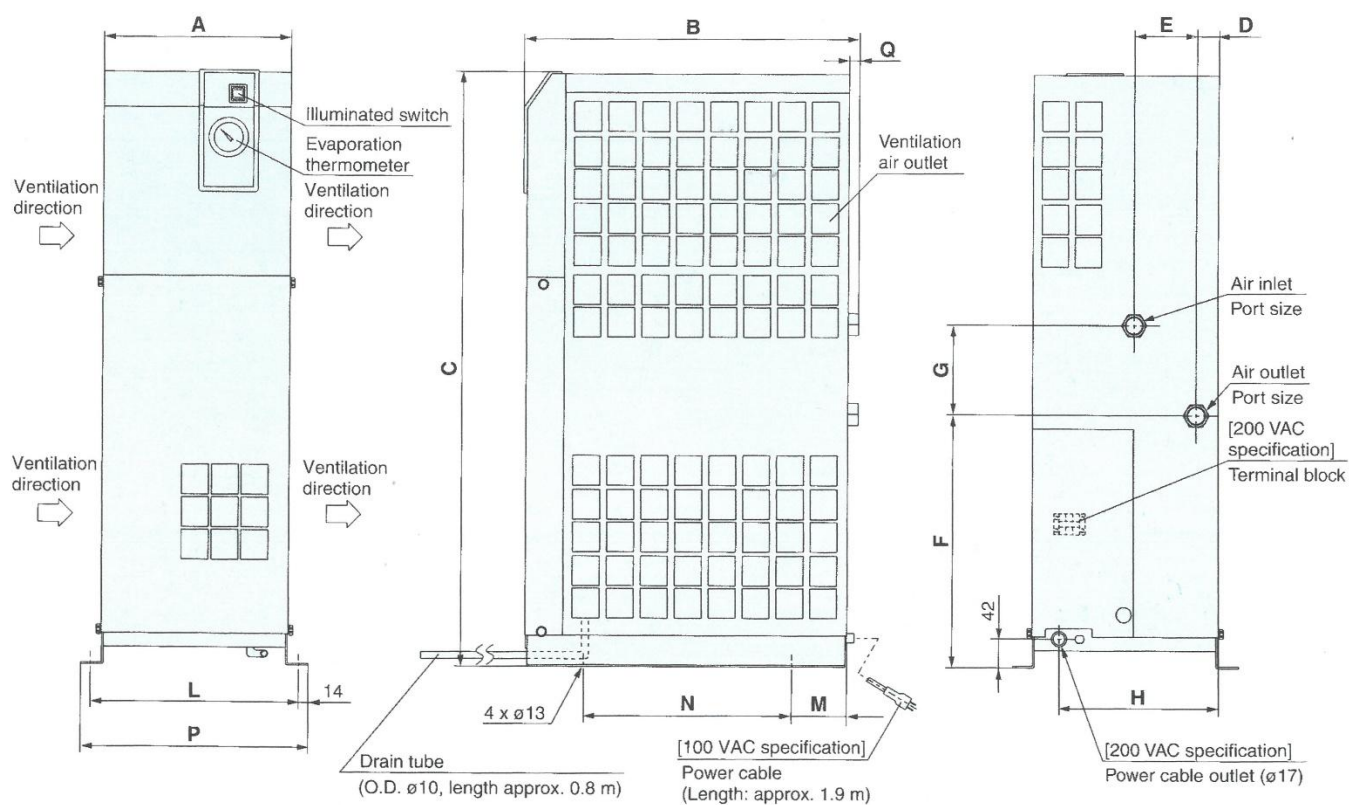


Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	K	L	M	N	P	Q
IDUA3E	Rc 3/8	270	455	498	31	42	283	80	15	240	80	275	-	15
IDUA4E	Rc 1/2		485	568			355					300		
IDUA6E	Rc 3/4		485	568			355					300		

