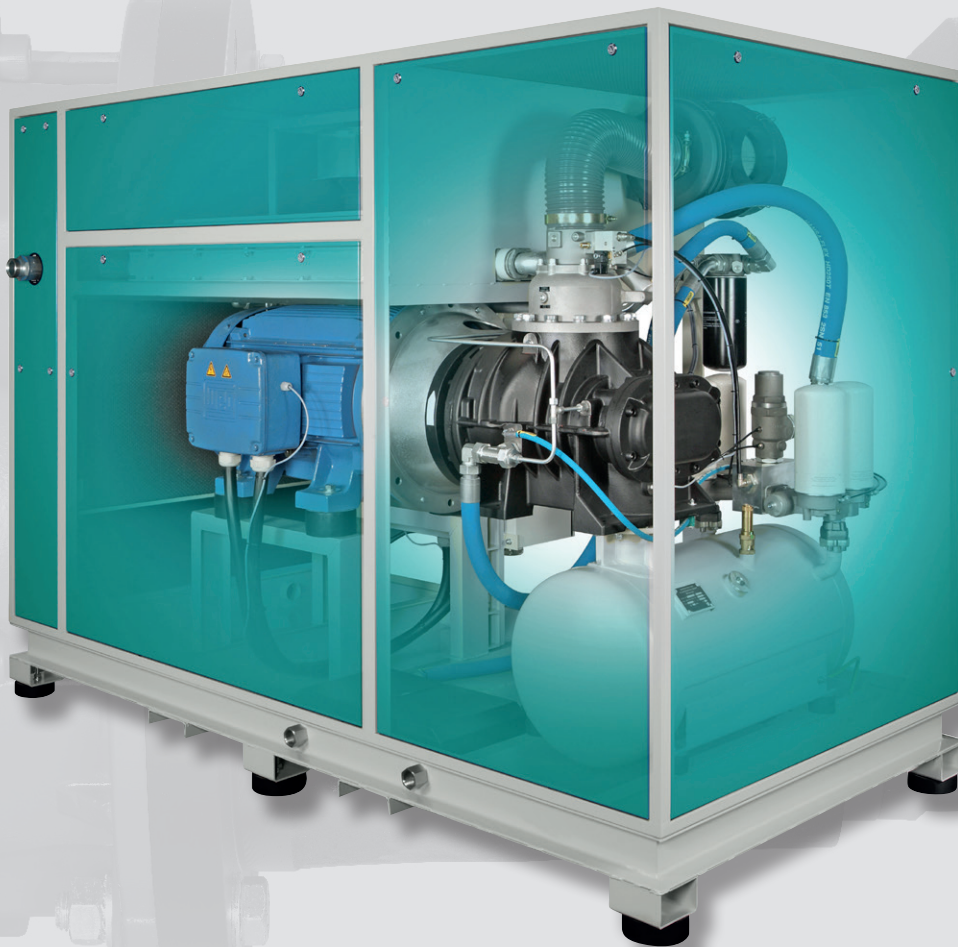


**Screw compressors**

**RS 132 – 315 D / RS 355 DW**  
**RSF 110 – 315 D / RSF 355 DW**  
with direct drive

 Made in  
Germany



**Motor power: 110 – 355 kW**





## RENNER GmbH Kompressoren – success rooted in tradition.

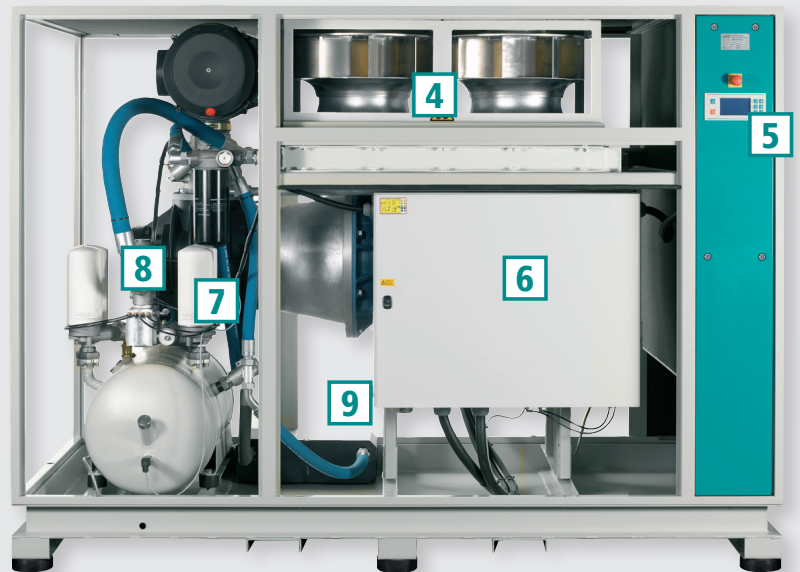
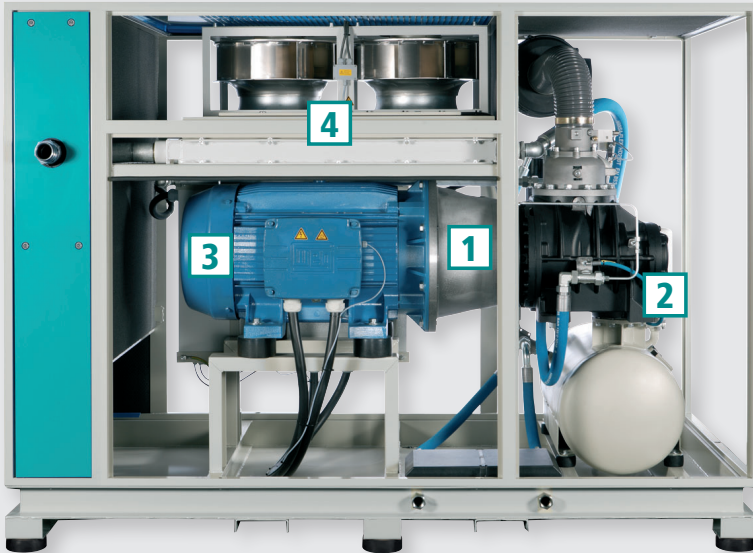
RENNER GmbH Kompressoren have been known for reliable compressed air for 25 years. As a family owned business with fast decision-making processes, we set the benchmarks in developing, manufacturing and selling efficient screw compressors and complete compressed air stations.

RENNER has more than 160 employees to provide you with first-class technical advice, robust compressor engineering, and reliable service in virtually more than one hundred countries. We offer fast maintenance services in Germany and all over the world through our large distributor network. You can rely on the high quality standards of our oil-injected screw compressors as well as in the segments of oil-free compressed air and piston compressors. We are proud to assist you as a competent sales and service partner worldwide!



## RENNER – the expert in screw compressors.

Easy removable service panels ensure excellent accessibility to all control- and maintenance-related components.



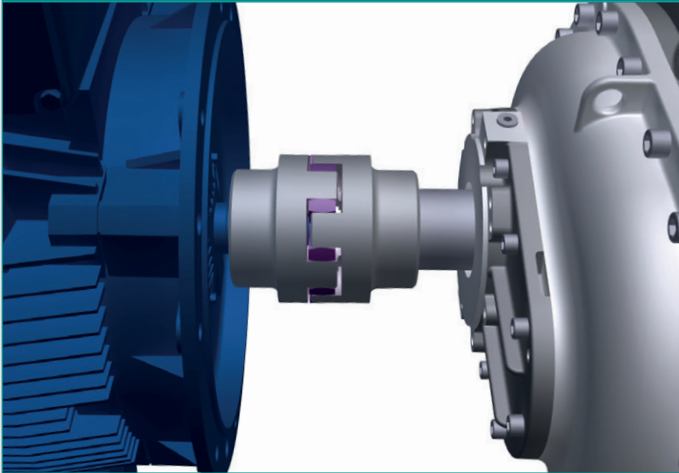
