

# EG SERIES

The Energy  
Efficient Compressor

The Technological Edge  
To Power Your Business

11 – 250 kW

**ELGi**<sup>®</sup>  
Always Better.



# EG SERIES

**Superior Energy Efficiency | Low Total Cost Of Ownership  
Industry Leading Warranty | Best-In-Class Reliability**

## Power consumption on your mind?

Around the world, changes are being made in the way businesses are powered, and in general, the way compressed air is used as a power in everyday life. These changes have implications for companies, governments, and individuals in the future.

Automotive, Chemical, Food and Beverage, Fast Moving Consumer Goods, Cement, Packaging, Pharma, Textile, Ceramics industries and Workshops rely heavily on compressed air. These industries fuel the world's economy.

## Applications



Automotive



Food and Beverage



Cement



Packaging



Mining



Agriculture



Textile



Ceramic



Manufacturing

## EG SERIES

THE ECO-FRIENDLY ENERGY-EFFICIENT COMPRESSOR



With high energy costs, revised regulatory and sustainability goals, and increasing competition, it is a continuous challenge for plant managers to reduce costs, achieve high productivity and improve energy efficiency. For industries using air compressors for day-to-day operations, the energy cost has

become a top concern. ELGi's screw compressors are engineered to be energy-efficient and environmentally friendly to minimise energy costs for customers.

The airend's screw elements are manufactured in-house using state-of-the-art machining centres. ELGi

is one of the few companies capable of design and manufacturing a wide range of oil lubricated and oil free airends.

ELGi's patent portfolio is a testament to the company's continuous research and innovation capabilities.



## Features and Benefits



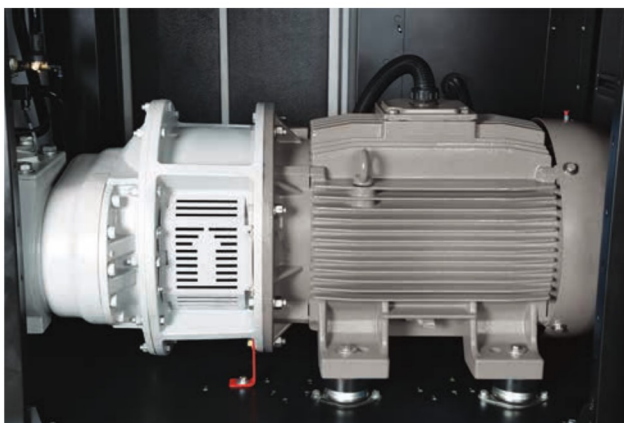
### Highly Efficient Airend Superior Energy Efficiency

ELGi's unique airends are equipped with in-house developed  $\eta$ -V profile rotors, with 4/5 lobe combination. The rotors are designed to run at low speeds to increase efficiency and life. The unique airend supplies compressed air for all demanding applications while ensuring minimal impact on the environment.



### Advanced Package Design Functional and Aesthetic

The package is configured with subsystems that are designed to minimize system losses and maximize energy savings. While the design offers easy serviceability, the aesthetically built acoustic enclosure keeps the noise levels in check.



### Motors Reliable and Efficient

The motors with a larger core and increased windings provide better thermal management. Additional fins on the face of the motor with the lowest air block over the frame provide better reliability. The four-pole motors make it more efficient at the operating shaft power.



### Intake Valve System Reduced Starting Load

The new generation intake valve with an integrated blow-down unit, solenoid control, and actuator, is designed for high efficiency. The intake valve optimally controls the compressor capacity during start-up, reducing the starting load on the motor.



Load/unload  
System

Suction Modulation  
System

Power Saving with  
VFD System

■ Actual Air Demand ■ Compressor Air Delivery

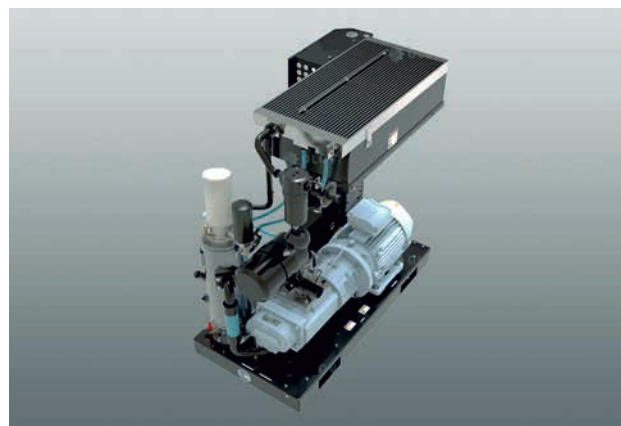
Modulation unit\* provides significant energy savings during fluctuating compressed air demand. This optimal capacity control results in direct savings of approximately 20% of power consumption at 60% load.

