Right-Angle Gearheads

Connection Information Technical reference → Page G-1

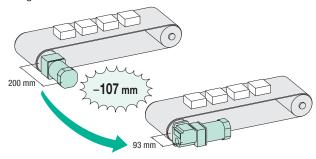
Right-angle gearheads are flange-mounted gearheads that use worm gears and special helical gears. They allow motors to be installed at right angles to the axis of equipment such as belt conveyors. They are available as hollow shaft RH types and solid shaft RA types and are ideal for keeping equipment compact.



Features

Ideal for Space Saving

The motor is perpendicular to the load shaft, enabling space saving.



Combination of 51K90GE-AW2U motor and gearhead with a gear ratio of 1:18

Wide Variety

A wide variety of gear ratios (20 types, from 3 to 180) are available. The optimal gear ratio can be selected in the same manner as with parallel shaft gearheads. The maximum permissible torques are also the same as for parallel shaft gearheads.

The GE pinion solid shaft type comes with a tapped hole at the shaft end.

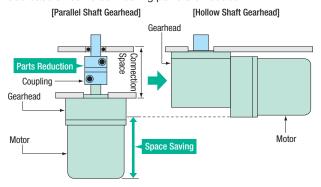
Mounting Using Torque Arm (Sold separately)

Hollow shaft gearheads (5GE□RH, 5GU□RH) are locked with a torque arm (sold separately) when mounted so the gearhead does not rotate from the reactive force of the load. When the torque arm is used, centering becomes unnecessary, so equipment mounting time can be reduced.

■ Torque arm → Page A-251

Low Cost

With hollow shaft gearheads, the parts cost and labor will decrease since no connecting parts are needed.



■RoHS Directive-Compliant

Right-Angle gearheads conform to the RoHS Directive that prohibits the use of six chemical substances including lead and cadmium.

■RoHS Directive → Page H-2

Introduction of Product Line of Right-Angle Gearheads

Combination types that feature a right-angle gearhead utilizing a hypoid gear combined with a motor are available.

BH Series, BHF Series - Combination Type - Right-Angle Shaft

High power of 200 W has been achieved with a frame size of 104 mm.

- ■Induction Motors BH Series → Page A-50
- Electromagnetic Brake Motors BH Series → Page A-138
- Speed Control Motor and Inverter Packages BHF Series → Page A-180





Features A-204/Product Line A-205

Applicable Product

The right-angle gearheads can be used with pinion shaft type motors.

Applicable Product	Series Type	Output Power	Combination Motor Pages
Induction Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-34, A-38, A-42, A-46
Reversible Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-76, A-80, A-84, A-88
Electromagnetic Brake Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-108, A-113, A-118, A-122
	MSS·W Series	25 W, 40 W, 60 W, 90 W	B-112
Speed Control Motors	US Series	25 W, 40 W, 60 W, 90 W	B-132
	ESO1/ESO2 + World K Series - Speed Control Motors	25 W, 40 W, 60 W	B-146
Inverters	FE100 + World K Series - Induction Motors	25 W, 40 W, 60 W, 90 W	B-168

Note

Product Number Code

5 GE 25 RH





1	Gearhead Frame Size	4 : 80 mm 5 : 90 mm
	Type of Pinion	GN : GN Type of pinion
2		GE: GE Type of pinion
		GU: GU Type of pinion
3	Gear Ratio	(Example) 25: Gear ratio 1:25
	RH: Right-Angle Shaft, H	ollow Shaft Gearhead, RoHS Directive-Compliant
4	RA: Right-Angle Shaft, S	olid Shaft Gearhead, RoHS Directive-Compliant

Customer Support Centre Singapore: \$\tilde{1}800-8420280\$, Malaysia: \$\tilde{1}800-806161\$, Others: \$\tilde{6}+65-6842-0280\$

Product Line

●Hollow Shaft Type (RoHS)

Gearhead Product Name	Gear Ratio
4GN□RH	3~180
5GN□RH	3~180
5GE□RH	3~180
5GU□RH	3~180

The following items are included in each product.

Gearhead, Mounting Screws, Parallel Key, Safety Cover (with screws), Gasket, Operating Manual

Solid Shaft Type RoHS

Gearhead Product Name	Gear Ratio
4GN□RA	3~180
5GN□RA	3~180
5GE□RA	3~180
5GU□RA	3~180

The following items are included in each product.

Gearhead, Mounting Screws, Parallel Key, Gasket, Operating Manual

Specifications

Product Name	Gear Ratio	Maximum Permissible Torque	Permissible Ov	verhung Load N	Permissible Thrust Load			
Floudet Name	ueai naliu	N∙m	10 mm from Shaft End	20 mm from Shaft End	N			
4GN□RH	3~180	8	250 *	220*	100			
5GN□RH	3~180	10	350 *	310*	200			
5GE□RH	3~180	20	560 *	500*	250			
5GU□RH	3~180	20	560 *	500*	250			
4GN□RA	3~18	- 8	100	150	100			
4GN_KA	25~180	~ ·	200	300	100			
5GN□RA	3~18	10	250	350	200			
3GN_KA	25~180	10	300	450	200			
	3~9		400	500				
5GE□RA	12.5~25	20	450	600	250			
	30∼180		500	700				
	3~9		400	500				
5GU□RA	12.5~25	20	450	600	250			
	30~180		500	700				

*With the hollow shaft type, the permissible overhung load depends on the distance measured from the flange-mounting surface. Note

No self-locking capabilities.

The right-angle gearheads cannot be used with torque motors or the **AXU** Series.

Permissible Torque When Gearhead is Attached

The permissible torques when a representative motor is attached are shown on pages A-211 to A-220. For motor combinations not covered, use the transmission efficiency value in the table below for your calculations. When making a selection, remember that the efficiency at starting is lower than at the rated speed.

Permissible Torque: $TG = TM \times i \times \eta$

 T_{G} : Gearhead Permissible Torque

T \mathbf{M} : Motor Torque : Gearhead Gear Ratio

 η : Gearhead Transmission Efficiency

Gearhead Transmission Efficiency

Product Name	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180			
4GN□RH	Rated		40)%		50	%							60)%	'								
4GN⊔KH	Starting		40)%		50	%							54	1%									
5GN□RH	Rated		50)%				68%	68% 60%															
3GN□KH	Starting		50)%				60%				54%												
5GE□RH	Rated		50)%				68	%						60%					50%				
3GE □ K⊓	Starting		50)%				60	%						54%					45%				
5GU□RH	Rated		50)%				68	%															
3GU_KH	Starting		50)%				60	%						45%									
4GN□RA	Rated			50)%				60%															
40NUKA	Starting			50)%									54	1%									
5GN□RA	Rated					68%						60%												
JUNUKA	Starting					60%																		
5GE□RA	Rated					68	%								60%					50%				
JGE KA	Starting					60	%							45%										
5GU□RA	Rated					68	%							50%										
JGU_RA	Starting					60	%								54%					45%				

Note

When combined with **FE100/FE200**, not all gear ratios are available. Refer to page A-220 for the list of permissible torques.

Calculating Permissible Overhung Load of Hollow Shaft Types

When the end of the load shaft is not supported by a bearing in the figure shown below, calculate the permissible overhung load using the following formula.

(This type experiences the highest amount of overhung load.)

♦4GN□RH

Permissible Overhung Load
$$W$$
 [N] = $\frac{59.5}{59.5 + Lp} \times 295$ [N]*

*295 [N]: Permissible overhung load at the flange-mounting surface

♦5GN□RH

Permissible Overhung Load
$$W\,[\mathrm{N}] = \frac{70}{70 + Lp}\,\, imes 400\,[\mathrm{N}]^*$$

*400 [N]: Permissible overhung load at the flange-mounting surface

♦5GE□RH

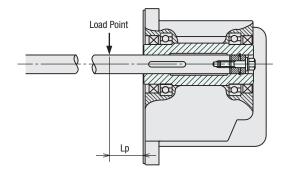
Permissible Overhung Load
$$\ W\,[{
m N}] = {68.5 \over 68.5 + Lp} \, imes 645\,[{
m N}]^*$$

*645 [N]: Permissible overhung load at the flange-mounting surface

♦5GU□RH

Permissible Overhung Load
$$\ W\,[{
m N}] = {68.5 \over 68.5 + Lp} \ imes 645\,[{
m N}]^*$$

*645 [N]: Permissible overhung load at the flange-mounting surface



Lp [mm]: Distance from flange-mounting surface to overhung load point

Permissible Load Inertia: J of Gearhead

→ Page A-17

lack A number indicating the gear ratio is entered where the box \Box is located within the product name.

