

# Horizon Electric Powered Oil Lubricated Screw Air Compressor

Reliable Air Compressor Solution.  
11kW - 75kW, 50Hz / 60Hz



Think Long Run

## Power saving airend



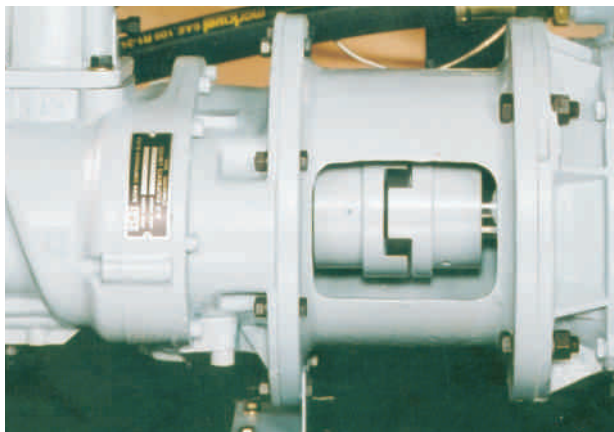
Axis Airends are designed and developed by Elgi over 50,000 man-hours of continuous engineering improvements, research and testing under a joint technology agreement with the Positive Displacement Compressor Technology Research Centre at City University, London. The airends are distinguished by the unique 'N' profile rotors that significantly increases the efficiency with advanced technology.

## Optimal capacity control



The volumetric efficiencies of screw compressors lie in the air intake system, which provides the direction and swirl in to the airend. The load and unload cycle which cannot be eliminated in an air system process is a major contribution in power consumption. The Horizon series incorporates the VARION type intake valve with modulation, which helps in optimizing the power statistics at varying loads.

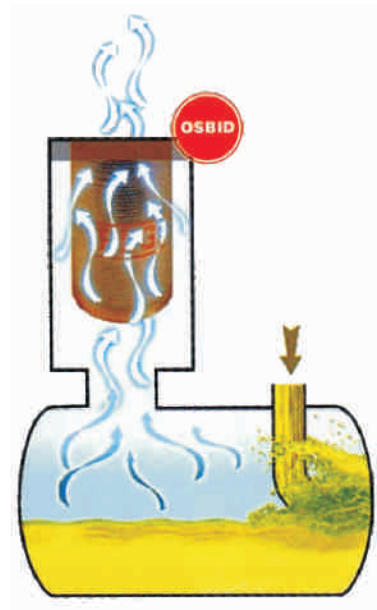
## Direct drive for transmission efficiency



Horizon's direct drive ensure efficient power transmission and constant FAD for its life. Unlike belt-driven screw compressors, there is no power loss and belt slippage. The drive is maintenance free for life. It has been observed that there is an improvement in efficiency upto 5% over belt drive.

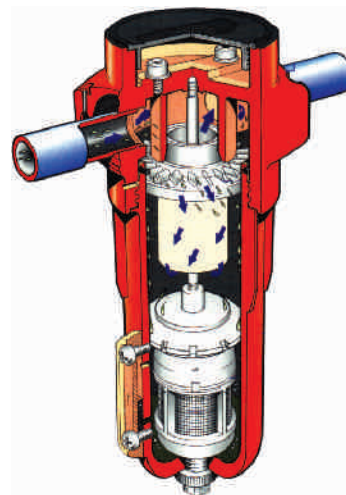
*\* Guarantee applies only to the process. Any deterioration due to other elements of the package does not qualify for the guarantee.*

