

Orientalmotor

KII KIS



Standard AC Motors

Single-Phase Induction Motors

KII Series

Three-Phase High-Efficiency Induction Motors

KIS Series

High-Intensity Gear Head, High Reliability.

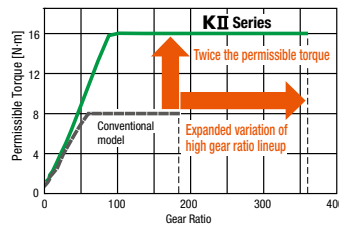


High Permissible Torque

The permissible torque is twice that of conventional models

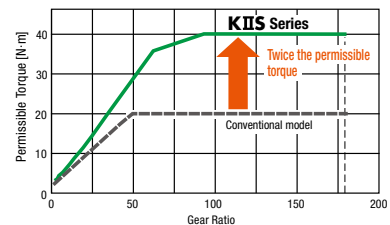
Increase in the strength of the gear raises the maximum permissible torque to twice the torque when compared with conventional models. A torque range that was unavailable can now be used.

● Gearhead output (permissible) torque for 25 W



KII Series

● Gearhead output (permissible) torque for 100 W



KIIS Series

High Strength

Permissible load is twice that of conventional models*

The strength of the permissible radial load and the permissible axial load is twice that of the conventional model.

*Remains the same in some products.

Permissible radial load



Permissible axial load

Conventional model **4GN-K**

Permissible radial load
200 N
Permissible axial load
50 N

Permissible radial load



Permissible axial load

KII Series 4GV

Permissible radial load
450 N
Permissible axial load
100 N

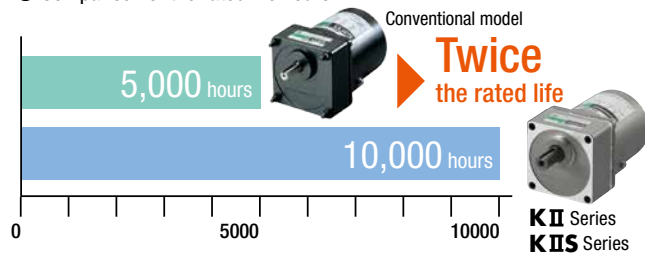
Long Life

The rated life is twice that of the conventional model

The large bore bearing used for this model extends the gearhead's rated life to 10,000 hours, which is twice that of the conventional model. This reduces the maintenance work for the device.

Rated life hours: Definition determined by Oriental Motor. For details, contact Oriental Motor.

● Comparison of the rated life hours

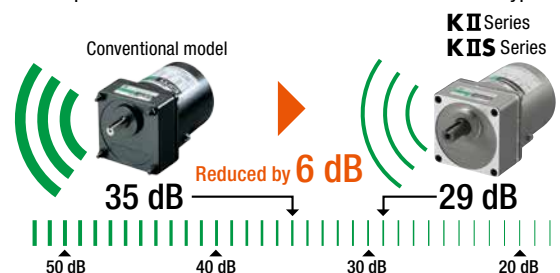


Silent

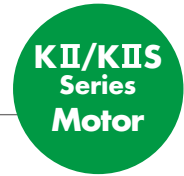
Reduced gear contact noise by 6 dB

Noises from motor/gearhead contact have been reduced by 6 dB compared with the conventional standard motor.

● Comparison of the noise level in the 80 mm frame size type



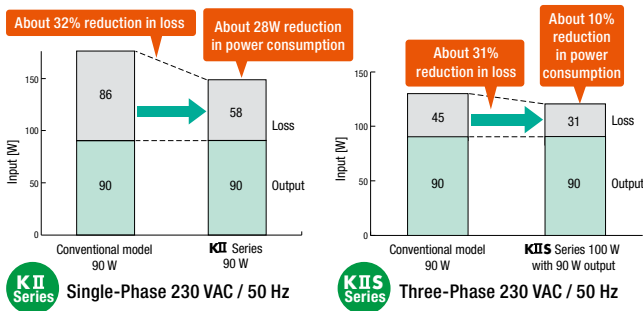
The Highest Level of Highly Efficient Motor.



High Performance Motor Installed

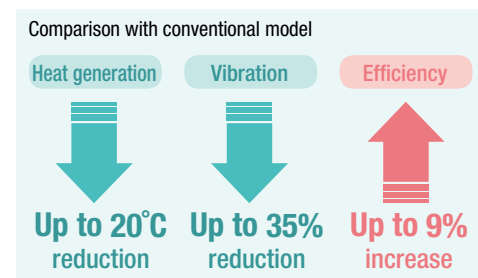
High efficiency

The optimal magnetic design and dedicated parts have dramatically reduced losses, achieving high efficiency. Compared with the conventional model under the same conditions, this model needs less power, contributing to a labor-saving device.



