



## EG Series Screw Air Compressors

Life source of industries

**ELGi**  
Always Better.

**UPTiME™**  
ASSURANCE



CIN: L29120TZ1960PLC000351

[www.elgi.com](http://www.elgi.com)

11 - 75 kW / 15 - 100 HP (50Hz)



## 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 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.

 **AIR UP.**  
**UPTIME™** comes standard on every EG 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.



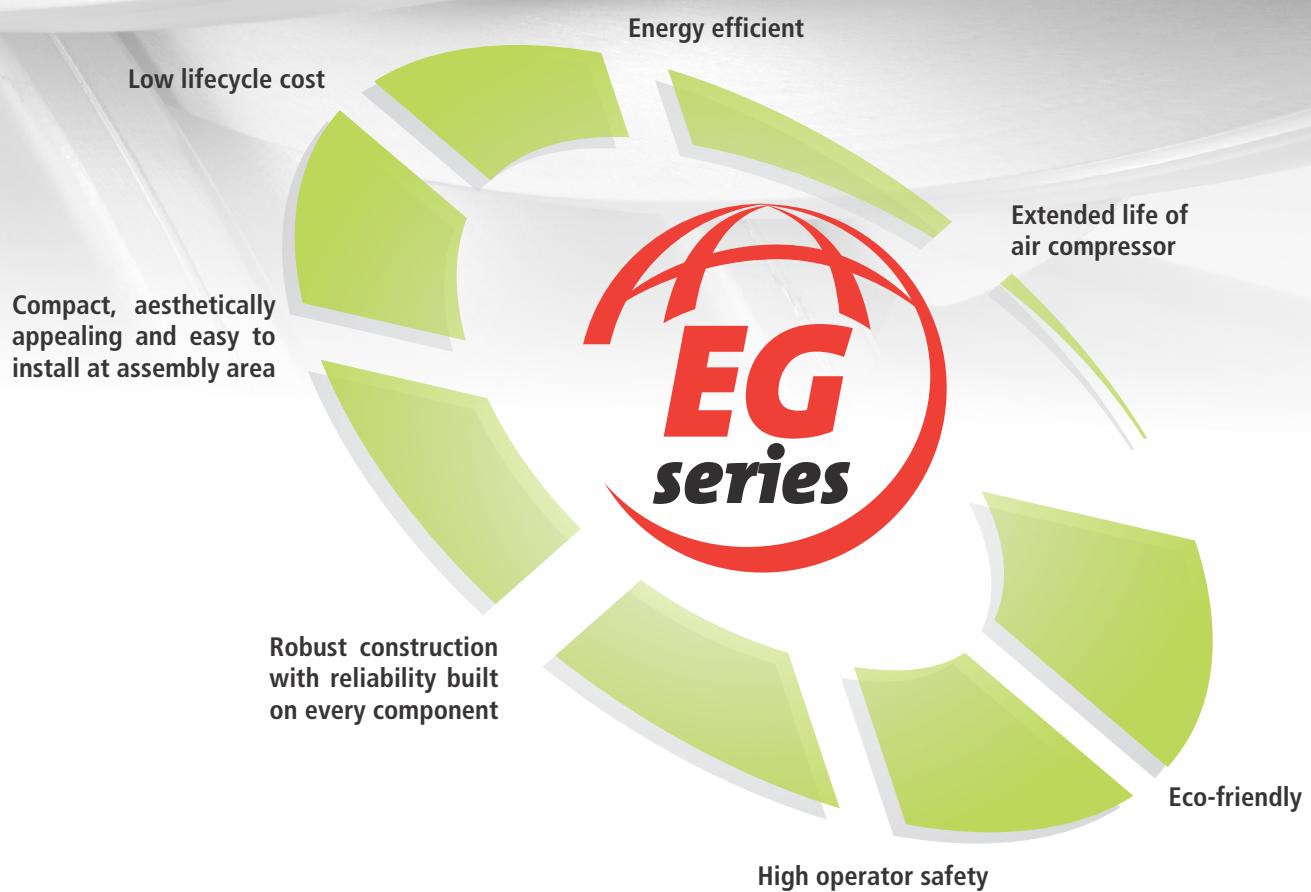
### UPTIME Components

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.

