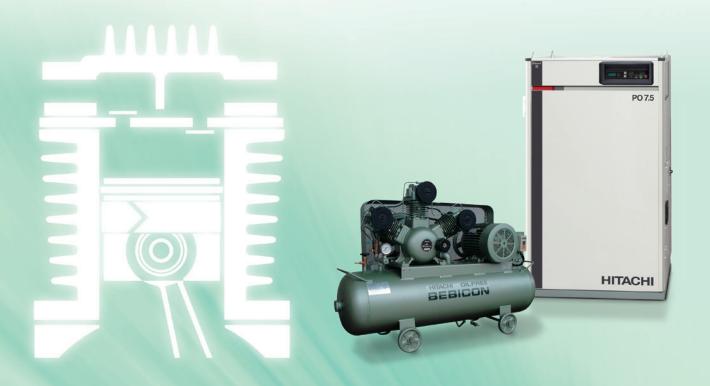
# **Hitachi BEBICON COMPRESSOR**

HITACHI Inspire the Next

Innovation, Performance and Reliability



# BEBICON

GENERAL CATALOG





# 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.

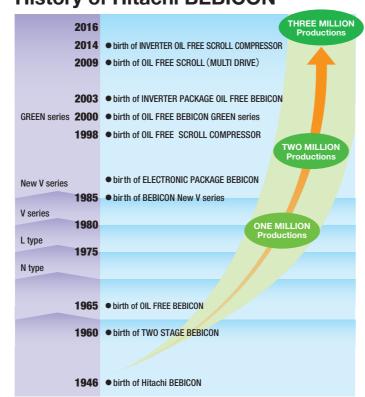
**Hitachi** has achieved **ONE Million** product shipments by *1979*, **TWO Million** by *1994*, and **THREE Million** by *2016*.

**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.

# **History of Hitachi BEBICON®**

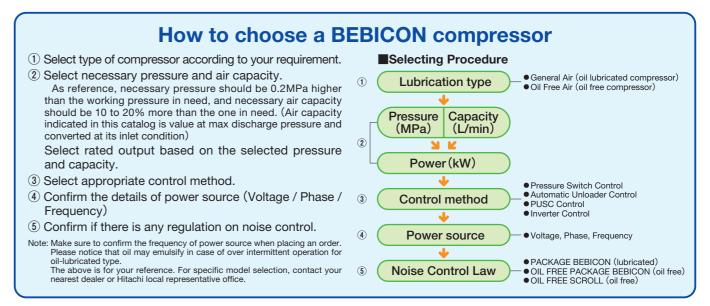


### **List of Model**

Model				Reciprocating				Scroll
Type Rated	OIL FREE	BEBICON	Oil-l	Lubricated BEBIC	CON	OIL FREE Boo	OIL FREE Scroll Air Compressor	
Output (kW)	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								•
30								•
33								•

### **Control Method**

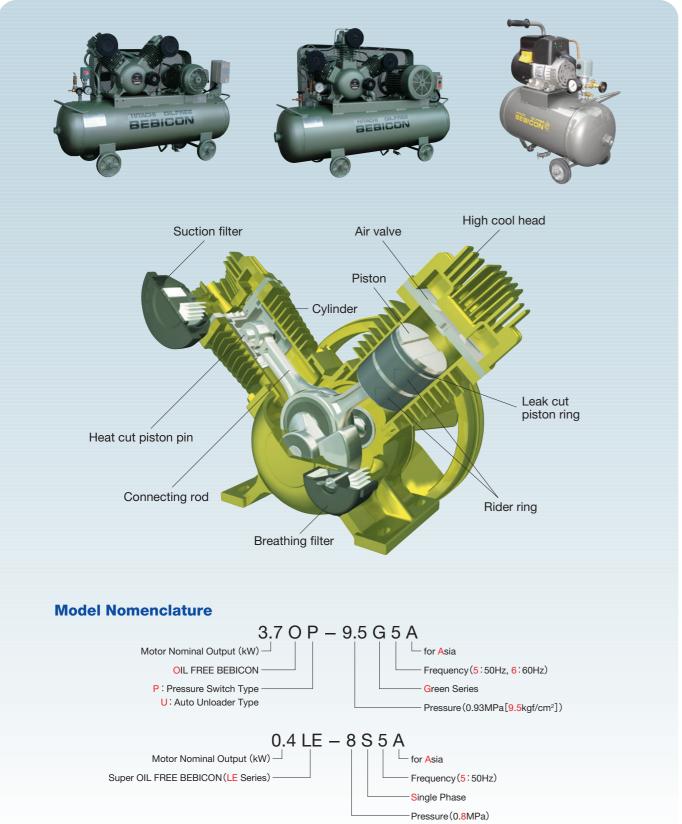
Auto Unloader Control	Automatically switch between Load/Unload operation by the pressure adjustment valve
Pressure Switch Control	Automatically Start/Stop the operation of compressor in order to maintain certain range of pressure Energy-saving is possible when compressed air is NOT needed, since motor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