IDU8E to 15E

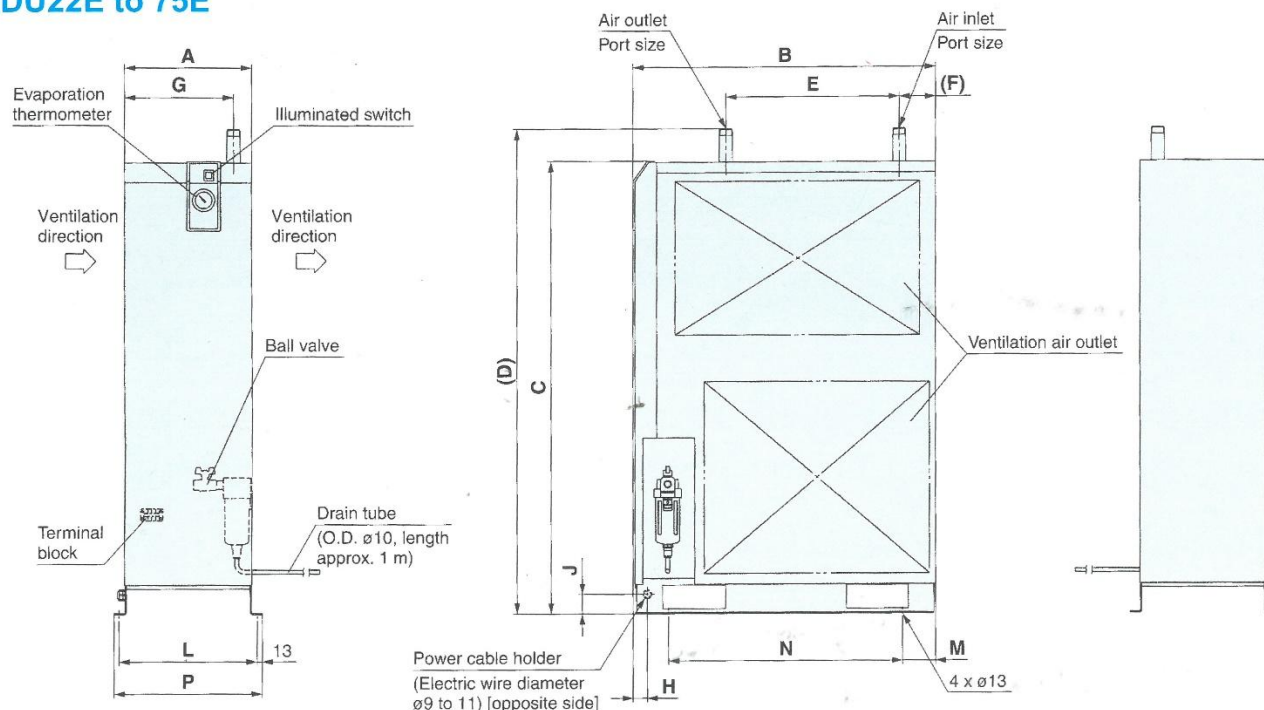


Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	H	L	M	N	P	Q
IDU8E	Rc 3/4	270	485	859	31	90	365	130	230	300	80	300	328	15
IDU11E				909										
IDU15E	Rc 1	300	620	960	79	54	425	93	258	330	66	470	358	16

IDU22E to 75E



Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	H	J	L	M	N	P
IDU22E	R 1	325	775	1153	1235	445	93	279	46	50	353	85	600	379
IDU37E	R1 1/ 2	360	855	1258	1350	550	64	290			388		680	414
IDU55E	R 2	470		1345	1440	530	53	360	30	500	75	700	526	
IDU75E				1480	1575									

Model Selection Guide

The corrected air flow capacity, which considers the user's operating conditions, is required for selecting the air dryer. Please select using the following procedures.

1 Read the correction factor.

Obtain the correction factor A to D suitable for your operating condition from the table below.

