



Products described in this catalog may differ from different countries or regions. Contact your nearest Hitachi representative office for details.

**Asia & Oceania**

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

**China**

Hitachi (China) Ltd. (Beijing office)  
18th Floor Beijing Fortune Building  
5 Dong San Huan Bei Lu Chao Yang District, Beijing 100004  
TEL : +86 (10) 6590-8111  
FAX : +86 (10) 6590-8110  
(Shanghai Office)  
(Hitachi (Shanghai) Trading Co., Ltd.)  
(Industrial Equipment Systems Division)  
12th Floor, Rui Jin Building No. 205, Maoming Road (S) Shanghai, 200020  
TEL : +86 (21) 6472-1002  
FAX : +86 (21) 6472-4990  
(Guangzhou Office)  
3406, Office Tower, CITIC Plaza 233 TianHe North Road, Guangzhou 510613  
TEL : +86 (20) 3891-2737  
FAX : +86 (20) 8752-1301

Hitachi East Asia Ltd.(Hong Kong Office)  
4th 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, Hung Kuo Building No. 167 Tun-Hwa North Road, Taipei (105) Taiwan  
TEL : +886 (2) 2718-3666  
FAX : +886 (2) 2718-8180

**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**

Hitachi Asia Ltd. (Jakarta Office)  
Menara BCA 38th Floor Suite #3804 & 3805 Jl.M.H Thamrin No.1 Jakarta 10310  
TEL : +62 (21) 2358-6757  
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 : +60 (3) 2031-8758

**Philippines**

Hitachi Asia Ltd. (Philippines Office)  
17th Floor Oledan Square 6788 Ayala Avenue, Makati City, Philippines 1226  
TEL : +63 (2) 886-9018  
FAX : +63 (2) 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) 829-9725  
FAX : +84 (8) 829-9729  
(Ha Noi Office)  
Sun Red River Bldg., 5th Floor, 23 Phan Chu Trinh Street Hoan Kiem District, Hanoi  
TEL : +84 (4) 933-3123  
FAX : +84 (4) 933-3125

**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 103045  
TEL : +7 (095) 787-4022, -4020  
FAX : +7 (095) 787-4021

**Latin America**

**Mexico**  
Hitachi Mexico, S.A. de C.V.  
Andres Bello No.10 Piso 10 Col. Chapultepec Polanco 11560, Mexico, D.F.  
TEL : +52 (55) 5282-9040  
FAX : +52 (55) 5282-9042

**North America**

**U.S.A.**  
Hitachi America, Ltd.  
(Industrial Components & Equipment Division)  
50 Prospect Avenue, Tarrytown, New York, 10591-4698  
TEL : +1(914) 332-5800  
FAX : +1(914) 332-5555  
(Charlotte Office)  
(Industrial Components & Equipment Division)  
6901 Northpark Blvd., Charlotte, NC 28216  
TEL : +1(704) 494-3008  
FAX : +1(704) 494-3809

**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.

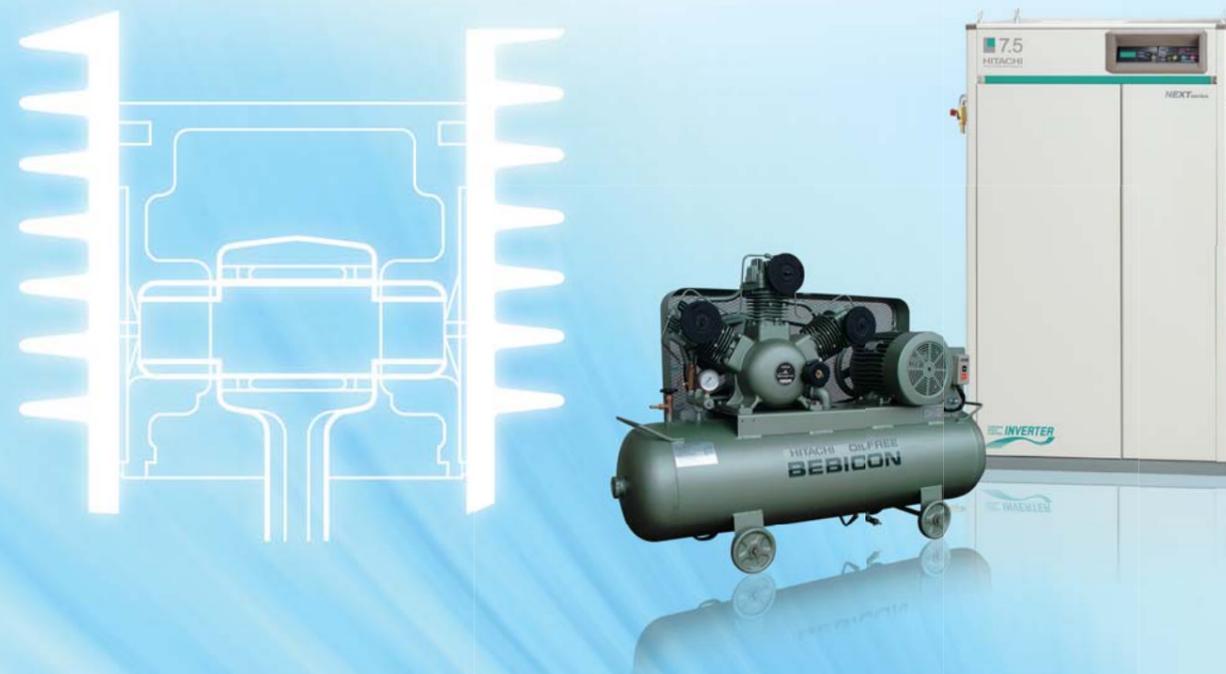
©Hitachi Industrial Equipment Systems Co.,Ltd.