\*Available for models from 55kW and above



### **Very Low Oil Carry Over (1ppm)** Superior Quality of Air

ELGi has developed a unique OSBIC process (Oil Separation by Impact and Centrifugal action) to separate air and oil with minimum pressure drop. This process involves removing oil in three stages, delivering consistent low oil carryover in the compressed air reducing the oil discharged into the environment. This efficient method also increases the life of the air-oil separation filter.



### **Efficient Cooling System** Extended Life and Cool Air

The cooling system with optimal fans and a large cooler surface area offers superior cooling performance. The integrated fan motor uses significantly low power and maintains an optimal temperature range of oil, thereby increasing the life of the parts. This smart cooling system keeps the discharged compressed air temperature low easing the load on the downstream equipment. Split coolers are a standard on our EG Series compressors, and increase the unit's reliability and facilitate maintenance.



### **Reliability Under Extreme Conditions** Robust and Reliable

The EG Series compressors are robust and reliable. They are designed to perform at extreme temperatures - from cold to hot and from dry to extremely humid conditions with design temperatures up to 50° c.



### **Custom-Designed Moisture Separator** Longer Life of End-Use Equipment

The EG Series air compressor has a custom-designed centrifugal type moisture separator with an automatic drain that comes as a part of the package at no extra cost. The custom-designed separator removes over 99% of bulk water from the compressed air, resulting in a corrosion-free, longer life of end-use equipment and reducing the load on the dryer.



## Safety and Protection

EG Series compressors are designed to ensure the highest level of safety.

**High-pressure trip | High-temperature trip | Pressure relief valve | Low voltage trip | Single phase preventer | Reverse rotation prevention.**



## Superior Warranty of up to 10 Years\* without limitation of working hours

ELGi's EG Series compressors come with superior warranty. Beginning with its design, manufacturing, and quality testing, the compressor is built to ensure long life, reliability, and durability.

\*On the airend. Terms & Conditions apply.

## EG Series

The Technological Edge to Power Your Business



- **Two-Stage Air Filtration**  
Increased Life of Consumables
- **Ease Of Maintenance**  
Ease of Access to Components with Removable Panels
- **Neuron III Controller**  
Remote Management of Compressor Operations
- **Energy-Efficient**  
Eco-Friendly Compressors
- **Robust Cooling System**  
Reduced Air Outlet Temperature
- **Silent And Aesthetic**  
Enclosure Designed to Industrial Standards
- **Excellent Oil Separation OSBIC**  
1 PPM Oil Carry Over
- **Option of "In-Built VFD"**  
Compact and Saves Floor Area
- **Safety Compliant Package**  
CE Certified
- **Highly Efficient Motor**  
Energy Cost Savings



## Neuron III Advanced Controller



## Reports

Provides cumulative report (run hours, load hours, stop hours, fault hours and remaining hours of operation for filters and other maintenance needs such as oil replacement)

- **Detailed 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.
- **VFD Parameters** - Displays current, frequency, voltage and percentage of operating load distribution hours.
- **Mimic Display** - Readout and closed-loop control

## Remote Monitoring

**DCS (MODBUS RTU/RS 485)** - The controller is enabled to synchronise with the distributed control system - control of compressor from the control panel of the customer.

**SCADA** - Compressor control through PC with remote monitoring by supervisory control and data acquisition process.

## Save Energy by Varying Motor Speed

The In-built ELGi Variable Frequency Drives (VFD) matches the compressor output with the demand by varying motor speed which reduces the power consumption and subsequently results in savings.

The VFD helps in eliminating frequent load-unload cycles and also wasted power from the energy bill. In a fixed speed compressor with a Star-Delta starter, the starting current is as high as three times the full load current (FLC). With ELGi VFD, the starting current is less than the FLC.

