

RENNER SCREW COMPRESSORS

**RSF
with Variable Speed Control**



Up to **35%**
energy savings!

Motor size: 4.0 to 250.0 kW



RSF 4,0 – 250



RSKF 18,5 – 45,0



RSDKF 4,0 – 15,0



RS-TF 75 + 90

RENNER Screw Compressors, a selling factor because of quality and economy.

The model series RSF / RSKF / RSDF / RSDKF and RS-TF are screw compressors with frequency control. This range of compressor is designed for tough industrial application. Additionally the compressors are equipped with the RENNERtronic intelligent control and monitoring system.

Advantages

- 2-year fully functional guarantee
- Encapsulated air end:
Compact design eliminates unwanted pipe work and potential oil leaks, as well as the need for pressure test certificates. Spin on & off separators save time and reduce maintenance costs.
- Maximised sound insulation canopy as standard and multiple fixings on a rubber-mounted seal allow low noise and low vibration setup.
- Easy to remove doors:
Very good access to the individual components and ease of maintenance result in low costs for the user.
- Standard components:
High quality German made parts and use of standard mineral oils ensure long life and low running costs.

Optional extra:

RENNER refrigeration dryer

The compressed air is directed into the refrigeration dryer for processing, and pre-cooled in the air/air-heat exchanger.

This pre-cooling takes place in a counter clockwise flow to the escaping, cooled compressed air; this is accomplished without any additional requirement for energy.

Further cooling to the pressure dew point occurs in the cooling chamber / air-heat exchanger that is cooled by a cooling agent circuit.

During the entire cooling process, the moisture escapes as condensate and is dispensed via a drain valve. The processed compressed air is re-heated by the discharged compressed air in the air/air-heat exchanger. The RENNER refrigeration dryers work environmentally and compatible with completely ozone harmless cooling agents R134a and R407c.



The electronic control of the refrigeration dryer

The electronic DDS3 control is a micro-control specially developed for compressed air dryers with the following functions:

- Pressure dew point indicator
- Control of condensate solenoid valve
- Automatic fan control.



RENNER Variable Speed or Frequency Control



Strong fluctuations of compressed air cannot be avoided in many operations. Even in such cases compressed air can be generated economically – the frequency controlled RENNER screw compressors ensure this. The compressor performance is adapted via a variable electronic speed control to the actual compressed air requirement. This guarantees an economic operation; the frequency inverter is integrated and firmly installed in the complete control system.

RENNERtronic controls

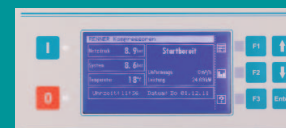
Advantages of the RENNERtronic:

- Controls and monitors the units
- Displays
 - the mains pressure within easily changeable pressure limits
 - the compressor temperature
 - faults/ fault message storage
 - maintenance intervals
- Capture of operating and load hours
- The software includes a Base Load Change Over function
- Control is secured by means of code levels
- Update for special functions possible at any time
- Diagnostic functions of inputs and outputs



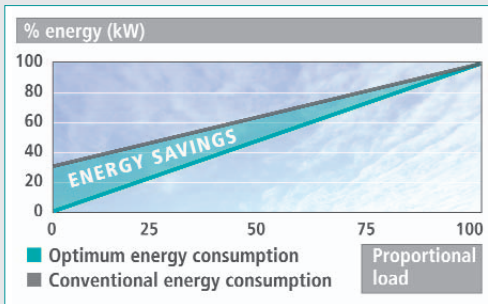
Advantages of the RENNERtronic Plus:

- Easier operation due to a larger display
- Real-time clock
- Integrated timer with 7 channels
- Monitoring of the mains pressure
- Base-load changeover (BLCO)
 - facilitated connection to other compressors
 - additional functions and options possible
- Displays
 - the flow (FAD)
 - the power consumption (optional)
 - additional symbols
- Numerous statistical evaluations
- Profibus and Modbus connection possible



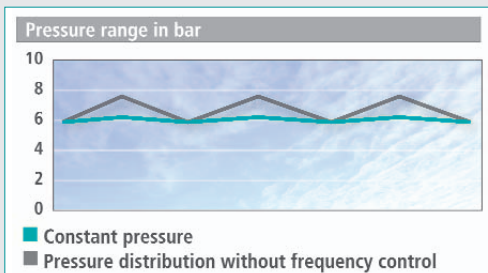
RENNER Variable Speed Control prevents idle time and pressure fluctuations.

