EG *Premium* Series
Screw Air Compressors

Life source of industries

ELGi
Always Better.

UPTiME™
ASSURANCE

CIN: L29120TZ1960PLC000351

www.elgi.com

90 - 160 kW / 125 - 200 HP

ELGi

Always Better.

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.

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 Premium Series Compressor

EG

PREMIUM SERIES

www.elgi.com

The EG Premium series compressors are the new generation energy efficient compressors designed and manufactured considering the futuristic requirements of the industry. These compressors are manufactured in compliance with the international standards like ASME, CE and designed for the higher reliability and performance. These new generation compressors are highly efficient and significantly reduce the operating costs and reduce the carbon foot print to a large extent.

Ease of Maintenance

Low cost of ownership

Compact, safe and silent

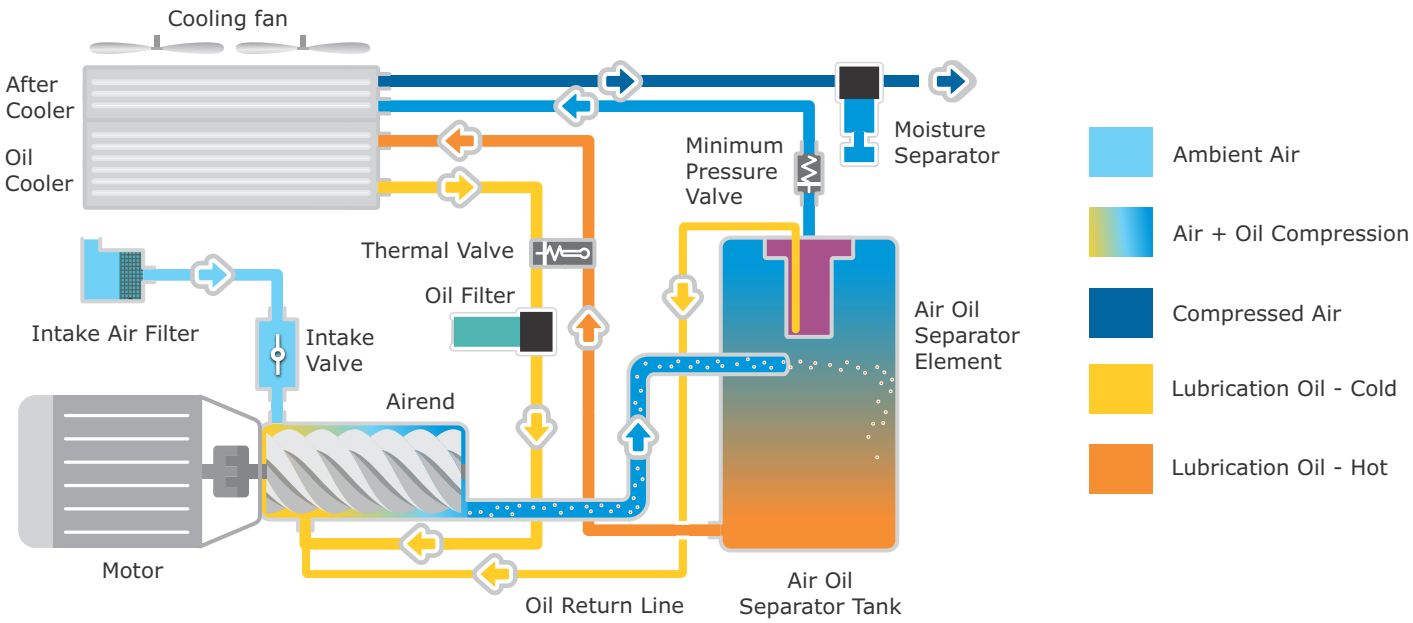
High air quality

Energy efficient

High reliability

* Warranty applicable only for Airend

EG Premium Series - Schematic Diagram



ELGi

The Technology Edge

EG Premium Series

Advanced Neuron III Controller

Remote management of compressor operations

Robust Cooling System

Reduced air outlet temperature

Three-Stage Air Filtration

Increased life of consumables

High Volumetric Efficiency

Low energy cost per cfm

Enclosure designed to Industrial standards

Robust, silent and aesthetic package

Premium Efficiency IE4 Motor*

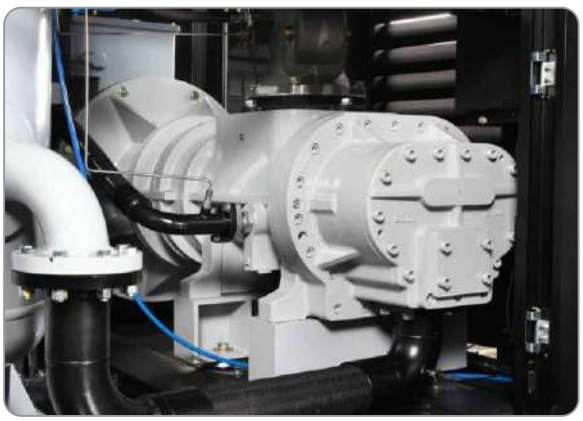
For maximum ambient temperature

Superior Technology Airend

Precise rotor clearances for higher energy efficiency

*Available on request

Eco-friendly energy efficient compressor



Premium efficiency airend

ELGi's airends 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.

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

Higher efficiency motor

- Premium efficiency IE3 class motors are used as standard
- Heavy duty TEFC induction motor with IP55 protection for assured operation in dusty environments
- Motor selected for high ambient of 50°C with power variants 415v/400v/380v in 50Hz
- Wide operating voltage- +/- 10%
- Regreasable ball bearings
- Rugged design to ensure higher life

Efficient air inlet system

