Hitachi BEBICON COMPRESSOR

Innovation, Performance and Reliability

HITACHI Inspire the Next



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 vour business.

History of Hitachi BEBICON®



List of Model

Model				Reciprocating				Scroll	
Rated	OIL FREE	BEBICON	Oil-I	Lubricated BEBIC	CON	OIL FREE Boo	OIL FREE Scroll Air Compressor		
(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								•	
Auto Un Pressure	loader Control ON e Switch Control C	ILY NLY		ECOMODE Inverter Dri	ECOMODE Control/PUSC Control Inverter Drive Control Multi Drive Control				

Control Method

Auto Unloader Control	Automatically switch between Load/Unload operation
Pressure Switch Control	Automatically Start/Stop the operation of compress Energy-saving is possible when compressed air is
PUSC Control	PUSC (Pressure Unloader Select Control) Automatically select between Pressure Switch Type the control of microcomputer
Inverter Control	Pressure can be maintained between certain levels
Multi-Drive Control	Automatically control the number of compressor he Energy-saving can be obtained.
ECOMODE Control	Optimized max pressure is automatically controlled 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.

- Select appropriate control method.
- (4) Confirm the details of power source (Voltage / Phase / ③ 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.

tion by the pressure adjustment valve

sor in order to maintain certain range of pressure NOT needed, since motor stops

e and Auto Unloader Type to respond to the need of compressed air under

under inverter drive. Energy-saving can be obtained.

eads in operation to respond to the need of compressed air

ed by monitoring the condition of air delivery.





OIL FREE BEBICON (0.4–11kW)

Steady Supply of Oil-free, Pure Air



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.





Heat Cut Piston Pin & Leak Cut Piston Ring

Discharg chambe

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 the reliability.

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

Specifications (Horizontal Tank Mount Type)

Control Metho	bd					Pressu	ire Switch C	ontrol					
	Model		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-9.5G5A	5.50P-9.5G5A	7.50P-8.5GA5A	110P-8.5GA5A	
Item · Unit		0.4LE-035A	0.750P-9.5GS6A	0.750P-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.	0.75		1.5		2.2		5.5	7.5	11	
Power Source	PH	1	1	1 3 1 3 1 3				3					
Max. Discharge Pressure	MPa	0.8		0.93							0.	0.83	
Air Capacity	L/min	42	7	5	165		240		405	605	880	1,285	
Air Tank Volume	L	20	8	0	80		9	0	125	150	235	290	
Air Outlet	-				1/4B×1				3/8	3×1	3/48	3×1	
Standard Accessories	_	Pressure Gauge, Safety Vale, Stop Valve		I	Pressure Ga	uge, Safety \	/alve, Hose J	Joint, Belt Co	over, Silence	r, Stop Valve	9		
External Dimensions (W×D×H)	mm	600×322 ×608	1,173×3	880×852	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	84	77	105	93	139	122	163	208	278	385	

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). 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 Meth	od				Auto Unioa	der Control				
	Model	1.50U-9.5GS5A	1.50U-9.5G5A	2.20U-9.5GS5A	2.20U-9.5G5A	3.70U-9.5G5A	5.50U-9.5G5A	7.50U-8.5GA5A	110U-8.5GA5A	
Item · Unit		1.50U-9.5GS6A 1.50U-9.5G6A		2.20U-9.5GS6A	2.20U-9.5G6A	3.70U-9.5G6A	5.50U-9.5G6A	7.50U-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	5	24	40	405	605	880	1,285	
Air Tank Volume	L	8	0	9	0	125	150	235	290	
Air Outlet	-		1/4	B×1		3/8	B×1	3/4B×1		
Standard Accessories	_		Pre	ssure Gauge, Sat	fety Valve, Hose	Joint, Belt Cover,	Silencer, Stop V	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°C. 3. Hitachi air compressors are not designed, intended or approved for breathing air applications. 2. The capacity of compressed air is the amount of air discharged under

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



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



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

1	Lilect								
	Item	Item · Unit							
	Power Consumption*	Main Screw Compressor	1,147		927				
	(MWh/year)	0		40					
	Simulated Annual Power	1,147		967					
	Specific Energy Consum	ption (m³/min/kW)	0.105		0.12				
	CO2 Emission* (t-CO2/ye	ear)	533		449				
	CO ₂ Reduction Rate (%)		16						
	* Operation time: 6,000hr/y	g/kWh is used a	s CO2 en	nission c					

Specifications

Tank Mounte Packaged Ty	d/ pe		I	Fank 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)	Rc1 Stop Valve	Rc3/4 Ste	op 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	850×630×1,180	981×786×1,492	1,197×931×1,513	
Weight	kg	67	67 205 261			356	210	290	399	

Note: 1. Air capacity is converted value under atmospheric condition from the capacity with Air capacity is converted value under atmospheric condition from the capacity with 0.5MPa of suction pressure and maximum pressure of discharge pressure.
 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 surface pressure house 0.4MPa house prevention each MOT he obtained).

suction pressure below 0.2MPa, however, energy-saving can NOT be obtained.)
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



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.

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 ai 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



Specifications (Horizontal Tank Mount Type)

Control Metho	bd		_			Pressure Sw	vitch 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	0	165		26	65	440	630	840	1,200		
Air Tank Volume	L	6	62	8	0	90		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 Co	ver, 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 roo freeze of drain water) to 40°C.
 The capacity of compressed air is the amount of air discharged under the maximum pressure converted in terms of air suction (atmospheric pressure).

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

Specifications (Horizontal Tank Mount Type)

Control Metho	bd					Auto	Unloader Co	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	65	440	630	840	1,200	1,650
Air Tank Volume	L	6	2	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)

Control Methe	od			Pre	ssure Switch Con	trol						
	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	e Gauge, Safety Val	/e, Hose Joint, Belt	Cover, Silencer, St	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 Methe	bd		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	—		3/4B×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).
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.





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 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.

* 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.



Multi-Drive Mode: possible.

Specifications (Built-in Air Dryer Model)

Control Metho	bd		P-M	ode		Multi-Drive 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	o Valve)×1		Rc3/	/4×1		Rc1×1	
External Dimensions (W×D×H)	mm	680×62	680×620×1,030 750×715×1,150			980×660×1,450 1,280×770×1,450		1,360×92	25×1,930	
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	bd		P-M	ode			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	0.85(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	_				Fu	II-Voltage Start	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	I×1	Rc1 1/2×1
External Dimensions (W×D×H)	mm	680×640	680×640×1,030 750×715×1,070		5×1,070	980×66	0×1,190	1,280×770×1,450	1,330×880×1,900	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 10. 10.MPa model is optional.
 Some of the models may NOT be available in Singapore, Malaysia and China ON-OFF frequency.For 3.7kW or lower models, it is also recommended to install a (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 12. Hitachi air compressors are not designed, intended or approved for breathing air applications.

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.

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

> 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 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



Model change to **NEXT**series 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 ±0.03MPa of setting pressure.

Setting pressure can be adjusted within ±0.01MPa 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.

New operation panel

Machine will automatically show required oil or filter or overhaul changes on the operation panel.



Abnormal vibration detection function (Oil-Free type 5.5-15kW only)

This function helps to detect abnormalities in machine to prevent any serious damage.







Package BEBICON (0.75–15kW) - Powered by Premium Efficiency Motor (IE3)

Specifications

Package OIL FREE BEBICON with Built-in Air Dryer

		-								
Control Method		Pressure Sw	vitch 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-7.5MNB5 POD-7.5MNB6	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 unloader-restart)			
Air Outlet	-	G1/4B Sto (Internal Diameter o	p Valve×1 fRubberHose φ6)	(Internal D	Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)			Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)Rc1 Stop Valve×1		
Built-in Air Tank Volume	L	3	0		35		32			
Recommended Air Tank Volume (additional)	L	-	_	38	55	95	150	230	280	430
External Dimensions(W×D×H)	mm	640×53	7×1,137	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 Sv	vitch 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	<u> </u>	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	1 3 3				3				
Starting Method	-	Full-Voltag	ge Starting			Full-Voltag	e Starting (with ur	g (with unloader-restart)			
Air Outlet	-	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12) (Internal D			Rc1/2 Stop Valve×1Rc1 StI Diameter of Rubber Hose ϕ 12)Rc1 St				
Built-in Air Tank Volume	L	3	0		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 1,050×945×1,400		45×1,400		
Weight	kg	106	100	133	151	185	288	306	428	484	
Noise Level	dB[A]	5	2	55		57	58	59	62	66	

Package Oil-lubricated BEBICON with Built-in Air Dryer

Control Method		Pressure Sw	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	_	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	4 — 0.93)	0.93 (0.78			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 ((with unloader-restart)			
Air Outlet	_	G1/4B Sto (Internal Diameter of	p Valve×1 f Rubber Hose φ6)	Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)		ose φ12)	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)			
Built-in Air Tank Volume	L	3	0	35			32			
Recommended Air Tank Volume (additional)	L	-	-	38	55	95	150	230	280	
External Dimensions(W×D×H	mm	640×53	7×1,137	745×620×1,150		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]	52		5	3 56			59		

Package Oil-lubricated BEBICON

13

Control Method		Pressure Sw	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)	MPa	0.93(0.74	- 0.93)	0.93(0.78			8 – 0.93)			
Air Capacity	L/min	8	0	165	265	440	630	840	1,200	
Power Source	PH	1	3				3			
Starting Method	—	Full-Voltag	ge Starting		F	Full-Voltage Starting (with unloader-restart	:)		
Air Outlet	_	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 6)		(Internal D	Rc3/8 Stop Valve×1 Diameter of Rubber H	ose <i>φ</i> 12)	(Internal D	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)		
Built-in Air Tank Volume	L	3	0		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	53 56			59		

Note: 1. Air capacity is converted volume at its inlet condition (atmospheric pressure).

Air capacity is converted volume at its linet conducton (atmospheric pressure).
 For guaranteed values, contact your nearest dealer or Hitachi local representative offices.
 [ECOMODE] is set as default control method for **NEXT**_{series} when shipment.
 Control pressure(ON-OFF) is default pressure set when shipment. When [ECOMODE] is selected, control pressure(OFF) may decrease due to condition.
 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 long docreation.

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 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

such as stop valve.

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 OLL is filled when shipment for package BEBICON (oil-lubricated). Do confirm there is appropriate volume of BEBICON OLL filled before operation. MUST use BEBICON OLL 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

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)						
Output	kW	5.5	7.5	11	15			
Item · Unit	-	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)	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	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	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose ϕ 12)		Rc1 Stop Valve×1			
Built-in Air Tank Volume	L		3	2				
Necessary Air Tank Volume (additional)	L	150 or	above	230 or	r above			
External Dimensions(W×D×H)	mm	850×80	5×1,440	1,302×945×1,400	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.
 5. Ambient temperature must be between 5 - 40°C at which no freeze of drain water.

 Operation when air capacity is about 40% will stop at operation pressure in case that the
 5. Ambient temperature must be between 5 - 40°C at which no freeze of drain water.

 0. 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

 pressure of air receiver tank rises.

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.
4. How the distance of 1.5m from the unit in an anechoic room at full load operation.
5. Noise level is measured value at a distance of 1.5m from the unit in an anechoic room at full load operation.
6. Bust-proof air dryer is available as an option.
7. How the designed intended or approved for breathing air Noise level might be increased due to different operating conditions and / or environments 11. Hitachi air compressors are not designed, intended or approved for breathing air with echo of actual field installations. applications.

4. Noise level may increase by 1-2dB[A] when refrigerant air dryer operates.

Hitachi BEBICON ROLLER (BR-1M)



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

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						
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						
	Resistance Load(COS $\phi = 1$) AC250V 5A						
Contact Specification	Induction Load(COS ϕ =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						
 be: 1. BR-1M is dedicatedly designed for Hitachi BEBICON unit control. Do NOT connect BR-1M with compressor of other brands. c) the pressure which is over the max pressure of the compressor connected can not be use 6. In case of connecting with reciprocating BEBICON which has load reduction function is is not pressible to use below citizin pressure of 0.5 dMPa. 							

It is necessary to install an analytic switch if the compressor is not equipped with one.
 About Energy-Saving Multi control, some models may NOT be applicable. For details, contact your nearest dealer or Hitachi local representative office

- such as stop valve.

Newly developed Energy-Saving Control

Loaded with Energy-Saving Multi Control, it is possible to control the connected BEBICONs

8 units of BEBICONs at maximum can be controlled by linking 2 units of BEBICON ROLLERS.

7. In the case of connecting with package oil-lubricated BEBICON, an optional PCB with external I/O is recor



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For further information, please contact your nearest sales representative.





Contact us in South East Asia

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.