Gardner Denver®

PUREAIR T90–355 & TVS90–355 | 125–450 HP
OIL-FREE TWO-STAGE FIXED & VARIABLE SPEED ROTARY SCREW COMPRESSOR

PureAir T/TVS

The Next Generation of High-Efficiency Oil-Free Compressors Has Arrived!

Introducing the PureAir Series Oil-Free Compressors by Gardner Denver

Founded in 1859, Gardner Denver has been meeting the demand for compressed air equipment for more than 160 years. Ingrained in our DNA is the desire to push the limits of technology by designing and manufacturing the most advanced, reliable and energy-efficient products available in the market place today. Today's Gardner Denver compressors run quieter, are more efficient and last longer than ever before. The new PureAir T/TVS 90–355 kW Series of oil-free compressors is a continuation in our long heritage of compressed air products. Utilizing state-of-the-art design and simulation software, combined with decades of experience in oil-free compression, Gardner Denver has once again delivered on our promise to offer the most efficient and reliable oil-free compressors available.

Reliability Meets Performance

The PureAir T/TVS Series compressors are designed with reliability at their core. They will take the punishment of 24/7 operation under extreme conditions.

CLASS ZERO

100% OIL FREE

The outstanding features that make the PureAir Series the compressor you'll want to have in your plant:

- **Class 0: 100% Oil Free—Zero Risk of Contamination**
- RotorArmor™ airend rotor and housing coating – improves efficiency and extends airend longevity
- Stainless steel 2nd stage airend rotors – extends airend longevity
- Stainless steel discharge air piping (1st and 2nd stage) – improves corrosion resistance
- TEFC cooling fan – prevents dirt and water ingress
- Quiet enclosure – reduces sound levels
- GD Governor™ controller – precision control and monitoring provides peace of mind
- Up to 131°F operation – built for harsh environments
- Compact footprint – reduces floor space requirement
- Optional energy recovery available to supply hot water for other processes

PureAir T Series Features with Benefits

Standard Features

1. 99.5% efficient 3 micron heavy-duty air filter element increases efficiency
2. Robust poppet-style non-return valve increases reliability
3. Long life oil filter reduces waste
4. Flexible cooler connections eliminate failures
5. Condensate separator with reliable timed drain
6. Pre-cooler reduces fatigue from temperature spikes
7. Pressure & temperature sensors remote-mounted to reduce vibration-induced failures
8. Best-in-class airend design provides exceptional reliability and performance. Rotors coated with GD RotorArmor™

PureAir T90–160
Fixed Speed, Air-Cooled Model

CLASS ZERO

100% OIL FREE

Available Options, PureAir Series Fixed Speed

- Outdoor installation, NEMA 4
- Low ambient to -10°F (-12°C)
- High ambient to +131°F (+55°C) except 160 & 355 kW
- Soft start
- Engineered custom design for special requirements
- 90/110/132/160/185/220/260/300/355 kW sizes
- 110, 125, 155 psig max working pressure
- Air-cooled and water-cooled

PureAir T185–355
Fixed Speed, Air-Cooled Model
Outdoor Model Option

PureAir TVS Features with Benefits

Standard Features

1. 99.5% efficient 3 micron heavy-duty air filter element increases efficiency
2. Integrated drive for variable flow output
3. Wide turndown range
4. Long life oil filter reduces waste
5. Flexible cooler connections eliminate failures
6. Condensate separator with reliable timed drain
7. Pre-cooler reduces fatigue from temperature spikes
8. Pressure & temperature sensors remote-mounted to reduce vibration-induced failures
9. Best-in-class airend design provides exceptional reliability and performance. Rotors coated with GD RotorArmor™