For further information, please contact your nearest sales representative.

HITACHI BEBICON COMPRESSOR

Innovation, Performance and Reliability

HITACHI  
Inspire the Next



BEBICON

GENERAL CATALOG



# TWO 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.

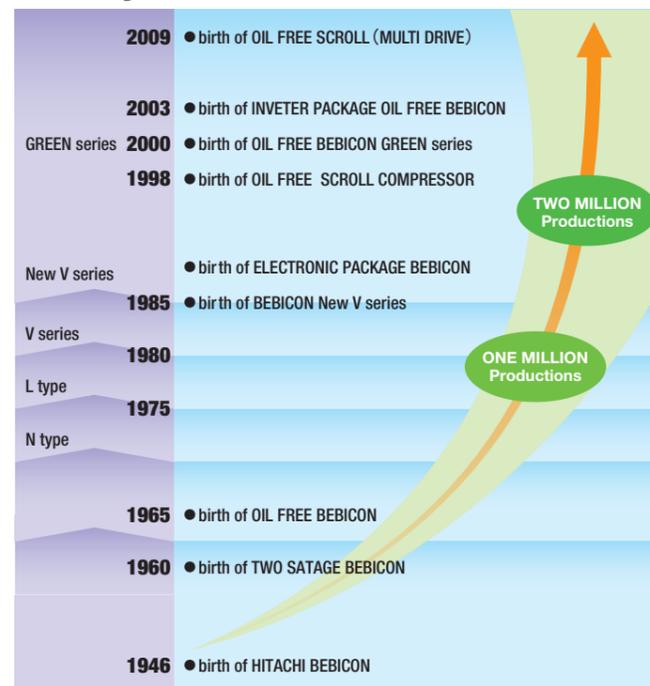
HITACHI has achieved **ONE Million** product shipments by 1979 and **TWO Million** by 1994.

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.

## History of HITACHI BEBICON®



## List of Model

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								●

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

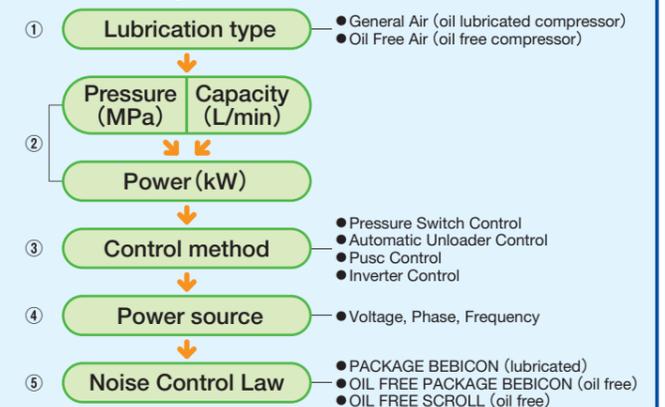
Auto Unloader Control	Automatically switch between Load/Unload operation by the pressure adjustment valve
Pressure Switch Control	Automatically Start/Stop the operation of compressor in order to maintain certain range of pressure. Energy-saving is possible when compressed air is NOT needed, since motor 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.

