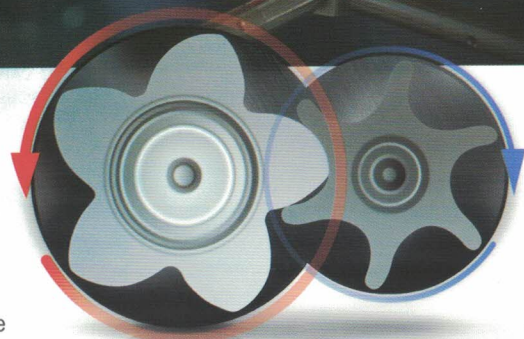


## Integrated Premium Production Process, State-of-the-art Design

Excellent performance of Fusheng rotary screw air compressor from high-end process technology, CAD and manufacturing system. Integrated high efficient airend, patent rotor profile, precious machining centers and grinding machines and premium measuring equipment. Using high strength, wearable and good elastic manganese steel and ductile iron in material to provide optimum clearance of rotor, continuously stable running and guarantee performance.



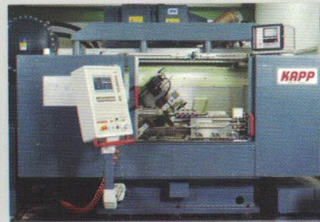
Patent rotor profile

## High Efficiency Airend

Patent rotor profile reduces differential pressure between lobe and flute and ensure the lowest back flow and increasing the volume efficiency. With long service life gears, perfect meshed male and female rotors maximized air delivery.



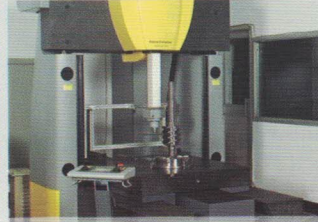
1



2



3

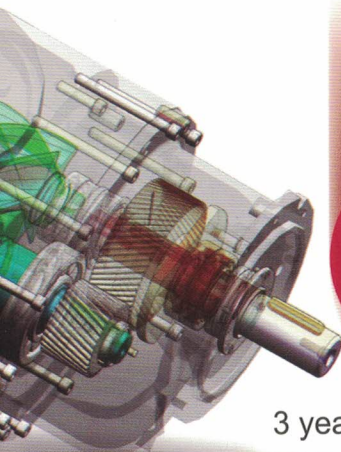


4

## Precision-Built Airend by High Precision Machining Equipment

Highly specialized machining and control equipment enables machining and grinding accuracy to 0.005 mm with roughness allowance (Ra) of 0.1~0.2μm.

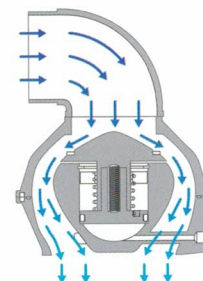
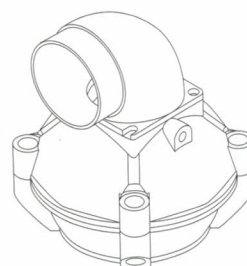
- 1 German KLINGELNBERG rotor grinding machine
- 2 German KAPP rotor precision grinding machine
- 3 Japanese CNC machining center
- 4 Sharpe & ZEISS 3D measuring equipment



**3**

YEAR

3 years airend warranty



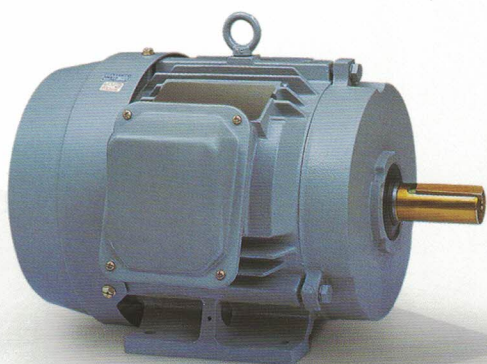
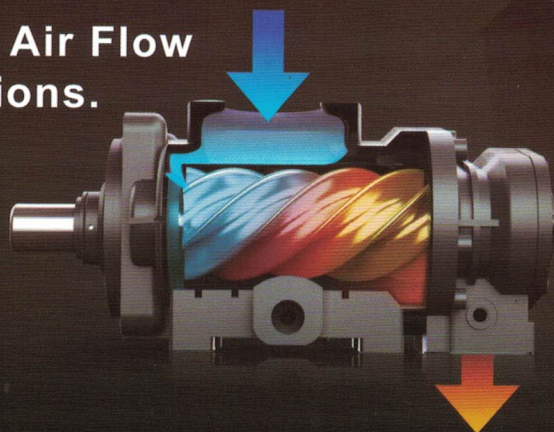
Exclusive inlet valve provides function of non-return, break oil and modulation control of capacity. Low pressure drop design provides optimum suction efficiency. The valve is automatic control based on actual air demand to provide high efficient energy saving.