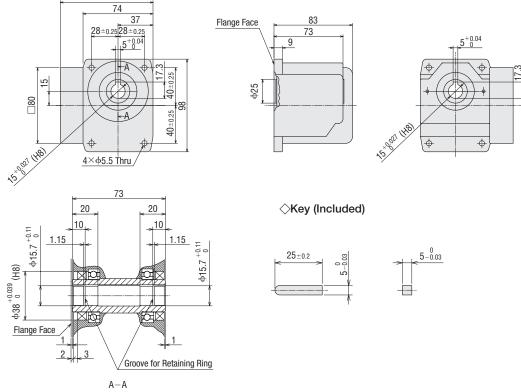
Dimensions (Unit = mm)

- Mounting screws are included with gearheads. Dimensions of mounting screws → Page A-267
- A number indicating the gear ratio is entered where the box

 is located within the product name.

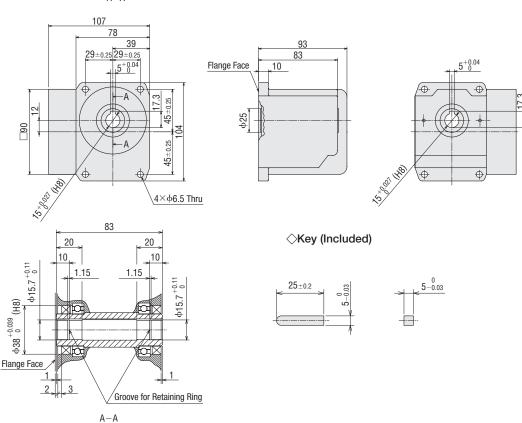
♦ Hollow Shaft Type 4GN□RH

Mass: 1.6 kg **CAD** A254

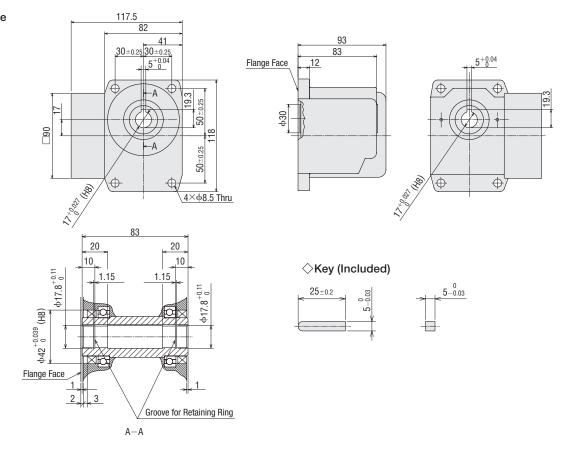


♦ Hollow Shaft Type 5GN□RH

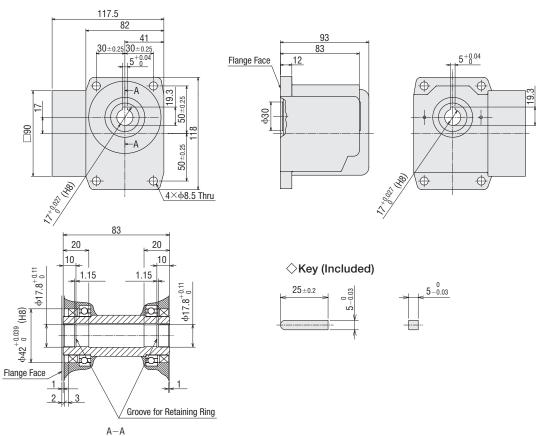
Mass: 2.0 kg **CAD** A229



♦ Hollow Shaft Type 5GE□RH Mass: 2.5 kg **CAD** A230



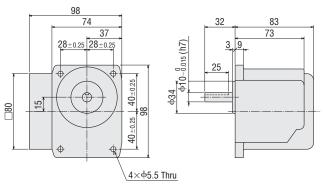
♦ Hollow Shaft Type 5GU□RH Mass: 2.5 kg **CAD** A230



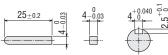
4GN□RA Mass: 1.6 kg

♦ Solid Shaft Type

CAD A255



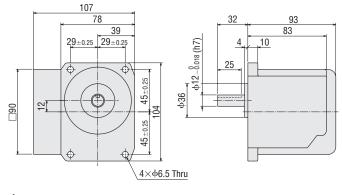
♦ Key and Key Slot (Included)

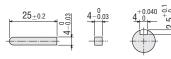


♦ Solid Shaft Type

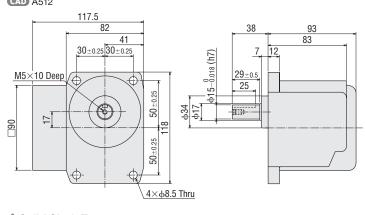
5GN□RA Mass: 2.0 kg

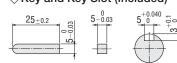
CAD A025





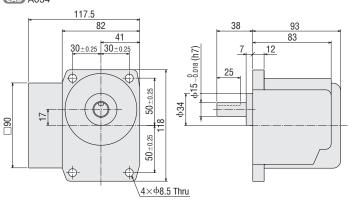
5GE□RA Mass: 2.5 kg CAD A512

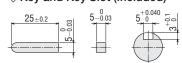




5GU□RA

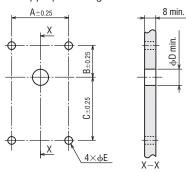
Mass: 2.5 kg **CAD** A034





Olimensions of the Gearhead Mounting Surface

Allow 8 mm or more for the thickness of the mounting plate and use screws of the appropriate length.



					U	nit = mm
Туре	Product Name	Α	В	С	φD	φЕ
	4GN□RH	56	25	55	ф15	ф5.5
Hollow	5GN□RH	58	33	57	ф15	ф6.5
Shaft	5GE□RH	60	33	67	ф17	ф8.5
	5GU□RH	60	33	67	ф17	ф8.5
	4GN□RA	56	25	55	ф35	ф5.5
Solid	5GN□RA	58	33	57	ф37	ф6.5
Shaft	5GE□RA	60	33	67	ф35	ф8.5
	5GU□RA	60	33	67	ф35	ф8.5

Mounting Method for Right-Angle, Hollow Shaft Types

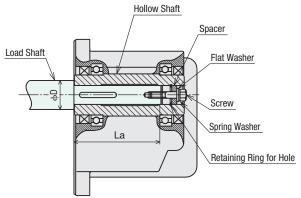
Example of Load Mounting Method

These figures below show how to install loads depending on the shape of the shaft.

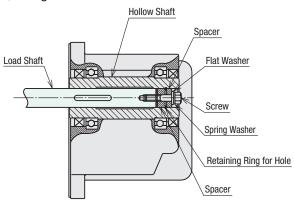
- Install the load shaft to the hollow output shaft by aligning the center of the hollow shaft with that of the load shaft.
- The hollow output shaft has a key slot. Machine a matching key slot on the load shaft and use the supplied key to fix the two shafts across the slots.
- The recommended tolerance of the load shaft is h7.
- If the motor is intended to receive large shocks due to frequent instantaneous stops or carry a large overhung load, use a stepped load shaft.

Notes

- When installing the load shaft to the hollow output shaft, be careful not to damage the hollow output shaft or bearing
- To prevent sticking, apply a coat of molybdenum disulfide grease on the exterior surface of the load shaft and interior surface of the hollow output shaft.
- Do not attempt to modify or machine the hollow output shaft. It may damage the bearing and cause the hollow shaft type gearhead to break.



