

EG Series Screw Air Compressors

Life source of industries









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.



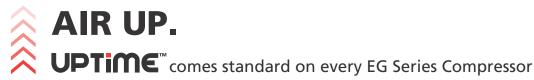
Robust Infrastructure

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



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-ofmind to our customers.



EG Series - The Technology Edge



EG Series

The Eco-friendly Energy-efficient compressors







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. 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





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





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





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





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 fanmotor 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





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

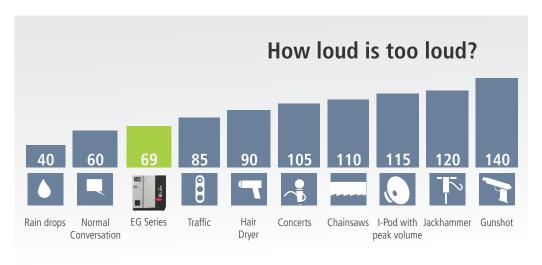
Global Series compressors are designed and perfected to ensure highest level of safety for

- 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



ELGi Airmate Accessories

Airmate Particulate Filter

Air Flow: 35 - 3,200 cfm (1 - 90 m³/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

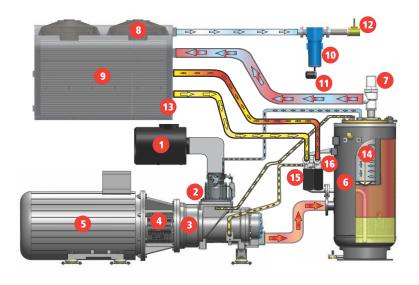
ELGi Air Audit help's in improving the performance of the compressors by identifying the areas of wastage in the system. ELGi's air audit services are offered in areas including generation, distribution and demand side systems

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



COOLED AIR







HOT OIL







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 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:

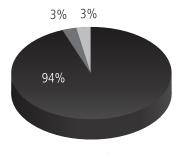
Electrical:

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

Mechanical:

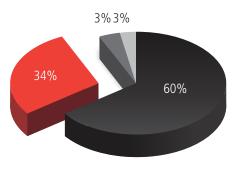
- Minimum maintenance
- Smooth start
- Smooth control