# High Efficiency Airend Induce Air Flow from Axial- and Radial- Directions.

High efficiency airend is designed by Fusheng global research center in Germany. The optimum design of rotor profile, volume efficiency and power consumption provides low rotational speed and increases operating efficiency.

- Low operation noise level
- Long service life of airend and bearings
- Fully utilize effective rotor length to maximize compression efficiency



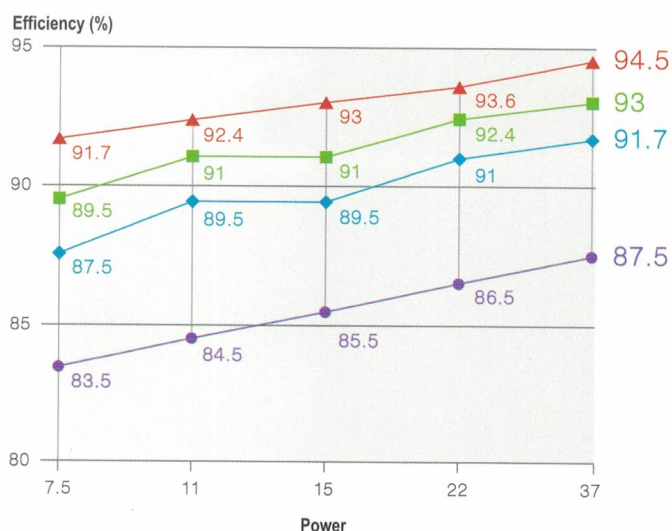
## IE3 Premium Efficiency Motor

Fusheng New SA series compressor equips with IE3 premium efficiency motor to increase the overall efficiency, and substantially reduce operating cost.

Efficacy

Costs

## Differences in efficiency of various grade of motors



CNS2934

IE1+

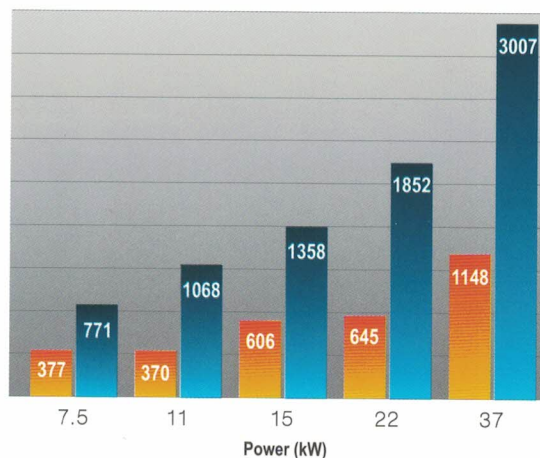
IE2

IE3

CNS2934 is the past standard of three-phase cage-squirrel induction motor.

## Benefit of Using IE3 Motor

Annual Cost Saving (USD)



Annual cost saving by using IE3 motor instead of IE1+

Annual cost saving by using IE3 motor instead of CNS2934

Comparing to air compressor 10 years ago (37kW), by using IE3 motor could save about 3,007 USD dollars. Comparing to air compressor with IE1+ motor, by using IE3 motor could save about 1,148 USD dollars.

\* Calculation is based on operation hours 8,000 hr/yr, and 1kWh = 0.12 USD



# Specification



新通行私人有限公司  
SIN THONG HUNG PTE. LTD.

Blk 5 Ang Mo Kio Ind. Park 2A  
#03-16, AMK Tech II, S'pore 567760  
Tel: 6484 3973/1, Fax: 6484 3066  
Email: sinthong@singnet.com.sg

## SA Air Compressor



### Equipment Instructions

Standard ● Optional ○ None ×

Type	Compressor	Dryer	Precision Filter	Air Receiver	Inverter
SA	●	×	×	×	×
SA-R	●	●	○	×	×
SA-T	●	×	×	●	×
SA-F	●	●	○	●	×