### Advantages:

- Energy savings
- Improved power factor
- Low starting current and hence reduced maximum demand
- Reduced maintenance
- High efficiency combined efficiency drive system



## by Heat Recovery System

ELGi's Heat Recovery System is an accessory that can be added to the EG Series compressor.



The Heat Recovery System can recover up to 76% of the waste heat generated during the compression process which can then in turn be used to heat water.

Technical Specifications - 50Hz

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m³/min	cfm	Kg	dB(A)	mm
EG 11	11	15	7.0	102	2.01	71	532	69	1356 x 721 x 1370
			8.0	116	1.81	64			
			9.5	138	1.64	58			
			12.5	181	1.39	49			
EG 15	15	20	7.0	102	2.78	98	552	69	1356 x 721 x 1370
			8.0	116	2.63	93			
			9.5	138	2.27	80			
			12.5	181	1.98	70			
EG 18	18	25	7.0	102	3.40	120	650	69	1500 x 821 x 1370
			8.0	116	3.23	114			
			9.5	138	2.83	100			
			12.5	181	2.32	82			
EG 22	22	30	7.0	102	4.02	142	650	69	1500 x 821 x 1370
			8.0	116	3.91	138			
			9.5	138	3.34	118			
			12.5	181	2.75	97			
EG 26	26	35	4.5	65	5.15	182	1044	69	1705 x 1111 x1570
			7.0	102	5.01	177			
			8.0	116	4.47	158			
			9.5	138	4.16	147			
EG 30	30	40	12.5	181	3.43	121	1044	69	1705 x 1111 x1570
			4.5	65	5.95	210			
			7.0	102	5.83	206			
			8.0	116	5.18	183			
EG 37	37	50	9.5	138	4.87	172	1044	69	1705 x 1111 x1570
			12.5	181	4.05	143			
			4.5	65	7.28	257			
			7.0	102	7.22	255			
EG 45	45	60	8.0	116	6.65	235	1110	69	1705 x 1111 x1570
			9.5	138	5.97	211			
			12.5	181	5.24	185			
			4.5	65	8.86	313			
EG 55	55	75	7.0	102	8.75	309	1116	69	1705 x 1111 x1570
			8.0	116	7.99	282			
			9.5	138	7.39	261			
			12.5	181	6.23	220			
EG 75	75	100	4.5	65	10.90	385	1523	69	1959 x 1266 x 1754
			7.0	102	10.76	380			
			8.0	116	10.11	357			
			9.5	138	9.29	328			
EG 90	90	125	12.5	181	7.59	268	2020	69	2063 x 1269 x 1969
			7.0	102	14.78	522			
			8.0	116	13.88	490			
			9.5	138	12.74	450			
EG 110	110	150	12.5	181	11.04	390	2935	75	2830 x 1640 x 2137
			4.5	65	19.9	706			
			7.0	102	16.57	585			
			8.0	116	15.23	538			
EG 110	110	150	10.0	145	13.31	470	3110	75	2830 x 1640 x 2137
			4.5	65	24.3	858			
			7.0	102	19.85	706			
			8.0	116	18.38	649			
EG 110	110	150	10.0	145	16.42	580	3110	75	2830 x 1640 x 2137
			10.0	145	16.42	580			



Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m³/min	cfm	Kg	dB(A)	mm
EG 132	132	175	4.5	65	29.1	1030	3755	75	2830 x 1640 x 2137
			7.0	102	24.21	855			
			8.0	116	22.4	791			
			10.0	145	20.11	710			
EG 160	160	200	7.0	102	29.05	1026	3780	75	2830 x 1640 x 2137
			8.0	116	27.01	954			
			10.0	145	24.07	850			
EG 200	200	250	4.5	65	38.51	1360	5295	78	3195 x 2108 x 2240
			7.0	102	37.94	1340			
			8.0	116	34.49	1218			
			9.5	138	31.15	1100			
			12.5	181	25.77	910			
EG 250	250	300	4.5	65	43.60	1540	5655	78	3195 x 2108 x 2240
			7.0	102	43.18	1525			
			8.0	116	41.77	1475			
			9.5	138	37.38	1320			
			12.5	181	31.15	1100			

