



DIRECT DRIVE VARIABLE SPEED PERMANENT MAGNET MOTOR ROTARY SCREW AIR COMPRESSOR

15 - 75 KW

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SOME COMPANIES ARE FOUNDED ON HARD WORK.
OTHERS ARE FOUNDED ON IDEALS.

FS-CURTIS WAS FOUNDED ON BOTH.





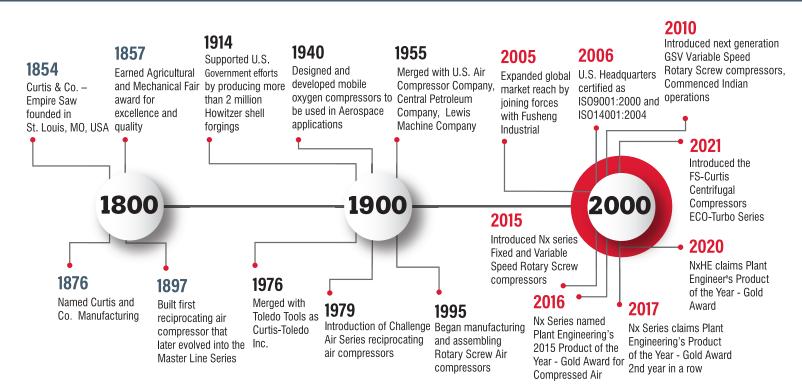


More than 170 years ago, the FS-Curtis way of doing business was established through two key commitments: a dedication to building quality products and a dedication to responsive customer service.

Over the decades, the company and its products have evolved through innovation and new technologies. But those commitments to quality and service remain unchanged. Today, just as in 1854, FS-Curtis customers can depend on our products for reliable, long-term service. Equally as important, they can depend on getting the same from our people.

A HISTORY

OF EXCELLENCE









AN ENERGY EFFICIENCY DRIVEN

INNOVATION

POWERFUL PERFORMANCE

FS-Curtis NXVi Series air compressors are renowned world-wide for their legendary reliability and highly energy efficient operation. Equipped with an integrated patented advanced airend & an exceptionally efficient permanent magnet motor, a smart VFD, and an intelligent controller, FS Curtis NXVi series delivers unparalleled energy saving performance in the toughest conditions.

FS-Curtis NXVi Series air compressors operate at peak efficiency even with 80% reduction in air output and an advanced PID control algorithm helps to generate stable air pressure.

The compact vertical design saves valuable floor and workspace, provides easy maintenance access, and reduces total cost of ownership.

Count on Dependable FS Curtis NXVi series air compressors for steady performance, quiet operation, a quicker return on investment and unmatched durability.



FEATURES AT A GLANCE

New Integrated design of air end and PM motor

Designed for maximum performance, energy efficiency with reliability

- Coupling free design offers best transmission efficiency
- High efficiency precision built air end with patented 5:6 rotor profile
- Efficiency of oil-cooled PM motor is close to IE5 efficiency class
- Maintenance free design reduces downtime

eCOOL® Technology

The ultimate in system protection & reliability

- Protects critical components from compressed generated heat
- Compartmentalized air flow design and oversized after cooler
- · Extends component life and reduces lifetime

Quality components

Build to the highest level of dependability and reliability

- Maintenance free patented intake valve with energy-saving design and streamline flow design reduces pressure loss, turbulence and noise.
- Air filter is made of multilayer nanocomposite material and has higher filtration levels, greater strength, longer service life, and significantly lower suction resistance.
- High efficiency integrated air/oil separator with 1-3 ppm carryover
- The separator, minimum pressure valve, and thermostatic valve are integrated, reducing the connections by up to 90%.
- Energy-efficient oversized cooler
- Heavy-duty industrial hose assemblies with leak-free fittings
- Durable powder-coat painted enclosure
- Non-asbestos gaskets with high temperature and pressure resistance are used to protect operators.