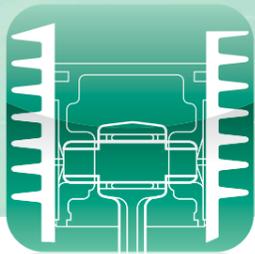
## How to choose a BEBICON compressor

- Select type of compressor according to your requirement.
- 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.
- Select appropriate control method.
- Confirm the details of power source (Voltage / Phase / Frequency)
- 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.

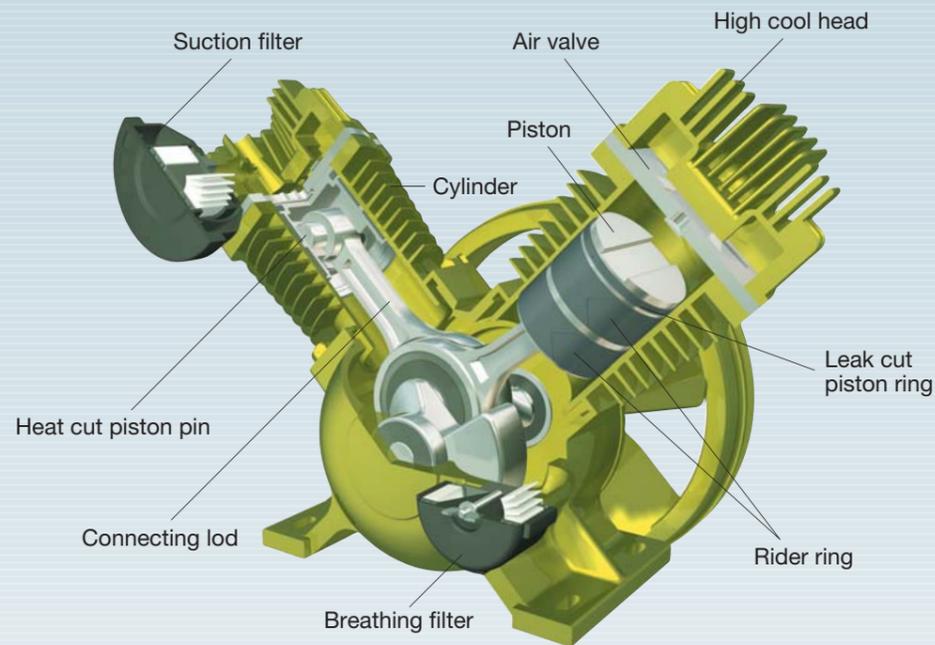
### ■Selecting Procedure



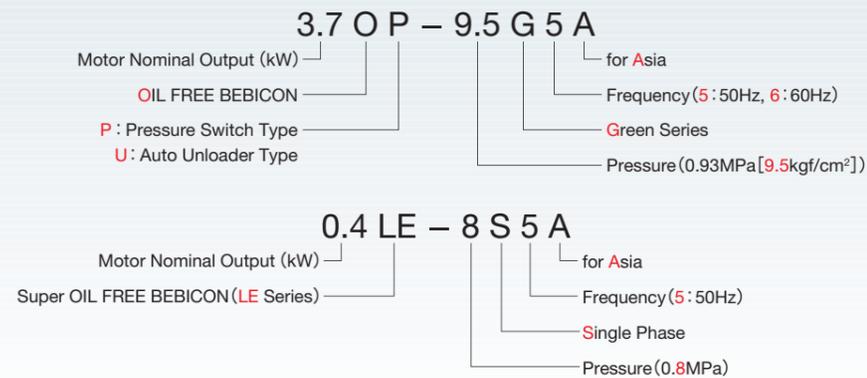


# OIL FREE BEBICON (0.4–11kW)

## 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

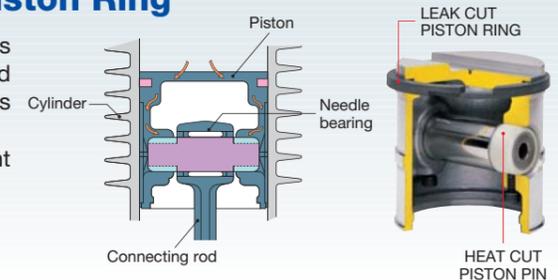
**Lead Air Valve** of I-shaped stainless steel suction air valve improves air capacity and improves durability against rusting.



### 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.

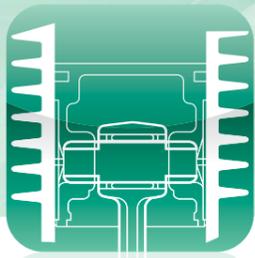
**Leak Cut Piston Ring** of specially shaped abutment joint reduces air leakage and improves air capacity.