## Technical Specifications - 50Hz VFD

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m³/min	cfm	Kg	dB(A)	mm
EG 11	11	15	7.0	102	0.71 ~ 2.01	25 ~ 71	582	69	1356 x 721 x 1370
			8.0	116	0.71 ~ 1.81	25 ~ 64			
			9.5	138	0.71 ~ 1.64	25 ~ 58			
			12.5	181	0.57 ~ 1.36	20 ~ 48			
EG 15	15	20	7.0	102	1.27 ~ 2.78	45 ~ 98	632	69	1356 x 721x 1370
			8.0	116	1.13 ~ 2.63	40 ~ 93			
			9.5	138	0.99 ~ 2.27	35 ~ 80			
			12.5	181	0.76 ~ 1.98	27 ~ 70			
EG 18	18	25	7.0	102	1.56 ~ 3.40	55 ~ 120	680	69	1500 x 821 x 1370
			8.0	116	1.50 ~ 3.23	53 ~ 114			
			9.5	138	1.13 ~ 2.83	40 ~ 100			
			12.5	181	1.02 ~ 2.32	36 ~ 82			
EG 22	22	30	7.0	102	1.78 ~ 4.02	63 ~ 142	685	69	1500 x 821 x 1370
			8.0	116	1.78 ~ 3.91	63 ~ 138			
			9.5	138	1.56 ~ 3.34	55 ~ 118			
			12.5	181	1.19 ~ 2.75	42 ~ 97			
EG 26	26	35	4.5	65	1.98 ~ 5.15	70 ~ 182	1089	69	1705 x 1111 x 1570
			7.0	102	1.98 ~ 5.01	70 ~ 177			
			8.0	116	1.64 ~ 4.47	58 ~ 158			
			9.5	138	1.47 ~ 4.16	52 ~ 147			
			12.5	181	1.56 ~ 3.43	55 ~ 121			

### Note:

- Free Air Delivery (FAD) is tested as per ISO 1217 : 2009 Annexure 'C/E' Edition: 4.
- Sound level measured as per ISO 2151, Second Edition.
- 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 .
- FAD values are provided at corresponding working pressure values.

## Technical Specifications - 50Hz VFD

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m <sup>3</sup> /min	cfm	Kg	dB(A)	mm
EG 30	30	40	4.5	65	1.22 ~ 5.95	43 ~ 210	1044	69	1705 x 1111 x1570
			7.0	102	1.16 ~ 5.83	41 ~ 206			
			8.0	116	1.33 ~ 5.18	47 ~ 183			
			9.5	138	1.50 ~ 4.87	53 ~ 172			
			12.5	181	1.53 ~ 4.05	54 ~ 143			
EG 37	37	50	4.5	65	1.50 ~ 7.28	53 ~ 257	1089	69	1705 x 1111 x1570
			7.0	102	1.56 ~ 7.22	55 ~ 255			
			8.0	116	1.70 ~ 6.65	60 ~ 235			
			9.5	138	1.87 ~ 5.97	66 ~ 211			
			12.5	181	2.07 ~ 5.24	73 ~ 185			
EG 45	45	60	4.5	65	1.81 ~ 8.86	64 ~ 313	1161	69	1705 x 1111 x1570
			7.0	102	1.87 ~ 8.75	66 ~ 309			
			8.0	116	2.07 ~ 7.99	73 ~ 282			
			9.5	138	2.21 ~ 7.39	78 ~ 261			
			12.5	181	2.44 ~ 6.23	86 ~ 220			
EG 55	55	75	4.5	65	2.55 ~ 10.90	90 ~ 385	1588	69	1959 x 1266 x 1754
			7.0	102	2.58 ~ 10.76	91 ~ 380			
			8.0	116	2.55 ~ 10.11	90 ~ 357			
			9.5	138	3.65 ~ 9.29	129 ~ 328			
			12.5	181	3.37 ~ 7.59	119 ~ 268			
EG 75	75	100	7.0	102	6.12 ~ 14.78	216 ~ 522	2090	69	2063 x 1269 x 1969
			8.0	116	6.06 ~ 13.88	214 ~ 490			
			9.5	138	6.12 ~ 12.74	216 ~ 450			
			12.5	181	5.24 ~ 11.04	185 ~ 390			
EG 90	90	125	7.0	102	6.65 ~ 16.57	235 ~ 585	2935	75	2830 x 1640 x 2137
			8.0	116	6.60 ~ 15.23	233 ~ 538			
			10.0	145	6.31 ~ 13.31	223 ~ 470			
EG 110	110	150	7.0	102	7.87 ~ 19.85	278 ~ 701	3220	75	2830 x 1640 x 2137
			8.0	116	7.76 ~ 18.38	274 ~ 649			
			10.0	145	7.76 ~ 16.42	274 ~ 580			
EG 132	132	175	7.0	102	10.00 ~ 24.21	353 ~ 855	3885	75	2830 x 1640 x 2137
			8.0	116	9.85 ~ 22.4	348 ~ 791			
			10.0	145	9.66 ~ 20.11	341 ~ 710			
EG 160	160	200	7.0	102	11.64 ~ 29.05	411 ~ 1026	3975	75	2830 x 1640 x 2137
			8.0	116	11.75 ~ 27.01	415 ~ 954			
			10.0	145	11.55 ~ 24.07	408 ~ 850			
EG 200	200	250	4.5	65	15.4 ~ 38.51	544 ~ 1360	5420	78	3195 x 2108 x 2240
			7.0	102	14.87 ~ 37.94	525 ~ 1340			
			8.0	116	14.72 ~ 34.49	520 ~ 1218			
			9.5	138	14.5 ~ 31.15	512 ~ 1100			
			12.5	181	12.57 ~ 25.77	444 ~ 910			
EG 250	250	300	4.5	65	17.4 ~ 43.6	614 ~ 1540	5780	78	3195 x 2108 x 2240
			7.0	102	18.2 ~ 43.18	642 ~ 1525			
			8.0	116	18.0 ~ 41.77	635 ~ 1475			
			9.5	138	17.7 ~ 37.38	625 ~ 1320			
			12.5	181	15.35 ~ 31.15	542 ~ 1100			