PureAir TVS90–160
Variable Speed, Air-Cooled Model

CLASS ZERO

100% OIL FREE

Available Options, PureAir Series Variable Speed

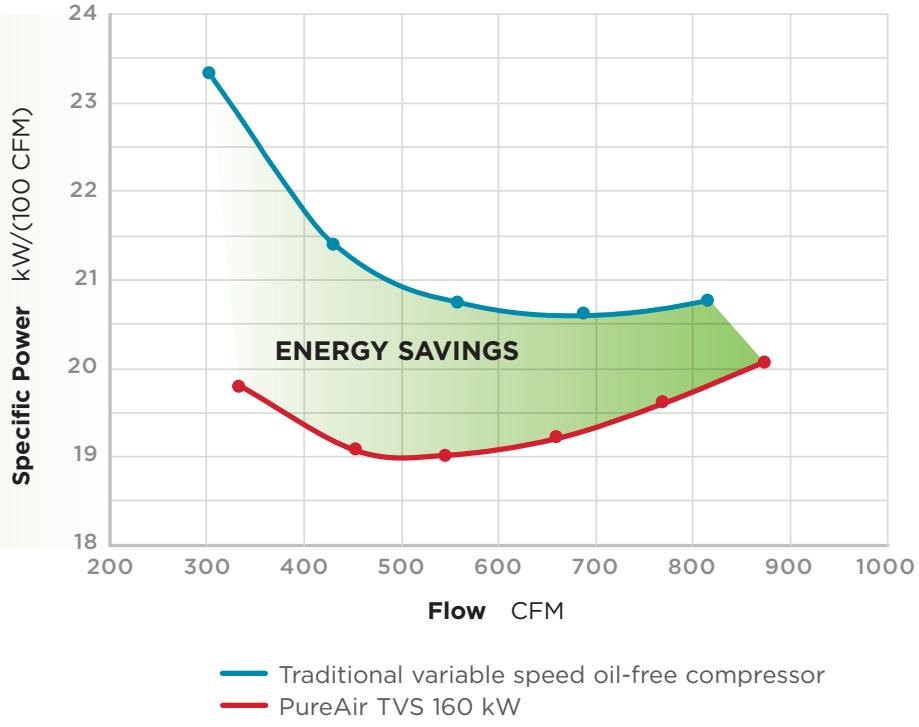
- Remote sensing kit
- Dry contacts
- No loss drain
- 90/110/132/160/200/250/315/355 kW sizes
- Air-cooled and water-cooled

PureAir TVS200–355
Variable Speed, Water-Cooled Model

Unmatched Efficiency

PureAir delivers up to **14% higher efficiency** than the leading competitor. Over the course of just five years, the PureAir can **save $50,000 or more** in energy cost in a typical application.

EFFICIENCY
160 kW at 125 psi(g)



Reduce the Cost of Ownership

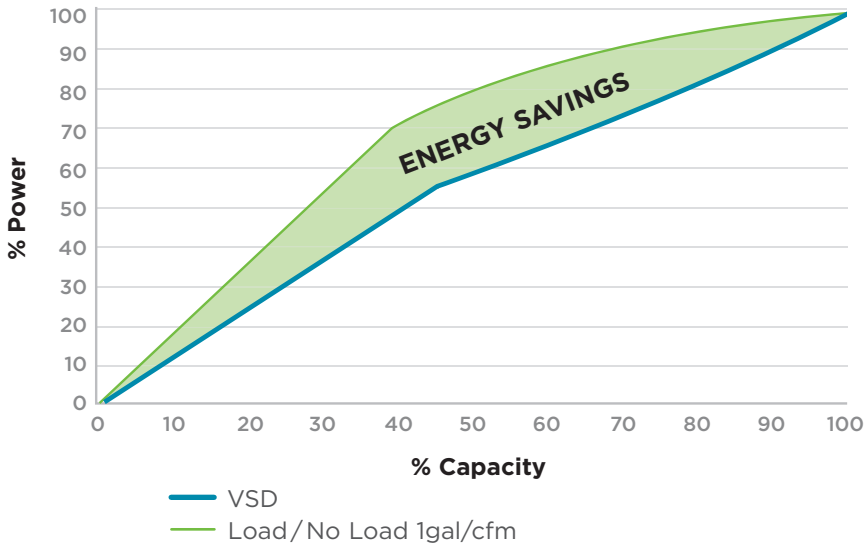
Minimize Your Energy Consumption

The largest cost component of a compressor during its lifetime is the power required to operate it.