- Three stages of filtration of inlet air
- Heavy duty dry type air filter optimally designed for higher efficiency (99.9%)
- Reduced suction noise through baffle arrangment
- Air filter with visual condition indicator for ease of maintenance
- Automatic cleaning of air filters for every cycle for enhanced life

In take valve system

The new generation intake valve comes with integrated blow down valve, solenoid switch and actuator for smooth operation

- Optimum size of the intake valve minimizes pressure drop and suction losses
- The suction modulation unit ensures effective control of inlet air flow and maximizes power savings
- Auto dual control operates on modulation mode from 100 – 60%
- in loading and in load/unload mode for loads below 60%
  An unique alternative method for energy savings without VFD

ELGi

The Technology Edge

Oil-less air (1ppm*)

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. Designed for international certifications

* as per ISO Standard

Efficient Cooling System

- Cooling system with large surface area for efficient cooling
- ERP compliant Fan motor with significantly lower power consumption
- Easy and quick access points, thus enables easy service and maintenance
- After cooler and Oil cooler isolated for enhancing cooling efficiency

Moisture - free air

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 system, resulting in corrosion free, longer life of the end use equipments and less load on the dryer.

Air Alert - IoT 4.0

AiR~Alert is an IoT enabling device which when fit in compressors will make them 'Industry 4.0' ready. It acquires data from compressor and sends it to dedicated servers which predicts failure modes ad generates alerts from data acquired and sends reports to the customer

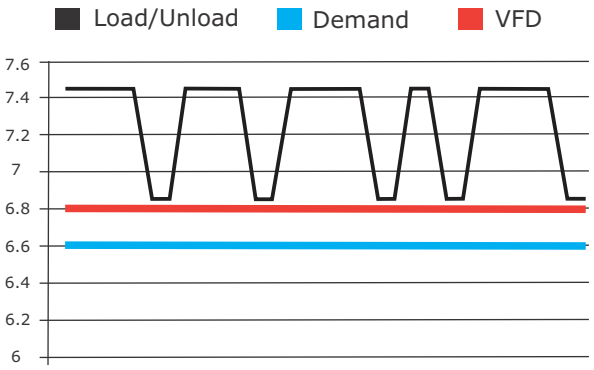
Eco-friendly energy efficient compressor

Neuron III Controller

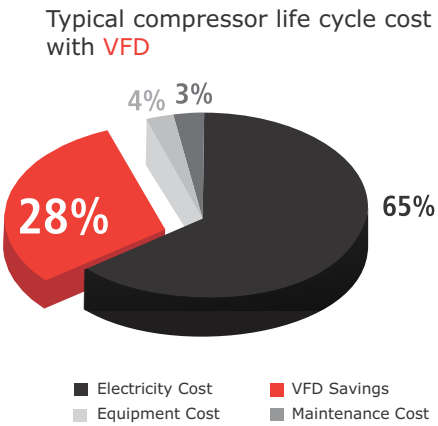
- Detects and prevents starting compressor from Phase loss and Phase reversal
- Remote Load / Unload and Start / Stop
- Run hour report for different speeds
- Provision for entering Latitude and Longitude to detect machine location
- Up to 99 fault reports with fault description and time stamp which captures exact time and operational parameters at the time of each failure