## Technical Specifications - 50Hz Premium

Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m <sup>3</sup> /min	cfm	Kg	dB(A)	mm
EG 90 - P	90	125	4.5	65	17.3	610	2980	76	2916 x 1885 x 1925
			7	102	17.05	624			
			8	116	15.66	553			
			10	145	13.45	475			
			12.5	181	11.86	419			
EG 110 - P	110	150	4.5	65	22.1	780	3200	76	2916 x 1885 x 1925
			7	102	21.55	761			
			8	116	20.5	724			
			10	145	17.5	618			
			12.5	181	14.87	525			
EG 132 - P	132	175	4.5	65	26.8	945	3970	76	2916 x 1885 x 1925
			7	102	26.5	936			
			8	116	24.35	860			
			10	145	21.52	760			
			12.5	181	17.5	619			
EG 160 - P	160	200	4.5	65	31.14	1100	4130	76	2916 x 1885 x 1925
			7	102	30.81	1088			
			8	116	28.77	1016			
			10	145	25.71	908			
			12.5	181	21.4	757			

## Technical Specifications - 50Hz VFD Premium

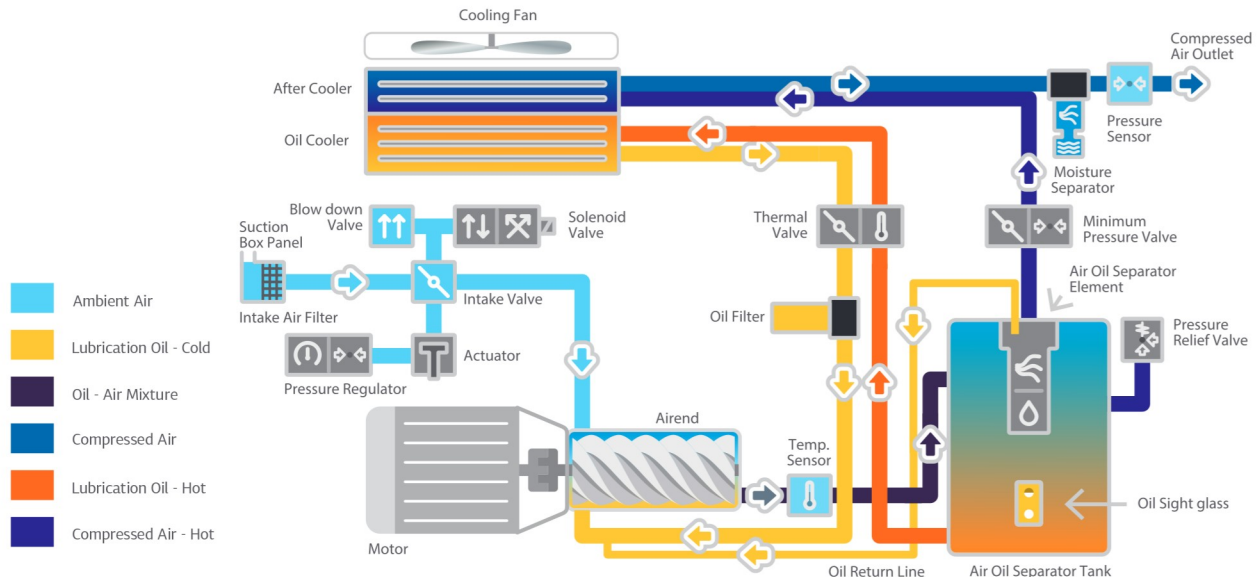
Model	Nominal Power		Working Pressure		Free Air Delivery		Weight	Noise	Dimensions L x B x H
50Hz	kW	HP	bar g	psi g	m <sup>3</sup> /min	cfm	Kg	dB(A)	mm
EG 90 - P	90	125	4.5	65	6.8~17.3	239~628	3230	76	2916 x 1885 x 1925
			7	102	6.68~17.5	236~602			
			8	116	6.65~15.66	235~553			
			10	145	6.46~13.45	228~475			
			12.5	181	5.64~11.86	199~419			
EG 110 - P	110	150	4.5	65	8.6~22.1	304~780	3400	76	2916 x 1885 x 1925
			7	102	8.47~21.55	299~761			
			8	116	8.61~20.5	304~724			
			10	145	8.27~17.5	292~618			
			12.5	181	7.14~14.87	252~525			
EG 132 - P	132	175	4.5	65	10.7~26.8	378~945	4290	76	2916 x 1885 x 1925
			7	102	10.62~26.5	375~936			
			8	116	10.45~24.35	369~860			
			10	145	10.45~21.52	369~760			
			12.5	181	8.4~17.5	297~619			
EG 160 - P	160	200	4.5	65	12.7~31.14	463~1100	4340	76	2916 x 1885 x 1925
			7	102	12.71~30.81	449~1088			
			8	116	12.57~28.77	444~1016			
			10	145	12.49~25.71	441~908			
			12.5	181	10.3~21.4	363~757			

### Note:

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- FAD values are provided at corresponding working pressure values.



