

Screw compressors

RS / RSF 55.0 – 1-110



All compressors
available with
variable speed control!

Motor power: 55.0 – 110 kW



RENNER – the expert in screw compressors.

Oil-injected screw compressors are the most modern and economical way of generating compressed air in the medium to top performance range these days. RENNER fully relies on this compression principle. The performance range is between 2.2 to 355 kW with a discharge pressure of up to 15 bar as standard.

RENNER screw compressors are designed with an asymmetrical profile for uncompromising, industrial use. Highly economical, long lifespan and easy and cost-effective maintenance are the most important criteria in the development of new products.



Series RS(F) 55.0 – 1-110

Is your requirement for compressed air as demanding as your need for quality and economy? Then RENNER's large screw compressors are the solution for you. Because this is where innovative compressor technology meets high serviceability and robust construction with useful extras. In pressure and power levels ranging from 7.5 to 15 bar and 55.0 and 110 kW.

RS 55.0 – 1-110: the logical continuation of RENNER products in the top performance range.

Energy efficient

Variable speed control significantly reduces the overall cost of your compressed air supply. The investment costs pay back in a very short period of time.

Key features at a glance

- 2 years full warranty.
- Compact and clearly laid out design.
- Effective rear duct silencer. The motor and the compact air end as well as the compressor housing are mounted on anti-vibration metal bumpers. This results in low-noise and low-vibration installation – also in compressor rooms.
- Easily removable doors allow easy access to the individual components for maintenance.
- The use of standard components from German brand manufacturers guarantees a high quality standard and enables short reaction times in the event of faults.
- Long lifespan due to intelligent construction details such as the automatic V-belt tensioning design or the cooling air system that guarantees optimal compressed air temperatures.
- High cooling air flow rate with excellent residual compression.

RS(F) 55.0 – 1-110 – the details.

What has the series got to offer over and above the well established RENNER design concept? An innovative, user-friendly concept totally geared to performance and economy.

Optimum accessibility – Goodbye to servicing headaches

Maintenance and repair can be labour-intensive and cost-intensive – if the engineer finds it hard to reach the relevant components. You can take our word that this problem will soon be a thing of the past. Because large removable doors are fitted as standard on RENNER compressors and the housing provides ample space for convenient layout of the components.

Air end – reliable centrepiece

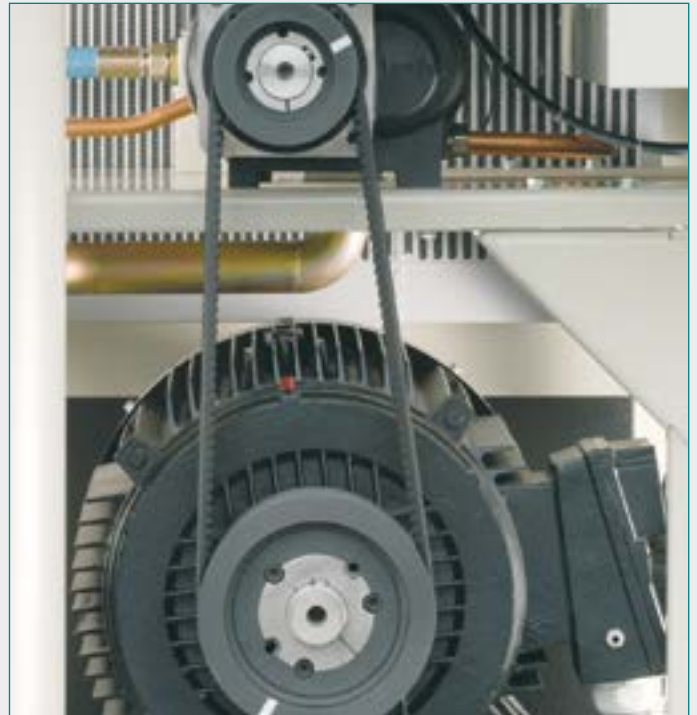
State-of-the-art production techniques guarantee supreme precision of rotor gears. The air end's location guarantees optimum rotational speeds and low energy consumption.

