

## COMPLETE SYSTEM

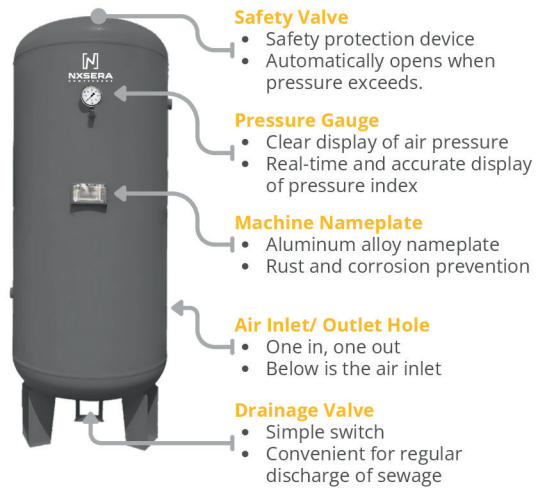


Removes the condensate that is collected after the air cools in the after cooler

Removes the condensate that is collected when the air cools inside of the receiver tank.

Removes the condensate that is collected in the filter bowl.

Removes the condensate that is collected in the air dryer and filter bowl.



### Air Filter Series:

We provide a complete range of compressed air filter solutions for various line filter grades.



📍 Factory address: Plot No: 129, Ganesh Nagar, Talwade Road, Talwade, Pune, Maharashtra - 411014  
 🌐 Web: [www.nxsera.com](http://www.nxsera.com)  
 ✉ Email: [nelson@nxsera.com](mailto:nelson@nxsera.com)  
 📞 Mob: (+91) 9309128400/ 8421947428

## Rotary Screw Compressors

Flow Rate 4.8 to 34.25 m<sup>3</sup>/min  
 Pressure 5.5 to 16 bar

[www.nxsera.com](http://www.nxsera.com)

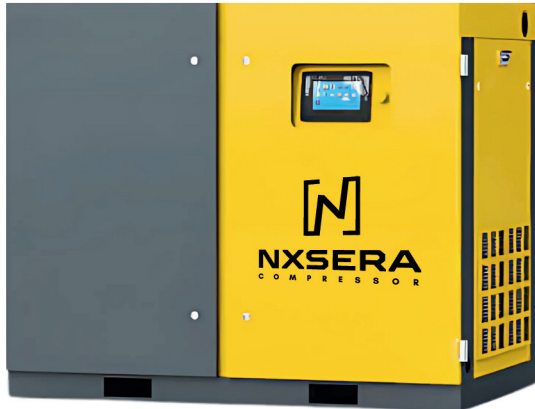
## VARIABLE SPEED DRIVE COMPRESSOR (PM VSD SERIES)

Application industry: Manufacturing, Pharmaceutical, Cement, Textile, Mining, Machinery, Petrochemical,

### VARIABLE SPEED DRIVE

Screw Compressors with permanent magnetic motor TEFC, IP55

Range from 7.5kW-75kW



- Energy saving up to 50% that reduces production cost
- Permanent magnet variable frequency control with a wide adjustment range
- IP55 electrical motor protection from dust and water
- Durable compression module, stable and reliable
- Adopts specialized oil seal with high efficient and no wear
- Eco friendly silent with improved technology and reliable performance
- Strong adaptability in harsh environments, a choice of all industrial applications
- Flexible coupling direct driven ensures direct connection without loss of transmission efficiency
- Unique heat removal and cooling system effectively increases the heat dissipation area run faster and smoother
- Less maintenance and operating cost



