



Asia & Oceania

China

Hitachi Industrial Equipment Systems (China) Co., Ltd.
(Shanghai Branch)
Room1207, Rui Jin Building, No.205
Maoming Road(S) Shanghai 200020
TEL : +86 (21) 5489-2378
FAX : +86 (21) 3356-5070
(Beijing Branch)
Room1420, 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)
Room3403, Office Tower, CITIC Plaza ,
No.233 Tianhe North Road, Guangzhou
510613
TEL : +86 (20) 3877-0438
FAX : +86 (20) 2735-3820

Hitachi Industrial Equipment Systems
(Hong Kong) Co., Ltd.
6th Floor, North Tower World Finance
Centre, Harbour City, Canton Road,
Tsim Sha Tsui, Kowloon 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

India

Hitachi India Pvt. Ltd.
Units 304-306, 3rd Floor, ABW Elegance
Tower, Jasola District Centre, New Delhi
110 025, India
TEL : +91 (11) 4060-5252
FAX : +91 (11) 4060-5253

Indonesia

PT Hitachi Asia Indonesia
Menara BCA 38th Floor Suite #3804 &
3805 Jl. M. H Thamrin No.1, Jakarta
10310, Indonesia
TEL : +62 (21) 2358-6757
FAX : +62 (21) 2358-6755

Malaysia

Lot 6498, Batu 5 3/4, Lorong Haji
Abdul Manan, 42100 Klang, Selangor
Darul Ehsan, Malaysia
TEL : +60 (3) 3290 2323

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)
No.30, Pioneer Crescent
#10-15, West Park Bizcentral
Singapore 628560
TEL : +65-6305-7400
FAX : +65-6305-7401

Thailand

Hitachi Asia (Thailand) Co., Ltd.
18th Floor, Ramaland Building, 952
Rama IV Road Bangrak, Bangkok 10500
TEL : +66 (2) 632-9292
FAX : +66 (2) 632-9299

Viet Nam

Hitachi Asia Ltd.
(Ho Chi Minh City Office)
4th Floor, The Landmark, 5B Ton Duc
Thang Street District 1, Ho Chi Minh City
TEL : +84 (8) 3829-9725
FAX : +84 (8) 3829-9729
(Ha Noi Office)
Sun Red River Bldg., 5th Floor,
23 Phan Chu Trinh Street
Hoan Kiem District, Hanoi
TEL : +84 (4) 3933-3123
FAX : +84 (4) 3933-3125

Australia

Hitachi Australia Pty Ltd.
Level 8, 123 Epping Road, North Ryde,
NSW 2113
TEL : +61 (2) 9888-4100
FAX : +61 (2) 9888-4188

Europe

Germany

Hitachi Europe GmbH
(Industrial Components & Equipment
Group)
Am Seestern 18 (Euro Center)
D-40547 Düsseldorf
TEL : +49 (211) 5283 0
FAX : +49 (211) 5283 649

Russian Federation

Hitachi, Ltd. (Moscow Office)
Millenium House, 12, Trubnaya, Moscow
107045
TEL : +7 (495) 787-4020
FAX : +7 (495) 787-4021

Latin America

Mexico

Hitachi Industrial Equipment
Mexico S.A. de C.V.
Avenida Rio Seguro 161, Parque Tecno
Industrial Castro del Rio Tramo
Irapuato-Silao km125, Carretera
Panamericaa C.P.36810, Irapuato, Gto.,
Mexico
TEL : +52 (462) 693-7088, -7089, -7090
FAX : +52 (462) 693-7091

North America

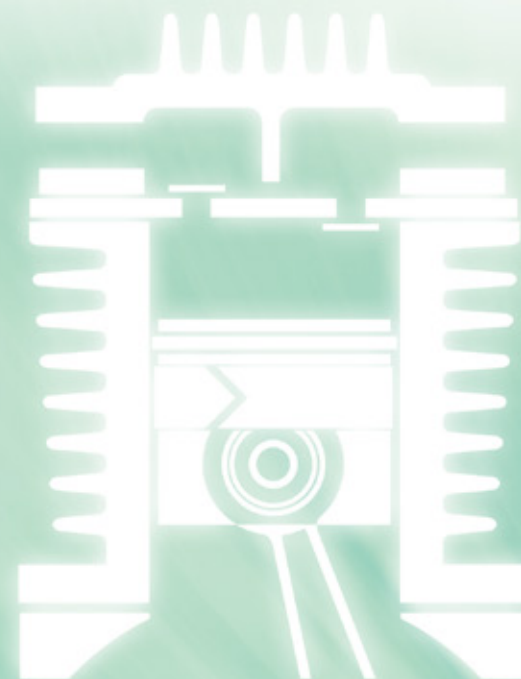
U.S.A.

Hitachi America, Ltd.
(Industrial Components & Equipment
Division)
50 Prospect Avenue, Tarrytown,
New York, 10591-4625
TEL : +1(914) 332-5800
FAX : +1(914) 332-5555
(Charlotte Office)
(Industrial Components & Equipment
Division)
6901 Northpark Blvd., Suite A, Charlotte,
NC 28216
TEL : +1 (704) 494-3008
FAX : +1 (704) 599-4108

Hitachi BEBICON COMPRESSOR

Innovation, Performance and Reliability

HITACHI
Inspire the Next



BEBICON

GENERAL CATALOG



Caution

- Follow the instructions described in the instruction manual. For details, contact your nearest Hitachi representative office.
- Do NOT use the air compressors to compress any gas other than air.
- Hitachi air compressors are not designed, intended or approved for breathing air applications.
- Do NOT modify the air compressor or its components.
- Be aware of the limitation of max pressure due to altitude of installation. For details, contact your nearest Hitachi representative office.
- Product appearances and specifications in this catalog are subject to change with or without notice, as Hitachi continues to develop the latest technologies and products for its customers.

Hitachi Industrial Equipment Systems Co., Ltd.

For further information, please contact your nearest sales representative.

THREE MILLION accumulative shipments High Quality and High Reliability with Long History – Hitachi BEBICON



Hitachi is one of the oldest Japanese air compressor manufacturers. **BEBICON** debuted in 1946 as registered trademark of Hitachi small air compressor.

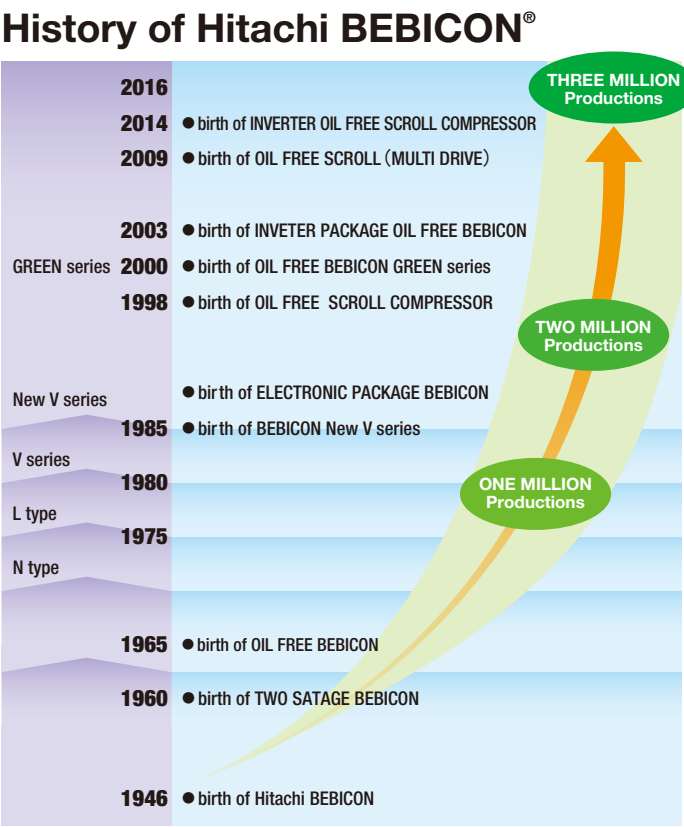
BEBICON is used in various areas of industry, such as engineering and metalworking industry, mining industry and building industry.