## Air-Oil Flow Circuit



## After Sales and Service

A wide range of after-sales products and services by ELGi is designed to add maximum value to customers. ELGi's quick service processes ensure optimum availability and reliability of compressors with the lowest possible operating costs.



### Genuine Spares and Service

Genuine spares and services from ELGi help to avoid unexpected compressor failures and the risk of subsequent damage to other vital compressor components. ELGi spares are designed, manufactured, and checked for quality to meet the standards of a new ELGi compressor. ELGi consistently focuses on improving spares to provide customers with the best results.



### ELGi Air Audit

ELGi air audit program helps improve compressors' performance by identifying the areas of wastage in the system. ELGi air audit services are offered for generation, distribution, and demand-side systems.

## ELGi Airmate Accessories



EZL Drain



Oil Water Separator



Refrigeration Air Dryer



Moisture Separator



AF Filter



Air Receiver

# ELGi

## Always Better.

Elgi Equipments Limited is a global air compressor manufacturer with a broad line of innovative and technologically superior compressed air systems.

ELGi has consistently worked towards ensuring that its customers achieve their productivity goals while keeping the cost of ownership low. ELGi offers a complete range of compressed air

solutions from oil lubricated and oil free rotary screw compressors, oil lubricated and oil free reciprocating compressors and centrifugal compressors, to dryers, filters, and downstream accessories.

The company's portfolio of over 400 products has found wide application across industries.

### 60+

Years of Customer-Centric Innovation

### 2 Mn+

Installations Worldwide

### 120+

Countries and Counting



### DEMING PRIZE 2019

ELGi is the first globally established industrial air compressor manufacturer to be awarded the Deming Prize for Excellence in Total Quality Management.