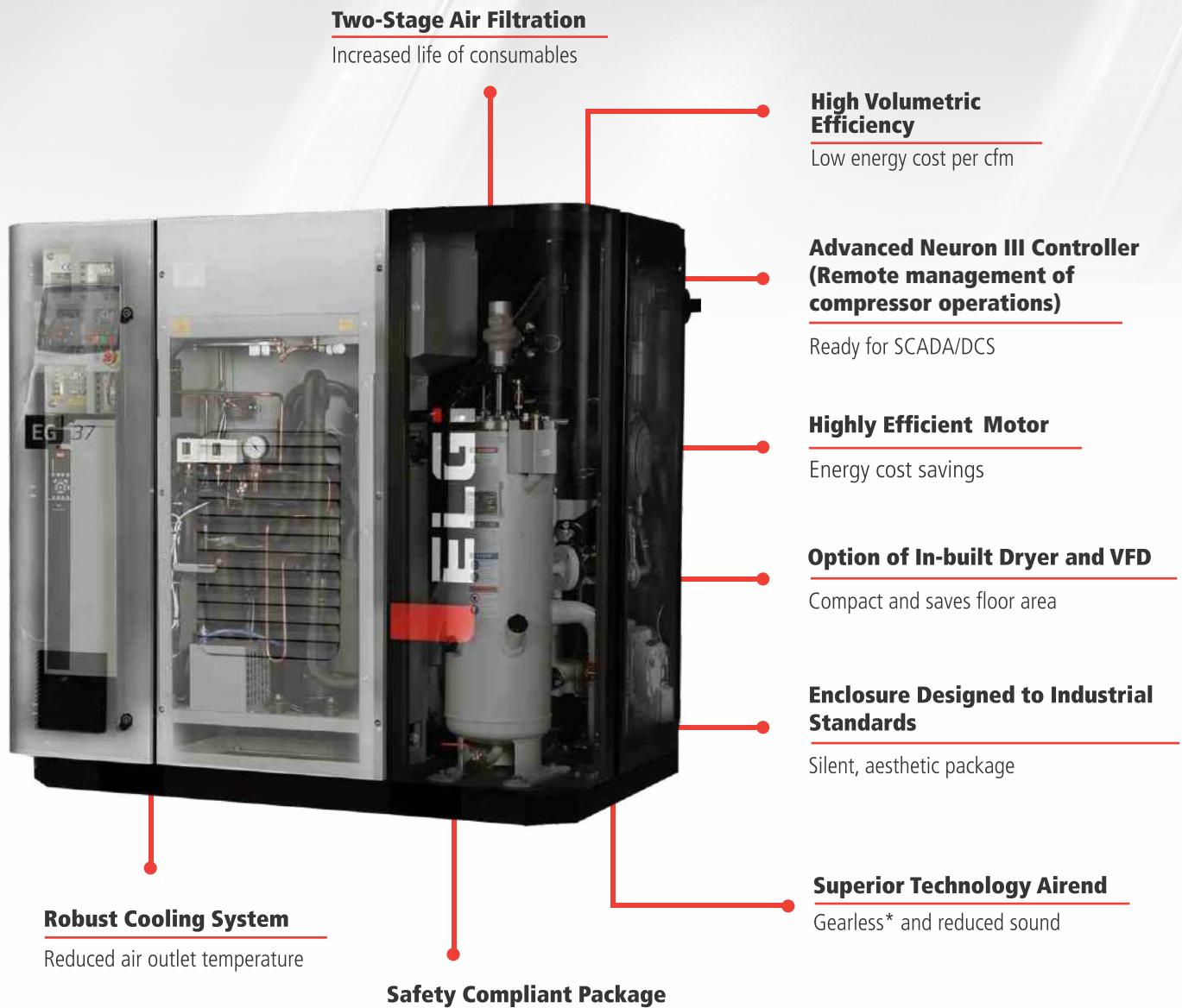


### UPTIME Assurance

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.



