hertz®
KOMPRESSOREN

NEW

0,16-4,58 m^3/min

11-37 kW

14,5-16-20 bar

LASER SERIES

Oil Injected, Direct Coupled/Belt Driven, Variable/Fixed Speed
High-Pressure Rotary Screw Air Compressors

Laser Series compressors deliver high-pressure, stable, and efficient air for laser cutting machines, ensuring superior performance under all conditions.

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Hertz Kompressoren's new LASER Series compressors are specifically engineered for laser cutting machines, providing clean, dry, and stable compressed air with high-pressure options of 14.5–16–20 bar. The variable-speed FRECON PLUS PM LASER and fixed-speed HSC LASER models feature a compact design, energy-efficient motor architecture, and high-durability components, enhancing cut quality while reducing operating costs.

With a new-generation screw block, high-pressure-resistant cooling system, advanced filtration, and a user-friendly control panel, the LASER Series delivers a complete solution for laser cutting processes—reliable, long-lasting, and maximized for efficiency.

General Advantages

- No external compressor is required to boost the pressure.
- One of the products in its class that takes up the least footprint.
- Compact design has the compressed air widget and compressor in a single place meets your expectations and demands at the optimal level.
- For 20 bar pressure options, it is offered with a high-pressure-rated dryer.
- High-quality components for a long service life and low maintenance costs.
- Tank-mounted versions are available both with a dryer and without a dryer.

FRECON PLUS PM LASER SERIES

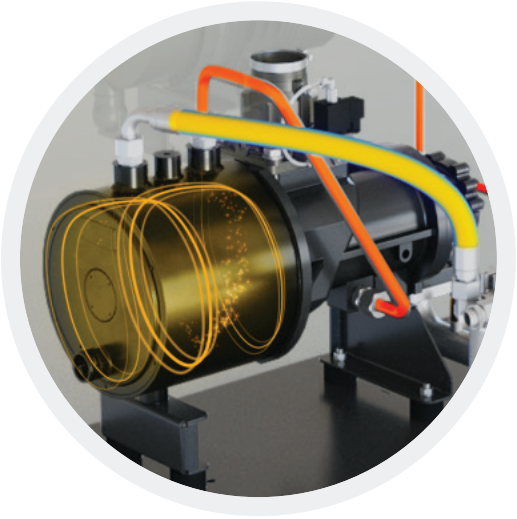
Oil Injected, Direct Coupled, Variable Speed
Rotary Screw Air Compressors

PM Technologies by smartpower

Advantages

- It saves up to 55% energy.*
- It operates at constant output pressure value.
- It provides effective and energy efficient compressed air production even in case of highly variable compressed air requirements.
- Long component life cycle thanks to soft start.
- It has the feature of protecting against the adverse effects of peak currents.

* When compared with compressors without an inverter for applications with variable requirements



General Features

- IE5 high efficiency-class IPM electric motor
- Operating with low noise level
- Soft start with variable speed power transmission

Air & Oil Separator

- Effective separator elements keep the amount of oil in the outlet air low (1-3 mg/m³) for highquality compressed air
- Easy-to-detach spin-on type separator

Electric Motor

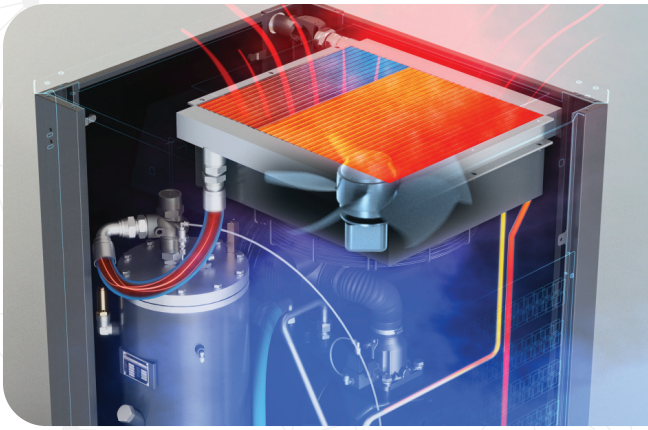
- IE5 Ultra Premium energy efficient Internal Permanent Magnet (IPM) electric motor
- Compact design
- Low noise levels
- F-class insulation
- Optimum oil cooling at all speeds for high efficiency
- Grease-free lubricated motor bearings

