

Oil injected screw air compressors

EL+ Series Inverter & PM motor



Cutting edge compressed air technology

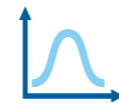
Innovation

EL-AV is leading with innovation.

The new EL+ screw compressor Series with Permanent Magnet motor Brings the highest efficiency to the customer.

The EL+ Series has a small footprint, very quiet operating, simple maintenance, high quality, and robust build for heavy-duty tasks 24/7.

And all this without any compromises.



Inverter & PM motor

The pairing between the above two components gives the compressor the following vital capabilities, one to change the flow and adjust it to the actual flow demand, the other provides the compressor with a wide working RPM range with a high-efficiency rating from 5% to 100% capacity.



Footprint

A minimal motor footprint (up to 50% compared to induction motor) lead to a smaller footprint compressor that will leave you with some extra space in your compressed air system room.



Extensive and efficient cooling system

An improved cooling system with a Heavy Duty radiator and a high-efficiency inverter fan keeps the oil at the optimal working temperature (80°C).

The efficient cooling system allows the compressor to work at almost any weather conditions efficiently.



Fast and easy Maintenance

The EL+ Series have minimal spare parts to replace on a regular maintenance basis.

The performance of Maintenance is fast and accessible than ever before.



Quiet

The new Permanent Magnet Motor and Screw are 10%-20% more silent.



Inside EL+ 7.5Kw-37Kw

Cooling system

- Big and efficient cooling radiator
- VSD cooling vent (22Kw and up) to keep optimal oil temperature, synchronized by a temp sensor
- Stainless steel piping

Controller

- EL-AV compressors ELHC+ in house controller
- Easy and fast to operate with a user-friendly interface
- All the important information in a graphic display
- Perfect automatic control of the unit promises to get the highest efficiency possible
- Weekly auto on/off schedule
- Alarm and alerts
- Optional gateway network connection with real-time alerts
- Color touch screen

VFD

- Built for heavy-duty
- Electronic components durable to high temperatures
- Designed especially for air compressor
- Dedicated input for cooling vent (VSD)
- Designed to work with PM motor

Permanent Magnet Synchronous Motor (PMSM)

- IE4 super premium Efficiency
- Up to 50% smaller footprint (compare to induction motor)
- 10%-20% more silent
- IP54 rating

Direct-driven airend

- One shaft direct drive with no gear or coupling results in zero energy waste on power transmission

