Gardner Denver

ENVIROAIRE T75–315 & TVS110–315 | 100–400 HP
OIL-FREE TWO-STAGE FIXED & VARIABLE SPEED ROTARY SCREW COMPRESSOR

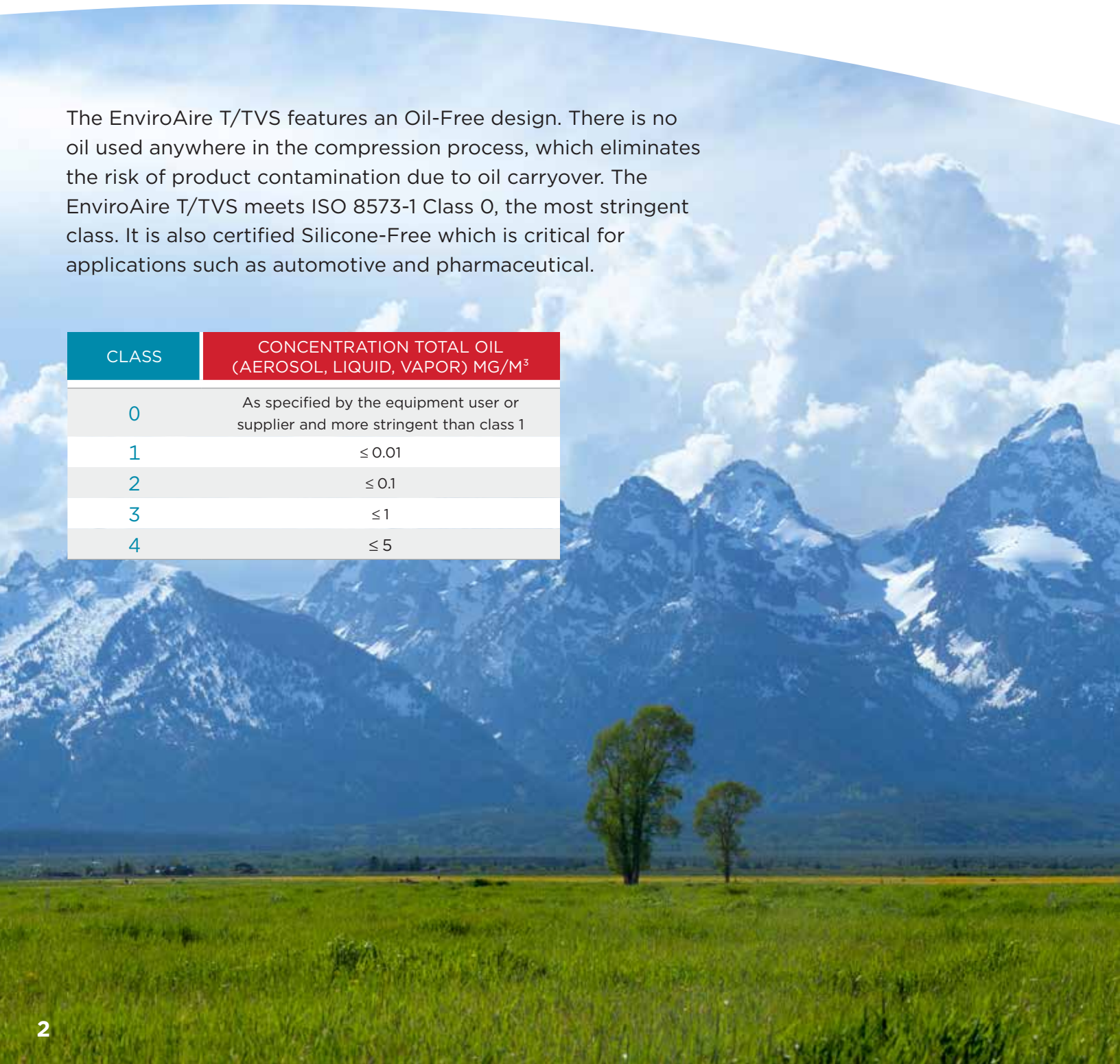
EnviroAire T/TVS

Eliminate the Risk

Guaranteed 100% Oil-Free

The EnviroAire T/TVS features an Oil-Free design. There is no oil used anywhere in the compression process, which eliminates the risk of product contamination due to oil carryover. The EnviroAire T/TVS meets ISO 8573-1 Class 0, the most stringent class. It is also certified Silicone-Free which is critical for applications such as automotive and pharmaceutical.

CLASS	CONCENTRATION TOTAL OIL (AEROSOL, LIQUID, VAPOR) MG/M^3
0	As specified by the equipment user or supplier and more stringent than class 1
1	≤ 0.01
2	≤ 0.1
3	≤ 1
4	≤ 5



Silicone-Free

Silicone contamination in compressed air systems cause problems across a wide range of industries such as electronics, pharmaceuticals and automotive. Costly product spoilage, re-work and production downtime can result from this contamination.

For example, a high quality paint finish is essential to the automotive industry. Blisters, cracking, craters and a loss of adhesion are all symptoms of silicone contamination.

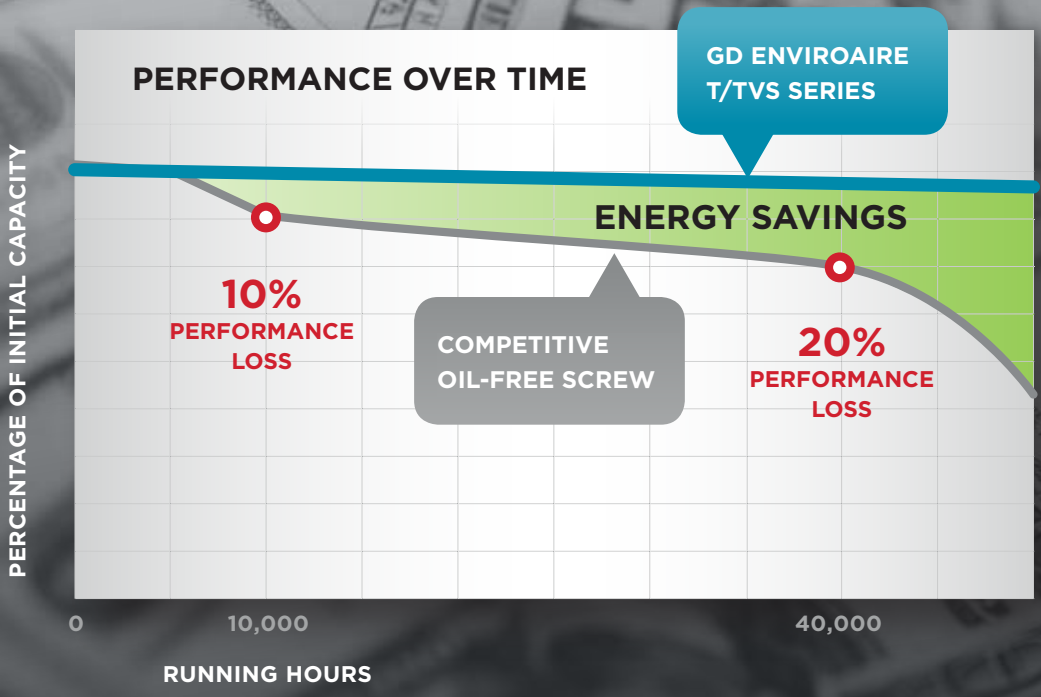
- 100% silicone-free, guaranteed
- Specifically designed for use in pure-air critical applications such as the automotive industry
- Avoids contamination and provides the highest air quality standards
- Independently tested and certified

Energy Saving
Performance Delivered

Gardner Denver EnviroAire T/TVS Series compressors utilize state-of-the-art design and manufacturing to ensure very tight tolerances thereby reducing loss. In addition, the rotors and housing are covered with a unique hard coating that ensures long-lasting performance. This combination results in little or no performance decay even after 40,000 hours of operation, saving thousands in utility expenses.