# **OIL FREE BEBICON** (0.4-11kW)

# Steady Supply of Oil-free, Pure Air



# 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 durability against rusting.





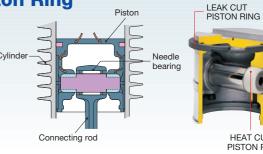
HEAT CUT PISTON PIN

Back Side

# **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 Cylinde

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



# **Specifications** (Horizontal Tank Mount Type)

Control Meth	od					Pressu	ıre Switch (	Control				
	Model	0.4LE-8S5A	0.75OP-9.5GS5A	0.75OP-9.5G5A	1.50P-9.5GS5A	1.50P-9.5G5A	2.20P-9.5GS5A	2.20P-9.5G5A	3.70P-9.5G5A	5.50P-9.5G5A	7.50P-8.5GA5A	110P-8.5GA5A
Item · Unit		0.4LE-050A	0.75OP-9.5GS6A	0.75OP-9.5G6A	1.50P-9.5GS6A	1.50P-9.5G6A	2.20P-9.5GS6A	2.20P-9.5G6A	3.70P-9.5G6A	5.50P-9.5G6A	7.50P-8.5GA6A	110P-8.5GA6A
Motor Nominal Output	kW	0.45	0.	75	1.5		2.2		3.7	5.5	7.5	11
Power Source	PH	1	1	3	1	3	1	3		3	3	
Max. Discharge Pressure	MPa	0.8		0.93 0.8							83	
Air Capacity	L/min	42	7	'5	10	165 240		405	605	880	1,285	
Air Tank Volume	L	20	8	30	8	60	90		125	150	235	290
Air Outlet	_				1/4B×1				3/81	B×1	3/41	B×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	1,173×3	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

139

122

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

30

kg

the maximum pressure converted in terms of air suction (atmospheric pressure,

77

105

ambient temperature 20°C, humidity 60%). 3. Hitachi air compressors are not designed, intended or approved for breathing air

163

208

278



# **OIL FREE BEBICON** (0.4-11kW)

### **Specifications** (Horizontal Tank Mount Type)

Control Meth	od				Auto Unioa	der Control				
	Model	1.5OU-9.5GS5A	1.5OU-9.5G5A	2.20U-9.5GS5A	2.20U-9.5G5A	3.70U-9.5G5A	5.5OU-9.5G5A	7.5OU-8.5GA5A	110U-8.5GA5A	
Item · Unit		1.5OU-9.5GS6A	1.5OU-9.5G6A	2.20U-9.5GS6A 2.20U-9.5G6A		3.70U-9.5G6A	5.5OU-9.5G6A	7.5OU-8.5GA6A	110U-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							
Air Capacity	L/min	16	55	24	40	405	605	880	1,285	
Air Tank Volume	L	80	0	9	0	125	150	235	290	
Air Outlet	-		1/48	3×1		3/88	3×1	3/4B×1		
Standard Accessories	_		Pre	ssure Gauge, Saf	ety Valve, Hose	Joint, Belt Cover,	Silencer, Stop Va	alve		
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  $40^{\circ}$ 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%)

Hitachi air compressors are not designed, intended or approved for breathing air



# OIL FREE Booster BEBICON (1.5-11kW)

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



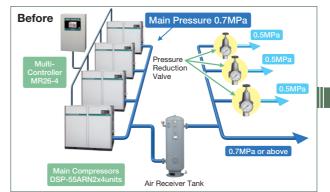


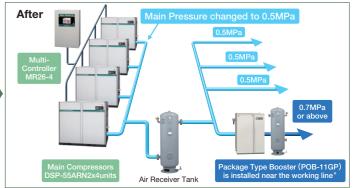
# **OIL FREE Booster BEBICON** (1.5-11kW)

# **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 imp

Item	· Unit	Before		After		
Power Consumption*	Main Screw Compressor	1,147	111	<b>9</b> 27		
(MWh/year)	Booster BEBICON	0		40		
Simulated Annual Power	Simulated Annual Power Consumption (MWh/year)					
Specific Energy Consum	ption (m³/min/kW)	0.105	111	0.124		
CO <sub>2</sub> Emission* (t-CO <sub>2</sub> /ye	533	111	<b>449</b>			
CO <sub>2</sub> Reduction Rate (%)	)		16	6		

0.497kg/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 CO<sub>2</sub> Emission Reduction is also possible.