- 1** Direct drive – soft start, almost zero loss power transmission
- 2** Air end – efficient and effective to the highest standards
- 3** Electric motor – economical and robust
- 4** Cooler unit – large surface area, highest performance and effectiveness for quieter running
- 5** Electronic control – intelligent, fast response with full digital monitoring (two variants possible)
- 6** Control cabinet – optionally with integrated, energy saving frequency converter
- 7** Separation system – guarantees consistent compressed air quality
- 8** Oil circuit – works efficiently with long maintenance intervals
- 9** Plate heat exchanger – innovative and economic heat recovery

**RENNER compressors – easy installation and cost-efficient maintenance.**



## RENNER direct driven compressors in detail

### Drives and electrics



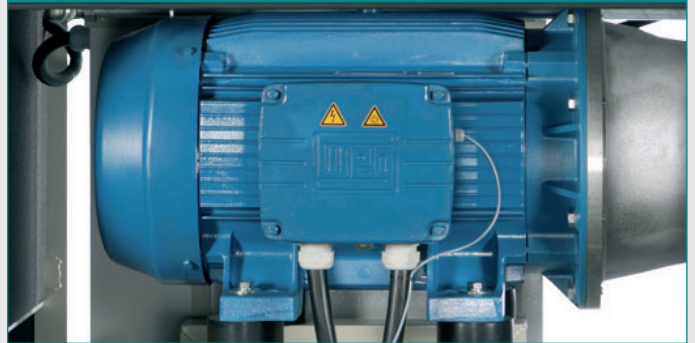
Direct-drive – the compressor block is directly connected to the drive motor. The almost loss-free power transmission guarantees reliable, high-performance compressor operation. The regular maintenance requirement is reduced to lubrication of the motor. All the electronic components are brand products of leading manufacturers. The control cabinet is integrated in the system and is situated in the cooled-off air flow. All machines are equipped with the electronic RENNERtronic control as standard or optionally with the RENNERtronic Plus.

