

LDS
LEADERDRIVES

COMPACT GEAR MOTOR

HIGH PERFORMANCE | MINI DRIVE

WATERTIGHT PROTECTION OPTION (IP55)



MY Edition-V9 (2024)

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COMPACT GEAR MOTOR

K SERIES

GENERAL SPECIFICATION

COMPACT ELECTRIC MOTOR AND GEAR REDUCER

General Specification

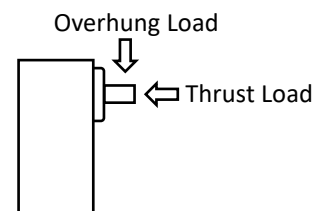
Features	Specifications
Insulation Resistance	100 MΩ or more when DC500V is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5 kV at 50Hz and 60Hz applied between the windings and the frame for 1 minute after rated motor operation under normal operating temperature and humidity.
Temperature Rise	Temperature rise of windings are 80°C or less measured by the resistance change method after rated motor operation with connecting a gearhead or equivalent heat radiation plate.*
Insulation Class	Class B (130°C).
Overheat Protection	Impedance protected. (Optional Overload Thermal Protection)
Motor Protection	IP20 for motor with conductive wire; IP54 for motor with terminal box.
Operating Temperature	-10 °c to +50 °c.
Ambient Humidity	85% or less (non-condensation).
Conformity Certification	CE / CCC

Life Service Factor

Type of Load	Life Service Factor			Specifications:
	5hrs/day Operation	8hrs/day Operation	24hrs/days Operation	
Constant Load	0.8	1	1.5	The service life of the motor usually rely on the quality of its ball bearing. Standard service life of ball bearing is 10,000 hours* Load: Constant continuous running Frame: 80°c (roller bearing), 50°c (sinter oil bearing) Life expectancy may vary due to frequent load variation Remark : Constant Load: Continuous one way operation. Light Load: Frequent start-stop, cam impact. Medium Load: Instant CW/CCW, instant stop.
Light Load	1.2	1.5	2	
Medium Load	1.5	2	2.5	

Gearhead Operation Efficiency Permissible Trust Load and Overhung Load

Gear Model	Gear Ratio	Max Torque (kg.cm)	Permissible Overhung Load (kgf)		Permissible Thrust Load (kgf)	Gearhead Operation Efficiency
			10mm from shaft end	20mm from shaft end		
2GN □ K	3 ~ 18	25	5	8	3	81%
	25 ~ 75		12	18		73%
	90 ~ 300		12	18		66%
3GN □ K	3 ~ 18	50	8	12	4	81%
	25 ~ 75		15	25		73%
	90 ~ 240		15	25		66%
4GN □ K	3 ~ 18	80	10	15	5	81%
	25 ~ 75		20	30		73%
	90 ~ 300		20	30		66%
5GN □ K	3 ~ 18	100	25	35	10	81%
	25 ~ 75		30	45		73%
	90 ~ 240		30	45		66%
5GU □ K 5GU □ KB	3 ~ 9	200	40	50	15	81%
	12.5 ~ 18		45	60		81%
	25 ~ 75		50	70		73%
	90 ~ 240		50	70		66%
6GU □ KB	3 ~ 9	400	55	80	20	90%
	12.5 ~ 18		55	80		90%
	25 ~ 75		65	100		86%
	90 ~ 180		65	100		81%





COMPACT GEAR MOTOR

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MOUNTING INSTRUCTION COMPACT ELECTRIC MOTOR AND GEAR REDUCER

Precautions for Installation

Check the technical specification and voltage on the identification label of the gear motor with your design requirement before any installation. For helical gear motor, gearhead should well-match with the motor dimension and specification.

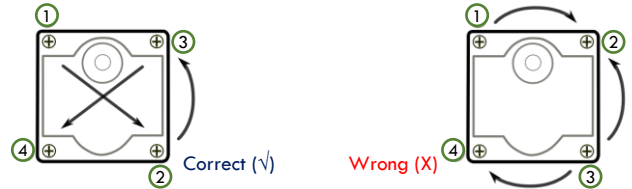
Round shaft motor

After drilling holes on the mounting plate, use 4 screws, washers and nuts to fasten the motor onto the mounting plate (screws and nuts are not offered with this motor). Please make sure there is no gap between the motor's flange face and mounting plate.