10 Year Life-Cycle Cost



Compressor without VFD





Compressor with CONSERVE

Technical Specification

	Motor Power		Working Pressure		Maximum Pressure		Free Air Delivery		Weight Without With Dryer Dryer		Noise Level
Model											
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m³/min	cfm	K	(g	dB(A)
			Length : 1	425mm Br	eadth : 80	8mm Hei	ght : 1470m	ım	•		
EG 11	11	15	7.0	102	7.5	109	2.01	71	532	590	69
EG 11	11	15	8.0	116	8.5	123	1.81	64	532	590	69
EG 11	11	15	9.5	138	10.0	145	1.64	58	532	590	69
EG 11	11	15	12.5	181	13.0	189	1.39	49	532	590	69
EG 15	15	20	7.0	102	7.5	109	2.78	98	552	630	69
EG 15	15	20	8.0	116	8.5	123	2.63	93	552	630	69
EG 15	15	20	9.5	138	10.0	145	2.27	80	552	630	69
EG 15	15	20	12.5	181	13.0	189	1.98	70	552	630	69
			Length: 1	500mm Bı	eadth: 91	0mm Heig	ht 1470mm	1			
EG 18	18	25	7.0	102	7.5	109	3.40	120	650	720	69
EG 18	18	25	8.0	116	8.5	123	3.23	114	650	720	69
EG 18	18	25	9.5	138	10.0	145	2.83	100	650	720	69
EG 18	18	25	12.5	181	13.0	189	2.32	82	650	720	69
EG 22	22	30	7.0	102	7.5	109	4.02	142	660	720	69
EG 22	22	30	8.0	116	8.5	123	3.91	138	660	720	69
EG 22	22	30	9.5	138	10.0	145	3.34	118	660	720	69
EG 22	22	30	12.5	181	13.0	189	2.75	97	660	720	69
LG 22							ght : 1570m			720	03
56.26	2.0						_		1011	4470	60
EG 26	26	35	4.5	65	5	73	5.15	182	1044	1179	69
EG 26	26	35	7	102	7.5	109	5.01	177	1044	1179	69
EG 26	26	35	8	116	8.5	123	4.47	158	1044	1179	69
EG 26	26	35	9.5	138	10	145	4.16	147	1044	1179	69
EG 26	26	35	12.5	181	13	189	3.43	121	1044 1044	1179	69
EG 30	30	40	4.5	65	5	73	5.95	210		1179	69
EG 30 EG 30	30 30	40	7 8	102 116	7.5 8.5	109 123	5.83 5.18	206 183	1044 1044	1179 1179	69 69
EG 30	30	40	9.5	138	10	145	4.87	172	1044	1179	69
EG 30	30	40	12.5	181	13	189	4.05	143	1044	1179	69
EG 37	37	50	4.5	65	5	73	7.28	257	1110	1260	69
EG 37	37	50	7	102	7.5	109	7.22	255	1110	1260	69
EG 37	37	50	8	116	8.5	123	6.65	235	1110	1260	69
EG 37	37	50	9.5	138	10	145	5.97	211	1110	1260	69
EG 37	37	50	12.5	181	13	189	5.24	185	1110	1260	69
EG 45	45	60	4.5	65	5	73	8.86	313	1116	1266	69
EG 45	45	60	7	102	7.5	109	8.75	309	1116	1266	69
EG 45	45	60	8	116	8.5	123	7.99	282	1116	1266	69
EG 45	45	60	9.5	138	10	145	7.39	261	1116	1266	69
EG 45	45	60	12.5	181	13	189	6.23	220	1116	1266	69
							ght : 1754m				
FC FF	FF		_	1					1522	1000	- 60
EG 55	55	75	4.5	65	5.5	80	10.90	385	1523	1698	69
EG 55	55	75	7.0	102	8.0	116	10.76	380	1523	1698	69
EG 55	55	75	8.0	116	9.0	131	10.11	357	1523	1698	69
EG 55	55	75	9.5	138	10.5	152	9.29	328	1523	1698	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 FAD values are provided at corresponding working pressure values