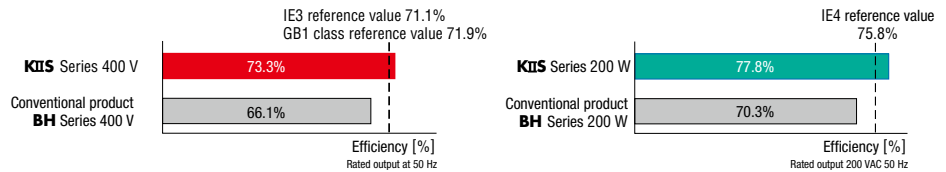
Low heat generation and low vibration

With less heat generation and vibration of the motor, achieved by reduced losses, the reliability of the device has increased.



High Efficiency Type IE3 and IE4

A motor efficiency of 77.8% (IE4, rated output power) and 73.3% (IE3) is achieved with optimal magnet design and specialized parts. Loss is greatly reduced, the motor's output is increased, and it is fanless.



Environmental Resistance

Fan-less structure

Reduction in loss has reduced the heat generation in the motor. Therefore, the KII Series's single-phase 220/230 VAC 50 Hz type and the KIS Series do not require the cooling fan that was installed in the conventional models of 60 W or higher, resolving the problem of raising dust.



IP66 water resistance specification

The sealing structure of the motor, gearhead, and terminal box has been strengthened. The terminal box type* conforms to the IP66 rating degree of protection.



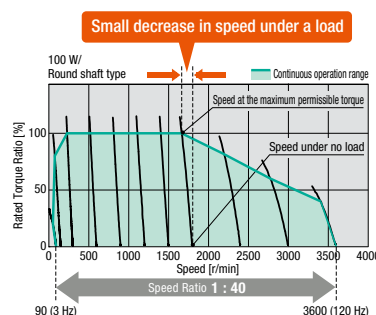
* Excluding the installation surface of the round shaft type
 IP66: The IP indication that shows the water-resistant and dust-resistant performance is specified under IEC 60529 and IEC 60034-5.

- Main specification**
- Material Case and terminal box: Aluminum Output shaft: S45C Screw: Stainless steel (Exposed part only)
 - Surface treatment Case and terminal box: Painted (Except the installation surface)

Best For Combination With An Inverter (KIS Series only)

Variable speed control

By combining with an inverter, you can control the speed in a wide range from the low speed at 3 Hz to the high speed at 100 Hz. Even at a low speed, high torque is produced. In addition, less variation under loads enables more stable speed control.



● About use with an inverter of other manufacturers

For easy use of an inverter, we provide, for your reference, the "Speed - Torque characteristics" and "Parameter settings for the inverter" when this product is combined with an inverter of another manufacturer. For details, contact our customer support center.

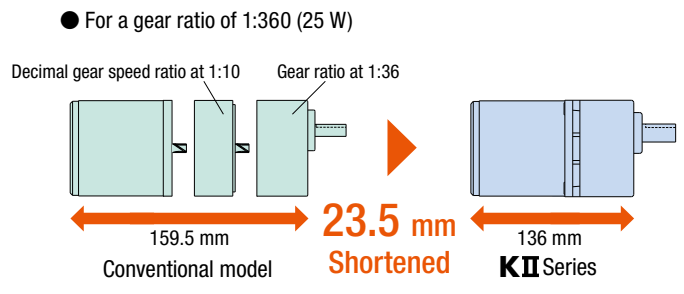
User-Friendly Design of The Gears and Motors.

High Gear Ratio

The overall length is reduced by the removal of the decimal gearhead

The gearhead lineup offers a wide range of gear ratios from low gear ratios up to a maximum of 1:360. For the high gear ratio at 1:180, the decimal gearhead was previously required. Now, only one gearhead is required, achieving a saving of space.

- **KII Series** For the output of 6 W to 25 W
- **KII Series** For 40 W and 60 W, up to 1:300; For 90 W, up to 1:180
- **KIIS Series** For 60 W, up to 1:300; For 100 W, 1:180



Output Axis Tapping

For motors with 25 W output power or higher, tapping has been applied to the output shaft end. This prevents the pulley and other transmission parts from coming off.



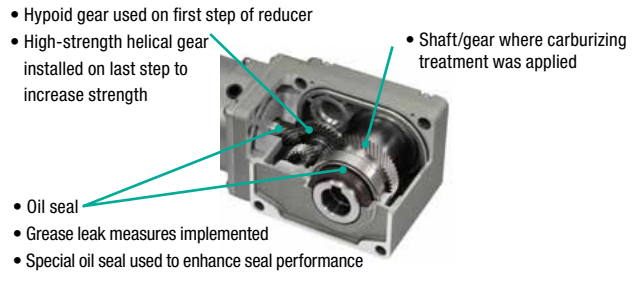
Increase In Installation Accuracy

The installation surface and pilot of the gearhead are polished. The gearhead can be installed into the device more accurately.

