

**ELGi**<sup>TM</sup>



2.2 - 45 kW



## **EN Series Screw Air Compressors**

Essentials encapsulated

**UPTIME**<sup>TM</sup>  
ASSURANCE





## a tradition of RELIABILITY

Elgi, established in 1960, designs and manufactures a wide range of 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 emerged as a multi-product, multi-market enterprise providing total compressed air 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.

## 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.



## 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 EHS certified. The products are manufactured under controlled environment to ensure that its quality continues to meet the highest standards.



# 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**<sup>™</sup>  
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 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

## 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

After cooler is standard in all models



■ Cold air  
■ Hot air

# Increased reliability

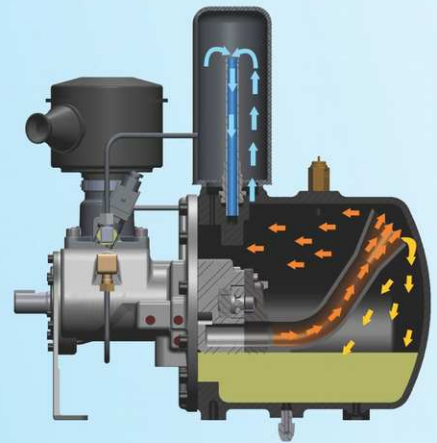
- Designed for wide range of temperatures upto 45°C
- Neuron<sup>®</sup> controller

The Neuron<sup>®</sup> 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



## 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








## Electrical System

### Motor

- High efficiency TEFC / S1 / IP55 motor suited for ambient temperature up to 45°C
- Built-in safety systems
- CE certified to ensure high levels of safety
- Eff1 / IE2 motor available as option



 50Hz	 Motor Power		Working Pressure		Maximum Pressure		 FAD		 Weight*	 Noise Level	Tank**
	kW	HP	bar g	psi g	bar g	psi g	m <sup>3</sup> /min	cfm	Kg	dB(A)	Ltrs.
<b>Length:460mm Breadth:600mm Height: 1015mm</b>											
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
<b>Length:575mm Breadth:770mm Height: 1300mm</b>											
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
<b>Length:575mm Breadth:770mm Height: 1335mm</b>											
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
<b>Length: 930mm Breadth: 1150mm Height: 1450mm</b>											
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	12.5	181	12.7	184	2.20	76	558	69	-
EN 22	22	30.0	7.0	102	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	-
<b>Length: 1250mm Breadth: 1025mm Height: 1650mm</b>											
EN 30x	30	40.0	7.0	102	7.5	109	5.41	191	850	74	-
EN 30x	30	40.0	9.5	138	10.0	145	4.39	155	850	74	-
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\*

Model	Flow		Max Pressure bar g	Electrical			Dimensions in mm			Weight Kg	Cooling media
	cfm	m <sup>3</sup> /min		Volts	Hz	phase	length	breadth	height		
EGRD 020	20	0.57	16	230	50	Single	371	513	475	60	Air
EGRD 040	40	1.42	16	230	50	Single	371	513	475	76	Air
EGRD 080	75	2.12	14	230	50	Single	343	419	739	84	Air