Perfect Response to Your Individual Air Demand

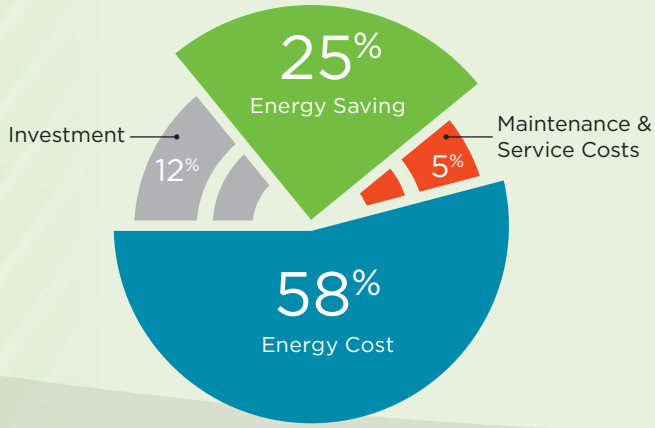
Variable speed compressors from Gardner Denver can efficiently and reliably handle varying air demands. The right variable speed compressor in the right application delivers significant energy savings while providing a stable air supply at constant pressure.

ENERGY SAVINGS
with a Variable Speed Drive

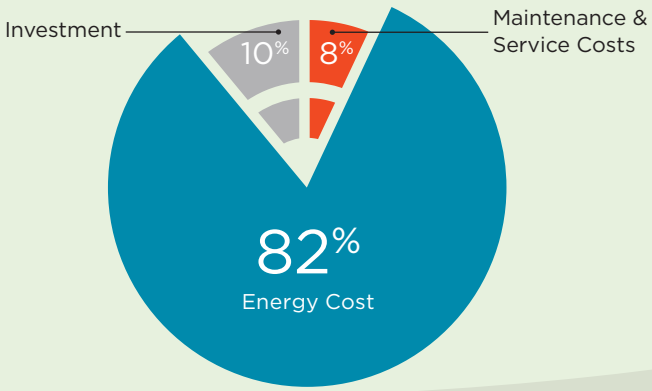


Variable Speed vs. Fixed Speed

Using a variable speed compressor can easily **save 25% energy** by using just the right amount of energy required to do the job and no more.



