EN Series
Screw Air Compressors
Essentials Encapsulated

UPTime™
ASSURANCE

www.elgi.com

2.2 - 45 kW / 03 - 60 HP
A Tradition of Reliability

ELGi, established in 1960, designs and manufactures a wide range of air compressors. The company has gained its reputation for design and manufacture of screw compressors through strategic partnerships and continuous research and development. Over the years, it has emerged as a multi-product, multi-market enterprise providing total compressed air solutions in all segments. ELGi’s design capabilities translated into a wide range of products ranging from oil-lubricated and oil-free rotary screw compressors, reciprocating compressors and centrifugal compressors. ELGi has its own manufacturing operations in India, Italy and USA with subsidiaries in Australia, Brazil, UAE and Indonesia. The company is fast expanding its global footprint attracting distributors and customers with its latest generation products.

Robust Infrastructure

ELGi has modern manufacturing facilities equipped with advanced high precision grinding machines, turning centres and CNC horizontal and vertical machining centres. Screw airend are manufactured with the latest rotor grinding technology, coupled with measurement technology to maintain precise manufacturing tolerances. ELGi’s manufacturing plants are both ISO and EOHS certified. The products are manufactured under controlled environment to ensure that its quality continues to meet the highest standards.

Innovative Technology

Screw Compressor elements are manufactured in-house using state-of-the-art machining centres for rotor grinding and machining castings of various sizes. ELGi’s own eta-V profile rotors ensure energy-efficient compressed air supply for all demanding applications. ELGi is one of the few companies capable of manufacturing wide range of airends and compressor packages in the world. ELGi’s patent portfolio is a testament to the company’s continuous research and innovation capability.

AIR UP.

**UPTiME™** comes standard on every EN Series Compressor

**UPTIME Design**

This speaks to the engineering and design of our products. Our R&D is dedicated to designing machines that run cooler, cleaner and longer... that are easy to service... with longer service intervals.

**UPTIME Components**

For so many of our customers, seeing is believing. They know a quality-built machine when they see it. That's why every part on a ELGi compressor is a quality part. From our proprietary air ends, to our use of leak-free hoses and piping.

**UPTIME Assurance**

Here is where we back our pledge, Our industry leading warranties, parts availability and call centers staffed by experts assure peace-of-mind to our customers.
EN Series
compact, silent and efficient

Essentials
Encapsulated

ELGi’s EN series screw compressors are designed to encapsulate all functional components and compressor within a common housing. With its small footprint, high reliability and low maintenance requirements, the compressors are ideal for all industrial applications where size, efficiency and cost matter.

UPTiME™ ASSURANCE

High reliability
Energy-efficient
Low cost of ownership
Ease of maintenance
Compact and silent
Encapsulated airend*

The EN series compressors are fitted with ELGI’s unique assembly which encapsulates all major functional systems such as intake system, compression system and separation system within a common frame.
- Energy efficient
- Minimal pressure drop across the system
- Compact
- Silent

* From EN 2 to EN 30

Efficient air-oil separation with (<3ppm)

The air-oil separation by impact and deceleration action involves three stages:
- **Stage 1:** Impact of air-oil mixture on the tank circumferential area
- **Stage 2:** Deceleration action of air-oil mixture to remove the oil particles
- **Stage 3:** Air with minor traces of oil enters the spin on separator for purification

Ease of maintenance

- Single service door access to routine maintenance points
- Spin-on oil filter and separator elements for fast and easy routine service

Reliable Neuron Controller

The Neuron XT controller has been custom designed and engineered as an efficient control solution for encapsulated series. The system allows you to monitor and control overall performance with easy-to-use service indications, malfunction alarms and safety shutdowns. The controller is built-in with 'service protect' modules. It also includes a service and operational log feature to provide real-time feedback and increase system productivity.