$35,000
SAVINGS PER YEAR

The EnviroAire T/TVS Series can offer a 20% or more reduction on operating costs, when compared to a competitive dry screw compressor. For example, for a 400 HP compressor, that could amount to $35k or more in electricity savings per year!



The Preferred Choice for Optimum Performance

Efficient Two-Stage Airend Design

Designed and manufactured by Gardner Denver to deliver maximum flow reliably and efficiently.

Reliable Cooling System

- A dedicated closed-loop cooling system for the airend, ensures a constant internal temperature level and near isothermal compression, which increases the overall longevity of the airend. This unique feature guarantees efficient operation and generates a stable and low discharge temperature.
- The EnviroAire T/TVS Series is available as air-cooled or water-cooled.

High Quality Electric Motors

Premium efficiency TEFC motors ensure high reliability.

Up to 113°F (45°C) Ambient Capability

Ensures reliability and trouble-free operation through efficient heat dissipation.

All Connections from One Side

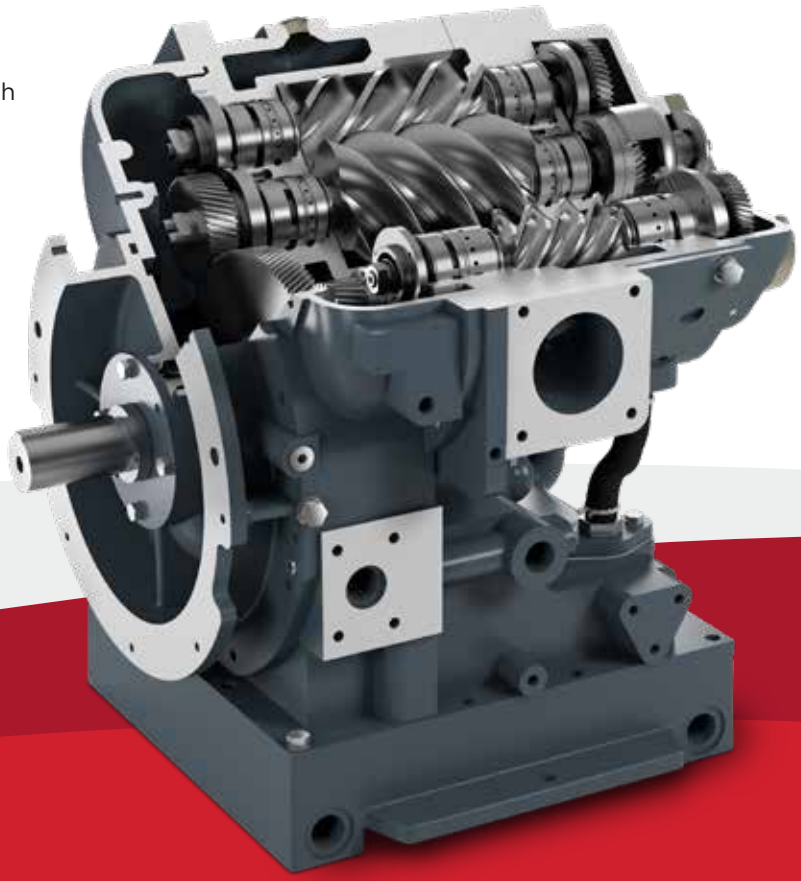
The modern design provides all connections on one side of the unit, such as cooling air inlet, customer network connection, electrical connection and condensate connection.

Easy Installation

- Gardner Denver saves you money from the very beginning—starting with transportation to your site. The unit's compact size allows you to move it through standard industrial double doors.
- Its small footprint minimizes the floor plan usage allowing you to maximize production space.
- The compressors require no special foundation and ducting is simple.

Dedicated Air Inlet

A separate air inlet designed specifically for the EnviroAire T/TVS 165–315 compressors, provides the coolest possible air which ensures the reliability and performance of the air end.



Reduce the Cost of Ownership

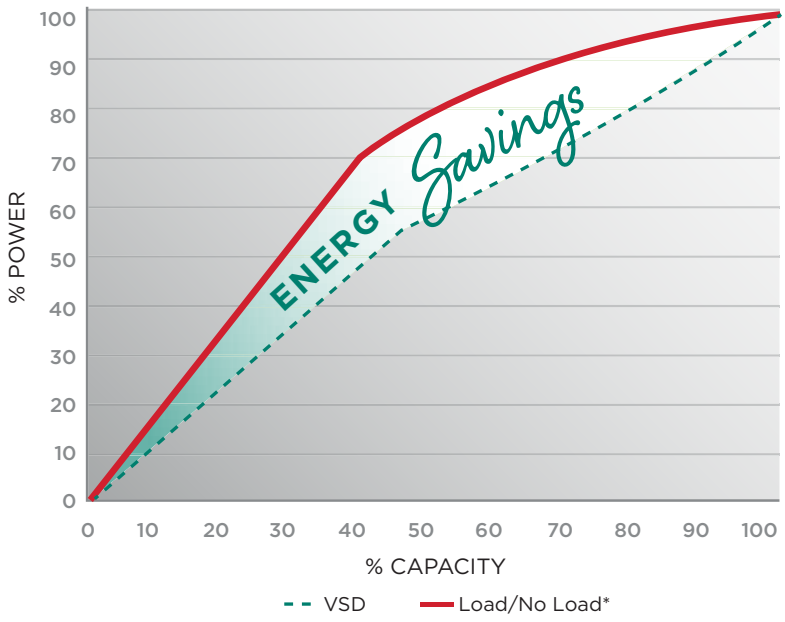
Minimize Your Energy Consumption

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

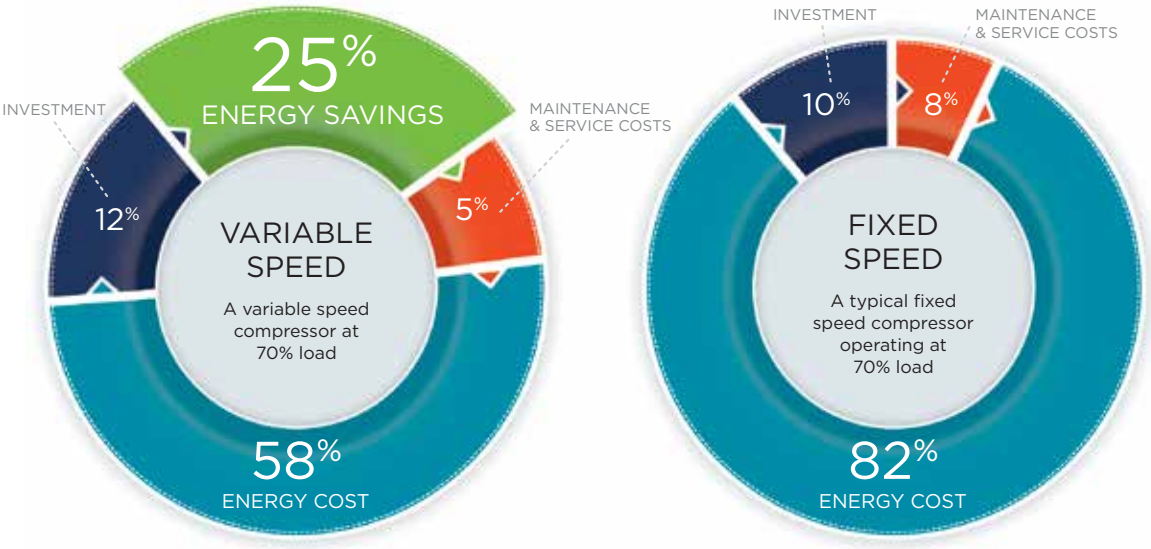


*Assumes 1 gal/cfm of receiver capacity

COST OF OWNERSHIP

Variable Speed vs. Fixed Speed

Using a variable speed compressor can easily save 25% on energy costs by supplying just the right amount of compressed air to do the job and no more.