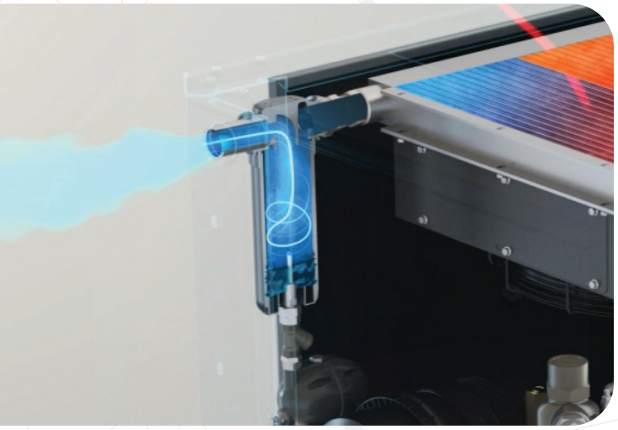
Intake System

- Air circulation inside the cabin with negative pressurized cabin andsealed cover structure
- Fresh air intake thanks to hot air evacuated at a point away from the suction
- Low noise level thanks to intake blinds (11 kW and above)

Cooling System

- Temperature controlled axial fan (15 kW and below)
- Optimum working temperature thanks to inverter controlled fans, provides additional energy efficiency (18 kW and above)
- High-pressure-resistant cooler





Water Separator

- Separation performance is >%99 even in very hot and humid conditions
- Compact, integrated and unique design (18 kW and above)
- High energy efficiency with minimal pressure loss (18 kW and above)

Controller

- User-friendly display interface with 7” LED display
- Group operation of up to 4 compressors
- Possibility to choose Master/Slave compressor
- Ability to connect to customer DCS system via ModbusTCP
- Compact construction with integrated driver and controller
- Weekly scheduler for starting/stopping the machine at 2 different time intervals can be individually set for each day of the week
- Dual PID feature can run simultaneous PID for temperature and pressure
- Pressure PID ensures energy-efficient operation by maintaining the pressure at the desired level
- Temperature PID controls the fan speed to maintain the screw block’s most efficient operating temperature
- All inverter and compressor control data are managed from a single point
- Ability to determine co-aging times of the system with selectable parameters
- Built-in phase sensor

HSC LASER SERIES

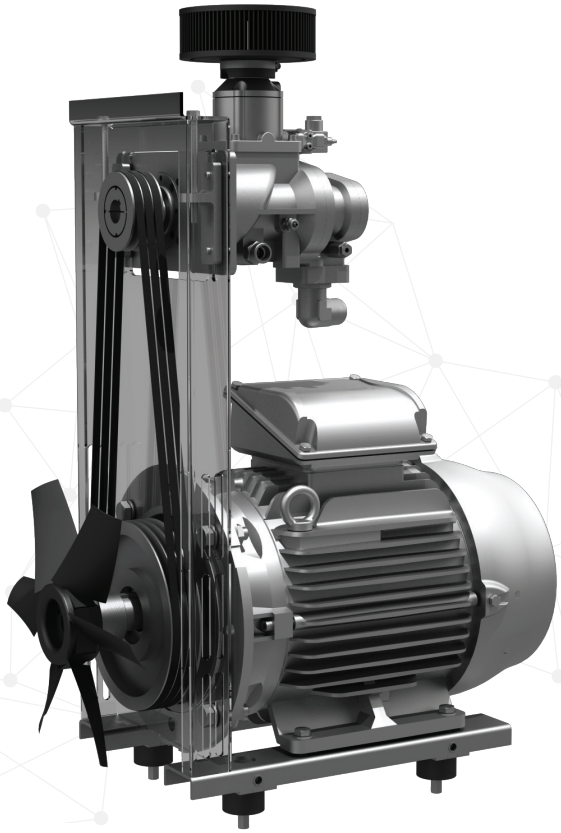
Oil Injected, Belt Driven, Fixed Speed
Rotary Screw Air Compressors

