

Encap Series Screw Air Compressors Essentials encapsulated



2.2-15 kW







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 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, China, Italy and France with subsidiary companies in Brazil, Middle East and Australia. The company is fast expanding its global footprint attracting distributors and customers with its latest generation products.

innovative **TECHNOLOGY**

Screw compression elements are manufactured in-house using state-of-the-art machining centres for rotor grinding and machining intrinsic castings of various sizes. Elgi's own eta-V (η -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 in India, China, Italy and France 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 machines, 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.

Encap Series

compact, silent and efficient



Elgi's Encap 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.



Everything you need in a compressor



Encapsulated airend

The Encap 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

Low cost of ownership



Design

Space saving design

- Powered by Elgi's energy-efficient eta-V $(\eta\text{-V})$ 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



Increased reliability

- Designed for wide range of temperatures upto 45°C (113°F)

• Neuron^e controller

The Neuron[®] 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

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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 (113°F)
- Built-in safety systems
- CE certified to ensure high levels of safety
- Eff1 / IE2 motor available as option



		Working pressure	FAD		Noise Level	Weight*	Type of	Tank** Ltrs.	
50Hz	kW(HP)	bar g	cfm m³/min		dBA	Kg	starter		
Length:600mm Breadth:460mm Height: 1000mm									
E02en	2.2 (3.0)	7	10.1	0.29	61	133	DOL	220	
E02en	2.2 (3.0)	9.5	7.5	0.21	61	133	DOL	220	
E03en	3.0 (4.0)	7	14.1	0.4	61	133	DOL	220	
E03en	3.0 (4.0)	9.5	11	0.31	61	133	DOL	220	
E03en	3.0 (4.0)	12.5	8.5	0.24	61	133	DOL	220	
E04en	4.0 (5.5)	7	18.3	0.52	61	143	DOL	220	
E04en	4.0 (5.5)	9.5	15	0.42	61	143	DOL	220	
E04en	4.0 (5.5)	12.5	12.8	0.36	61	143	DOL	220	
E05en	5.5 (7.5)	7	25.7	0.73	63	150	DOL	220	
E05en	5.5 (7.5)	9.5	21.8	0.62	63	150	DOL	220	
E05en	5.5 (7.5)	12.5	17.7	0.5	63	150	DOL	220	
		Length	:575mm Brea	adth:770mm I	Height: 1292mm				
E05enX	5.5 (7.5)	7	29	0.82	64	250	DOL	270	
E05enX	5.5 (7.5)	9.5	23	0.65	64	250	DOL	270	
E05enX	5.5 (7.5)	12.5	19	0.54	64	250	DOL	270	
E07en	7.5 (10.0)	7	39	1.1	64	260	DOL	270	
E07en	7.5 (10.0)	9.5	32	0.91	64	260	DOL	270	
E07en	7.5 (10.0)	12.5	27	0.76	64	260	DOL	270	
E11en	11.0(15.0)	7	60.5	1.71	65	280	Star Delta	270	
E11en	11.0(15.0)	9.5	49.5	1.4	65	280	Star Delta	270	
E11en	11.0(15.0)	12.5	43	1.22	65	280	Star Delta	270	
		Length	:575mm Brea	adth:770mm I	Height: 1335mm				
E15en	15.0(20.0)	7	73	2.07	66	320	Star Delta	270	

Note :

Free Air Delivery (FAD) is tested as per ISO 1217 : 2009 Annex. C Ed. 3 Noise level measured as per ISO 2151, second edition at 1m distance-free field condition **Compressors with horizontal/vertical receiver tank and refrigerated air dryer available as option * Weight of compressor and tank, both mounted on a tank, shall be provided on request Due to continuous engineering improvements, the specifications are subject to change without prior notice

Technical Specification - Refrigerated Air Dryers

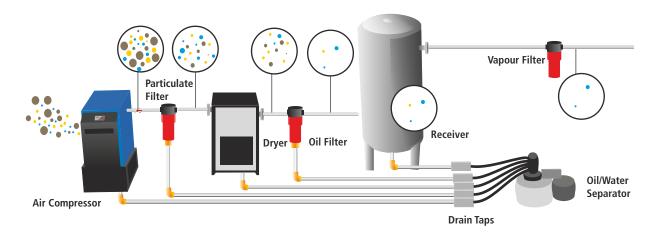
	Flow		Max Electrical Pressure		cal	Dimensions in mm			Weight	Cooling	
Model	cfm	m³/min		Volts	Hz	phase	length	breadth	height	Kg	Cooling media
ELRD 020	20	0.57	16	230	50	Single	360	475	570	45	Air
ELRD 040	40	1.13	16	230	50	Single	360	475	570	47	Air
ELRD 080	80	2.27	16	230	50	Single	500	700	830	95	Air

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



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: $+3^{\circ}$ 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 100 cfm
- Working pressure : 7-13 bar





global **REACH**

Elgi serves the world marketplace. Over two million compressors are powering business in 63 countries worldwide. The company offers a strong sales and service network with a well-knit distribution network of more than 250 dealers worldwide. Elgi has its own manufacturing facilities in India, China, France and Italy. It has also set up warehouse facilities in Brazil, Middle East and Australia.