### Air end block – reliable centrepiece



The centrepiece of the compressor is the air end, which is constructed and manufactured with the most modern production methods in Germany. The optimal air end for your compressor can be used on a modulating basis. In units with variable speed control, where the operating pressure changes, adjustments can also be made on the frequency converter to optimally adjust the speed of the compressor to the compressor performance. The unit is thus precisely designed to the customer's compressed air requirements and power is used economically.

### Electric motor



Only electric motors from well-known manufacturers of protection class IP55 are used. As a standard, the drive motors are monitored and proven both thermally (via the thermistor of the motor) as well as electronically (overload protection via the frequency converter). The load on the motor is reduced on starting and during operations due to the direct drive combined with a high quality, maintenance-free shaft coupling with a modern isolating element. The drive motors of compressors with variable speed control are equipped with antistatic bearing shields as standard.

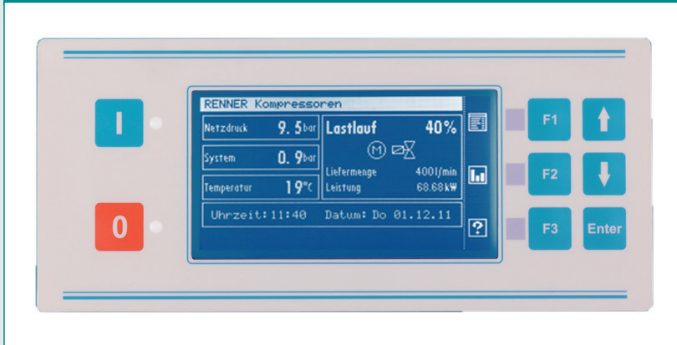
### Cooler unit



Compressors up to 160 kW are equipped with two parallel radial fans with a high residual thrust. Compared to a traditional cooling system, the radial fans require less drive energy and operate quietly and powerfully. RENNER compressors with more than 160 kW are equipped with an effective axial fan. Variable speed control is optionally available. When it comes to conception and design, we work closely with German fan manufacturers for the best cooling air flow and vibration-free operation. The units can be optionally equipped with air inlet filter mats for applications with a high level of ambient dust exposure. With generously sized oil and compressed air aftercoolers as well as integrated oil temperature control, the units run perfectly even at high ambient temperatures. The compressors can be operated with open doors without overheating.

## RENNER direct driven compressors in detail

### Control

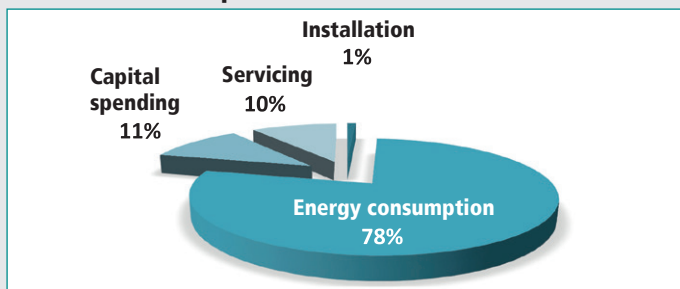


Compressed air supply must be reliable and economical. This is guaranteed with an intelligent control both for single compressors as well as for RENNER compressed air stations. Compressors of other manufacturers can also be connected to our controls. Please see page 7 for detailed information on the controls.

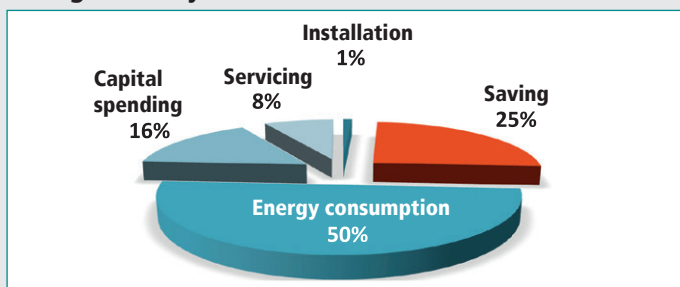
### Frequency converters (optional)

The frequency converter minimises idle times and optimises supply with fluctuating compressed air requirements. Start-up peaks are avoided and the compressor's delivery rate is controlled continuously – that saves electricity costs! The total costs for your compressed air supply are significantly reduced and investment costs are amortised in the shortest possible time.