General Features

- Next gen screw block and motor
- Electronic control
- Easy installation and rapid commissioning thanks to its compact design
- Operating pressure up to 20 bar
- Dryer & tank mounted option (22 kW and below)

Advantages

- Blind cover allows you to place it up against the wall. Convenient placement makes for easy servicing, maintenance, and access. (22 kW and below)
- Optimized intake chamber and insulated cold air intake increase energy efficiency. (30 kW and above)

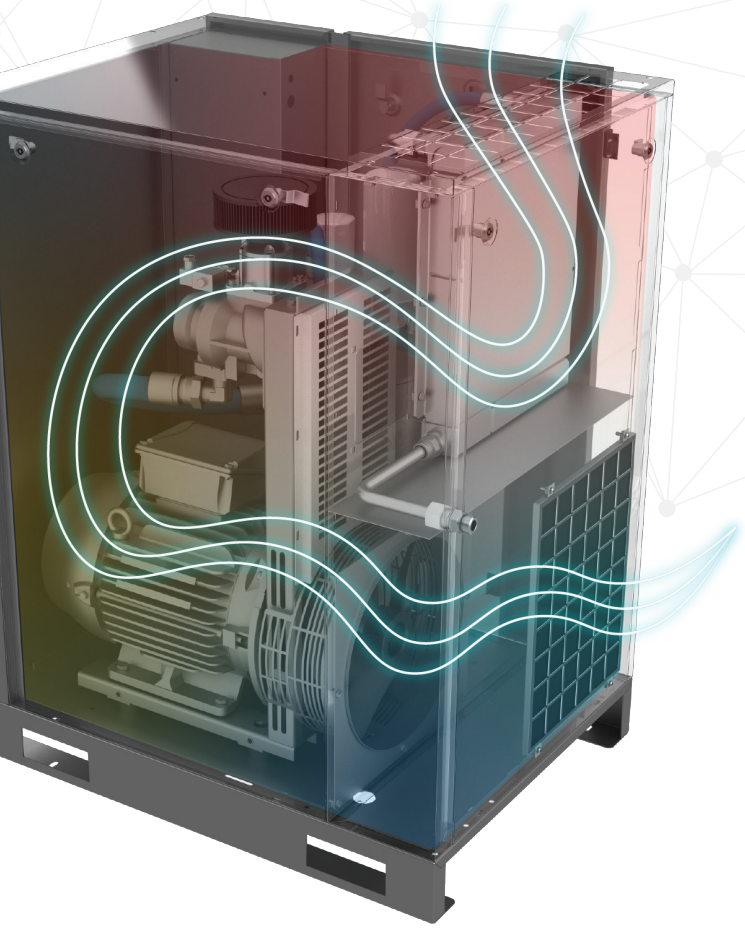


Screw Block

- Durable screw block provides high-capacity air and is specially selected for each model's capacity requirement
- Operated in high ambient temperatures and offers superior reliability
- Air production with less loss thanks to new rotor profiles
- Next gen bearing design which increased load-bearing capacity
- Low maintenance and replacement costs

Main Motor and Drive System

- IE3 efficiency-class electric motor
- Star/delta motor starter
- Belt-pulley drive system
- Easy-to-use belt tensioner
- Pulley bushing for easy servicing



Cooling System

- Minimum footprint with quiet and effective axial fan coupled directly to the main motor (22 kW and below)
- Temperature-controlled additional axial fan (30 kW and above)
- High-pressure-resistant cooler

Oil Separator

- Longer lasting separators keep maintenance costs down
- Effective separator elements keep the amount of oil in the outlet air low (1-3 mg/m³) for highquality compressed air
- Spin-on separator: easy to replace, assemble, and disassemble

Controller

- Without the need for an external main controller, ability to co-aged work synchronized with Master/Slave for up to two compressors
- Internal ModBus communication
- User-friendly on-screen interface
- Alarm log records last 20 alarms
- Maintenance warnings and log records

Air Filter

- Two-stage filtration (initial filtration/precision filtration) (18 kW and above)
- 99.9% efficiency in particle separation down to 3 microns
- Low pressure loss
- Easy maintenance and long service life

Certification

- High-quality components such as electrical materials selected in accordance with IEC and CE standards and a high efficiency, less energy consuming screw block offered as standard.