The EG Series compressors represent a giant leap in design and performance with each component designed for reliability and ease of maintenance. The compressor is manufactured in compliance with applicable international standards (UL, ASME, CE and others) and designed as per the international quality standards. These new generation compressors significantly reduce operating costs and provide cost savings with fast return on investment.



## EG Series - The Technology Edge



\*for selected models only

# EG Series

The Eco-friendly  
Energy-efficient compressors



Save energy  
High efficient airend



ELGi's airenads are equipped with in-house developed eta-V profile rotors, with 4/5 lobe combination, the rotors are designed to run at optimum speeds. This unique design reduces pressure losses and increased efficiencies. The rotors ensure energy-efficient compressed air supply for all demanding applications.

- Precise rotor clearances for best-in-class energy efficiency
- Low operating speeds for long life, low maintenance and low sound level
- Complies with applicable safety standards



Reduced starting load  
Intake valve system

The new generation intake valve with integrated blow down unit, solenoid controls and actuators is designed for low losses. Intake valve optimally controls the compressor capacity during startup reducing the no-load power. This optimal capacity control results in direct savings on power consumption





## **Oil-Less Air(1ppm)\***

### **Efficient air-oil separation with OSBIC(3 Stages)**

ELGi has applied unique OSBIC process (Oil Separation By Impact and Centrifugal action) which enables efficient separation of air and oil, with minimum pressure drop. The method enables separation of oil in three stages, delivering consistent oil-free air while increasing the life of separator element

\* as per ISO Standards



## **Moisture-Free Air**

### **99% Water Free**

Depending on the humidity level of inlet air, bulk water remains in compressed air at varying levels and causes corrosion of piping, end tools, machinery and valves. EG Series air compressor has a custom-designed centrifugal type moisture separator with an automatic drain. This comes as a part of the package at no extra cost and removes over 99% of bulk water from the compressed air, resulting in corrosion free, longer life of end use equipments and less load on the dryer



## **Cool Air**

### **Efficient air cooling**

The cooling system with fans and larger cooling surface area enhances the cooling of hot air. The fan motor uses significantly low power. The integrated fan-motor assembly maintains low temperature there by increasing the life of motor. Smart cooling system design enables easy maintenance and ducting. More over, the complete system is insulated internally from other zones



## **Robust and Reliable**

### **Reliability under extreme conditions**

EG series compressors are designed to perform at extreme temperatures - from cold to hot and from dry to extremely humid conditions





## Performance Control System

- Built-in Dryer Dew Point integration
- VFD Parameter (Power, HMR, Frequency, Ampere, Voltage)
- Read out and closed loop control
- Selectable AO (Pressure/Temperature/Dew Point) for DCS integration
- Controlled drain system



## Reports

- Cumulative Report (Run hours, load hours, unload hours, stop hours, fault hours and remaining AFCT, OFCT, OSCT, OCT and RGT)
- Detail Report - Previous 15 days (Load hours, unload hours, stop hours, fault hours, and number of times machine stopped due to standby)
- Fault Report - (Previous 99 faults in chronological order with real time stamping and type of fault)



## Remote Monitoring

- **DCS (MODBUS RTU/RS 485):** controller is enabled to synchronize with distributed control system - control of compressor from control panel of customer
- **SCADA :** compressor control through PC with remote monitoring by supervisory control and data acquisition process



## Safety and Protection

Global Series compressors are designed and perfected to ensure highest level of safety for

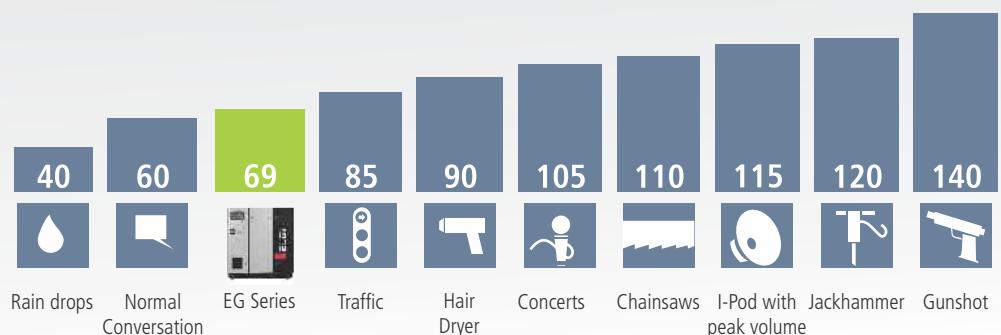
- Pressure regulating valve
- High pressure
- High temperature
- Pressure relief valve
- Phase order and single phase