**ENERGY  
SAVING**

**20-50%**

### Specifications (Variable Speed)

Model		N-10V	N-15V	N-20V	N-30V	N-40V	N-50V	N-60V	N-75V	N-100V
Free Air Delivery (m³/min)	8Bar	1.1	1.8	2.3	3.4	5.0	6.2	7.2	9.7	12.6
	10Bar	0.9	1.5	1.8	3.2	4.5	5.2	6.2	8.0	11.0
	12Bar	0.7	1.1	1.4	2.3	3.1	4.4	5.3	6.4	9.4
Ambient Temperature	Deg.C	3-40								
Cooling		Air-Cooled								
Discharge Temperature	Deg.C	≤Ambient Temp+15°C								
Noise Level (dB(A))	dB(A)	70±3			72±3			75±3		
Driven		Direct								
Rated Power (kW)	kW	7.5	11	15	22	30	37	45	55	75
Starting		Variable Frequency Soft Starting								
Electricity	(V/Ph/Hz)	380/3/50~60								
Length	mm	800	900	900	1080	1230	1230	1800	1800	1800
Width	mm	650	750	750	830	950	950	1400	1400	1400
Height	mm	950	1030	1030	1120	1220	1220	1660	1660	1660
Weight	kg	150	215	225	300	410	425	850	1060	1200
Air Outlet Size	G"	3/4"	1"	1"	1"	1-1/2"	1-1/2"	2"	2"	2"

Note: The specifications are subject to change without prior notice for continuous improvement.

## AIR DRYER

### REFRIGERATED AIR DRYER SERIES



**Quick Cold-drying effect**  
Perfect system performance  
Efficient cold-drying



**Lower The Cost**  
Longer service life  
Less repair part  
Lower maintenance cost

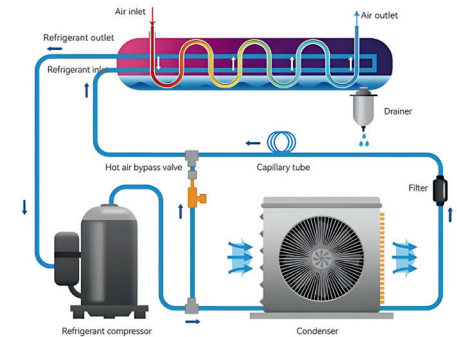


**Reliable performance**  
Original Panasonic compression fittings  
Stable pressure dew point  
Reduces production failure rate



**Easy To Operate**  
Ready to use  
Safe and stable

- The refrigerated air dryer matches its air capacity with compressed air, using freezing and dehumidifying principles to cool it.
- This process condenses water and oil, resulting in clean compressed air.
- Its design and precision parts boost productivity, lower operating costs, and enhance system protection.
- The use of high quality thick copper tubes prevent from being corroded to cause leakage from the machine's refrigeration system and has a longer service life.



### DESICCANT AIR DRYER SERIES

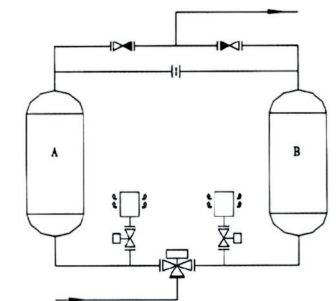
Reliable design of desiccant air dryer ensures porcelain ball used at the bottom of the adsorption tower to make the air distribution more uniform that can prevent the bottom adsorbent from soaking and prolong the life of the adsorbent. We can supply specially tailored make high performance adsorbent for excellent dew point.



Flow range: 1.5-500 m³/min  
Pressure range: 0.6-1.0MPa  
Intake temperature: ≤45°C  
Regeneration volume: ≤15%  
Working Cycle: 4-20 Minutes  
Pressure dew point: -20°C, -40°C  
Intake oil content: ≤0.1PPM  
Adsorbent: Alumina Molecular Sieve  
Power: 220V/1Ph/50HZ

High pressure, stainless steel section custom-made.  
More than 1.0 MPa can be customized.

Working flow chart of the whole machine.





## SINGLE-STAGE OIL INJECTION AIR COMPRESSOR



### 1.New generation single-stage screw airend.

Adopts top quality third generation asymmetric wire twin screw air end designed for higher efficiency by 5%-15% compared to second generation air end. Optimized flow channel design with large rotor with Swedish SKF heavy duty bearings and double lip shaft seal.

### 2.High-efficiency permanent magnetic motor

It features a larger service factor for varying speeds in air applications, optimizing torque and efficiency to handle different loading conditions.

### 3.Intake valve control system

The specialized design of integrated air intake valve with adjustment range from 0 to 100%, target to reduce pressure loss and make longer working life.

### 4.Advanced control technology for PM motor driver

The motor driver with variable frequency speed regulating rotation system, More energy saving with lower power consumption.