After installing a load shaft, install the safety cover.



Recommended Load Shaft Installation Dimensions

Unit = mm

Product Name	4GN□RH	5GN□RH	5GE□RH 5GU□RH	BH Series, BHF Series BH6G2- RH
Inner Diameter of Hollow Shaft (H8)	ф15 ^{+0.027}	ф15 ^{+0.027}	ф17 ^{+0.027}	ф25 ^{+0.033}
Shaft Diameter of Load Shaft (h7)	ф15 ⁰ _{-0.018}	ф15_0 _{0.018}	ф17_0 _{0.018}	ф25_0021
Nominal Hole Diameter of Retaining Ring	φ15 C-Shaped Retaining Ring	φ15 C-Shaped Retaining Ring	φ17 C-Shaped Retaining Ring	φ25 C-Shaped Retaining Ring
Applicable Screw	M5	M5	M5	M8
Spacer Thickness*	4	4	4	6
Stepped Shaft Outer Diameter ϕD	ф25	ф25	ф30	ф40
Length of Stepped Shaft La	58~60	68~70	68~70	86~90

^{*}Determine the spacer thickness according to the dimensions in the table. If the spacer is thicker than the specified dimension, the screw will project from the surface and

Retaining rings for holes, spacers, screws or other parts used to install the load shaft are not included. These parts must be purchased separately.

lacktriangle A number indicating the gear ratio is entered where the box \Box is located within the product name.

Permissible Torque When Motor is Installed

- A code (T) indicating the terminal box type is entered where the box
 ightharpoonup is located within the motor product name.
- lacktriangle A number indicating the gear ratio is entered where the box \Box is located within the gearhead product name.
- The speed is calculated by dividing the motor's synchronous speed by the gear ratio. The actual speed is 2 to 20% less than the displayed value, depending on the load.
- The transmission efficiency at starting is lower than at the rated speed, so output torque is lower.

World K Series – Induction Motors

♦ Hollow Shaft Type - 50 Hz

The rotation direction of all output shafts is the opposite direction to the motor shaft.

Unit = N·m

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-CW2□E	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(220 VAC) /4GN □RH	Starting	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
4IK25GN-CW2□E	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(230 VAC) /4GN □RH	Starting	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2	Rated	0.23	0.27	0.38	0.46	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
/4GN□RH	Starting	0.29	0.35	0.48	0.58	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5IK40GN-CW2□E	Rated	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
(220 VAC) /5GN □ RH	Starting	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-CW2□E	Rated	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
(230 VAC) /5GN □ RH	Starting	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2■	Rated	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
/5GN□RH	Starting	0.60	0.72	1.0	1.2	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5IK60GE-CW2□E	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GE□RH	Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2□	Rated	0.68	0.81	1.1	1.4	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
/5GE□RH	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-CW2□E	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RH	Starting	0.68	0.81	1.1	1.4	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□	Rated	1.0	1.2	1.7	2.0	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
/5GE□RH	Starting	1.3	1.5	2.1	2.6	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

♦ Hollow Shaft Type - 60 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

Unit = N⋅m

Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-AW2□U 4IK25GN-CW2□E	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
(230 VAC) /4GN RH	Starting	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-CW2□E	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
(220 VAC) /4GN □RH	Starting	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
4IK25GN-SW2	Rated	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
/4GN□RH	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5IK40GN-AW2□U 5IK40GN-CW2□E	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH	Starting	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5IK60GE-AW2□U 5IK60GE-CW2□E	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
/5GE□RH	Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2	Rated	0.57	0.68	0.95	1.1	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
/5GE□RH	Starting	0.75	0.90	1.3	1.5	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20
5IK90GE-AW2■U	Rated	0.88	1.1	1.5	1.8	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RH	Starting	0.68	0.81	1.1	1.4	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-CW2□E	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RH	Starting	0.68	0.81	1.1	1.4	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□	Rated	0.86	1.0	1.4	1.7	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
/5GE□RH	Starting	1.1	1.3	1.8	2.1	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

♦ Solid Shaft Type - 50 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = N{\cdot}\mathsf{m}$

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-CW2□E	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(220 VAC) /4GN □ RA	Starting	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
4IK25GN-CW2□E	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(230 VAC) /4GN □ RA	Starting	0.18	0.22	0.30	0.36	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2□	Rated	0.29	0.34	0.48	0.57	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
/4GN□RA	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5IK40GN-CW2□E	Rated	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
(220 VAC) /5GN □ RA	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-CW2□E	Rated	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
(230 VAC) /5GN □ RA	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2	Rated	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
/5GN□RA	Starting	0.72	0.86	1.2	1.4	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5IK60GE-CW2□E	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GE□RA	Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2■	Rated	0.92	1.1	1.5	1.8	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-CW2□E	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RA	Starting	0.81	0.97	1.4	1.6	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□	Rated	1.4	1.7	2.3	2.8	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
/5GE□RA	Starting	1.5	1.8	2.6	3.1	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

♦ Solid Shaft Type - 60 Hz

The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = N{\cdot}\mathsf{m}$

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Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-AW2□U 4IK25GN-CW2□E	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
(230 VAC)/4GN RA	Starting	0.18	0.22	0.30	0.36	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-CW2□E	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
(220 VAC) /4GN □ RA	Starting	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
4IK25GN-SW2	Rated	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
/4GN□RA	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5IK40GN-AW2□U 5IK40GN-CW2□E	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5IK60GE-AW2□U 5IK60GE-CW2□E	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
/5GE□RA	Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2□	Rated	0.78	0.93	1.3	1.6	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
/5GE□RA	Starting	0.90	1.1	1.5	1.8	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20
5IK90GE-AW2_U	Rated	1.2	1.4	2.0	2.4	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RA	Starting	0.81	0.97	1.4	1.6	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-CW2□E	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RA	Starting	0.81	0.97	1.4	1.6	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□	Rated	1.2	1.4	1.9	2.3	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
/5GE□RA	Starting	1.3	1.5	2.1	2.5	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

World K Series – Reversible Motors

♦ Hollow Shaft Type - 50 Hz

The rotation direct	ction of a	ıll out	put sh	nafts i	s the	oppo	site d	irectio	n to t	he m	otor s	haft.								Uni	t = N·m
Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2□E	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(220 VAC) /4GN □RH	Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
4RK25GN-CW2□E	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(230 VAC) /4GN □RH	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2	Rated	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
/5GN□RH	Starting	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2□E	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
(220 VAC) /5GE □RH	Starting	0.63	0.76	1.1	1.3	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
5RK60GE-CW2□E	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
(230 VAC) /5GE □RH	Starting	0.71	0.85	1.2	1.4	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW2□E	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RH	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

Customer Support Centre Singapore: \$\tilde{1}800-8420280\$, Malaysia: \$\tilde{1}800-806161\$, Others: \$\tilde{6}+65-6842-0280\$

♦ Hollow Shaft Type - 60 Hz

The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = N\text{-}\mathsf{m}$

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Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-AW2□U 4RK25GN-CW2□E	Huttu	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
/4GN□RH	Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-AW2UU	Rated	0.41	0.49	0.68	0.81	1.4	1.7	2.3	2.8	3.3	4.1	4.9	5.8	8.1	9.7	10	10	10	10	10	10
/5GN□RH	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK40GN-CW2□E	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-AW2□U 5RK60GE-CW2□E	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
/5GE□RH	Starting	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-AW2UU	Rated	0.88	1.1	1.5	1.8	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RH	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5RK90GE-CW2□E	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RH	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

♦ Solid Shaft Type - 50 Hz

The rotation direction of all output shafts is the opposite direction to the motor shaft.

