



Package BEBICON (0.75–11kW)

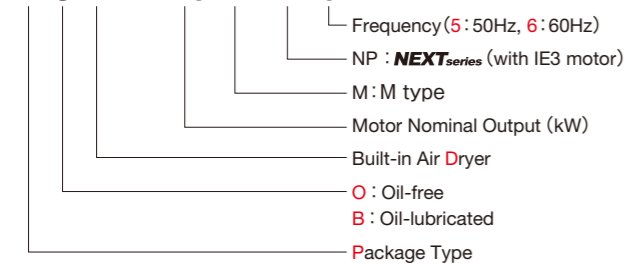
- Powered by Premium Efficiency Motor (IE3)

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

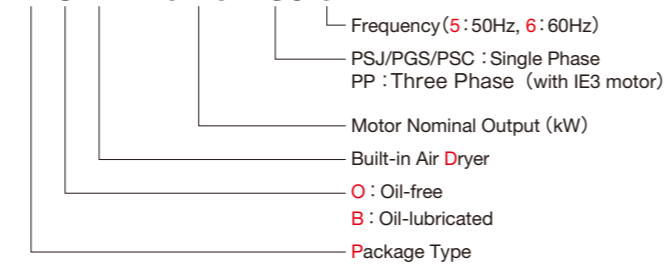


Model Nomenclature

POD – 7.5 M NP 5



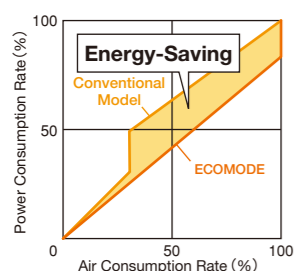
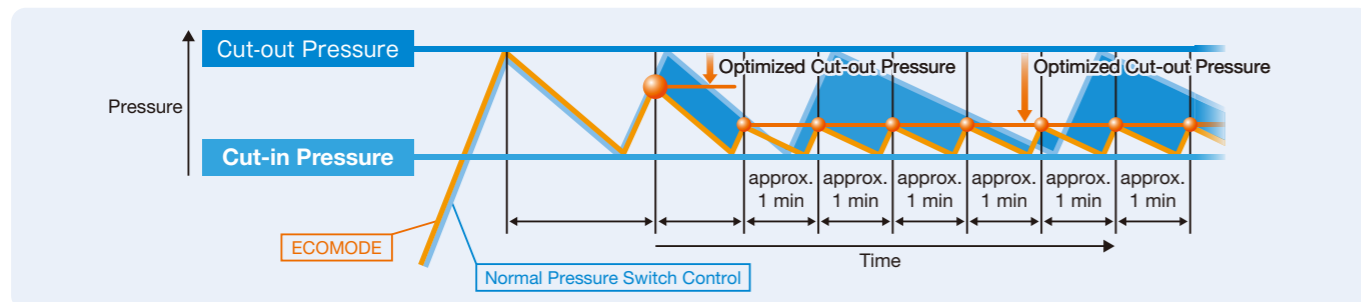
POD – 0.75 PSJ 5



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.



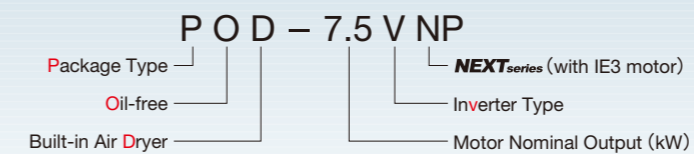
Compared with the conventional model under PUSC control, Energy-Saving of **40%** when air consumption rate is 30%, or **24%** when air consumption rate is 50%, or **14%** when air consumption rate is 70% is possible. (in case of PB-3.7kW with 95L air receiver tank installed)

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



POD-7.5VNP

V type

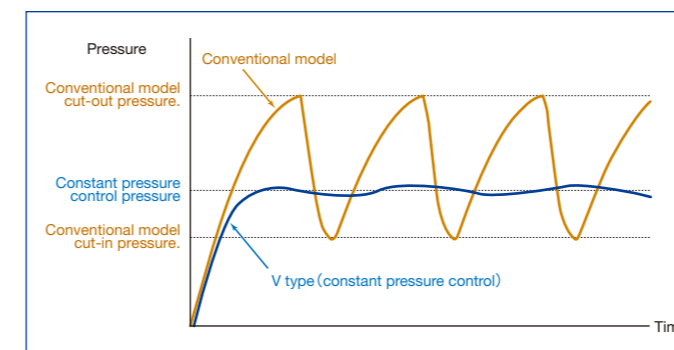
Features

Constant Pressure Control

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

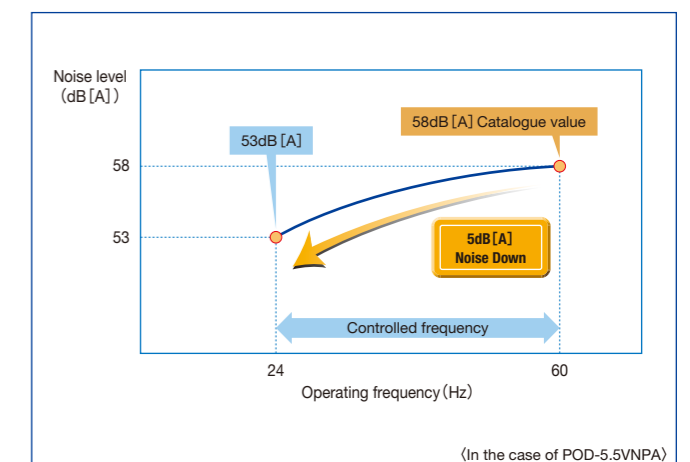
Setting pressure can be adjusted within $\pm 0.01\text{MPa}$ at control panel.

Moreover, in case that air consumption is extremely low, operation may stop at maximum pressure.



Sophisticated operating sound with inverter

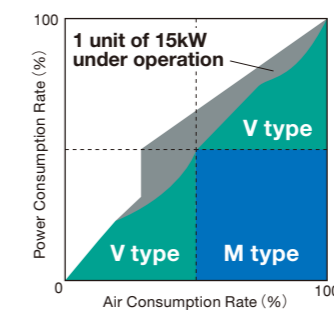
Inverter soft start reduces the starting noise. Low speed operation sound is 5 dB [A] lower than normal speed operation sound.



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 (0.75–11kW)

- Powered by Premium Efficiency Motor (IE3)

Specifications

Package OIL FREE BEBICON with Built-in Air Dryer

Control Method	Pressure Switch Control			ECOMODE/PUSC (possible for conversion)					
	Output Model	0.75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit	kW	0.75 POD-0.75PSJ5 POD-0.75PSJ6	1.5 POD-1.5MNP5 POD-1.5MNP6	2.2 POD-2.2MNP5 POD-2.2MNP6	3.7 POD-3.7MNP5 POD-3.7MNP6	5.5 POD-5.5MNP5 POD-5.5MNP6	7.5 POD-7.5MNP5 POD-7.5MNP6	11 POD-11MNP5 POD-11MNP6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.78 – 0.93)						0.85 (0.70 – 0.85)	
Air Capacity	L/min	75	165	240	405	605	875	1,280	
Dew-Point of Outlet Air	°C	15 or below under pressure							
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting			Full-Voltage Starting (with unloader-restart)				
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30	35			32			
Recommended Air Tank Volume (additional)	L	—	38	55	95	150	230	280	
External Dimensions (W×D×H)	mm	640×537×1,137		745×620×1,150		850×680×1,180		850×805×1,440	1,302×945×1,400
Weight	kg	129	123	158	176	212	341	484	
Noise Level	dB[A]	52	55			57	58	59	62

Package OIL FREE BEBICON

Control Method	Pressure Switch Control			ECOMODE/PUSC (possible for conversion)					
	Output Model	0.75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit	kW	0.75 PO-0.75PGS5 PO-0.75PGS6	1.5 PO-1.5MNP5 PO-1.5MNP6	2.2 PO-2.2MNP5 PO-2.2MNP6	3.7 PO-3.7MNP5 PO-3.7MNP6	5.5 PO-5.5MNP5 PO-5.5MNP6	7.5 PO-7.5MNP5 PO-7.5MNP6	11 PO-11MNP5 PO-11MNP6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.78 – 0.93)						0.85 (0.7 – 0.85)	
Air Capacity	L/min	75	165	240	405	605	875	1,280	
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		850×680×1,020		850×805×1,230	1,050×945×1,400
Weight	kg	106	100	132	150	184	287	305	427
Noise Level	dB[A]	52	55			57	58	59	62

Package Oil-lubricated BEBICON with Built-in Air Dryer

Control Method	Pressure Switch Control			ECOMODE/PUSC (possible for conversion)					
	Output Model	0.75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit	kW	0.75 PBD-0.75PSJ5 PBD-0.75PSJ6	1.5 PBD-1.5MNP5 PBD-1.5MNP6	2.2 PBD-2.2MNP5 PBD-2.2MNP6	3.7 PBD-3.7MNP5 PBD-3.7MNP6	5.5 PBD-5.5MNP5 PBD-5.5MNP6	7.5 PBD-7.5MNP5 PBD-7.5MNP6	11 PBD-11MNP5 PBD-11MNP6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.74 – 0.93)						0.93 (0.78 – 0.93)	
Air Capacity	L/min	80	165	265	440	630	840	1,200	
Dew-Point of Outlet Air	°C	15 or below under pressure							
Power Source	PH	1	3	3					
Starting Method	—	Full-Voltage Starting			Full-Voltage Starting (with unloader-restart)				
Air Outlet	—	G1/4B Stop Valve×1 (Internal Diameter of Rubber Hose φ6)		Rc3/8 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)			
Built-in Air Tank Volume	L	30	35			32			
Recommended Air Tank Volume (additional)	L	—	38	55	95	150	230	280	
External Dimensions (W×D×H)	mm	640×537×1,137		745×620×1,150		850×680×1,180		850×805×1,440	1,302×945×1,400
Weight	kg	117	105	150	173	209	320	349	473
Noise Level	dB[A]	52	53			56	59	59	59

Package Oil-lubricated BEBICON

Control Method	Pressure Switch Control			ECOMODE/PUSC (possible for conversion)					
	Output Model	0.75	1.5	2.2	3.7	5.5	7.5	11	
Item · Unit	kW	0.75 PB-0.75PSC5 PB-0.75PSC6	1.5 PB-1.5MNP5 PB-1.5MNP6	2.2 PB-2.2MNP5 PB-2.2MNP6	3.7 PB-3.7MNP5 PB-3.7MNP6	5.5 PB-5.5MNP5 PB-5.5MNP6	7.5 PB-7.5MNP5 PB-7.5MNP6	11 PB-11MNP5 PB-11MNP6	
Max. Discharge Pressure (ON-OFF Control Pressure)	MPa	0.93 (0.74 – 0.93)						0.93 (0.78 – 0.93)	
Air Capacity	L/min	80	165	265	440	630	840	1,200	
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	82	124	148	181	279	312	416
Noise Level	dB[A]	52	53			56	59	59	59

- Note: 1. Air capacity is converted volume at its inlet condition (atmospheric pressure ambient temperature 20°C, humidity 60%). For guaranteed values, contact your nearest dealer or Hitachi local representative offices.
 2. [ECOMODE] is set as default control method for **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. 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 Model	5.5	7.5	11
Item · Unit	kW	5.5 POD-5.5VNPA	7.5 POD-7.5VNP	11 POD-11VNP
Max. Discharge Pressure	MPa	0.85		
Air Capacity under constant pressure control (at initial setting)	L/min	630 (@0.81MPa)	910 (@0.73MPa)	1,335 (@0.73MPa)
Range of Constant Pressure Control	MPa	0.58 – 0.78		
Dew-Point of Outlet Air	°C	15 or below under pressure		
Starting Method	—	Inverter		
Air Outlet	—	Rc1/2 Stop Valve×1 (Internal Diameter of Rubber Hose φ12)		
Built-in Air Tank Volume	L	32		
Necessary Air Tank Volume (additional)	L	150 or above		230 or above
External Dimensions (W×D×H)	mm	850×805×1,440		
Weight	kg	342	355	505
Noise Level	dB[A]	58	59	62

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

Hitachi BEBICON ROLLER (BR-1M)



BR-1M

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

Specifications

Item	Content
Applicable Compressor Model	BEBICON, OIL FREE BEBICON, Package (OIL FREE) BEBICON Inverter Controlled Package OIL FREE BEBICON OIL FREE Scroll Compressor (Multi-Drive)
Controllable Number of Units	Max. 4 (Up to 8 by linking 2 units of BR-1M)
Control Mode	Energy-Saving Multi Control
Function	Automatic Restart after Power Failure, Rotary Start, Back-up Leveling Operation Hour, Switching to Conventional Control Mode
Input	Remote Operation, Compressor General Abnormal Input, Link Input
Output	Compressor Operation, Load Reduction when Starting, External Control, Mode Control Alarm Output, General Abnormal Output, Operation Answer, Link Output
Contact Specification	Resistance Load (COS φ = 1) AC250V 5A 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

- 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.