Reduced Wear & Tear

Superb Flexibility Comes Standard with the TVS Series

With a wide capacity range, the TVS Series features the market's quickest and widest response to air demand changes.

Your benefits during varying air demand:

- Reduced wear and tear on inlet and discharge valve components
- No shock bearing loads for the airend
- Minimized pulsating load (full load pressure/off load pressure) for all pressurised components within compressor package

THE TVS SERIES FEATURES THE MARKET'S QUICKEST & WIDEST RESPONSE TO CHANGING AIR DEMAND

GD Pilot TS:
State-of-the-Art Control

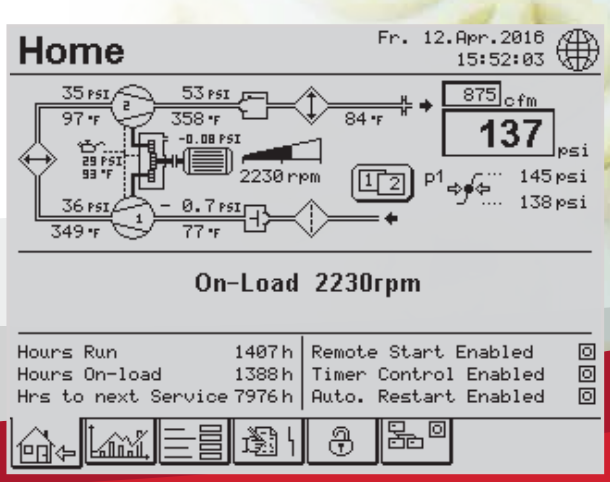
The “GD Pilot TS” with its 5.7” high resolution touch screen display is extremely user-friendly and easy to navigate. All functions are clearly structured in five main menus and are intuitively visual.

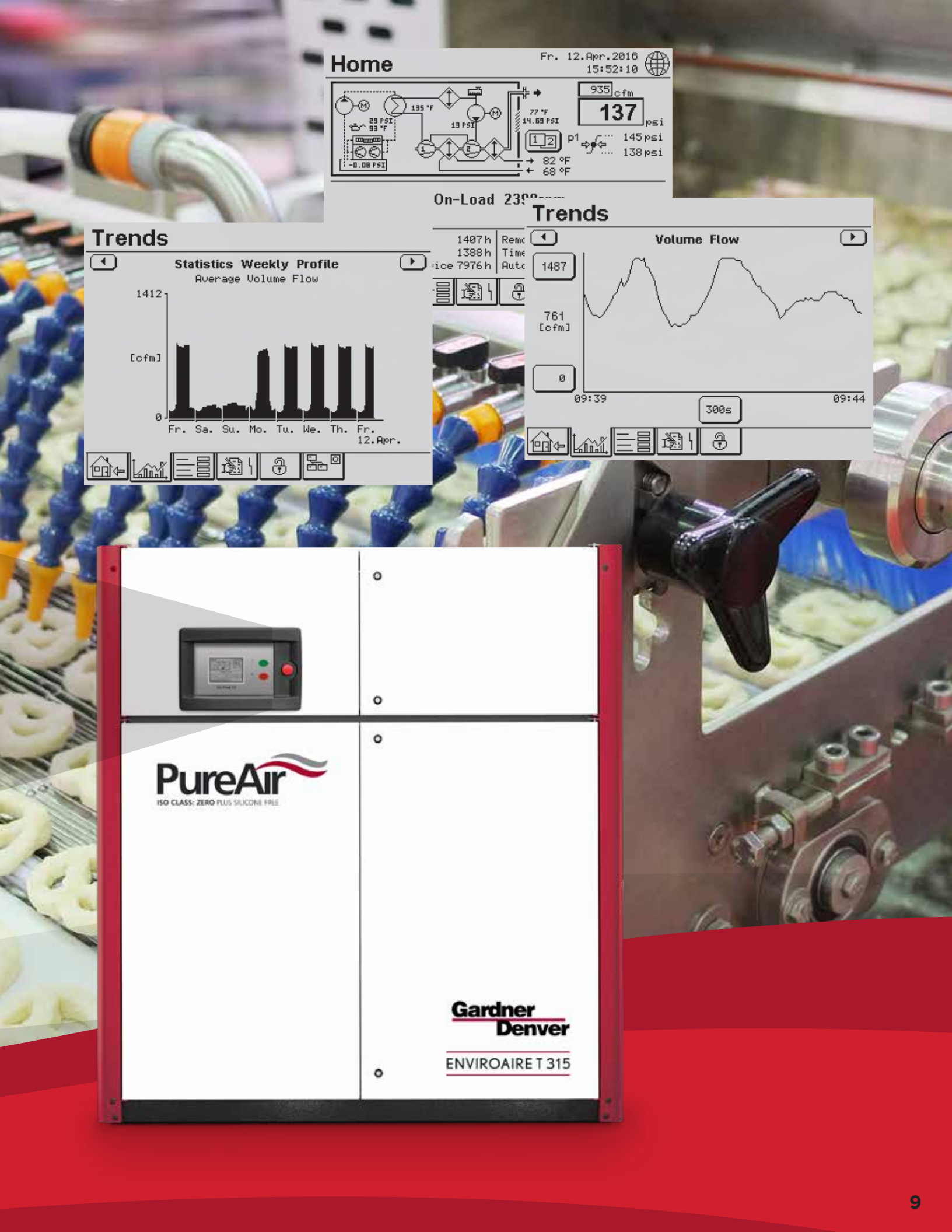
The multilingual “GD Pilot TS” control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, which is essential for reducing your operating costs.

With the ability to display detailed system analysis in the form of trend diagrams and graphs, operating parameters can be precisely set to maximize the efficiency.

Features & Functions

- Compressor status
- Line/network pressure
- Motor speed (variable speed)
- On load hours/total hours run & average volume flow
- Weekly average volume flow
- Ambient pressure & temperature
- Inlet/outlet pressure and temperature at both stages
- Optional base-load sequencing for up to four compressors
- Real time clock–allows pre-setting of compressor starting/stopping
- Second pressure setting
- Auto restart after power failure
- Remote control via programmable inputs
- RS485 Modbus RTU standard
- Optional SD card for data logging

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PureAir
ISO CLASS: ZERO PLUS SILICONE FREE
Gardner Denver
ENVIROAIRE T 315