### Conventional compressor station:



### Savings after 5 years:



### Oil separation system



Compressors up to 160 kW are equipped with external separators which can be changed in a simple spin-off/spin-on process. Larger units have an internal separator cartridge. Due to the excellent separation efficiency of the system as a whole, the compressors can be used in the pressure range of 5.0 to 15.0 bar. Special pressures on request.

### Oil circuit



The amount of oil in the units is determined in such a way as to extend the oil change intervals (depending on ambient conditions). An oil level sensor is integrated as standard and is read by the controller. All the units in this series have a horizontal oil separation vessel in which the oil is separated from the compressed air highly efficiently at low speeds. The large surface area of the oil in a horizontal oil separation vessel is a major factor in the prevention of foam build-up.

## Optional: internal and external heat recovery.

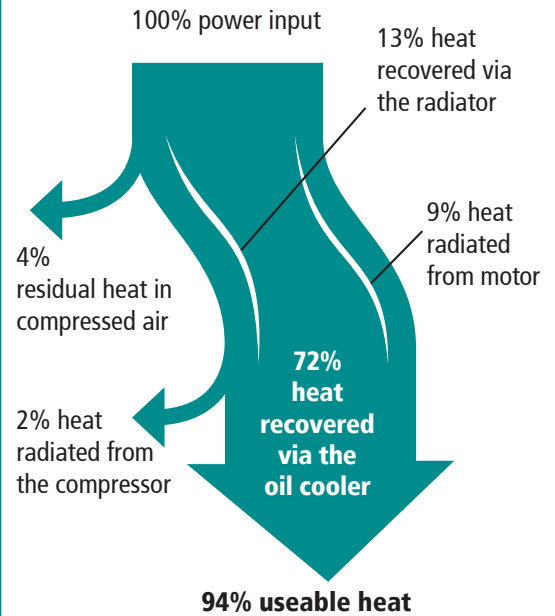


When using screw compressors, a large amount of heat is also generated in addition to the actual main product – compressed air. With RENNER heat recovery, you can regain up to 94% of the energy you have already used as heat in the form of hot air, industrial water or hot water. This makes perfect sense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

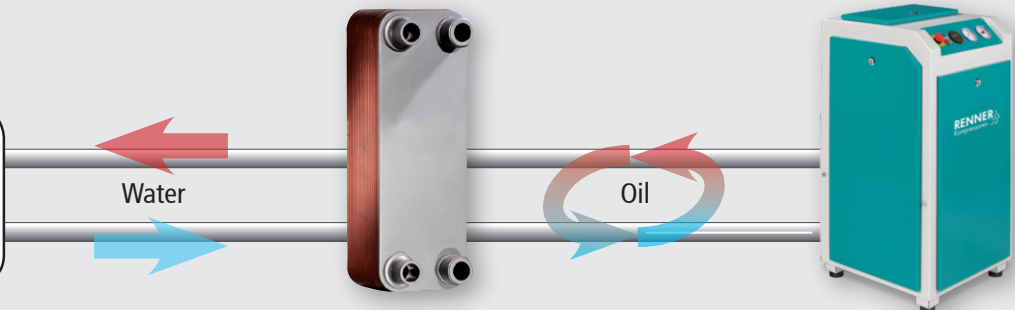
Heat recovery via plate heat exchanger: the heat exchangers feature a very simple installation, the integration into the existing water cycle is done by an installer. No external energy is required for the operation.

- 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:



- hot water
- central heating system
- cooling systems



## Integrated heat exchanger

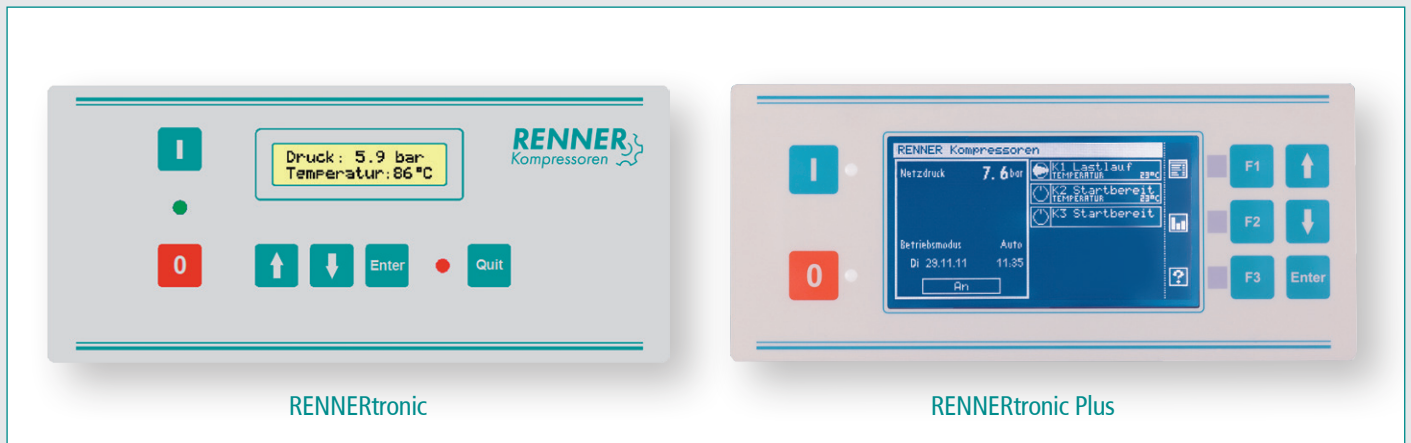


## External heat exchanger





## RENNER compressor controls – for more safety and lower costs



### Performance characteristics of the RENNERtronic

(standard for all compressor types RS 132 – 315 D / RS 355 DW and RSF 110 – 315 D / RSF 355 DW)

The display of the RENNERtronic always provides information on the current network pressure, the oil temperature and the operating mode. The logical menu structure simplifies handling even for novice users. Individual adjustments, e.g. starting and stop pressures, can be carried out easily.

### Besides the basic functions for controlling compressors, the control has the following features:

- pressure sensor-controlled pressure regulation with two individually adjustable pressure bands
- protection of controls with various code levels
- operating and load hours recording
- displays remaining time until the next service
- Timeous plain text messages of upcoming maintenance intervals (100 operating hours before service is due). Different intervals can be programmed for the different components.
- event log of the last 10 events stating the respective operating hour
- immediate switch-off in the event of relevant faults (e.g. excess current), soft switch-off for faults irrelevant to the compressor (e.g. refrigerant dryer has iced over)
- 3 freely assignable digital inputs with 26 selectable functions
- 2 freely assignable potential-free contacts with 15 selectable functions
- 1 free analogue input for optional monitoring of system pressure
- integrated automatic re-start (not activated ex factory)
- integrated speed control function for frequency converter
- integrated base load change over (BLCO) for controlling up to 4 additional compressors
- RS485 interface for:
  - connecting optional BLCO module for controlling 4 compressors
  - connecting optional I/O extension module with 8 additional digital inputs and 4 additional voltage-free outputs
  - direct connection to RENNERconnect, RENNERcontrol or as a slave unit to the RENNERtronic Plus
  - connecting the update device for updating firmware

### The RENNERtronic Plus offers the following additional advantages

(optionally available for all compressor types RS 132 – 315 D / RS 355 DW and RSF 110 – 315 D / RSF 355 DW)

- even better overview of information due to a large full graphic display with additional display of flow and power consumption
- numerous statistical analyses displayed graphically
- integrated real-time clock with 7 timer channels
- system pressure monitoring as standard
- when using the BLCO function, up to 4 slave compressors can be connected via the RS485 interface
- connecting optional Profibus DP module
- integrated Modbus interface (requires additional software update)
- 9 freely assignable digital inputs with 39 selectable functions
- 4 freely assignable potential-free contacts with 28 selectable functions

## RENNERconnect with 7" touchscreen

Does your compressed air station work economically? RENNERconnect is a higher level, intelligent control system for optimal management and monitoring of your compressed air station. RENNERconnect contributes to efficiency and is highly reliable. Intelligent, air-demand based connection of the compressors provides not only a high energy savings potential, but also ensures increased operational reliability of your compressors. The control can be operated intuitively and safely via the integrated touchscreen.