A **VARIABLE SPEED** COMPRESSOR
OPERATING AT 70% LOAD

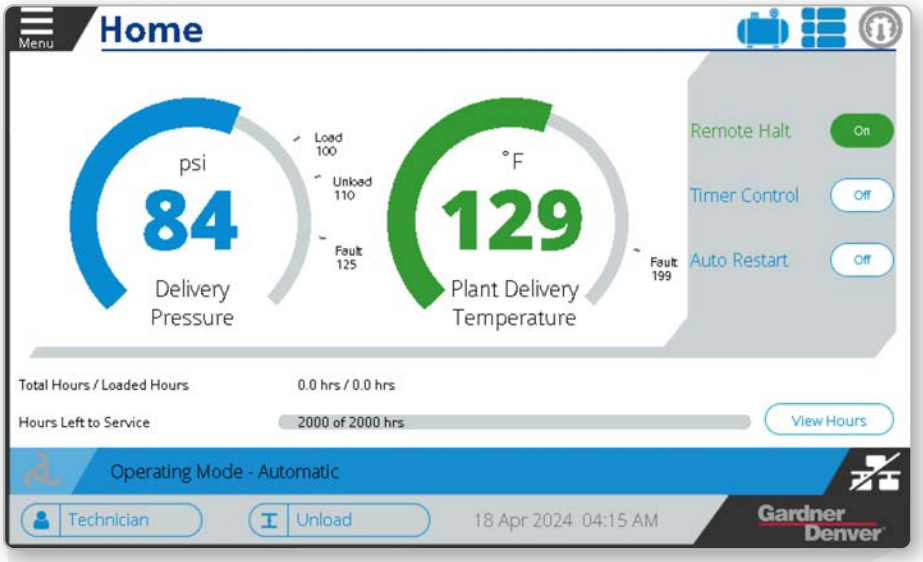


A TYPICAL **FIXED SPEED** COMPRESSOR
OPERATING AT 70% LOAD

Get in Touch with the Next Generation of Compressor Controllers

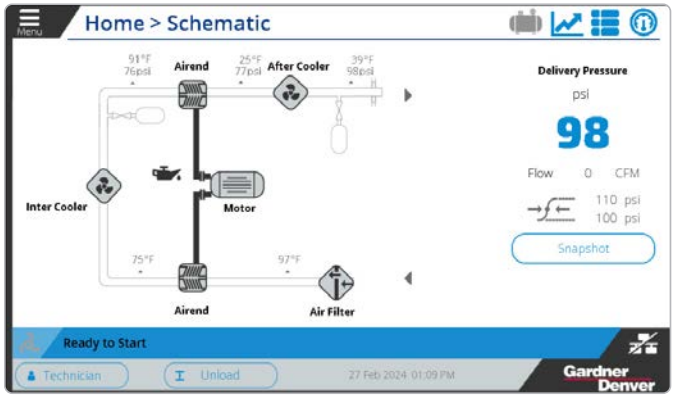
State-of-the-Art

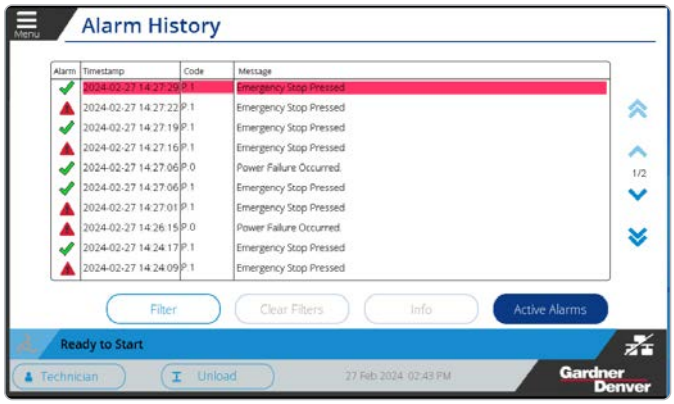
Gardner Denver completes its industry-leading oil-free compressor packages with a state-of-the-art touchscreen controller: the GD Governor™. Featuring cutting edge graphics that provide necessary compressor data and full-color schematics in seconds, the GD Governor™ is standard on all PureAir oil-free compressor models.

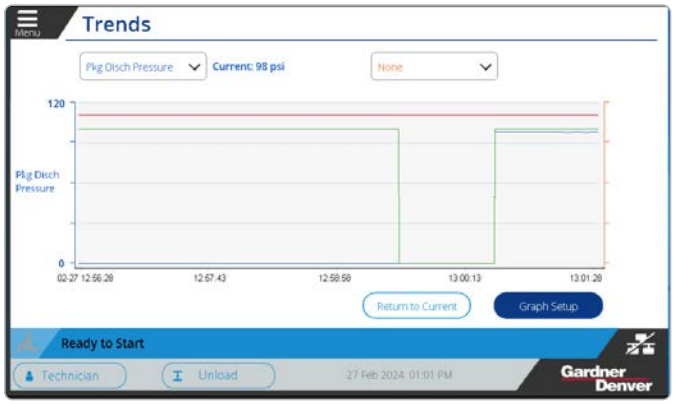


GD Governor™ Touchscreen Controller Features

- User-friendly navigation with state-of-the-art graphics and design
- Machine status available on a 10 inch, full-color touchscreen display
- Detailed schematics at your fingertips
- Advanced machine monitoring & diagnostics
- Data logging and iConn remote monitoring connection
- Sequencing of up to 4 compressors
- Web server to allow access to the GD Governor™ from your desktop
- Available with optional energy monitoring