## Compressor Near Point of Use

Compressors can be placed anywhere in assembly area without any special foundation

- Low Sound
- Low Vibration
- Compact

## How loud is too loud?



# ELGi Airmate Accessories

## Airmate Particulate Filter

Air Flow : 35 - 3,200 cfm (1 - 90 m<sup>3</sup>/min)  
Working Pressure : 100 - 190 psig (7 - 13 bar g)  
Filtration Range : 1 - 0.003 microns



## Airmate Air Receiver

Capacity : 250 - 10000 ltrs  
Working Pressure : 100 - 190 psi g (7 - 13 bar g)  
Code of Construction: ASME sec. VIII Div.I or IS 2825



## Drain Valves

Timer controlled and zero loss  
Capacity : 50 to 2000 cfm  
Working Pressure : 100 - 190 psig (7 - 13 bar g)



## Cooler Pre-filter

Available for all the models as an optional accessory



## After Sales Solutions

A wide range of After Sales products and services is designed to add maximum value for our customers. Our fast serviceability ensures optimum availability and reliability of the compressors with the lowest possible operating costs

### Genuine Spares and Service

ELGi Genuine Spares helps in avoiding unexpected compressor failures and the risk of consequential damage to other vital compressor components. ELGi spares are designed, manufactured and checked for quality to meet the standards of a new compressor. The spares undergo continuous improvement to provide best results and are available through the vast network of ELGi dealers in India and International markets

### ELGi Air Audit

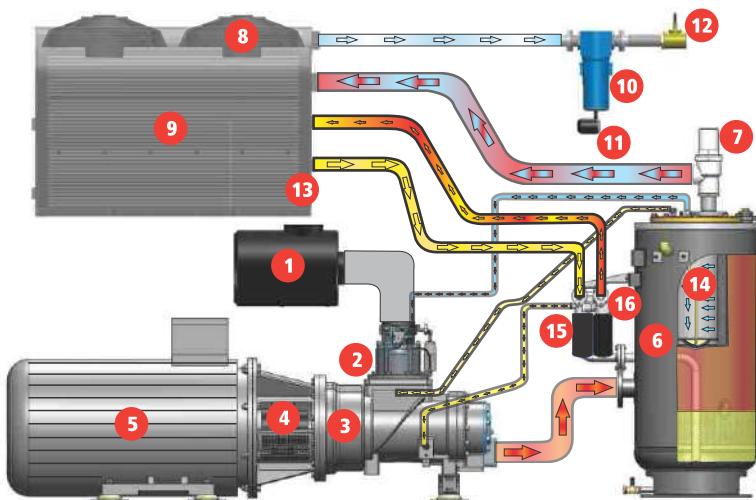
ELGi Air Audit help's in improving the performance of the compressors by identifying the areas of wastage in the system. ELGi's air audit services are offered in areas including generation, distribution and demand side systems

## Genuine Spares

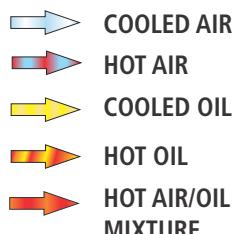
For enhancing performance and productivity



## Air/Oil Flow Diagram



1. Air Intake Filter
2. Suction Control Valve
3. Airend
4. Drive Coupling
5. Electric Motor
6. Air-Oil Separator Tank
7. Minimum Pressure Valve
8. Cooling Fan
9. After Cooler
10. Moisture Separator
11. Automatic Drain
12. Outlet Valve
13. Oil Cooler
14. Air-Oil Separator
15. Oil Filter (spin-on)
16. Thermal Valve Unit





## Superior Air Quality

**In-built air treatment (optional)**

### In-built ELGi Airmate Refrigerant Air Dryer\*

The in-built ELGi Refrigerant Air Dryer uses eco-friendly refrigerant and its optimal design meets dew point range of 3°C - 7°C. The design ensures safety with minimum pressure drop and maximum thermal efficiency. Dryer designs meet ISO 8573 standards for performance.