1. Energy savings:



By lowering the energy absorption, depending on the specific requirements, the power consumption is reduced to a minimum.

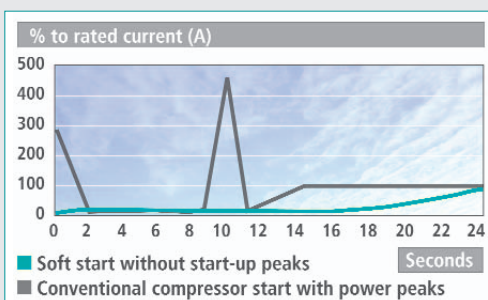
2. Reduces wear:



Minimises wear and tear on the compressors components.

- Low maintenance costs and longer life cycles
- No power peaks or spikes through soft start up cycle.

3. Pressure optimisation:



Constantly maintaining a pressure band of 0.2 bar enables a lower operating pressure.

- Decreasing the operating pressure by 1 bar reduces the energy consumption by approx. 8%.

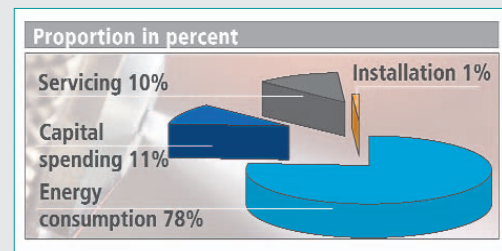
4. Reduces losses by not decompressing the internal system:

No unnecessary power consumption as no more idling phases.

5. Reduces CO₂ emissions due to lower electricity consumption.

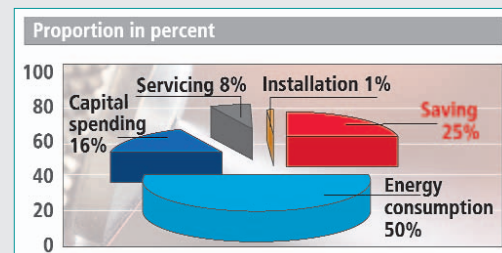
To compare: overall costs after 5 years.

Traditional compressor:



After 5 years in operation, the energy costs come up to 78% of the overall expenditure of a conventional compressor. The only way to reduce the overall expenditure is to minimise the cost of energy.

RSF Compressor:



Operating the variable speed compressors from RENNER enables you to save up to 35% of the energy cost. This results into savings of overall 25%. Thus the entire energy balance sheet of the user is substantially improved.

Energy efficiency

The frequency control significantly reduces the overall cost of your compressed air supply. The investment is endorsed in the shortest period.





RENNER screw compressors

RSF 4,0 – 250 with frequency control, electronic control RENNERtronic and fitted pre-filter-grids.

The basis of the RSF 4.0 kW to 250 kW range presented here is the RENNER RS standard program. These screw compressors are designed for tough industrial applications.

High efficiency, long life cycles, as well as simple and cost efficient maintenance were the deciding criteria in developing these products.

All standard RSF compressors are equipped with the RENNERtronic intelligent control and monitoring system and the pre-filter-grids.