EnviroAire Technical Data

FIXED SPEED MACHINES, 50 & 60 HZ

MODEL	COOLING METHOD	DRIVE MOTOR		NOMINAL PRESSURE		FAD*		NOISE LEVEL**	WEIGHT		DIMENSIONS L × W × H
		HP	KW	PSIG	BAR	ACFM	M³/MIN	DB(A)	LBS	KG	IN. (MM)
T75	Air	100	75	116	8	437	12.37	76	6,665	3,023	102.2 × 68.7 × 78.8 (2597 × 1744 × 2001)
				145	10	383	10.85	75			
	Water	100	75	116	8	437	12.37	73	7,105	3,223	
				145	10	383	10.85	71			
T90	Air	125	90	116	8	562	15.91	77	7,125	3,223	
				145	10	464	13.14	76			
	Water	125	90	116	8	562	15.91	74	7,546	3,423	
				145	10	464	13.14	73			
T110	Air	150	110	116	8	670	18.97	78	7,198	3,265	
				145	10	596	16.88	78			
	Water	150	110	116	8	670	18.97	76	7,639	3,465	
				145	10	596	16.88	75			
T132	Air	180	132	116	8	797	22.57	78	8,007	3,632	
				145	10	741	20.98	77			
	Water	180	132	116	8	767	21.72	78	8,007	3,632	
				145	10	741	20.98	77			
T160	Air	215	160	116	8	N/A	N/A	N/A	8,034	3,644	
				145	10	795	22.51	79			
	Water	215	160	116	8	N/A	N/A	N/A	8,475	3,844	
				145	10	795	22.51	78			
T165	Air	215	160	125	8.6	988	27.98	81	11,387	5,165	130 × 79 × 86 (3300 × 1994 × 2190)
				145	10	875	24.78	83			
	Water	215	160	125	8.6	988	27.98	77	10,395	4,715	
				145	10	875	24.78	79			
T200	Air	270	200	125	8.6	1236	35.00	84	12,147	5,510	
				145	10	1080	30.58	85			
	Water	270	200	125	8.6	1236	35.00	80	11,155	5,060	
				145	10	1080	30.58	81			
T250	Air	335	250	125	8.6	1525	43.18	85	12,489	5,665	
				145	10	1366	38.68	86			
	Water	335	250	125	8.6	1525	43.18	81	11,497	5,215	
				145	10	1366	38.68	82			
T315	Air	420	315	125	8.6	1705	48.28	85	13,162	5,970	
				145	10	1585	44.88	86			
	Water	420	315	125	8.6	1705	48.28	81	12,170	5,520	
				145	10	1585	44.88	82			

* 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*		NOISE LEVEL**	WEIGHT		DIMENSIONS L × W × H
		HP	KW	PSIG	BAR	ACFM	M³/MIN	DB(A)	LBS	KG	IN. (MM)
TVS110	Air	150	110	116	8	682	19.31	78	7,227	3,476	130 × 79 × 86 (3300 × 1994 × 2190)
				145	10	613	17.36	78			
	Water	150	110	116	8	682	19.31	76	7,668	3,478	
				145	10	613	17.36	75			
TVS132	Air	180	132	116	8	800	22.65	79	7,663	3,476	
				145	10	736	20.84	79			
	Water	180	132	116	8	800	22.65	79	8,104	3,676	
				145	10	736	20.84	77			
TVS160	Air	215	160	116	8	N/A	N/A	N/A	8,131	3,688	
				145	10	819	23.19	79			
	Water	215	160	116	8	N/A	N/A	N/A	8,572	3,888	
				145	10	819	23.19	79			
TVS200	Air	270	200	125	8.6	1246	35.28	84	12,258	5,560	130 × 79 × 86 (3300 × 1994 × 2190)
				145	10	1087	30.78	85			
	Water	270	200	125	8.6	1246	35.28	80	11,266	5,060	
				145	10	1087	30.78	81			
TVS250	Air	335	250	125	8.6	1536	43.49	85	12,599	5,715	
				145	10	1377	38.99	86			
	Water	335	250	125	8.6	1536	43.49	81	11,607	5,215	
				145	10	1377	38.99	82			
TVS315	Air	420	315	125	8.6	1716	48.59	86	13,272	6,020	
				145	10	1585	44.88	87			
	Water	420	315	125	8.6	1716	48.59	81	12,280	5,520	
				145	10	1585	44.88	82			

* 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)

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 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.

The leader in every market we serve

by continuously improving all business processes

with a focus on innovation and velocity

Gardner Denver®

Gardner Denver, Inc.

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Quincy, IL 62305
866-440-6241
www.gardnerdenver.com/gdproducts

GS-ENVIROAIRE-T-TVS 5th Ed. 9/18

Please recycle after use.

Gardner Denver

ENVIROAIRE T37–74 & TVS37–74 | 50–100 HP
OIL-FREE TWO-STAGE FIXED & VARIABLE SPEED ROTARY SCREW COMPRESSOR

EnviroAire T/TVS

Gardner Denver:
A History of Excellence

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 EnviroAire T/TVS 37–74 kW Series are a continuation in our long heritage of compressed air products.

Reliability + Performance = Peace of Mind

The EnviroAire T/TVS 37/45/55/74 Series compressors are designed to take the punishment of 24/7/365 usage under the most adverse conditions. Here are a few of the many standard features that ensure 100% reliable operation:

- **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
- Auto restart after power failure – reduces downtime
- TEFC cooling fan – prevents dirt and water ingress
- Quiet enclosure – reduces sound levels
- GD Pilot S Controller – precision control and monitoring provides peace of mind
- Up to 115°F operation – built for the harshest environments
- Compact footprint – reduces floor space requirement