Screw compressor element

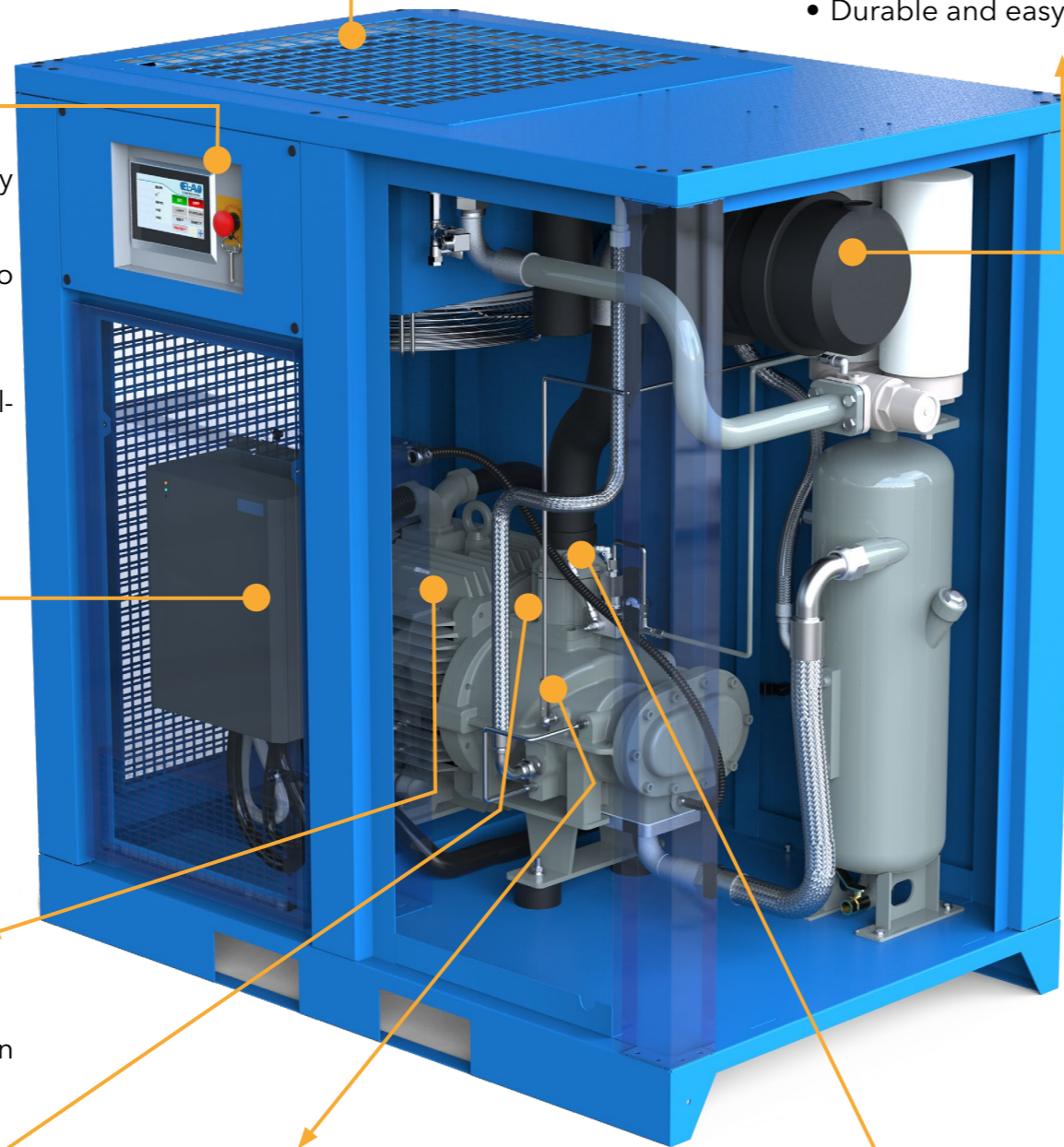
- Unique profile and design
- Lightweight housing
- Stainless steel screws
- Built for heavy-duty
- Silent working
- Reinforced 6 bearings

High end filters for heavy-duty

- Spin-on oil separator for fast and easy replace (up to 37Kw)
- Improved oil filter for a longer life and better flow
- Durable and easy to maintain

Intake valve

- With a unique patent for minimal air loss
- Extreme long life
- Works fast and efficiently



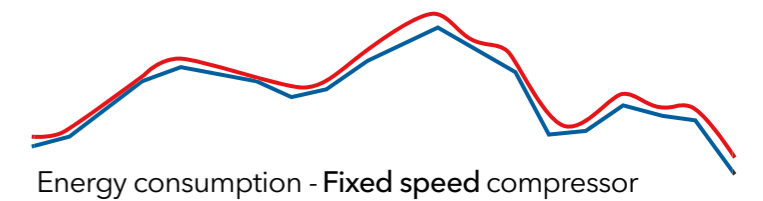
Looking to save on electricity expenses? You can start save right now with EL+ Series Compressors

Energy Savings with EL+

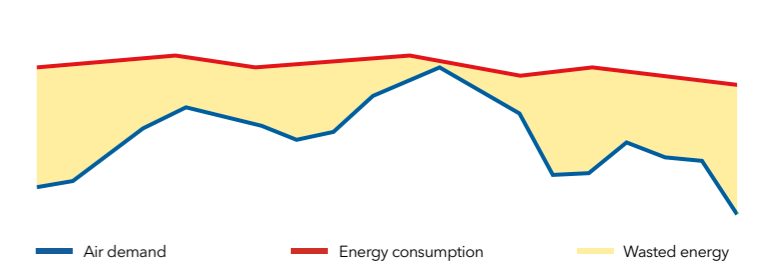
Every EL+ Series compressor comes with an IE4 super premium efficiency motor and inverter. These two components together bring an average savings of 50% in electricity.