Length, breadth and height dimensions include integrated dryer

Technical Specification - VFD Model

			10/00	lein a	Maximum				Weight		Noise	
Model	Motor P	ower	Wor Pres	sure		sure	Tree All Delivery		Without With Dryer Dryer		Level	
50 Hz	kW	НР	bar g	psi g	bar g	psi g	m³/min	cfm	Kg		dB(A)	
			Leng	th : 1425	mm Bre	adth:8	08mm Height :	1470mm				
EG 11	11	15	7.0	102	7.5	109	0.71 ~ 2.01	25 ~ 71	582	640	69	
EG 11	11	15	8.0	116	8.5	123	0.71 ~ 1.81	25 ~ 64	582	640	69	
EG 11	11	15	9.5	138	10.0	145	0.71 ~ 1.64	25 ~ 58	582	640	69	
EG 11	11	15	12.5	181	13.0	189	0.57 ~ 1.36	20 ~ 48	582	640	69	
EG 15	15	20	7.0	102	7.5	109	1.27 ~ 2.78	45 ~ 98	632	710	69	
EG 15	15	20	8.0	116	8.5	123	1.19 ~ 2.63	42 ~ 93	632	710	69	
EG 15	15	20	9.5	138	10.0	145	0.99 ~ 2.27	35 ~ 80	632	710	69	
EG 15	15	20	12.5	181	13.0	189	0.76 ~ 1.98	27 ~ 70	632	710	69	
			Leng	gth: 150	0mm Bre	eadth: 9	10mm Height 1	470mm				
EG 18	18	25	7.0	102	7.5	109	1.56 ~ 3.40	55 ~ 120	680	750	69	
EG 18	18	25	8.0	116	8.5	123	1.50 ~ 3.23	53 ~ 114	680	750	69	
EG 18	18	25	9.5	138	10.0	145	1.13 ~ 2.83	40 ~ 100	680	750	69	
EG 18	18	25	12.5	181	13.0	189	1.02 ~ 2.32	36 ~ 82	680	750	69	
EG 22	22	30	7.0	102	7.5	109	1.78 ~ 4.02	63 ~ 142	685	745	69	
EG 22	22	30	8.0	116	8.5	123	1.78 ~ 3.91	63 ~ 138	685	745	69	
EG 22	22	30	9.5	138	10.0	145	1.56 ~ 3.34	55 ~ 118	685	745	69	
EG 22	22	30	12.5	181	13.0	189	1.19 ~ 2.75	42 ~ 97	685	745	69	
			Lengt	h : 1705	mm Brea	adth : 11	111mm Height :	1570mm	1			
EG 26	26	35	4.5	65	5	73	1.98 ~ 5.15	70 ~ 182	1089	1224	69	
EG 26	26	35	7	102	7.5	109	1.98 ~ 5.01	70 ~ 177	1089	1224	69	
EG 26	26	35	8	116	8.5	123	1.64 ~ 4.47	58 ~ 158	1089	1224	69	
EG 26	26	35	9.5	138	10	145	1.47 ~ 4.16	52 ~ 147	1089	1224	69	
EG 26	26	35	12.5	181	13	189	1.56 ~ 3.43	55 ~ 121	1089	1224	69	
EG 30	30	40	4.5	65	5	73	1.22 ~ 5.95	43 ~ 210	1089	1224	69	
EG 30	30	40	7	102	7.5	109	1.16 ~ 5.83	41 ~ 206	1089	1224	69	
EG 30	30	40	8	116	8.5	123	1.33 ~ 5.18	47 ~ 183	1089	1224	69	
EG 30	30	40	9.5	138	10	145	1.53 ~ 4.87	54 ~ 172	1089	1224	69	
EG 30	30	40	12.5	181	13	189	1.53 ~ 4.05	54 ~ 143	1089	1224	69	

Technical Specification - VFD Model

	Model Motor Power		Mon	lei nen	Mani				Wei	ight	Noise
Model			Working Pressure			imum ssure	Free Air	Without Dryer	With Dryer	Level	
50 Hz	kW	HP	bar g	psi g	bar g	psi g	m³/min	cfm	Kg		dB(A)
			Lengt	h : 1705	mm Brea	adth : 11	I11mm Height :	1570mm			
EG 37	37	50	4.5	65	5	73	1.50 ~ 7.28	53 ~ 257	1155	1305	69
EG 37	37	50	7	102	7.5	109	1.56 ~ 7.22	55 ~ 255	1155	1305	69
EG 37	37	50	8	116	8.5	123	1.70 ~ 6.65	60 ~ 235	1155	1305	69
EG 37	37	50	9.5	138	10	145	1.87 ~ 5.97	66 ~ 211	1155	1305	69
EG 37	37	50	12.5	181	13	189	2.07 ~ 5.24	73 ~ 185	1155	1305	69
EG 45	45	60	4.5	65	5	73	1.81 ~ 8.86	64 ~ 313	1161	1311	69
EG 45	45	60	7	102	7.5	109	1.87 ~ 8.75	66 ~ 309	1161	1311	69
EG 45	45	60	8	116	8.5	123	2.07 ~ 7.99	73 ~ 282	1161	1311	69
EG 45	45	60	9.5	138	10	145	2.21 ~ 7.39	78 ~ 261	1161	1311	69
EG 45	45	60	12.5	181	13	189	2.44 ~ 6.23	86 ~ 220	1161	1311	69
			Lengt	h :1959ı	mm Brea	ndth : 12	: 66mm Height	1754mm			
EG 55	55	75	4.5	65	5.5	80	2.55 ~ 10.90	90 ~ 385	1588	1763	69
EG 55	55	75	7.0	102	7.5	109	2.58 ~ 10.76	91 ~ 380	1588	1763	69
EG 55	55	75	8.0	116	8.5	123	2.55 ~ 10.11	90 ~ 357	1588	1763	69
EG 55	55	75	9.5	138	10.0	145	2.55 ~ 9.29	90 ~ 328	1588	1763	69
EG 55	55	75	12.5	181	13.0	189	3.37 ~ 7.59	119 ~ 268	1588	1763	69
			Lengt	h :2063ı	mm Brea	dth : 12	:69mm Height :	1969mm			
EG 75	75	100	7.0	102	7.5	109	2.32 ~ 14.78	82 ~ 522	2090	2305	69
EG 75	75	100	8.0	116	8.5	123	2.27 ~ 13.88	80 ~ 490	2090	2305	69
EG 75	75	100	9.5	138	10.0	145	2.10 ~ 12.74	74 ~ 450	2090	2305	69
EG 75	75	100	12.5	181	13.0	189	3.09 ~ 11.04	109 ~ 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) 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 Length, breadth and height dimensions include integrated dryer

