1994 - 2014
20 Jahre
Druckluft, die bewegt!

RENNER Kompressoren

RENNER – The expert in screw compressors

RS-D and RSF-D series with direct drive

Made in Germany

All compressors available with frequency control!

Motor size: 95 – 355 kW

The company – reliable and dynamic!

As a dynamic, medium-sized family run company, RENNER GmbH has specialised in the development and production of screw compressors for demanding compressed air users since 1994. A qualified team works permanently on expanding and optimising the wide range of products. Customer benefits and market demands are the focus of our attention. Details such as economy, energy efficiency, environmental protection and maintenance friendliness are of highest priority. This also applies to the RS-D series.

Made in Germany

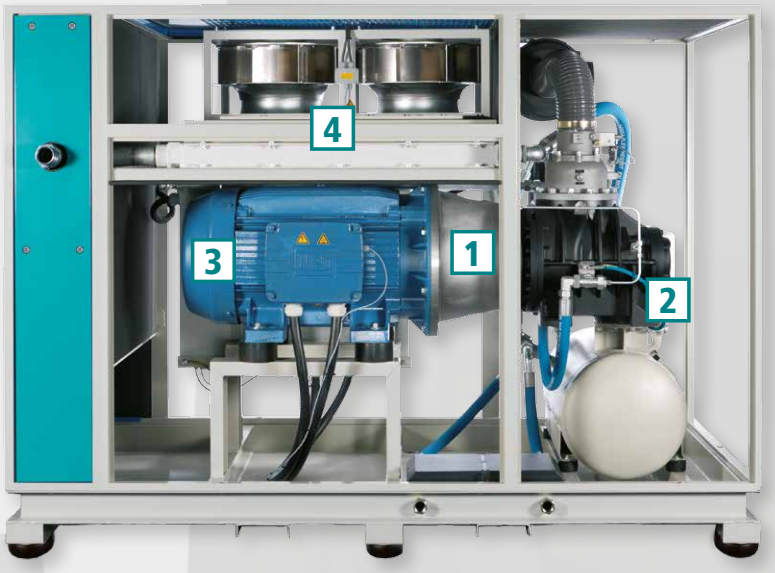
RENNER has the highest requirements for economic and sustainable compressed air generation. Competent technical advisers are responsible for planning optimally designed compressed air stations – individually customised to the requirements of each individual customer. A high level of product quality and fast response of the RENNER sales and service organisation for repairs and spare parts requirements guarantee the best possible operational safety. Worldwide!

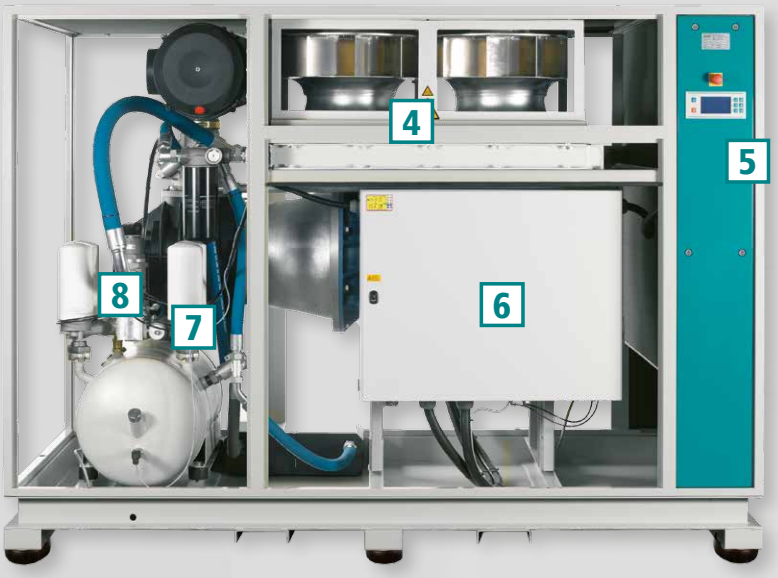
RENNER - one of the best in compressors!