Model	Pressure		Capacity*				Motor	Connection	Dimensions [Width x Length x Height] (mm)		Weight (kg)		Air Receiver	Noise
			Minimum		Maximum									
	bar	psi	m³/min	cfm	m³/min	cfm	kW/HP		Base Mounted	Tank + Dryer	Base Mounted	Tank + Dryer		dB (A)
FRECONPLUS PM LASER 11	16	232	0,16	6	0,87	31	11/15	G3/4"	835 x 730 x 1200	1890 (16 bar) / 1950 (20 bar) x 730 x 1700	210	376 (16 bar) / 417 (20 bar)	500L	74
	20	290	0,38	13	0,78	28								
FRECONPLUS PM LASER 15	16	232	0,28	10	1,38	49	15/20	G3/4"	835 x 730 x 1200	2010 (16 bar) / 2000 (20 bar) x 700 (16 bar) / 1000 (20 bar) x 2066 (16 bar) / 1950 (20 bar)	236	618 (16 bar) / 657 (20 bar)	500L	75
	20	290	0,48	17	1,31	46								
FRECONPLUS PM LASER 18	16	232	1,38	49	2,05	72	18,5/25	G1"	870 x 905 x 1400	2010 x 700 x 2066	350	729	500L	74
	20	290	-	-	-	-								
FRECONPLUS PM LASER 22	16	232	1,04	37	2,39	84	22/30	G1"	870 x 905 x 1400	2010 x 700 x 2066	358	732	500L	75
	20	290	-	-	-	-								
FRECONPLUS PM LASER 30	16	232	0,70	25	3,18	112	30/40	G1 1/2"	1030 x 935 x 1400	-	468	-	-	74
	20	290	0,90	32	2,54	90								
FRECONPLUS PM LASER 37	16	232	0,88	31	3,90	138	37/50	G1 1/2"	1030 x 935 x 1400	-	475	-	-	73
	20	290	0,82	29	3,19	113								

- Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
- Hertz Kompressoren reserves its rights to make changes in its products and specifications without prior notice.
* Refers to free air delivery measured according to ISO 1217:2009, Annex E standard.

Model	Pressure		Capacity*		Motor	Connection	Dimensions [Width x Length x Height] (mm)		Weight (kg)		Air Receiver
	bar	psi	m³/min	cfm	kW/HP		Base Mounted	Tank + Dryer	Base Mounted	Tank + Dryer	
HSC LASER 11	14,5	210	0,99	35	11/15	G3/4"	962 x 732 x 1200	1880 x 732 x 1700	295	470 (14,5-16 bar) 495 (20 bar)	250L
	16	232	0,79	27,9							
	20	290	0,55	19,4							
HSC LASER 15	14,5	210	1,48	52,3	15/20	G3/4"	962 x 732 x 1200	1880 x 732 x 1700	315	490 (14,5-16 bar) 515 (20 bar)	250L
	16	232	1,38	48,7							
	20	290	1,02	36							
HSC LASER 18,5	14,5	210	1,76	62,2	18,5/25	G3/4"	1039 x 948 x 1462	2135 x 1200 x 2010	425	835	500L (14,5-16 bar) - 2x250L (20 bar)
	16	232	1,63	57,6							
	20	290	1,17	41,3							
HSC LASER 22	14,5	210	2,31	81,6	22/30	G3/4"	1039 x 948 x 1462	2135 x 1200 x 2010	465	900	500L (14,5-16 bar) - 2x250L (20 bar)
	16	232	2,15	76							
	20	290	1,66	59							
HSC LASER 30	14,5	210	3,51	124	30/40	G1 1/4"	1135 x 1035 x 1600	-	665	-	-
	16	232	3,22	114							
	20	290	2,51	89							
HSC LASER 37	14,5	210	4,58	162	37/50	G1 1/4"	1135 x 1035 x 1600	-	725	-	-
	16	232	4,23	149							
	20	290	3,34	118							

- Unit performances measured in reference conditions which are 1 bar absolute air pressure, %0 relative humidity, 20°C inlet air temperature, 71°C thermostatic valve set temperature and use of Smartoil.
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