### Specifications (Horizontal Tank Mount Type)

Control Method		Auto Unloader Control							
Model		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
Item · Unit		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/min	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.

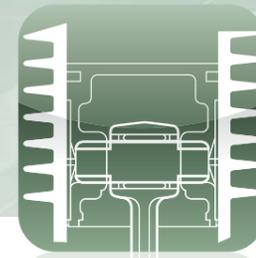


# OIL FREE BEBICON (0.4–11kW)

## Specifications (Horizontal Tank Mount Type)

Control Method		Pressure Switch Control										
Item · Unit	Model	Pressure Switch Control										
		0.4LE-8S5A	0.750P-9.5GS5A	0.750P-9.5G5A	1.50P-9.5GS5A	1.50P-9.5G5A	2.20P-9.5GS5A	2.20P-9.5G5A	3.70P-9.5GS5A	5.50P-9.5GS5A	7.50P-8.5GA5A	11.0P-8.5GA5A
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									
Air Capacity	L/min	42	75	165		240		405	605	880	1,285	
Air Tank Volume	L/min	20	80	80		90		125	150	235	290	
Air Outlet	—	1/4B×1				3/8B×1			3/4B×1			
Standard Accessories	—	Pressure Gauge, Safety Valve, 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	30	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. ambient temperature 20°C, humidity 60%).  
 2. The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure, Hitachi air compressors are not designed, intended or approved for breathing air applications).  
 3. Hitachi air compressors are not designed, intended or approved for breathing air applications.

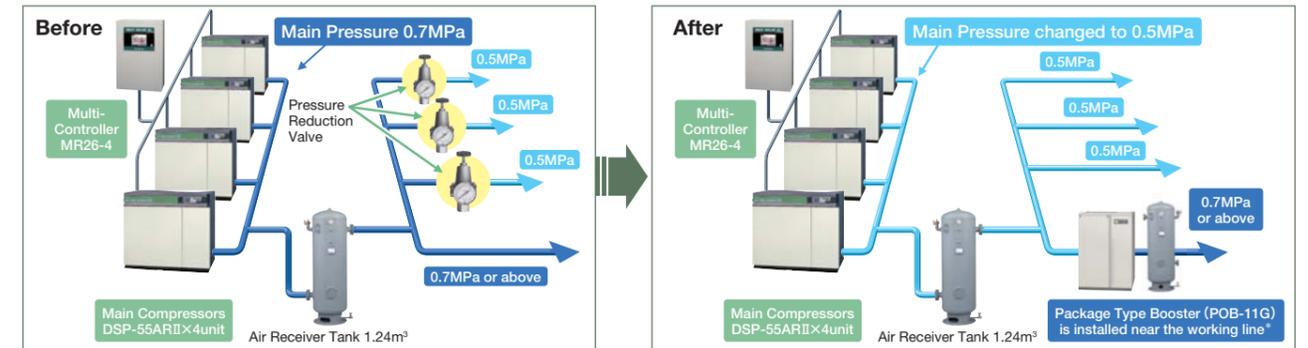


# OIL FREE Booster BEBICON (1.5–11kW)

## 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 20m<sup>3</sup>/min



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

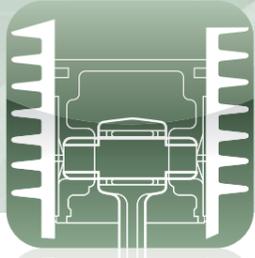
### Effect

Item · Unit	Before	After
Power Consumption* (MWh/year)	Main Screw Compressor	1,147
	Booster BEBICON	40
Simulated Annual Power Consumption (MWh/year)	1,147	967
Specific Energy Consumption (m <sup>3</sup> /min/kW)	0.105	0.124
CO <sub>2</sub> Emission* (t-CO <sub>2</sub> /year)	573	483
CO <sub>2</sub> Reduction Rate (%)	16	

\* Operation time: 6,000hr/y

0.500kg/kWh is used as CO<sub>2</sub> emission coefficient

After replacing with the Booster BEBICON:  
**180 MWh/y** Energy-Saving is obtained.  
 At the same time, **16%** of CO<sub>2</sub> Emission Reduction is also possible.