Model	Working Pressure	Delivery	Main Motor Power		Voltage	Oil Fill Volume	Discharge Pipe Diameter	Length	Width	Height	Weight	Noise Level		
	barG	m³/min	kW	HP	V	Liter	inch	mm	mm	mm	kg	dB(A)		
50Hz														
SA08	7	1.27	7.5	10	380 415 / 220 380 440	7.5	G $\frac{3}{4}$	800	670	1100	275	64		
SA08-R	8	1.18									358	63		
SA08-T	10	0.99									415			
SA08-F	12	0.8									498			
SA11	7	1.82	11	15				15	G1	1250	880	1515	285	65
SA11-R	8	1.7											368	64
SA11-T	10	1.52											425	
SA11-F	12	1.35											508	
SA15	7	2.5	15	20		15	G1			1250	880	1515	610	71
	8	2.3												70
	10	2.1												
	12	1.8												
SA22	7	3.9	22	30				15	G1	1250	880	1515	670	72
	8	3.7												71
	10	3.2												70
	12	2.8												
SA37	7	6.6	37	50		18.5	G1 $\frac{1}{2}$			1350	940	1680	865	73
	8	6.3												72
	10	5.6												71
	12	4.9												70

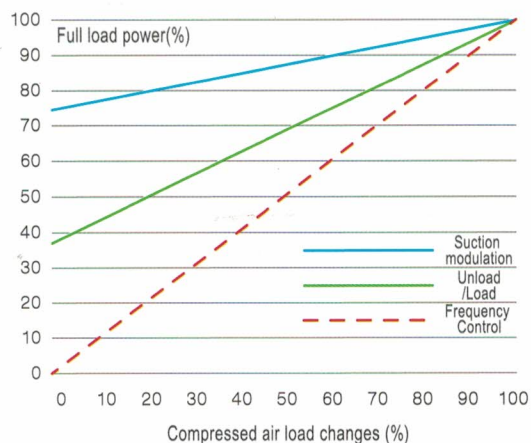
\*Noise level measured according to ISO 2151





### Variable Frequency Energy Saving Control

Variable frequency driven compressor provides 30~100% turndown range of capacity control. According to actual compressed air demand of system to automatically adjust rotational speed of motor to meet the requirement. Providing optimum energy saving solution in variable loading management and reducing operation cost up to 45%.

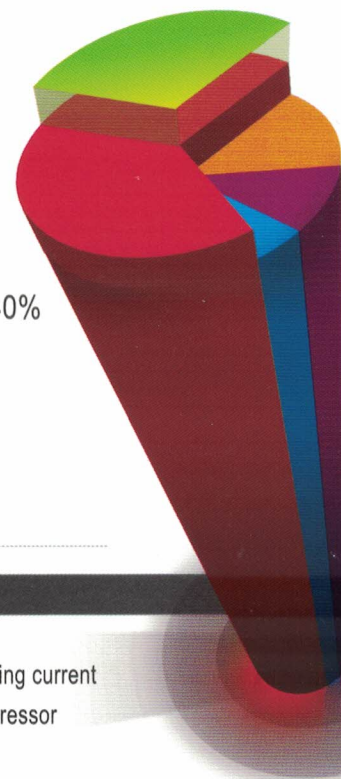


### Energy Saving Benefit of Variable Frequency Driven Compressor

Variable frequency driven compressor saves operation cost

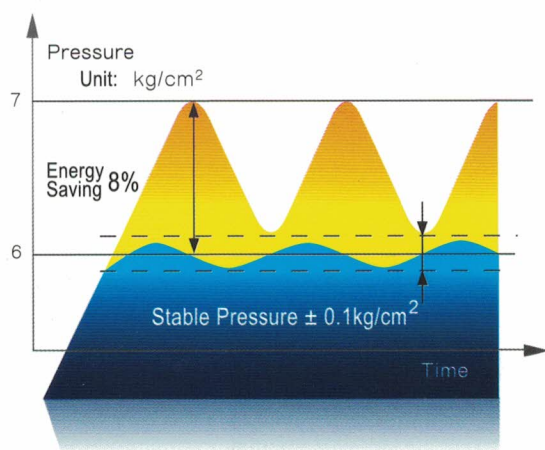
up to **40 %** in its service life

- Maintenance Cost 5%
- Installation Cost 10%
- Initial Cost 15%
- Energy Cost 70%
- Energy Saving Cost 40%



### Energy Saving with stable pressure band

- Instantly response for variational air demand to keep stable system pressure within  $0.1 \text{ kg/cm}^2$ .
- Comparing to loading/unloading controlled compressor, VFD compressor could save around 8% energy.



### VFD Starting/Running

- Reducing starting current
- To eliminate Y-Delta shift starting current
- Extending service life of compressor