## **Specifications**

\*Operation time: 6,000hr/y

-										
Tank Mounte Packaged Ty			1	Tank Mount Typ	e			Package Type		
	Model	OBB-1.5GP5	OBB-3.7G5A	OBB-7.5G5A	OBB-7.5HP5	OBB-11GP5	POB-3.7GP5	POB-7.5G5A	POB-11G5A	
Item · Unit		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	17	70	28	30	35	_	_	
Air Inlet	-		Rc	3/4		Rc1	Rc	3/4	Rc1	
Air Outlet	_	G3/8B Stop Valve		Rc3/4 Stop Valve	9	Rc1 Stop Valve	Rc3/4 Stop Valve		Rc1 Stop Valve	
External Dimensions (W×D×H)	mm	846×447×762	1,774×518×972		981×786×1,492	1,197×931×1,513				
Weight	kg	67	205	261	300	356	210	290	399	

Note: 1. Air capacity is converted value under atmospheric condition from the capacity with

 <sup>1.</sup> 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
the control of the pressure reduction of the pressure research to the pressure reduction.)

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

install air filter and micron filter on the suction side of the Booster BEBICON Temperature of suction air must be below 50°C.
 Ambient temperature must be between 0 (at which there is no freeze of drain water).

and 40°C.

Some of the models may NOT be available in Singapore, Malaysia and China (Mainland) due to the pressure vessel regulations.

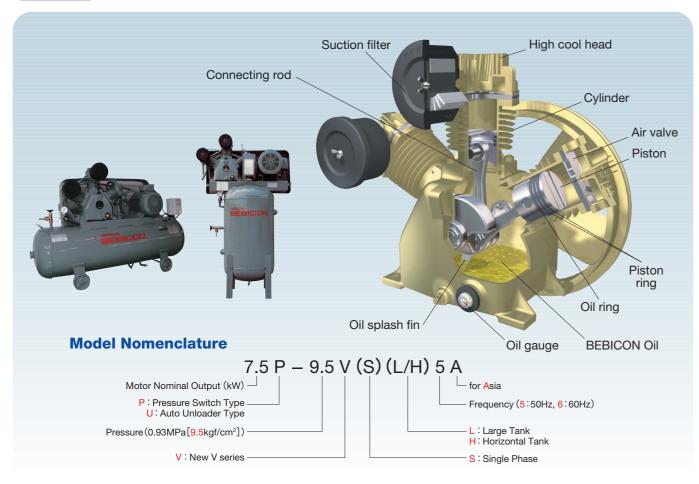
For details, contact your nearest dealer or Hitachi local representative office 8. Hitachi air compressors are not designed, intended or approved for breathing air



# Oil-Lubricated BEBICON (0.75-15kW)

# Easy-to-Use and Durable New V series

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



## **Specifications** (Horizontal Tank Mount Type)

Control Meth	od					Pressure Sw	itch 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	8	80	16	65	26	65	440	630	840	1,200
Air Tank Volume	L	6	62	8	0	9	0	125	150	235	260
Air Outlet	-			1/4	B×1	3/8B×1				3/4	3×1
Standard Accessories	_		Pressure Gauge, Safety Valve, Hose Joint, Belt Cover, Silencer, Stop Valve								
External Dimensions (W×D×H)	mm	931×3	76×804	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	71	64	91	80	114	97	125	186	242	308

- Note: 1. Use the compressor at a place where ambient temperature is 0 (at which there is no freeze of drain water) to  $40^{\circ}$ C.

  - 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

# **Specifications** (Horizontal Tank Mount Type)

and the second s												
Control Metho	od					Auto	Unloader C	ontrol				
	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	8	0	16	65	26	265		630	840	1,200	1,650
Air Tank Volume	L	6	2	8	80 9		0	125	150	235	260	290
Air Outlet	-			1/4	3×1			3/8	3×1	3/4E	3×1	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	931×37	76×816	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)

O - udus I Madia	1			D	O	ll						
Control Metho	oa			Pre	ssure Switch Con	troi						
	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		0.0	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>						
Standard Accessories	_		Pressure	Gauge, Safety Val	ve, Hose Joint, Belt	Cover, Silencer, Sto	op 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	75	97	123	140	223	262	295				

# **Specifications** (Vertical Tank Mount Type)

Control Metho	od		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	<u> </u>		3/4B×1							
Standard Accessories	_	Pressure Gaug	e, Safety Valve, Hose Joint, Belt Cover, Silend	cer, 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.

  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%). B. Hitachi air compressors are not designed, intended or approved for breathing ai

### **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.



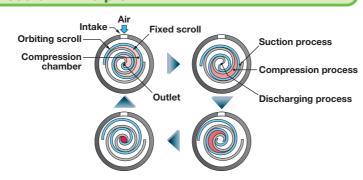
# OIL FREE Scroll Air Compressor (1.5-33kW)

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



#### **Scroll Compression Principle**

- 1. Compressor sucks air through air inlet located at outer
- 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.

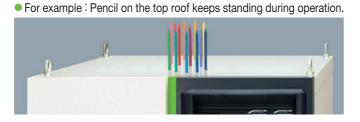


### **Low Noise, Low Vibration**

Noise level is only 45dB [A] that is like in the library (1.5kW)







### **Easy to Use**

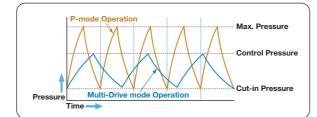
Few Daily Check items and Easy to Check, Total Cost Saving

- 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.
- \*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.



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

## Specifications (Built-in Air Dryer Model)

Control Metho	od		P-M	ode			Multi-I	Orive Mode / P	-Mode	
	Model	SRL-1.5DMNA5	SRL-2.2DMNA5	SRL-3.7DMNA5	SRL-5.5DMNA5	SRL-7.5DMNA5	SRL-11DMNA5	SRL-15DMNA5	SRL-22DMNA5	SRL-30DMNA5
Item · Unit		SRL-1.5DMNA6	SRL-2.2DMNA6	SRL-3.7DMNA6	SRL-5.5DMNA6	SRL-7.5DMNA6	SRL-11DMNA6	SRL-15DMNA6	SRL-22DMNA6	SRL-30DMNA6
Motor Nominal Output	kW	1.5	2.2	3.7	5.5	7.7	11	16.5	22	30
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				0.65 - 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)	3,300(2,840)
Dew Point of Outlet Air	°C		(under pressu	re)15 or below		(under pressure) 10 or below				
Ambient Temperature	°C					5 - 40				
Starting Method	_					Direct				
Air Tank Volume	L	1	8	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		1,280×770×1,450	1,360×925×1,930	
Weight	kg	144	158	200	234	353	397	576	799	873
Noise Level	dB[A]	45	46	47	50	53	56	58	61	63

#### Without Air Dryer Model

Control Metho	od		P-M	lode			Multi-I	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		0.80(1.0)				
ON-OFF Control Pressure	MPa		0.65 - 0.85(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	_				Fu	II-Voltage Starti	ing			
Air Tank Volume	L	1	8	24	24 (necessary for extra air receiver tank)			*6		
Air Outlet	-		Rc3/8(stop	o Valve)×1		Rc3/	/4×1	Rc1	1×1	Rc1 1/2×1
External Dimensions (W×D×H)	mm	680×64	0×1,030	750×71	5×1,070	980×660×1,190   1,280×770×1,450   1,330×880×1,900   1,36			1,360×1,030×1,670	
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.
- If the air dryer operates at the same time, the noise level may be enlarged by 1 to 2 dB [A].
   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
- model), 230L or above (22/30/33kW). 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 (22/30/33kW)
- 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
- 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)

  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.

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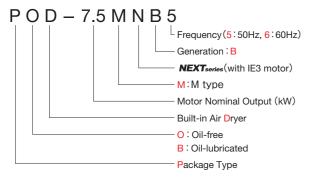
# Package BEBICON (0.75-15kW)

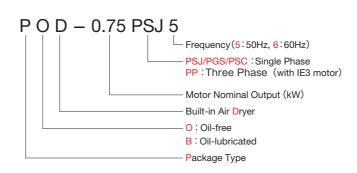
- Powered by Premium Efficiency Motor (IE3)

# Model change to **NEXT**<sub>series</sub> is complete for Package BEBICON (1.5–15kW).



#### **Model Nomenclature**

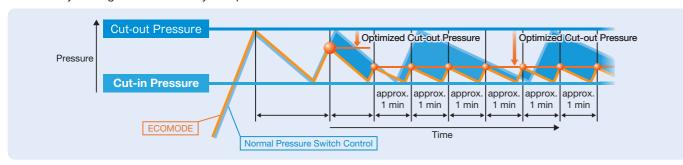




# M type

### New [ECOMODE] Control, Further Energy-Saving

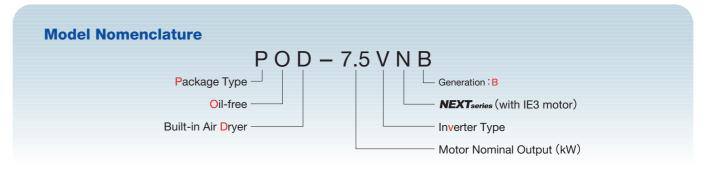
Optimized cut-out pressure is automatically controlled by monitoring the condition of air delivery. Energy-saving can be obtained by cutting the unnecessary compression.



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

\*In case of low rotation speed.

# V type



### **Features**

### **Constant Pressure Control**

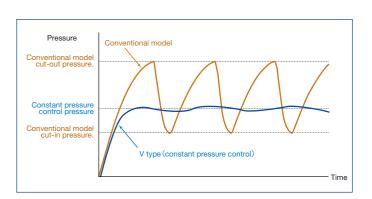
Energy-Saving is possible under constant pressure control, as it can supply air at minimum pressure as required. Pressure of discharge air can be controlled within  $\pm 0.03$ MPa of setting pressure.

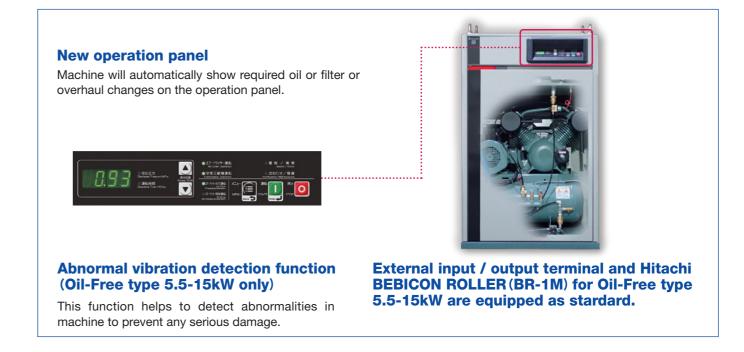
Setting pressure can be adjusted within  $\pm 0.01$ MPa at control panel.

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.





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# Package BEBICON (0.75-15kW)

# - Powered by Premium Efficiency Motor (IE3)

### **Specifications**

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

- Fackage OIL	rackage oil thee bedicon with built-in Air bryer									
Control Method		Pressure Sw	ritch Control			ECOMODE/PUSC (possible for conversion)				
Output	kW	0.	75	1.5	2.2	3.7	5.5	7.5	11	15
Item · Unit Model	_	POD-0.75PSJ5 POD-0.75PSJ6	POD-0.75PP5 POD-0.75PP6	POD-1.5MNB5 POD-1.5MNB6	POD-2.2MNB5 POD-2.2MNB6	POD-3.7MNB5 POD-3.7MNB6	POD-5.5MNBA5 POD-5.5MNBA6		POD-11MNB5 POD-11MNB6	POD-15MNB5 POD-15MNB6
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93(0.78 - 0.93)			0.85(0.70 - 0.85)					
Air Capacity	L/min	7	5	165	240	405	605	875	1,280	1,700
Dew-Point of Outlet Air	°C	(under pressure) 15 or below								
Power Source	PH	1 3			3					
Starting Method	—	Full-Voltag	ge Starting			Full-Voltage	Starting (with unlo	ader-restart)		
Air Outlet	_	G1/4B Sto (Internal Diameter of				(1 Hose φ12)	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			Rc1 Stop Valve×1
Built-in Air Tank Volume	L	3	30 35				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	850×80	5×1,440	1,302×945×1,400	1,353×945×1,400		
Weight	kg	129	123	159	177	213	329	342	485	555
Noise Level	dB[A]	5	2	5	5	57	58	59	62	66

#### ■ Package OIL FREE BEBICON

Control Method		Pressure Sw	ritch Control			ECOMODE/	DDE/PUSC (possible for conversion)				
Output	kW	0.	75	1.5	2.2	3.7	5.5	7.5	11	15	
Item · Unit Model	_	PO-0.75PGS5 PO-0.75PGS6	PO-0.75PP5 PO-0.75PP6	PO-1.5MNB5 PO-1.5MNB6	PO-2.2MNB5 PO-2.2MNB6	PO-3.7MNB5 PO-3.7MNB6	PO-5.5MNB5 PO-5.5MNB6	PO-7.5MNB5 PO-7.5MNB6	PO-11MNB5 PO-11MNB6	PO-15MNB5 PO-15MNB6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa			0.93 (0.78 - 0.93)			0.85 (0.70 - 0.85)				
Air Capacity	L/min	7	5	165	240	405	605	875	1,280	1,700	
Power Source	PH	1	3 3				3				
Starting Method	_	Full-Voltage Starting Full-Voltage Starting (v				je Starting (with ur	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) (Internal D			Rc1/2 Stop Valve×1 iameter 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	430	
External Dimensions (W×D×H)	mm	640×537×867		745×620×960 850×680×1,020		850×80	850×805×1,230 1,050×94		45×1,400		
Weight	kg	106	100	133	151	185	288	306	428	484	
Noise Level	dB[A]	52		5	5	57	58	59	62	66	

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

Control Method		Pressure Sw	ritch Control		EC	COMODE/PUSC (possible for conversion)				
Output	kW	0.	75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit Model	_	PBD-0.75PSJ5 PBD-0.75PSJ6	PBD-0.75PP5 PBD-0.75PP6	PBD-1.5MNB5 PBD-1.5MNB6	PBD-2.2MNB5 PBD-2.2MNB6	PBD-3.7MNB5 PBD-3.7MNB6	PBD-5.5MNBA5 PBD-5.5MNBA6	PBD-7.5MNB5 PBD-7.5MNB6	PBD-11MNB5 PBD-11MNB6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93(0.74 - 0.93) 0.93(0.7			8 – 0.93)					
Air Capacity	L/min	8	0	165	265	440	630	840	1,200	
Dew-Point of Outlet Air	°C	(under pressure) 15 or below								
Power Source	PH	1	3	3						
Starting Method	_	Full-Voltage	Starting		F	ull-Voltage Starting (	II-Voltage Starting (with unloader-restart)			
Air Outlet	_	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve $\times$ 1 Rc1/2 Stop Valve $\times$ 1 (Internal Diameter of Rubber Hose $\phi$ 12) (Internal Diameter of Rubber Hose $\phi$				ose φ12)		
Built-in Air Tank Volume	L	3	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		745×62	0×1,150	850×680×1,180	850×80	5×1,440	1,302×945×1,400	
Weight	kg	117	105	151	174	210	321	350	474	
Noise Level	dB[A]	5	52		3	56			59	

#### ■ Package Oil-lubricated BEBICON

Control Method	Control Method		vitch Control		ECOMODE/PUSC (possible for conversion)					
Output	kW	0.	75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit Model	_	PB-0.75PSC5 PB-0.75PSC6	PB-0.75PP5 PB-0.75PP6	PB-1.5MNB5 PB-1.5MNB6	PB-2.2MNB5 PB-2.2MNB6	PB-3.7MNB5 PB-3.7MNB6	PB-5.5MNB5 PB-5.5MNB6	PB-7.5MNB5 PB-7.5MNB6	PB-11MNB5 PB-11MNB6	
Max. Discharge Pressure (ON-OFF Control Pressure)	МРа	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	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 Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12) (Internal Diameter of Rubber H				ose 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	82	125	149	182	280	313	417	
Noise Level	dB[A]	5	2	5	3	56			59	

- Note: 1. Air capacity is converted volume at its inlet condition (atmospheric pressure ambient 1. Air capacity is converted volume at its finite 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 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.
     Noise level may increase by 1-2dB[A] when refrigerant air dryer operates.
     Ambient temperature must be between 0 to 40°C. (for built-in air dryer model, 5-40°C at which a force of department.

  - which no freeze of drain wate)
  - 8. Dew point of outlet air is under ambient temperature of 30°C, at Max. Discharge Pressure. 9. External dimension shows the dimension of panels. It does NOT include protruding objects
- 10. Do NOT use wiring thinner than the regulation or long wiring which causes the voltage drop
- 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.

   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.
   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.
   Rust-proof air dryer is available as an option.
   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

# **Specifications**

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

		<u> </u>	(1 to 11 11 11 11 11 11 11 11 11 11 11 11 11		\					
Control Method			Inverter (Automatic switch between constant pressure control and pressure switch control)							
Output		5.5	7.5	11	15					
Item · Unit Model	_	POD-5.5VNB	POD-7.5VNB	POD-11VNB	POD-15VNB					
Max. Discharge Pressure	MPa	0.93		0.85						
Air Capacity under constant pressure control (at initial setting)	oressure setting) L/min 630 (@0.81MPa)		910 (@0.73MPa)	1,335 (@0.73MPa)	1,770(@0.73MPa)					
Range of Constant Pressure Control	МРа	0.58 - 0.86	0.58 - 0.86 0.58 - 0.78							
Dew-Point of Outlet Air	°C		(under pressure) 15 or below							
Starting Method	_		Inverter							
Air Outlet	_	Rc1/2 Sto	p Valve×1 (Internal Diameter of Rubber He	lose φ12) Rc1 Stop Valve×1						
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	850×80	850×805×1,440		1,552×945×1,400					
Weight	kg	343	356	506	602					
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 Operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when air capacity is about 40% will stop at operation pressure in case that the Operation when a capacity is a capacity is a capacity of the Operation when a capacity is a capacity of the Operation when a capacity is a

  - Air capacity of built-in dryer model may decrease by 3-5% when drain condensates.
     Noise level is measured value at a distance of 1.5m from the unit in an anechoic room at full

  - with echo of actual field installations. 4. Noise level may increase by 1-2dB[A] when refrigerant air dryer operates.

- Such as stop valve.

  In case that compressor operates for more than 1 min, operation will stop at cut-in pressure+0.06MPa.

  Air capacity of built-in dryer model may decrease by 3-5% when drain condensates.

  Noise level is measured value at a distance of 1.5m from the unit in an anechoic room at full load operation.

  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
- Hitachi BEBICON ROLLER (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.

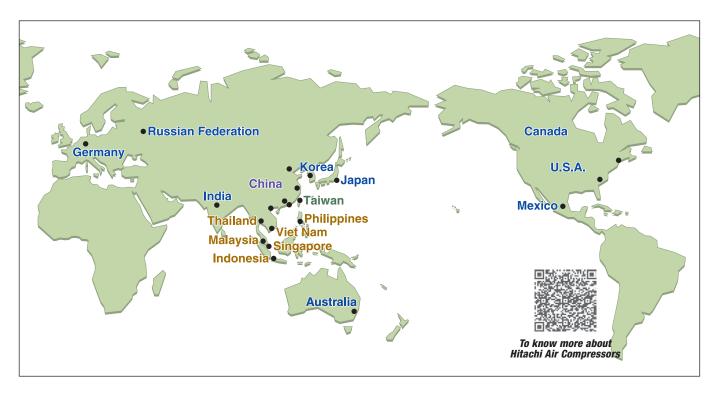
Automatic restart after power failure, back-up function, leveling operation hour etc is available. Detailed and direct setting of control pressure is possible.

# **Specifications**

Item	Content					
Appicable 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	Energ	y-Saving Multi Control				
Function	Automatic Restart after Power Failure, Rotary Start, Back-up Leveling Operation Hour, Switching to Conventional Control Mode					
Input	Remote Operation, Comp	ressor 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					
One-to-at One office-time	Resistance Load(COS <i>φ</i> =1) AC250V 5A	Minimum Anniinakina Land DOSV 1000 A				
Contact Specification	Induction Load(COS $\phi$ =0.4) AC250V 1.5A	Minimum Application Load DC5V 10mA				
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°C⋅85%					
Pressure Pipe Connection Port		Rc1/4				
Terminal Screw Size		M3				
Weight	6kg					

- BR-1M is dedicatedly designed for Hitae 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
- 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 the case of connecting with package oil-lubricated BEBICON, an optional PCB with external I/O is recommended.



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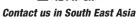
TEL: +852 2735-9218

FAX: +852 2735-6793

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For further information, please contact your nearest sales representative.







Contact us in other regions

### 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.