**Designed for high inlet (55°C) and ambient (45°C) temperatures**

- Energy efficient rotary gas compressor
- 3 in 1 Heat exchanger bringing in efficiency and compactness to dryer package.
- Internally grooved condenser which increases heat transfer efficiency and brings compactness to the package
- Energy loss due to pressure drop is nil
- Non-cyclic control ensures stabilized dew point for various input load
- Eco-friendly gas - R407C keeps environment unpolluted
- Single door access for routine check up and preventive maintenance

\*Please contact ELGi's nearest sales office for integrated dryer options

## Energy Saving - The CONSERVE Way

### In-Built ELGi **CONSERVE™ ENERGY EFFICIENCY** 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 and also the wasted power from the energy bill.

A fixed speed compressor operates on a load unload band of at least 10 psi around the working pressure whereas with ELGi VFD, compressor can be operated within a band of 2 psi. Since the compressor is not operated under higher than working pressure requirements, there is substantial energy saving. For every 2 psi reduction in operating pressure, there is 1% power saving.

In a fixed speed compressor with Star-Delta starter, starting current is as high as three times the full load current (FLC). With ELGi VFD starting, starting current is less than the FLC. This helps to avoid using heavy rated components like fuses, MCCB, cable size, generator rating, isolators etc.

For compressed air systems with fluctuating demand pattern, giving a fast return on investment.



### Advantages:

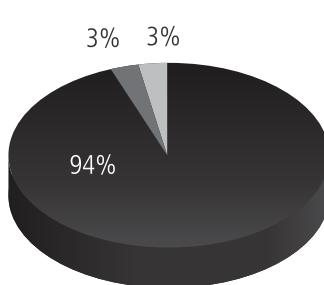
#### Electrical:

- Low starting current
- High efficiency
- Improved power factor
- Reduced maximum demand

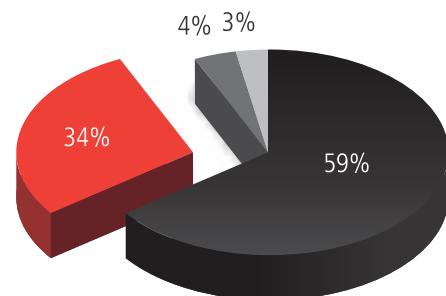
#### Mechanical:

- Minimum maintenance
- Smooth start
- Smooth control

### 10 Year Life-Cycle Cost



Compressor without VFD



Compressor with **CONSERVE™ ENERGY EFFICIENCY**

- Electricity Cost
- VFD Saving
- Equipment Cost
- Maintenance Cost

## Technical Specification

Model	Motor Power		Working Pressure		Maximum Pressure		Free Air Delivery		Weight		Noise Level
									Without Dryer	With Dryer	
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m³/min	cfm	(Kg)		dB(A)

Length : 1425mm Breadth : 720mm Height : 1470mm

EG 11	11	15	7.0	102	7.5	109	2.01	71	590	630	69
EG 11	11	15	8.0	116	8.5	123	1.81	64	590	630	69
EG 11	11	15	9.5	138	10.0	145	1.64	58	590	630	69
EG 11	11	15	12.5	181	13.0	189	1.27	45	590	630	69
EG 15	15	20	7.0	102	7.5	109	2.69	95	610	670	69
EG 15	15	20	8.0	116	8.5	123	2.55	90	610	670	69
EG 15	15	20	9.5	138	10.0	145	2.24	79	610	670	69
EG 15	15	20	12.5	181	13.0	189	1.90	67	610	670	69
EG 18	18	25	7.0	102	7.5	109	3.40	120	680	760	69
EG 18	18	25	8.0	116	8.5	123	3.17	112	680	760	69
EG 18	18	25	9.5	138	10.0	145	2.78	98	680	760	69
EG 18	18	25	12.5	181	13.0	189	2.27	80	680	760	69
EG 22	22	30	7.0	102	7.5	109	3.96	140	690	760	69
EG 22	22	30	8.0	116	8.5	123	3.85	136	690	760	69
EG 22	22	30	9.5	138	10.0	145	3.31	117	690	760	69
EG 22	22	30	12.5	181	13.0	189	2.69	95	690	760	69

