

EN Series Screw Air Compressors

Essentials Encapsulated







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 China, France, India and Italy with subsidiaries in Australia, Brazil, UAE, USA 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 airends 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



UPTIME comes standard on every EN Series Compressor



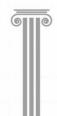
UPTIME Design

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, with industry-leading warranties, parts availability, loaner machines and call centers staffed by experts.

EN Series

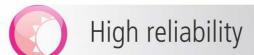
compact, silent and efficient



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.

















Encapsulated airend*

The EN series compressors are fitted with ELGi's unique airend 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 (<2ppm)

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





Increased reliability

- Designed for wide range of temperatures upto 45°C
- Neuron^e controller

The Neuron^e 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 builtin with 'service protect' modules. It also includes a service and operational log feature to provide real-time feedback and increase system productivity





High efficiency motor

- Heavy duty TEFC / S1 / IP55 / IE2 motor suited for ambient temperature up to 45°C
- Built-in safety systems
- CE certified to ensure high levels of safety



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



Technical Specification

| Model | Rated Power | | Working Pressure | | Max. Pressure | | Free Air Delivery | | Weight* | Noise | Tank** |
|--------|-------------|------|------------------|-------------|---------------|-----------|------------------------|-----|---------|-------|----------------|
| 50Hz | kW | НР | bar g psi g | | bar g psi g | | m³/min cfm | | Kgs | dB(A) | Litres |
| | | | Len | gth:460mm | Breadth:600 | Omm Heigh | t: 1015mm | , | | | |
| EN 2 | 3.0 | 4.0 | 7.0 | 102 | 7.2 | 104 | 0.28 | 10 | 133 | 61 | 220 |
| EN 2 | 3.0 | 4.0 | 9.5 | 138 | 9.7 | 141 | 0.21 | 8 | 133 | 61 | 220 |
| EN 3 | 3.0 | 4.0 | 7.0 | 102 | 7.2 | 104 | 0.38 | 14 | 133 | 61 | 220 |
| EN 3 | 3.0 | 4.0 | 9.5 | 138 | 9.7 | 141 | 0.31 | 11 | 133 | 61 | 220 |
| EN 3 | 3.0 | 4.0 | 12.5 | 181 | 12.7 | 184 | 0.24 | 9 | 133 | 61 | 220 |
| EN 4 | 4.0 | 5.5 | 7.0 | 102 | 7.2 | 104 | 0.51 | 18 | 143 | 61 | 220 |
| EN 4 | 4.0 | 5.5 | 9.5 | 138 | 9.7 | 141 | 0.42 | 15 | 143 | 61 | 220 |
| EN 4 | 4.0 | 5.5 | 12.5 | 181 | 12.7 | 184 | 0.36 | 13 | 143 | 61 | 220 |
| EN 5 | 5.5 | 7.5 | 7.0 | 102 | 7.2 | 104 | 0.69 | 25 | 150 | 64 | 220 |
| EN 5 | 5.5 | 7.5 | 9.5 | 138 | 9.7 | 141 | 0.57 | 20 | 150 | 64 | 220 |