# OIL FREE Booster BEBICON (1.5–11kW)

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

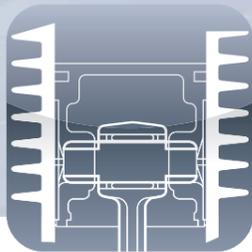


## Specifications

Item · Unit	Model	Tank Mounted Type					Packaged Type		
		OBB-1.5GB5	OBB-3.7G5A	OBB-7.5G5A	OBB-7.5HB5	OBB-11GB5	POB-3.7G5	POB-7.5G5	POB-11G5
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/min	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	1,774×553×968	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	64	180	261	285	331	207	288	397
Noise Level	dB[A]	70	73	78	78	80	54	57	60

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 Packaged 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 Packaged 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. 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.  
 8. 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.  
 9. 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/cm<sup>2</sup>])
- 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		Auto Unloader Control										
Model		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
Item · Unit		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										
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

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. ambient temperature 20°C, humidity 60%).  
 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		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		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	

### 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	7.5
Power Source	PH	3		
Max. Discharge Pressure	MPa	1.23 (1.37)		
Air Capacity	L/min	400	550	760
Air Tank Volume	L	300		
Air Outlet	—	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	957×590×1,732	1,025×611×1,734	1,102×634×1,814
Weight	kg	420	450	480

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. ambient temperature 20°C, humidity 60%).  
 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 (1.5–22kW)

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

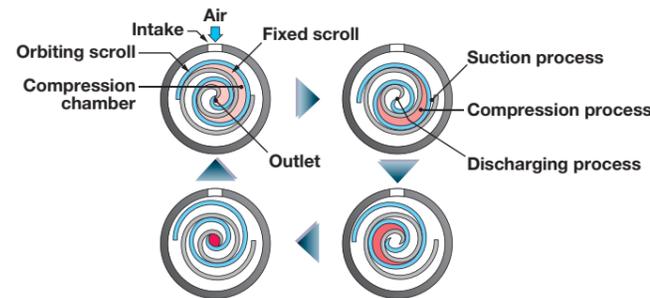
**Model Nomenclature**

**SRL – 5.5 (D) MB 5 A**

- OIL FREE SCROLL
- for Asia
- Frequency (5 : 50Hz, 6 : 60Hz)
- MA/MB/ME type
- Built-in Air Dryer
- Motor Nominal Output (kW)

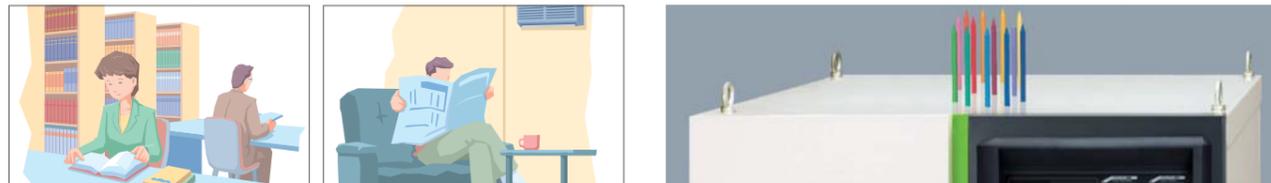
## Scroll Compression Principle

1. Compressor sucks air through air inlet located at outer scroll.
2. Compression chamber goes smaller with rotary movement and trapped air is compressed.
3. 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.
4. 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

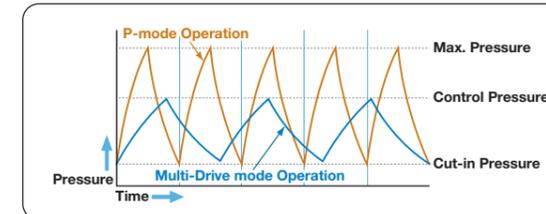
Few Daily Check items and Easy to Check, Total Cost Saving

- ① No need to change oil and separate the oil from drain. No need to install oil mist filter as well.\*
- ② Well-designed structure utilizes easy maintenance of draining and cleaning of suction filters.
- ③ Drain with rust is prevented by the adoption of air tank made of aluminum.

\*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.

## Space Saving

As the back and right side is flat, and with the adoption of exhaust from top roof, it is possible to install the air compressor with two sides just close to the walls. So, installation space is greatly saved. \* It is still necessary to secure space for maintenance.