### 5.Intelligent microcomputer control system

Big touch panel for easy operation, optional for multiple languages. The programmable controller is available for external remote control to monitor the key functions of air compressor.

### 6.The excellent cooling system

The fin type heat exchange cooler with 30% surplus to make sure air compressor work perfectly under ambient temperature 45°C.

### 7.Energy efficient filtration system

Durable design oil separator tank with larger sized tank volume, having higher precise separation to reduce oil carryover.



### Screw Air End

Simple and robust design which provides high reliability and low vibration and noise level. Adopts the international top level third generation asymmetric wire twin screw air end, adheres to the exquisite manufacturing process, adopts the peak high efficiency low pressure, high efficiency tooth shape and the axial air inlet design. Optimized flow channel design with a large rotor, low speed and high efficiency, increased energy efficiency by 5-15% compared to the second generation air end. Built with Swedish SKF heavy duty bearings, double lip shaft seal, durable and reliable. The bearing design life is 80,000 to 100,000 hours and the air end design life is about 200,000 hours.

## FIXED SPEED DRIVE COMPRESSOR (FX DD SERIES)

Power Plants, Ship building, Construction, Medical, Food & Beverages, Instrumentation, Process, etc.

### FIXED SPEED DRIVE

Screw Compressors with induction motor, IP55

Range from 7.5kW-75kW



- High performance fixed speed direct drive with less wearing parts and high reliability adjustment range
- IP55 electrical motor protection from dust and water
- Durable compression module, stable and reliable
- Adopts specialized oil seal with high efficient and no wear
- Eco friendly silent with improved technology and reliable performance
- Strong adaptability in harsh environments, a choice of all industrial applications
- Flexible coupling direct driven ensures direct connection without loss of transmission efficiency.
- Unique heat removal and cooling system effectively increases the heat dissipation area run faster and smoother.
- Less maintenance and operating cost



Easy to install



Firm Structure



High reliability

### Specifications (Fixed-speed)

Model		N-10F	N-15F	N-20F	N-30F	N-40F	N-50F	N-60F	N-75F	N-100F
Free Air Delivery (m³/min)	8Bar	1.0	1.7	2.2	3.3	5.0	6.0	7.2	9.3	12.0
	10Bar	0.8	1.5	1.8	3.1	4.5	5.2	6.2	8.0	10.8
	12Bar	0.7	1.1	1.4	2.3	3.1	4.4	5.3	6.4	9.4
Ambient Temperature	Deg.C	3-40								
Cooling		Air-Cooled								
Discharge Temperature	Deg.C	≤Ambient Temp+15°C								
Noise Level	dB(A)	70±3			72±3			75±3		
Driven		Direct								
Rated Power	kW	7.5	11	15	22	30	37	45	55	75
Starting		Star-delta Starting								
Electricity	V/Ph/Hz	380/3/50								
Length	mm	900	1120	1120	1300	1460	1460	1800	1800	1800
Width	mm	650	750	750	920	1045	1045	1400	1400	1400
Height	mm	870	980	980	1170	1250	1250	1660	1660	1660
Weight	kg	205	290	300	440	625	635	850	1095	1275
Air Outlet Size	G"	3/4"	1"	1"	1"	1-1/2"	1-1/2"	2"	2"	2"

Note: The specifications are subject to change without prior notice for continuous improvement.



## TANK MOUNTED INTEGRATED COMPRESSOR (ITMD SERIES)

### Application industry:

Manufacturing, Pharmaceutical, Cement, Textile, Mining, Machinery, Petrochemical, Power Plants, Ship building, Construction, Medical, Food & Beverages, Instrumentation, Process, etc.