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2□E	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(220 VAC) /4GN □ RA	Starting	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
4RK25GN-CW2□E	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
(230 VAC) /4GN □ RA	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2□E	Rated	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
/5GN□RA	Starting	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2□E	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
(220 VAC) /5GE □ RA	Starting	0.76	0.91	1.3	1.5	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
5RK60GE-CW2□E	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
(230 VAC) /5GE □ RA	Starting	0.85	1.0	1.4	1.7	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW2□E	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

♦ Solid Shaft Type - 60 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = \mathsf{N}{\cdot}\mathsf{m}$

Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-AW2□U 4RK25GN-CW2□E	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
/4GN□RA	Starting	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-AW2UU	Rated	0.55	0.66	0.92	1.1	1.4	1.7	2.3	2.8	3.3	4.1	4.9	5.8	8.1	9.7	10	10	10	10	10	10
/5GN□RA	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK40GN-CW2□E	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-AW2□U 5RK60GE-CW2□E	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
/5GE□RA	Starting	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-AW2□U	Rated	1.2	1.4	2.0	2.4	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5RK90GE-CW2□E	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

■World K Series – Electromagnetic Brake Motors

♦ Hollow Shaft Type - 50 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

IInit — N·m

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2MJ 4RK25GN-CW2ME	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
4RR25GN-CW2ME /4GN□RH	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
4IK25GN-SW2M	Rated	0.23	0.27	0.38	0.46	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
/4GN□RH	Starting	0.29	0.35	0.48	0.58	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5RK40GN-CW2MJ 5RK40GN-CW2ME	Rated	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
/5GN□RH	Starting	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5IK40GN-SW2M	Rated	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
/5GN□RH	Starting	0.60	0.72	1.0	1.2	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5RK60GE-CW2MJ 5RK60GE-CW2ME	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GE□RH	Starting	0.71	0.85	1.2	1.4	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5IK60GE-SW2M	Rated	0.68	0.81	1.1	1.4	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
/5GE□RH	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5RK90GE-CW2MJ 5RK90GE-CW2ME	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RH	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-SW2M	Rated	1.0	1.2	1.7	2.0	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
/5GE□RH	Starting	1.3	1.5	2.1	2.6	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

♦ Hollow Shaft Type - 60 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = N{\boldsymbol{\cdot}}\mathsf{m}$

Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-AW2MU 4RK25GN-CW2ME	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
/4GN□RH	Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
4IK25GN-SW2M (Three-Phase 200 VAC)	Rated	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
/4GN□RH	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
4IK25GN-SW2M	Rated	0.18	0.22	0.30	0.36	0.56	0.68	1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8
(Three-Phase 220/230 VAC) /4GN□RH	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-AW2MU	Rated	0.41	0.49	0.68	0.81	1.4	1.7	2.3	2.8	3.3	4.1	4.9	5.8	8.1	9.7	10	10	10	10	10	10
/5GN□RH	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK40GN-CW2ME 5IK40GN-SW2M	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-AW2MU 5RK60GE-CW2ME	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
/5GE□RH	Starting	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5IK60GE-SW2M	Rated	0.57	0.68	0.95	1.1	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
/5GE□RH	Starting	0.75	0.90	1.3	1.5	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20

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Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearheads	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
5RK90GE-AW2MU	Rated	0.88	1.1	1.5	1.8	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RH	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5RK90GE-CW2ME	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RH	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5IK90GE-SW2M	Rated	0.86	1.0	1.4	1.7	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
/5GE□RH	Starting	1.1	1.3	1.8	2.1	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

♦ Solid Shaft Type - 50 Hz

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

Unit = N•m

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2MJ 4RK25GN-CW2ME	Huttu	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
/4GN□RA	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
4IK25GN-SW2M	Rated	0.29	0.34	0.48	0.57	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
/4GN□RA	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5RK40GN-CW2MJ 5RK40GN-CW2ME	Rated	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
/5GN□RA	Starting	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5IK40GN-SW2M	Rated	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
/5GN□RA	Starting	0.72	0.86	1.2	1.4	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5RK60GE-CW2MJ 5RK60GE-CW2ME	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GE□RA	Starting	0.85	1.0	1.4	1.7	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5IK60GE-SW2M	Rated	0.92	1.1	1.5	1.8	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5RK90GE-CW2MJ 5RK90GE-CW2ME	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-SW2M	Rated	1.4	1.7	2.3	2.8	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
/5GE□RA	Starting	1.5	1.8	2.6	3.1	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

♦ Solid Shaft Type - 60 Hz

The rotation direction of all output shafts is the opposite direction to the motor shaft.

U	nit	=	N	•

Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Motor/ Gearhead	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-AW2MU	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
4RK25GN-CW2ME /4GN□RA	Starting	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
4IK25GN-SW2M (Three-Phase 200 VAC)	Rated	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
/4GN□RA	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
4IK25GN-SW2M	Rated	0.23	0.27	0.38	0.45	0.56	0.68	1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8
(Three-Phase 220/230 VAC) /4GN □ RA	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-AW2MU	Rated	0.55	0.66	0.92	1.1	1.4	1.7	2.3	2.8	3.3	4.1	4.9	5.8	8.1	9.7	10	10	10	10	10	10
/5GN□RA	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK40GN-CW2ME 5IK40GN-SW2M	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-AW2MU	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5RK60GE-CW2ME /5GE□RA	Starting	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5IK60GE-SW2M	Rated	0.78	0.93	1.3	1.6	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
/5GE□RA	Starting	0.90	1.1	1.5	1.8	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20
5RK90GE-AW2MU	Rated	1.2	1.4	2.0	2.4	3.0	3.6	5.0	6.0	7.2	9.9	10.5	12.6	17.6	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5RK90GE-CW2ME	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
/5GE□RA	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20
5IK90GE-SW2M	Rated	1.2	1.4	1.9	2.3	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
/5GE□RA	Starting	1.3	1.5	2.1	2.5	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