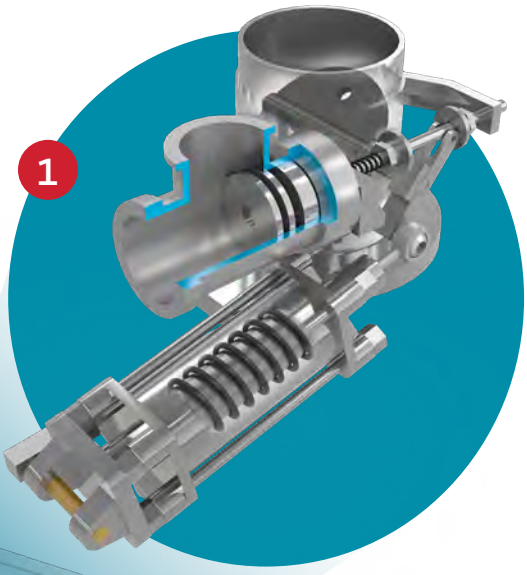
Rugged & Reliable EnviroAire T Series

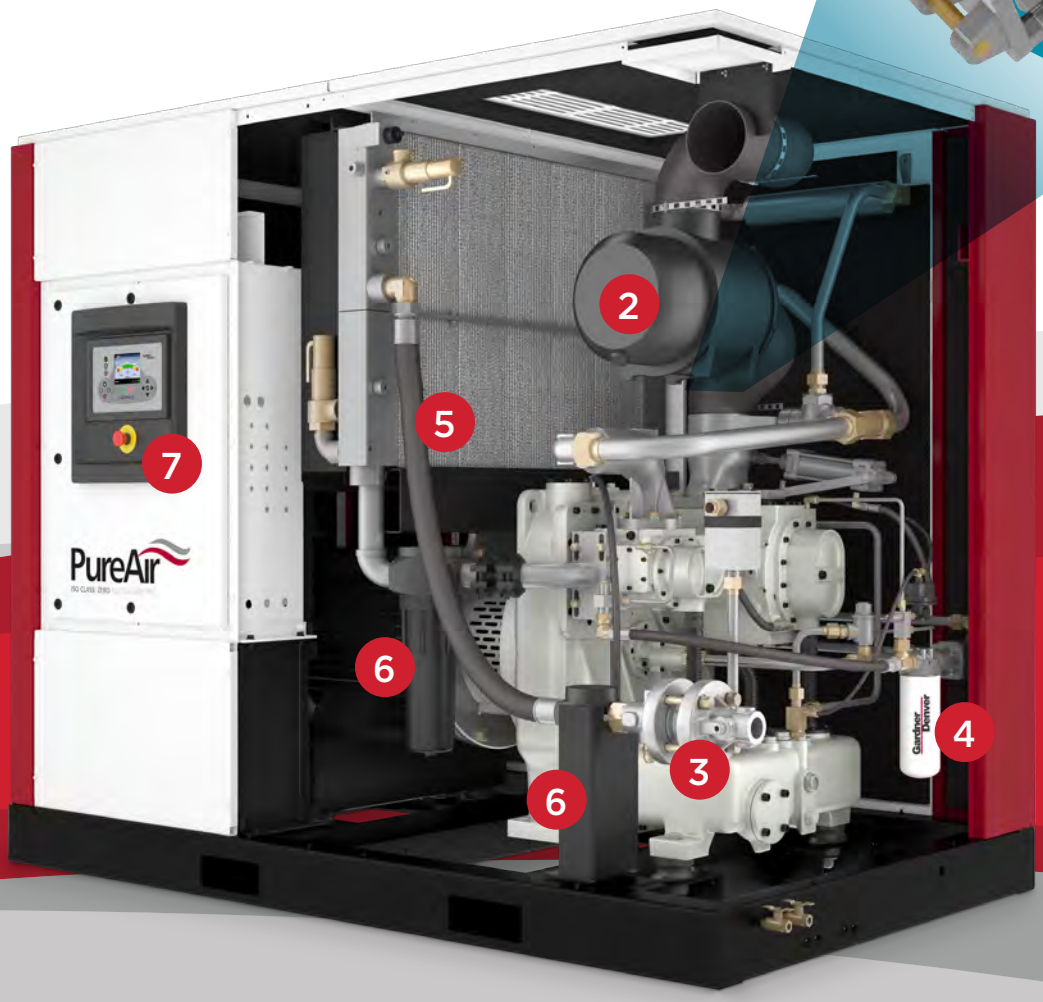
For applications where demand is relatively constant and a variable speed compressor is not needed, the EnviroAire T Series is the perfect fit. All EnviroAire T Series compressors have the following features:

- TEFC NEMA premium efficiency motor
- Wye-Delta starter reduces motor starting current, lowers peak power demand
- Hydraulically actuated inlet valve
  - Butterfly style valve – eliminates diaphragm service/replacement
  - Full flow – less restrictive than diaphragm style valve to reduce pressure drop
  - Rugged heavy duty design – provides years of trouble free operation
  - Inlet valve and blow down valve mechanically interlocked – handles heavy cycling
  - Hydraulic actuation – significantly improves reliability
- Available pressure variants: 100 psig, 125 psig, 150 psig

1 Inlet Valve

- Low pressure drop butterfly valve
- Heavy duty hydraulic cylinder actuator
- Rugged blow down valve
- Reliable mechanically linked inlet and blow down valves





2 99.5% efficient 3 micron **heavy duty air filter** element

3 Robust poppet style **non-return valve**

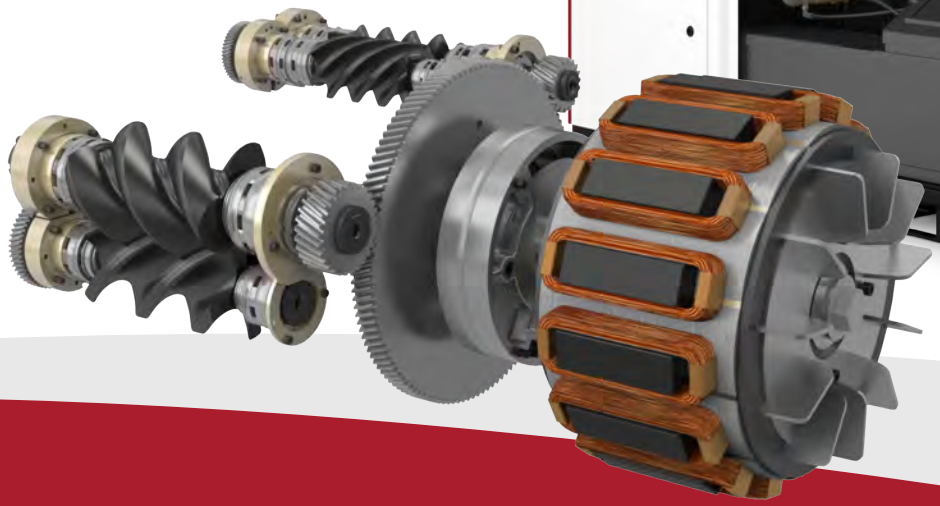
4 Long life **oil filter**

5 **Flexible cooler connections** eliminate failures

6 **Condensate separator** with auto drain

7 **GD Pilot S** compressor controller

Adaptive & Energy-Saving EnviroAire TVS Series



Not all applications have a constant demand level for compressed air. For those varying type demands, an EnviroAire TVS Series compressor can provide a reliable compressed air supply while adjusting its speed to provide lower flows when demand is light and higher flows when demand is greatest. The ability to vary the speed to match the demand is what makes the EnviroAire TVS Series the perfect energy efficient fit for these applications.

- Hybrid permanent magnet ODP motor
  - Higher efficiency – reduces energy costs up to 28% versus standard inverter duty motor
  - Cooler operation – increases longevity and reliability
  - Increased torque – reduces motor fatigue
  - Simple design – no motor bearings or seals to wear out
  - No motor coupling – increases reliability and reduces service requirement
  - Smaller size – saves space and weight
  - Unity power factor – reduces energy loss typical of standard inverter duty motors
  - 100% maintenance free – no lubrication or service required
- Modular VFD drive includes power module with integral DC choke
- Available pressure variants: 100 psig, 125 psig, 150 psig

THE PERFECT Energy-Efficient FIT FOR FLUCTUATING DEMAND

Reduce the Cost of Ownership

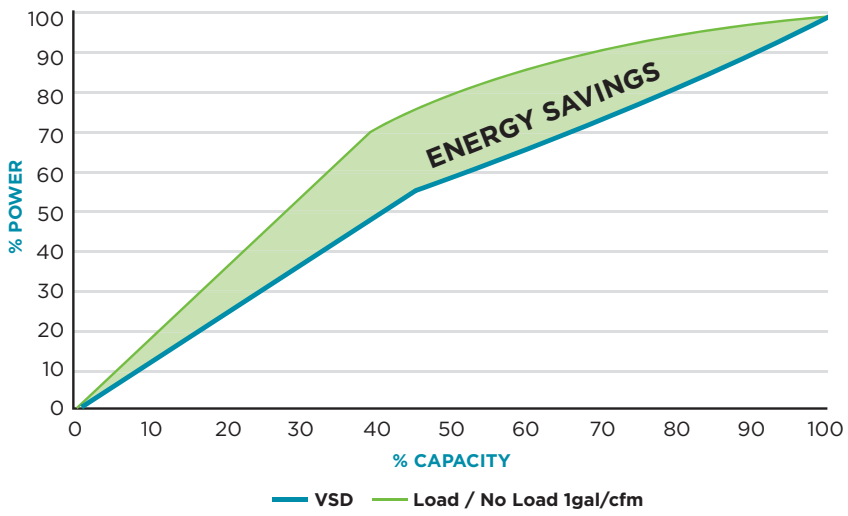
Minimize Your Energy Consumption

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

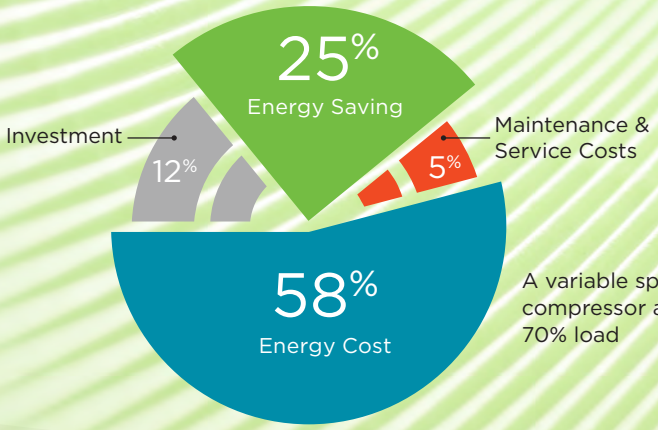
Perfect Response to Your Individual Air Demand