2 Calculate the corrected air flow capacity.

Obtain the corrected air flow capacity from the following formula.
Corrected air flow capacity = Operating air flow capacity ÷ (Correction factor A x B x C x D).

3 Select the model

Select the model which corrected air flow capacity exceeds the air flow capacity from the specification table. (For the air flow capacity, refer to the data E).

Data A:
Inlet Air Temperature

Inlet air temperature (°C)	Correction factor	
	IDUA3E~37E	IDU55E,75E
5 to 45	1.15	1.21
50	1.07	1.10
55	1	1
60	0.95	0.87
65	0.9	0.76
70	0.86	0.74
75	0.82	0.72
80	0.79	0.70

Data B:
Ambient Temperature

Ambient temperature (°C)	Correction factor	
	IDUA3E~37E	IDU55E,75E
2 to 25	1.2	1.25
30	1.04	1.11
32	1	1
35	0.93	0.90
40	0.84	0.63

Data C:
Outlet Air Pressure

Outlet air pressure dew point (°C)	Correction factor	
	IDUA3E~37E	IDU55E,75E
3	0.55	0.53
5	0.7	0.67
10	1	1
15	1.3	1.30

Data D:
Inlet Air Pressure

Inlet air pressure (MPa)	Correction factor	
	IDUA3E~37E	IDU55E,75E
0.2	0.62	0.62
0.3	0.72	0.69
0.4	0.81	0.77
0.5	0.88	0.85
0.6	0.95	0.93
0.7	1	1
0.8	1.06	1.08
0.9	1.11	1.16
1 to 1.6	1.16	1.23

Data E
Air Flow Capacity

Model	IDUA3E	IDUA4E	IDUA6E	IDU8E	IDU11E	IDU15E	IDU22E	IDU37E	IDU55E	IDU75E	
Air flow capacity (ℓ/min) (ANR)	50 Hz	320	520	750	1100	1500	2600	3900	5700	8400	11000



Refrigerated Air Dryer

Series IDFA-E

IDFA11E

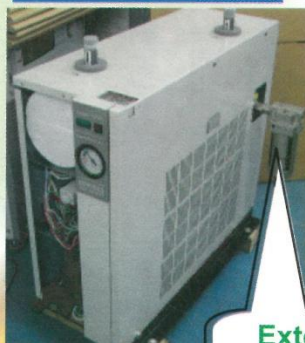
NEW
Series IDFA

IDFA6E

IDFA6E

IDFA6E

Previous IDF



External
mounting
auto drain

New IDFA



Built-in auto drain

Air flow capacity

Increased up to the

max 40%

(SMC comparison)

Power consumption

Decreased up to the

max 40%

(SMC comparison)

Refrigerant

R134a (HFC)

R407C (HFC)

Coefficient of destruction
for ozone is zero

Heat exchanger



Improved corrosion resistance with
the use of stainless steel, plate type
heat exchanger (IDFA4E to 75E)

Built-in auto-drain

For more information and details, please contact SMC :

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Email : sales@smcsing.com.sg

