



Screw Compressor PremiumPower 20 TD500 | 20 HP / 15 kW | 1100-2420 l/min | 500 l

369214-IVR-G3



Product details

EAN	8712418441369
GPSR Airpress	Airpress Polska Sp. z o.o.
Weight	460 kg
Length	1,945 mm (1.945 m)
Width	676 mm (6.76 dm)
Height	1,940 mm (1.94 m)
SKU	369214-IVR-G3
Drive	Direct driven 1:1
Starter	Inverter
Motor Type	PM
Motor efficiency class	IE5
Air-end	x15-g3
Number of stages	1
Control panel	AirVision One
Available languages	Dutch, Polish, German, French, Spanish, English, Russian
Capacity air receiver (L)	500
Galvanized tank	No
Dryer voltage (V)	230
Refrigerant	R513A
Cooling air volume (m ³ /h)	1,400 m ³ /h (23.333 m ³ /min)
Duty cycle (run time/downtime %)	100/0
Minimum working pressure (bar)	6 bar
Free air delivery at 8 bar (L/min)	2,420 L/min (40.333 L/s)
Free air delivery at 10 bar (L/min)	2,160 L/min (36 L/s)
Noise level at 0 m (dB(A))	65
Noise level at 4 m (dB(A))	45
Main air connection (")	1

Minimum ambient temperature (°C)	5
Maximum ambient temperature (°C)	45
Oilfree	No
Oil capacity (L)	8.1
Current (A)	29.8
Plug type	EURO 63A-5P
Power cable	5 x 10 mm ²
IP classification	IP55
Start-stop timer	No
Autoregulation of idling	No
Motor power (hp / kW)	20 hp / 15 kw
Variable speed (IVR)	Yes
Pump speed (rpm)	1920-3420
Air receiver	Yes
Dryer	Yes
Maximum pressure (bar)	10
Minimum free air delivery (L/min)	1,100 L/min (18.333 L/s)
Minimum free air delivery (m ³ /h)	66 m ³ /h (1.1 m ³ /min)
Maximum free air delivery (L/min)	2,420 L/min (40.333 L/s)
Maximum free air delivery (m ³ /h)	145.2 m ³ /h (2.42 m ³ /min)
Voltage (V)	400 V / 50 Hz / 3 Ph

Description

Screw Compressor PremiumPower 20 TD500 | 20 hp / 15 kw | 1100-2420 L/min | 500 L

The PremiumPower 20 TD500 is a variable-speed screw compressor with an integrated dryer and a 500-litre air tank, designed for high efficiency and low energy consumption. It is equipped with a high-performance screw block, IE5-class ultra-premium motor, a next-generation inverter, and a AirVision One controller. This combination ensures stable, energy-efficient operation and allows convenient monitoring and control of the entire compressed air production process. Ideal for daily operation in demanding industrial conditions.

Key technical benefits

Integrated dryer – efficiently removes moisture from the air, protecting pneumatic systems and tools from corrosion and damage.

500-litre air tank – stabilises compressed air supply, eliminating pressure fluctuations and improving system efficiency.

High-efficiency next-generation screw module (airend) – designed and manufactured in Europe, guarantees greater airflow with lower energy consumption.

Direct driven 1:1 that directly connects the screw module to the motor – no need for gearboxes, reduction in energy losses and significantly improvement of compressor efficiency.

Ultra Premium IE5 energy class permanent magnet synchronous motor.

European AirVision One controller – monitors the operation in real-time, enabling predictive diagnostics, minimising downtime risks, and simplifying maintenance.

Wide variable-speed range (IVR) thanks to the integration of the screw block with the inverter – the compressor operates at lower speeds when air demand is reduced, saving energy and decreasing mechanical wear by reducing the amount of motor starts.

IVR variable-speed technology for smooth starts that reduce stress, extends service life, and delivers significant energy savings under fluctuating air demand.

Optimised total cost of ownership (TCO), covering purchase cost, energy consumption, consumables, servicing, and downtime costs. This results in reduced interruptions, longer service intervals, and stable performance.

Additional advantages

Optimised energy consumption via the inverter, which automatically adjusts the motor speed to match air demand. This can achieve up to 50% energy savings and reduces total lifecycle costs by appr. 30% over five years.

Quiet operation thanks to the radial fan, maintaining a noise level of 65 dB(A) and allowing installation close to the point of use.

Compact design for easy installation in confined spaces.

AirVision One controller for smart oversight

The modern controller provides full oversight of the compressor operation (pressure, temperature, load), automatic restart functions, weekly scheduling, and intelligent cooling control. This enhances operational stability and supports energy optimisation.

Main technical benefits

Easy integration with sensors and connected devices (e.g., air treatment, signalling).

Intuitive interface with ergonomic navigation.

Performance graphs and statistics for trend analysis and better optimisation of energy use and servicing.

Built-in web server for remote monitoring and diagnostics without extra modules.

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Technical data

GENERAL PARAMETERS					
INDIVIDUAL TECHNICAL DATA					
Motor		Free air delivery (FAD) L/min			
Class	Motor power	for min. pressure	for 8-bar pressure	for 10-bar pressure	
IE5	20 hp / 15 kw	1100 L/min	2420 L/min	2160 L/min	
Minimum pressure	Maximum pressure	Operating noise	Drive	Pump speed (RPM) at 8 bar	Pump speed (RPM) at 10 bar
6 bar	10 bar	65 dB(A)	Direct driven 1:1	1920 - 3720	1920-3420
INSTALLATION DATA					
Length	Width	Height	Weight	Connection	Power supply
1945 mm	676 mm	1940 mm	460 kg	1"	400 V / 50 Hz / 3 Ph
GENERAL PARAMETERS					
INDIVIDUAL TECHNICAL DATA					
Class	IE5				

Motor power	20 hp / 15 kw	
for min. pressure	1100 L/min	
for 8-bar pressure	2420 L/min	
for 10-bar pressure		2160 L/min
Minimum pressure	6 bar	
Maximum pressure	10 bar	
Noise level	65 dB(A)	
Drive	Direct driven 1:1	
Pump speed (RPM) at 8 bar	1920 - 3720	
Pump speed (RPM) at 10 bar	1920-3420	

INSTALLATION DATA

Length	1945 mm
Width	676 mm
Height	1940 mm
Weight	460 kg
Connection	1"
Power supply	400 V / 50 Hz / 3 Ph

- Optional equipment
- Air Vision Touch controller, which expands the compressor functionality with:
 - Electricity consumption measurement system
 - Air temperature sensor
 - Compressed air flow and consumption sensor
 - Automatic condensate drain
 - Pressure dew point measurement (PDP)
 - Plate heat exchanger
 - Oil heater
 - Food Grade oil