Integrated VFD (Variable Frequency Drive)

- ELGi's VFD are specially configured to run efficiently with the ELGi's advanced eta-v profile airends
- VFD varies the compressor speed which in turn varies the air flow as per demand. This results in stabilization of pressure and saves energy
- VFD integrated machines operate at a very minimal pressure band of 0.2 bar when compared to a fixed speed machine which operates at a much higher pressure of 0.5 bar. This saves considerable energy
- All the above advantages combined, a VFD machine can typically offer a savings of between 20% - 30% depending on the demand variation available in the system

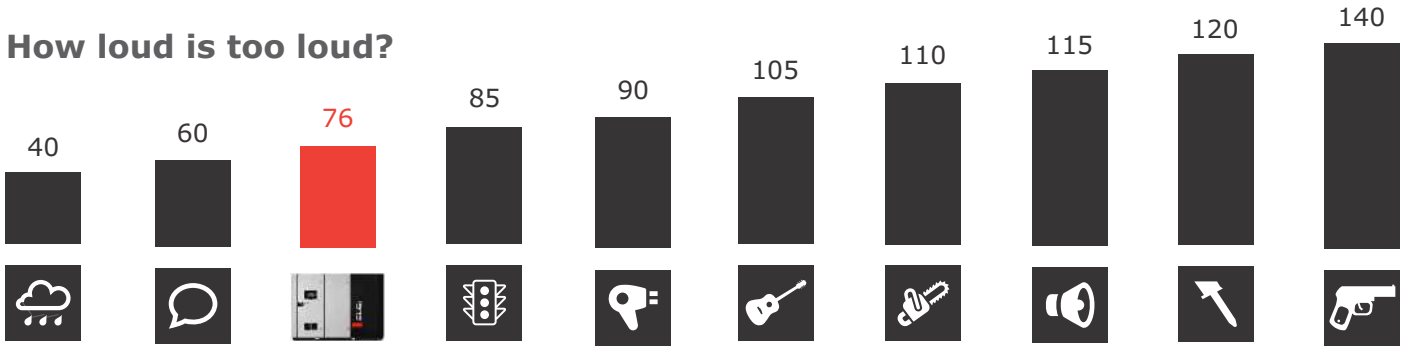


Typical Pressure pattern using a standard compressor and a compressor with VFD



Low sound level, low vibration and compact

All these improvements are offered without compromising on the USP of low noise and vibration



Technical Specification

Model	Motor Power		Working Pressure		Maximum Pressure		Free Air Delivery		Weight*	Noise Level	Dimensions (LxBxH)
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m^3/min	cfm	Kg	dB(A)	(mm)
EG 90 - P	90	125	4.5	65	5.5	80	17.3	610	2980	76	2916 x 1885 x 1925
EG 90 - P II	90	125	7	102	8	116	17.7	624	2980	76	2916 x 1885 x 1925
EG 90 - P	90	125	7	102	8	116	17.0	602	2980	76	2916 x 1885 x 1925
EG 90 - P	90	125	8	116	9	131	15.7	553	2980	76	2916 x 1885 x 1925
EG 90 - P	90	125	10	145	11	160	13.5	475	2980	76	2916 x 1885 x 1925
EG 90 - P	90	125	12.5	181	13.5	196	11.9	419	2980	76	2916 x 1885 x 1925
EG 110 - P	110	150	4.5	65	5.5	80	22.1	780	3200	76	2916 x 1885 x 1925
EG 110 - P	110	150	7	102	8	116	21.6	761	3200	76	2916 x 1885 x 1925
EG 110 - P	110	150	8	116	9	131	20.5	724	3200	76	2916 x 1885 x 1925
EG 110 - P	110	150	10	145	11	160	17.5	618	3200	76	2916 x 1885 x 1925
EG 110 - P	110	150	12.5	181	13.5	196	14.9	525	3200	76	2916 x 1885 x 1925
EG 132 - P	132	175	4.5	65	5.5	80	26.8	945	3970	76	2916 x 1885 x 1925
EG 132 - P	132	175	7	102	8	116	26.5	936	3970	76	2916 x 1885 x 1925
EG 132 - P	132	175	8	116	9	131	24.4	860	3970	76	2916 x 1885 x 1925
EG 132 - P	132	175	10	145	11	160	21.5	760	3970	76	2916 x 1885 x 1925
EG 132 - P	132	175	12.5	181	13.5	196	17.5	619	3970	76	2916 x 1885 x 1925
EG 160 - P	160	200	4.5	65	5.5	80	31.14	1100	4130	76	2916 x 2084 x 1925
EG 160 - P	160	200	7	102	8	116	30.8	1088	4130	76	2916 x 1885 x 1925
EG 160 - P	160	200	8	116	9	131	28.8	1016	4130	76	2916 x 1885 x 1925
EG 160 - P	160	200	10	145	11	160	25.7	908	4130	76	2916 x 1885 x 1925
EG 160 - P	160	200	12.5	181	13.5	196	21.4	757	4130	76	2916 x 1885 x 1925