Helical gear shaft motor (in combination with gearhead)

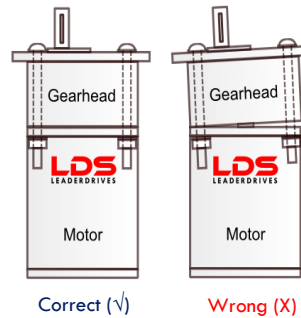
After drilling holes on the mounting plate, use the 4 screws and nuts supplied with the gearhead to fasten gearhead and motor (come with O-ring) on the mounting plate. Make sure the gearhead is installed properly on the motor and there is no gap between the motor flange face and gearhead.

Gearhead is combined with a motor using the recessed areas on each unit as guides. DO NOT contact a tooth tip of pinion shaft to a tooth tip of gearhead. Set each tooth of motor and gearhead correctly and gently press and turn the gearhead in clockwise and counter-clockwise.



Tightening of fixing bolts

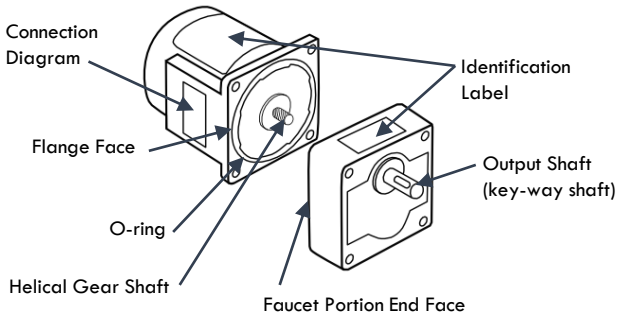
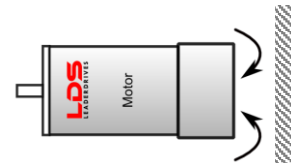
Do not forcedly assemble the motor and gear head. Do not damage the tooth of the motor and gear head. Incorrect assembly results in abnormal noise generation or shortened unit life.



Gearhead Installation

Install gearhead properly and there is no gap between the motor flange face and gearhead.

On installation, the mounting of the motor must allow a free-flow of cooling air over the surface of the motor (leave a minimum 20~30mm space from the rear cover of the motor).



Remark: When face mounting the geared motor to an assembly, Do not remove or twist the gearhead from or on the motor. This will cause the O-ring to deform (become distorted or damaged) resulting in grease leakage when reassembled

During replacement or maintenance, please replace the o-ring if it is damaged or distorted. You may contact your LDS representative to obtain the o-ring for free of charge.

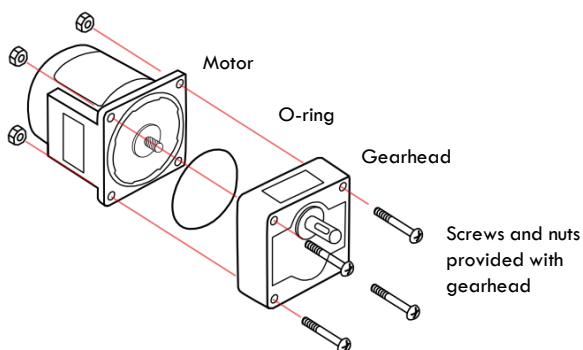
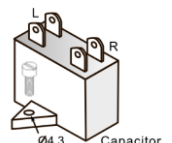
Screw used for installation

Model (Motor)	Model (Gearhead)	Screw Size	Installation Torque
2IK/2RK	2GN	M4	20kgfcm
3IK/3RK	3GN	M5	25kgfcm
4IK/4RK	4GN	M5	25kgfcm
5IK/5RK	5GN/5GU	M6	30kgfcm
6IK/6RK	6GN/6GU	M6	35kgfcm

Important Instruction for Capacitor Installation

Before installation, please ensure correct capacitor is being used with your motor (supplied with single phase motor).

Capacitor should be installed at least 10cm away from the motor by using M4 screws. Too close to a motor will result in excessive heat hence shorten the lifespan of capacitor.





COMPACT GEAR MOTOR

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GLOSSARY OF TERMS

COMPACT ELECTRIC MOTOR AND GEAR REDUCER

AC Electric Motor

An AC motor is an electric motor that is driven by alternating current. It is used in the conversion of electrical energy into mechanical energy. This mechanical energy is made from utilizing the force that is exerted by the rotating magnetic fields produced by the alternating current that flows through its coils.

