

Rotary Screw Air Compressors **Electra-Saver®**



50–100 HP, SAV 50/75/100 Variable Displacement Control

Turn Valve Part Load Technology

- The patented Turn Valve is the most efficient part load capacity control system in the industry.
- Kypho™ rotor design, coupled with Turn Valve technology can reduce energy costs as much as 16%.
- Automatically compresses exactly the right amount of air required, assuring maximum efficiency and energy savings.

Direct Drive Non-Geared Airend

- Increased bearing life (L-10 life in excess of 100,000 hours) due to large tapered roller bearings.
- Permanent airend to motor connection via rigid flange connection for vibration-free operation.

Maintenance Reducing Design Features

- Simplified access to air/oil separator, requiring removal of only six bolts and no piping to change separator elements. This reduces maintenance time by 90%!
- Easy access to air filter mounted directly to the inlet valve.
- Spin-on ten micron full-flow oil filters ensure longer lubricant life and protection for all working parts.

Heavy Duty Inlet Air Filter

- Standard canister-type filter on Electra-Saver units; usually an option with other manufacturers.
- Removes 99.9% of airborne particulates five microns and larger.
- Extends lubricant life by almost 20%.

Auto Sentry® ES+ Solid State Electronic Controller

- Most sophisticated, technically advanced microprocessor based control system in the compressor industry.
- Every control option available in the industry is standard on the Gardner Denver Auto Sentry® ES+ controller.
- More self-diagnostic capability than any other rotary screw compressor.
- Built-in ability to sequence up to eight compressors.
- User friendly readout. No codes to decipher. Digital and full text Vacuum Fluorescent Display (VFD).

Standard Equipment

- Direct drive, non-gear, C-flange mounted airend
- Automatic, integral Turn Valve part-load control system
- Modulating, vertical inlet valve
- Heavy duty, 5 micron, inlet air filter
- 460 volt, 3 phase, 60 HZ, 1800 RPM, 1.15 S.F., EPA “energy efficient” ODP drive motor **with standard 5-year warranty**
- Airend and motor shaft are coupled through a permanently aligned, resilient cushion-type flexible coupling
- Stainless steel control lines
- Unitized airend/motor assembly mounted to the compressor base with all-angle, elastomer, vibration isolators
- ASME coded air/oil reservoir with Gardner Denver Eliminator™ separator element
- Oil cooler/aftercooler:
 - Air cooled models—heavy duty radiator-type with thermally controlled, totally enclosed fan motor
 - Water cooled models—shell and tube heat exchanger
- Thermostatic oil control valve
- Package mounted moisture separator and trap
- Rigid steel base with forklift slots
- Pressure relief valve
- Automatic blowdown valve through inlet filter
- Minimum discharge pressure check valve
- Lube system includes all galvanized steel fittings and piping
- Factory fill AEON™ 9000SP synthetic lubricant
- NEMA 12 control/electrical enclosure includes:
 - Wye-Delta, 460 volt main motor starter with NEMA starting requirements (optional on SAV 50/75 units)
 - Fan motor starter
 - Control voltage transformer
 - Auto-Sentry® ES+ solid state controller
 - U.L. listed and CSA certified electrics
- Auto-Sentry® ES+ microprocessor based, fully programmable touch pad controller with the following functions:
 - Full text Vacuum Florescent Display (VFD) with interactive compressor diagram
 - Operating mode selection: constant run, low demand with reservoir blowdown, automatic stop/start with timed blowdown and sequence (up to 8 units), all with modulating inlet valve or load/no load control
 - Emergency stop button
 - Complete system diagnostics through VFD
 - Displays for hourmeter, loaded hours, total runtime, discharge air temperature, system/reservoir pressure, separator differential pressure and motor amps
 - VFD Advisory lamps, light yellow on diagram, displays service for air filter, change separator, oil and oil filter change, low/high temperature, sequencing communication error, and high motor amps
 - VFD Protective shutdown lamps, light red on diagram, displays high temperature, low oil pressure, main motor overload, fan motor overload, high pressure, change separator, choice of one field-selectable message: high vibration, phase relay, motor protector, low voltage
 - Power interruption protection
 - High speed electronic modulation control
 - Thermally controlled fan motor on air cooled units
 - Contacts for remote start/stop operation plus remote monitoring

Optional Equipment

- Wye-Delta, reduced starting current starters (standard on SAV 100)
- Full acoustic enclosure with access doors
- NEMA 4 control enclosure
- Seacoast (air-cooled) or salt water (water-cooled) coolers
- Factory fill AEON™ 6000FG Food Grade synthetic lubricant
- Alternate voltages, TEFC or high efficiency drive motors
- Remote mounted air cooled coolers

Performance 60 HZ, 50 - 100 HP

Motor HP	Style	Model	Working Pressure		Air Delivery (1)	
			psig	bar	acfm	m ³ /min
50	SAV 50	EAH	100	6.9	229	6.48
			110*	7.5	227	6.60
			125	8.6	200	5.66
			150	10.3	182	5.50
75	SAV 75	EAM	100	6.9	350	9.91
			125	8.6	305	8.64
100	SAV 100	EAP	100	6.9	470	13.31
			125	8.6	420	11.49
			150	10.3	353	10.00
100	SAV 100 DX	EAP	100	6.9	361	10.22
			110*	7.5	357	10.17
			125	8.6	357	10.11
			150	10.3	354	10.02

Performance 50 HZ, 75 kW

Motor HP	Style	Model	100	6.9	491	13.90
100/75	SAV 100	EAQ	125	8.6	409	11.60
			150	10.3	313	8.90

Dimensions/Weights

HP	Approximate Dimensions (2)			Approximate Shipping Weight (3)		
		Length	Width	Height	Enclosed	Open
50	in	79	48	50	lb	3080
	mm	2286	1422	1524	kg	1396
75	in	90	55	60	lb	3665
	mm	2286	1422	1524	kg	1662
100	in	90	55	60	lb	4106
	mm	2286	1422	1524	kg	1862

1. Capacity measured in accordance with CAGI/PNEUROP acceptance test code PN2CPTC2.
 2. Dimensions shown are nominal for all unenclosed models and for quiet enclosed water cooled models. Width on all quiet enclosed air cooled models is 90" (2286 mm).
 3. Weights shown are for air cooled models less shipping skid. Water cooled models weigh slightly less.
- * 110 psig available as field set option only. Order 100 psig unit and reset operating pressure in the field.

Gardner Denver®

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