The inverter gives the compressor the ability to change its airflow and match it to the user's actual air demand. This ability itself boosts the efficiency by up to 35% compared to the fixed-speed compressor. Further, the use of the PM motor increases the efficiency by at least 20% more than the use of induction motor.

Energy consumption - EL+ compressor



Energy consumption - Fixed speed compressor



— Air demand — Energy consumption — Wasted energy

Why should you use an Inverter compressor?

In most manufacturing plants today, the demand for compressed air varies during the days, months, and weeks. When using a non-inverter compressor, energy is wasted at any point where the compressor significantly overcomes compressed air demand and working at idle mode.

This wasted energy can be compensated using an inverter compressor that adapts itself to the factory compressed air demand. Using any inverter compressor will improve the efficiency by at least 20%.

The advantages of using the EL+ Air compressor

- Average 50% energy savings
- Save on idling time (up to 0% idle) no suction valve blow-off loss
- Extra-wide RPM range (15%-100%) with high efficiency all the way.
- No peak current at start-up

Inside EL+ 55Kw-110Kw

Cooling system

- Big and efficient cooling radiator
- VSD cooling vent to keep optimal oil temperature, synchronized by a temp sensor

Controller

- EL-AV compressors ELHC+ in house controller
- Easy and fast to operate with a user-friendly interface
- All the important information in a graphic display
- Perfect automatic control of the unit promises to get the highest efficiency possible
- Weekly auto on/off schedule
- Alarm and alerts
- Optional gateway network connection with real-time alerts
- 7" Color touch screen

VFD

- Built for heavy-duty
- Electronic components durable to high temperatures
- Designed especially for air compressor
- Dedicated input for cooling vent (VSD)
- Designed to work with PM motor

Permanent Magnet Synchronous Motor (PMSM)

- IE4 super premium Efficiency
- Up to 50% smaller footprint (compare to induction motor)
- 10%-20% more silent
- IP54 rating

High end filters for heavy-duty

- Improved oil filter for a longer life and better flow
- Durable and easy to maintain