Separator

The effective RENNER separator is easily accessible and therefore very easy to maintain. Multiple oil pre-separation, rapid degassing and low foam formation guarantee compressed air quality – even in applications that have the highest compressed air requirements. The residual oil content remains at a mere 1 to 3 mg/m³.

Sound insulation box

We provide effective sound insulation as standard. A distortion-resistant sound insulation box reduces vibrations and noise to extremely low levels. They can be reduced even further – with RENNER super sound insulation, which is available as an option.



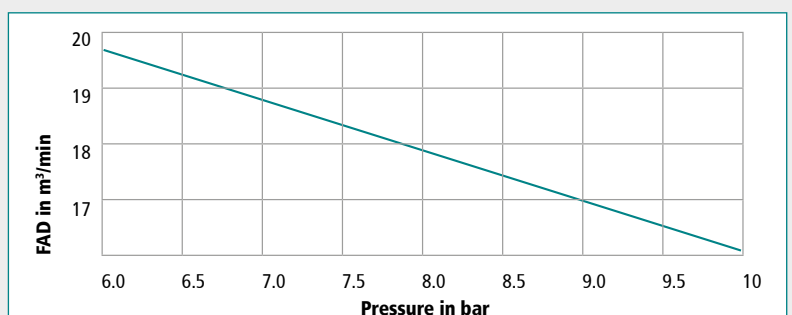
Reliable V-belt drive – durable and consistently efficient

RENNER's engineering design prevents a reduction in free air delivery and premature wear in this essential drive component: the pivoting base suspension keeps tightening the V-belt automatically.

Operating mode of RSF from 6-10 bar (REflex)

All RENNER compressors with variable speed control adapt flexibly and automatically to current pressure regarding both pressure and free air delivery. Thus the compressor provides at all times the optimally adjusted free air delivery in the set pressure range (6 to 10 bar).

- Free air delivery and control range adjust automatically to current pressure.
- Speed and load limits of the motor are observed.
- If pressure drops due to high air consumption, the Reflex function releases reserves that increase free air delivery.
 - ▶ Reliability of supply
- The pressure range from 6 to 10 bar can be configured variably without changing drive elements.



Energy savings: compressors with variable speed control. The RSF series is characterized by quality and efficiency.

RENNER screw compressors with variable speed control are designed for tough industrial applications. Additionally the compressors are equipped with the RENNERtronic Touch intelligent control and monitoring system.

Do you know how much energy your compressed air station requires and how much goes to waste?

About 60,000 compressed air stations in Germany consume 14 billion kWh of electricity annually. This corresponds to 5% of the electricity consumption of all German industrial plants. The energy savings potential of 30% is immense (4.2 billion kWh)! Moreover your commitment can contribute to reducing environmental pollution.

Compressed air stations work in the most efficient and economical way, if the entire system has been fine-tuned. RENNER, the experienced German manufacturer of quality compressor systems, together with its reliable local distributors, can meet these requirements and get the job done for you.

Our partners in distribution are qualified to check your compressed air station in order to determine your savings potential and guarantee long-term economical operation. We can demonstrate to you, how you could benefit by bringing down your operating cost and making an active contribution to reducing CO₂ emissions at the same time.

Optimum use of energy: RENNER screw compressors with variable speed control

- Use of an efficient control system for compressors
- Use of heat recovery systems
- Use of advanced compressed air piping systems without leakage
- Regular service by factory-trained service technicians

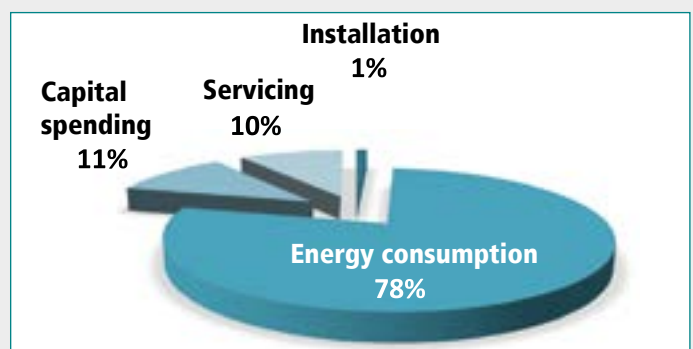
Variable speed control

Strong fluctuations of compressed air cannot be avoided in many operations. Even in such cases compressed air can be generated economically – RENNER screw compressors with variable speed control guarantee a cost efficient steady flow of compressed air. The compressor speed adapts to the actual need for compressed air with variable speed control. This guarantees economic operation; the frequency converter is integrated and firmly installed in the switch cabinet.