Compressed air solutions for all sustainable air needs



Oil free series screw 45 - 450 kW / 190 - 2601 cfm



EG series rotary screw 11 - 250 kW / 49 - 1540 cfm



EN series rotary screw 2.2 - 45 kW / 9.0 - 280 cfm



Electric portable (Trolley) 22 - 90 kW / 130 - 500 cfm



Diesel portable (Trolley) 185 - 1200 cfm / 100 - 350 psig



Diesel portable (Skid) 500 - 1500 cfm / 175 - 400 psig



Oil free recip 5.0 - 30 kW / 14.5 - 90 cfm



Oil lubricated recip 1.0 - 40 hp / 2.0 - 128 cfm

OVERSEAS OFFICES:

Australia: ELGI EQUIPMENTS PTY LTD., 7/66 Pritchard Road, Virginia, Queensland - 4014, Australia. **T:** +61-7-3106 0589, **E:** enquiry@elgi.com.au, **W:** www.elgi.com.au

Belgium: ELGI COMPRESSORS BELGIUM S.R.L., Drève Richelle 167, 1410 Waterloo, Belgium. **E:** euenquiry@elgi.com, **W:** www.elgiaircompressors.eu

Brazil: ELGI COMPRESSORES DO BRASIL LTD., Av. Emilio Checchinato, 4195 - B:Cep:13295 - 000, Bairro: Sao Roque da Chave: Itupeva - São Paulo, Brazil. **T:** 4496 5519, 4496 6611, **E:** contacto@elgi.com.br, **W:** www.elgi.br

China: ELGI EQUIPMENTS (ZHEJIANG) LIMITED., West of 1st floor, Building 2, No.232, Yunhai Road, Jiaxing 314033 P.R. China. T: +86-573-82551120, 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: ROTAIR SPA., Via Bernezzo 67,12023 Caraglio (CN), Italy. T: +39 0171619676, E: info@rotairspa.com, W: www.rotairspa.com

Malaysia: ELGI EQUIPMENTS LIMITED., No.2A-4-6, Jalan Jubli Perak, 22/1, Section 22, 40400, Shah Alam, Selangor, Malaysia. T: +603-55693544, F: +603-55693544, E: malaysia-enquiry@elgi.com, W: www.elgi.com.my

Middle East: ELGI GULF (FZE)., P.O. Box: 120695, P6-27, SAIF Zone, Sharjah, U.A.E. T: +971 6 557 9970, E: gulfenquiry@elgi.com, W: www.elgigulf.com

Thailand: ELGI EQUIPMENTS LIMITED., 223/66 Country Complex A 14th Floor, Sanphawut Road, Bangna Tai, Bangna, Bangkok – 10260. **T:** +6627455160, **E:** thailand-enquiry@elgi.com, **W:** www.elgi.co.th

U.S.A: ELGI COMPRESSORS USA,INC., 1500-N Continental Blvd, Charlotte, NC 28273, USA. T: +1 704-943-7966, E: usa.sales@elgi.com, 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)