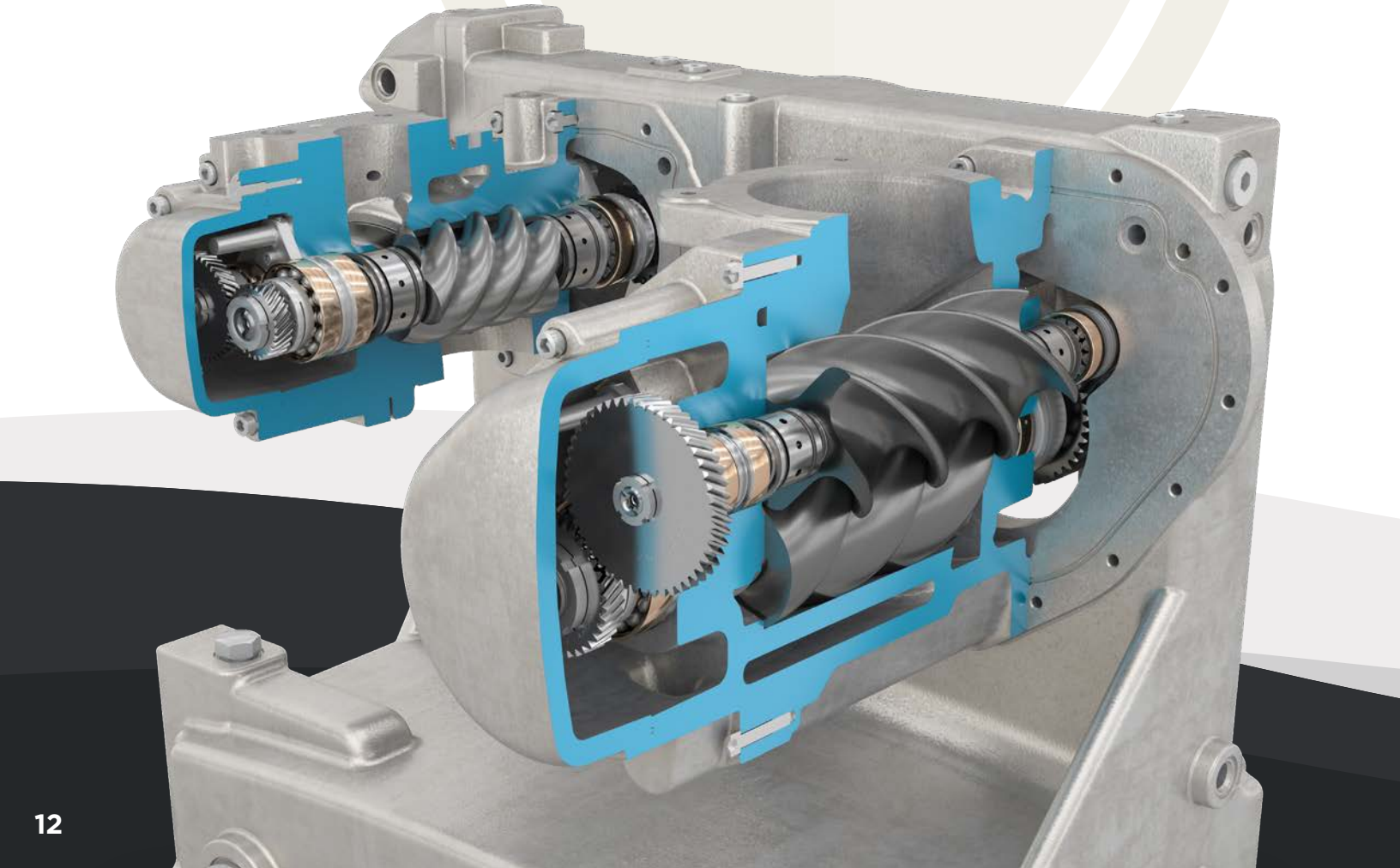


GD RotorArmor™

Not All Airend Coatings Are the Same

- Dry screw airend housings and rotors are coated to:
  - Prevent corrosion
  - Maximize efficiency
  - Provide optimum protection against rotor wear
- Not all coatings are the same! GD RotorArmor™ creates both a chemical and mechanical bond to the rotor and housing to ensure maximum efficiency and protection under extreme conditions
- Other manufacturers use a two-part process with a soft second layer PTFE-graphite coating which ensures good sealing on day one, but rapidly wears, reducing performance by 10% or more
- PureAir: Guaranteed maximum efficiency throughout the compressor life