| EN 5 | 5.5 | 7.5 | 12.5 | 181 | 12.7 | 184 | 0.48 | 17 | 150 | 64 | 220 |
| | | | | gth:575mm | | | | | | | |
| EN 5x | 5.5 | 7.5 | 7.0 | 102 | 7.2 | 104 | 0.82 | 29 | 250 | 66 | 270 |
| EN 5x | 5.5 | 7.5 | 9.5 | 138 | 9.7 | 141 | 0.65 | 23 | 250 | 66 | 270 |
| EN 5x | 5.5 | 7.5 | 12.5 | 181 | 12.7 | 184 | 0.54 | 19 | 250 | 66 | 270 |
| EN 7 | 7.5 | 10.0 | 7.0 | 102 | 7.2 | 104 | 1.10 | 39 | 270 | 66 | 270 |
| EN 7 | 7.5 | 10.0 | 9.5 | 138 | 9.7 | 141 | 0.91 | 32 | 270 | 66 | 270 |
| EN 7 | 7.5 | 10.0 | 12.5 | 181 | 12.7 | 184 | 0.76 | 27 | 270 | 66 | 270 |
| EN 11 | 11 | 15.0 | 7.0 | 102 | 7.2 | 104 | 1.71 | 61 | 280 | 67 | 270 |
| EN 11 | 11 | 15.0 | 9.5 | 138 | 9.7 | 141 | 1.40 | 50 | 280 | 67 | 270 |
| EN 11 | 11 | 15.0 | 12.5 | 181 | 12.7 | 184 | 1.22 | 43 | 280 | 67 | 270 |
| | | | 1 | gth:575mm | | | | | | | |
| EN 15 | 15 | 20.0 | 7.0 | 102 | 7.2 | 104 | 2.07 | 73 | 320 | 68 | 270 |
| EN 15 | 15 | 20.0 | 9.5 | 138 | 9.7 | 141 | 1.76 | 62 | 320 | 68 | 270 |
| EN 15 | 15 | 20.0 | 12.5 | 181 | 12.7 | 184 | 1.56 | 55 | 320 | 68 | 270 |
| LIVIS | 13 | 20.0 | | th: 930mm I | | | | 33 | 320 | 00 | 270 |
| EN 15x | 15 | 20.0 | 7.0 | 102 | 7.2 | 104 | 2.50 | 89 | 520 | 69 | |
| EN 15x | 15 | 20.0 | 9.5 | 138 | 9.7 | 141 | 2.10 | 75 | 520 | 69 | |
| EN 15x | 15 | 20.0 | 12.5 | 181 | 12.7 | 184 | 1.80 | 64 | 520 | 69 | - |
| EN 18 | 18.5 | 25.0 | 7.0 | 102 | 7.2 | 104 | 3.10 | 108 | 558 | 69 | - |
| EN 18 | 18.5 | 25.0 | 9.5 | 138 | 9.7 | 141 | 2.60 | 93 | 558 | 69 | |
| EN 18 | 18.5 | 25.0 | 20000000 | 777.00 | 12.7 | 184 | 2.20 | 76 | 558 | 69 | - |
| EN 22 | 22 | 30.0 | 12.5 7.0 | 181 | 7.2 | 104 | 3.60 | 127 | 610 | 69 | - |
| EN 22 | 22 | 30.0 | 9.5 | 138 | 9.7 | 141 | 3.10 | 108 | 610 | 69 | |
| EN 22 | 22 | 30.0 | 12.5 | 181 | 12.7 | 184 | 2.60 | 92 | 610 | 69 | |
| EN 30 | 30 | 40.0 | 7.0 | 102 | 7.2 | 104 | 4.30 | 152 | 678 | 69 | |
| EN 30 | 30 | 40.0 | 9.5 | 138 | 9.7 | 141 | 3.60 | 127 | 678 | 69 | _ |
| EN 30 | 30 | 40.0 | 12.5 | 181 | 12.7 | 184 | 3.00 | 106 | 678 | 69 | - |
| EN 30 | 30 | 40.0 | - | | | | | 100 | 076 | 09 | |
| EN 30x | 30 | 40.0 | 7.0 | 102 | 7.5 | 109 | ht: 1650mm 5.41 | 191 | 850 | 74 | |
| EN 30x | | | | | | | 4.39 | 155 | | 74 | |
| | 30 | 40.0 | 9.5 | 138 | 10.0 | 145 | | | 850 | | = 0 |
| EN 30x | 30 | 40.0 | 12.5 | 181 | 13.0 | 189 | 3.60 | 127 | 850 | 74 | - |
| EN 37 | 37 | 50.0 | 7.0 | 102 | 7.5 | 109 | 6.57 | 232 | 890 | 74 | - |
| EN 37 | 37 | 50.0 | 9.5 | 138 | 10.0 | 145 | 5.47 | 193 | 890 | 74 | - |
| EN 37 | 37 | 50.0 | 12.5 | 181 | 13.0 | 189 | 4.70 | 166 | 890 | 74 | |
| EN 45 | 45 | 60.0 | 7.0 | 102 | 7.5 | 109 | 7.93 | 280 | 950 | 74 | - |
| EN 45 | 45 | 60.0 | 9.5 | 138 | 10.0 | 145 | 6.80 | 240 | 950 | 74 | |
| EN 45 | 45 | 60.0 | 12.5 | 181 | 13.0 | 189 | 5.66 | 200 | 950 | 74 | - |