## Efficient oil-air separation



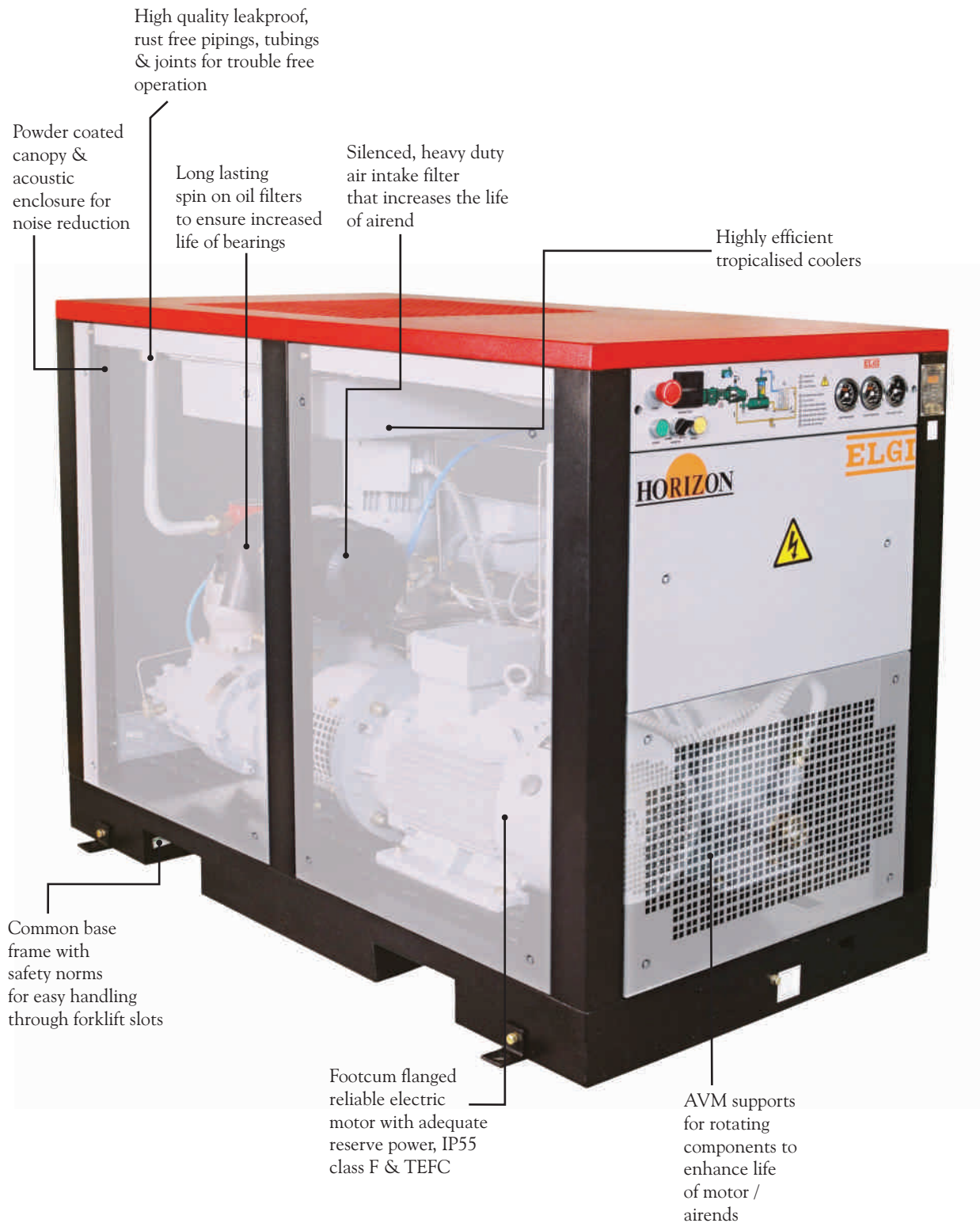
A new horizon in SUPERIOR AIR QUALITY. Over the years, ELGI has perfected the "OSBID" process (Oil Separation By Impact and Deceleration) which enables efficient separation of air and oil, with minimum pressure drop. This process results in consistent quality of air, specifically during the working cycle and unloading. The oil carry-over level is consistently less than 2 ppm, with the OSBID process. ELGI guarantees the OSBID process for the life of the compressor.

## 99% Bulk water free



Bulk water remains in compressed air at varying levels, depending on the humidity level of inlet air. This bulk water causes corrosion of piping, end tools, machinery and valves. Every HORIZON Series Air Compressor has a custom-designed centrifugal type moisture separator with automatic drain at the outlet of the after cooler. This comes as 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 end use equipment and less load on the dryer.

## Horizon E 11 - E 75



### Benefits of "Horizon" Series

- Rugged & Reliable design
- Tropical suitability
- Energy efficient screw airend
- No belt losses - only gear drive
- Low maintenance costs
- Adequate safety & Interlocks
- In-built high quality moisture separator
- Superior air quality (OSBID) <2ppm

## Tropicalised reliability

HORIZON Series Compressors are **tropicalised** to perform at high ambient temperatures - from hot summer to cold winter and from dry to extremely humid conditions. Each package is crafted to the highest standards to give you **low-noise, trouble-free** performance. All this, in a sleek, elegant, **compact** design that saves valuable shopfloor space.