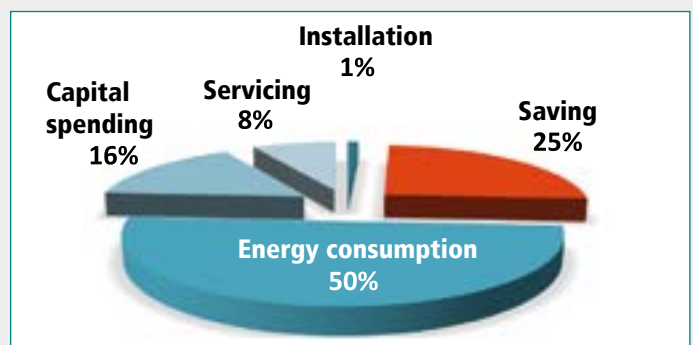
Comparing total cost after 5 years:

Fixed speed compressors:



After 5 years of operation, the energy cost usually amounts to 78% of the total cost of a conventional compressor. The only way to reduce the overall cost is to reduce the cost of energy.

RENNER's RSF compressors with variable speed control:



A RENNER RSF compressor can save up to 35% of your energy costs. This yields total savings of 25% of your compressor station and improves your overall energy balance considerably.

RENNERtronic Touch



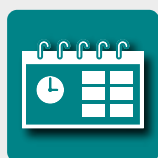
Smartphone-like operation:
Intuitively operable touchscreen on state-of-the-art technology.



Events history:
The last 50 messages are displayed including date and time.



Pressure and temperature diagram:
Extensive statistics on pressure and temperature diagrams with hourly scaling.



Scheduler with six channels:
This can be used to switch the four pressure bands, four potential-free relay contacts or the compressor.



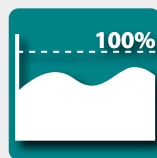
USB port:
Updates can be easily uploaded using a USB stick.



Replacing the control:
RENNERtronic Touch (4.3" touchscreen) and RENNERtronic Plus Touch (7" touchscreen) are easily interchangeable.



Service indicator:
Maintenance message will be shown when the set operating hour intervals is reached or at the latest after one year.



Display of compressor utilisation:
Recording of operating and load hours as well as the percentage load for compressors with variable speed control.



Different code levels:
Parameter access is restricted depending on the code level and the compressor is thus protected against unauthorised access.



Flexible inputs and outputs:
Freely assignable and inscribable digital inputs as well as four potential-free outputs.



Control of frequency converters:
The direct connection via RS485 bus interface eliminates the need for a separate converter display. Exchange of information in **plain text**.



! RENNERtronic Plus Touch with additional functions

The RENNERtronic Plus Touch fulfils **all the functions of the RENNERtronic Touch**. But it can do even more!



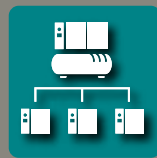
7" touchscreen:
Overview a multitude of information simultaneously and clearly.



Scheduler with eight channels:
In addition to the above-mentioned functions, priorities for Base Load Change Over can also be assigned via the scheduler.



Pressure and temperature diagram:
Extensive statistics on pressure and temperature diagrams with daily, weekly and monthly scaling.



Base Load Change Over:
The software is equipped with an extensive Base Load Change Over. This is connected via an additional interface module (Modbus). This allows you to control up to eight additional compressors. The compressors are connected with a network cable.



Optional: internal and external heat recovery.