RENNER Kompressoren

RENNER – The expert in screw compressors

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





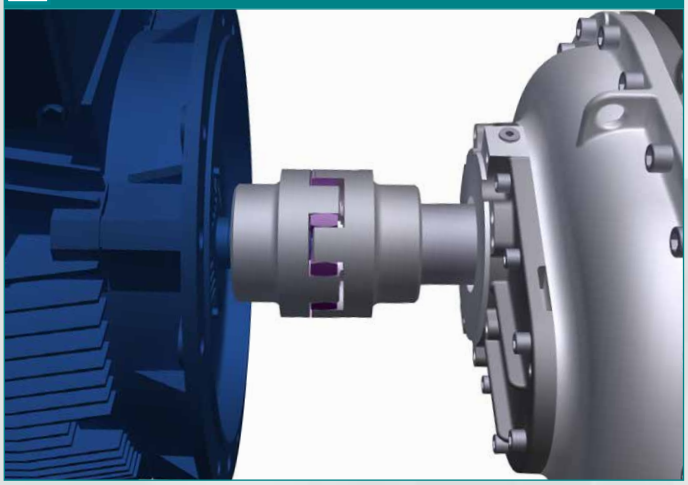
1. Direct drive – soft start, almost zero loss power transmission
2. Air end – efficient and effective to the highest standards
3. Electric motor – economical and robust
4. Cooler unit – large surface area, highest performance and effectiveness for quieter running
5. Electronic control – intelligent,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

RENNER compressors – easy installation and cost-efficient maintenance.

RS 95 D – RS 355 D: RENNER direct driven compressors in detail:

What has the direct-drive series got to offer over and above the time-honoured RENNER design features? An innovative, user-friendly concept totally geared to performance and economy.

1 Drives and electrics

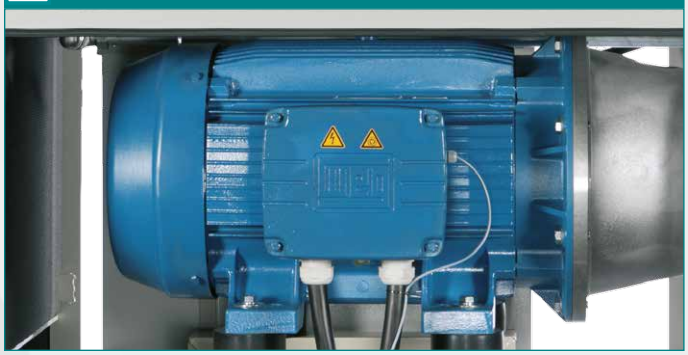


Direct-drive – the compressor block is directly connected to the drive motor. The almost loss-free power transmission guarantees reliable, high-performance compressor operation. The regular maintenance requirement is reduced to lubrication of the motor. All the electronic components are brand products 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.

2 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 frequency-controlled units, 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.

3 Electric motor



Only electric motors from well-known manufacturers of protection class IP55 are used. As a standard, the drive motors are monitored 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 frequency-controlled compressors are equipped with antistatic bearing shields as standard.

4 Cooler unit

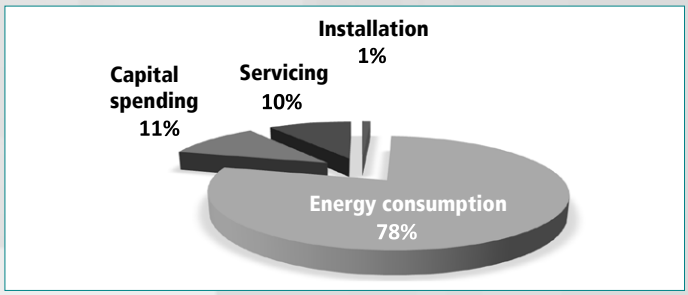
Compressors in the RS 95 D - RS 160 D series are equipped with two parallel radial fans with a high residual thrust. Compared to a traditional cooling system, the radial fans require less drive energy and operate quietly and powerfully. RENNER compressors with more than 160 kW are equipped with an effective axial fan. Frequency 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.

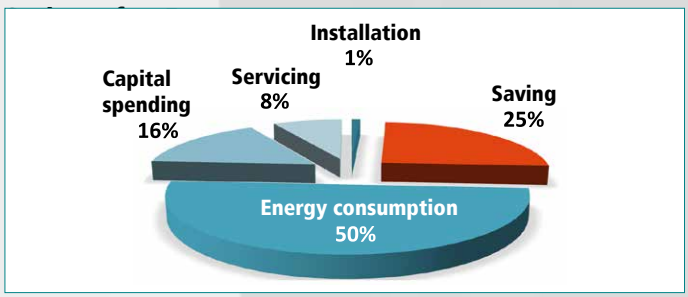
5 Control

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. Non-RENNER compressors can also be connected to our controls. Please see next page for detailed information on the controls.

6 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.