Ambient Temperature

Ambient temperature is the temperature of the air surrounding the motor. This is the threshold point or temperature the motor assumes when shut off and completely cool. Higher ambient temperatures increase internal pressure, which will require an increase to the service factor used. High or low temperatures may employ different seal materials and lubrication viscosities.

Ampere / Current (A / Amp / Amperes)

Amps figures on the nameplate are just the motor's maximum ratings. They do not reflect actual operating conditions of your machine/equipment. Use a True-RMS Industrial Logging Multi-meter with a clamp accessory to measure the ampere to check if the motor operation is under-loaded (and thus costly to operate) or over-loaded (and at risk of burnout).

Causes of Motor Failure

Motor overload occurs when a motor is under excessive load. Its symptoms are excessive current draw, insufficient torque and overheating. **Motor overheat** refers to an unexpected rise of temperature in motor windings that can cause damage to the motor stator. It is a major cause of premature wear on electrical and mechanical components that ultimately leads to motor failure.

Coactive Axial Cooling Fan

Axial Fan is designed for force-air cooling of electric motor, and to protect the electric motor by keeping them at an optimal cooling temperature. LDS uses renowned Maglev Motor Axial Fan with high airflow (40CFM) to enhance a superior life expectancy of the motor (especially for single phase motor).

Efficiency (%)

Motor efficiency is the ratio between the amount of mechanical work the motor performs and the electrical power it consumes to do the work, represented by a percentage. A higher percentage represents a more efficient motor. Electric motor efficiency is dependent on (but not limited to) design, materials, construction, rating, load, power quality, and operating conditions.

Electrical Grounding (Earthing)

Electrical grounding / Grounding / Earthing refer to a safety measure used to prevent people from accidentally coming in contact with electrical hazards. Electrical Grounding is essential in every equipment and can be done through attaching the ground conductor to any of the mounting bolt of the motor.

Frequency (Hz)

To operate successfully, the motor frequency must match the power system (supply) frequency. In Malaysia and Singapore, the frequency is 50 Hz (cycles). In other parts of the world, the frequency may be 50Hz or 60 Hz.

Insulation class

Insulation classes group insulations by their resistance to thermal aging and failure. There is two common insulation classes in LDS products:
Insulation Class B : Max 130°C / Insulation Class F : Max 155°C.

Inverter (Frequency Inverter) vs. Speed Controller.

A frequency inverter changes output voltage frequency and magnitude to vary the speed, power, and torque of a connected three phase induction motor to meet load conditions. A speed controller controls the rotation speed of single phase capacitor run induction motor via a modular tachogenerator (permanent magnet type) connected to the rear shaft of the motor (rotor).

Over-voltage refers to the voltages exceeding rated voltage designed in the motor. A 10% overvoltage means motor will be overload by approximately 10%.

Poles

LDS motors are available 2Pole (3000rpm), 4Pole (1500rpm) and 6Pole (1000rpm), in 50Hz System (8pole – 750rpm is not available).

Power Rating / Output Power

A power rating is a measurement of the maximum amount of power that can be used with a specific tool or device. It is measured in Watt (W), Kilowatt (kW) or Horsepower (HP).

Rated Output Torque [Kgm / Kgcm / Nm]

This is the limit of mechanical strength of the speed reduction mechanism. Make sure that the applied torque, including the acceleration torque and load fluctuation, does not exceed the permissible torque (the load should never be greater than what the motor is rated for).

Rated Voltage (V)

Motors are designed to yield optimal performance when operating at a specific voltage level. LDS Motors are available in single-phase (1Ø) 100-110V and 220-240V, three-phase (3Ø) 220-240V and 380-415V.

Service Factor (S.F)

Service factor can be generally defined as an application's required value over the rated value of the unit. Service factor should be determined for conditions such as non-uniform load, hours of service, and elevated ambient temperature. A service factor of 1.0 means a unit has just enough capacity to handle the application. There is no tolerance for additional requirements, which could cause the gearbox to overheat or fail.

Temperature / Temperature Rise in Motor

Temperature rise is the change within a motor when operating at full load. When a motor is operating, all energy losses of the motor are transformed into heat, causing the motor temperature to rise. In an ambient temperature area, surface temperature of LDS's 1-phase motor will rise to 80°C after 60minute of continuous operation; 3-phase motor's surface temperature will rise to 40°C after 60minute of continuous operation. (Use infrared thermometer to measure the motor temperature. Do not judge the motor temperature by touching the motor surface, or you could get injured).