Dba shield noise reduction

Designed for quieter operation

- Extra thick sound installation
- Axial fan with unique bionic design of blades reduces noise
- Independent air inlet with sound muffling
- Can be installed in applications where dBA level is critical
- Can be used as an onsite compressor to reduce losses due to leakages in pipeline

Ease of maintenance

Designed for low cost of ownership, easy service little and little down time

- Easy access to all preventative maintenance components
- Controller alerts for maintenance intervals
- Every component is meticulously designed to have minmal or no downtime
- Easy to install Space-saving smaller footprint

Intelligent AIMS Plus controller

- Intuitive and easy to use
- Variety of control, monitoring and protection features
- RS485 Modbus communication interface & sequence control

Demandsmart energy management system

The ideal combination of variable speed drive, controller and drivetrain

- Super premium PM motor is energy efficient over a wide speed range
- Greatly reduces energy consumption at part load
- Reduces lifecycle costs by limiting energy consumption
- Fully enclosed variable drive enables reliable performance in harsh environments
- · Precise air pressure control
- Wide working pressure range



Extended Warranty Program

All NXVi Series products are backed by an optional industry leading warranty:

Just register the machine online, Use only FS-Curtis Genuine Parts and Lubricants per the required maintenance schedule, and you will have peace of mind knowing that your machine is backed by the NxGEN Warranty.

To know more about extended warranty, please contact our nearest sales representative.

INNOVATIVE INTEGRATED DRIVE DESIGN

FS-Curtis NXVi Series air compressors feature a coupling free integrated direct drive upright design of airend (1) and permanent magnet motor (2). This cutting edge technology offers enhanced energy efficiency, increases reliability and improves productivity

Enhanced energy efficiency that boosts your money saving

- Efficiency of Super premium PM Motor is close IE5 efficiency class which means lower specific energy consumption and substantial reduction in life cycle cost
- Precision built air end with patented 5:6 rotor profile with large rotor low-speed design offers maximum performance with lower energy consumption.
- The lubricating oil is injected in compression chamber in the direction of air which significantly reduces oil resistance in the compression process and maximizes the efficiency
- Coupling free direct drive transmission with minimal losses offers best transmission efficiency

Greater reliability extends lifespan

- The PM motor is rated IP66, premium protection against dust and water ingress
- Globally renowned air end proven in thousands of installations.
- Thanks to efficient oil cooling of PM motor optimal cooling at all speeds and conditions is ensured

Maintenance free design - Downtime Reduction and Productivity Improvement

- Coupling-free direct drive design means no maintenance is needed
- Bearing less design of PM motor requires no maintenance
- Oil cooled design means no greasing/regreasing is required and thus downtime is reduced

eCOOL® TECHNOLOGY



A COOL INNOVATION

Compressors generate heat. FS-Curtis exclusive eCOOL technology provides protection from heat and reduces thermal stress.

By combining smart compressor layout with intelligent component selection, eCOOL technology maximizes cooling airflow for greater energy efficiency, improved reliability and increases service life up to 50% longer for motors and electrical components and up to 30-50% longer for hoses and seals.



eCool technology maximizes cooling airflow for greater energy efficiency, improved reliability and extended service life.



DEMANDSMART SYSTEM™

Take control of your energy savings with our DemandSmart™ Energy Management System which includes the intelligent controller, smart variable speed drive, and advanced airend to create greater overall efficiency. This innovative design maximizes energy savings and reduces overall operating costs



SMART VARIABLE SPEED DRIVE

Demand Smart system in NXVi Series compressors maximizes energy savings with a smart variable speed drive (VSD). The VSD allows you to match your energy usage to current system demands, eliminating the need to overpressure the system, so you'll save money by not wasting energy. In addition, the soft starting capability of FS-Curtis' VSD reduces inrush current requirement, decreasing your power demand — and, of course, increasing your energy savings.

EXPERIENCE OPTIMAL PERFORMANCE WHILE PAYING ONLY FOR THE AIR YOU USE

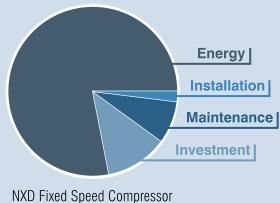
- The innovative coupling free direct drive design offers faster response and greater operational efficiency
- Variable operation of NXVi lowers the airend speed to modulate the output based on real time air demand. Hence, it will utilize power in accordance with the system's real time air demand, resulting in a significant reduction in power consumption
- Matching the operating speed with changes in demand reduces component wear and noise
- With Demand Smart technology, the VSD enhances quality by stabilizing air pressure at 1 psi increments
- Built-in DC choke protects against harmonic disturbances and eliminates the need to source additional corrective devices

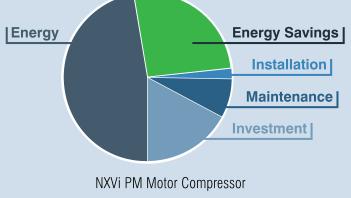
NXVI AN ECO-FRIENDLY ENERGY SAVING SMART SOLUTION



Over 70% of a compressors lifecycle cost is attributed to its energy consumption, and compressed air generation significantly contributes to a plant's total electricity bill. To significantly reduce energy costs and CO2 emissions, you can depend on the FS Curtis NWi compressors, which offer remarkable energy savings of up to 50% in variable demand applications when compared to conventional fixed-speed compressors.