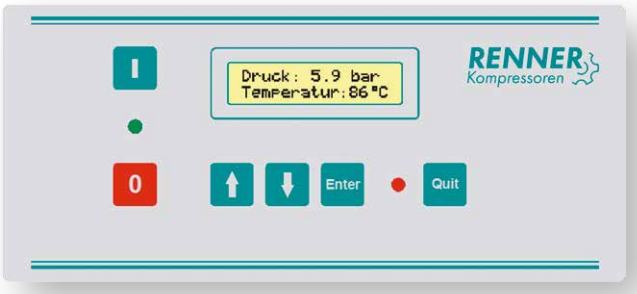
7 Oil separation system

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.

8 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.

RENNER compressor controls – for more safety and lower costs



RENNERtronic

RENNERtronic Plus

Performance characteristics of the RENNERtronic (standard for all compressor types RS 95 D – RS 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
  - connecting optional Profibus DP module
  - direct connection to RENNER interconnected intelligent control system or as a slave unit to the RENNERtronic Plus
  - connecting the update device for updating firmware
- Service and fault messages via SMS to up to 4 programmable mobile phone numbers (optional)

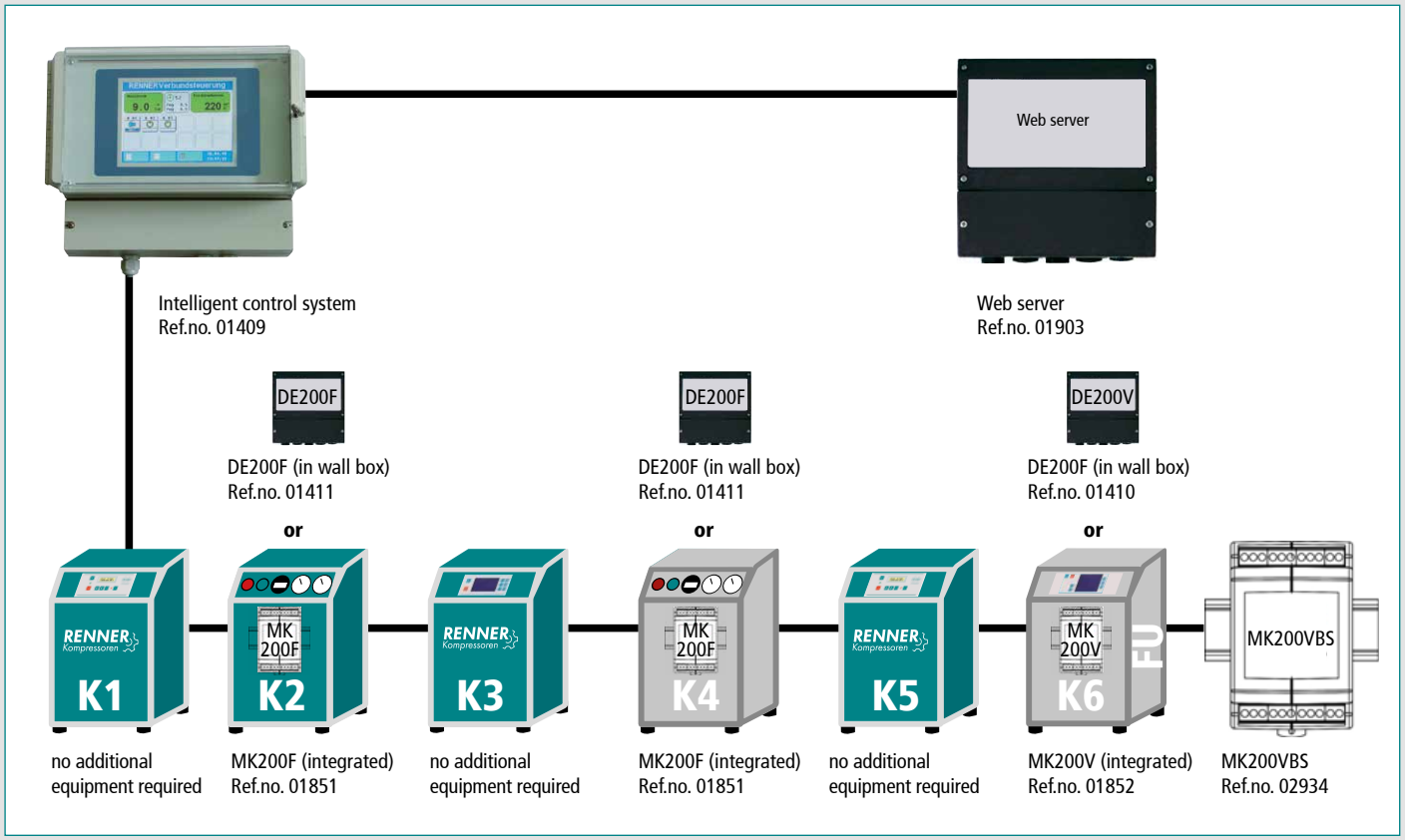
The RENNERtronic Plus offers the following additional advantages (optionally available for all compressor types RS 95 D – RS 355 DW)