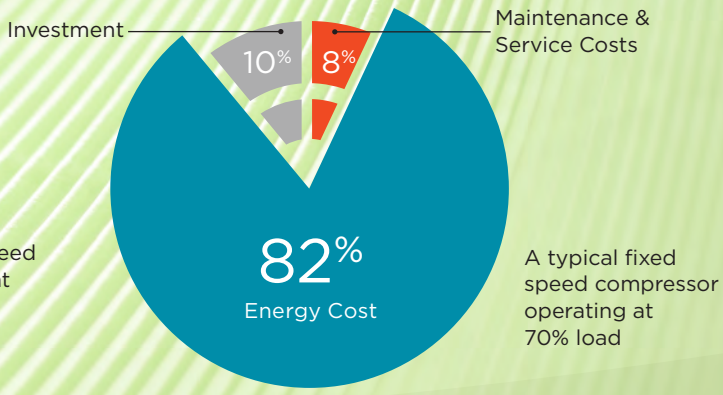
Variable speed compressors from Gardner Denver can efficiently and reliably handle varying air demands. The right variable speed compressor in the right application delivers significant energy savings while providing a stable air supply at constant pressure.

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.

The Choice is Yours: T versus TVS Series

Production facilities come in all shapes and sizes and so do their air demands. Gardner Denver offers compressors to meet whatever your requirements might be. Some plants have a relatively constant demand for compressed air day-in and day-out while other plants may have both high and low demand throughout each and every day.

Constant Demand Application

Fixed speed compressor (T Series) provides:

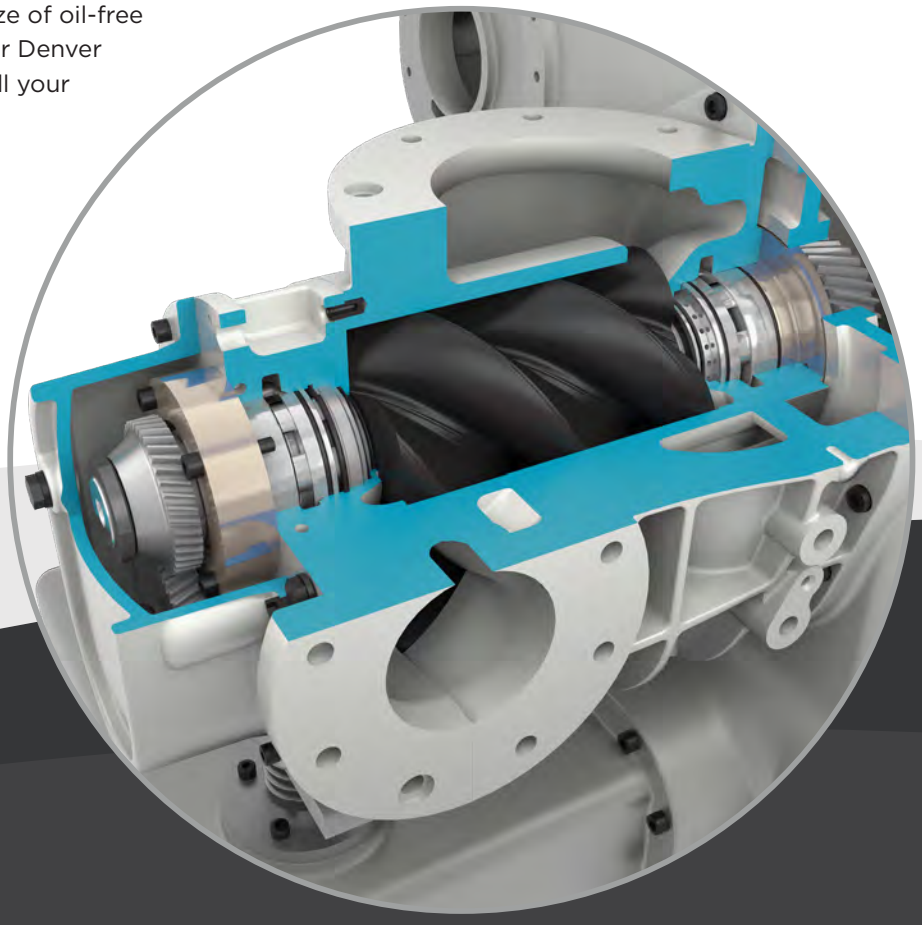
- Highest energy efficiency in a constand demand application
- Lowest purchase cost

Fluctuating Demand Application

Variable speed compressor (TVS Series) provides

- Highest energy efficiency in a fluctuating demand application
- Reduced compressor wear and tear
- Less compressor cycling

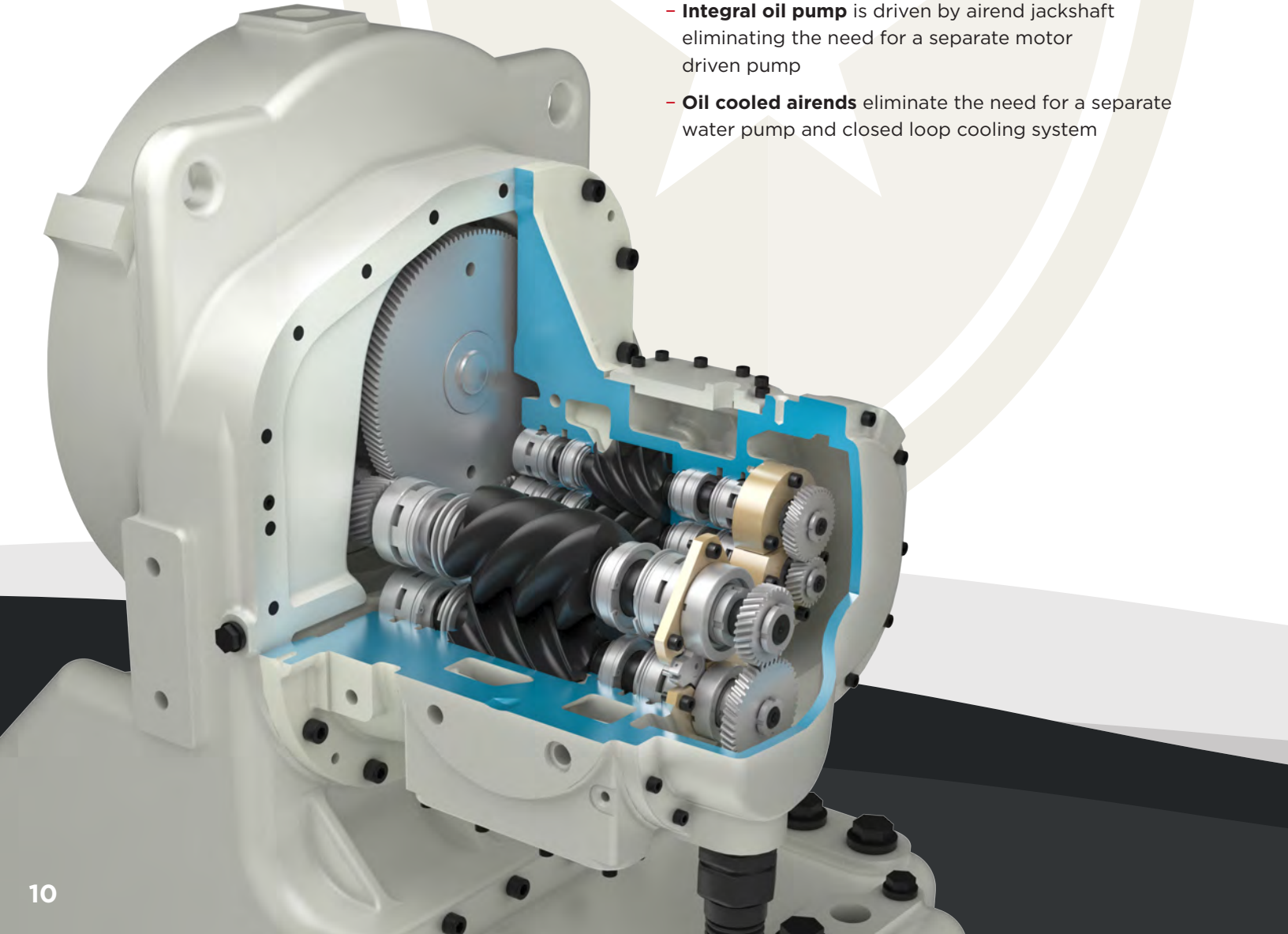
The choice of fixed or variable speed is only one of many system considerations for providing quality compressed air. When it comes to selecting the right type and size of oil-free compressor, experience matters. Gardner Denver distributors are your go-to-experts for all your compressed air needs and can help you select the best compressor as well as downstream equipment to handle your specific application.