## Microcontroller edge



- Microcontroller based control unit
- Compatible and user-friendly
- Simple alpha - numerical screen
- Scroll button to monitor operating parameters
- Readouts of pressure and temperature
- On-demand readouts of all operating and maintenance conditions
- Safety shut downs
- Power failure auto re-start
- Dual control

## Safety & Inter locks

The Horizon models are built with maximum safety built-in tripping / warnings to ensure trouble free operation with microcontroller option.

### Trip provisions

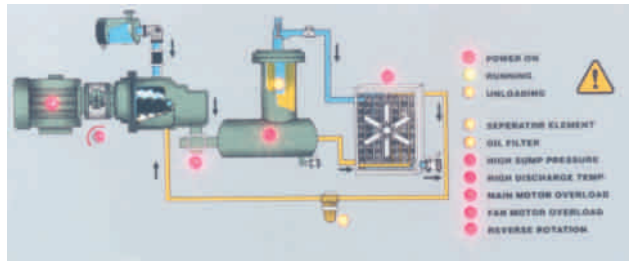
- Emergency stop
- Main motor over loading
- Cooler motor over loading
- Reverse rotation of main motor
- High sump pressure
- High discharge air-oil temperature

### Warning Signals

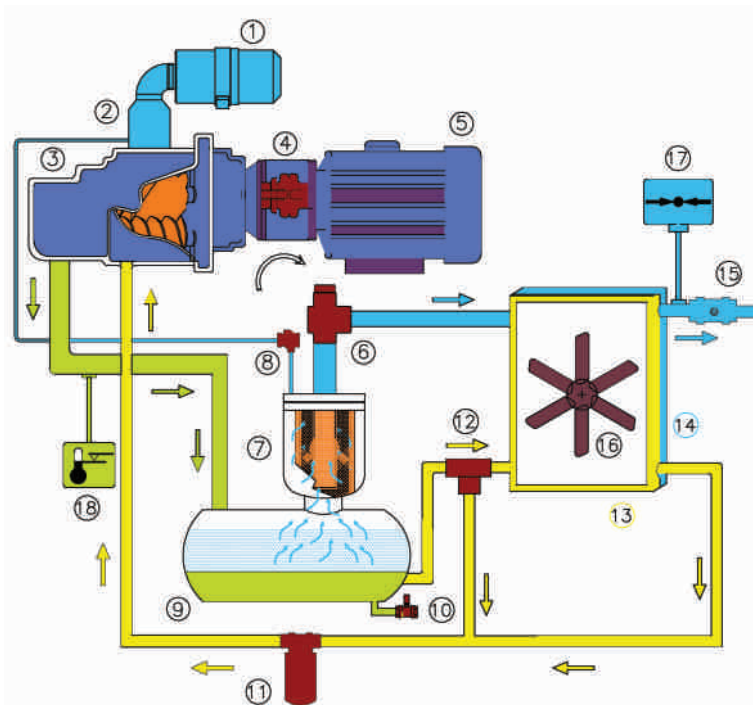
- Separator element (differential pressure)
- Oil Filter (differential pressure)

## MIMIC Panel

Custom made solid state MIMIC electronic annunciation panel gives fault indication for easy maintenance. Units with MIMIC option are also available.



## Schematic Diagram



1. Air filter
2. Intake valve
3. Airend
4. Coupling
5. Motor
6. Minimum pressure valve
7. Separator element
8. Blow down valve
9. Receiver Tank
10. Ball valve - Drain
11. Oil filter
12. Thermal valve
13. Oil cooler
14. After cooler
15. Ball valve - service line
16. Fan
17. Pressure transmitter
18. Temperature sensor

\* Units are generally offered with MIMIC as standard option and Microcontroller can be supplied upon specific request.