Hitachi has achieved **ONE Million** product shipments by 1979, **TWO Million** by 1994, and **THREE Million** by 2016.

Hitachi has introduced compressors of Oil-free type, Package type and Scroll type, always one-step ahead of the customers' needs.

Hitachi developed and introduced **INVERTER PACKAGE OIL FREE BEBICON** and **OIL FREE Booster BEBICON** to meet customers' need of energy-saving and environment protection.

Hitachi believes that our **BEBICON** compressor can satisfy your various needs and help you grow your business.



List of Model

Rated Output (kW)	Model Type	Reciprocating							Scroll
		OIL FREE BEBICON		Oil-Lubricated BEBICON			OIL FREE Booster BEBICON		OIL FREE Scroll Air Compressor
		Horizontal Tank	Package Type	Horizontal Tank	Vertical Tank	Package Type	Tank Mount	Package Type	Package Type
0.4		●							
0.75		●	●	●		●			
1.5		●	●	●		●	●		●
2.2		●	●	●		●			●
3.7		●	●	●	■	●	●	●	●
5.5		●	●	●	■	●			●
7.5		●	●	●	■	●	●	■	●
11		●	●	●		●	●	●	●
15				●					●
22									●
33									●

Auto Unloader Control ONLY
 Pressure Switch Control ONLY
 Auto Unloader Control/Pressure Switch Control

ECOMODE Control/PUSC Control
 Inverter Drive Control
 Multi-Drive Control

■ Medium Pressure (1.23/1.37MPa) Model Available

Control Method

Auto Unloader Control	Automatically switch between Load/Unload operation by the pressure adjustment valve
Pressure Switch Control	Automatically Start/Stop the operation of compressor in order to maintain certain range of pressure Energy-saving is possible when compressed air is NOT needed, since motor stops.
PUSC Control	PUSC (Pressure Unloader Select Control) Automatically select between Pressure Switch Type and Auto Unloader Type to respond to the need of compressed air under the control of microcomputer
Inverter Control	Pressure can be maintained between certain levels under inverter drive. Energy-saving can be obtained.
Multi-Drive Control	Automatically control the number of compressor heads in operation to respond to the need of compressed air Energy-saving can be obtained.
ECOMODE Control	Optimized max pressure is automatically controlled by monitoring the condition of air delivery. Energy-saving can be obtained.

How to choose a BEBICON compressor

① Select type of compressor according to your requirement.

② Select necessary pressure and air capacity.
As reference, necessary pressure should be 0.2MPa higher than the working pressure in need, and necessary air capacity should be 10 to 20% more than the one in need. (Air capacity indicated in this catalog is value at max discharge pressure and converted at its inlet condition)
Select rated output based on the selected pressure and capacity.

③ Select appropriate control method.

④ Confirm the details of power source (Voltage / Phase / Frequency)

⑤ Confirm if there is any regulation on noise control.

Note: Make sure to confirm the frequency of power source when placing an order. Please notice that oil may emulsify in case of over intermittent operation for oil-lubricated type. The above is for your reference. For specific model selection, contact your nearest dealer or Hitachi local representative office.

■Selecting Procedure

① Lubrication type
● General Air (oil lubricated compressor)
● Oil Free Air (oil free compressor)

② Pressure (MPa) Capacity (L/min)
↓
Power (kW)

③ Control method
● Pressure Switch Control
● Automatic Unloader Control
● Pusc Control
● Inverter Control

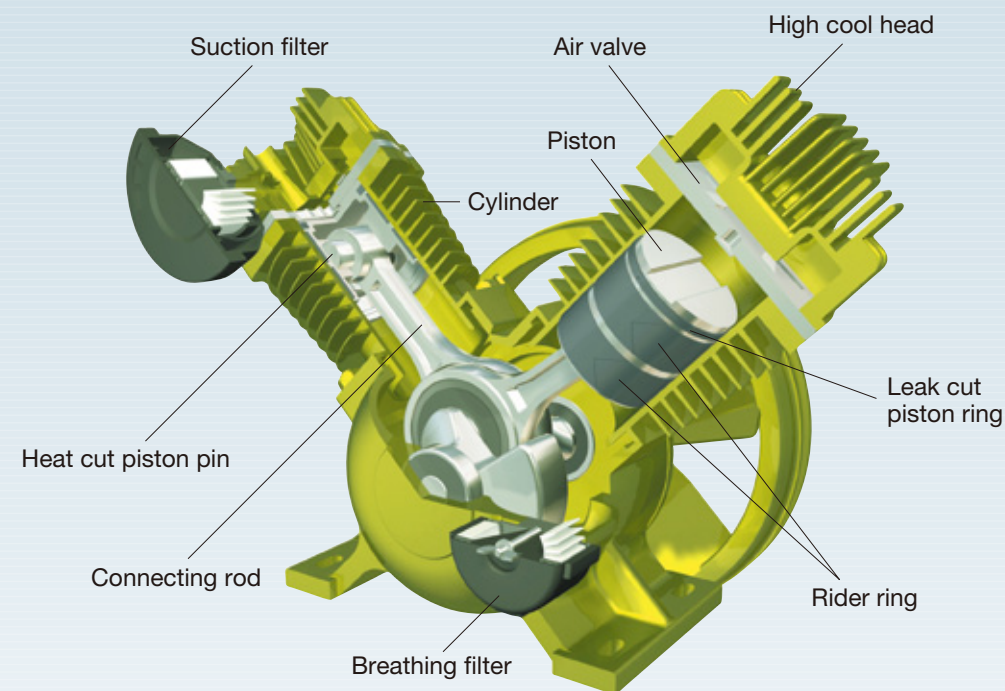
④ Power source
● Voltage, Phase, Frequency

⑤ Noise Control Law
● PACKAGE BEBICON (lubricated)
● OIL FREE PACKAGE BEBICON (oil free)
● OIL FREE SCROLL (oil free)

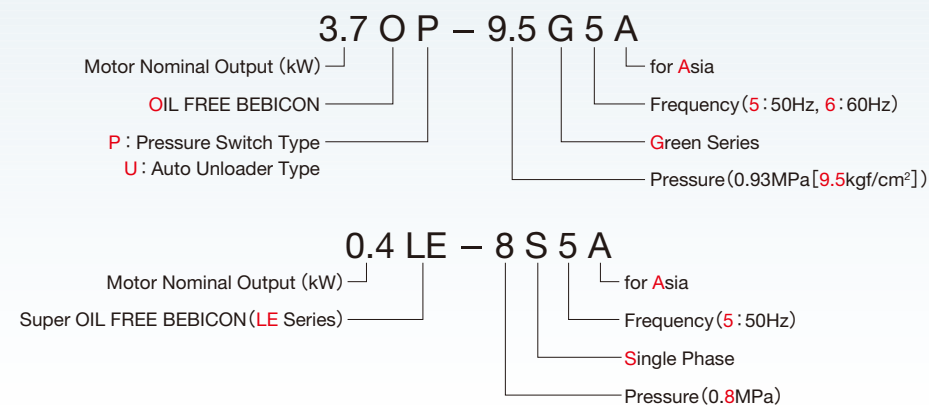


OIL FREE BEBICON (0.4–11kW)

Steady Supply of Oil-free, Pure Air



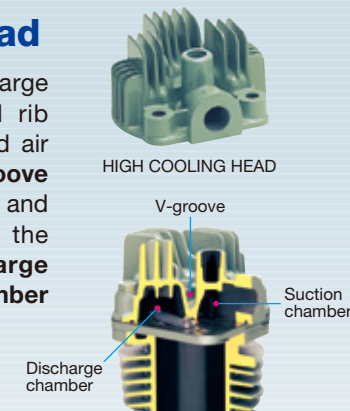
Model Nomenclature



Features Oil-free Air Supply, High Performance, Durable Design, Long Overhaul Cycle

High Cooling Head

High Cooling Head with large aluminum alloy ventilated rib improves heat radiation and air capacity. In addition, **V-groove** located between discharge and suction chamber reduces the heat transfer from **discharge chamber** to **suction chamber** and improves air capacity.