Technical Specification (VFD Models)

Model	Motor Power		Working Pressure		Maximum Pressure		Free Air Delivery		Weight*	Noise Level	Dimensions (LxBxH)
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m^3/min	cfm	Kg	dB(A)	(mm)
EG 90 - P	90	125	4.5	65	5.5	80	6.8~17.3	239~628	3230	76	2916 x 1885 x 1925
EG 90 - P	90	125	7	102	8	116	6.9~17.7	242~624	3230	76	2916 x 1885 x 1925
EG 90 - P	90	125	7	102	8	116	6.9~17.0	242~602	3230	76	2916 x 1885 x 1925
EG 90 - P	90	125	8	116	9	131	6.7~15.6	235~553	3230	76	2916 x 1885 x 1925
EG 90 - P	90	125	10	145	11	160	6.5~13.4	228~475	3230	76	2916 x 1885 x 1925
EG 90 - P	90	125	12.5	181	13.5	196	5.6~11.8	199~419	3230	76	2916 x 1885 x 1925
EG 110 - P	110	150	4.5	65	5.5	80	8.6~22.1	304~780	3400	76	2916 x 1885 x 1925
EG 110 - P	110	150	7	102	8	116	8.5~21.55	300~761	3400	76	2916 x 1885 x 1925
EG 110 - P	110	150	8	116	9	131	8.6~20.5	302~724	3400	76	2916 x 1885 x 1925
EG 110 - P	110	150	10	145	11	160	8.5~17.5	301~618	3400	76	2916 x 1885 x 1925
EG 110 - P	110	150	12.5	181	13.5	196	7.1~14.86	250~525	3400	76	2916 x 1885 x 1925
EG 132 - P	132	175	4.5	65	5.5	80	10.7~26.8	378~945	4290	76	2916 x 1885 x 1925
EG 132 - P	132	175	7	102	8	116	10.6~26.5	375~936	4290	76	2916 x 1885 x 1925
EG 132 - P	132	175	8	116	9	131	10.4~24.4	369~860	4290	76	2916 x 1885 x 1925
EG 132 - P	132	175	10	145	11	160	10.4~21.5	369~760	4290	76	2916 x 1885 x 1925
EG 132 - P	132	175	12.5	181	13.5	196	8.4~17.5	297~619	4290	76	2916 x 1885 x 1925
EG 160 - P	160	200	4.5	65	5.5	80	12.7~31.14	463~1100	4340	76	2916 x 2084 x 1925
EG 160 - P	160	200	7	102	8	116	12.7~30.8	449~1088	4340	76	2916 x 1885 x 1925
EG 160 - P	160	200	8	116	9	131	12.6~28.8	444~1016	4340	76	2916 x 1885 x 1925
EG 160 - P	160	200	10	145	11	160	12.5~25.7	441~908	4340	76	2916 x 1885 x 1925
EG 160 - P	160	200	12.5	181	13.5	196	10.3~21.4	363~757	4340	76	2916 x 1885 x 1925

Note:

- Free Air Delivery(FAD) measured in accordance to ISO 1217 : 2009 Annex.C Ed.4
- FAD is declared at the working pressure
- All models are available in air-cooled and water-cooled variants
- Unload pressure (or) max pressure with suction modulation is 1 bar above the working pressure
- FAD indicated is for the full package measured at the outlet after moisture separator
- Sound level measured 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

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)*

Distributed by

DGI/SPSLEF7215/02/08/0000/2019/08/06/A

01CAT0008/R04