RSF 4,0 – 55,0

| Model | Free Air Delivery | | | | | | | | Motor power | | Compressed air outlet Inches | Dimensions D x W x H in mm | Weight kg |
|------------|---------------------|--------|---------------------|--------|---------------------|--------|---------------------|--------|-------------|------|---------------------------------|-------------------------------|--------------|
| | 7.5 bar | | 10 bar | | 13 bar | | 15 bar | | kW | HP | | | |
| | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | | | | | |
| RSF 4,0 | 0.17–0.56 | 6–20 | 0.14–0.46 | 5–16 | 0.11–0.35 | 4–12 | 0.09–0.30 | 3–11 | 4.0 | 5.5 | 1/2 | 770 x 579 x 907 | 172 |
| RSF 5,5 | 0.23–0.77 | 8–27 | 0.20–0.65 | 7–23 | 0.16–0.53 | 6–19 | 0.14–0.45 | 5–16 | 5.5 | 7.5 | 1/2 | 770 x 579 x 907 | 178 |
| RSF 7,5 | 0.33–1.10 | 12–39 | 0.29–0.95 | 10–34 | 0.22–0.74 | 8–24 | 0.19–0.63 | 7–22 | 7.5 | 10.0 | 1/2 | 770 x 579 x 907 | 199 |
| RSF 11,0 | 0.53–1.76 | 19–62 | 0.45–1.50 | 16–53 | 0.35–1.16 | 12–41 | 0.28–0.93 | 10–33 | 11.0 | 15.0 | 3/4 | 998 x 671x 1123 | 320 |
| RSF 15,0 | 0.67–2.24 | 24–79 | 0.59–1.96 | 21–69 | 0.45–1.51 | 16–53 | 0.37–1.24 | 13–44 | 15.0 | 20.0 | 3/4 | 998 x 671x 1123 | 335 |
| RSF 18,5 | 0.87–2.91 | 31–103 | 0.79–2.62 | 28–93 | 0.66–2.20 | 23–78 | 0.57–1.89 | 20–67 | 18.5 | 25.0 | 1 1/4 | 1287 x 799 x 1296 | 561 |
| RSF 22,0 | 1.04–3.46 | 37–122 | 0.93–3.10 | 33–109 | 0.80–2.66 | 28–94 | 0.69–2.31 | 24–82 | 22.0 | 30.0 | 1 1/4 | 1287 x 799 x 1296 | 576 |
| RSF 1-30,0 | 1.31–4.38 | 46–155 | 1.20–4.01 | 42–142 | 1.06–3.52 | 37–124 | 0.91–3.02 | 32–107 | 30.0 | 40.0 | 1 1/4 | 1384 x 799 x 1296 | 648 |
| RSF 2-30,0 | 1.52–5.05 | 54–178 | 1.28–4.28 | 45–151 | 1.13–3.76 | 40–133 | 1.02–3.40 | 36–120 | 30.0 | 40.0 | 1 1/4 | 1548 x 939 x 1580 | 850 |
| RSF 37,0 | 1.85–6.15 | 65–217 | 1.57–5.24 | 55–185 | 1.37–4.56 | 48–161 | 1.25–4.15 | 44–147 | 37.0 | 50.0 | 1 1/4 | 1548 x 939 x 1580 | 874 |
| RSF 45,0 | 2.18–7.25 | 77–256 | 1.95–6.51 | 69–230 | 1.67–5.55 | 59–196 | 1.51–5.03 | 53–178 | 45.0 | 60.0 | 1 1/4 | 1548 x 939 x 1580 | 991 |
| RSF 55,0 | 2.79–9.30 | 99–328 | 2.39–7.96 | 84–281 | 2.01–6.70 | 71–237 | 1.76–5.87 | 62–207 | 55.0 | 75.0 | 2 | 1754 x 1104 x 1697 | 1225 |

RSF 75,0 – 250

| Model | Free Air Delivery | | | | | | | | Motor power | | Compressed air outlet Inches | Dimensions D x W x H in mm | Weight kg |
|-----------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|--------|-------------|-----|---------------------------------|-------------------------------|--------------|
| | 7.5 bar | | 10 bar | | 13 bar | | 15 bar | | kW | HP | | | |
| | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | | | | | |
| RSF 75 | 3.63–12.10 | 128–427 | 3.11–10.35 | 110–365 | 2.76–9.20 | 98–325 | 2.43–8.10 | 86–286 | 75.0 | 100 | 2 | 1754 x 1104 x 1697 | 1343 |
| RSF 85 | 4.25–14.16 | 150–500 | 3.64–12.12 | 128–428 | 3.21–10.71 | 113–378 | 2.81–9.38 | 99–331 | 85.0 | 115 | 2 | 1754 x 1104 x 1697 | 1375 |
| RSF 90 | 4.67–15.55 | 165–549 | 4.11–13.70 | 145–484 | * | * | * | * | 90.0 | 120 | 2 1/2 | 2110 x 1365 x 1936 | 2063 |
| RSF 1-110 | 5.55–18.50 | 196–653 | 4.77–15.90 | 168–562 | * | * | * | * | 110.0 | 150 | 2 1/2 | 2110 x 1365 x 1936 | 2180 |
| RSF 2-110 | 5.66–18.85 | 200–653 | 4.92–16.40 | 168–562 | * | * | * | * | 110.0 | 150 | 3 | 2587 x 1652 x 1993 | 2920 |
| RSF 132 | 7.04–23.45 | 248–828 | 6.12–20.40 | 216–720 | * | * | * | * | 132.0 | 175 | 3 | 2587 x 1652 x 1993 | 3281 |
| RSF 160 | 8.37–27.90 | 296–985 | 7.46–24.85 | 263–878 | * | * | * | * | 160.0 | 160 | 3 | 2587 x 1652 x 1993 | 3350 |
| RSF 200 | * | * | * | * | * | * | * | * | 200.0 | 270 | * | * | * |
| RSF 250 | * | * | * | * | * | * | * | * | 250.0 | 315 | * | * | * |