Minimum pressure valve

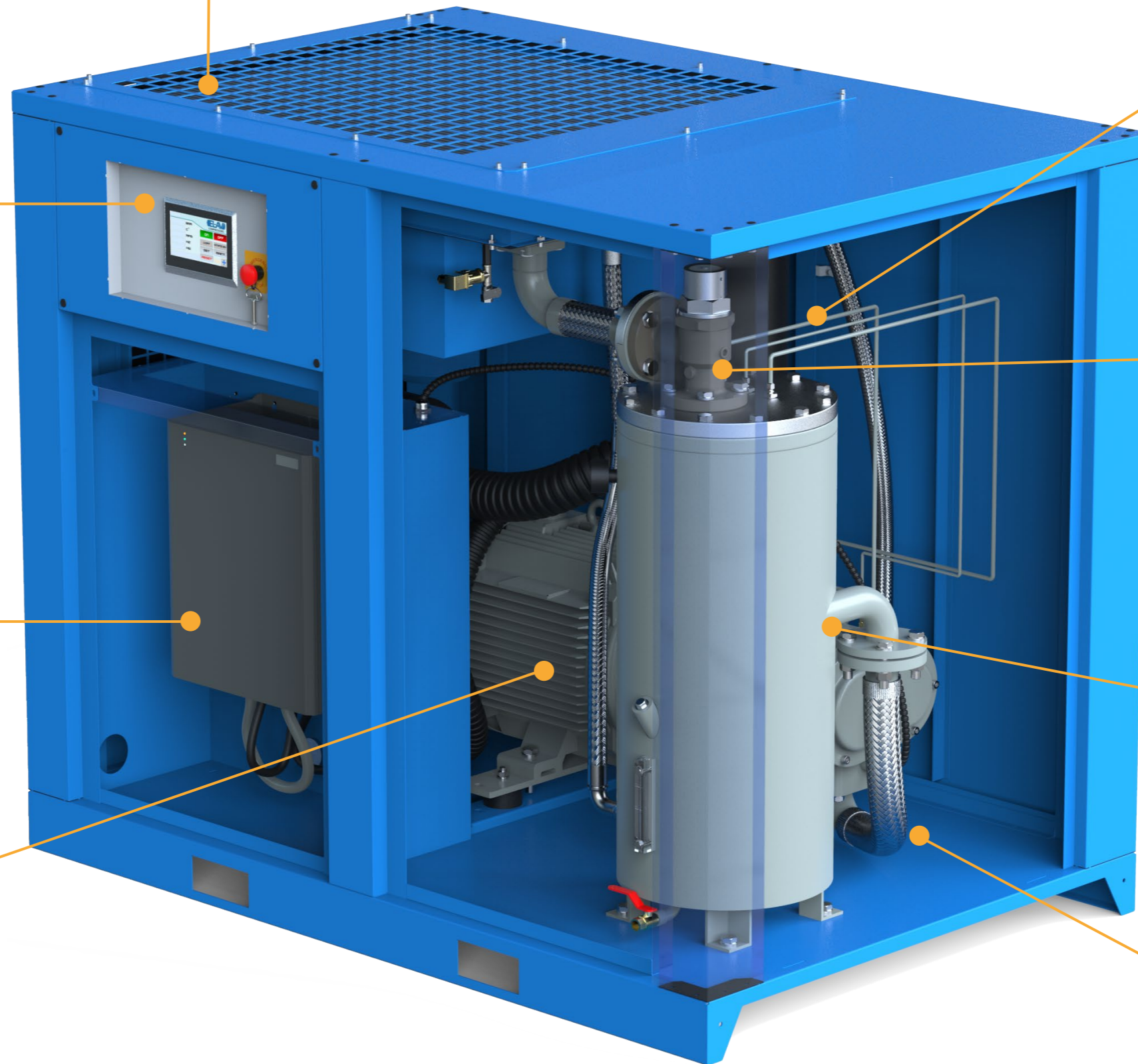
- Reinforced and made for heavy duty and long life span