Speed Control Motors – **US** Series

♦ Hollow Shaft Type

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $Unit = N{\cdot}m$

Product Name	Gear	r Ratio																			0.111	
i roduct waille		otor																				
Motor/ Gearhead	Sp	peed min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
US425-401U2		1200	0.24	0.29	0.40	0.48	0.75	0.90	1.5	1.8	2.2	3.0	3.6	4.3	6.0	7.2	8	8	8	8	8	8
/4GN□RH		90	0.060	0.072	0.10	0.12	0.19	0.23	0.38	0.45	0.54	0.75	0.90	1.1	1.5	1.8	2.3	2.7	3.0	3.6	4.5	5.4
		Starting	0.13	0.15	0.21	0.25	0.39	0.47	0.71	0.85	1.0	1.4	1.7	2.0	2.8	3.4	4.3	5.1	5.7	6.8	8	8
		220/230 VAC 50 Hz	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	1200	220 VAC 60 Hz	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
		230 VAC 60 Hz	0.17	0.20	0.28	0.34	0.53	0.63	1.1	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.6	8	8	8	8
US425-402E2 /4GN□RH	90	220 VAC 50/60 Hz 230 VAC 50 Hz	0.048	0.058	0.080	0.096	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3
		230 VAC 60 Hz	0.042	0.050	0.070	0.084	0.13	0.16	0.26	0.32	0.38	0.53	0.63	0.76	1.1	1.3	1.6	1.9	2.1	2.5	3.2	3.8
	C4 4 !	220 VAC 50/60 Hz	0.12	0.14	0.20	0.24	0.38	0.45	0.68	0.81	0.97	1.4	1.6	1.9	2.7	3.2	4.1	4.9	5.4	6.5	8	8
	Starting	230 VAC 50/60 Hz	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
US540-401U2		1200	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH		90	0.11	0.13	0.18	0.21	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.6
/JON-KH		Starting	0.27	0.32	0.45	0.54	0.81	0.97	1.4	1.6	1.9	2.4	2.9	3.5	4.9	5.8	7.3	8.7	9.7	10	10	10
	1200	220/230 VAC 50 Hz	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	1200	220/230 VAC 60 Hz	0.35	0.41	0.58	0.69	1.2	1.4	2.0	2.3	2.8	3.5	4.1	5.0	6.9	8.3	10	10	10	10	10	10
US540-402E2		90	0.095	0.11	0.16	0.19	0.32	0.39	0.54	0.64	0.77	0.95	1.1	1.4	1.9	2.3	2.8	3.4	3.8	4.5	5.7	6.8
/5GN□RH	Starting	220 VAC 50 Hz 230 VAC 50/60 Hz	0.21	0.25	0.35	0.42	0.63	0.76	1.1	1.3	1.5	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	9.1	10	10
		220 VAC 60 Hz	0.19	0.23	0.31	0.38	0.56	0.68	0.94	1.1	1.4	1.7	2.0	2.4	3.4	4.1	5.1	6.1	6.8	8.1	10	10
US560-501U2		1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GU□RH		90	0.30	0.36	0.50	0.60	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0
/500_KII		Starting	0.43	0.51	0.71	0.86	1.3	1.5	2.1	2.6	3.1	4.3	4.6	5.5	7.7	9.2	11.5	13.9	15.4	15.4	19.2	20
	1200	220/230 VAC 50 Hz	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	1200	220/230 VAC 60 Hz	0.68	0.81	1.1	1.4	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
US560-502E2	90	220/230 VAC 50 Hz	0.21	0.25	0.35	0.42	0.71	0.86	1.2	1.4	1.7	2.4	2.5	3.0	4.2	5.0	6.3	7.6	8.4	8.4	10.5	12.6
/5GU□RH	90	220/230 VAC 60 Hz	0.24	0.29	0.40	0.48	0.82	0.98	1.4	1.6	2.0	2.7	2.9	3.5	4.8	5.8	7.2	8.6	9.6	9.6	12.0	14.4
/300□KII	Starting	220 VAC 50 Hz 230 VAC 50/60 Hz	0.36	0.43	0.60	0.72	1.1	1.3	1.8	2.2	2.6	3.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	13.0	16.2	19.4
		220 VAC 60 Hz	0.32	0.38	0.53	0.63	0.95	1.1	1.6	1.9	2.3	3.2	3.4	4.1	5.7	6.8	8.5	10.2	11.3	11.3	14.2	17.0
US590-501U2		1200	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GU□RH		90	0.30	0.36	0.50	0.60	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0
/500=KII		Starting	0.61	0.73	1.0	1.2	1.8	2.2	3.0	3.6	4.4	6.1	6.6	7.9	10.9	13.1	16.4	19.7	20	20	20	20
		1200	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
LICEON ENGEN	90	220/230 VAC 50 Hz	0.35	0.41	0.58	0.69	1.2	1.4	2.0	2.3	2.8	3.9	4.1	5.0	6.9	8.3	10.4	12.4	13.8	13.8	17.3	20
US590-502E2 /5GU□RH	90	220/230 VAC 60 Hz	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	4.4	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20
/330_KH	Starting	220 VAC 50/60 Hz	0.54	0.65	0.90	1.1	1.6	1.9	2.7	3.2	3.9	5.4	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20
	otarting	230 VAC 50/60 Hz	0.60	0.72	1.0	1.2	1.8	2.2	3.0	3.6	4.3	6.0	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20

♦ Solid Shaft Type

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

Unit = N⋅m

Product Name	Gear	r Ratio																				
Motor/ Gearhead	Sp	otor peed min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
US425-401U2		1200	0.30	0.36	0.50	0.60	0.75	0.90	1.5	1.8	2.2	3.0	3.6	4.3	6.0	7.2	8	8	8	8	8	8
/4GN□RA		90	0.075	0.090	0.13	0.15	0.19	0.23	0.38	0.45	0.54	0.75	0.90	1.1	1.5	1.8	2.3	2.7	3.0	3.6	4.5	5.4
/-TOTALIKA		Starting	0.16	0.19	0.26	0.32	0.39	0.47	0.71	0.85	1.0	1.4	1.7	2.0	2.8	3.4	4.3	5.1	5.7	6.8	8	8
		220/230 VAC 50 Hz	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	1200	220 VAC 60 Hz	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
		230 VAC 60 Hz	0.21	0.25	0.35	0.42	0.53	0.63	1.1	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.6	8	8	8	8
US425-402E2 /4GN□RA	90	220 VAC 50/60 Hz 230 VAC 50 Hz	0.060	0.072	0.10	0.12	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3
		230 VAC 60 Hz	0.053	0.063	0.088	0.11	0.13	0.16	0.26	0.32	0.38	0.53	0.63	0.76	1.1	1.3	1.6	1.9	2.1	2.5	3.2	3.8
	Starting	220 VAC 50/60 Hz	0.15	0.18	0.25	0.30	0.38	0.45	0.68	0.81	0.97	1.4	1.6	1.9	2.7	3.2	4.1	4.9	5.4	6.5	8	8
	Starting	230 VAC 50/60 Hz	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
US540-401U2		1200	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA		90	0.14	0.17	0.24	0.29	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.6
, son and		Starting	0.32	0.39	0.54	0.65	0.81	0.97	1.4	1.6	1.9	2.4	2.9	3.5	4.9	5.8	7.3	8.7	9.7	10	10	10
	1200	220/230 VAC 50 Hz	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	1200	220/230 VAC 60 Hz	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.1	5.0	6.9	8.3	10	10	10	10	10	10
US540-402E2		90	0.13	0.15	0.21	0.26	0.32	0.39	0.54	0.64	0.77	0.95	1.1	1.4	1.9	2.3	2.8	3.4	3.8	4.5	5.7	6.8
/5GN□RA	Starting	220 VAC 50 Hz 230 VAC 50/60 Hz	0.25	0.30	0.42	0.50	0.63	0.76	1.1	1.3	1.5	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	9.1	10	10
		220 VAC 60 Hz	0.23	0.27	0.38	0.45	0.56	0.68	0.94	1.1	1.4	1.7	2.0	2.4	3.4	4.1	5.1	6.1	6.8	8.1	10	10

Customer Support Centre
Singapore: \$\infty\$1800-8420280, Malaysia: \$\infty\$1800-806161, Others: \$\infty\$+65-6842-0280

																					Unit	: = N·m
Product Name	Gear	Ratio																				
Motor/ Gearhead	Sp	otor peed min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
US560-501U2		1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GU□RA		90	0.41	0.49	0.68	0.82	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Starting	0.51	0.62	0.86	1.0	1.3	1.5	2.1	2.6	3.1	4.3	4.6	5.5	7.7	9.2	11.5	13.9	15.4	15.4	19.2	20
	1200	220/230 VAC 50 Hz	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	1200	220/230 VAC 60 Hz	0.92	1.1	1.5	1.8	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
US560-502E2	90	220/230 VAC 50 Hz	0.29	0.34	0.48	0.57	0.71	0.86	1.2	1.4	1.7	2.4	2.5	3.0	4.2	5.0	6.3	7.6	8.4	8.4	10.5	12.6
/5GU□RA		220/230 VAC 60 Hz	0.33	0.39	0.54	0.65	0.82	0.98	1.4	1.6	2.0	2.7	2.9	3.5	4.8	5.8	7.2	8.6	9.6	9.6	12.0	14.4
,	Starting	220 VAC 50 Hz 230 VAC 50/60 Hz	0.43	0.52	0.72	0.86	1.1	1.3	1.8	2.2	2.6	3.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	13.0	16.2	19.4
		220 VAC 60 Hz	0.38	0.45	0.63	0.76	0.95	1.1	1.6	1.9	2.3	3.2	3.4	4.1	5.7	6.8	8.5	10.2	11.3	11.3	14.2	17.0
US590-501U2		1200	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
/5GU□RA		90	0.41	0.49	0.68	0.82	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0
		Starting	0.73	0.87	1.2	1.5	1.8	2.2	3.0	3.6	4.4	6.1	6.6	7.9	10.9	13.1	16.4	19.7	20	20	20	20
		1200	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
US590-502E2	90	220/230 VAC 50 Hz	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.9	4.1	5.0	6.9	8.3	10.4	12.4	13.8	13.8	17.3	20
/5GU□RA		220/230 VAC 60 Hz	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	4.4	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20
,	Starting	220 VAC 50/60 Hz	0.65	0.78	1.1	1.3	1.6	1.9	2.7	3.2	3.9	5.4	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20
	Ottai tillig	230 VAC 50/60 Hz	0.72	0.86	1.2	1.4	1.8	2.2	3.0	3.6	4.3	6.0	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20