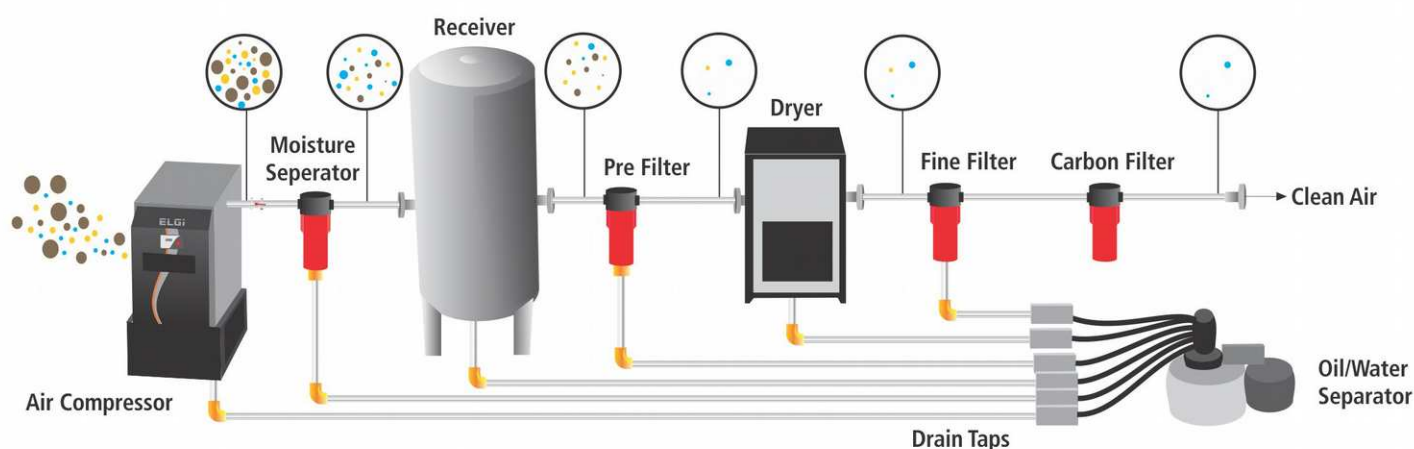
### Note:

\* for models upto EN15

Performance data is measured at 7 bar, inlet temperature 45°C, ambient temperature 35°C, pressure dew point +3°C

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## Typical Compressed Air Supply system



## Downstream accessories

Elgi's comprehensive range of air accessories provides you with the clean, dry air you need to extend the life of your equipment and ensure the quality of your end product.

## Clean Air Solutions



### Refrigeration air dryer

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



### Downstream filter

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



### Air receiver

- Capacity : 250-10000 ltrs.
- Working pressure : 7-60 bar
- Code of construction: ASME sec. VIII Div.I or IS 2825



### Drain valves

#### Timer controlled and zero loss

- Capacity: Upto 2000 cfm
- Working Pressure: 7-16 bar

## Genuine Spares

For enhancing performance and productivity





## ELGi Brand Support



# AIR UP.

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

### DESIGN

#### 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.

### COMPONENTS

#### 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.

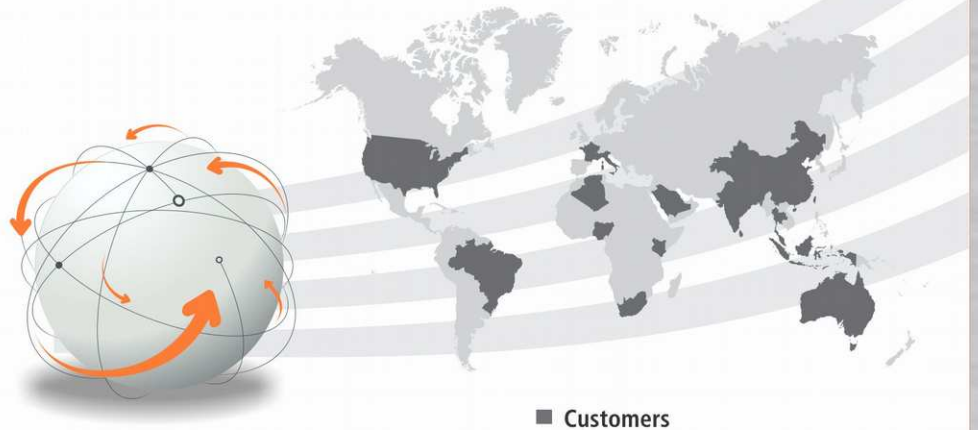
### ASSURANCE

#### UPTIME Assurance

Here is where we back our pledge, with industry-leading warranties, parts availability, loaner machines and call centers staffed by experts.

## World-Class Products. Global Reach. Local Service.

Our rapidly expanding global footprint now spans **73** countries, **20** offices and more than **280** distributors. ELGi has its own manufacturing facilities in China, France, India and Italy. Additionally, ELGi has warehouse operations to stock units and parts in Australia, Brazil, UAE, Indonesia and USA.



# ELGi

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