Air/Oil separator

- Heavy duty Air/Oil vessel separator

Stainless steel piping

- In order to get flexibility and toughness at the same time



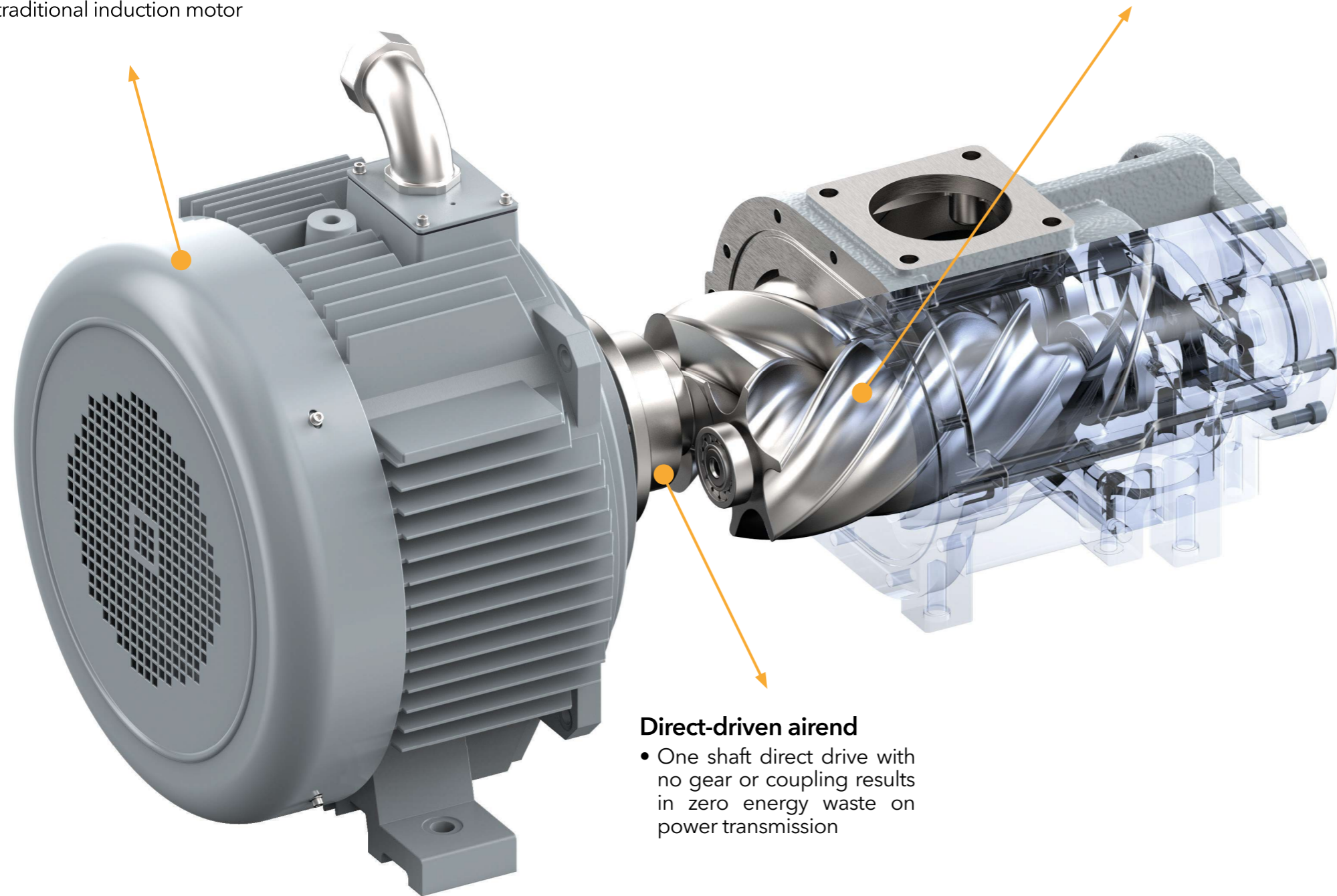
Our most efficient Screw unit

Permanent Magnet Synchronous Motor (PMSM)

- IE4 super premium Efficiency
- Up to 50% smaller footprint (compare to induction motor)
- 10%-20% more silent
- IP54 rating
- Higher efficiency with VFD compare to traditional induction motor

Screw compressor element

- Unique profile and design
- Lightweight housing
- Stainless steel screws
- Built for heavy-duty
- Silent working
- Reinforced 6 bearings



Direct-driven airend

- One shaft direct drive with no gear or coupling results in zero energy waste on power transmission

The perfect match

Our EL+ Series use the combination of our best screw unit with high air flow capacity long life span and 6 reinforced bearings combine with our IE4 Permanent Magnet motor.

This perfect combination brings very high air flow with a very low electric consumption, which leads to a very low kWh to m3/min ratio.

As well our motor have no bearings for the rotor unlike most of the electric motors on the market.

Why EL+ PM motor?