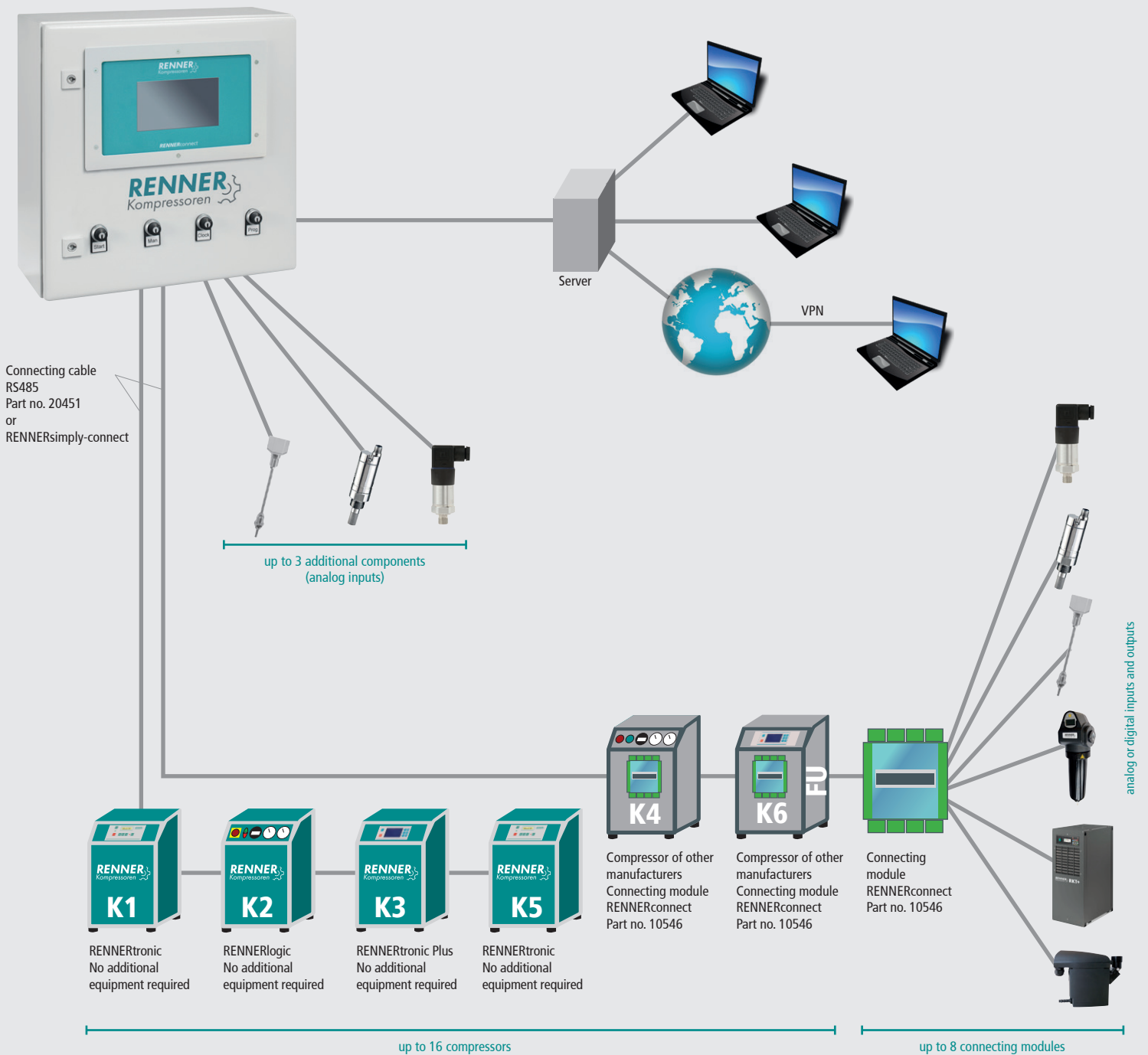
### Connectivity:

#### RENNERconnect

Part no. 14873

17489

14874





## Features of the RENNERconnect:

- 1) Regardless of the compressor type, up to 16 compressors can be controlled:
    - RENNER compressors
    - compressors of other manufacturers
    - standard compressors with load and no-load control
  - 2) All compressors operate in a common, narrow pressure band, which means:
    - all compressors are activated at the same switch on/off pressure
    - pressure band can be reduced to a minimum
    - high potential for energy savings, as pressure can be reduced maximally
    - older compressor stations can be operated more economically
  - 3) All compressors are connected via RS485-bus-system.
  - 4) RENNERconnect can connect to various additional components in your compressor room and monitor them (e.g. dryer, drain, dew point sensor, flow sensor, additional pressure sensors).
  - 5) DIN ISO 50001: The control system can be used as energy management tool according to DIN ISO 50001 (section 4.6.1. monitoring, measurement, analysis). Contact us, we gladly provide you with information!
- extremely low switching frequency (extends the service life of all mechanical components of the compressors)
  - particularly low energy cost due to constant calculation of air consumption which ensures an efficient use of compressor capacity

## Advantages of RENNERconnect

- Compressors with RENNERtronic, RENNERtronic Plus or RENNERlogic can be directly connected to RENNERconnect.
- Compressors of other manufacturers can be connected by simply applying a compact connecting module.
- Maximum energy savings (up to 40%) by avoiding expensive idle time and load / unload switching cycles, pressure optimization by 4 adjustable pressure bands and by reduction of maximum pressure.
- At least doubles the service life of suction controls, air ends, contactors and motors!  
The service cost corresponds to the actual load times.
- RENNERconnect matches the use of the compressors automatically with the demand for compressed air in order to generate just the right amount needed for production.