* upon request

Options:

Electronic control RENNERtronic Plus (starting with RSF 18,5)

Article no.

05591

External motor lubrication (from 75 kW)

00846

Fitted pre-filter box



RENNER screw compressors

RSKF 4,0 – 45,0 with attached refrigeration dryer, frequency control, electronic control RENNERtronic and fitted pre-filter-grids.

The standard RSKF series is equipped with the RENNERtronic intelligent control and monitoring system. This guarantees a most favourable economic operation, as well as the necessary security in servicing and maintaining the system. A connection to the superior compressed air management systems is possible. RSKF means a complete compressed air station. No additional assembly expense for frequency converter and refrigeration dryer, simply plug in and connect to the pressure system and your RENNER compressor will be a reliable and economic source of compressed air.

RSKF 4,0 – 45,0

| Model | Free Air Delivery | | | | | | | | Motor power | | Compressed air outlet Inches | Dimensions D x W x H in mm | Weight kg |
|-------------|---------------------|--------|---------------------|--------|---------------------|--------|---------------------|--------|-------------|------|---------------------------------|-------------------------------|--------------|
| | 7.5 bar | | 10 bar | | 13 bar | | 15 bar | | kW | HP | | | |
| | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | | | | | |
| RSKF 4,0 | 0.17–0.56 | 6–20 | 0.14–0.46 | 5–16 | 0.11–0.35 | 4–12 | 0.09–0.30 | 3–11 | 4.0 | 5.5 | 1/2 | 1024 X 579 x 907 | 198 |
| RSKF 5,5 | 0.23–0.77 | 23–77 | 0.20–0.65 | 7–23 | 0.16–0.53 | 6–19 | 0.14–0.45 | 5–16 | 5.5 | 7.5 | 1/2 | 1024 X 579 x 907 | 218 |
| RSKF 7,5 | 0.33–1.10 | 10–34 | 0.28–0.95 | 10–34 | 0.22–0.74 | 8–26 | 0.19–0.63 | 7–22 | 7.5 | 10.0 | 1/2 | 1024 X 579 x 907 | 240 |
| RSKF 11,0 | 0.53–1.76 | 16–53 | 0.45–1.50 | 16–53 | 0.35–1.16 | 12–41 | 0.28–0.93 | 10–33 | 11.0 | 15.0 | 3/4 | 1253 x 671 x 1123 | 368 |
| RSKF 15,0 | 0.67–2.24 | 21–69 | 0.59–1.96 | 21–69 | 0.45–1.51 | 16–53 | 0.37–1.24 | 13–44 | 15.0 | 20.0 | 3/4 | 1253 x 671 x 1123 | 385 |
| RSKF 18,5 | 0.87–2.91 | 31–103 | 0.79–2.62 | 28–93 | 0.66–2.20 | 23–78 | 0.57–1.89 | 20–67 | 18.5 | 25.0 | 1 1/4 | 1632 x 799 x 1296 | 728 |
| RSKF 22,0 | 1.04–3.46 | 37–122 | 0.93–3.10 | 33–109 | 0.80–2.66 | 28–94 | 0.69–2.31 | 24–82 | 22.0 | 30.0 | 1 1/4 | 1632 x 799 x 1296 | 760 |
| RSKF 1-30,0 | 1.31–4.38 | 46–155 | 1.20–4.01 | 42–142 | 1.06–3.52 | 37–124 | 0.91–3.02 | 32–107 | 30.0 | 40.0 | 1 1/4 | 1732 x 799 x 1296 | 867 |
| RSKF 2-30,0 | 1.52–5.05 | 54–178 | 1.28–4.28 | 45–151 | 1.13–3.76 | 40–133 | 1.02–3.40 | 36–120 | 30.0 | 40.0 | 1 1/4 | 1896 x 939 x 1580 | 977 |
| RSKF 37,0 | 1.85–6.15 | 65–217 | 1.57–5.24 | 55–185 | 1.37–4.56 | 48–161 | 1.25–4.15 | 44–147 | 37.0 | 50.0 | 1 1/4 | 1896 x 939 x 1580 | 1019 |
| RSKF 45,0 | 2.18–7.25 | 77–256 | 1.95–6.51 | 69–230 | 1.67–5.55 | 59–196 | 1.51–5.03 | 53–178 | 45.0 | 60.0 | 1 1/4 | 1896 x 939 x 1580 | 1159 |