## The ELGI Edge - In Black & White

Model	Power		Capacity		Max. Pressure	Weight
	kW	HP	m <sup>3</sup> /min	cfm	kg/cm <sup>2</sup>	Kg
<b>Length: 1475 mm   Breadth: 800 mm   Height: 1150 mm   50Hz / 60Hz</b>						
E11-7.5	11	15	1.81	64	7.5	630
E11-10	11	15	1.56	55	10	
E11-13	11	15	1.19	42	13	
E15-7.5	15	20	2.41	85	7.5	640
E15-10	15	20	2.15	76	10	
E15-13	15	20	1.73	61	13	
E18-7.5	18.5	25	2.97	105	7.5	710
E18-10	18.5	25	2.61	92	10	
E18-13	18.5	25	2.07	73	13	
E22-7.5	22	30	3.57	126	7.5	710
E22-10	22	30	3.03	107	10	
E22-13	22	30	2.52	89	13	
<b>Length: 1675 mm   Breadth: 850 mm   Height: 1365 mm   50Hz / 60Hz</b>						
E30-7.5	30	40	5.40	191	7.5	1050
E30-10	30	40	4.53	160	10	
E30-13	30	40	3.62	128	13	
E37-7.5	37	50	6.43	227	7.5	1100
E37-10	37	50	5.38	190	10	
E37-13	37	50	4.61	163	13	
<b>Length: 2000 mm   Breadth: 980 mm   Height: 1715 mm   50Hz / 60Hz</b>						
E45-7.5	45	60	7.56	267	7.5	1150
E45-10	45	60	6.31	223	10	
E45-13	45	60	5.66	180	13	
E55-7.5	55	75	9.77	345	7.5	1710
E55-10	55	75	8.21	290	10	
E55-13	55	75	6.88	243	13	
<b>Length: 2200 mm   Breadth: 1170 mm   Height: 1920 mm   50Hz / 60Hz</b>						
E75-8	75	100	14.16	500	8	2100
E75-9	75	100	13.37	472	9	
E75-10.5	75	100	11.81	417	10.5	
E75-11.5	75	100	10.73	379	11.5	
E75-13.5	75	100	9.91	350	13.5	

\* Maximum pressure is the cut-off pressure set in the unit.

• All standard models are air cooled. Output is measured at pressures as follows 7.0 kg/cm<sup>2</sup> 9.5 kg/cm<sup>2</sup> and 12.5 kg/cm<sup>2</sup>. Due to continuous engineering improvements, specifications are subject to change without prior notice.

• Noise level measured as per Pneuport / Cagi PN8NTC2: Tolerance:3dB(A) • Ref ISO : 1217 / 1996 (E) Annex C / or tolerances on FAD & power consumption

• Electrical - 415 / 380V, 50Hz, 3Φ, (230 / 460V, 60Hz, 3Φ)\* Refer to ELGI.

### ELGI Genuine Compressor Oil

ELGI offers “specifically engineered” genuine compressor oil in three types viz. mineral oil based, semi - synthetic oil with special additives for extended life and fully synthetic oil for longer life as ELGI Airlube and AirlubePlus. It is recommended to use ELGI's genuine oil to keep your compressor in peak performance and to get extended life.

### Economical & Genuine Spares

For longer life, optimum performance and reliability of your compressor, always insist for genuine ELGI spares. They are cost effective and readily available through our global after sales network. Specially made spares kits are also available to meet the requirements of 2500 Hrs, 7500 Hrs etc. which will be more cost effective too.



Think Long Run

## Accessories

ELGI offers complete set of downstream accessories to improve the air quality It also provides one-stop shop option for the entire compressed air package solution.

### Airmate Auto Drain Valve

Capacity	up to 353 cfm
Working Pressure	16kgf / cm <sup>2</sup> max
Media	Condensate



### Airmate Air Filter

Capacity	19 to 2119 cfm
Working Pressure	16kgf / cm <sup>2</sup> max
Filtration Range	1 to 0.003 microns



### Airmate Air Receiver

Capacity	250 to 10,000 liters
Working Pressure	7 to 12.5 kgf / cm <sup>2</sup> max
Code of Construction	ASME Sec VIII Div .1 or IS2825



### Airmate Refrigeration Air Dryer

Capacity	10 to 1750 cfm
Working Pressure	16kgf / cm <sup>2</sup> max
Dew Point	+3 deg C PDP



## The Long Run Benefits only with ELGI

Over 40 years of experience and continuous innovations make the ELGI Horizon Electric Powered Screw Air Compressor such a brilliant solution for you. There are a million ELGI machines powering businesses in 40 countries worldwide. They are exceptionally dependable and engineered to global practices like Six-sigma, TPM, TQM and Quality Circles. Added to innumerable product advantages is the invaluable edge of service. A vast dealer network spanning India and the world ensure easy availability and prompt service. The fact is those who think long run, insist on ELGI, the global compressor solutions company.

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