LIFE CYCLE COST OVER 5 YEARS





INTELLIGENT AIMS PLUS CONTROLLER



The Attentive controller interface provides a great variety of control and monitoring features, enabling you to enhance your compressor's efficiency and reliability significantly.

Using an advanced control algorithm, controller controls the main drive motor and regulates system pressure within a narrow pressure band to maximize energy efficiency.

SIMPLICITY | INGENUITY | RELIABILITY

Features





- Dual pressure set points
- Remote control status
- Auto restart after power failure
- RS-485 Modbus communication interface & sequence control (up to 8 compressors)
- Optional GoService platform Compressor IoT Smart Service platform, hosted on the Cloud.

Protection Features



- Wrong phase sequence protection
- Frost protection
- High discharge air and system temperature/pressure
- · Motor overload and current monitoring
- Input power supply fluctuation

Service & Maintenace Prompts



- Alarm/trip history records
- Motor service & maintenance time
- Compressor service & maintenance time
- Oil filter service & maintenance time
- Lubricating oil service & maintenance time
- Oil fine separator service & maintenance time
- Air filter service & maintenance time

TECHNICAL DATA

MODEL	CAPACITY FAD* (CFM)					POWER		NOISE LEVEL**	DIMENSIONS	WEIGHT
	5 Bar (g)	7 Bar (g)	8 Bar (g)	10 Bar (g)	12.5 Bar (g)	kW	НР	dB(A)	Length x Width x Height (mm)	(kg)
NXVi 15	19-90	19-77	18-76	18-70	16-60	15	20	70	690 x 660 x 1585	320
NXVi 18	41-142	34-114	31-107	25-88	23-78	18.5	25	70	800 x 790 x 1760	450
NXVi 22	43-146	42-145	41-140	37-126	30-103	22	30	70	800 x 790 x 1760	450
NXVi 30	67-232	60-207	57-195	49-167	42-143	30	40	72	940 x 850 x 1805	602
NXVi 37	75-258	74-254	69-237	60-207	51-176	37	50	72	940 x 850 x 1805	602
NXVi 45	103-353	90-309	84-287	75-256	63-214	45	60	72	1305 x 1105 x 1892	1100
NXVi 55	132-454	114-392	108-369	89-306	75-259	55	75	73	1395 x 1155 x 2000	1500
NXVi 75	165-568	148-509	142-487	123-422	104-356	75	100	73	1395 x 1155 x 2000	1500

^{*} FAD Measured as per ISO1217, annexC, latest edition

^{**} Noise level determined according to ISO 2151 in free field conditions, tolerance upto +-3 dB

CONTINUED

COMMITMENT

A company history that dates back more than 170 years is a company history that, to us, is just the beginning. FS-Curtis is committed to offering a world-class portfolio of products. Through the dependability of our people and our quality-focused manufacturing, FS-Curtis will continue to be the most trusted and dependable name in compressed air serving even more markets through our ever-growing global presence.



You can count on **FS-Curtis** to approach the next 170 years by staying true to the values and strengths that are appreciated by our customers today.

A WORLD OF DIFFERENCE

The FS-Curtis headquarters in St. Louis, Missouri, U.S.A. is the anchor of a larger global network. FS-Curtis builds quality products — and a quality reputation — at locations around the world.

In addition to our manufacturing and packaging locations, a large global network of sales agents and distributors ensures that sales and service support is available around the world, day in and day out.

ST. LOUIS, MO USA (HEADQUARTERS)

INDIA | GERMANY | TAIWAN | BRAZIL | VIETNAM | INDONESIA | CHINA





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CORPLITERATURE: FSCIPL-NXVI1575-REV1 Improvements and research are continuous at FS-Curtis. Specifications may change without notice.

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