Length : 1705mm Breadth : 1111mm Height : 1570mm

EG 30	30	40	7.0	102	7.5	109	5.80	205	990	1160	68
EG 30	30	40	8.0	116	8.5	123	5.18	183	990	1160	68
EG 30	30	40	9.5	138	10.0	145	4.93	174	990	1160	68
EG 30	30	40	12.5	181	13.0	189	3.96	140	990	1160	68
EG 37	37	50	7.0	102	7.5	109	7.14	252	1110	1230	68
EG 37	37	50	8.0	116	8.5	123	6.51	230	1110	1230	68
EG 37	37	50	9.5	138	10.0	145	5.95	210	1110	1230	68
EG 37	37	50	12.5	181	13.0	189	5.10	180	1110	1230	68
EG 45	45	60	7.0	102	7.5	109	8.49	300	1140	1320	68
EG 45	45	60	8.0	116	8.5	123	7.79	275	1140	1320	68
EG 45	45	60	9.5	138	10.0	145	7.08	250	1140	1320	68
EG 45	45	60	12.5	181	13.0	189	5.80	205	1140	1320	68

Length : 1961mm Breadth : 1265mm Height : 1755mm

EG 55	55	75	7.0	102	8.0	116	10.76	380	1750	1970	69
EG 55	55	75	8.0	116	9.0	131	10.05	355	1750	1970	69
EG 55	55	75	9.5	138	10.5	152	9.20	325	1750	1970	69
EG 55	55	75	12.5	181	13.5	196	7.50	265	1750	1970	69

Length : 2063mm Breadth : 1269mm Height : 1969mm

EG 75	75	100	7.0	102	8.0	116	14.78	522	2020	2240	69
EG 75	75	100	8.0	116	9.0	131	13.88	490	2020	2240	69
EG 75	75	100	9.5	138	10.5	152	12.74	450	2020	2240	69
EG 75	75	100	12.5	181	13.5	196	11.04	390	2020	2240	69

### Note:

Free Air Delivery(FAD) is tested as per ISO 1217 : 2009 Annexure C Edition: 4

All standard models are air-cooled

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

## Technical Specification - VFD Model

Model	Motor Power		Working Pressure		Maximum Pressure		Free Air Delivery		Weight		Noise Level
									Without Dryer	With Dryer	
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m³/min	cfm	(Kg)		dB(A)

Length : 1425mm Breadth : 720mm Height : 1470mm

EG 11	11	15	7.0	102	7.5	109	0.79 ~ 2.01	28 ~ 71	640	680	69
EG 11	11	15	8.0	116	8.5	123	0.79 ~ 1.81	28 ~ 64	640	680	69
EG 11	11	15	9.5	138	10.0	145	0.76 ~ 1.64	27 ~ 58	640	680	69
EG 11	11	15	12.5	181	13.0	189	0.62 ~ 1.27	22 ~ 45	640	680	69
EG 15	15	20	7.0	102	7.5	109	1.30 ~ 2.69	46 ~ 95	690	750	69
EG 15	15	20	8.0	116	8.5	123	1.25 ~ 2.55	44 ~ 90	690	750	69
EG 15	15	20	9.5	138	10.0	145	1.02 ~ 2.24	36 ~ 79	690	750	69
EG 15	15	20	12.5	181	13.0	189	0.91 ~ 1.90	32 ~ 67	690	750	69
EG 18	18	25	7.0	102	7.5	109	1.53 ~ 3.40	54 ~ 120	710	790	69
EG 18	18	25	8.0	116	8.5	123	1.39 ~ 3.17	49 ~ 112	710	790	69
EG 18	18	25	9.5	138	10.0	145	1.33 ~ 2.78	47 ~ 98	710	790	69
EG 18	18	25	12.5	181	13.0	189	1.02 ~ 2.27	36 ~ 80	710	790	69
EG 22	22	30	7.0	102	7.5	109	1.87 ~ 3.96	66 ~ 140	715	790	69
EG 22	22	30	8.0	116	8.5	123	1.84 ~ 3.85	65 ~ 136	715	790	69
EG 22	22	30	9.5	138	10.0	145	1.50 ~ 3.31	53 ~ 117	715	790	69
EG 22	22	30	12.5	181	13.0	189	1.19 ~ 2.69	42 ~ 95	715	790	69

