

# SENATOR

INDUSTRIAL AIR COMPRESSORS

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## GS and GSV Series 4 to 15 kW

Rotary Screw Air Compressors  
0.66 to 2.62 m<sup>3</sup>/min  
7 to 10 bar



The **Senator GS and GSV Series** comprise a range of electric rotary screw air compressors that are integrated, tank-mounted packages supplied ready for use. They are ideally suited for small-to-medium industrial applications and are usually complemented by additional compressed air treatment equipment installed downstream.

Each model has been developed using innovative European design concepts to achieve a compact layout and then upgraded with heavy-duty components to satisfy the demands of Australia's harsh operating conditions. This proven formula is why thousands of Australian businesses now rely upon their Senator industrial air compressors to power them through each working day.

While the fixed speed GS Series models offer the most affordable choice in terms of initial capital cost, the variable speed GSV Series models generally have a much lower whole-of-life cost when electricity consumption is taken into account. The GSV's variable speed drive uses less energy by continuously adjusting the compressor's output to match the typically fluctuating air demand.

## → Features and Benefits

**Compact turn-key compressor and air tank package** offers a convenient plug-and-play solution with minimum installation cost and space requirements.

**Soundproofed cabinet and anti-vibration mounting** of rotating components enables the unit to be installed directly at the work site.

**Precision technology rotary screw air-end** with advanced rotor profile and slow rotor speed ensures 24/7 reliability, high flow rate, low energy consumption and long service life.

**High efficiency, MEPS compliant electric motor** reduces energy consumption and carbon footprint.

**7, 8 and 10 bar (102, 116 and 145 psi) outlet pressure capability** that is suitable for a broad range of compressed air applications.

**Fan-forced after-cooler** minimises water carry-over in the discharge air and increases the efficiency of any downstream air treatment equipment.

**Thermostat-controlled oil cooler** allows continuous operation in ambient temperatures of up to 45°C without shortening oil life or increasing oil carry-over.

**Oversized 450 litre air receiver tank** provides ample air storage capacity to prevent excessive system pressure fluctuations and facilitates more effective condensate removal.



**Unitary Tank-Mounted Configuration**  
(as supplied)

**Star-delta motor starter** on GS models reduces peak electrical demand and mechanical shock-loading during compressor start-up.

**Microprocessor-based variable speed drive (VSD)** on GSV models provides smooth motor acceleration upon start-up and then optimised speed and power control under all operating conditions.

**Multi-function electronic controller** with LCD display serves as a user-friendly interface for compressor operation, systems monitoring and protection, and maintenance scheduling. Sequential control and remote start/stop capable.

**Lift-off cabinet panels** are easily removable for maintenance access.

**Spin-on oil filter and air/oil separator elements** minimise service downtime.

**User re-configurable into separate compressor and air tank modules** for special purpose applications or restricted installation spaces.

**Compliant with Australian Workplace Health and Safety Regulations** for industrial workplace use.

## → Accessories

**A full range of performance-matched air treatment equipment** including refrigerant dryers and in-line filters is available to complement the GS and GSV Series compressors. Please consult your local Senator dealer for application specific advice.

## → Energy Saving GSV Series

**Energy consumption comprises about 75% of the total annual cost** for an electric screw compressor in most industrial applications. A conventional fixed speed 15 kW unit, for example, uses around \$7,000 worth of electricity per year on average working just one 38-hour shift per week.

**Senator GSV Series variable speed compressors can use up to 30% less electricity** than comparable fixed speed models. In the above example, this could add up to a cost saving of approximately \$2,000 per year.

**A Senator GSV Series compressor** is the energy smart choice whether for a new installation or a replacement upgrade. It will pay for itself many times over in electricity cost savings.