Uses a hypoid gear with built-In Oil Seal

Less grease leakage

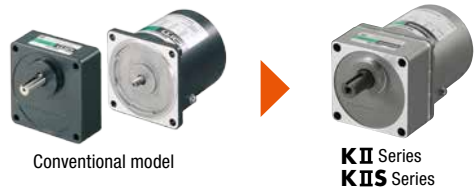
Oil seal is installed in the final stage of the output shaft. This prevents grease from leaking. Furthermore, 40 W and higher motors use a special oil seal with high sealing performance. This provides highly reliable measures against grease leakage.



Combination Type

Pre-assembled gearhead

The combination type comes with a motor and a gearhead pre-assembled. This type makes the installation into the device easy, and you no longer have to worry about giving damage to the shaft, which may cause abnormal noise.

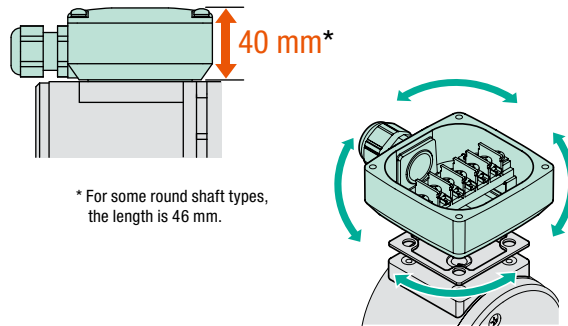


< What is the combination type? >
The combination type comes with the motor and gearhead pre-assembled with dedicated screws. Motors and gearheads are also available individually for maintenance.

Slim Terminal Box

Improvement in workability

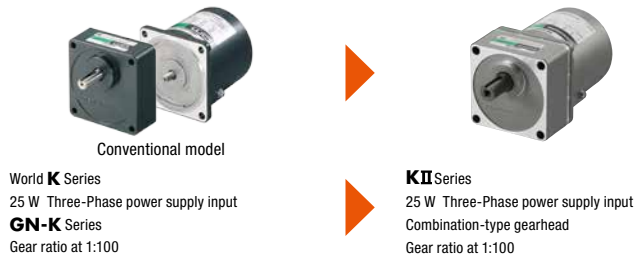
A slim terminal box is used to make wiring work easier. The box is slimmer than conventional products. The cable outlet can be changed by 90 degrees to four different directions. The slim terminal box type conforms to the IP66 rating degree of protection. (Except the installation surface of the round shaft type)



Cost Performance

High performance at an affordable price

This model is affordably priced, equivalent to or less than conventional models, while increasing in strength and efficiency.



International Standards

Conforms to safety standards

This series conforms to the UL/CSA Standards and the China Compulsory Certification System (CCC System), and is also affixed with the CE Marking (Low Voltage Directive).



Energy Efficiency Regulation in China

Conforms to the First Grade (GB25958-2010) (**KII** Series only)

KII Series 220 VAC/230 VAC 50 Hz (except the 6 W type), we provide products obtaining certification under the China Certificate for Energy Conservation Products (CQC31-461113-2011).



Orientalmotor

These products are manufactured at plants certified with the international standards **ISO 9001** (for quality assurance) and **ISO 14001** (for systems of environmental management).

Specifications are subject to change without notice.
This catalogue was published in June, 2015.

ORIENTAL MOTOR (EUROPA) GmbH

www.orientalmotor.de

European Headquarters

Schießstraße 74

40549 Düsseldorf, Germany

Tel: 0211-5206700 Fax: 0211-52067099



Other countries:

www.orientalmotor.eu



ORIENTAL MOTOR (UK) LTD.

www.oriental-motor.co.uk

UK Headquarters

Unit 5, Faraday Office Park,

Rankine Road, Basingstoke,

Hampshire RG24 8AH, U.K.

Tel: 01256-347090 Fax: 01256-347099



ORIENTAL MOTOR (FRANCE) SARL

www.orientalmotor.fr

France Headquarters

56, Rue des Hautes Pâtures

92000 Nanterre Cedex, France

Tel: 01 47 86 97 50 Fax: 01 47 82 45 16



ORIENTAL MOTOR ITALIA s.r.l.

www.orientalmotor.it

Italy Headquarters

Via A. De Gasperi, 85

20017 Mazzo di Rho (MI), Italy

Tel: 02-93906346 Fax: 02-93906348



ORIENTAL MOTOR CO., LTD.

www.orientalmotor.co.jp

Headquarters

4-8-1 Higashiueno

Taito-ku, Tokyo 110-8536, Japan

Tel: (03)6744-0361 Fax: (03)5826-2576

Customer Center (Support in German & English)

00800 - 22 55 66 22*
CA LL OM CC

Mon-Thu: 08:00 - 17:30 CET Friday: 08:00 - 16:00 CET

* Free Call Europe

info@orientalmotor.de

For more information please contact: