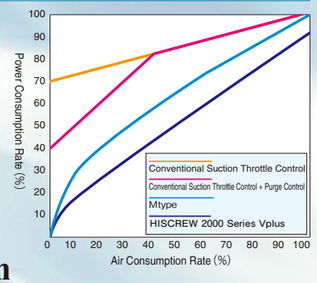
2000 Series VPLUS, M type
High Performance, Compact Package

VSD
Fixed Speed Type
Air-Cooled
Water-Cooled
Without Dryer

Energy-Saving

Responding to the amount of used air, linear decline of power consumption feature is refined. Further, motor of special specification is NOT needed since higher efficiency has been achieved.
Energy-Saving of 35–50% is possible compared with conventional modulation control. (In case of 40–60% Air Consumption Rate)

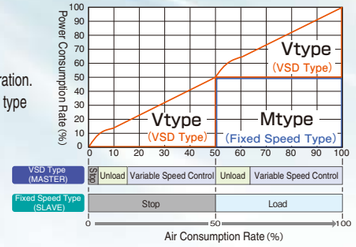


2000 Series 200hp (150kW) Dual type
Evolved Energy-Saving Feature with V-M Combination

VSD
Fixed Speed Type
Air-Cooled
Water-Cooled
Without Dryer

Improvement of Energy-Saving Performance

Evolved Energy-Saving feature is possible by loading 2 units of 100hp inside together with V-M combination control.
VSD type with inverter as MASTER is preferred during operation.
In case of increase in used air, the operation of fixed speed type will be triggered.
The change of load can be balanced by the revolution control of VSD type.



Automatic Switch-Over of Operation in case of Trouble

In case that operation of one compressor stops due to trouble, the total operation continues by automatically switching over to the other.

Easy-Maintenance

Easy daily inspection such as cleaning/replacement of suction filter, refill of oil, replacement of oil filter and oil separator is possible by ONLY removing the front panel.

Refilling Grease
Possible to refill grease of motor from back side

Spin-On Type Oil Separator
Adoption of Easy-Maintenance, Spin-On Type Oil Separator

STANDARD SPECIFICATIONS

VPLUS (Variable Speed Control Type) M type (Fixed Speed Type) Dual type

Item \ Model		OSP-100V6ALI	OSP-100VWLI	OSP-100M6ALI	OSP-100M6WLI	OSP-150V6AD	OSP-150V6WD	OSP-150M6AD	OSP-150M6WD
Cooling Method		Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled	Air Cooled	Water Cooled
Motor Nominal Output		135 hp / 100 kW				200 (100×2) hp / 150 (75×2) kW			
Rated	Discharge Pressure	102 psig / 0.7 MPa		109 [123] psig / 0.75 [0.85] MPa		109 [123] psig / 0.75 [0.85] MPa			
	Discharge Capacity	639 CFM / 18.1 m³/min		639 [590] CFM / 18.1 [16.7] m³/min		918 [851] CFM / 26.0 [24.1] m³/min			
PQ WIDE MODE	Discharge Pressure	87 psig / 0.6 MPa	123 psig / 0.85 MPa	—		—			
	Discharge Capacity	671 CFM / 19.0 m³/min	590 CFM / 16.7 m³/min	—		—			
Setting Range of Pressure		73–123 psig / 0.5–0.85 MPa		—		—			
Working Range of PQ WIDE MODE		87–123 psig / 0.6–0.85 MPa		—		—			
Suction Pressure/Temperature		Atmospheric Pressure• 32–104°F / 0–40°C				Atmospheric Pressure• 32–104°F / 0–40°C			
Temperature of Discharge Air		Ambient Temperature +27°F / +15°C or below	Water Temperature +23°F / +13°C or below	Ambient Temperature +27°F / +15°C or below	Water Temperature +23°F / +13°C or below	Ambient Temperature +27°F / +15°C or below	Water Temperature +23°F / +13°C or below	Ambient Temperature +27°F / +15°C or below	Water Temperature +23°F / +13°C or below
Starter Type		Soft Start		Star-Delta (3 Contactor)		Star-Delta + Soft Start		Star-Delta (3 Contactor)	
Capacity Control Type		V+I+P type		U+I+P type		V-M Combination Control (VSD and Fixed Speed Combination Control)		U+I+P type	
Lubricating Oil Filling Amount		12.7 gal / 48 L [Not Filled]				17.4 gal / 66 L [Not Filled]			
Output of Cooling Fan		2 (1×2)hp / 1.5 (0.75×2)kW	0.14 (0.07×2) hp / 0.1 (0.05×2) kW	2 (1×2)hp / 1.5 (0.75×2)kW	0.14 (0.07×2) hp / 0.1 (0.05×2) kW	3 (1.5×2)hp / 2.2 (1.1×2)kW	0.14 (0.07×2) hp / 0.1 (0.05×2) kW	3 (1.5×2)hp / 2.2 (1.1×2)kW	0.14 (0.07×2) hp / 0.1 (0.05×2) kW
Cooling Water		–	Water Temperature 90°F/32°C or below / Quantity 5.3 CFM / 150L/min	–	Water Temperature 90°F/32°C or below / Quantity 5.3 CFM / 150L/min	–	Water Temperature 90°F/32°C or below / Quantity 7.1 CFM /200L/min	–	Water Temperature 90°F/32°C or below / Quantity 7.1 CFM / 200L/min
Discharge Air Pipe Diameter		2-1/2B (JIS 10K Flange)				3B (JIS 10K Flange)			
External Dimension (W×D×H)		81"×54"×74" / 2,050mm×1,365mm×1,875mm				96"×67"×75" / 2,450mm×1,700mm×1,900mm			
Weight		5,291 lb / 2,400 kg	5,071 lb / 2,300 kg	5,071 lb / 2,300 kg	4,850 lb / 2,200 kg	7,055 lb / 3,200 kg	7,165 lb / 3,250 kg	6,834 lb / 3,100 kg	6,945 lb / 3,150 kg
Noise Level (4.9ft from the front)		72 dB[A]	69 dB[A]	72 dB[A]	69 dB[A]	75 dB[A]	73 dB[A]	75 dB[A]	73 dB[A]

Notes:
1. Capacity is the converted value at its inlet condition. Capacity is measured at following pressure.
   102psig model : 102psig
   109psig model : 102psig. 123psig model : 116psig
   For guaranteed values, contact your nearest dealer or HITACHI local representative offices.
2. Pressure is indicated as the gauge pressure.
3. Motor output values are indicated as motor nominal outputs.
4. Lubricating oil is NOT filled when shipment, therefore prepare NEW HISCREW OIL 2000 in advance.
5. Noise level is measured value at 4.9ft in front and 3.3ft height in an anechoic room, under full load operation. It may vary in different operation conditions or environments.
6. It is necessary to install an air receiver tank of enough volume. If the volume of the air receiver tank is not enough, normal capacity control may malfunction.
7. Models of 200V or 3000V voltage spec. are NOT available.
8. Earth leakage circuit breaker is NOT attached. Prepare it in advance.
9. External dimension does NOT include the duct on the back side (7" in depth) and protruding objects such as piping.
10. [ ] shows values of capacity under different discharge pressure.

2-stage S type
High Efficiency, Energy-Saving HITACHI Unique 2-stage Air End Type Large Class

Fixed Speed Type
Water-Cooled
Without Dryer

Higher Efficiency, More Energy-Saving and Labor-Saving compared to Conventional Models

Improvement of 5 to 7% in efficiency compared to conventional models
For 2-stage HISCREW, unique 2-stage air end is adopted. Compared to conventional OS series, the amount of discharge air is upped by 5 to 7% as for the same motor output.

Comparison of Discharge Air (300hp Model)

Energy-Saving Effect of Operation

Example (Comparison with Conventional Model)

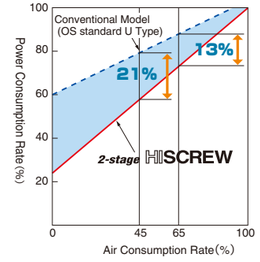
Example of 300hp Model	
Discharge Pressure	100psig
Model	Conventional Type: OS-240U6 New Type: OSP-240S6WT
Operation Time	6,000h/year

Annual Power Consumption at Full-Load Operation (300hp): About 1,567MWh

Case 1 (Air Consumption Rate is about 65%)
Power reduction rate is 13%.
Power saved is about **200MWh/year.**

Case 2 (Air Consumption Rate is about 45%)
Power reduction rate is 21%.
Power saved is about **327MWh/year.**

Integral Unload Mode as Standard Equipment
In addition to U-Mode Control (non-step control of open ratio of suction filter), I-Mode Control (intake throttle and purge)*1 is provided as standard control. Excellent Energy-Saving effect is achieved during capacity control operation as well as normal operation.



