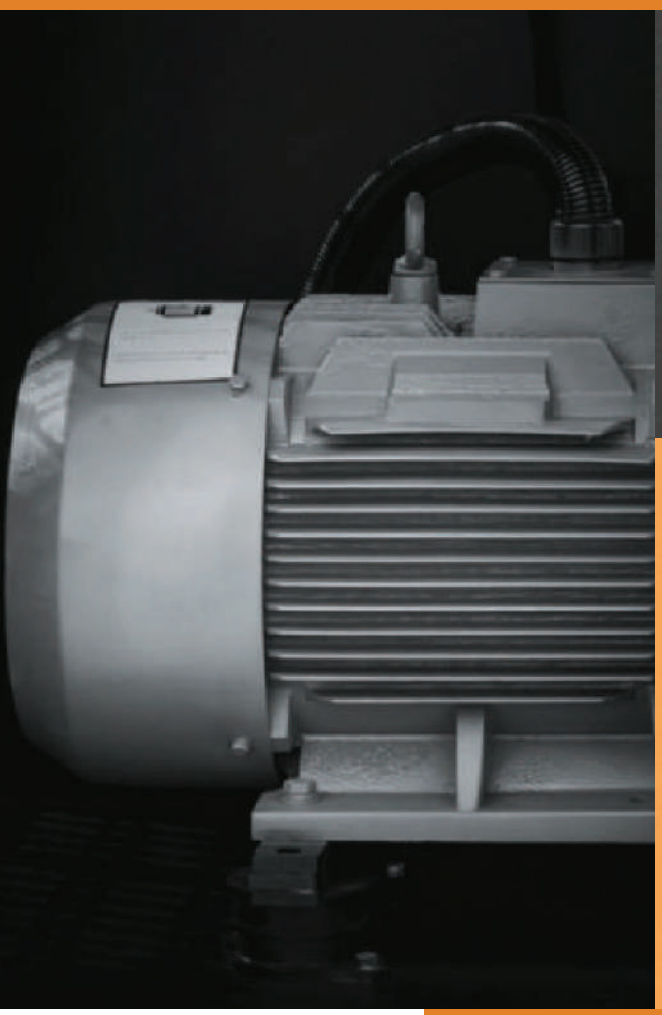
GENEXIS
KOMPRESSOREN



PMSM INVERTER
SCREW AIR COMPRESSOR

Catalogue

Germany Genexis Compressor

GENEXIS
KOMPRESSOREN

INTRODUCTION

GENEXIS KOMPRESSOREN PERMANENT MAGNET VARIABLE SPEED SCREW AIR COMPRESSOR (EGM SERIES)

Energy saving and environmental protection are new technological challenges for today's industrial product and have become the largest mission of air compressor industry in the 21st century. In order to meet the needs of the times, leading its peers, Germany Genexis Kompressoren Compressor take meeting customers demand as the core of technology development, constantly developing advanced leading screw compressors suitable for the trend of the times. Genexis Kompressoren EGM series screw air compressors are **exporting to more than 100 countries and area**, with advantage of reliable operation, low noise, long life, high efficiency and more energy-saving.

Why Genexis Kompressoren?