- 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 2 slave compressors can be connected without requiring an additional module as well as up to 4 compressors with RENNERtronic or RENNERtronic Plus controls via the RS485 interface
- 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

RENNER interconnected intelligent control system

Use your compressed air station economically! RENNER's interconnected intelligent control system is a higher level, intelligent control for the optimal management and monitoring of your compressed air station.

RENNER's interconnected intelligent control system facilitates the reliable and economical operation of your compressor. By connecting your compressors intelligently and based on consumption, you will not only exploit major energy saving potentials but your machines will also be more reliable. The display has a touch screen and is easy to operate. All information is displayed in plain text.



Performance characteristics/special features of the RENNER interconnected intelligent control system:

1) Controls up to 12 compressors irrespective of the machine type:
   - RENNER compressors
   - Non-RENNER compressors
   - Standard compressors with load/idle cycle control
   - Speed-controlled or fixed speed compressors
   - Piston or screw compressors

2) All compressors operate in one common, narrow pressure band. This means:
   - Same switch on and off points for all compressors
   - Pressure band can be reduced to a minimum
   - High energy savings due to maximum pressure reduction
   - Older compressors also become more economical in next to no time

Model	Description
Intelligent control system	control unit for up to twelve compressors incl. pressure sensor
MK 200 F	additional module for non-RENNER compressors and RENNER standard compressors
MK 200 V	additional module for variable speed non-RENNER compressors
DE 200 F	additional module for wall mounting for fixed speed compressors and RENNER standard compressors
DE 200 V	additional module for wall mounting for frequency-controlled non-RENNER compressors
MK 200 VBS	additional inputs and outputs for the RENNER interconnected intelligent control system

RENNER Kompressoren

► RENNER direct driven compressors

RS 95 D – 355 DW direct drive
RSF 110 D – 355 DW direct drive, with variable speed control
all with electronic control RENNERtronic

RS 95 – 315 D / RS 355 DW / RSF 110 – 315 D / RSF 355 DW

Model	Free air delivery								Motor power		Compressed air outlet	Dimensions L x W x H	Weight
	7,5 bar		10 bar		13 bar		15 bar						
	m³/min	cfm	m³/min	cfm	m³/min	cfm	m³/min	cfm	kW	HP	inch / DIN flange	mm	kg
RS 95 D	16.64	588	14.52(1)	513	12.24	432	*	*	95	130	G2	2830x1460x2226(2)	2750
RS 110 D	19.10(1)	675	16.60	586	14.39(1)	508	*	*	110	150	G2	2830x1460x2226(2)	2800
RS 132 D	23.61	834	20.43(1)	721	16.15	570	*	*	132	180	G2½	2830x1460x2226(2)	3150
RS 160 D	27.95(1)	987	25.04(1)	884	19.52(1)	689	*	*	160	220	G2½	2830x1460x2226(2)	3180
RS 200 D	35.75(1)	1262	31.33(1)	1106	*	*	*	*	200	270	DN 100	3500x2100x2270	4900
RS 250 D	44.42	1568	35.80(1)	1264	30.14(1)	1064	*	*	250	340	DN 100	3500x2100x2270	5100
RS 280 D	49.22(1)	1738	44.35	1566	34.06(1)	1203	*	*	280	380	DN 150	3500x2100x2270	5210
RS 315 D	50.70(1)	1790	44.55	1573	38.90(1)	1373	*	*	315	420	DN 150	3500x2100x2270	5600
RS 355 DW	–	–	50.10(1)	1769	43.56	1538	*	*	355	480	DN 150	*	*
RSF 110 D	5.73-19.10	202-674	4.98-16.60	176-586	*	*	*	*	110	150	G2	2830x1460x2226(2)	2950
RSF 132 D	7.08-23.61	250-834	6.13-20.43	216-721	4.85-16.15	171-570	*	*	132	180	G2½	2830x1460x2226(2)	3210
RSF 160 D	8.39-27.95	296-987	7.52-25.04	266-884	9.59-20.01	338-706	*	*	160	220	G2½	2830x1460x2226(2)	3650
RSF 200 D	14.57-36.42	515-1286	12.54-31.33	443-1106	8.37-24.30	296-858	*	*	200	270	DN 100	3500x2100x2270	5330
RSF 250 D	18.00-45.00	782-1955	15.15-37.87	535-1337	8.37-31.05	296-1096	*	*	250	340	DN 100	3500x2100x2270	5530
RSF 315 D	22.16-55.38	636-1589	18.78-46.95	663-1658	18.80-40.50	664-1430	*	*	315	420	DN 150	3500x2100x2270	5700
RSF 355 DW	–	–	20.89-52.21	738-1844	18.80-44.30	664-1564	*	*	355	480	DN 150	*	*

(1) with gear (2) also available in 1988mm height
*upon request W = water cooled

We reserve the right for technical modification.