## → Customer and Product Support

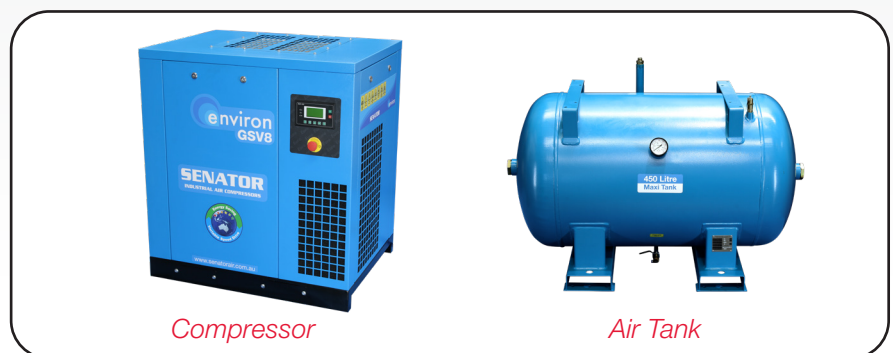
**100-point pre-delivery inspection and full-load testing** of each compressor is carried out in Australia before dispatch.

**Australia-wide dealer network** offering sales, installation, service and genuine spare parts backup.

**12-month parts and labour warranty.**



## → User Configured Option



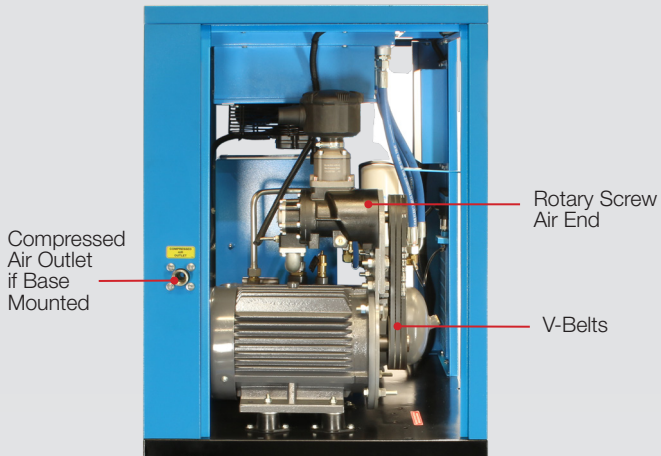
*Compressor*

*Air Tank*

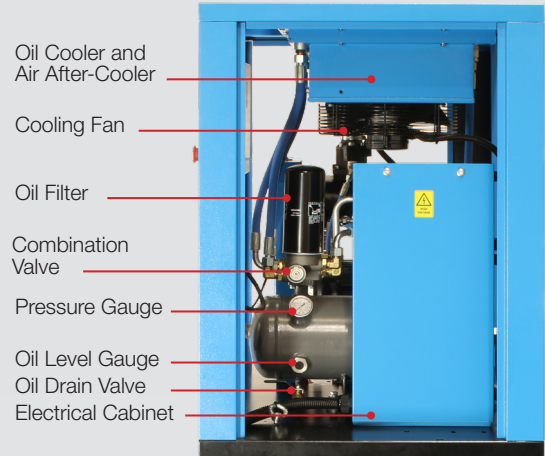
**Two-Piece Configuration**  
(Compressor and air tank not available for purchase separately)