Thermal Overload Protection (TP)

Thermal protection is a method of electric motor protection that is activated when a motor operating at the rated voltage locks up for some reason with the power still being supplied. It uses a thermal relay inside the motor to break the circuit to the winding coil at a temperature below the level that would cause burning (overheating). Other protection methods including overload relay, motor thermostat and fuse.

Type of Load

High shock or impact loads can cause increased wear on the gear teeth and shaft bearings. This wear could cause premature failure if not accounted for when sizing. These loads will require an increased service factor. **Uniform loads** are loads that remain constant during the application, while non-uniform loads change during the application. **Non-uniform loads**, even if small, will require a higher service factor than uniform loads. An example of a uniform load would be a conveyor with a consistent product amount riding on it. A non-uniform load would be any sort of intermittent cutting application. This intermittent cutting force causes a periodic increase in the torque on the gearbox, which is a non-uniform load.

Under-Voltage will cause under-power of electric motor. The motor slip also increases proportionally to the square of the voltage drop. As a result, the motor will be running slower with a lower output and the process would not be producing as expected.

Unbalanced Voltages are unequal voltage values on 3-phase circuits that can exist anywhere in a power distribution system.

COMPACT SPIRAL BEVEL GEAR MOTOR

25W ~ 250W | Gear Reduction Ratio 7.5 ~ 225



Motor output power : 25W to 250W.

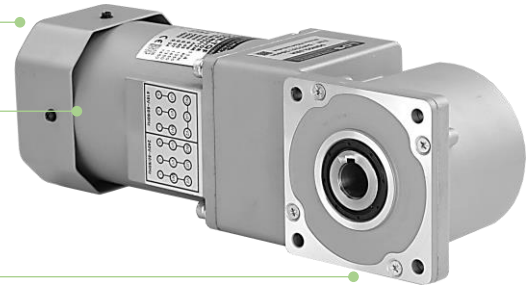
- > Induction Motor
- > Speed Control Motor
- > Inverter Motor
- > Electromagnetic Brake Motor
- > Clutch Brake Motor

Spiral bevel gear design offers constant backlash throughout the service life of the gearbox.

- * Quiet operation and longer lifespan
- * Higher efficiency and output torque
- * Lower operating temperature

Gearbox design with smooth and clean surface without any protrusions.

Ideal design for sanitary environment with quicker and easier cleaning process. It reduces operating costs specially in food processing applications.



Compact Right Angle Spiral Bevel Gear Reducer Model :

Motor Rating (Watt)	Frame Size	Mounting PCD	Hollow Output Shaft Bore Dia. x Length
25W	80x80mm	94mm	Dia.15mm x 82mmL
40W~180W	90x90mm	104mm	Dia.17mm x 86mmL
200W~250W	104x104mm	120mm	Dia. 22mm x 103mmL



Gearbox Engineering



Technical Support And Collaboration



High Efficiency Performance



1 Year Product Warranty

SPIRAL BEVEL GEAR REDUCER – GEAR REDUCTION RATIO

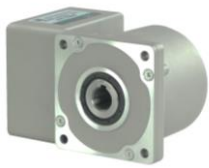
4GN-RH (4IK – 25W) ▪ 5GN-RH ▪ 5GU-RH (5IK – 40W ~ 180W)

Spiral Bevel Gear Reducer Ratio and Output Shaft Rotation Speed Guideline (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio	6*	9	15	18	22.5	27	37.5	45	54	75	90
Output Speed - RPM	225	150	90	75	60	50	36	30	25	18	15

Gear Reduction Ratio	108	150	180	225	(270)	(375)	(450)	(540 ~ 22,500)
Output Speed - RPM	12.5	9	7.5	6	5	3.6	3	(0.06 ~ 2.5rpm)

Note : () – Double Gear Reduction Ratio (Parallel Shaft Gearhead + Decimal Gearhead)

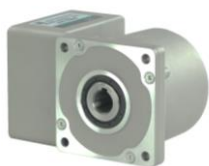


6GU-RH (6IK – 200W ~ 250W)

Spiral Bevel Gear Reducer Ratio and Output Shaft Rotation Speed Guideline (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio	7.5	9	12.5	15	18	25	30	37.5	45	63
Output Speed - RPM	180	150	108	90	75	54	45	36	30	21