We have the right accessories for a wide range of applications: compressed air filters, air receivers, refrigeration dryers, adsorption dryers, condensate drains and oil/water separation systems

Optional extras:
Internal/external heat recovery
RENNERtronic Plus
Explosion protected
Special voltages
Special models

Innovative and energy saving: heat recovery

When using screw compressors, a large amount of heat is generated in addition to the desired main product – compressed air. RENNER has developed a heat recovery system for you. With RENNER's heat recovery technology, you can recover up to 85% of the energy you have already used as heat in the form of hot air, industrial water or hot water. This makes ecological sense and saves a great deal of money!

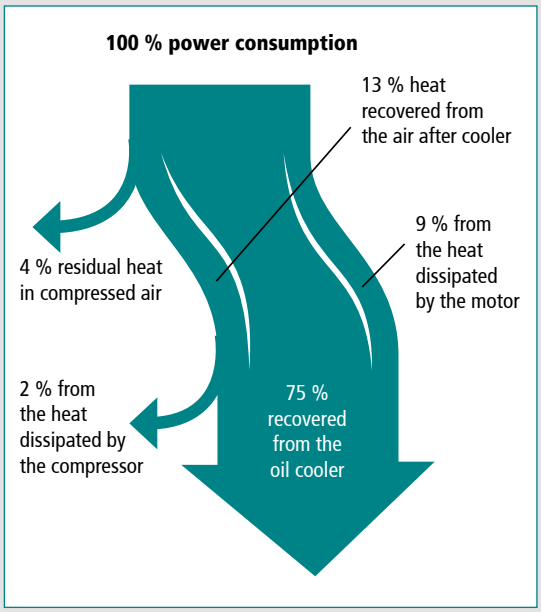
Heat recovery with integrated plate heat exchanger

- for RENNER screw compressors 18.5 kW – 355 kW
- standard: inlet temperature 15°C, outlet temperature 65°C (industrial water) or inlet temperature 35°C, outlet temperature 65°C (heating)
- other temperature ranges available on request

The integrated plate heat exchanger is for all compressors

Install, connect, benefit!

The external heat exchanger stands out with its easy installation - the connection to the existing water circuit can be carried out by a plumber. No external energy is required for operation.



We offer a retrofittable, external heat exchanger box for all compressors

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RENNER – THE SPECIALIST IN COMPRESSORS

Set up in 1994, this family run company employs a highly motivated and successful team specialising in the development and production of economic compressor systems. The structure and size of the company guarantees flexible decision-making and quick realisation, thereby ensuring optimal alignment of new developments to the needs of the market.

THE RENNER MANUFACTURING AND SUPPLY PROGRAMME:

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

SCREW COMPRESSORS:

- from 3.0 – 355.0 kW, also for oil-free compressed air of breathable quality
- water-injected screw compressors from 18.5 – 120.0 kW
- up to 40 bar, e.g. for manufacture of PET bottles
- as compact units with air receiver, refrigerant dryer and frequency control
- special version with plate heat exchanger – save energy and money!
- customised models, mobile/portable, built-in units, designed to customer specifications
- for special applications: gas compression, operation of drilling apparatus, rail and special-purpose vehicles

SCROLL COMPRESSORS:

- for oil-free compressed air from 1.5 to 22.0 kW

oil-free Made in Germany · SCROLLline Industry · SCROLLline SuperSilent

PISTON COMPRESSORS:

- from 1.5 – 11.0 kW
- stationary or mobile, with or without sound insulation

COMPRESSED AIR ACCESSORIES:

- compressed air filters, air receivers, refrigeration dryers, adsorption dryers, condensate drains and oil/water separation systems

Supplied by your RENNER distributor:

RENNER GmbH · Kompressoren

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Zertifiziertes Management-System ZDH ZERT DIN EN ISO 9001
Reg.-Nr.: Q1 0205013

RE-RS95-355D - ENG - 08/2014