- Both the fixed and variable speed airends have these standard features:
  - **Stainless steel 2nd stage rotor** offers maximum corrosion protection
  - **GD RotorArmor™** is a high-performance rotor and housing coating designed to improve airend performance and extend airend life
  - **Motor-driven oil pump** provides lubrication prior to airend rotation and maintains oil pressure until the airend comes to a complete stop ensuring full lubrication whenever the airend is rotating
  - **Motor driven closed-loop cooling** provides optimum airend efficiency and performance by circulating water/glycol through the airend jackets. Water-in-jacket cooling provides 3% better efficiency than oil-in-jacket cooling



Peace-of-Mind Protection & Smarter Performance

Fitted with the GD Governor™ touch screen controller, PureAir models provide the ability to monitor the installation's operational parameters. This is accomplished through a multilingual and user-friendly control system, which is essential for protecting your investment and lowering running costs.

The controller in turn allows connection to iConn—the real-time monitoring service providing in-depth and accurate information about the system. This proactive, smart technology provides total peace-of-mind, ensuring production planning is protected by precise statistics and insight generated by the controller. This data keeps users informed about performance and highlights any cause for concern before a problem arises.

The Gardner Denver iConn platform **mitigates risk** and allows you to continuously monitor your compressed air equipment.

iConn by Gardner Denver

Keeping the System Healthy

Ensure your compressed air system remains a total package

Total System Protection

Since 1859, Gardner Denver has been supporting the compressed air industry with high-quality, long-lasting compressor and air treatment solutions. Carrying on that legacy, our robust line of parts, lubricants and downstream accessories ensure your system stays healthy.

The focus on total system protection by Gardner Denver not only includes OEM parts and fluid solutions, but a commitment to the longevity of your equipment through our industry-leading warranty programs.

Protect your investment.

Sales & Service Distributors Across America

An Extensive Network

By leveraging the extensive network of authorized Gardner Denver factory-trained local distributors, your sales, service, and technical support needs can be handled quickly and easily.

To find a distributor visit:
www.GardnerDenver.com

Best Warranty in the Industry

Experience Peace of Mind

The engineering philosophy of Gardner Denver ensures long-lasting, reliable equipment. Our simple, but bold warranty programs demonstrate our belief in the quality found in Gardner Denver compressors.

Our standard 2-year warranty ensures that you have peace of mind when it comes to your system's operation. For added protection, take advantage of our 5-year extended airend warranty program. Simply stated, it's the best in the industry.

Air Treatment Solutions

To complement your PureAir T/TVS compressor, Gardner Denver has a full suite of air treatment solutions to meet your air quality needs. Whether you need a refrigerated air dryer, desiccant dryer or a nitrogen generator—reach out to your local distributor for application assistance.

REFRIGERATED DRYERS

RGD Series
Non-Cycling
- 2.5–1,200 CFM

RPC Series
Energy Saving
- 75–2,000 CFM

XGNC Series
Non-Cycling
- 7–1,200 CFM
- 1,800–12,000 CFM Modular

XGCY Series
Cycling Dryer
- 10–1,200 CFM
- 1,800–24,000 CFM Modular

DESICCANT DRYERS

DGH Series
Heatless
- 3–5,400 CFM

DHP Series
Externally Heated
- 100–4,000 CFM

DPB Series
Heated Blower Purge
- 100–4,300 CFM

XGHL Series
Heatless
- 90–5,000 CFM

XGHP Series
Externally Heated
- 150–8,000 CFM

XGHB Series
Heated Blower Purge
- 150–8,000 CFM

CHILLERS, FILTERS, NITROGEN GENERATORS, PIPING, STORAGE TANKS & MORE

Air Storage Tanks

XGTK Series

- Vertical & Horizontal
- 30–5,000 gal Standard

Chillers

XGCH Series - Process Chillers

- 0.5–106.0 Ton
- 113°F Ambient Standard

Drains

XGDR/SMD/DS/EDDS Series

- Zero-Loss
- Electric Timed Drain

Filters

XG/FIL Series

- 20–21,250 CFM
- High Pressure and High Temperature Filters, Multiple Grades Available