Length : 1705mm Breadth : 1111mm Height : 1570mm

EG 30	30	40	7.0	102	7.5	109	2.24 ~ 5.80	79 ~ 205	1040	1210	68
EG 30	30	40	8.0	116	8.5	123	2.21 ~ 5.18	78 ~ 183	1040	1210	68
EG 30	30	40	9.5	138	10.0	145	2.18 ~ 4.93	77 ~ 174	1040	1210	68
EG 30	30	40	12.5	181	13.0	189	1.87 ~ 3.96	66 ~ 140	1040	1210	68
EG 37	37	50	7.0	102	7.5	109	2.72 ~ 7.14	96 ~ 252	1130	1290	68
EG 37	37	50	8.0	116	8.5	123	2.63 ~ 6.51	93 ~ 230	1130	1290	68
EG 37	37	50	9.5	138	10.0	145	2.61 ~ 5.95	92 ~ 210	1130	1290	68
EG 37	37	50	12.5	181	13.0	189	2.35 ~ 5.10	83 ~ 180	1130	1290	68
EG 45	45	60	7.0	102	7.5	109	3.20 ~ 8.50	113 ~ 300	1200	1370	68
EG 45	45	60	8.0	116	8.5	123	3.17 ~ 7.79	112 ~ 275	1200	1370	68
EG 45	45	60	9.5	138	10.0	145	3.20 ~ 7.08	113 ~ 250	1200	1370	68
EG 45	45	60	12.5	181	13.0	189	2.75 ~ 5.80	97 ~ 205	1200	1370	68

Length : 1961mm Breadth : 1265mm Height : 1755mm

EG 55	55	75	7.0	102	7.5	109	4.53 ~ 10.76	160 ~ 380	1820	2040	69
EG 55	55	75	8.0	116	8.5	123	4.53 ~ 10.05	160 ~ 355	1820	2040	69
EG 55	55	75	9.5	138	10.0	145	4.45 ~ 9.20	157 ~ 325	1820	2040	69
EG 55	55	75	12.5	181	13.0	189	3.65 ~ 7.50	129 ~ 265	1820	2040	69

Length : 2063mm Breadth : 1269mm Height : 1969mm

EG 75	75	100	7.0	102	7.5	109	6.12 ~ 14.78	216 ~ 522	2090	2305	69
EG 75	75	100	8.0	116	8.5	123	6.06 ~ 13.88	214 ~ 490	2090	2305	69
EG 75	75	100	9.5	138	10.0	145	6.12 ~ 12.74	216 ~ 450	2090	2305	69
EG 75	75	100	12.5	181	13.0	189	5.24 ~ 11.04	185 ~ 390	2090	2305	69

### Note:

Free Air Delivery (FAD) is tested as per ISO 1217 : 2009 Annexure E Edition: 4

All standard models are air-cooled

Sound level measures as per ISO 2151, Second Edition at 1m distance in field conditions, +/- 3dB(A)

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# Compressed air solutions for all sustainable air needs



**Oil-Free Series Screw**  
90 - 450 kW / 480 - 2515 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)**  
185 - 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@elgi.com, **W:** www.elgi.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:** 4496 5519, 4496 6611, **E:** contacto@elgi.com.br, **W:** www.elgi.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

**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.l., 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

Customer care mobile no.: +91 92821 11224 (SMS only)

Toll-free no: **1800-425-3544** (applicable for India only)

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