Options:

Article no.

Electronic control RENNERtronic Plus (starting with RSKF 18,5)

05591

Fitted pre-filter box



RENNER screw compressors

RSDF 4.0 kW - 15.0 kW on horizontal air receiver with frequency control, electronic control RENNERtronic and fitted pre-filter-grids.

RSDKF 4.0 kW- 15.0 kW on horizontal air receiver with attached refrigeration dryer, frequency control, electronic control RENNERtronic and filter grids fitted.

Air receivers are according to 2009/105 EC / AD2000 directives.

RENNER compressors mounted on horizontal air receivers.

RSD stands for RENNER compressors mounted on air receivers. As mentioned above the RSDK machines are with attached refrigeration dryer and the RSDKF configuration has even the Variable Speed Control built in.

These complete and compact compressed "full feature" air stations save space and time consuming assembly on site. They are ready for immediate operation, just connect the power cable to a suitable supply and an air-line to the air discharge valve (both supplied with the unit).

Besides the standard air receivers with hand-holes, **ECN (economy) air receivers** with a 2" inspection hole are available if so required. All receivers are manufactured according to 2009/105 EC / AD2000 directives.

RSDF 4,0 – 15,0 / RSDKF 4,0 – 15,0

| Model | Free Air Delivery | | | | | | | | Motor power | | Compressed air outlet Inches | Air receiver liter | Dimensions D x W x H in mm | Weight kg |
|------------|---------------------|-------|---------------------|-------|---------------------|-------|---------------------|-------|-------------|------|------------------------------|--------------------|----------------------------|-----------|
| | 7.5 bar | | 10 bar | | 13 bar | | 15 bar | | kW | HP | | | | |
| | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | | | | | | |
| RSDF 4,0 | 0.17–0.56 | 6–20 | 0.14–0.46 | 5–16 | 0.11–0.35 | 4–12 | 0.09–0.30 | 3–11 | 4.0 | 5.5 | 1/2 | 250 | 1410 x 579 x 1442 | 257 |
| RSDF 5,5 | 0.23–0.77 | 8–27 | 0.20–0.65 | 7–23 | 0.16–0.53 | 6–19 | 0.14–0.45 | 5–16 | 5.5 | 7.5 | 1/2 | 250 | 1410 x 579 x 1442 | 263 |
| RSDF 7,5 | 0.33–1.10 | 12–39 | 0.28–0.95 | 10–34 | 0.22–0.74 | 8–26 | 0.19–0.63 | 7–22 | 7.5 | 10.0 | 1/2 | 250 | 1410 x 579 x 1442 | 284 |
| RSDF 11,0 | 0.53–1.76 | 19–62 | 0.45–1.50 | 16–53 | 0.35–1.16 | 12–41 | 0.28–0.93 | 10–33 | 11.0 | 15.0 | 3/4 | 250 | 1410 x 671 x 1653 | 405 |
| RSDF 15,0 | 0.67–2.24 | 24–79 | 0.59–1.96 | 21–69 | 0.45–1.51 | 16–53 | 0.37–1.24 | 13–44 | 15.0 | 20.0 | 3/4 | 250 | 1410 x 671 x 1653 | 420 |
| RSDKF 4,0 | 0.17–0.56 | 6–20 | 0.14–0.46 | 5–16 | 0.11–0.35 | 4–12 | 0.09–0.30 | 3–11 | 4.0 | 5.5 | 1/2 | 250 | 1410 x 579 x 1442 | 283 |
| RSDKF 5,5 | 0.23–0.77 | 8–27 | 0.20–0.65 | 7–23 | 0.16–0.53 | 6–19 | 0.14–0.45 | 5–16 | 5.5 | 7.5 | 1/2 | 250 | 1410 x 579 x 1442 | 303 |
| RSDKF 7,5 | 0.33–1.10 | 12–39 | 0.29–0.95 | 10–34 | 0.22–0.74 | 8–26 | 0.19–0.63 | 7–22 | 7.5 | 10.0 | 1/2 | 250 | 1410 x 579 x 1442 | 325 |
| RSDKF 11,0 | 0.53–1.76 | 19–62 | 0.45–1.50 | 16–53 | 0.35–1.16 | 12–41 | 0.28–0.93 | 10–33 | 11.0 | 15.0 | 3/4 | 250 | 1410 x 671 x 1653 | 453 |
| RSDKF 15,0 | 0.67–2.24 | 24–79 | 0.59–1.96 | 21–69 | 0.45–1.51 | 16–53 | 0.37–1.24 | 13–44 | 15.0 | 20.0 | 3/4 | 250 | 1410 x 671 x 1653 | 470 |