## Industry 4.0

Connect your central control system via modbus with RENNER compressors and benefit from extensive possibilities of network data exchange in real time. Whether you want to focus on status monitoring, look at fault reports, or retrieve service messages, all information is available and ready to be gathered. Communication interfaces of the control systems are used between the individual RENNER compressors and secure full access as well as full control of the compressed air station.

Intelligent interconnectedness of the components enables communication between compressed air production, air treatment as well as their optimal adjustment to achieve maximum efficiency.



## Screw compressors

RS 132 – 315 D / RS 355 DW direct drive  
with electronic control RENNERtronic

### RS 132 – 315 D / RS 355 DW

Model	Free air delivery m <sup>3</sup> /min <sup>(1)</sup>								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				
	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm			inch / DIN-flange	dB(A) <sup>(2)</sup>	mm	kg
RS 132 D	23.61	834	20.43	721	16.15	570	15.10 <sup>(3)</sup>	533 <sup>(3)</sup>	132	180	G2½	79	2830 x 1460 x 2226 <sup>(4)</sup>	3150
RS 160 D	27.95 <sup>(3)</sup>	987 <sup>(3)</sup>	25.04	884	19.52 <sup>(3)</sup>	689 <sup>(3)</sup>	18.82 <sup>(3)</sup>	664 <sup>(3)</sup>	160	220	G2½	79	2830 x 1460 x 2226 <sup>(4)</sup>	3180
RS 185 D	31.70 <sup>(3)</sup>	1119 <sup>(3)</sup>	27.67 <sup>(3)</sup>	977 <sup>(3)</sup>	22.89 <sup>(3)</sup>	808 <sup>(3)</sup>	22.06	779	185	250	DN 100	84	3500 x 2100 x 2270	4700
RS 200 D	35.75 <sup>(3)</sup>	1262 <sup>(3)</sup>	31.33 <sup>(3)</sup>	1106 <sup>(3)</sup>	–	–	–	–	200	270	DN 100	84	3500 x 2100 x 2270	4900
RS 220 D	–	–	–	–	28.80 <sup>(3)</sup>	1017 <sup>(3)</sup>	25.54 <sup>(3)</sup>	902 <sup>(3)</sup>	220	300	DN 100	84	3500 x 2100 x 2270	4950
RS 250 D	44.42	1568	35.80 <sup>(3)</sup>	1264 <sup>(3)</sup>	30.14 <sup>(3)</sup>	1064 <sup>(3)</sup>	29.00 <sup>(3)</sup>	1024 <sup>(3)</sup>	250	340	DN 100	84	3500 x 2100 x 2270	5100
RS 280 D	49.96 <sup>(3)</sup>	1764 <sup>(3)</sup>	44.35	1566	34.15 <sup>(2)</sup>	1205 <sup>(3)</sup>	29.91	1056	280	380	DN 150	84	3500 x 2100 x 2292	5500
RS 315 D	50.94 <sup>(3)</sup>	1799 <sup>(3)</sup>	44.55	1573	38.90 <sup>(3)</sup>	1373 <sup>(3)</sup>	33.77 <sup>(3)</sup>	1192 <sup>(3)</sup>	315	420	DN 150	84	3500 x 2100 x 2292	5600
RS 355 DW	–	–	50.10 <sup>(3)</sup>	1769 <sup>(3)</sup>	43.56 <sup>(3)</sup>	1538 <sup>(3)</sup>	38.53 <sup>(3)</sup>	1360 <sup>(3)</sup>	355	480	DN 150	86	3500 x 2100 x 2292	6200

<sup>(1)</sup> according to ISO 1217 Annex C  
W = water-cooled

<sup>(2)</sup> according to DIN EN ISO 2151:2009

<sup>(3)</sup> with gearbox

<sup>(4)</sup> available at a height of 1988 mm for an additional charge

Options	Part no.
Electronic control RENNERtronic Plus	05591
Intake air filters for RS 132 – 160 D (not retrofittable)	15153
Intake air filters for RS 200 – 315 D / RS 355 DW (not retrofittable)	15154
Ball valve 2", PN16	10513
Ball valve 2½", PN16	10526
Ball valve DN100, PN16	19959
Ball valve DN150, PN16	06446
Flange expansion joints DN100, PN16 at compressed air outlet (for tension reduction and vibration damping in tubes)	00122
Flange expansion joints DN150, PN16 at compressed air outlet (for tension reduction and vibration damping in tubes)	00123
IE4 motor	on request
Standstill heating – additional heater 2.2 kW, 230 V / 50 Hz, IP54, for all types, controllable (from 280 kW – 2 pc. required)	00124
Tropical-modification up to 47°C ambient temperature	on request
Water-cooling system	on request
Heat recovery	on request
Packaging	on request