GD RotorArmor™

All Airend Coatings Are **Not** 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 Teflon-Graphite coating which ensures good sealing on day one, but rapidly wears, reducing performance by 10% or more
- EnviroAire: Guaranteed maximum efficiency throughout the compressor life
- Both the fixed and VSD 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
  - **Integral oil pump** is driven by airend jackshaft eliminating the need for a separate motor driven pump
  - **Oil cooled airends** eliminate the need for a separate water pump and closed loop cooling system



Energy Saving
Performance Delivered

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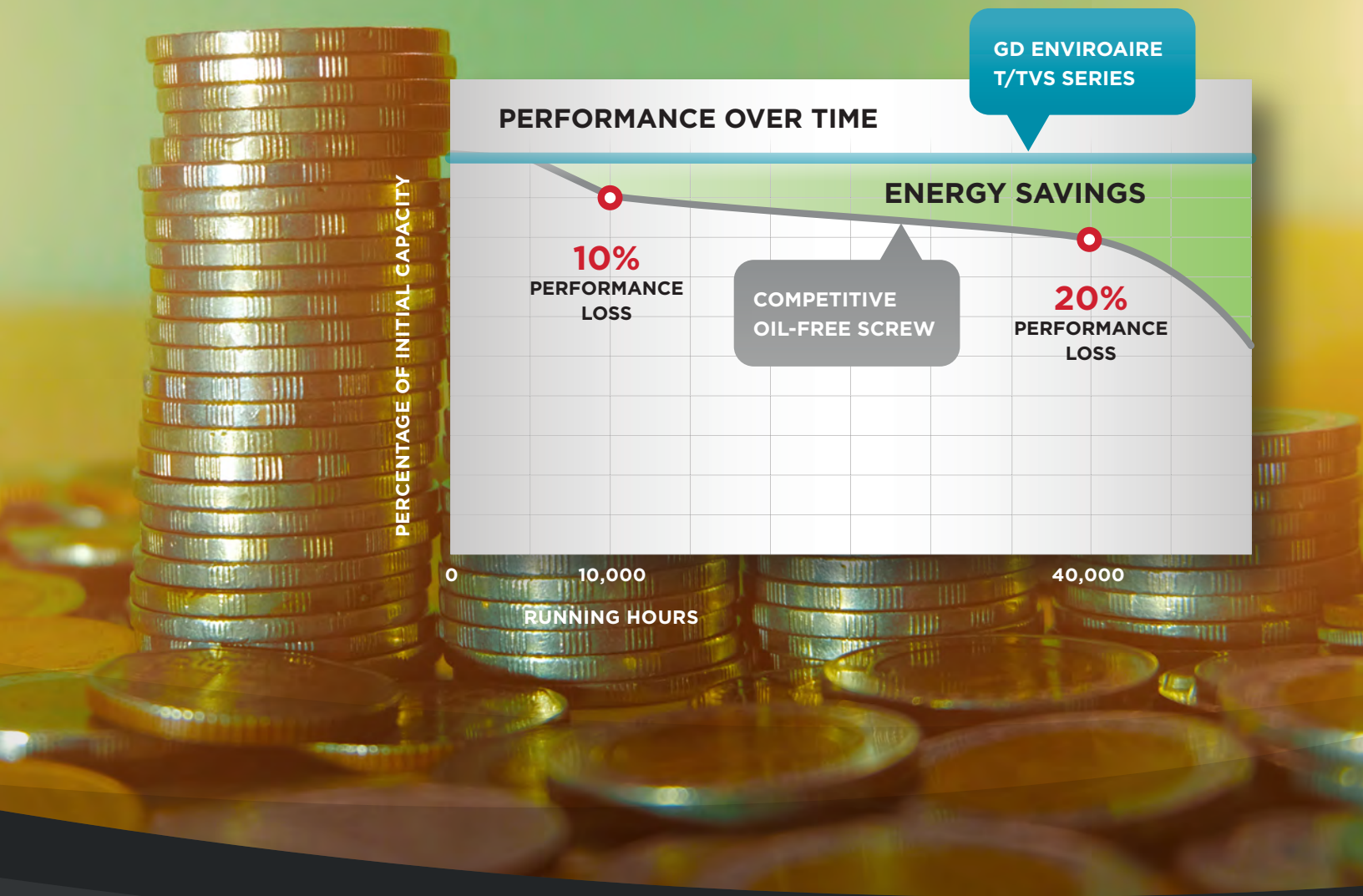
$10,000

SAVINGS PER YEAR

The EnviroAire T/TVS Series can offer a 20% or more reduction on operating costs, when compared to a competitive dry screw compressor. For example, for a 100 HP compressor, that could amount to $10k or more in electricity savings per year!

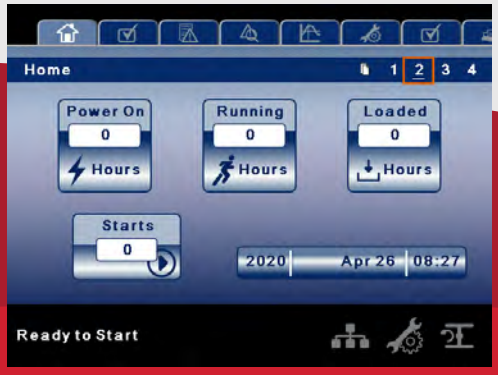


GD Pilot S: User Friendly Control

The GD Pilot S with its 5.7″ high resolution color display is intuitive and easy to navigate. All functions are clearly structured into 8 main menu tabs across the top of the display, selectable by using the cursor controls on the bottom right of the controller.