- Designed for wide range of temperatures upto 50°C
- Integration to energy management system
- MODBUS communications for DCS control through RS485 port
- In-built phase loss & phase reversal protection
- Remote start / stop facility
High efficiency motor

- Heavy duty TEFC / S1 / IP55 motor suited for ambient temperature up to 50°C
- Built-in safety systems

Energy Saving

In-Built ELGi Variable Frequency Drives (VFD)*

Matches compressor output with demand by varying motor speed. The power consumption reduces in line with the reduction in demand. This helps in eliminating the frequent load-unload cycle thereby providing savings in energy.

* Available in select models only

Low cost of ownership

Design

- Space saving design
- Powered by ELGi’s energy-efficient eta-V rotor profiles
- Zero leakage due to integration of components/connections
- Fewer parts and connections require only minimum maintenance

Operational

Longer life of consumables

- Efficient air filtration system where air enters through pre-filtered enclosure. Cleaner suction air keeps the internal components of the compressor clean and maintains optimum cooling efficiency
- Low oil-fill

Robust cooling system in high ambient temperature

- Air cooling with separate hot and cold zones
- High efficiency coolers and cooling fans ensure low operating temperature
- Improved cooling ensures longer life of compressor

After cooler is standard in all models

- Cold air
- Hot air
### Technical Specification (50Hz)

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Power</th>
<th>Working Pressure</th>
<th>Max. Pressure</th>
<th>Free Air Delivery</th>
<th>Weight*</th>
<th>Noise</th>
<th>Tank**</th>
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<tr>
<td>50Hz</td>
<td>kW</td>
<td>HP</td>
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Length:615mm Breadth:715mm Height: 845mm

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Length: 930mm Breadth: 1150mm Height: 1450mm

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Note: 1. Free Air Delivery (FAD) is tested as per ISO 1217 : 2009 Annexure C Edition; 4. Sound level measured as per ISO 2151, Second Edition at 1m distance in field conditions. &±3dB(A)
2. BM - Base Mounted. * Weight and dimension are for Base Mounted models. ** Compressors mounted on horizontal receiver tank and dryer available as option (for models up to EN15).
3. DOL Starter for EN 2 to EN 7, Star Delta Starter for EN 11 to EN 45, EN 5 / EN 7 / EN 5x are also available with Star Delta Star
4. Due to continuous engineering improvements, the specifications are subject to change without prior notice.
5. Product images displayed in this brochure are only for representative purpose and may not exactly match the actual product.
6. EN 2 - 9.5 is also available in 230V single phase 50Hz variant.
Technical Specification - VFD Model

<table>
<thead>
<tr>
<th>Model</th>
<th>Motor Power</th>
<th>Working Pressure</th>
<th>Max. Pressure</th>
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<td></td>
<td>kW</td>
<td>bar g</td>
<td>psi g</td>
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</table>

Length: 615mm Breadth: 715mm Height: 845mm

Note:
- Free Air Delivery (FAD) is tested as per ISO 1217: 2009 Annexure E Edition: 4
- All standard models are air-cooled
- * Weight and dimension are for Base Mounted models. ** Compressors mounted on horizontal receiver tank and dryer available as option
- Sound level measures as per ISO 2151, Second Edition at 1m distance in field conditions, +/- 3dB(A)
- Due to continuous improvements, the specifications are subject to change without prior notice
- Product images displayed in this brochure are only representative and may not exactly match the actual product

ELGi Airmate Accessories

**Moisture separator**
- Capacity: 100-365 cfm
- Working pressure: 16 bar g

**Downstream filter**
- Capacity: 19-1200 cfm
- Working pressure: 7-60 bar
- Filtration range: 1-0.003 microns

**Drain valves**
(Timer controlled & zero loss)
- Capacity: 50-2000 cfm
- Working pressure: 16 bar
- Media: Condensate

**Dessicant air dryer**
- Capacity: 10-45 cfm
- Working pressure: 16 bar g

**Refrigeration air dryer**
- Capacity: 10-2000 cfm
- Working pressure: 7-60 bar
- Filtration range: +3°C PDP

**Air receiver**
- Capacity: 250-10000 ltrs.
- Working pressure: 7-12.5 bar
- Code of construction: ASME sec. VIII Div.1 or IS 2825

Typical compressed air supply system

Genuine Spares
For enhancing performance and productivity