

**Screw compressors** 

# **Booster RS-M / RS-MF**





Pressure: 25 – 40 bar / Motor power: 18.5 – 45.0 kW











## **RENNER Booster screw compressors**

The RS-M Booster is designed for industrial and economical compressed air generation. The machines are ideally suited for the use of low-pressure systems, where the existing mains pressure for special requirements is compressed to any desired final pressure up to a maximum of 40 bar by the integration of a RENNER booster. The booster screw compressors in PET bottle blow molding machines, where the high compressed air requirement of PET blow molding systems is covered in conjunction with an upstream screw compressor, gained the greatest importance.

The RENNER boosters have a compact design and are equipped with a large combi-cooler for low heating of the components and thus ensure a low compressed air outlet temperature. Thanks to the robust and service-friendly design, the intervals between maintenance are longer.

## **RENNER compressors: compact – robust – cost-effective**

The side panels / maintenance doors are easily removable for easy access to all service parts. The self-adjusting Vbelt tensioner ensures optimum belt tension and therefore increases V-belt life. The body of the silencing canopy and its maintenance doors are powdercoated and the high-quality insulation material minimises noise levels.

The system operates automatically in full load/idling/intermittent mode. Switching intervals can be controlled and adjusted according to operational requirements. The system has multiple anti-vibration mountings to ensure exceptionally smooth operation. The unit can be mounted without a base.

## **Advantages**

- Suitable for continuous operation
- Pulsation-free compressed air
- Wear-resistant compressor air-end
- Low maintenance costs
- Compact design, small footprint
- Low vibration, no base required
- Low noise level
- Optimum heat recovery options
- Suitable for food-grade and biodegradable oils
- Two-year full warranty
- Ready to connect with 3 m electrical cable fitted free as standard along with operating manual for instant plug and play operation



# **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 Touchwith 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.



#### **Technical data**

The RENNER booster increases the pressure at the 1st stage to 40 bar with a maximum free air delivery of 10,5 m<sup>3</sup>/min (depending on the pre-pressure, motor power and other conditions).

**Inlet pressure:** 6 to 13 bar **Outlet pressure:** 25 to 40 bar

Pressure rate (Outlet / Inlet): min. 2.5 / max. 6.0

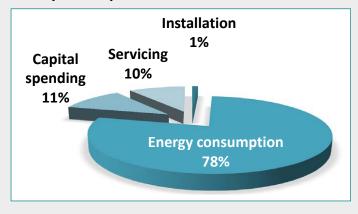
**Ambient temperature:** 5 to 40°C **Speed:** min. 1,500 / max. 4,500 rpm

**Drive type:** belt drive

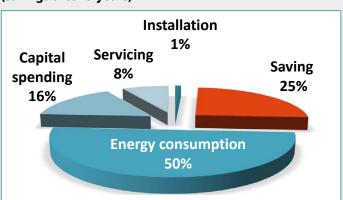
## **RENNER variable speed control**

Major fluctuations in compressed air requirements cannot be avoided in many factories. RENNER screw compressors with variable speed control are based on the principle that compressed air can still be generated cost-effectively even if requirements vary. The compressor output is adjusted to meet the actual air demand using the infinitely variable electronic speed control, thus guaranteeing maximum possible levels of economy. The frequency converter complete with control unit is integrated in the unit and permanently installed.

#### **Fixed speed compressors:**



# RENNER's RSF compressors with variable speed control (savings after 5 years):



	Free air delivery <sup>(1)</sup>													tor	Compressed		Dimensions	Weight
	Pre-pressure:	7.5 bar			10 bar				13 bar			power		air outlet	level	LxWxH		
	Final pressure:	25 bar		40 bar		25 bar		40 bar		25 bar	40 bar							
		m³/min	cfm	m³/min	cfm	m³/min	cfm	m³/min	cfm		m³/min	cfm	kW HP	inch	dB(A) <sup>(2)</sup>	mm	kg	
RS-M 1	8.5	4.2	148	-	_	5.6	198	_	-	-	3.1	109	18.5	25	G1¼	71	1810 x 1200 x 1835	1032
RS-M 22.0		5.2	184	-	-	6.8	240	3.5	124	-	4.3	152	22.0	30	G1¼	71	1810 x 1200 x 1835	1062
RS-M 3	0.0	7.6	268	4.1	145	9.4	332	5.5	194	-	6.8	240	30.0	40	G1¼	74	1810 x 1200 x 1835	1108
RS-M 3	7.0	_	_	5.5	194	_	_	7.2	254	_	8.8	311	37.0	50	G1¼	75	1810 x 1200 x 1835	1130
RS-M 4	5.0	-	_	7.2	254	-	_	9.1	321	-	10.5	371	45.0	60	G1¼	76	1810 x 1200 x 1835	1290
RS-MF 18.5		-	_	-	-	2.2-5.6	78-198	_	-	_	_	_	18.5	25	G1¼	71	1810 x 1200 x 1835	1062
RS-MF 22.0		2.0-5.2	70-184	-	-	2.2-6.8	78-240	3.0-3.5	106-124	-	3.0-4.3	106-152	22.0	30	G1¼	71	1810 x 1200 x 1835	1097
RS-MF 30.0		2.0-7.6	70-268	3.0-4.1	106-145	2.2-9.4	78-332	3.0-5.5	106-194	-	3.0-6.8	106-240	30.0	40	G1¼	74	1810 x 1200 x 1835	1149
RS-MF	37.0	-	-	3.0-5.5	106-194	-	-	3.0-7.2	106-254	-	3.2-8.8	113-311	37.0	50	G1¼	75	1810 x 1200 x 1835	1172
RS-MF	45.0	_		3.0-7.2	106-254	_	_	3.0-9.1	106-321	_	3.2-10.5	113-371	45.0	60	G11/4	76	1810 x 1200 x 1835	1389

(1) RS-M according to ISO 1217 Annex C / RS-MF according to ISO 1217 Annex E (2) according to DIN EN ISO 2151:2009

Reference conditions: final pressure 40 bar; inlet temperature 30°C; reference state 1013 mbar, 20°C. In order to select the right model, and to determine reference conditions, please contact your responsible area sales director. Other final pressures on request. Please note that the inlet concentration in the booster must be in accordance with ISO 8573-1 (2/4/2).

Options	Part no.
Electronic control RENNERtronic Plus Touch	23836



# **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 – quaranteed.

#### **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:

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