

SENATOR

INDUSTRIAL AIR COMPRESSORS

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 environ



TS and TSV* Series 4 to 15 kW

Rotary Screw Air Compressors
0.50 to 2.40 m³/min
8 to 13 bar

* Eligible for Government Energy Efficiency Grants



The **Senator TS and TSV 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.

The designs have been extensively proven throughout Asia and Europe with thousands of units already in service. Further refinement of the TS and TSV Series has taken into account the extensive feedback from Senator end users in Australia over many years.

While the fixed speed TS Series offers the most affordable initial capital cost, the variable speed TSV Series generally has a much lower whole-of-life cost when electricity consumption is included. The variable speed drive uses less energy by continuously adjusting the compressor's output to match 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.



Oil lubricated, precision engineered and ultra reliable EU COMP air ends are a standout feature of the Senator TS and TSV Series.

State-of-the-art third generation rotor profile with 5:6 lobe combination delivers more air with lower energy consumption.

8, 10 and 13 bar outlet pressure capability that is suitable for a broad range of compressed air applications.

External spin-on (TS4 & TS6) or internal cartridge air-oil separator element ensures the lowest residual oil content in the discharge air.

Fan-forced after-cooling increases efficiency of downstream compressed air treatment (TS/V8 and larger).

Thermostat-controlled, fan-forced oil cooling permits continuous operation in ambient temperatures of up to 45°C.

High efficiency IE3 class, MEPS compliant electric motor reduces energy consumption.

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

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

Oversized 300 or 450 litre air receiver tank provides ample air storage to prevent excessive system pressure fluctuations and facilitates more effective condensate removal.

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

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

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

→ Multi-Function Electronic Controller



Air Intelligent Management System (AIMS) controller serves as a user-friendly interface for compressor operation, monitoring, protection and maintenance scheduling.

- Fully automatic operation after initial push-button start.
- Continuous display of operating status, pressure and temperature.
- Over pressure and under / over temperature protection.
- Scheduling and tracking of critical maintenance tasks.
- Warning and shutdown alarm notification and log.
- Selectable automatic restart after mains power failure.
- Selectable run time limit for maintenance enforcement.
- Remote hardwired stop / start control.

- Sequential control of up to eight interconnected TS Series compressors.

- Modbus RS-485 data communication for standalone compressors (TS only).

→ Accessories

A full range of performance-matched compressed air treatment equipment including refrigerant dryers and in-line filters is available to complement the TS and TSV Series.

→ Energy Saving TSV Series

Energy consumption comprises about 75% of the total annual cost for an electric screw compressor in most industrial applications. A fixed speed 15 kW unit, for example, can use up to \$10,000 worth of electricity per year working just one 38-hour shift per week.

Senator TSV Series variable speed compressors can use up to 30% less electricity than comparable fixed speed models. This will save your business money and reduce its carbon footprint.

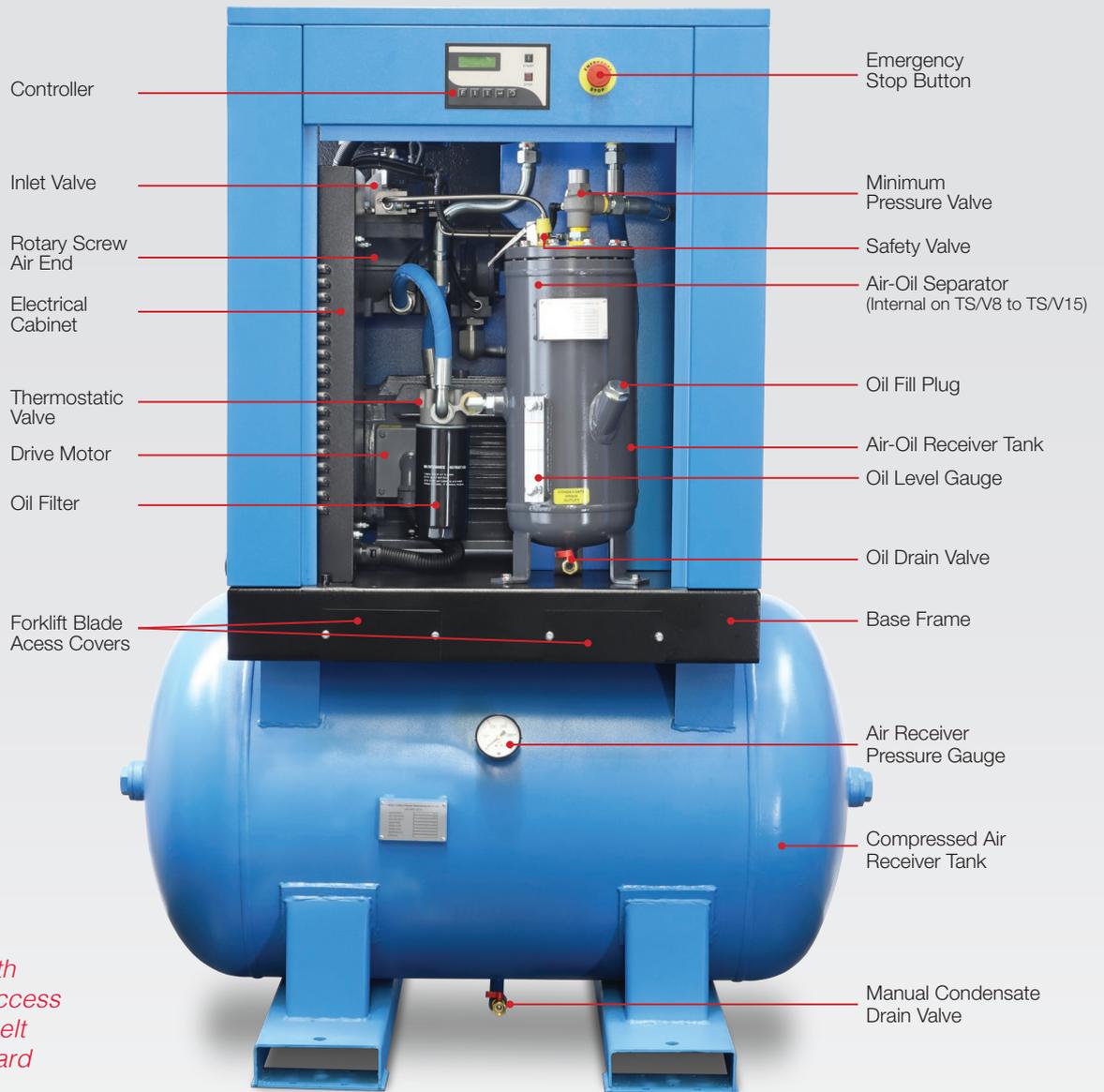
A Senator TSV Series compressor is the smart energy choice whether for a new installation or a replacement upgrade. It will pay for itself many times over in electricity cost savings.