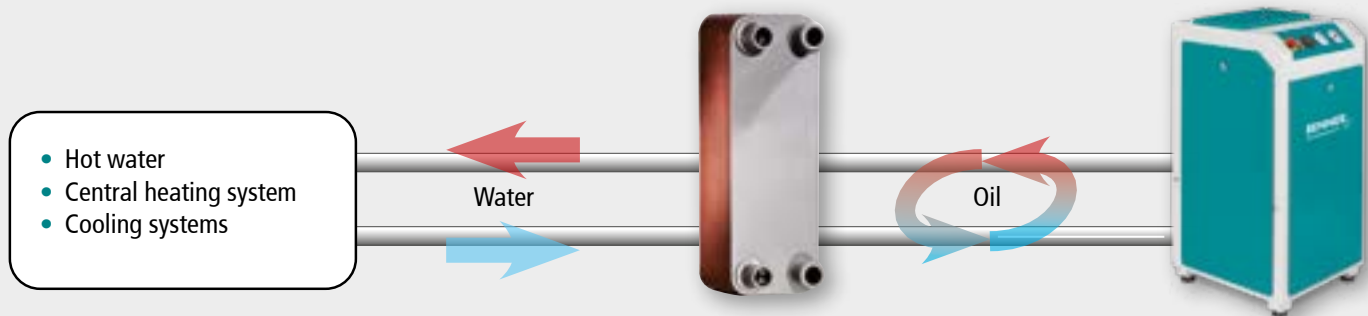
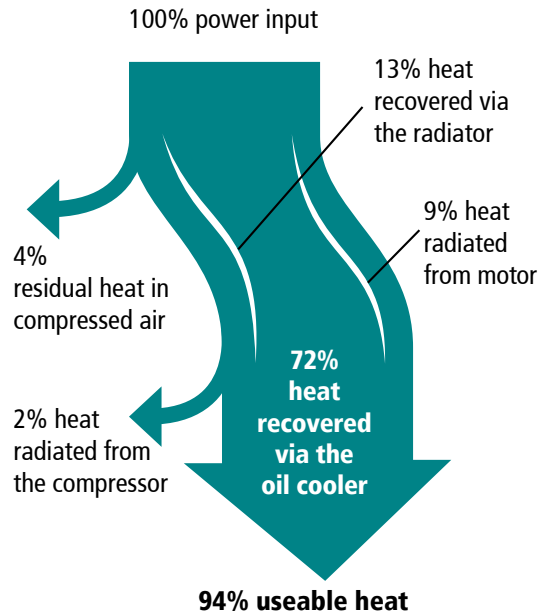


When using screw compressors, a large amount of heat is also generated in addition to the actual main product – compressed air. With RENNER heat recovery, you can regain up to 94% of the energy you have already used as heat in the form of hot air, industrial water or hot water. This makes perfect sense ecologically and saves a lot of money!

Heat recovery via plate heat exchanger: the heat exchangers feature a very simple installation, the integration into the existing water cycle is done by an installer. No external energy is required for the operation.

- For RENNER screw compressors 7.5 – 250 kW
- Standard: inlet temp. 15°C, outlet temp. 65°C (industrial water)
or
inlet temp. 35°C, outlet temp. 65°C (reflux heating)
- Other temperature ranges available on request
- Safety heat exchanger (drinking water)
- Retrofitting available on request

Useable heat with optimally matched heat recovery:



Integrated heat exchanger



External heat exchanger





Screw compressors

RS 55.0

RS 75 – 1-110 with electronic control RENNERtronic Touch

RS 55.0 – 1-110

Model	Free air delivery ⁽¹⁾								Motor power		Compressed air outlet	Noise level	Dimensions L x W x H	Weight
	7.5 bar		10 bar		13 bar		15 bar		kW	HP	inch	dB(A) ⁽²⁾	mm	kg
RS 55.0	9.55	337	8.23	291	7.05	249	6.23	220	55	74	G2	76	1754 x 1104 x 1697	1257
RS 75 ⁽³⁾	12.10	427	10.35	365	9.20	325	8.10	286	75	100	G2	76	1754 x 1104 x 1697	1367
RS 90 ⁽³⁾⁽⁴⁾	15.55	549	13.70	484	11.48	405	–	–	90	120	G2½	80	2110 x 1356 x 1936	2094
RS 1-110 ⁽³⁾⁽⁴⁾⁽⁵⁾	18.50	653	15.90	562	12.78	451	–	–	110	150	G2½	80	2110 x 1356 x 1936	2217