Lead Air Valve

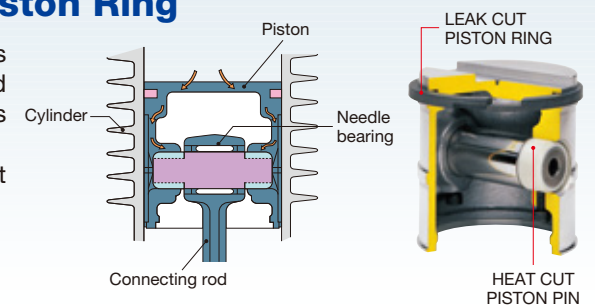
Lead Air Valve of I-shaped stainless steel suction air valve improves air capacity and improves durability against rusting.



Heat Cut Piston Pin & Leak Cut Piston Ring

Heat Cut Piston Pin of heat-insulating material reduces heat transfer from the **piston** to the **needle bearing** and keeps bearing in relatively low temperature and improves the reliability.

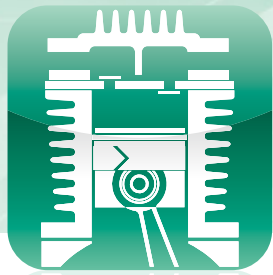
Leak Cut Piston Ring of specially shaped abutment joint reduces air leakage and improves air capacity.



Specifications (Horizontal Tank Mount Type)

Control Method		Pressure Switch Control										
Model Item · Unit		0.4LE-8S5A	0.75OP-9.5GS5A	0.75OP-9.5GS6A	1.5OP-9.5GS5A	1.5OP-9.5GS6A	2.2OP-9.5GS5A	2.2OP-9.5GS6A	3.7OP-9.5GS5A	5.5OP-9.5GS6A	7.5OP-8.5GA5A	11OP-8.5GA5A
			0.75OP-9.5GS6A	0.75OP-9.5GS6A	1.5OP-9.5GS6A	1.5OP-9.5GS6A	2.2OP-9.5GS6A	2.2OP-9.5GS6A	3.7OP-9.5GS6A	5.5OP-9.5GS6A	7.5OP-8.5GA6A	11OP-8.5GA6A
Motor Nominal Output	kW	0.4	0.75		1.5		2.2		3.7	5.5	7.5	11
Power Source	PH	1	1	3	1	3	1	3	3			
Max. Discharge Pressure	MPa	0.8	0.93								0.83	
Air Capacity	L/min	42	75		165		240		405	605	880	1,285
Air Tank Volume	L	20	80		80		90		125	150	235	290
Air Outlet	—	1/4B×1							3/8B×1		3/4B×1	
Standard Accessories	—	Pressure Gauge, Safety Vale, Stop Valve	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve									
External Dimensions (W×D×H)	mm	600×322×608	1,173×380×852		1,173×431×897	1,173×393×897	1,283×434×825	1,283×403×825	1,345×423×913	1,470×482×995	1,674×552×1,045	2,014×646×1,153
Weight	kg	40	90	85	121	110	150	129	158	201	282	400

Note: 1. Use the compressor at a place where ambient temperature is 0 (at which there is no freeze of drain water) to 40°C.
2. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure, ambient temperature 20°C, humidity 60%).
3. Hitachi air compressors are not designed, intended or approved for breathing air applications.

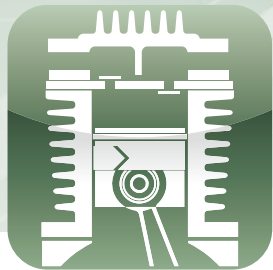


OIL FREE BEBICON (0.4–11kW)

Specifications (Horizontal Tank Mount Type)

Control Method		Auto Unloader Control							
Model Item · Unit		1.5OU-9.5GS5A	1.5OU-9.5G5A	2.2OU-9.5GS5A	2.2OU-9.5G5A	3.7OU-9.5G5A	5.5OU-9.5G5A	7.5OU-8.5GA5A	11OU-8.5GA5A
		1.5OU-9.5GS6A	1.5OU-9.5G6A	2.2OU-9.5GS6A	2.2OU-9.5G6A	3.7OU-9.5G6A	5.5OU-9.5G6A	7.5OU-8.5GA6A	11OU-8.5GA6A
Motor Nominal Output	kW	1.5		2.2		3.7	5.5	7.5	11
Power Source	PH	1	3	1	3	3			
Max. Discharge Pressure	MPa	0.93						0.83	
Air Capacity	L/min	165		240		405	605	880	1,285
Air Tank Volume	L	80		90		125	150	235	290
Air Outlet	—	1/4B×1				3/8B×1		3/4B×1	
Standard Accessories	—	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve							
External Dimensions (W×D×H)	mm	1,173×431×913	1,173×393×913	1,283×434×852	1,283×403×852	1,345×423×942	1,470×482×1,010	1,674×550×1,076	2,014×646×1,153
Weight	kg	121	110	150	129	158	201	282	400

Note: 1. Use the compressor at a place where ambient temperature is 0 (at which there is no freeze of drain water) to 40°C.
2. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure, ambient temperature 20°C, humidity 60%).
3. Hitachi air compressors are not designed, intended or approved for breathing air applications.



OIL FREE Booster BEBICON (1.5–11kW)

Energy-Saving and Improvement of Specific Energy Consumption is Possible by Local Pressurerising



OBB-1.5GP



OBB-7.5G



POB-11G

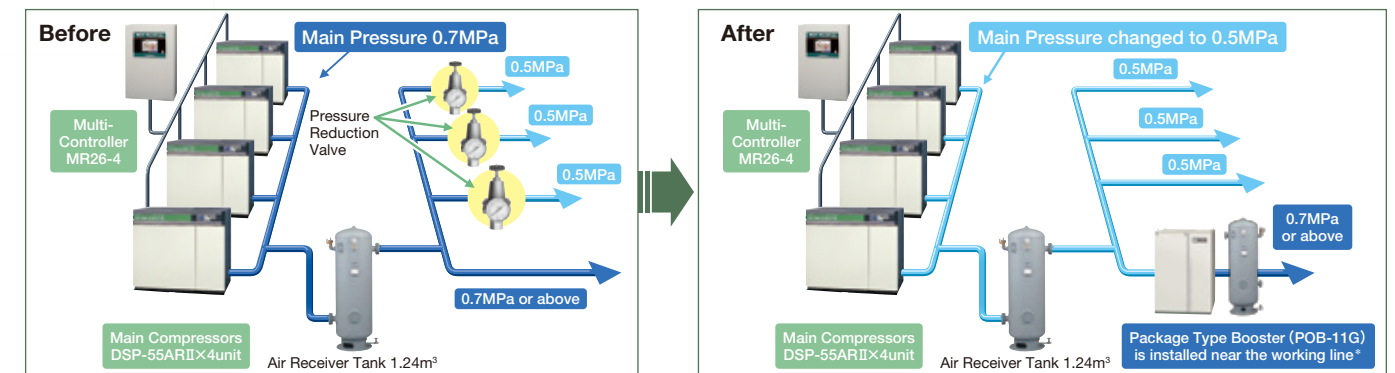


OIL FREE Booster BEBICON (1.5–11kW)

Energy-Saving Simulation after replacing pressure reduction valves with OIL FREE Booster BEBICON

Calculation Conditions

- DSP-55kW×4 units controlled by Multi-Controller, Operation Rate 78%
- Discharge Pressure 0.7MPa, average use of compressed air is 20m³/min



* In case that oil is contained in the suction air, air filter and micron mist filter have to be installed before suction import.

Effect

Item · Unit		Before	After
Power Consumption* (MWh/year)	Main Screw Compressor	1,147	927
	Booster BEBICON	0	40
Simulated Annual Power Consumption (MWh/year)		1,147	967
Specific Energy Consumption (m³/min/kW)		0.105	0.124
CO ₂ Emission* (t-CO ₂ /year)		811	684
CO ₂ Reduction Rate (%)		16	

* Operation time: 6,000hr/y

0.707kg/kWh is used as CO₂ emission coefficient

After replacing with the Booster BEBICON:
180 MWh/y Energy-Saving is obtained.
At the same time, **16%** of CO₂ Emission Reduction is also possible.

Specifications

Tank Mounted/ Packaged Type		Tank Mount Type					Package Type		
Model Item · Unit		OBB-1.5GP5	OBB-3.7G5A	OBB-7.5G5A	OBB-7.5HP5	OBB-11GP5	POB-3.7GP5	POB-7.5G5A	POB-11G5A
		OBB-1.5GP6	OBB-3.7G6A	OBB-7.5G6A	OBB-7.5HP6	OBB-11GP6	POB-3.7GP6	POB-7.5G6A	POB-11G6A
Motor Nominal Output	kW	1.5	3.7	7.5		11	3.7	7.5	11
Suction Air Pressure	MPa	0 – 0.5					0.2 – 0.5		
Max. Discharge Pressure	MPa	1.0			1.37	1.0	1.0		
ON-OFF Control Pressure	MPa	0.8 – 1.0			1.18 – 1.37	0.8 – 1.0	0.8 – 1.0		
Air Capacity	L/min	600	1,400	2,850	2,500	4,250	1,400	2,850	4,250
Air Tank Volume	L	38	170		280		35	—	
Air Inlet	—	Rc3/4				Rc1	Rc3/4		Rc1
Air Outlet	—	G3/8B Stop Valve	Rc3/4 Stop Valve			Rc1 Stop Valve	Rc3/4 Stop Valve		Rc1 Stop Valve
External Dimensions (W×D×H)	mm	846×447×762	1,774×518×972	1,774×553×958	1,938×608×1,114	1,938×679×1,113	963×693×1,224	981×786×1,492	1,197×931×1,513
Weight	kg	66	205	261	303	357	212	290	399

Note: 1. Air capacity is converted value under atmospheric condition from the capacity with 0.5MPa of suction pressure and maximum pressure of discharge pressure.
2. Working range of suction pressure is from atmospheric pressure to 0.5MPa for Tank Mounted models, and 0.2MPa to 0.5MPa for Package Models.
Please install pressure reduction valve if necessary. (It is possible to be used under suction pressure below 0.2MPa, however, energy-saving can NOT be obtained.)
3. It is required to install an air receiver tank of sufficient volume on the suction side to prevent drain water to enter the suction side of Booster BEBICON.
It is necessary to install an air receiver for the Package Type. Refer to local regulations when selecting air receiver tank.
4. The intake air of Oil-free Booster BEBICON must be oil free air, which has no oil contaminant. If oil contaminant is contained in the suction air,

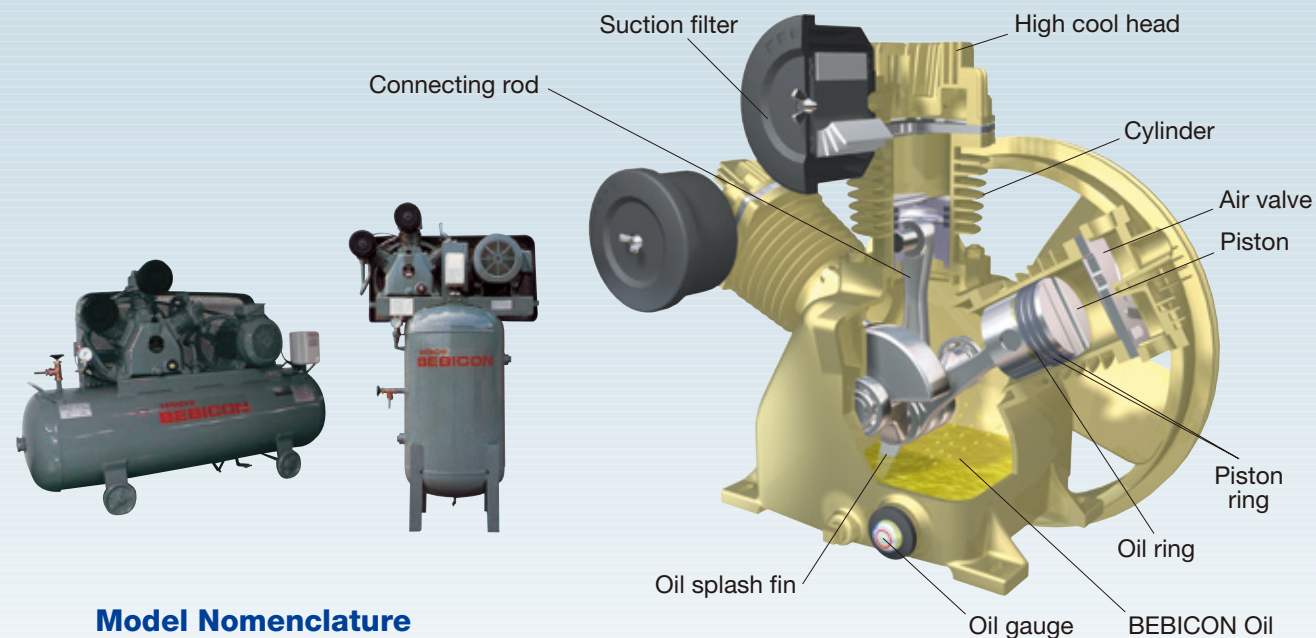
install air filter and micron filter on the suction side of the Booster BEBICON.
5. Temperature of suction air must be below 50°C.
6. Ambient temperature must be between 0 (at which there is no freeze of drain water) and 40°C.
7. Some of the models may NOT be available in Singapore, Malaysia and China (Mainland) due to the pressure vessel regulations.
For details, contact your nearest dealer or Hitachi local representative office.
8. Hitachi air compressors are not designed, intended or approved for breathing air applications.



Oil-Lubricated BEBICON (0.75–15kW)

Easy-to-Use and Durable New V series

Features High Performance, High Reliability, Compact & Light, Easy-to-Maintain



Model Nomenclature

7.5 P – 9.5 V (S) (L/H) 5 A

Motor Nominal Output (kW) —
P : Pressure Switch Type
U : Auto Unloader Type
Pressure (0.93MPa[9.5kgf/cm²]) —
V : New V series
for Asia
Frequency (5 : 50Hz, 6 : 60Hz)
L : Large Tank
H : Horizontal Tank
S : Single Phase

Specifications (Horizontal Tank Mount Type)

Control Method		Pressure Switch Control									
Model		0.75P-9.5VS5A	0.75P-9.5V5A	1.5P-9.5VS5A	1.5P-9.5V5A	2.2P-9.5VS5A	2.2P-9.5V5A	3.7P-9.5V5A	5.5P-9.5V5A	7.5P-9.5V5A	11P-9.5V5A
Item · Unit		0.75P-9.5VS6A	0.75P-9.5V6A	1.5P-9.5VS6A	1.5P-9.5V6A	2.2P-9.5VS6A	2.2P-9.5V6A	3.7P-9.5V6A	5.5P-9.5V6A	7.5P-9.5V6A	11P-9.5V6A
Motor Nominal Output	kW	0.75		1.5		2.2		3.7	5.5	7.5	11
Power Source	PH	1	3	1	3	1	3	3			
Max. Discharge Pressure	MPa	0.93									
Air Capacity	L/min	80		165		265		440	630	840	1,200
Air Tank Volume	L	62		80		90		125	150	235	260
Air Outlet	—	1/4B×1						3/8B×1		3/4B×1	
Standard Accessories	—	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve									
External Dimensions(W×D×H)	mm	931×376×804		1,173×418×855	1,173×380×855	1,283×434×860	1,283×403×860	1,345×428×923	1,470×482×932	1,674×556×1,094	1,793×611×1,098
Weight	kg	80	75	96	85	147	126	160	202	255	326

Note: 1. Use the compressor at a place where ambient temperature is 0 (at which there is no freeze of drain water) to 40°C.
2. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure, ambient temperature 20°C, humidity 60%).
3. Hitachi air compressors are not designed, intended or approved for breathing air applications.

Specifications (Horizontal Tank Mount Type)

Control Method		Auto Unloader Control										
Model Item · Unit		0.75U-9.5VS5A	0.75U-9.5V5A	1.5U-9.5VS5A	1.5U-9.5V5A	2.2U-9.5VS5A	2.2U-9.5V5A	3.7U-9.5V5A	5.5U-9.5V5A	7.5U-9.5V5A	11U-9.5V5A	15U-9.5V5A
		0.75U-9.5VS6A	0.75U-9.5V6A	1.5U-9.5VS6A	1.5U-9.5V6A	2.2U-9.5VS6A	2.2U-9.5V6A	3.7U-9.5V6A	5.5U-9.5V6A	7.5U-9.5V6A	11U-9.5V6A	15U-9.5V6A
Motor Nominal Output	kW	0.75		1.5		2.2		3.7	5.5	7.5	11	15
Power Source	PH	1	3	1	3	1	3	3				
Max. Discharge Pressure	MPa	0.93										
Air Capacity	L/min	80		165		265		440	630	840	1,200	1,650
Air Tank Volume	L	62		80		90		125	150	235	260	290
Air Outlet	—	1/4B×1						3/8B×1		3/4B×1		1B×1
Standard Accessories	—	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve										Pressure Gauge, Safety Valve, Belt Cover, Silencer, Stop Valve
External Dimensions (W×D×H)	mm	931×376×816		1,173×418×867	1,173×380×867	1,283×434×894	1,283×403×894	1,345×428×948	1,470×482×979	1,674×547×1,103	1,793×611×1,103	2,014×734×1,221
Weight	kg	80	75	96	85	134	126	160	202	255	326	448

Specifications (Horizontal Tank Mount Type)

Control Method		Pressure Switch Control						
Model		0.75P-9.5VL5A	1.5P-9.5VL5A	2.2P-9.5VL5A	3.7P-9.5VL5A	3.7P-14VH5A	5.5P-14VH5A	7.5P-14VH5A
Item · Unit		0.75P-9.5VL6A	1.5P-9.5VL6A	2.2P-9.5VL6A	3.7P-9.5VL6A	3.7P-14VH6A	5.5P-14VH6A	7.5P-14VH6A
Motor Nominal Output	kW	0.75	1.5	2.2	3.7	3.7	5.5	7.5
Power Source	PH	3						
Max. Discharge Pressure	MPa	0.93				1.37		
Air Capacity	L/min	80	165	265	440	400	550	760
Air Tank Volume	L	92	150	170	170	230		
Air Outlet	—	1/4B×1			3/8B×1	3/8B×1		3/4B×1
Standard Accessories	—	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve						
External Dimensions(W×D×H)	mm	1,286×376×804	1,470×435×901	1,775×435×808	1,775×448×923	1,624×525×1,007	1,624×566×1,015	1,624×590×1,090
Weight	kg	78	117	142	160	223	262	295

Specifications (Vertical Tank Mount Type)

Control Method		Pressure Switch Control		
Model		3.7P-12.5 (14) V5A	5.5P-12.5 (14) V5A	7.5P-12.5 (14) V5A
Item · Unit		3.7P-12.5 (14) V6A	5.5P-12.5 (14) V6A	7.5P-12.5 (14) V6A
Motor Nominal Output	kW	3.7		5.5
Power Source	PH	3		
Max. Discharge Pressure	MPa	1.23 (1.37)		
Air Capacity	L/min	400		550
Air Tank Volume	L	300		
Air Outlet	—	3/4B×1		
Standard Accessories	—	Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve		
External Dimensions(W×D×H)	mm	957×590×1,732		1,025×611×1,734
Weight	kg	420		450

Note: 1. Use the compressor at a place where ambient temperature is 0 (at which there is no freeze of drain water) to 40°C.
2. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure, ambient temperature 20°C, humidity 60%).
3. Hitachi air compressors are not designed, intended or approved for breathing air applications.

BEBICON OIL

Hitachi BEBICON OIL is high performance lubricating oil which is specially developed for Hitachi BEBICON compressors. To maximize Energy-Saving effects, prevent performance degradation and protect BEBICON compressors from trouble or breakdown, it is necessary to use Hitachi genuine BEBICON OIL as the ONLY lubricating oil during maintenance.

Genuine Parts

Hitachi genuine parts must be used when maintaining a Hitachi BEBICON compressor, to keep your BEBICON compressor from trouble or breakdown.





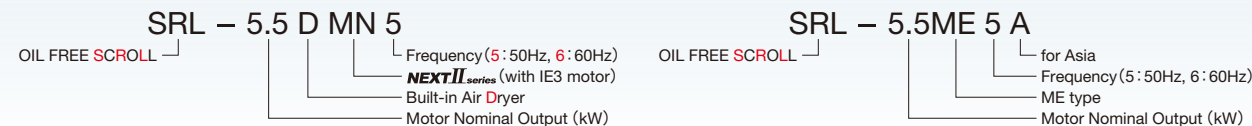
OIL FREE Scroll Air Compressor (1.5–33kW)



Low Noise, Low Vibration, High Reliability.
Space Saving, Energy Saving with Multi-Drive Control.

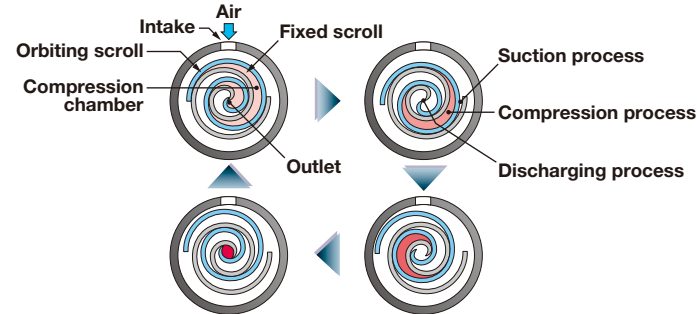


Model Nomenclature



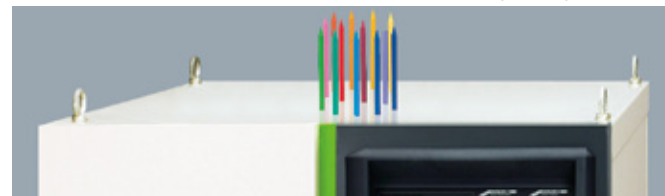
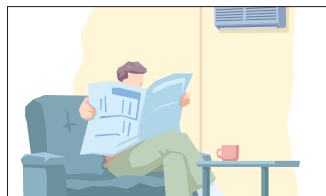
Scroll Compression Principle

- Compressor sucks air through air inlet located at outer scroll.
- Compression chamber goes smaller with rotary movement and trapped air is compressed.
- Compression chamber becomes minimum volume at the center of the scroll and air is pumped out through air outlet located at the center of scroll.
- These, suction, compression & discharging, process is repeated continuously.



Low Noise, Low Vibration

- Noise level is only 45dB [A] that is like in the library (1.5kW)
- For example: Pencil on the top roof keeps standing during operation.



Easy to Use

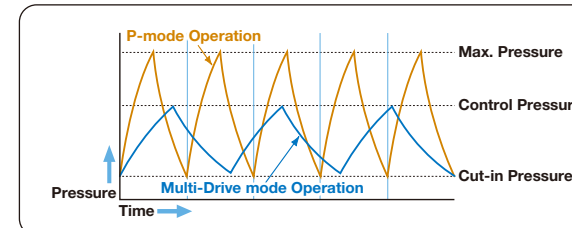
Few Daily Check items and Easy to Check, Total Cost Saving

- No need to change oil and separate the oil from drain. No need to install oil mist filter as well.*
- Well-designed structure utilizes easy maintenance of draining and cleaning of suction filters.

* In case that the suction air is thought to contain oil, it is necessary to install oil mist filter.

Energy-Saving with Multi-Drive Control

Multi-Drive control method is added to the conventional Pressure Switch Control method. It is also possible to easily change between Multi-Drive control and Pressure Switch control by operation of switch button. Under Multi-Drive control mode, the operation of SRL heads is modified automatically responding to the need of air. Optimized operation which can keep the necessary pressure is possible.



P-Mode:

Same as conventional Pressure Switch Control method, if the pressure reaches max pressure, the operation of compressor will stop. When the pressure decreases to the cut-in pressure, the operation of compressor will restart.

Multi-Drive Mode:

The operation of compressor is automatically controlled to keep the pressure around necessary pressure (control pressure). Unnecessary power consumption is prevented by avoiding the pressure to reach max pressure. So, energy-saving is possible.

Specifications (Built-in Air Dryer Model)

Control Method		P-Mode				Multi-Drive Mode / P-Mode			
Model		SRL-1.5DMN5	SRL-2.2DMN5	SRL-3.7DMN5	SRL-5.5DMN5	SRL-7.5DMN5	SRL-11DMN5	SRL-15DMN5	SRL-22DMN5
Item · Unit		SRL-1.5DMN6	SRL-2.2DMN6	SRL-3.7DMN6	SRL-5.5DMN6	SRL-7.5DMN6	SRL-11DMN6	SRL-15DMN6	SRL-22DMN6
Motor Nominal Output	kW	1.5	2.2	3.7	5.5	7.7	11	16.5	22
Max. Discharge Pressure	MPa	0.8	0.8 (1.0)	0.8 (1.0)	0.8 (1.0)				
ON-OFF Control Pressure	MPa	0.65 – 0.8 (0.8 – 1.0)							
Air Capacity	L/min	170	255 (200)	425 (345)	640 (500)	890 (700)	1,280 (1,000)	1,920 (1,500)	2,560 (2,000)
Dew Point of Outlet Air	°C	15 or below (under pressure)				10 or below (under pressure)			
Ambient Temperature	°C	5 – 40							
Starting Method	—	Full-Voltage Starting							
Air Tank Volume	L	18	24	24 (necessary for extra air receiver tank)		— *6			
Air Outlet	—	Rc3/8 (stop Valve) ×1				Rc3/4×1		Rc1×1	
External Dimensions (W×D×H)	mm	680×620×1,030		750×715×1,150		980×660×1,450		1,280×770×1,450	1,360×925×1,930
Weight	kg	135	149	191	225	353 (350)	397 (391)	576 (567)	799 (787)
Noise Level	dB[A]	45	46	47	50	53	56	58	61

Without Air Dryer Model

Control Method		P-Mode				Multi-Drive Mode / P-Mode				
Model		SRL-1.5ME5A	SRL-2.2ME5A	SRL-3.7ME5A	SRL-5.5ME5A	SRL-7.5ME5A	SRL-11ME5A	SRL-15ME5A	SRL-22ME5A	SRL-33ME5A
Item · Unit		SRL-1.5ME6A	SRL-2.2ME6A	SRL-3.7ME6A	SRL-5.5ME6A	SRL-7.5ME6A	SRL-11ME6A	SRL-15ME6A	SRL-22ME6A	SRL-33ME6A
Motor Nominal Output	kW	1.5	2.2	3.7	5.5	7.7	11	16.5	22	33
Max. Discharge Pressure	MPa	0.85	0.85 (1.0)	0.85	0.85 (1.0)	0.80 (1.0)				
ON-OFF Control Pressure	MPa	0.65 – 0.85 (0.8 – 1.0)				0.65 – 0.8 (0.8 – 1.0)				
Air Capacity	L/min	160	240 (200)	400	600 (500)	880 (700)	1,260 (1,000)	1,890 (1,500)	2,520 (2,000)	3,780 (3,000)
Ambient Temperature	°C	0 – 40								
Starting Method	—	Full-Voltage Starting								
Air Tank Volume	L	18		24	24 (necessary for extra air receiver tank)	— *6				
Air Outlet	—	Rc3/8 (stop Valve) ×1				Rc3/4×1		Rc1×1		Rc1 1/2×1
External Dimensions (W×D×H)	mm	680×640×1,030			750×715×1,070		980×660×1,190		1,280×770×1,450	1,330×880×1,900
Weight	kg	119	129	175	184	315 (312)	350 (344)	515 (506)	720 (708)	1,000
Noise Level	dB[A]	45	46	47	50	57	59	61	61	63

- Note: 1. Air capacity is converted value at its inlet condition. For guaranteed values, contact your nearest dealer or Hitachi local representative office.
2. Air capacity from the air dryer is about 3% to 5% less than the one from the compressor due to the drain condensation.
3. Noise level is measured at 1.5m front under full-load operation in an anechoic room. Noise level might be increased due to different operating conditions and / or environments with echo of actual field installations.
4. If the air dryer operates at the same time, the noise level may be enlarged by 1 to 2 dB [A].
5. It is necessary to install an air receiver tank for 5.5kW or above models to reduce ON-OFF frequency. For 3.7kW or lower models, it is also recommended to install a separate air receiver tank.
6. It is necessary to install an air receiver tank with volume of 150L or above (7.7/11/16.5kW

- model), 230L or above (22kW model), or 500L or above (33kW model). When using P-mode, it is also recommended to install an air receiver with volume of 230L or above (7.7/11/16.5kW model), 430L or above (22kW model), or 700L or above (33kW model).
7. External dimensions indicate the package panel ONLY, NOT including protruding objects as discharge outlet.
8. Outlet air dew point is measured under the ambient temperature of 30°C.
9. Ambient temperature must be between 0 (at which there is no freeze of drain water) and 40°C.
10. 1.0MPa model is optional.
11. Some of the models may NOT be available in Singapore, Malaysia and China (Mainland) due to the pressure vessel regulations.
For details, contact your nearest dealer or Hitachi local representative office.
12. Hitachi air compressors are not designed, intended or approved for breathing air applications.



Package BEBICON (0.75–11kW) - Powered by Premium Efficiency Motor (IE3)

Model change to **NEXT**series is complete
for Package BEBICON (1.5–11kW).



Model Nomenclature

P O D – 7.5 M N P 5

Frequency (5: 50Hz, 6: 60Hz)
NP: **NEXT**series (with IE3 motor)
M: M type
Motor Nominal Output (kW)
Built-in Air Dryer
O: Oil-free
B: Oil-lubricated
Package Type

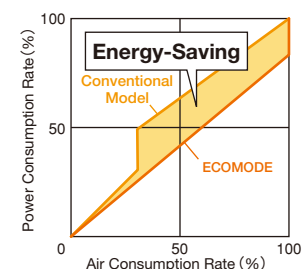
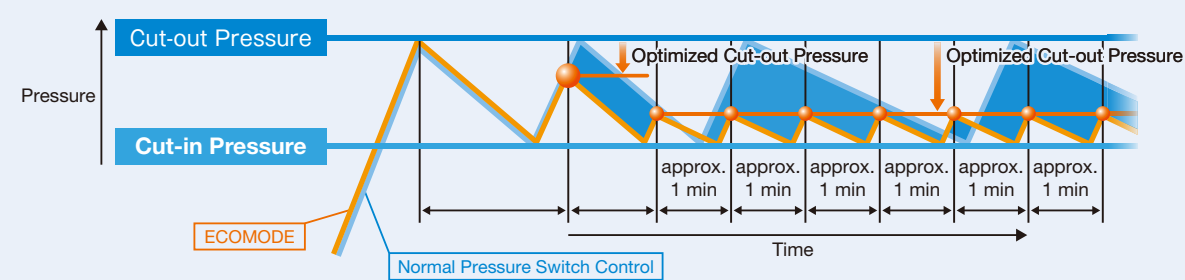
P O D – 0.75 P S J 5

Frequency (5: 50Hz, 6: 60Hz)
PSJ/PGS/PSC: Single Phase
PP: Three Phase (with IE3 motor)
Motor Nominal Output (kW)
Built-in Air Dryer
O: Oil-free
B: Oil-lubricated
Package Type

M type

New [ECOMODE] Control, Further Energy-Saving

Optimized cut-out pressure is automatically controlled by monitoring the condition of air delivery. Energy-saving can be obtained by cutting the unnecessary compression.



Compared with the conventional model under PUSC control, Energy-Saving of **40%** when air consumption rate is 30%, or **24%** when air consumption rate is 50%, or **14%** when air consumption rate is 70% is possible.
(in case of PB-3.7kW with 95L air receiver tank installed)

Calculation condition:
- 3,000h/year operation
- Pressure setting at 0.78 – 0.93 MPa
- Extra air receiver tank installed

Energy Saving, Oil-free Air Supply, Low Noise Level*

* In case of low rotation speed.

Model Nomenclature

P O D – 7.5 V N P
Package Type: P
Oil-free: O
Built-in Air Dryer: D
NEXTseries (with IE3 motor): V
Inverter Type: N
Motor Nominal Output (kW): P



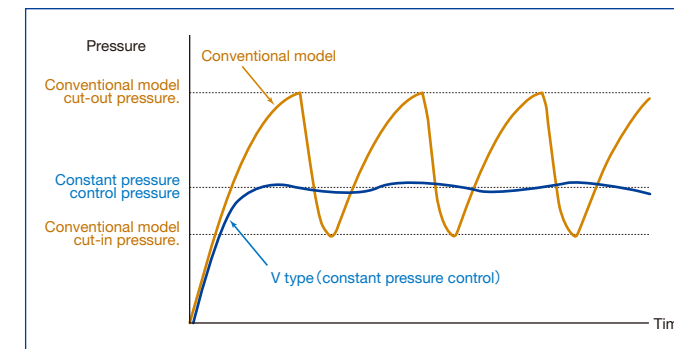
POD-7.5VNP

V type

Features

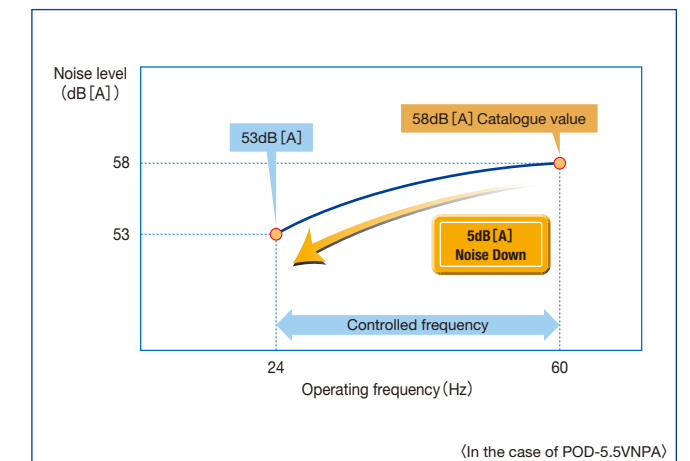
Constant Pressure Control

Energy-Saving is possible under constant pressure control, as it can supply air at minimum pressure as required. Pressure of discharge air can be controlled within ± 0.03 MPa of setting pressure. Setting pressure can be adjusted within ± 0.01 MPa at control panel. Moreover, in case that air consumption is extremely low, operation may stop at maximum pressure.



Sophisticated operating sound with inverter

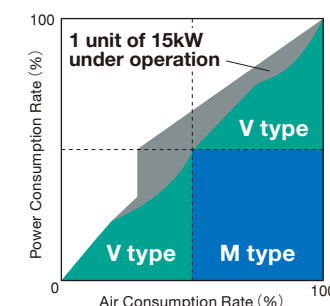
Inverter soft start reduces the starting noise. Low speed operation sound is 5 dB [A] lower than normal speed operation sound.



Energy-Saving by V-M combination

Further Energy-Saving is possible by V-M combination in case of multi units under operation.

Example of V-M combination



Effect

If you have 1 unit of 7.5kW M type* installed and the air requirement is 15kW class, add 1 unit of 7.5kW V type. Energy-Saving of V type can be obtained compared with the cases of replacing with 1 unit of 15kW M type or adding 1 unit of 7.5kW M type.

* It does not only apply for M type but also for models whose cut-in pressure can be changed.



Package BEBICON (0.75–11kW)

- Powered by Premium Efficiency Motor (IE3)

Specifications

Package OIL FREE BEBICON with Built-in Air Dryer

Control Method		Pressure Switch Control		ECOMODE/PUSC (possible for conversion)					
		0.75		1.5	2.2	3.7	5.5	7.5	11
Item · Unit		kW — POD-0.75PSJ5 POD-0.75PSJ6		POD-1.5MNP5 POD-1.5MNP6	POD-2.2MNP5 POD-2.2MNP6	POD-3.7MNP5 POD-3.7MNP6	POD-5.5MNP5 POD-5.5MNP6	POD-7.5MNP5 POD-7.5MNP6	POD-11MNP5 POD-11MNP6
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.78 – 0.93)						0.85 (0.70 – 0.85)	
Air Capacity	L/min	75		165	240	405	605	875	1,280
Dew-Point of Outlet Air	°C	15 or below under pressure							
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting		Full-Voltage Starting (with unloader-restart)					
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30		35		32			
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280
External Dimensions (W×D×H)	mm	640×537×1,137		745×620×1,150		850×680×1,180		850×805×1,440	
Weight	kg	129	123	158	176	212	328	341	484
Noise Level	dB[A]	52		55		57	58	59	62

Package OIL FREE BEBICON

Control Method		Pressure Switch Control		ECOMODE/PUSC (possible for conversion)					
		0.75		1.5	2.2	3.7	5.5	7.5	11
Item · Unit		kW — PO-0.75PGS5 PO-0.75PGS6		PO-1.5MNP5 PO-1.5MNP6	PO-2.2MNP5 PO-2.2MNP6	PO-3.7MNP5 PO-3.7MNP6	PO-5.5MNP5 PO-5.5MNP6	PO-7.5MNP5 PO-7.5MNP6	PO-11MNP5 PO-11MNP6
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.78 – 0.93)						0.85 (0.7 – 0.85)	
Air Capacity	L/min	75		165	240	405	605	875	1,280
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting		Full-Voltage Starting (with unloader-restart)					
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30		35		32			
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280
External Dimensions (W×D×H)	mm	640×537×1,137		745×620×960		850×680×1,020		850×805×1,230	
Weight	kg	106	100	132	150	184	287	305	427
Noise Level	dB[A]	52		55		57	58	59	62

Package Oil-lubricated BEBICON with Built-in Air Dryer

Control Method		Pressure Switch Control		ECOMODE/PUSC (possible for conversion)					
		0.75		1.5	2.2	3.7	5.5	7.5	11
Item · Unit		kW — PBD-0.75PSJ5 PBD-0.75PSJ6		PBD-1.5MNP5 PBD-1.5MNP6	PBD-2.2MNP5 PBD-2.2MNP6	PBD-3.7MNP5 PBD-3.7MNP6	PBD-5.5MNP5 PBD-5.5MNP6	PBD-7.5MNP5 PBD-7.5MNP6	PBD-11MNP5 PBD-11MNP6
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.74 – 0.93)						0.93 (0.78 – 0.93)	
Air Capacity	L/min	80		165	265	440	630	840	1,200
Dew-Point of Outlet Air	°C	15 or below under pressure							
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting		Full-Voltage Starting (with unloader-restart)					
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30		35		32			
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280
External Dimensions (W×D×H)	mm	640×537×1,137		745×620×1,150		850×680×1,180		850×805×1,440	
Weight	kg	117	105	150	173	209	320	349	473
Noise Level	dB[A]	52		53		56	56	59	59