*1. A function of locking the compressor in U Type operation in case of being used as a base load unit or balancing the influence of change in pressure is provided.

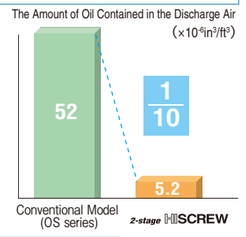
*2. To maximize the effect of Energy-Saving, it is necessary to install an air receiver tank with sufficient volume. For details, contact your nearest dealer or HITACHI local representative offices.

Labor-Saving due to Easy-Maintenance

NOT Necessary for Daily Draining
Auto temperature adjust valve which the temperature inside the oil separator is automatically controlled so that no drain is condensed, is provided as standard equipment. It is NOT necessary to do the troublesome daily draining of the oil separator.

NOT Necessary to Change Bearing of Motor
There is NO bearing in the motor as adoption of unique over-hang structure. Therefore, change of bearing and refilling of grease are NOT necessary.

Significant Reduction of Oil Consumption
The amount of oil contained in the discharge air is reduced to 5.2×10^{-6}in³/ft³ (1/10 of the conventional type) as the adoption of new developed oil separator, which gives a new image to large oil-flooded screw compressor. Besides providing cleaner compressed air, the work of refilling oil is also significantly reduced.



STANDARD SPECIFICATIONS

Item \ Model		OSP-150S6WT	OSP-190S6WT	OSP-240S6WT
Cooling Method		Water Cooled		
Motor Nominal Output		200 hp / 150 kW	250 hp / 190 kW	300 hp / 240 kW
Discharge Pressure		100 (120) psig / 0.69 (0.83) MPa		
Discharge Capacity		1,006 (883) CFM / 28.5 (25.0) m³/min	1,288 (1,133) CFM / 36.5 (32.1) m³/min	1,589 (1,398) CFM / 45.0 (39.6) m³/min
Suction Pressure/Temperature		Atmospheric Pressure• 32–104°F / 0–40°C		
Temperature of Discharge Air		Water Temperature +23°F / +13°C or below		
Lubricating Oil		Mineral Oil 26.4 gal / 100 L [Not Filled]	Mineral Oil 31.7 gal / 120 L [Not Filled]	Mineral Oil 39.6 gal / 150 L [Not Filled]
Cooling Water	Temperature	90°F / 32°C or below		
	Quantity	7.2 CFM / 205 L/min	9.0 CFM / 255 L/min	11.5 CFM / 325 L/min
Discharge Air Pipe Diameter		3B (JIS 10K Flange)	4B (JIS 10K Flange)	
External Dimension (W×D×H)		91"×55"×61" / 2,303mm×1,400mm×1,555mm	99"×65"×61" / 2,503mm×1,650mm×1,555mm	
Weight		7,826 lb / 3,550 kg	10,362 lb / 4,700 kg	10,692 lb / 4,850 kg
Noise Level (4.9ft from the front)		74 dB [A]	75 dB [A]	75 dB [A]

Notes:
1. Capacity is the converted value at its inlet condition. For guaranteed values, contact your nearest dealer or HITACHI local representative offices.
2. Pressure is indicated as the gauge pressure.
3. Noise level is measured value at 4.9ft in front and 3.3ft height in an anechoic room, under full load operation. It may vary in different operation conditions or environments.
4. To maximize the effect of energy-saving under I type control, it is necessary to install an air receiver tank of enough volume.
5. Specifications described above do NOT include reactor starter (separately placed).
6. Dimension of the exclusive reactor starter (separately placed) for 3000V voltage spec. is 24"×39"×55"(W×D×H).