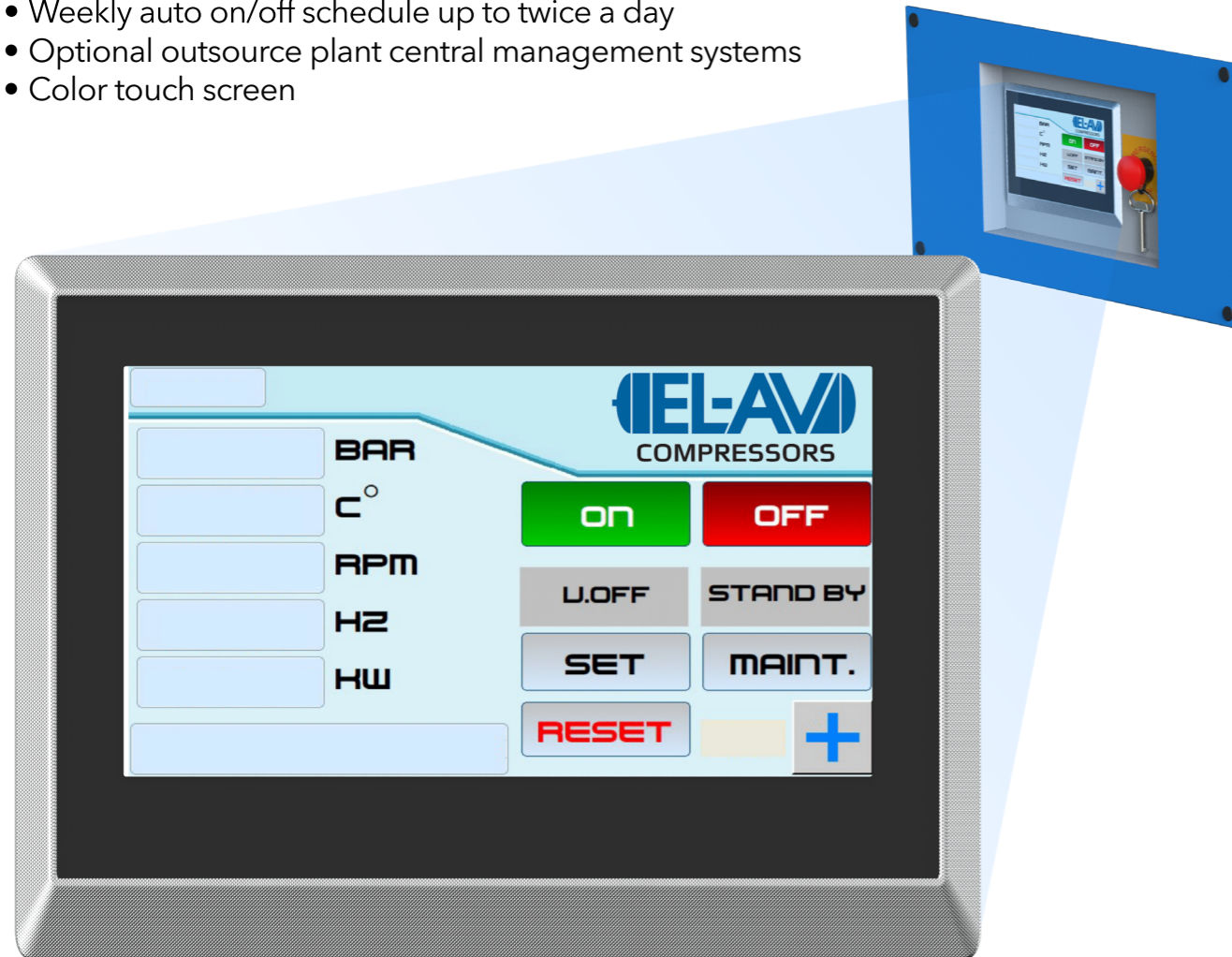
Simply because is much more efficient than the traditional induction motor, is smaller, is more quiet, it has a wider frequency (Hz) range with higher efficiency all the way and its more reliable thanks to its non bearing design.



Technical Specifications EL+10-150 HP

ELHC+ Controller

- Real-time data of energy consumption
- Real-time data of the compressor working status (temp, rotation speed, pressure, Etc.)
- Real-time Alerts and Alarms
- Weekly auto on/off schedule up to twice a day
- Optional outsource plant central management systems
- Color touch screen