# Equipment Design Details



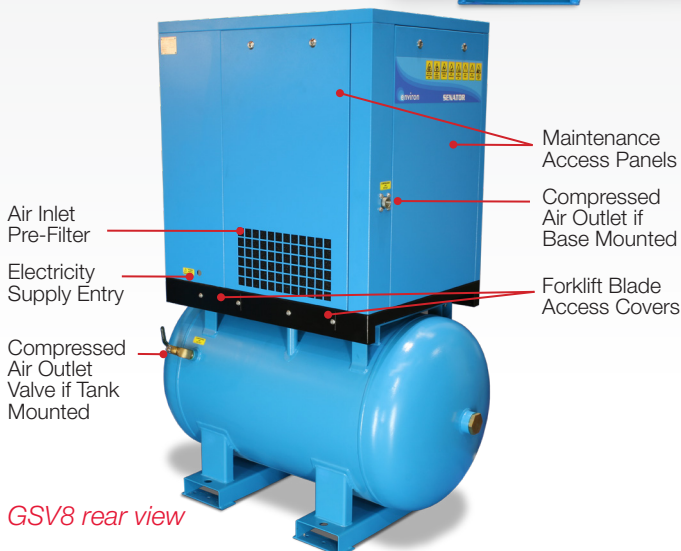
Left side view



Right side view



GSV8 shown with maintenance access panels and V-belt drive safety guard removed

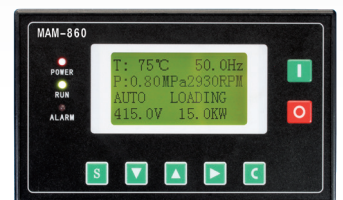


GSV8 rear view

## Multi-Function Electronic Controllers



GS Series Controller

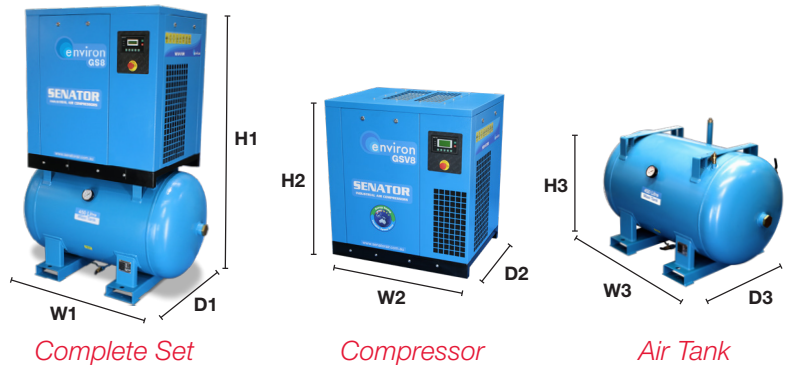


GSV Series Controller

# Specifications

Parameter		Unit	GS Series					GSV Series		
			GS4	GS6	GS8	GS11	GS15	GSV8	GSV11	GSV15
Free Air Delivery * #	@ 7 bar	m³/min	0.66	0.89	1.20	1.88	2.62	0.48-1.20	0.75-1.88	1.05-2.62
	@ 102 psi	cfm	23	31	42	66	93	17-42	26-66	37-93
	@ 8 bar	m³/min	0.60	0.82	1.10	1.78	2.45	0.44-1.10	0.71-1.78	0.98-2.45
	@ 116 psi	cfm	21	29	39	63	87	16-39	25-63	35-87
	@ 10 bar	m³/min	0.50	0.70	0.99	1.57	2.17	0.40-0.99	0.63-1.57	0.87-2.17
	@ 145 psi	cfm	18	25	35	55	77	14-35	22-55	31-77
Motor ^	Power	kW	4	5.5	7.5	11	15	7.5	11	15
		hp	5.5	7.5	10	15	20	10	15	20
Tank	Volume	Litre	450	450	450	450	450	450	450	450
Noise Level	@ 1 m	dB(A)	62	67	68	70	72	69	71	73
Air Outlet	Size	BSP	3/4" F	3/4" F	3/4" F	1" F	1" F	3/4" F	1" F	1" F
Dimensions - Complete Set	W1	cm	136	136	136	136	136	136	136	136
	D1	cm	78	78	78	78	78	78	78	78
	H1	cm	183	183	183	190	190	183	190	190
Dimensions - Air Compressor	W2	cm	95	95	95	112	112	95	112	112
	D2	cm	72	72	72	77	77	72	77	77
	H2	cm	104	104	104	114	114	104	114	114
Dimensions - Air Tank	W3	cm	136	136	136	136	136	136	136	136
	D3	cm	78	78	78	78	78	78	78	78
	H3	cm	89	89	89	89	89	89	89	89
Weight	Complete Set	kg	408	424	444	546	561	459	567	591
	Compressor	kg	232	248	268	370	385	283	391	415
	Air Tank	kg	176	176	176	176	176	176	176	176

\* Per ISO 1217:2009 Annexes C and E.  
 # 8 bar (116 psi) configuration is standard.  
 ^ Electricity supply: 415 V, 3-Phase, 50 Hz.



**AUTHORISED SENATOR DEALER:**

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