Tel: (65) 6861 0888

Fax: (65) 6861 5815

Malaysia

Email : sales@smcmy.com.my

Tel: (603) 5635 0590

Fax: (603) 5635 0601

Indonesia Distributor

PT. SINAR MUTIARA CEMERLANG

Email : sales@smcindonesia.com

Tel: (+62-21) 612 2888 / 649 8786

Fax: (+62-21) 649 8765

Model		IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E	IDFA15E	IDFA22E	IDFA37E	IDFA55E	IDFA75E
Specification		-23	-23	-23	-23	-23	-23	-23	-23	-23	-23
Rated Condition	Air Flow Rate (ANR) (Note 1) t/min										
	At Outlet Pressure Dew Point of 10°C	283	566	833	1516	1866	2800	4233	6366	8500	13700
Operating Range	Operating Pressure (Mpa)	0.7									
	Inlet Air Temperature (°C)	35									
	Ambient Temperature (°C)	25									
	Working Fluid	Compressed Air									
	Inlet Air Temperature (°C)	5 to 50									
Electric Specification	Inlet Air Pressure (MPa)	0.15 to 1.0									
	Ambient Temperature (°C)	2 to 40 (Relative Humidity of 85% or less)									
	Power supply voltage	Single -phase 230VAC ±10% 50Hz									
	Operating Current (Note 2) (A)	1.2	1.2	1.2	1.4	2.7	3.0	4.3	5.4	7.9	
	Power Consumption (Note 2) (W)	180	180	180	208	385	470	760	1130	1700	
	Circuit Breaker (Note 3) (A)	5					10				20
Condenser		Air-cooled type									
Refrigerant		R134A (HFC)						R407C (HFC)			
Auto drain (Float type)		AD38 (normally closed)		AD48 (normally open)							
Port size		Rc 3/8	Rc ½	Rc 3/4			Rc 1	R 1	R 1½	R 2	
Accessory (kg)		Hexagon nipple						-			
Weight (kg)		18	22	23	27	28	46	54	62	100	116
Coating color		Body panel: White 1 Base : Gray 2									
Compliant standards		EU directive compliant (with CE marking)									
Applicable Compressor kW (Standard)		2.2	3.7	5.5	7.5	11	15	22	37	55	75

Note 1: The data for t/min (ANR) is referring to the conditions of 20°C, 1atm. Pressure & relative humidity of 65%.

Note 2: the value is that of under specified condition.

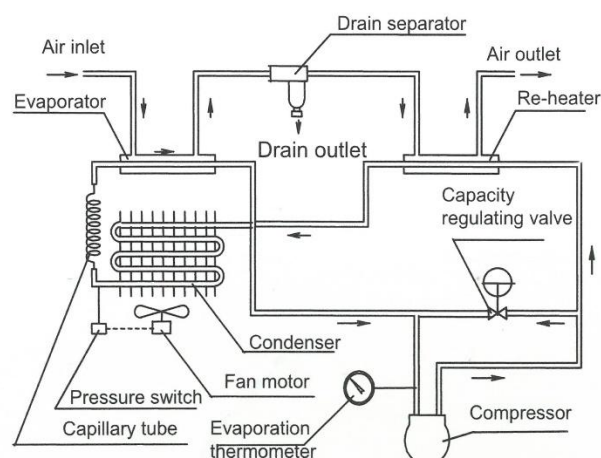
Note 3: Install GFCI breaker that comes with sensitivity of 30mA

Note 4: When short period power shortage (including instantly recovered shortage) is recovered.

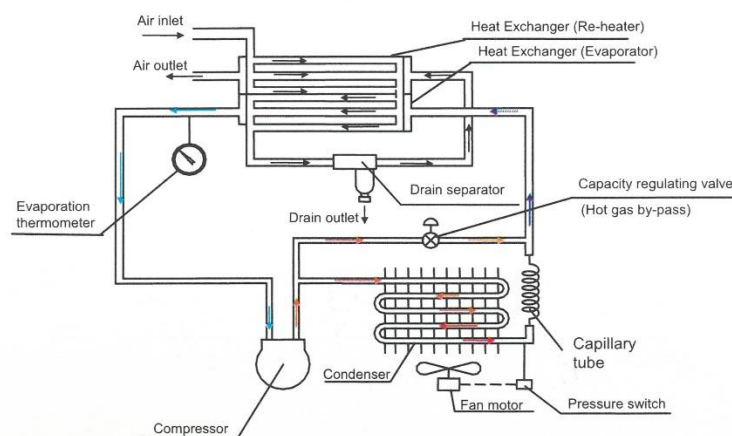
It may take a longer starting period the un-usual starting or may not start due to the protective devices.