Model	Working Pressure		Capacity FAD (min-max)						Electric motor		Noise level	Air outlet
	bar(g)	psi(g)	m ³ /min		l/min		cfm		Hp	Kw	dB(A)	BSP
			min	max	min	max	min	max				
ELAD10INV	6	87	0.26	1.30	260	1300	9.2	45.9	10	7.5	63	G 3/4"
	7	102	0.24	1.20	240	1200	8.5	42.4				
	8	116	0.22	1.10	220	1100	7.8	38.8				
	10	145	0.19	0.95	190	950	6.7	33.5				
ELBD20INV	6	87	0.52	2.60	520	2600	18.4	91.8	20	15	64	G 1"
	7	102	0.484	2.42	484	2420	17.1	85.5				
	8	116	0.446	2.23	446	2230	15.8	78.8				
	10	145	0.36	1.80	360	1800	12.7	63.6				
ELBD30INV	6	87	0.88	4.40	880	4400	31.1	155.4	30	22	65	G 1"
	7	102	0.8	4.00	800	4000	28.3	141.3				
	8	116	0.75	3.75	750	3750	26.5	132.4				
	10	145	0.7	3.50	700	3500	24.7	123.6				
ELCD50INV	6	87	1.46	7.30	1460	7300	51.6	257.8	50	37	65	G 1 ^{1/2} "
	7	102	1.36	6.80	1360	6800	48.0	240.1				
	8	116	1.3	6.50	1300	6500	45.9	229.5				
	10	145	1.12	5.60	1120	5600	39.6	197.8				
ELFD75INV	6	87	2.28	11.40	2280	11400	80.5	402.6	75	55	68	G 2"
	7	102	2.18	10.90	2180	10900	77.0	384.9				
	8	116	2.1	10.50	2100	10500	74.2	370.8				
	10	145	1.88	9.40	1880	9400	66.4	332.0				
ELFD100INV	6	87	3	15.00	3000	15000	105.9	529.7	100	75	72	G 2"
	7	102	2.86	14.30	2860	14300	101.0	505.0				
	8	116	2.66	13.30	2660	13300	93.9	469.7				
	10	145	2.38	11.90	2380	11900	84.0	420.2				
ELGD125INV	6	87	3.54	17.70	3540	17700	125.0	625.1	125	90	72	G 3"
	7	102	3.396	16.98	3396	16980	119.9	599.6				
	8	116	3.18	15.90	3180	15900	112.3	561.5				
	10	145	2.83	14.15	2830	14150	99.9	499.7				
ELGD150INV	6	87	4.374	21.87	4374	21870	154.5	772.3	150	110	72	G 3"
	7	102	4.09	20.45	4090	20450	144.4	722.2				
	8	116	3.972	19.86	3972	19860	140.3	701.3				
	10	145	3.374	16.87	3374	16870	119.2	595.8				

* Unit performance measured according to ISO 1217:2009, annex E.

* Mean noise level measured at a distance of 1 m according to ISO 2151:2004

Reference conditions:

- Absolute inlet pressure 1 bar (14.5 psi).
- Intake air temperature 20°C, 68°F.



IoT Gateway solution

Optional add-on feature

As the Internet of things is creating a revolution in manufacturing, EL-AV offers innovative connectivity solutions. EL-AV sees IoT solutions as an opportunity to reduce our customers' costs while promoting energy-saving and increasing overall operational efficiency. By connecting through our remote control system ECloud. With ECloud, you can follow the status of your equipment and be alerted when it is time to perform maintenance. This real-time tool provides the possibility to get a complete overview of your compressors, providing you with live data at the same time.



Dimensions

Model	Dimensions (mm)			Weight (kg)
	Length	Width	Height	
ELAD10INV	958	750	1000	240
ELBD20INV				380
ELBD30INV	1420	920	1435	490
ELCD50INV				680
ELFD75INV	1820	1200	1518	1120
ELFD100INV				1350
ELGD125INV	2280	1320	1980	2100
ELGD150INV				2250



About EL-AV

Since its establishment in 1985 up to this day, EL-AV Compressors has set itself the goal of striving for technological advantages in its products and professional benefits in its service.

With vast experience in the compressed air systems and gas generating market and a wide range of products, EL-AV Compressors promise its customers always to provide the ideal product for their needs, and thus ensure peace of mind for many years, as well as maximum money and energy savings over time.

EL-AV Compressors provides made in Israel products at the cutting edge of global technology, promising reliability, efficiency, and maximum benefits to the customer.

EL-AV
COMPRESSORS

SINCE 1985



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