## Screw compressors

RSF 110 – 315 D / RSF 355 DW direct drive  
with variable speed control and electronic control RENNERtronic

### RSF 110 – 315 D / RSF 355 DW

Model	Free air delivery (REflex) <sup>(1)(2)</sup>												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		max. at 13 bar		max. at 15 bar		kW	HP	inch / DIN-flange	dB(A) <sup>(3)</sup>	mm	kg
	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm	m <sup>3</sup> /min	cfm						
RSF 110 D – 6-8 bar	5.00	176	20.1	729	18.0	653	–	–	–	–	–	–	110	150	G2	79	2830 x 1460 x 2226 <sup>(3)</sup>	2950
RSF 110 D – 6-15 bar	3.85	139	17.8	646	17.8	646	16.1	586	14.0	508	12.9	468	110	150	G2	79	2830 x 1460 x 2226 <sup>(3)</sup>	2950
RSF 132 D – 6-10 bar	5.90	214	25.7	932	22.9	831	20.4	720	–	–	–	–	132	180	G2½	79	2830 x 1460 x 2226 <sup>(3)</sup>	3210
RSF 132 D – 6-13 bar	5.00	176	21.2	769	21.1	766	19.2	696	16.2	588	–	–	132	180	G2½	79	2830 x 1460 x 2226 <sup>(3)</sup>	3210
RSF 132 D – 6-15 bar	3.85	139	16.5	598	16.4	595	16.3	591	16.1	586	15.5	547	132	180	G2½	79	2830 x 1460 x 2226 <sup>(3)</sup>	3210
RSF 160 D – 6-13 bar	5.90	214	28.1	1020	26.9	976	25.0	884	20.0	726	–	–	160	220	G2½	79	2830 x 1460 x 2226 <sup>(3)</sup>	3650
RSF 160 D – 6-15 bar	5.90	214	30.0	1089	26.9	976	25.1	911	21.1	765	19.6	692	160	220	G2½	79	2830 x 1460 x 2226 <sup>(3)</sup>	3650
RSF 200 D – 6-13 bar	5.60	203	39.3	1426	34.4	1248	31.3	1136	24.3	882	–	–	200	270	DN 100	84	3500 x 2100 x 2270	5120
RSF 200 D – 6-15 bar	5.90	214	31.8	1154	31.3	1136	28.8	1045	25.1	911	23.3	823	200	270	DN 100	84	3500 x 2100 x 2270	5120
RSF 250 D – 6-10 bar	11.80	428	49.3	1789	44.5	1615	37.9	1375	–	–	–	–	250	340	DN 100	84	3500 x 2100 x 2270	5530
RSF 250 D – 6-15 bar	5.60	203	39.7	1441	39.2	1422	37.9	1375	31.2	1132	27.9	1012	250	340	DN 100	84	3500 x 2100 x 2270	5530
RSF 315 D – 6-13 bar	11.80	428	56.1	2036	54.0	1960	46.9	1702	40.2	1459	–	–	315	420	DN 150	84	3500 x 2100 x 2292	5700
RSF 315 D – 6-15 bar	10.30	373	43.0	1560	42.9	1557	42.8	1553	39.2	1422	36.0	1306	315	420	DN 150	84	3500 x 2100 x 2292	5700
RSF 355 DW – 6-13 bar	11.80	428	–	–	–	–	52.2	1894	44.3	1608	–	–	355	480	DN 150	86	*	*
RSF 355 DW – 13-15 bar	10.30	373	–	–	–	–	–	–	42.7	1550	39.6	1437	355	480	DN 150	86	*	*

<sup>(1)</sup> according to ISO 1217 Annex E    <sup>(2)</sup> REflex function: pressure range continuously variable    <sup>(3)</sup> available at a height of 1988 mm for an additional charge    \* on request    W = water-cooled

Options	Part no.
Electronic control RENNERtronic Plus	05591
Intake air filters for RSF 110 – 160 D (not retrofittable)	15153
Intake air filters for RSF 200 – 315 D / RSF 355 DW (not retrofittable)	15154
Ball valve 2", PN16	10513
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Permanent magnet motor (PM-motor)	on request
IE4 motor	on request
Standstill heating – additional heater 2.2 kW, 230 V / 50 Hz, IP54, for all types, controllable (from 280 kW – 2 pc. required)	00124
Tropical-modification up to 47°C ambient temperature	on request
Water-cooling system	on request
Heat recovery	on request
Packaging	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

 Industry 4.0

#### COMPRESSED AIR ACCESSORIES:

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

Your RENNER distributor:

### RENNER GmbH · Kompressoren

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DIN EN ISO 9001  
REG.-NR. Q1 0205013