→ Customer and Product Support

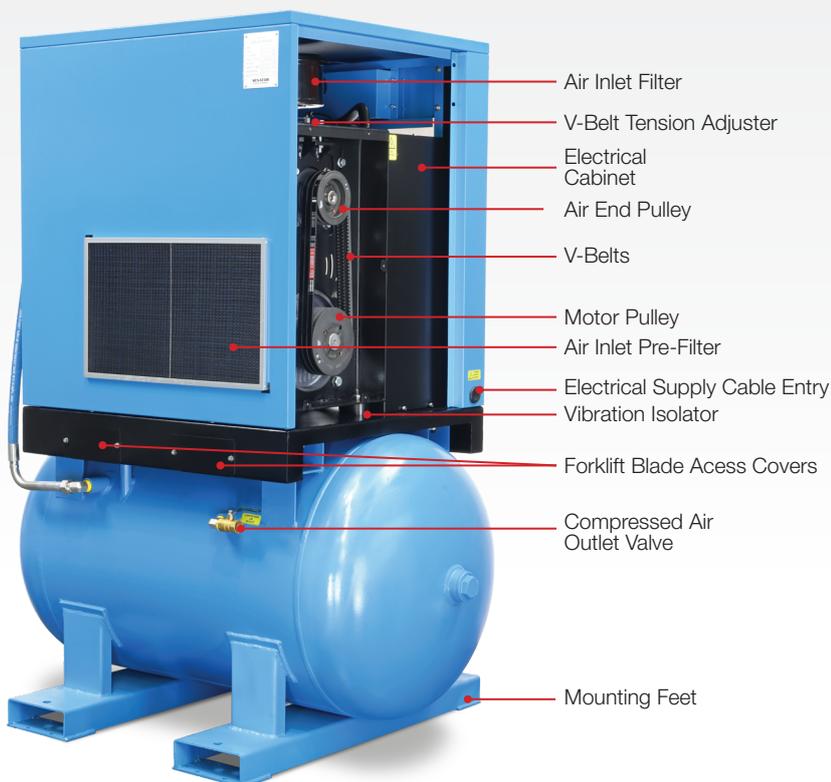
Comprehensive pre-delivery inspection and full-load testing of each compressor is carried out in Australia by experienced technicians.

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

12-month parts and labour warranty to protect your investment.



TS15 shown with maintenance access panels and V-belt drive safety guard removed.



→ Layout Option



User reconfigurable into two-piece layout. Note: Air tank not available for purchase separately.

→ Specifications

Parameter		Unit	TS Series					TSV Series		
			TS4	TS6	TS8	TS11	TS15	TSV8	TSV11	TSV15
Free Air Delivery	@ 8 bar	m ³ /min	0.50	0.75	1.02	1.65	2.40	0.41-1.02	0.66-1.65	0.96-2.40
	@ 10 bar	m ³ /min	0.40	0.65	0.95	1.50	2.05	0.38-0.95	0.60-1.50	0.82-2.05
	@ 13 bar	m ³ /min	0.35	0.50	0.83	1.40	1.85	0.33-0.83	0.56-1.40	0.74-1.85
Motor	Power	kW	4	5.5	7.5	11	15	7.5	11	15
Air Tank	Volume	Litre	300	300	300	450	450	300	450	450
Noise Level	@ 1 m	dB(A)	65	65	66	67	68	68	68	70
Air Outlet	Size	BSP	1/2" F	1/2" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
Dimensions Complete Set	W1	cm	141	141	144	136	136	144	136	136
	D1	cm	70	70	92	100	100	92	100	100
	H1	cm	153	153	156	179	179	164	179	179
Dimensions Air Compressor	W2	cm	66	66	80	88	88	88	88	96
	D2	cm	60	60	80	83	83	88	88	99
	H2	cm	89	89	100	108	108	108	108	108
Dimensions Air Tank	W3	cm	141	141	144	136	136	144	136	136
	D3	cm	70	70	92	100	100	92	100	100
	H3	cm	67	67	64	80	80	64	80	80
Weight	Complete Set	kg	367	367	516	572	630	545	589	663
	Compressor	kg	209	210	312	362	423	318	368	451
	Air Tank	kg	158	157	204	210	207	227	221	212

- FAD per ISO 1217:2009 Annexes C and E.
- 8 bar configuration is standard.
- Electricity supply: 400 V, 3-Phase, 50 Hz.
- 1 bar = 100 kPa = 0.1 MPa = 14.5 psi
- 1 m³/min = 1,000 L/min = 16.7 L/s = 35.3 cfm



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Specifications are subject to change without notice. 2025-09-01