4 ADVANTAGES:

MORE **EFFICIENT** 01

MORE **COMFORTABLE** 02

MORE **STABLE** 03

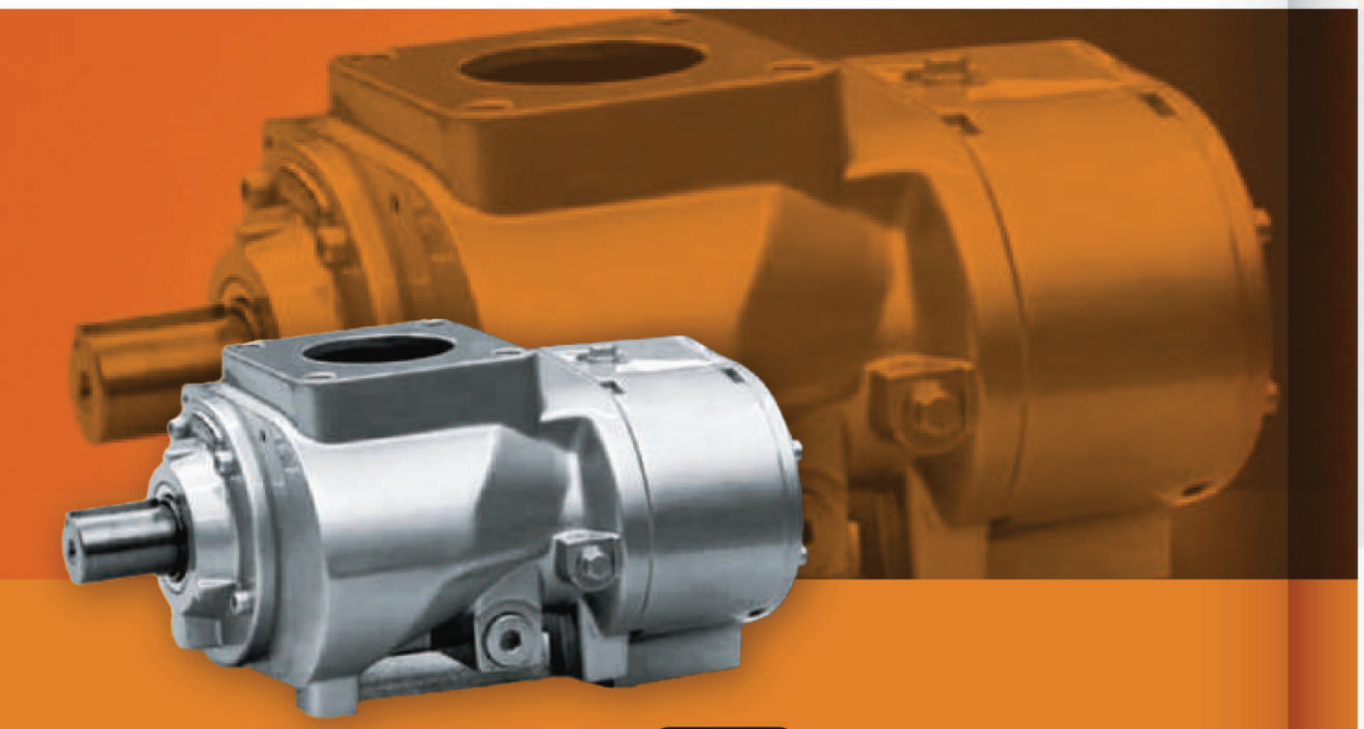
MORE **CONVENIENT** 04

5 REASON TO CHOOSE US!

- Inverter control
- IPM motor
- Full touch screen
- IE4 motor
- Myhijau

OUR PRODUCTS

PMSM Inverter Screw Air Compressor



Lower Noise

Variable Frequency Regulation Stable Supply Pressure

German Schaeffler Bearing
Swedish SKF Bearing

German Technology

Microcomputer Control Simple & Convenient Operation

01

More Efficient

- Technology Innovation
- Long Life
- Low Noise
- High Efficiency Air End
- More Efficient
- Low Vibration

02

More Comfortable

- **Energy Efficiency:**
  Frequency conversion technology supplies energy based on gas demand, minimizing energy loss. The motor operates at a lower frequency, reducing mechanical rotation noise.
- **Reduced Noise:**
  Frequency conversion adjusts the motor speed without the need for frequent loading and unloading, reducing noise caused by these operations.
- **Stable Pressure:**
  Continuous loading maintains stable pressure, reducing noise associated with unstable pressure fluctuations.

03

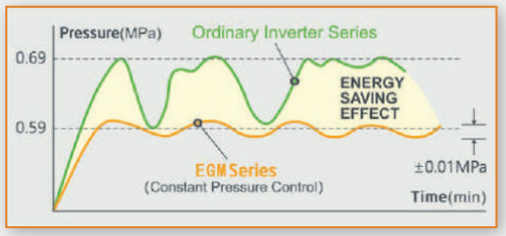
More Stable

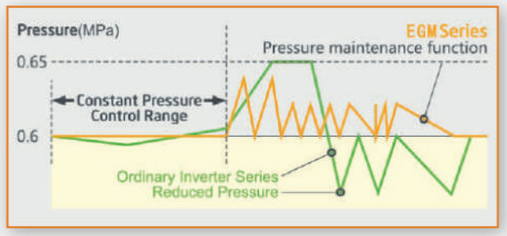
- **Adopting frequency conversion speed control to make full use of energy-saving effects to create a new generation of energy-saving compressor that saves electricity and energy**

The conventional speed regulation method of the air compressor is to adjust the air intake volume by adjusting the inlet valve. The input power is large, and a large amount of energy is consumed in the current-carrying process of the valve. When using the variable frequency speed, if the flow requirements are reduced, the requirements can be met by reducing the speed of the host.

- **Provide the necessary amount of air with the necessary pressure through constant pressure control**

High-accuracy constant-pressure control with a pressure variation range of ±0.01 MPa or less can be performed, effectively providing the machine with the most suitable air pressure necessary. Moreover, the accuracy of the set pressure is 0.01MPa. accurate setting to achieve maximum energy savings.





04

More Convenient *(Touch Screen)*

- **One-touch switch for changing control pressure settings**
The power saving control pressure can be easily changed on the operation panel.

- **The newly developed operating panel is simple and easy to understand**
Energy saving mode and remote operation conversion can be realized directly on the operation panel. Moreover, in the event of a failure, the display will show the contents of the fault and the fault can be quickly eliminated.

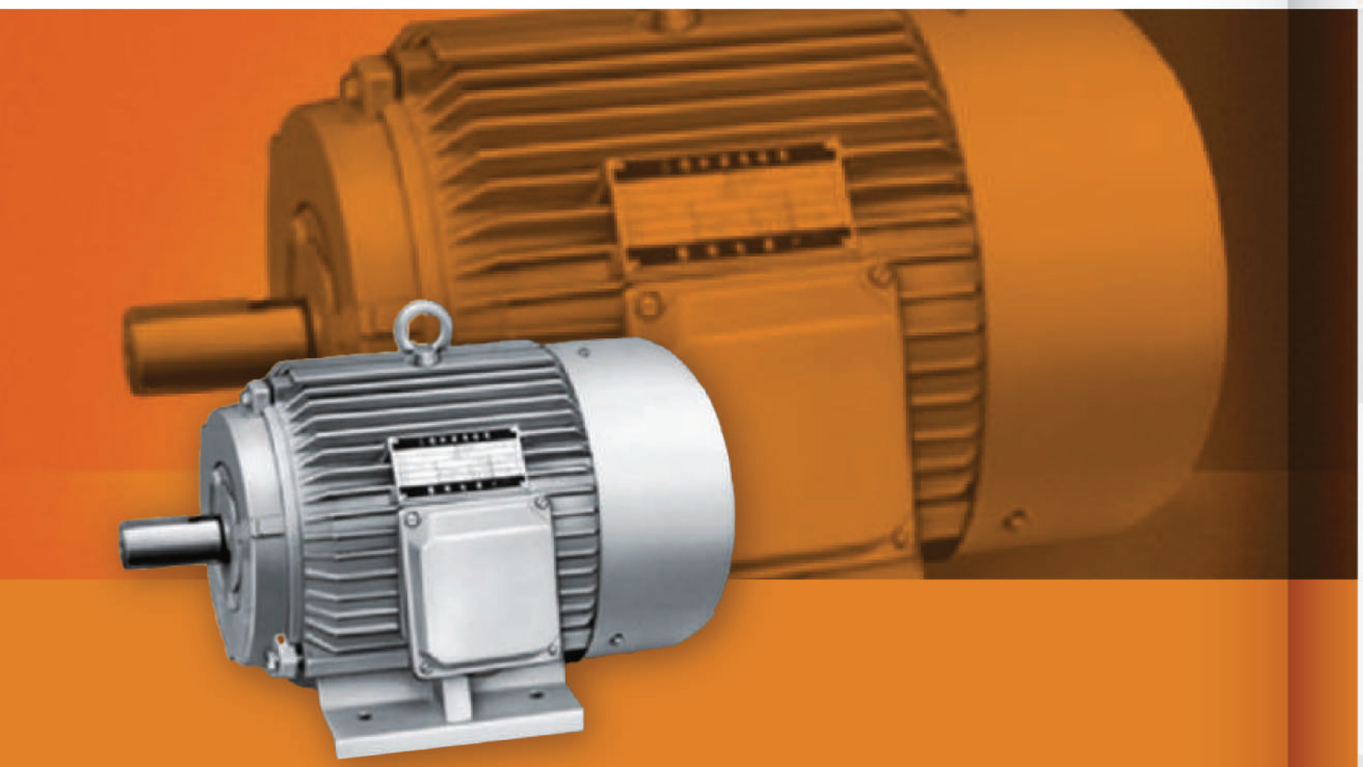
- **Genexis Kompressoren unique in-line vector control*1. And PID control achieve fast response while ensuring safety and reliability**
The variable speed control of the EPM Series and the system control of the compressor are all technologies developed by Genexis Kompressoren. Exhaust pressure ±0.01MPa control system, while achieving a high degree of response, but also to play a superior load following up and safety.

- **The status of the compressor and various settings can be confirmed on the LED display**

- **You can use the functions of timing operation, alternate operation, etc. to save energy and save labor**

OUR PRODUCTS

Genexis Kompressoren Permanent Magnet Synchronous Motor



Super-level energy efficiency (More energy-efficient)

High Degree Of Protection Design

Comparison of Efficiency: (Permanent Magnet Synchronous Motor and Asynchronous Induction Motor)

- **Super-level energy efficiency (More energy-efficient)**

  The permanent magnet frequency conversion synchronous motor used in Genexis Kompressoren compressor passes national level energy efficiency laboratory tests, have exceeded the national first-class energy efficiency standards.

- **High Degree Of Protection Design**

  Safety and reliability have been guaranteed. Motor adopts IP54 high protection grade design, which can prevent failure caused by bad environment.

- **Comparison of Different Speed (Efficiency of Permanent Magnet Synchronous Motor and Asynchronous Induction Motor)**

  Due to different working principles, permanent-magnet variable-frequency synchronous motors maintain more than 95% efficiency and higher power factor at different speeds. The efficiency of permanent magnet frequency conversion synchronous motor at low speed is 20% higher than traditional asynchronous motor.

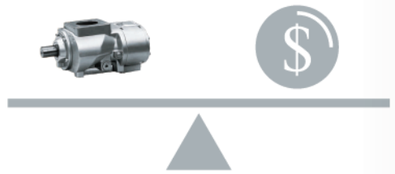
WHY INVERTER?

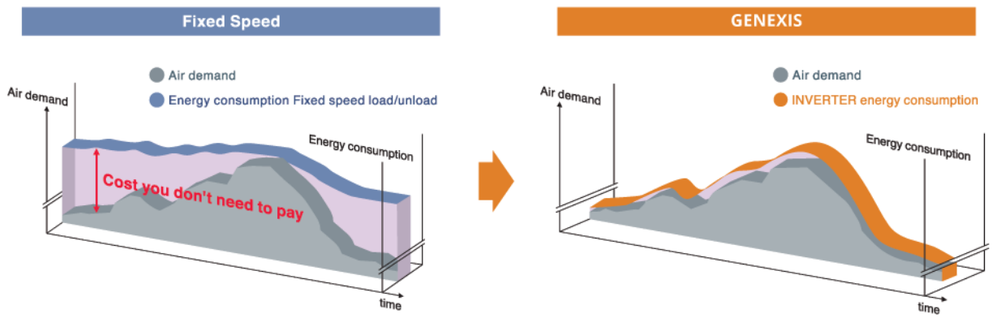
Question actually should be WHY NOT?

Since we firstly applied IPM motor on INVERTER , we have been accumulated know-how of INVERTER compressor for many years. Our advanced energy saving technology have been chosen by various fields of industry over the years.

Pay for what you use

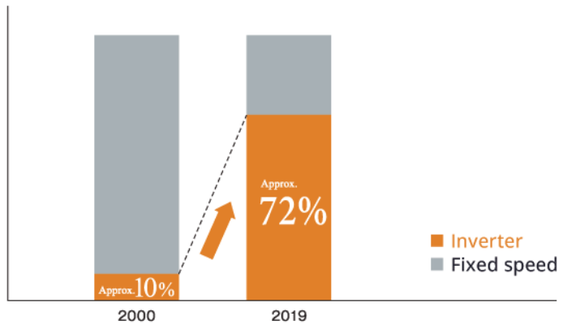
In every situation in our life, we only pay for what we eat and drink. And of course, compressors also should be that way. “GENEXIS EGM VSD” can adjust compressor's rotating speed depends on the demand of factory load which changes from moment to moment by own developed algorithm by the INVERTER. Thus, it can provide exact volume and pressure what customer needs and achieve maximum energy saving.





72% in Southeast Asia include Malaysia is using Inverter + IPM motor Air Compressor

The percentage of INVERTER type GENEXIS* ships in South-East Asia market is approx 72%. In 2000. INVERTER ratio was only approx 10%. This is a sign of fact that people are getting aware of importance of “Energy Saving" and "Return on Investment” (ROI). Now INVERTER is not special but mainstream for every industry.



Approx.

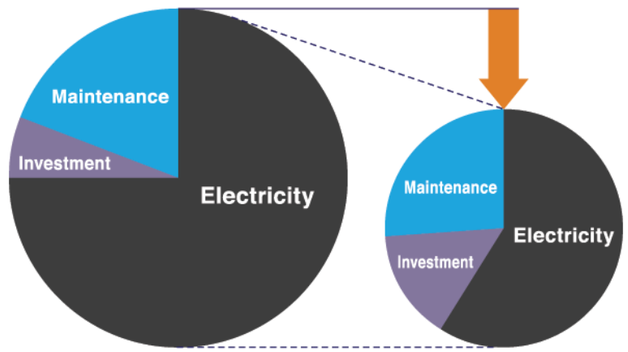
72%

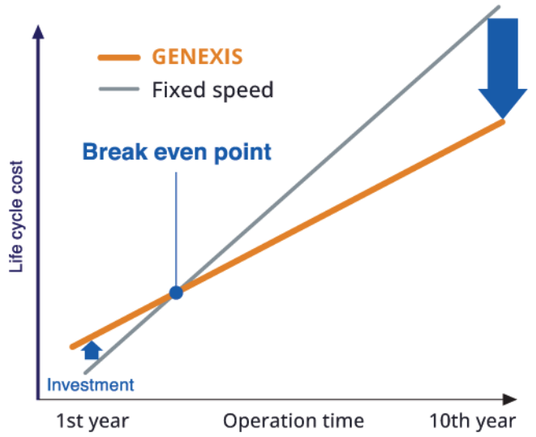
ADVANTAGES OF INVERTER

ROI *(return on investment)*

What's important is not initial cost but life cycle cost (LCC). INVERTER compressors may look more expensive than fixed sceed model. But many customers choose them because they know importance of life cycle cost (LCC) & return on investment (ROI) when it comes to choosing compressors.

■ Life cycle cost (LCC) comparison





Can Save Approx.

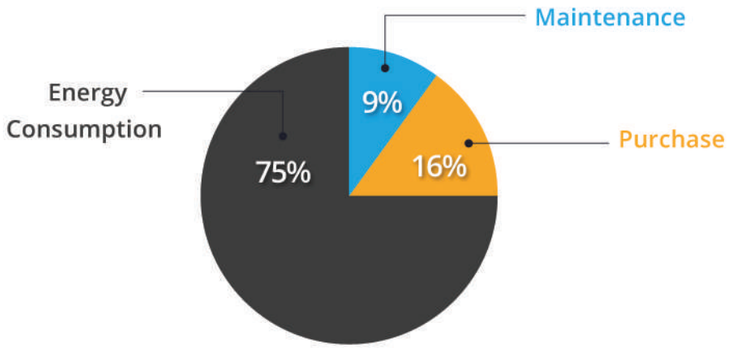
33%

of life cycle cost (LCC)

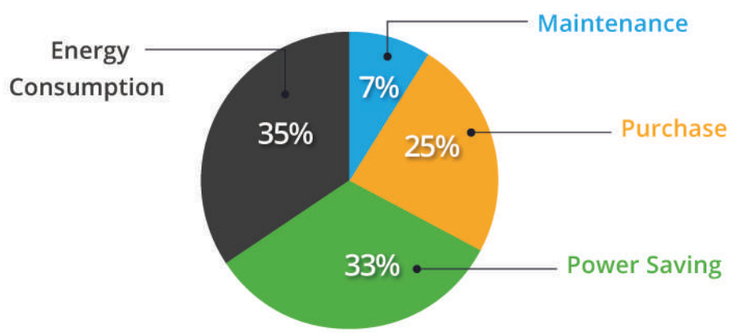
COMPARISON OF ENERGY-SAVING EFFECTS

When buying an air compressor, the traditional cost *(ie, purchase cost + maintenance cost)* accounts for only 25% of the total cost, while energy consumption accounts for 75%.

Ordinary
Power Frequency



GENEXIS KOMPRESSOREN
EGM Series



GENEXIS KOMPRESSOREN

Save 33-35% Energy

EGM Series → compare to → *Power Frequency*

Genexis kompressoren ***(Egm frequency conversion)*** **screw air compressor saves 33-35% energy than ordinary** ***(Power Frequency)*** **screw air compressor.**

For Example:

1. A 75KW ordinary screw air compressor runs for 8000 hours a year, with an electricity fee of RM 0.50/kWh, and the electricity charge for one year is:
75KW*8000 hours*0.50/KW.h = RM300,000

2. Genexis Kompressoren EGM 75KW screw air compressor, saving about 35% of energy a year.
A Total of: 300,000 * 35% = RM105.000

3. Return on Investment (ROI) :
About 1 Year

MAINTENANCE OF AIR COMPRESSOR

We provide selective maintenance services for customer's equipment maintenance. The content is customized for your equipment.

You can choose a **single price maintenance** or choose **long-term parts supply** or preventive maintenance contract, through the above contract, you can enjoy valued service and guarantee and overhauled and updated parts at competitive price.

We also provide energy saving solution, such as energy recovery, frequency conversion, and energy-saving optimization systems, can greatly reduce your production cost.

Only use genuine parts and service of **GENEXIS KOMPRESSOREN COMPRESSOR DEALERSHIP** to ensure the normal aperation of the compressor group and normal life to the greatest extent.

TECHNICAL PARAMETER

OF EGM SCREW AIR COMPRESSOR

Model	Motor Power *(Kw)*	Exhaust Pressure *(Mpa)*	Exhaust Volume *(m3/min)*	Outlet Size *(size)*	Size *L x W x H (mm)*	Weight *(Kg)*
EGM-10A	7.5	0.8	1.1	G1/2"	800 x 650 x 840	182
		1.0	0.9			
EGM-20A	15	0.8	2.3	G3/4"	940 x 720 x 1020	277
		1.0	2.0			
EGM-30A	22	0.8	3.8	G1"	1200 x 950 x 1135	410
		1.0	3.6			
EGM-40A	30	0.8	5.2	G1"	1200 x 950 x 1135	460
		1.0	4.8			
EGM-50A	37	0.8	6.5	G1 1/2"	1420 x 900 x 1390	610
		1.0	5.7			
EGM-60A	45	0.8	7.5	G1 1/2"	1560 x 1000 x 1365	830
		1.0	6.8			
		1.2	5.6			
EGM-75A	55	0.8	10.5	G2"	1800 x 1070 x 1490	1120
		1.0	8.9			
		1.2	7.6			
EGM-100A	75	0.8	13.5	G2"	1800 x 1070 x 1490	1290
		1.0	11.5			
		1.2	10.0			
EGM-120A	90	0.8	16.5	G2"	2100 x 1400 x 1780	1900
		1.0	13.7			
		1.2	12.3			
EGM-150A	110	0.8	20.5	G2 1/2"	2500 x 1450 x 1800	2300
		1.0	17.9			
		1.2	15.3			
EGM-175A	132	0.8	24.0	G2 1/2"	2700 x 1550 x 1800	3500
		1.0	21.3			
		1.2	18.3			
EGM-220A	160	0.8	28.5	G2 1/2"	2700 x 1550 x 1800	3800
		1.0	25.5			
		1.2	21.5			
EGM-250A	185	0.8	32.0	DN80	2800 x 1800 x 1950	3450
		1.0	27.5			
		1.2	25.1			
EGM-300A	220	0.8	37.5	DN80	2800 x 1800 x 1950	3850
		1.0	31.5			
		1.2	28.2			
EGM-350A	250	0.8	42.2	DN80	3250 x 2100 x 2300	4250
		1.0	38.5			
		1.2	34.9			