Speed Controller **ES01/ES02** + World **K** Series – Speed Control Motors

 \Diamond Induction Motors - Hollow Shaft Type

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

The rotation di	rection of all	outpu	ut shafts is the	opp	osite	aire	ctior	1 10 1	ne n	10101	Sila	III.										Unit :	= N·
Product N	ame	G	lear Ratio																				
Motor/ Gearhead	Applicable Speed Controller Product Name		Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25RGN-AW2U			1200	0.22	0.27	0.37	0.44	0.69	0.83	1.4	1.7	2.0	2.8	3.3	4.0	5.6	6.7	8	8	8	8	8	8
4IK25KGN-AW2U /4GN□RH	ESO1		90	0.060	0.072	0.10	0.12	0.19	0.23	0.38	0.45	0.54	0.75	0.90	1.1	1.5	1.8	2.3	2.7	3.0	3.6	4.5	5.4
/4011=KII			Starting	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
			220/230 VAC 50 Hz	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
		1200	220 VAC 60 Hz	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
4IK25RGN-CW2E	ESO2		230 VAC 60 Hz	0.18	0.22	0.30	0.36	0.56	0.68	1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8
/4GN□RH	E302		90	0.048	0.058	0.080	0.096	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.
		Starting	220 VAC 50/60 Hz	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
		Starting	230 VAC 50/60 Hz	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
			1200	0.34	0.41	0.56	0.68	1.1	1.4	1.9	2.3	2.8	3.4	4.1	4.9	6.8	8.1	10	10	10	10	10	10
5IK40RGN-AW2U	ESO1		90	0.10	0.12	0.17	0.20	0.34	0.41	0.57	0.68	0.82	1.0	1.2	1.4	2.0	2.4	3.0	3.6	4.0	4.8	6.0	7.2
/5GN□RH	E301	Ctartina	110 VAC 60 Hz	0.27	0.32	0.45	0.54	0.81	0.97	1.4	1.6	1.9	2.4	2.9	3.5	4.9	5.8	7.3	8.7	9.7	10	10	10
		Starting	115 VAC 60 Hz	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
			220 VAC 50 Hz	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
		1200	220 VAC 60 Hz	0.42	0.50	0.70	0.84	1.4	1.7	2.4	2.9	3.4	4.2	5.0	6.0	8.4	10	10	10	10	10	10	10
		1200	230 VAC 50 Hz	0.48	0.58	0.80	0.96	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
5IK40RGN-CW2E	ESO2		230 VAC 60 Hz	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RH	E3U2	00	220 VAC 50/60 Hz	0.11	0.14	0.19	0.23	0.38	0.46	0.64	0.77	0.92	1.1	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.4	6.8	8.
		90	230 VAC 50/60 Hz	0.11	0.13	0.18	0.21	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.6
		C111	220 VAC 50/60 Hz	0.29	0.34	0.48	0.57	0.86	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.2	7.7	9.2	10	10	10	10
		Starting	230 VAC 50/60 Hz	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
			1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
5IK60RGU-AW2U /5GU□RH	ESO1		90	0.32	0.38	0.53	0.63	1.1	1.3	1.8	2.1	2.6	3.6	3.8	4.5	6.3	7.6	9.5	11.3	12.6	12.6	15.8	18.
/3GU_KH			Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
			220 VAC 50 Hz	0.69	0.83	1.2	1.4	2.3	2.8	3.9	4.7	5.6	7.8	8.3	9.9	13.8	16.6	20	20	20	20	20	20
		1200	220 VAC 60 Hz 230 VAC 50/60 Hz	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
5IK60RGU-AW2U	FC00		220 VAC 50 Hz	0.30	0.36	0.50	0.60	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.
/5GU□RH	ESO2	00	220 VAC 60 Hz	0.32	0.39	0.54	0.65	1.1	1.3	1.8	2.2	2.6	3.7	3.9	4.6	6.5	7.7	9.7	11.6	12.9	12.9	16.1	19.
		90	230 VAC 50 Hz	0.26	0.31	0.43	0.51	0.87	1.0	1.4	1.7	2.1	2.9	3.1	3.7	5.1	6.1	7.7	9.2	10.2	10.2	12.8	15.
			230 VAC 60 Hz	0.27	0.32	0.45	0.54	0.92	1.1	1.5	1.8	2.2	3.1	3.2	3.9	5.4	6.5	8.1	9.7	10.8	10.8	13.5	16.
			Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20

♦ Induction Motors - Solid Shaft Type

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = N{\cdot}\mathsf{m}$

Product N	Name	Gea	ar Ratio																				
Motor/ Gearhead	Applicable Speed Controller Product Name	S	Motor speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25RGN-AW2U			1200	0.28	0.33	0.46	0.56	0.69	0.83	1.4	1.7	2.0	2.8	3.3	4.0	5.6	6.7	8	8	8	8	8	8
4IR25RGIN-AW20 /4GN□RA	ESO1		90		0.090		0.15	0.19	0.23	0.38	0.45	0.54	0.75	0.90	1.1	1.5	1.8	2.3	2.7	3.0	3.6	4.5	5.4
, TOTALLA			Starting		-			0.45		0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
			220/230 VAC 50 Hz					0.77		1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
		1200	220 VAC 60 Hz	-	0.29	-	-		-	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
4IK25RGN-CW2E	ESO2		230 VAC 60 Hz		0.27					1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8
/4GN□RA	1302		90	_	0.072		_		0.18			0.43	0.60	-	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3
		Starting	220 VAC 50/60 Hz	-		-		-		0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
		otal tilly	230 VAC 50/60 Hz	_	_		_	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
			1200	0.46	0.55	0.77	0.92	1.1	1.4	1.9	2.3	2.8	3.4	4.1	4.9	6.8	8.1	10	10	10	10	10	10
5IK40RGN-AW2U	ESO1		90	0.14	0.16	0.23	0.27	0.34	0.41	0.57	0.68	0.82	1.0	1.2	1.4	2.0	2.4	3.0	3.6	4.0	4.8	6.0	7.2
/5GN□RA	1301	Starting	110 VAC 60 Hz	0.32	0.39	0.54	0.65	0.81	0.97	1.4	1.6	1.9	2.4	2.9	3.5	4.9	5.8	7.3	8.7	9.7	10	10	10
		otal tilly	115 VAC 60 Hz	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
			220 VAC 50 Hz	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
		1200	220 VAC 60 Hz	0.57	0.69	0.95	1.1	1.4	1.7	2.4	2.9	3.4	4.2	5.0	6.0	8.4	10	10	10	10	10	10	10
		1200	230 VAC 50 Hz	0.65	0.78	1.1	1.3	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
5IK40RGN-CW2E	ESO2		230 VAC 60 Hz	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
/5GN□RA	E302	90	220 VAC 50/60 Hz	0.15	0.18	0.26	0.31	0.38	0.46	0.64	0.77	0.92	1.1	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.4	6.8	8.
		90	230 VAC 50/60 Hz	0.14	0.17	0.24	0.29	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.0
		Ctantina	220 VAC 50/60 Hz	0.34	0.41	0.57	0.68	0.86	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.2	7.7	9.2	10	10	10	10
		Starting	230 VAC 50/60 Hz	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
			1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
5IK60RGU-AW2U /5GU□RA	ESO1		90	0.43	0.51	0.71	0.86	1.1	1.3	1.8	2.1	2.6	3.6	3.8	4.5	6.3	7.6	9.5	11.3	12.6	12.6	15.8	18.
/SGU_KA			Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
			220 VAC 50 Hz	0.94	1.1	1.6	1.9	2.3	2.8	3.9	4.7	5.6	7.8	8.3	9.9	13.8	16.6	20	20	20	20	20	20
		1200	220 VAC 60 Hz 230 VAC 50/60 Hz	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
5IK60RGU-AW2U	ESO2		220 VAC 50 Hz	0.41	0.49	0.68	0.82	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.
/5GU□RA	E502	00	220 VAC 60 Hz	0.44	0.53	0.73	0.88	1.1	1.3	1.8	2.2	2.6	3.7	3.9	4.6	6.5	7.7	9.7	11.6	12.9	12.9	16.1	19.
JGG_RA		90	230 VAC 50 Hz	0.35	0.42	0.58	0.69	0.87	1.0	1.4	1.7	2.1	2.9	3.1	3.7	5.1	6.1	7.7	9.2	10.2	10.2	12.8	15.
			230 VAC 60 Hz	0.37	0.44	0.61	0.73	0.92	1.1	1.5	1.8	2.2	3.1	3.2	3.9	5.4	6.5	8.1	9.7	10.8	10.8	13.5	16.
			Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = \mathsf{N}{\cdot}\mathsf{m}$