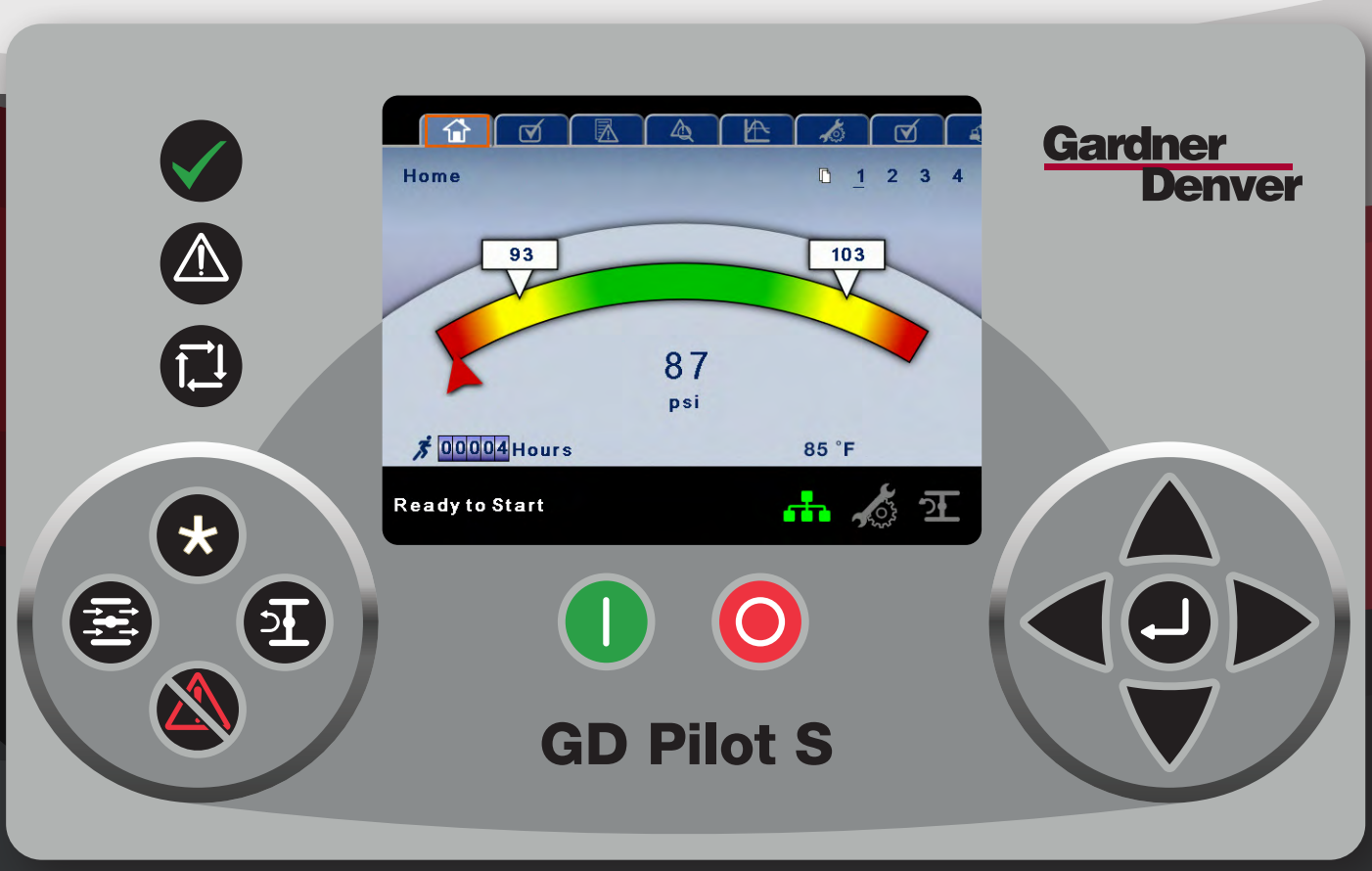
The multilingual GD Pilot S control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters of the compressor, essential for reducing your operating costs.

With the ability to display detailed system analysis in the form of trend graphs, operating parameters can be precisely set to maximize the efficiency of the compressor.



Functions & Features

- 3 LED status indicators – provides immediate visual compressor status
- Tabbed page layout – makes navigation faster and easier
- Graphing of more than 30 parameters – improves system optimization
- Convenient maintenance timers – ensure timely service reminders
- Auto restart after power failure
- Remote pressure input
- Remote start/stop
- Remote load/unload
- Consumable monitoring
  - Lubricant filter
  - Inlet air filter
  - Bearing oil level monitoring
- ModBus RS-485 interface – enables connection to building management system
- Ethernet port – allows web enabled control via tablet, laptop or mobile device
- USB service port – field service tool access
- Data collection via SD card – up to 30 days



Sales & Service Distributors Across America

An Extensive Network

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

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.

To find a distributor visit:
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EnviroAire Technical Data

FIXED SPEED MACHINES, 50 & 60 HZ

MODEL	COOLING METHOD	DRIVE MOTOR HP	DRIVE MOTOR KW	NOMINAL PRESSURE PSIG	NOMINAL PRESSURE BAR	FAD* ACFM	FAD* M³/MIN	NOISE LEVEL** DB(A)	WEIGHT LBS	WEIGHT KG	DIMENSIONS L × W × H IN. (MM)
T37	Air	50	37	100 125	6.9 8.6	216 186	6.1 5.3	76	5110	2318	
	Water	50	37	100 125	6.9 8.6	216 186	6.1 5.3				
T45	Air	60	45	100 125	6.9 8.6	268 232	7.6 6.6	76	5364	2433	
	Water	60	45	100 125	6.9 8.6	268 232	7.6 6.6				
T55	Air	75	55	100 125 150	6.9 8.6 10.3	336 290 268	9.5 8.2 7.6	76	5364	2433	88.5 × 54.0 × 75.4 (2248 × 1372 × 1914)
	Water	75	55	100 125 150	6.9 8.6 10.3	336 290 268	9.5 8.2 7.6				
T74	Air	100	75	100 125 150	6.9 8.6 10.3	424 411 390	12.0 11.6 11.0	76	5500	2495	
	Water	100	75	100 125 150	6.9 8.6 10.3	424 411 390	12.0 11.6 11.0				

VARIABLE SPEED MACHINES, 50 & 60 HZ

MODEL	COOLING METHOD	DRIVE MOTOR HP	DRIVE MOTOR KW	NOMINAL PRESSURE PSIG	NOMINAL PRESSURE BAR	FAD* ACFM	FAD* M³/MIN	NOISE LEVEL** DB(A)	WEIGHT LBS	WEIGHT KG	DIMENSIONS L × W × H IN. (MM)
TVS37	Air	50	37	100 125	6.9 8.6	200 179	5.7 5.1	65–74	3481	1579	
	Water	50	37	100 125	6.9 8.6	200 179	5.7 5.1	63–69	3580	1624	81.9 × 43.9 × 81.5 (2080 × 1115 × 2070)
TVS45	Air	60	45	100 125	6.9 8.6	237 219	6.7 6.2	65–74	3481	1579	
	Water	60	45	100 125	6.9 8.6	237 219	6.7 6.2	63–69	3580	1624	
TVS55	Air	75	55	100 125 150	6.9 8.6 10.3	331 299 269	9.4 8.5 7.6	76–80	4502	2042	
	Water	75	55	100 125 150	6.9 8.6 10.3	331 299 269	9.4 8.5 7.6	76–80	4502	2042	81.8 × 52.0 × 76.7 (2078 × 1321 × 1947)
TVS74	Air	100	75	100 125 150	6.9 8.6 10.3	435 400 368	12.3 11.3 10.4	76–80	4502	2042	
	Water	100	75	100 125 150	6.9 8.6 10.3	435 400 368	12.3 11.3 10.4	76–80	4502	2042	

* 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)

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