Construction Principle (Circuit for Air / Refrigerant)

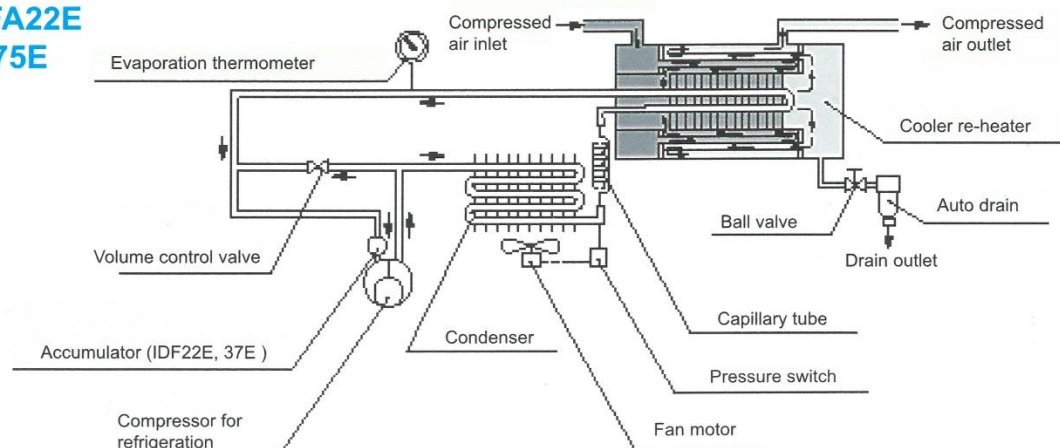
IDFA3E



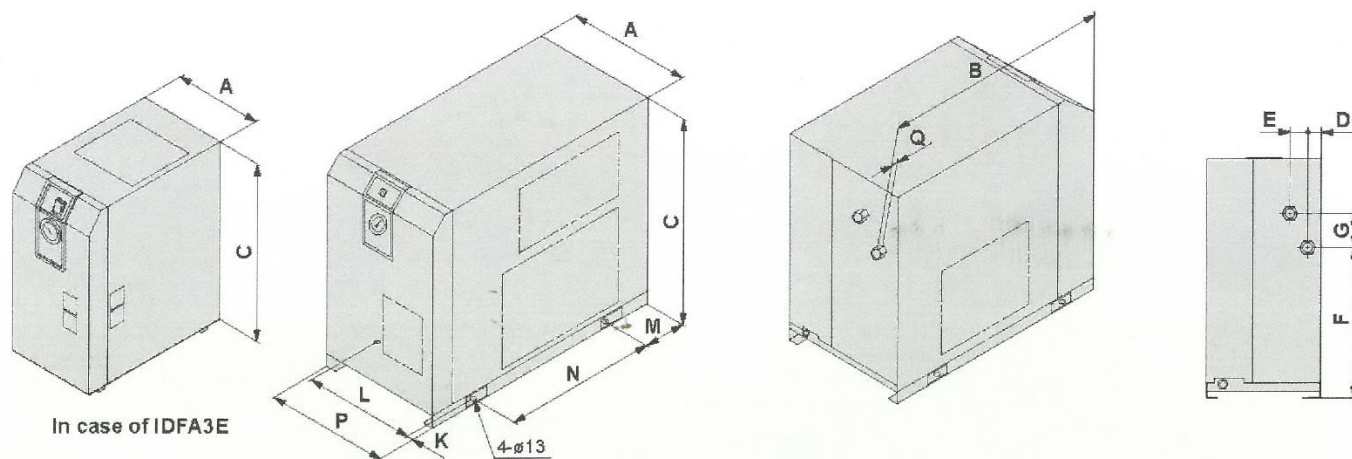
IDFA4E to 15E



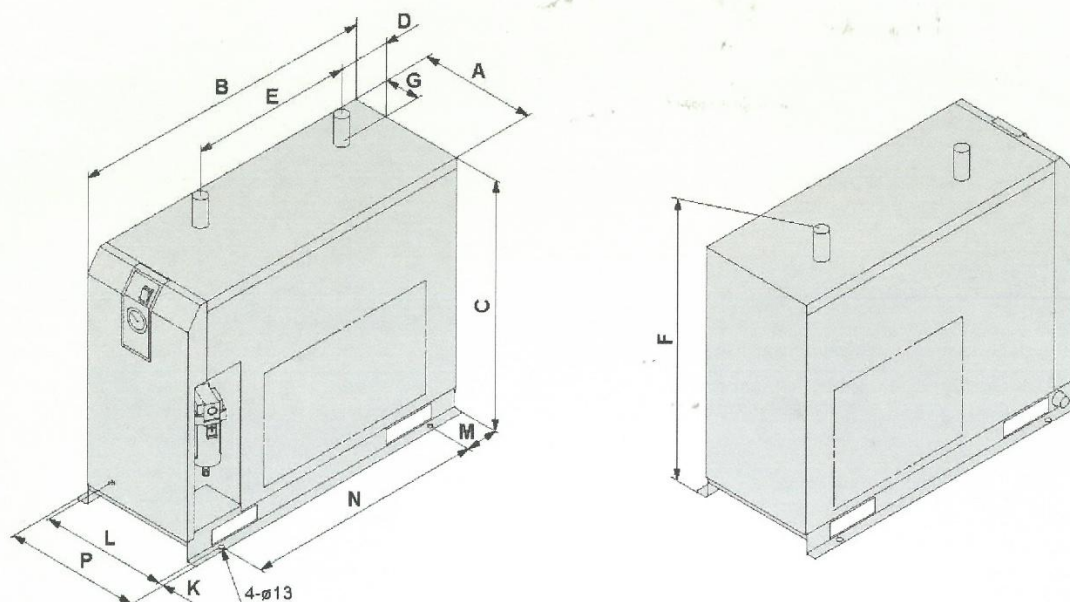
IDFA22E to 75E



IDFA3E to 15E



IDFA22E to 37E



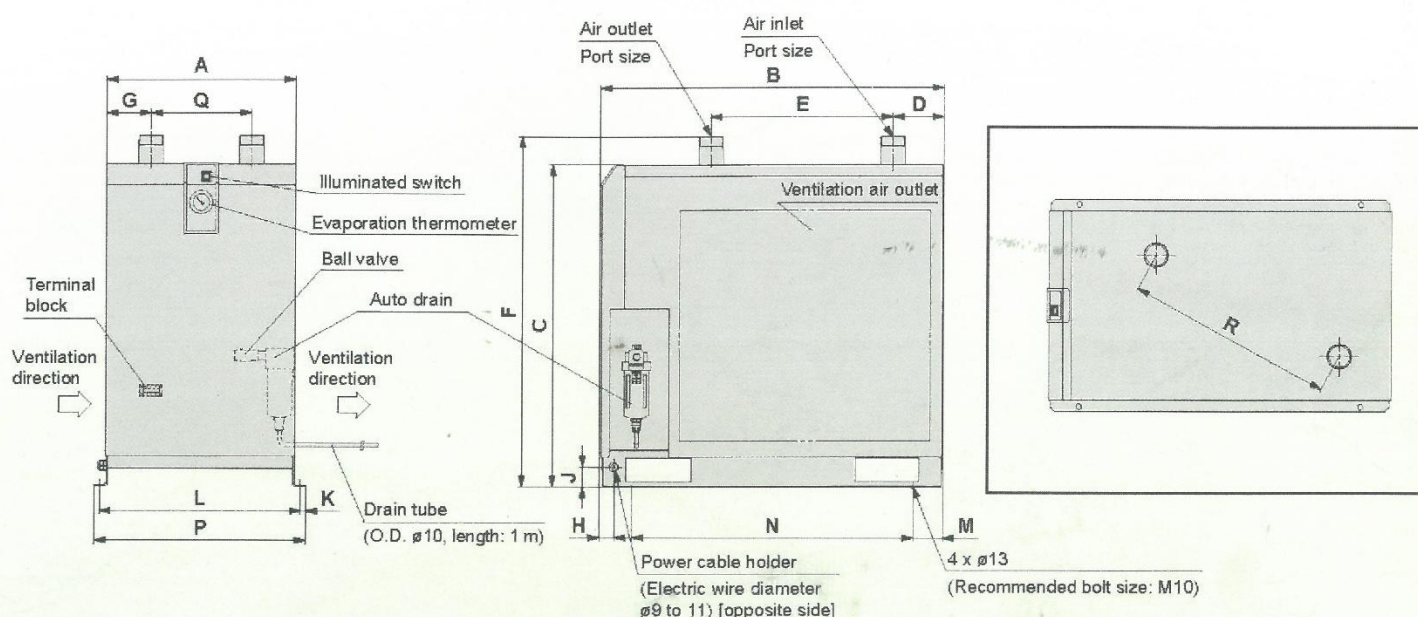
Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	K*	L*	M*	N*	P	Q
IDFA3E	Rc 3/8	226	410	473	67	125	304	33	36	154	21	330	-	15
IDFA4E	Rc 1/2	270	453	498	31	42	283	80	15	240	80	275		13
IDFA6E	Rc 3/4		455	568			355					300		15
IDFA8E			485											
IDFA11E														
IDFA15E	Rc 1	300	603	578	41	54	396	87		270	101	380	314	16
IDFA22E	R 1	290	775	623	134	405	698	93	13	314	85	600	340	-
IDFA37E	R 1½		855									680		