Product I	Name	Ge	ear Ratio																				
Motor/ Gearheads	Combination Speed Controller Product Name		Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25RGN-AW2U			1200	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
4RR25RGN-AW20 /4GN□RH	ESO1		90	0.13	0.16	0.22	0.26	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
/			Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
			1200	0.25	0.30	-		0.77		1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
		90	220/230 VAC 50 Hz	_	_	0.23					1.0	1.2	1.7	2.1	2.5	3.5	4.1	5.2	6.2	6.9	8	8	8
4RK25RGN-CW2E	ESO2	30	220/230 VAC 60 Hz	0.13	0.16	0.22	0.26	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
/4GN□RH	⊔RH ======	Starting	220 VAC 50/60 Hz 230 VAC 60 Hz	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
			230 VAC 50 Hz	0.19	0.22	0.31	0.37	0.58	0.70	1.0	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.5	8	8	8	8
			1200	0.48	0.58	0.80	0.96	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
5RK40RGN-AW2U	ESO1		90	0.23	0.28	0.39	0.47	0.79	0.95	1.3	1.6	1.9	2.3	2.8	3.3	4.7	5.6	7.0	8.4	9.3	10	10	10
/5GN□RH	E301	Starting	110 VAC 60 Hz	0.36	0.43	0.60	0.72	1.1	1.3	1.8	2.2	2.6	3.2	3.9	4.7	6.5	7.8	9.7	10	10	10	10	10
		Starting	115 VAC 60 Hz	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
			1200	0.48	0.58	0.80	0.96	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
			220 VAC 50 Hz	0.27	0.32	0.45	0.54	0.92	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5RK40RGN-CW2E /5GN□RH	ESO2	90	220 VAC 60 Hz 230 VAC 50/60 Hz	0.26	0.31	0.43	0.51	0.87	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.1	7.7	9.2	10	10	10	10
		C44i	220/230 VAC 50 Hz	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
		Starting	220/230 VAC 60 Hz	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
FRICAROU ANNOU			1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
5RK60RGU-AW2U /5GU□RH	ESO1		90	0.41	0.49	0.68	0.81	1.4	1.7	2.3	2.8	3.3	4.6	4.9	5.8	8.1	9.7	12.2	14.6	16.2	16.2	20	20
/300⊔KH			Starting	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
			1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
FRICE ARROLL AWAR			90	0.42	0.50	0.70	0.84	1.4	1.7	2.4	2.9	3.4	4.8	5.0	6.0	8.4	10.1	12.6	15.1	16.8	16.8	20	20
5RK60RGU-CW2E /5GU□RH	ESO2		220 VAC 50 Hz	0.63	0.76	1.1	1.3	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
/JOULKIT		Starting	230 VAC 50 Hz	0.69	0.83	1.2	1.4	2.1	2.5	3.5	4.1	5.0	6.9	7.5	8.9	12.4	14.9	18.6	20	20	20	20	20
			220/230 VAC 60 Hz	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20

The rotation d				oppi	Joile	and	Otioi	1 10 1	110 11	10101	ona											Unit	
Product N	lame	0	Gear Ratio																				
Motor/ Gearhead	Combination Speed Controller Product Name		Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25RGN-AW2U			1200	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
4KK25KGN-AW2U /4GN□RA	ESO1		90	0.17	0.20	0.28	0.33	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
TONDRA			Starting	-	0.25		-			0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
			1200		0.37			-		1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
		i an	220/230 VAC 50 Hz	-	-						1.0	1.2	1.7	2.1	2.5	3.5	4.1	5.2	6.2	6.9	8	8	8
RK25RGN-CW2E	ESO2		220/230 VAC 60 Hz	0.17	0.20	0.28	0.33	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
/4GN□RA	2302	Starting	220 VAC 50/60 Hz 230 VAC 60 Hz	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
			230 VAC 50 Hz	0.23	0.28	0.39	0.47	0.58	0.70	1.0	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.5	8	8	8	8
			1200	0.65	0.78	1.1	1.3	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
5RK40RGN-AW2U	ESO1		90	0.32	0.38	0.53	0.63	0.79	0.95	1.3	1.6	1.9	2.3	2.8	3.3	4.7	5.6	7.0	8.4	9.3	10	10	10
/5GN□RA	1301	Starting	110 VAC 60 Hz	0.43	0.52	0.72	0.86	1.1	1.3	1.8	2.2	2.6	3.2	3.9	4.7	6.5	7.8	9.7	10	10	10	10	10
		Ottai tii ig	115 VAC 60 Hz		0.56	_		1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
			1200		0.78		1.3	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
			220 VAC 50 Hz	0.37	0.44	0.61	0.73	0.92	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5RK40RGN-CW2E ∕5GN□RA	ESO2	90	220 VAC 60 Hz 230 VAC 50/60 Hz	0.35	0.42	0.58	0.69	0.87	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.1	7.7	9.2	10	10	10	10
		Ctarting	220/230 VAC 50 Hz	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
		Stai tilly	220/230 VAC 60 Hz	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60RGU-AW2U			1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
/5GU□RA	ESO1		90		0.66	0.92	1.1	1.4	1.7	2.3	2.8	3.3	4.6	4.9	5.8	8.1	9.7	12.2	14.6	16.2	16.2	20	20
			Starting	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3		15.4	18.5	20	20	20	20
			1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
SRK60RGU-CW2E			90		0.69		1.1	1.4	1.7	2.4	2.9	3.4	4.8	5.0	6.0	8.4	-	12.6	15.1		16.8	20	20
/5GU□RA	ESO2		220 VAC 50 Hz	0.76		1.3	1.5	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6		20	20	20	20	20
		Starting	230 VAC 50 Hz		0.99	1.4	1.7	2.1	2.5	3.5	4.1	5.0	6.9	7.5	8.9	12.4	14.9	18.6	20	20	20	20	20
			220/230 VAC 60 Hz	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20

Inverter FE100 + World K Series - Induction Motors

♦ Hollow Shaft Type

■ The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = \mathsf{N}{\boldsymbol{\cdot}}\mathsf{m}$