Gear Reduction Ratio	75	95	120
Output Speed - RPM	18	14	11





COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM

COMPACT ELECTRIC MOTOR AND GEAR REDUCER

6

Motor Frame Size

- 2 : 60mm Sq. (2.36")
- 3 : 70mm Sq. (2.76")
- 4 : 80mm Sq. (3.15")
- 5 : 90mm Sq. (3.54")
- 6 : 104mm Sq. (4.09")

Motor Type

- I : Induction
- R : Reversible

I

K

Series

K : K series

200

Motor Output Power

- 6W
- 15W
- 25W
- 40W
- 60W
- 90W
- 120W
- 150W
- 180W
- 200W
- 250W

V

Option

- [] : Standard
- R : Variable Speed
- V : Inverter Duty

GN

Motor Output Shaft

- A : Round Shaft (D-cut) / Key-Shaft
- GN : Helical Gear Shaft
- GX : Helical Gear Shaft X*
- GL : Helical Gear Shaft L*
- GB : Spur Shaft (for Clutch & Brake)

S

Voltage

- A : 1Ø100V, 50/60Hz
- A2 : 1Ø110V, 50/60Hz
- C : 1Ø220V, 50/60Hz
- C2 : 1Ø240V, 50/60Hz
- S : 3Ø220V, 50/60Hz
- S2 : 3Ø240V, 50/60Hz
- S3 : 3Ø380V, 50/60Hz
- S4 : 3Ø415V, 50/60Hz
- TQ : 3Ø240/415V, 50/60Hz
- U : 3Ø220/380V, 50/60Hz

F

Option/Accessories

- B : Electro-magnetic Brake
- EF : Co-active Powerful Cooling Fan (40CFM)
- F : Standard Cooling Fan (Shaft-mounted type)
- N : Special Key Shaft
- T : Terminal Box (IP44)
- VS : Viton Oil Seal
- WP : Watertight Protection (IP55)
- Y : Thermal Overload Protection (Automatic Reset Type)
- 2P : 2-Pole Motor (2,780rpm)
- 6P : 6-Pole Motor (980rpm)

Remark

* Default motor design is 4pole, 50Hz (1320rpm to 1450rpm)

PRODUCTS AT A GLANCE



Round-Shaft Electric Motor
2,800 ▪ 1,400rpm
6W~250W



Key-Shaft Electric Motor
1,400 ▪ 2,800rpm
40W~250W



Induction & Reversible
Gear Motor (Capacitor Run)
6W~250W



Induction Gear Motor
(with Flange gearhead &
Terminal Box)



Compact Gear Motor with
Decimal Gearhead
Gear Ratio 1/300 ~1/2400



Electro-Magnetic Brake
Gear Motor (Brake 220V)
6W~250W



Clutch & Brake Gear Motor
(Clutch & Brake DC24V)
40W~250W



Variable Speed Gear Motor
with Analogue Controller
6W~250W, 1Phase



Variable Speed Motor
with Analogue Controller
6W~250W, 1Phase



Compact Gear Motor
With Compact IGBT Inverter
25W~250W, 1Phase



Worm Gear Package
Gear reduction ratio 5~100
40W~250W



Worm Gear Package
with Electromagnetic Brake
40W~250W



Worm Gear Package
Gear Reduction
Ratio 125~14,400



Hollow Shaft
Spiral Bevel Gear Motor
25W~250W



Compact Spiral Bevel Gear Motor
With Compact IGBT Inverter
25W~250W, 1Phase

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.



COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM SPEED CONTROLLER AND INVERTER

U S P

Speed Controller Model

USM : Unit Type Analogue / Digital Display (Panel Mount)

USP : Unit Type Digital Display (Panel Mount)

SD : Din Rail Type Analogue with built-in VR

SS : Din Rail Type Analogue with separate VR

DSC : Din Rail Type with Digital Display & external VR

72

Input Voltage

71 : 1Ø110V, 50Hz (For USM model)

72 : 1Ø220V, 50Hz
(For USM, USP & DSC model)

61 : 1Ø110V, 50Hz (For SS & SD model)

62 : 1Ø220V, 50Hz (For SS & SD model)

31 : 1Ø110V, 50Hz (For SS Brakepack model)

32 : 1Ø220V, 50Hz (For SS Brakepack model)

1000 : 1Ø110V, 50Hz (For USM Model)