⁽¹⁾ according to ISO 1217 Annex C

⁽²⁾ according to Norm DIN EN ISO 2151:2009

⁽³⁾ with RENNERtronic Touch

⁽⁴⁾ with rotation direction control via phase rotation control

⁽⁵⁾ IE4 motor as standard

Options

Options	Part no.
Electronic control RENNERtronic Touch	RS 55.0
Electronic control RENNERtronic Plus Touch	RS 55.0
Electronic control RENNERtronic Plus Touch	RS 75 – 1-110
Rotation direction control via phase rotation control	RS 55.0 + 75
External motor greasing	RS 75 – 90
IE4 motor	on request
Water-cooling system	on request



Screw compressors

RSF 55.0 – 1-110

with variable speed control, pre-filter frames and electronic control RENNERtronic Touch

RSF 55.0 – 1-110

Modell	Free air delivery (REflex) ⁽¹⁾⁽²⁾								Free air delivery ⁽¹⁾				Motor power		Compressed air outlet	Noise level	Dimensions L x W x H	Weight
	min.		max. at 6 bar		max. at 8 bar		max. at 10 bar		13 bar		15 bar				inch	dB(A) ⁽³⁾	mm	kg
	m³/min	cfm	m³/min	cfm	m³/min	cfm	m³/min	cfm	m³/min	cfm	m³/min	cfm	kW	HP				
RSF 55.0	3.28	116	10.20	360	9.21	325	8.23	291	2.64-7.05	93-249	2.33-6.23	82-220	55	74	G2	76	1754 x 1104 x 1697	1297
RSF 75	4.19	148	12.83	453	11.59	409	10.35	366	3.66-9.20	129-325	3.23-8.10	114-286	75	100	G2	76	1754 x 1104 x 1697	1440
RSF 90	5.01	177	16.71	590	15.21	537	13.70	483	*	*	–	–	90	120	G2½	79	2110 x 1356 x 1936	2172
RSF 1-110 ⁽⁴⁾	5.91	209	19.72	696	17.81	629	15.90	561	*	*	–	–	110	150	G2½	78	2110 x 1356 x 1936	2297

⁽¹⁾ according to ISO 1217 Annex E

⁽²⁾ REflex function: 6 to 10 bar, continuously variable

⁽³⁾ according to DIN EN ISO 2151:2009

⁽⁴⁾ IE4 motor as standard

* on request

Options

Options	Part no.
Elektronik control RENNERtronic Plus Touch	RSF 55.0
External motor greasing	RSF 75 – 90
IE4 motor	on request
Water-cooling system	on request

COMPRESSED AIR FOR ALL APPLICATIONS



RENNER GmbH Kompressoren, a family run business established in 1994, develops and assembles economical and energy-efficient compressors. A broad range of compressed air accessories are also part of the product portfolio. The structure and size of the company ensure flexible decisions and short lead times, thus providing optimal focus on the requirements of the customers.

THE RENNER MANUFACTURING AND SUPPLY PROGRAMME:

We can supply you with the right compressor for any application – guaranteed.

SCREW COMPRESSORS:

- From 2.2 to 355 kW
- Up to 40 bar, e.g. for manufacture of PET bottles
- Compact systems with air receiver, refrigeration dryer, and variable speed control
- Heat exchanger integrated or as an external box
- Special applications: gas compression, operation of drilling devices, rail, and special-purpose vehicles
- Customized models designed to customer specifications

OIL-FREE COMPRESSORS:

- SCROLL compressors for oil-free compressed air from 1.5 to 30.0 kW
- Water-injected screw compressors for oil-free compressed air in breathing air quality from 18.5 to 120 kW



PISTON COMPRESSORS:

- From 1.5 to 11.0 kW
- Stationary or mobile, with or without sound insulation

CONTROL SYSTEMS:

- Compressor control systems
- Superordinate control systems
- State-of-the-art web server monitoring



COMPRESSED AIR ACCESSORIES:

- Air filters, air receivers, refrigeration dryers, adsorption dryers, condensate drains, and oil-water-separators

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DIN EN ISO 9001
REG.-NR. Q1 0205013