* Meaning the foot dimensions for the IDFA3.

IDFA55E to 75E



Dimensions

(mm)

Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
IDFA55E	R 2	470	855	800	128	455	868	110	36	50	13	500	75	700	526	250	519
IDFA75E				900			968										

Model Selection Guide

The corrected air flow capacity, which considers the user's operating conditions, is required for selecting the air dryer. Please select using the following procedures.

- Read the correction factor.**
Obtain the correction factor A to D suitable for your operating condition from the table below.
- Calculate the corrected air flow capacity.**
Obtain the corrected air flow capacity from the following formula.
Corrected air flow capacity = Air consumption ÷ (Correction factor A x B x C)
- Select the model**
Select the model which air flow capacity exceeds the corrected air flow capacity using the specification table. For air flow capacity, refer to the data D below)

Data B:
Ambient Temperature

Ambient temperature (°C)	Correction factor	
	IDFA3E~11E	IDFA15E~75E
20	1.1	1.1
25	1	1
30	0.91	0.97
35	0.83	0.89
40	0.79	0.77

Data D:
Air Flow Capacity

Model	Air flow capacity (ℓ/min) [ANR]									
	IDFA3E	IDFA4E	IDFA6E	IDFA8E	IDFA11E	IDFA15E	IDFA22E	IDFA37E	IDFA55E	IDFA75E
Outlet air pressure 3°C	200	400	600	1083	1333	2000	3033	4550	6500	11000
7°C	250	516	766	1383	1683	2533	3850	5783	7200	12000
dew point 10°C	283	566	833	1516	1866	2800	4233	6366	8500	13700

Data A:
Inlet Air Temperature

Inlet air temperature (°C)	Correction factor
5 to 25	1.30
30	1.25
35	1
40	0.83
45	0.7
50	0.6

Data C:
Inlet Air Pressure

Inlet air pressure (MPa)	Correction factor	
	IDFA3E~11E	IDFA15E~75E
0.3	0.8	0.72
0.4	0.87	0.81
0.5	0.92	0.88
0.6	0.96	0.95
0.7	1.00	1.00
0.8	1.04	1.06
0.9	1.07	1.11
1.0	1.1	1.16
1.2	1.16	1.21
1.4	1.21	1.25
1.6	1.25	1.27