XGCT - Activated Carbon Towers

- 80–5,500 CFM

XG/FME Series - Mist Eliminators

- 125–10,000 CFM

Piping

Quick-Lock & Big Lock Series

- Sizes from 0.5–10″
- Extruded Aluminum Piping
- Next Generation Fittings

Nitrogen Generators

XGN2 Series

- Membrane 1–153 CFM, 95–99.5% purity
- PSA 15–2,353 CFM, 95–99.999% purity

PureAir Technical Data

FIXED SPEED MACHINES, 50 & 60 HZ

MODEL	COOLING METHOD	DRIVE MOTOR		NOMINAL PRESSURE		FAD*				NOISE LEVEL**	WEIGHT				DIMENSIONS
						60 HZ		50 HZ			60 HZ		50 HZ		
		HP	KW	PSIG	BARG	ACFM	M³/MIN	ACFM	M³/MIN	DB(A)	LBS	KG	LBS	KG	L × W × H IN. (MM)
T90	Air	125	90	100 125 150	6.9 8.6 10.3	631 597 530	17.9 16.9 15.0	614 582 517	17.4 16.5 14.6	78	7939	3601	8139	3692	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	125	90	100 125 150	6.9 8.6 10.3	639 605 539	18.1 17.1 15.3	622 590 525	17.6 16.7 14.9	75	7648	3469	7848	3560	
T110	Air	150	110	100 125 150	6.9 8.6 10.3	749 713 645	21.2 20.2 18.3	742 708 643	21.0 20.0 18.2	78	8051	3652	8662	3929	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	150	110	100 125 150	6.9 8.6 10.3	756 721 653	21.4 20.4 18.5	750 716 651	21.2 20.3 18.4	75	7760	3520	8371	3797	
T132	Air	175	132	100 125 150	6.9 8.6 10.3	856 819 750	24.2 23.2 21.2	872 837 768	24.7 23.7 21.7	78	8192	3716	9222	4183	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	175	132	100 125 150	6.9 8.6 10.3	864 826 758	24.5 23.4 21.5	880 844 776	24.9 23.9 22.0	75	7901	3584	8931	4051	
T160	Air	215	160	100 125 150	6.9 8.6 10.3	955 919 855	27.0 26.0 24.2	993 983 915	28.1 27.8 25.9	78	8402	3811	9226	4185	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	215	160	100 125 150	6.9 8.6 10.3	962 926 863	27.2 26.2 24.4	1000 990 922	28.3 28.0 26.1	75	8111	3679	8935	4053	
T185	Air	250	185	100 125 150	6.9 8.6 10.3	1265 1141 1000	35.4 31.9 28.0	NA	NA	80	11671	5294	NA	NA	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	250	185	100 125 150	6.9 8.6 10.3	1281 1158 1018	35.9 32.4 28.5	NA	NA	76	10146	4602	NA	NA	
T220	Air	300	220	100 125 150	6.9 8.6 10.3	1485 1370 1257	41.6 38.4 35.2	NA	NA	80	11682	5299	NA	NA	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	300	220	100 125 150	6.9 8.6 10.3	1502 1387 1274	42.1 38.8 35.7	NA	NA	76	10157	4607	NA	NA	
T260	Air	350	260	100 125 150	6.9 8.6 10.3	1601 1560 1442	44.8 43.7 40.4	NA	NA	80	12189	5529	NA	NA	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	350	260	100 125 150	6.9 8.6 10.3	1617 1577 1459	45.3 44.2 40.9	NA	NA	76	10664	4837	NA	NA	
T300	Air	400	300	100 125 150	6.9 8.6 10.3	1840 1777 1598	51.5 49.8 44.7	NA	NA	80	12520	5679	NA	NA	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	400	300	100 125 150	6.9 8.6 10.3	1856 1794 1614	52.0 50.2 45.2	NA	NA	76	10994	4987	NA	NA	
T355	Water	450	355	125 150	8.6 10.3	1916 1803	53.6 50.5	NA	NA	76	12218	5542	NA	NA	137 × 85 × 97 (3457 × 2152 × 2446)