Note:
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)
DOL Starter for EN 2 to EN 7 and Star Delta Starter for EN 11 to EN 45
** Compressors mounted on horizontal receiver tank and dryer available as option (for models upto EN 15)
* Weight and dimension are for the base unit
Due to continuous engineering 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

Technical Specification - Refrigerated Air Dryers*

| | Flow | | Max Pressure | Electrical | | | Dimensions in mm | | | Weight | Cooling | |
|----------|------|--------|-----------------|------------|----|--------|------------------|---------|--------|--------|------------------|--|
| Model | cfm | m³/min | bar g | Volts | Hz | phase | length | breadth | height | Kg | Cooling media | |
| EGRD 020 | 20 | 0.57 | 16 | 230 | 50 | Single | 395 | 475 | 500 | 25 | Air | |
| EGRD 040 | 40 | 1.13 | 16 | 230 | 50 | Single | 395 | 475 | 500 | 28 | Air | |
| EGRD 080 | 80 | 2.27 | 16 | 230 | 50 | Single | 380 | 420 | 775 | 33 | Air | |

Note:

Performance data is measured at 7 bar, inlet temperature 45° C, ambient temperature 35° C, pressure dew point $+3^{\circ}$ C Due to continuous engineering improvements, technical specifications are subject to change without prior notice

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



Refrigeration air dryer

- Capacity: 10-2000 cfm
- Working pressure: 7-60 bar
- Filtration range: +3°C. PDP



Drain valves

(Timer controlled & zero loss)

- Capacity: 50-2000 cfm
- Working pressure: 16 bar
- Media : Condensate



Dessicant air dryer

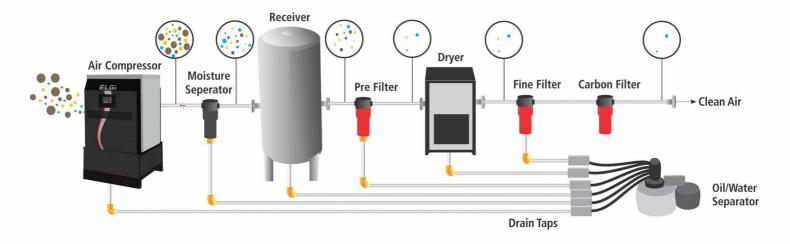
- Capacity: 10-45 cfm
- Working pressure: 16 bar g



Air receiver

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

Typical compressed air supply system



Genuine Spares

For enhancing performance and productivity



^{*} for models upto EN15

Compressed air solutions for all sustainable air needs



Oil-Free Series Screw 90 - 450 kW / 572 - 2450 cfm



EG Series Rotary Screw 11 - 250 kW / 47 - 1612 cfm



EN Series Rotary Screw 2.2 - 75 kW / 8.0 - 469 cfm



Electric Portable (Trolley) 22 - 75 kW / 131 - 490 cfm



Diesel portable (Trolley) 175 - 1100 cfm / 100 - 300 psi



Diesel Portable (Skid) 475 - 1500 cfm / 150 - 400 psi



Oil-free Recip 1.0 - 75 HP / 1.8 - 300 cfm



Oil-lubricated Recip 1.0 - 40 HP / 2.0 - 128 cfm

OVERSEAS OFFICES:

Bangladesh : ELGI Equipments Limited, 5th Floor, Planners Tower, Level: 5 Suite: 8-13, 13/A Bir Uttam CR Datt Road, Sonargaon, Dhaka-1000. Bangladesh. T:880-9671453-65, F:880-28616148, E: bangladesh-enquiry@elgi.com

Malaysia: ELGI Equipments Limited, No 2A-4-6, Jalan Jubli Perak, 22/1, Section 22, 40400, Shah Alam, Malaysia, T: +603 55693544, F: +603-55693544, E:malaysia-enquiry@elqi.com, w:www.elqi.com.my

Srilanka: S.G. Arcade, 2nd Floor, No.441, Sri Sangaraja Mawatha, Colombo-10, T: 00 - 94-11-2392425, F: 00-94-11-4737412. E: elgisupport@slnet.lk

Thailand: ELGI Equipments Limited, 223/66 Country Complex A 14th Floor, Sanphawut Road, Bangna Bangkok - 10260. T: +6627455160 E: thailand-enquiry@elgi.com, w: www.elgi.co.th

WHOLLY OWNED SUBSIDIARIES

Australia: ELGI Equipments Australia Pvt Ltd., 38. Richland Avenue, Coopers Plain QLD 4108 Australia. T: +61-7-3106 0589, F: +61-7-3106 0537, E: Enquiry@elgi.com.au, w: www.elgi.com.au

Brazil: ELGI Compressores Do Brasil Ltd., Av. Emilio Checchinato, 4195 - B: Cep: 13295 - 000, Bairro: Sao Roque da Chave: Itupeva - SP, Brazil. T:44965519,44966611, E:contacto@elqi.com.br, w:www.elqi.br

China: ELGI Equipments (Zhejiang) Limited, No.232, Yunhai Road, Economic Development Zone, Jiaxing 314033 P. R. China T: +86-573-82079100 Hotline: 400-826-3585 | ELGI Compressors Trading (shanghai) Co. Ltd., Rm 909, LSHQ International Centre, 288 Hongjing Road, Shanghai 201103, P. R. China T: +86-21-33581191 Hotline: 400-826-3585, E: enquiry.cn@elgi.com, w: www.elgi.com.cn

France: SAS Belair, Zone Espace leaders; 156 rue de Moutti Sud, 74540 Alby Sur Cheran, France. T: 04 50 68 20 57, F: 04 50 68 22 61, E: info@belair.fr

Indonesia: PT ELGI Equipments Indonesia, Kawasan Pergudangan, BIZPARK Commercial Estate, Pulogadung Jl. Raya Bekai KM 21, 5 Blok A3 No. 12, Kel. Rawa Terate, Kec. Cakung, Pulogadung Jakarta Timur 13920. T:+62-21-46822216, 46827388, E: indonesia-enquiry@elgi.com, w: www.elgi.co.id

Italy: ELGI Compressors Italy S.r.I., Rome(RM), Via Del Babuino 51, 00187: ROTAIR Spa, Via Bernezzo 67, 12023 Caraglio (CN), Italy. T: +39 0171619676, F:+39 0171619677, E: info@rotairspa.com

Middle East: ELGI Gulf (FZE), P.O. Box: 120695, Q4-081, SAIF Zone, Sharjah, U.A.E. T: +971 6 557 9970, F: + 971 6 557 9980, E: gulfenquiry@elgi.com

USA: ELGI Compressors USA, Inc. 1500-N Continental Blvd, Charlotte, NC 28273. T: +1-704-943-7966, M: +1-803-427-7985, W: www.elgi.us



ELGI EQUIPMENTS LIMITED

CORPORATE OFFICE: Trichy Road, Singanallur, Coimbatore - 641005, T: +91-422-2589555, E: enquiry@elgi.com, w: www.elgi.com

Distributed bu