The air receiver sizes are variable and designed for normal operating conditions.

Options:

| | Article no. |
|---|-------------|
| Powder coated 500 litre air receiver with hand-hole | 10871 |
| Galvanised 250- / 500 litre air receiver with hand-hole | 10868/10870 |
| Powder coated 270 / 500 litre air receiver with 2 inch hole (models RSDF- / RSDKF-ECN*) | 01713/01714 |
| Level controlled electronic condensate drain | 05311 |

* Only available up to a maximum pressure of 10 bar



RENNER screw compressors

RS-TF 75 kW and 90 kW in twin design with RENNERtronic frequency control, electronic control and base load changeover control.

Double the power package! Cumulative performance summarised. Screw compressors for greater compressed air requirement in a reliable and economic tandem design.

Many proven RENNER design features which have stood the test of time, however completely new is the basic concept, which is entirely reviewed for operating reliably and cost-effective - that is high user benefit.

The system consists of two identical compressor units each with separate drive motors and separated coolers, integrated into a common sound insulation box.

The standard RS-TF models are equipped with the RENNERtronic intelligent control and monitoring system. The base load change over control operates both compressors according to customers requirement and monitors the direction of rotation.

Both machines are equipped with separate frequency converters.

RS-TF 75 and RS-TF 90

| Model | Free Air Delivery | | | | | | | | Motor power | | Compressed air outlet Inches | Dimensions D x W x H in mm | Weight kg |
|----------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|---------|-------------|----------|---------------------------------|-------------------------------|--------------|
| | 7.5 bar | | 10 bar | | 13 bar | | 15 bar | | kW | HP | | | |
| | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | m ³ /min | cfm | | | | | |
| RS-TF 75 | 3.69-12.30 | 128-434 | 3.14-10.48 | 110-370 | 2.74-9.12 | 95-322 | 2.49-8.30 | 87-293 | 2 x 37.0 | 2 x 50.0 | 2 | 2020 x 1494 x 2083 | 2015 |
| RS-TF 90 | 4.35-14.50 | 155-512 | 3.91-13.02 | 140-460 | 3.33-11.10 | 120-392 | 3.02-10.06 | 110-355 | 2 x 45.0 | 2 x 60.0 | 2 | 2020 x 1494 x 2083 | 2065 |

Standard equipment:

- Electronic control RENNERtronic
- Reporting operating hours for load and idle periods
- Digital pressure display
- Digital temperature display
- Early maintenance identification on the display screen.
- Full fault diagnosis with locations indicator on the display screen
- Base load change over control.

Options:

- Electronic control RENNERtronic Plus (one only is required)

Article no.

05591

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 to 355 kW, also for oil-free compressed air of breathable quality
- Water-injected screw compressors from 18.5 to 85.0 kW 
- Up to 40 bar, e.g. for manufacture of PET bottles
- As compact units with compressed air tank, refrigerant drier 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



PISTON COMPRESSORS:

- from 1.5 to 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:

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