* Data measured and stated in accordance with ISO1217 4th Edition Annex C and E at the following conditions:
Air Intake Pressure: 1 bar a/14.5 psi, Air Intake Temperature: 20°C/68°F, Humidity: 0% (dry)

**Measured in free field conditions in accordance with the ISO 2151, tolerance ±3 dB(A)

VARIABLE SPEED MACHINES, 50* & 60 HZ

MODEL	COOLING METHOD	DRIVE MOTOR		NOMINAL PRESSURE		FAD** 50/60 HZ		NOISE LEVEL***	WEIGHT 50/60 HZ		DIMENSIONS L × W × H
		HP	KW	PSIG	BARG	ACFM	M³/MIN	DB(A)	LBS	KG	IN. (MM)
TVS90	Air	125	90	100 125 150	6.9 8.6 10.3	626 564 517	17.7 16.0 14.6	64–78	7185	3259	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	125	90	100 125 150	6.9 8.6 10.3	626 564 517	17.7 16.0 14.6	62–75	6894	3127	
TVS110	Air	150	110	100 125 150	6.9 8.6 10.3	685 683 639	19.4 19.3 18.1	64–78	7185	3259	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	150	110	100 125 150	6.9 8.6 10.3	685 684 639	19.4 19.4 18.1	62–75	6894	3127	
TVS132	Air	175	132	100 125 150	6.9 8.6 10.3	879 814 772	24.9 23.0 21.9	64–78	8067	3659	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	175	132	100 125 150	6.9 8.6 10.3	879 814 772	24.9 23.0 21.9	62–75	7776	3527	
TVS160	Air	215	160	100 125 150	6.9 8.6 10.3	899 897 837	25.5 25.4 23.7	64–78	8067	3659	107 × 72 × 87 (2712 × 1825 × 2200)
	Water	215	160	100 125 150	6.9 8.6 10.3	900 897 836	25.5 25.4 23.7	62–75	7776	3527	
TVS200	Air	268	200	100 125 150	6.9 8.6 10.3	1230 1121 1016	34.4 31.4 28.4	64–80	12531	5684	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	268	200	100 125 150	6.9 8.6 10.3	1253 1178 1073	35.1 33.0 30.0	62–76	11005	4992	
TVS250	Air	335	250	100 125 150	6.9 8.6 10.3	1493 1386 1282	41.8 38.8 35.9	64–80	12884	5844	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	335	250	100 125 150	6.9 8.6 10.3	1527 1451 1346	42.8 40.6 37.7	62–76	11358	5152	
TVS315	Air	422	315	100 125 150	6.9 8.6 10.3	1778 1674 1570	49.8 46.9 44.0	64–80	13997	6349	137 × 85 × 97 (3457 × 2152 × 2446)
	Water	422	315	100 125 150	6.9 8.6 10.3	1809 1744 1639	50.7 48.8 45.9	62–76	12471	5657	
TVS355	Water	476	355	100 125 150	6.9 8.6 10.3	1809 1807 1796	50.7 50.6 50.3	62–76	12504	5672	137 × 85 × 97 (3457 × 2152 × 2446)

* 50 Hz only applies to TVS90–TVS160 models.

** Data measured and stated in accordance with ISO1217 4th Edition Annex C and E at the following conditions:
Air Intake Pressure: 1 bar a/14.5 psi, Air Intake Temperature: 20°C/68°F, Humidity: 0% (dry)

***Measured in free field conditions in accordance with the ISO 2151, tolerance ±3 dB(A)

The leader in every market we serve

by continuously improving all business processes

with a focus on innovation and velocity

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GS-PUREAIR-T-TVS 1st Ed. 7/24
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Please recycle after use.