Product Nan	пе	Gear Ratio																					
Motor/ Gearhead	Combination Inverters Product Name	Setting Frequency (Setting speed r/r		3	3.6	5	6	<i>7</i> .5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		6.6	Rated	_	_	_	_	_	0.75	1.1	1.3	1.6	2.5	3.0	3.7	4.4	5.3	6.6	8	8	8	8	8
	FE100A	(200)	Starting	_	_	_	_	_	0.75	0.99	1.2	1.5	2.3	2.7	3.3	3.9	4.8	6.0	7.2	8	8	8	8
4IK25GN-SW2□	FE100A	$10 \sim 50$	Rated	_	_	_	_	_	0.95	1.4	1.7	2.3	3.2	3.9	4.7	5.6	6.7	8	8	8	8	8	88
/4GN□RH	FE100S	$(300 \sim 1500)$	Starting	_	_	_	_	_	0.95	1.3	1.5	2.0	2.9	3.5	4.2	5.0	6.0	7.6	8	8	8	8	8
		80	Rated	_			_	_	-	0.64		1.0	1.5	2.0	2.4	2.9	3.5	4.4	5.3	5.9	7.1	8	88
		(2400)	Starting	_	_	_		_	0.22	0.58	-	0.92	1.3	1.8	2.1	2.6	3.1	3.9	4.7	5.3	6.4	8	8
	FE100A	$6.6\sim50$	Rated	_	_	_	_	1.3	1.6	2.5	3.0	3.6	5.1	6.2	7.4	8.9	10	10	10	10	10	10	10
5IK40GN-SW2■	FE100A	(200 ~ 1500)	Starting	_	_	_	_	1.1	1.4	2.2	2.7	3.2	4.6	5.6	6.7	8.0	9.6	10	10	10	10	10	10
/5GN□RH	FE100S	80	Rated	_	_	_	_	0.58	0.75	1.1	1.4	1.7	2.7	3.2	3.9	4.7	5.6	7.1	8.5	9.5	10	10	10
		(2400)	Starting	_	_	_	_			1.0	1.2	1.5	2.4	2.9	3.5	4.2	5.1	6.4	7.7	8.5	10	10	10
		6.6	Rated	_	_	0.84	1.0	1.4	1.7	2.6	3.1	3.8	5.3	5.4	6.5	9.1	11.0	13.8	16.6	18.4	18.4	20	20
	FE100A	(200)	Starting	_	_	0.84	1.0	1.2	1.5	2.3	2.7	3.3	4.7	4.9	5.9	8.2	9.9	12.4	14.9	16.6	16.6	20	20
5IK60GE-SW2	FE100C	10 ~ 50	Rated	_	_	1.2	1.5	2.1	2.6	3.7	4.5	5.5	7.7	7.9	9.6	13.3	16.0	20	20	20	20	20	20
/5GE□RH	FE100S	(300 ~ 1500)	Starting	_		1.2	1.5	1.9	2.3	3.3	4.0	4.8	6.8	7.1	8.6	12.0	14.4	18.1	20	20	20	20	20
		80	Rated	_	_		0.70		1.3	2.0	2.5	3.1	4.4	4.5	5.4	7.6	9.2	11.5	13.9	15.4	15.4	19.3	20
		(2400)	Starting	_	_		0.70		1.1	1.8	2.2	2.7	3.8	4.0	4.9	6.9	8.3	10.4	12.5	13.9	13.9	17.4	20
		6.6	Rated	_	_	1.3	1.6	2.2	2.7	3.8	4.6	5.5	7.7	7.9	9.6	13.3	16.0	20	20	20	20	20	20
	FE100A	(200)	Starting	_	_	1.3	1.6	1.9	2.4	3.3	4.0	4.9	6.8	7.2	8.6			18.1	20	20	20	20	20
5IK90GE-SW2	FE100C	10 ~ 60	Rated	_	_	1.3	1.8	2.4	2.9	4.2	5.1	6.1	8.6	8.8	10.6	-	17.8	20	20	20	20	20	20
/5GE□RH	FE100S	(300 ~ 1800)	Starting	_	_	1.3	1.8	2.1	2.6	3.7	4.5	5.4	7.6	7.9	9.6	13.4	16.1	20	20	20	20	20	20
	FEIOUS -	80	Rated	_	_	0.83	1.1	1.5	2.0	2.9	3.6	4.3	6.1	6.3	7.6		12.8	16.0	19.3	20	20	20	20
		(2400)	Starting	_	_	0.83	1.1	1.3	1.8	2.6	3.1	3.8	5.4	5.7	6.8	9.6	11.5	14.4	17.4	19.3	19.3	20	20

Note

Gear ratios not shown in the list of permissible torque are not available.

♦ Solid Shaft Type

The rotation direction of all output shafts is the opposite direction to the motor shaft.

 $\mathsf{Unit} = \mathsf{N}{\cdot}\mathsf{m}$

Product Nan	ne	Gear Ratio																					
Motor/ Gearhead	Combination Inverters Product Name	Setting Frequenc (Setting speed r/i		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		6.6	Rated	_	_	0.45	0.54	0.73	0.88	1.2	1.5	1.8	2.6	3.2	3.8	4.5	5.4	6.8	8	8	8	8	8
	FF1004	(200)	Starting	_	-	0.45	0.54	0.73	0.88	1.1	1.3	1.6	2.4	2.8	3.4	4.1	4.9	6.1	7.3	8	8	8	8
4IK25GN-SW2□	FE100A FE100C	$10 \sim 50$	Rated	_	_	0.38	0.74	0.93	1.1	1.5	1.9	2.4	3.3	4.0	4.8	5.7	6.8	8	8	8	8	8	8
/4GN□RA	FE100C	$(300 \sim 1500)$	Starting	_	-	0.38	0.74	0.93	1.1	1.4	1.7	2.2	3.0	3.6	4.3	5.1	6.2	7.7	8	8	8	8	8
	121000	80	Rated	_	_	0.20	0.24	0.30	0.41	0.81	0.98	1.2	1.6	2.1	2.5	3.0	3.6	4.5	5.4	6.0	7.2	8	8
		(2400)	Starting	_	-	0.20	0.24	0.30	0.41	0.73	0.88	1.1	1.5	1.9	2.3	2.7	3.2	4.1	4.9	5.4	6.5	8	8
	FE100A	$6.6\sim50$	Rated	_	_	0.98	1.2	1.5	1.8	2.6	3.2	3.8	5.3	6.3	7.6	9.0	10	10	10	10	10	10	10
5IK40GN-SW2■	FE100A	$(200 \sim 1500)$	Starting	_	_	0.86	1.0	1.3	1.5	2.3	2.8	3.3	4.7	5.7	6.8	8.1	9.7	10	10	10	10	10	10
/5GN□RA	FE100S	80	Rated	_	_	0.32	0.38	0.78	0.94	1.3	1.6	1.9	2.8	3.4	4.0	4.8	5.8	7.2	8.6	9.6	10	10	10
	121000	(2400)	Starting	_	_	0.28	0.34	0.69	0.83	1.1	1.4	1.7	2.5	3.0	3.6	4.3	5.2	6.5	7.8	8.6	10	10	10
		6.6	Rated	_	_	1.0	1.2	1.5	1.8	2.7	3.3	3.9	5.4	5.6	6.7	9.3	11.2	14.0	16.7	18.6	18.6	20	20
		(200)	Starting	_	_	0.89	1.1	1.3	1.6	2.4	2.9	3.4	4.8	5.0	6.0	8.4	10.0	12.6	15.1	16.7	16.7	20	20
5IK60GE-SW2	FE100A FE100C	$10 \sim 50$	Rated	_	_	1.5	1.8	2.4	2.8	3.9	4.7	5.7	7.9	8.1	9.7	13.5	16.2	20	20	20	20	20	20
/5GE□RA	FE100C	$(300 \sim 1500)$	Starting	_	_	1.3	1.5	2.1	2.5	3.5	4.2	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
		80	Rated	_	_	0.85	1.0	1.3	1.5	2.3	2.7	3.3	4.6	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20
		(2400)	Starting	_	_	0.75	0.89	1.1	1.3	2.0	2.4	2.9	4.0	4.2	5.1	7.0	8.4	10.5	12.6	14.0	14.0	17.6	20
		6.6	Rated	0.88	1.1	1.5	1.8	2.4	2.8	3.9	4.7	5.7	7.9	8.1	9.7	13.5	16.2	20	20	20	20	20	20
		(200)	Starting	0.77	0.93	1.3	1.5	2.1	2.5	3.5	4.2	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2	FE100A FE100C	10 ~ 60	Rated	0.98	1.2	1.6	2.1	2.6	3.2	4.4	5.3	6.3	8.8	9.0	10.8	15.0	18.0	20	20	20	20	20	20
/5GE□RA	FE100C	$(300 \sim 1800)$	Starting	0.86	1.0	1.4	1.9	2.3	2.8	3.9	4.6	5.6	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
		80	Rated	0.70	0.84	1.2	1.4	1.8	2.3	3.2	3.8	4.5	6.3	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20
		(2400)	Starting	0.62	0.74	1.0	1.2	1.5	2.0	2.8	3.3	4.0	5.6	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20

Note

Gear ratios not shown in the list of permissible torque are not available.