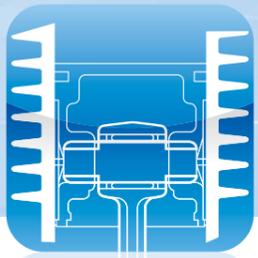
## Specifications (Built-in Air Dryer Model)

Control Method	Model	P-Mode				Multi-Drive Mode / P-Mode		
		SRL-1.5DME5	SRL-2.2DME5	SRL-3.7DME5	SRL-5.5DME5	SRL-7.5DMA5	SRL-11DMA5	SRL-15DMA5
Item · Unit		SRL-1.5DME6	SRL-2.2DME6	SRL-3.7DME6	SRL-5.5DME6	SRL-7.5DMA6	SRL-11DMA6	SRL-15DMA6
Motor Nominal Output	kW	1.5	2.2	3.7	5.5	7.7	11	16.5
Max. Discharge Pressure	MPa	0.8(1.0)						
ON-OFF Control Pressure	MPa	0.65 – 0.8 (0.8 – 1.0)						
Air Capacity	L/min	168	252 (200)	420	630 (500)	880 (700)	1,260 (1,000)	1,890 (1,500)
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)	—		
Air Outlet	—	Rc3/8 (stop Valve) × 1				Rc3/4 × 1		R1 × 1
External Dimensions (W×D×H)	mm	680×620×1,030		750×715×1,150		980×660×1,450		1,280×770×1,450
Weight	kg	134	144	188	203	332 (329)	365 (359)	528 (519)
Noise Level	dB[A]	45	46	47	50	53	56	58

## Without Air Dryer Model

Control Method	Model	P-Mode				Multi-Drive Mode / P-Mode			
		SRL-1.5MB5	SRL-2.2MB5A	SRL-3.7MB5A	SRL-5.5MB5A	SRL-7.5MB5A	SRL-11MB5A	SRL-15MB5A	SRL-22MB5A
Item · Unit		SRL-1.5MB6	SRL-2.2MB6A	SRL-3.7MB6A	SRL-5.5MB6A	SRL-7.5MB6A	SRL-11MB6A	SRL-15MB6A	SRL-22MB6A
Motor Nominal Output	kW	1.5	2.2	3.7	5.5	7.7	11	16.5	22
Max. Discharge Pressure	MPa	0.8	0.85 (1.0)				0.80 (1.0)		
ON-OFF Control Pressure	MPa	0.65 – 0.8	0.65 – 0.85 (0.8 – 1.0)				0.65 – 0.8 (0.8 – 1.0)		
Air Capacity	L/min	168	240 (200)	420	630 (500)	880 (700)	1,260 (1,000)	1,890 (1,500)	2,520 (2,000)
Ambient Temperature	°C	0 – 40							
Starting Method	—	Full-Voltage Starting							
Air Tank Volume	L	18		24	24 (necessary for extra air receiver tank)	—			
Air Outlet	—	Rc3/8 (stop Valve) × 1				Rc3/4 × 1		R1 × 1	
External Dimensions (W×D×H)	mm	680×620×1,030	680×640×1,030	750×715×1,070		980×660×1,190		1,280×770×1,450	1,330×880×1,900
Weight	kg	117	129	175	184	315 (312)	350 (344)	515 (506)	720 (708)
Noise Level	dB[A]	45	46	47	50	57	59	61	61

- 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. External dimensions indicate the package panel ONLY, NOT including protruding objects as discharge outlet.  
 7. Outlet air dew point is measured under the ambient temperature of 30°C.  
 8. Ambient temperature must be between 0 (at which there is no freeze of drain water) and 40°C.  
 9. 1.0MPa model is optional.  
 10. 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.  
 11. Hitachi air compressors are not designed, intended or approved for breathing air applications.



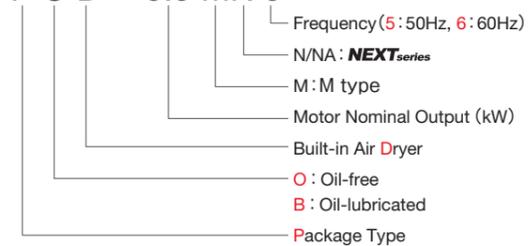
# Package BEBICON (0.75–15kW)

Model change to **NEXTseries** is complete for Package BEBICON (1.5–15kW).

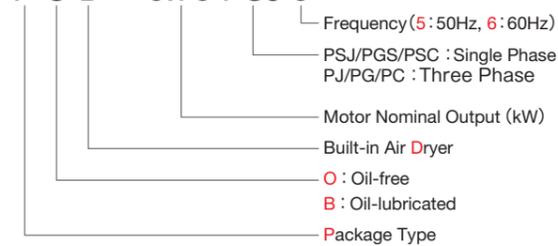


### Model Nomenclature

POD – 5.5 MN 5



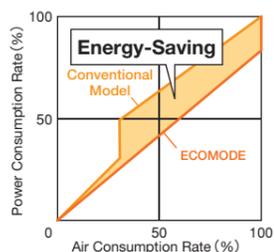
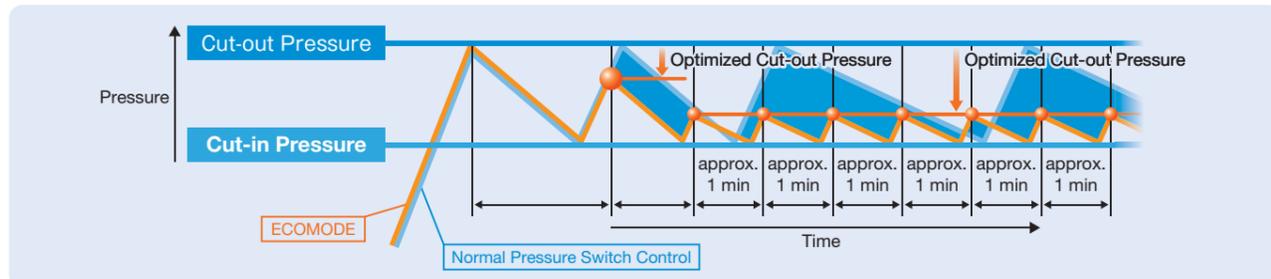
POD – 0.75 PSJ 5



## 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

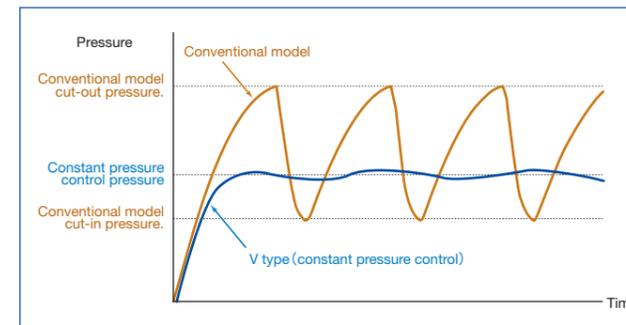


## V type

### Features

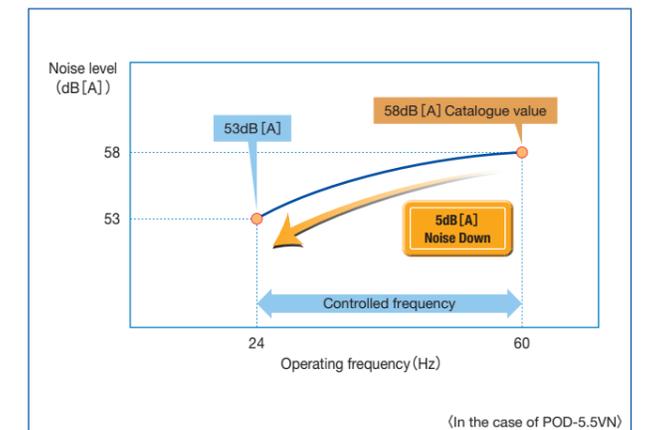
#### Constant Pressure Control

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  $\pm 0.03\text{MPa}$  of setting pressure. Setting pressure can be adjusted within  $\pm 0.01\text{MPa}$  at control panel. Moreover, in case that air consumption is extremely low, operation may stop at maximum pressure.



#### Sophisticated operating sound with inverter

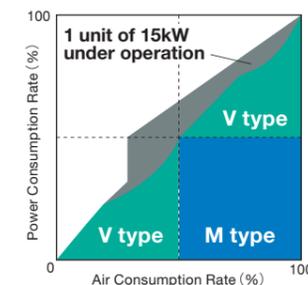
Inverter soft start reduces the starting noise. Low speed operation sound is 5 dB [A] lower than normal speed operation sound.



## Energy-Saving by V-M combination

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

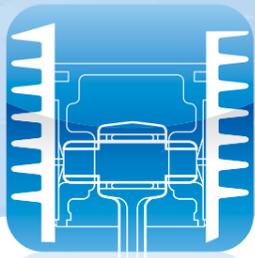
### Example of V-M combination



### 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 (0.75–15kW)

## Specifications

### Package OIL FREE BEBICON with Built-in Air Dryer

Control Method	Output Model	Pressure Switch Control		ECOMODE/PUSC (possible for conversion)							
		0.75	1.5	2.2	3.7	5.5	7.5	11	15		
Item · Unit	—	POD-0.75PSJ5 POD-0.75PSJ6	POD-0.75PJ5 POD-0.75PJ6	POD-1.5MNA5 POD-1.5MNA6	POD-2.2MNA5 POD-2.2MNA6	POD-3.7MNA5 POD-3.7MNA6	POD-5.5MN5 POD-5.5MN6	POD-7.5MN5 POD-7.5MN6	POD-11MN5 POD-11MN6	POD-15MN5 POD-15MN6	
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	1,700	
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)			Rc1 Stop Valve×1	
Built-in Air Tank Volume	L	30		35			32			32	
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280	430	
External Dimensions(W×D×H)	mm	640×537×1,137		745×620×1,150			850×680×1,180		850×805×1,440	1,302×945×1,400	1,353×945×1,400
Weight	kg	129	121	157	171	209	306	324	481	548	
Noise Level	dB[A]	52		55			57	58	59	62	66

### Package OIL FREE BEBICON

Control Method	Output Model	Pressure Switch Control		ECOMODE/PUSC (possible for conversion)							
		0.75	1.5	2.2	3.7	5.5	7.5	11	15		
Item · Unit	—	PO-0.75PGS5 PO-0.75PGS6	PO-0.75PG5 PO-0.75PG6	PO-1.5MN5 PO-1.5MN6	PO-2.2MN5 PO-2.2MN6	PO-3.7MN5 PO-3.7MN6	PO-5.5MN5 PO-5.5MN6	PO-7.5MN5 PO-7.5MN6	PO-11MN5 PO-11MN6	PO-15MN5 PO-15MN6	
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	1,700	
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)			Rc1 Stop Valve×1	
Built-in Air Tank Volume	L	30		35			32			32	
Recommended Air Tank Volume (additional)	L	—		38	55	95	150	230	280	430	
External Dimensions(W×D×H)	mm	640×537×867		745×620×960			850×680×1,020		850×805×1,230	1,050×945×1,400	1,353×945×1,400
Weight	kg	106	98	131	145	181	271	288	405	458	
Noise Level	dB[A]	52		55			57	58	59	62	66

### Package Oil-lubricated BEBICON with Built-in Air Dryer

Control Method	Output Model	Pressure Switch Control		ECOMODE/PUSC (possible for conversion)						
		0.75	1.5	2.2	3.7	5.5	7.5	11		
Item · Unit	—	PBD-0.75PSJ5 PBD-0.75PSJ6	PBD-0.75PJ5 PBD-0.75PJ6	PBD-1.5MNA5 PBD-1.5MNA6	PBD-2.2MNA5 PBD-2.2MNA6	PBD-3.7MNA5 PBD-3.7MNA6	PBD-5.5MN5 PBD-5.5MN6	PBD-7.5MN5 PBD-7.5MN6	PBD-11MN5 PBD-11MN6	
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	1,302×945×1,400
Weight	kg	117	103	149	168	206	298	332	470	
Noise Level	dB[A]	52		53			56	56	59	

### Package Oil-lubricated BEBICON

Control Method	Output Model	Pressure Switch Control		ECOMODE/PUSC (possible for conversion)						
		0.75	1.5	2.2	3.7	5.5	7.5	11		
Item · Unit	—	PB-0.75PSC5 PB-0.75PSC6	PB-0.75PC5 PB-0.75PC6	PB-1.5MN5 PB-1.5MN6	PB-2.2MN5 PB-2.2MN6	PB-3.7MN5 PB-3.7MN6	PB-5.5MN5 PB-5.5MN6	PB-7.5MN5 PB-7.5MN6	PB-11MN5 PB-11MN6	
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	640×537×867		745×620×960			850×680×1,120		850×805×1,230	1,050×945×1,400
Weight	kg	88	80	123	143	178	263	295	394	
Noise Level	dB[A]	52		53			56	56	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 **NEXT** series 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. 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	Output Model	Inverter (Automatic switch between constant pressure control and pressure switch control)			
		5.5	7.5	11	15
Item · Unit	—	POD-5.5VN	POD-7.5VN	POD-11VN	POD-15VN
Max. Discharge Pressure	MPa	0.93			
Air Capacity under constant pressure control (at initial setting)	L/min	630 (@0.81MPa)	910 (@0.73MPa)	1,335 (@0.73MPa)	1,770 (@0.73MPa)
Range of Constant Pressure Control	MPa	0.58 – 0.86			
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)			Rc1 Stop Valve×1
Built-in Air Tank Volume	L	32			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	1,552×945×1,400
Weight	kg	320	338	502	595
Noise Level	dB[A]	58	59	62	66

- 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
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
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.