Package Oil-lubricated BEBICON

Control Method		Pressure Switch Control		ECOMODE/PUSC (possible for conversion)					
		0.75		1.5	2.2	3.7	5.5	7.5	11
Item · Unit		kW — PB-0.75PSC5 PB-0.75PSC6		PB-1.5MNP5 PB-1.5MNP6	PB-2.2MNP5 PB-2.2MNP6	PB-3.7MNP5 PB-3.7MNP6	PB-5.5MNP5 PB-5.5MNP6	PB-7.5MNP5 PB-7.5MNP6	PB-11MNP5 PB-11MNP6
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.74 – 0.93)						0.93 (0.78 – 0.93)	
Air Capacity	L/min	80		165	265	440	630	840	1,200
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting		Full-Voltage Starting (with unloader-restart)					
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30		35		32			
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280
External Dimensions (W×D×H)	mm	640×537×867		745×620×960		850×680×1,120		850×805×1,230	
Weight	kg	88	82	124	148	181	279	312	416
Noise Level	dB[A]	52		53		56	56	59	59

- Note: 1. Air capacity is converted volume at its inlet condition (atmospheric pressure ambient temperature 20°C, humidity 60%). For guaranteed values, contact your nearest dealer or Hitachi local representative offices.
2. [ECOMODE] is set as default control method for **NEXTSeries** when shipment.
3. Control pressure (ON-OFF) is default pressure set when shipment. When [ECOMODE] is selected, control pressure (OFF) may decrease due to condition.
4. Air capacity of built-in dryer model may decrease by 3-5% when drain condensates.
5. Noise level is measured value at a distance of 1.5m from the unit in an anechoic room at full load operation.
Noise level might be increased due to different operating conditions and / or environments with echo of actual field installations.
6. Noise level may increase by 1-2dB[A] when refrigerant air dryer operates.
7. Ambient temperature must be between 0 to 40°C. (for built-in air dryer model, 5-40°C at which no freeze of drain water)
8. Dew point of outlet air is under ambient temperature of 30°C.
9. External dimension shows the dimension of panels. It does NOT include protruding objects such as stop valve.

10. Do NOT use wiring thinner than the regulation or long wiring which causes the voltage drop of 2% or more during operation.
Do NOT use power source with change in voltage or power generator.
11. BEBICON OIL is filled when shipment for package BEBICON (oil-lubricated). Do confirm there is appropriate volume of BEBICON OIL filled before operation.
MUST use BEBICON OIL as the only lubricant oil.
12. To fully utilize the Energy-Saving effect of ECOMODE and realize energy efficient operation, it is recommended to secure piping and existing air receiver tank with recommended volume or above, or install separate air receiver tank. If sufficient volume for air accumulation can not be secured, operation will be under [PUSC] control even if [ECOMODE] is set due to the short operation cycle.
13. Rust-proof air dryer is available as an option.
14. It is necessary to install an air receiver tank with volume of 230L or above for PO(D)-15kW model.
15. Hitachi air compressors are not designed, intended or approved for breathing air applications.

Specifications

Inverter Controlled V-type Package OIL FREE BEBICON with Built-in Air Dryer

Control Method		Inverter (Automatic switch between constant pressure control and pressure switch control)		
		5.5		11
Item · Unit		kW — POD-5.5VNPA		POD-11VNP
Max. Discharge Pressure	MPa	0.93		0.85
Air Capacity under constant pressure control (at initial setting)	L/min	630 (@0.81MPa)		1,335 (@0.73MPa)
Range of Constant Pressure Control	MPa	0.58 - 0.86		0.58 – 0.78
Dew-Point of Outlet Air	°C	15 or below under pressure		
Starting Method	—	Inverter		
Air Outlet	—	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		
Built-in Air Tank Volume	L	32		
Necessary Air Tank Volume (additional)	L	150 or above		230 or above
External Dimensions (W×D×H)	mm	850×805×1,440		1,302×945×1,400
Weight	kg	342		505
Noise Level	dB[A]	58		62

- Note: 1. Air capacity under constant pressure control may vary down to 40% of the above value due to variable speed control in case that air consumption is low.
Operation when air capacity is about 40% will stop at operation pressure in case that the pressure of air receiver tank rises.
In case that compressor operates for more than 1 min, operation will stop at cut-in pressure+0.06MPa.
2. Air capacity of built-in dryer model may decrease by 3-5% when drain condensates.
3. Noise level is measured value at a distance of 1.5m from the unit in an anechoic room at full load operation.
Noise level might be increased due to different operating conditions and / or environments with echo of actual field installations.
4. Noise level may increase by 1-2dB[A] when refrigerant air dryer operates.
5. Ambient temperature must be between 5 - 40°C at which no freeze of drain water.
6. Dew point of outlet air is under ambient temperature of 30°C.
7. External dimension shows the dimension of panels. It does NOT include protruding objects such as stop valve.
8. Do NOT use wiring thinner than the regulation or long wiring which causes the voltage drop of 2% or more during operation.
Do NOT use power source with change in voltage or power generator.
9. For V-type, it is necessary to install a vertical air receiver tank with necessary volume.
10. Rust-proof air dryer is available as an option.
11. Hitachi air compressors are not designed, intended or approved for breathing air applications.

Hitachi BEBICON ROLLER (BR-1M)



BR-1M

- **Newly developed Energy-Saving Control**
Loaded with Energy-Saving Multi Control, it is possible to control the connected BEBICONs under the latest Energy-Saving Control.
- **Response to Inverter Controlled Package OIL FREE BEBICON and Multi-Drive SRL**
Further energy-saving is possible when connected with high energy-saving models such as inverter controlled package OIL FREE BEBICON or multi-drive SRL.
- **Possible to control up to 8 units**
8 units of BEBICONs at maximum can be controlled by linking 2 units of BEBICON rollers.
- **Various Functions**
Automatic restart after power failure, back-up function, leveling operation hour etc is available. Detailed and direct setting of control pressure is possible.

Specifications

Item	Content	
Applicable Compressor Model	BEBICON, OIL FREE BEBICON, Package (OIL FREE) BEBICON Inverter Controlled Package OIL FREE BEBICON OIL FREE Scroll Compressor (Multi-Drive)	
Controllable Number of Units	Max. 4 (Up to 8 by linking 2 units of BR-1M)	
Control Mode	Energy-Saving Multi Control	
Function	Automatic Restart after Power Failure, Rotary Start, Back-up Leveling Operation Hour, Switching to Conventional Control Mode	
Input	Remote Operation, Compressor General Abnormal Input, Link Input	
Output	Compressor Operation, Load Reduction when Starting, External Control, Mode Control Alarm Output, General Abnormal Output, Operation Answer, Link Output	
Contact Specification	Resistance Load(COS φ =1) AC250V 5A	Minimum Application Load DC5V 10mA
	Induction Load(COS φ =0.4) AC250V 1.5A	
Control Pressure	0.2 – 1.4 MPa	
Power Source	Single Phase 100 – 220V (50/60Hz)	
Power Capacity	10VA	
External Dimension (W×D×H)	350×120×300 mm	
Ambient Temperature・Humidity	0~40℃・85%	
Pressure Pipe Connection Port	Rc1/4	
Terminal Screw Size	M3	
Weight	6kg	

- Note: 1. BR-1M is dedicatedly designed for Hitachi BEBICON unit control. Do NOT connect BR-1M with compressor of other brands.
2. It is necessary to install an air receiver tank.
3. It is necessary to install a magnetic switch if the compressor is not equipped with one.
4. About Energy-Saving Multi control, some models may NOT be applicable. For details, contact your nearest dealer or Hitachi local representative office
5. Pressure which is over the max pressure of the compressor connected can not be used.
6. In case of connecting with reciprocating BEBICON which has load reduction function, it is not possible to use below cut-in pressure of 0.54MPa.
7. In case of connecting with package oil-lubricated BEBICON, a PCB with external I/O is necessary.