- Integrated Screw compressor, Air Dryer, horizontal air receiver and line filters
- Easy to install and less floor area
- Integration choice available in both fixed speed drive and variable speed drive
- High performance fixed speed direct drive with less wearing parts and high reliability adjustment range
- IP55 electrical motor protection from dust and water
- Durable compression module, stable and reliable
- Adopts specialized oil seal with high efficient and no wear
- Eco friendly silent with improved technology and reliable performance
- Strong adaptability in harsh environments, a choice of all industrial applications
- Flexible coupling direct driven ensures direct connection without loss of transmission efficiency.
- Unique heat removal and cooling system effectively increases the heat dissipation area run faster and smoother.
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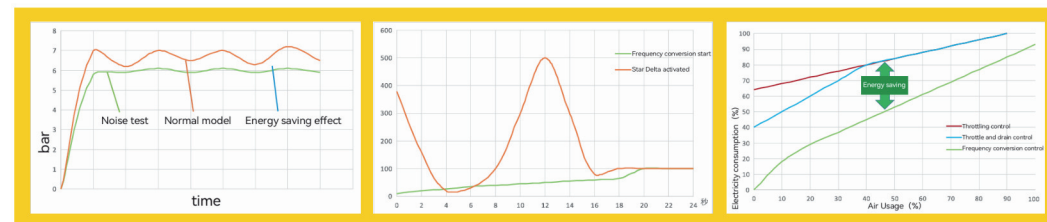
### WHY CHOOSE A 4-IN-1 AIR COMPRESSOR?

1. Integrated design with beautiful appearance, fewer parts, and connectors reduce the possibility of unit failure and leakage; direct discharge of dry compressed air, fully guarantee the quality of user terminal gas; greatly save customer installation costs and use space.
2. With new modular design structure, compact layout, ready to install and work.
3. After strict testing of the unit, the vibration value of the unit is far lower than the international standard.
4. The integrated and optimized pipeline design reduces the length and number of pipelines, thereby reducing the incidence of pipeline leakage and internal losses caused by the pipeline system.
5. Adopting a freeze dryer with excellent performance, a compact rotary refrigeration compressor, and a high cooling capacity configuration scheme to ensure reliable operation under high-temperature conditions.



## OVERALL ENERGY SAVING

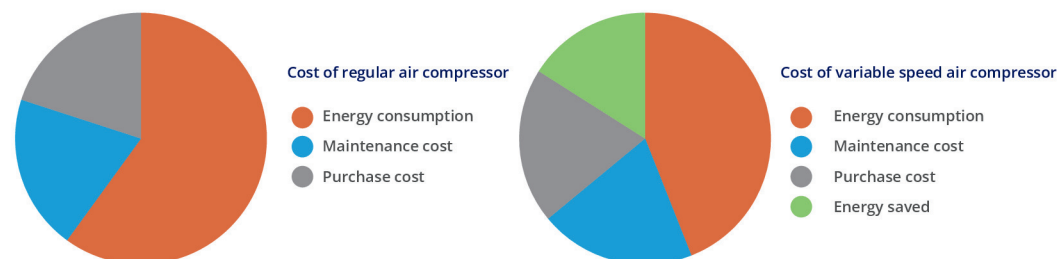
Compared with powered fixed air compressor, variable speed air compressor has practical significance in energy saving.



The variable speed air compressor offers precise pressure control, quickly responding to changes by adjusting the motor's speed. It maintains pressure fluctuations within  $\pm 0.1$  bar, stabilizes the pipe network's pressure, optimizes air volume, and minimizes energy loss.

A variable speed air compressor uses frequency conversion for smooth startup, eliminating peak current from star-delta methods. This reduces starting power, minimizes impact on the power grid and equipment, and lowers operational noise.

Variable speed control surpasses standard throttle control, offering a wider flow rate adjustment range. When paired with a high-efficiency permanent magnet motor, it provides greater energy savings at lower flow rates.



- Most of the cost in the life cycle of the air compressor is generated by the electricity it consumes.
- The power consumption of the compressor is closely related to the on-site air planning.
- The variable speed air compressor can not only ensure smooth production, but also save considerable electricity costs and achieve a win-win situation for the enterprise.



### Permanent Magnet Motor

Using less power to provide more compressed air as well as larger range of air volume adjustment, 15%-38% savings on electricity comparing with ordinary constant frequency machine, and 5%- 10% to ordinary variable frequency machine. More obvious effect of energy saving where the greater fluctuation of air use.

1. High efficiency PM motor saves energy 6-7% comparing with common 3-phase asynchronous motor.
2. Adopts latest air end and 1-shaft structure for more compact, stable and efficiency.
3. Use intelligent inverter technology, PM VF compressor saves energy up to 30%.
4. Owns numbers of patented technologies.
5. Industrial LOT functionality.