2000 : 1Ø220V, 50Hz (For USM model)

200W

For Motor Output Power

6W

15W

25W

40W

60W

90W

120W

150W

180W

200W

250W

CF

Option

CF : For motor with coactive fan

X : Customised model

VR : External VR

SK : With Brakepack

IGBT

Inverter Model

IGBT : Compact Inverter with Digital Display (Panel Mount)

Input Voltage : 1phase 220V

Output Voltage 3ph220V

K200

For Motor Output Power

K060 : Max 60W (Panel Mount)

K100 : Max 120W (Panel Mount)

K180 : Max 180W (Panel Mount)

K200 : Max 200W (Panel Mount)

K250 : Max 250W (Panel Mount)

Frequency Controller Model

FC : Frequency Controller with Digital Display

Input Voltage : 1phase 220V

Output Voltage 3ph220V

For Motor Output Power

400 : Max 400W (Panel Mount)

750 : Max 750W (Wall Mount)



USM 71 • USM 72

Unit Type Speed Controller
Analogue
Panel Mount



USM 1000 • USM 2000

Unit Type Speed Controller
with Digital Display
Panel Mount



USP 72 – Push Start

Unit Type Universal Speed
Controller with Digital Display
Panel Mount



DSC 72 – Speed Controller

with Digital Display & I/O
with separate VR
Din Rail Mount



SS 31 • SS 32

Brakepack Speed Controller
with separate VR
11 pin / Din Rail Mount



SD 61 • SD 62

Speed Controller
With built-in VR
8pin / Din Rail Mount



SS 61 • SS 62

Speed Controller
with built-in VR
8pin / Din Rail Mount



SS62-SK

Speed Controller
With Brakepack
Din Rail Mount



IGBT-K100 • IGBT-K200

Compact IGBT Inverter with
LED Digital Display
Panel Mount



FC 400

Compact Frequency Controller
with Digital Display, 400W
Panel Mount, 1ph220V



COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM COMPACT PARALLEL SHAFT GEAR REDUCER



Square Type



Hinge Type

6

Gearhead Frame Size

- 2 : 60mm Sq. (2.36")
- 3 : 70mm Sq. (2.76")
- 4 : 80mm Sq. (3.15")
- 5 : 90mm Sq. (3.54")
- 6 : 104mm Sq. (4.09")

GU

Gearhead Type

- GN** : For helical gear motor 6W-40W, 200W
- GU** : For helical gear motor 60W-250W
- GT** : For helical gear motor 40W-180W
Gear Reduction Ratio 2.1, 3.6 & 4.2

180

Gear Reduction Ratio

1/2.1 ~ 1/300

K

Design

- K** : Ball Bearing
- X** : Decimal Gearhead (10X)

B

5GU Gear Box Option

- For Motor Power 60W ~ 200W Motor
- [] : Hinge Type Gearhead
- B** : Square type Gearhead

- S18

Option

- N** : Special Shaft
- S18** : Output Shaft 18mm
- VS** : Viton Oil Seal for Output Shaft

PERMISSIBLE OUTPUT TORQUE (2GN-K, 3GN-K, 4GN-K, 5GN-K, 5GU-K, 5GU-KB, 6GN-K, 6GU-KB-S18) Parallel Shaft Gear Reducer Ratio and Output Torque (Single Reduction, Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		2.1*	3	3.6*	4.2*	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	
Output Speed (RPM)		643	450	375	321	270	225	180	150	108	90	75	54	45	37.5	27	22.5	18	
Rated Power	6W 2GN	--	1.2	--	--	1.9	2.3	2.9	3.4	4.7	5.7	6.8	9.3	11	13	16	20	24	
	15W 3GN	--	3	--	--	4.7	5.7	7.1	8.5	12	14	18	23	28	33	46	50	50	
	25W 4GN	--	5	--	--	7.8	9.4	12	14	20	23	28	38	46	55	76	80	80	
	40W 5GN	5	7.3	9	10	12	15	18	22	30	36	43	54	65	77	100	100	100	
	60W 5GU	8	12	14	16	19	22	28	34	48	55	62	82	98	118	164	196	200	
	90W 5GU	12	18	20	24	28	34	43	51	71	85	96	125	150	178	200	200	200	200
	120W 5GU	17	24	29	34	40	48	58	65	94	108	130	180	200	200	200	200	200	200
	150W 5GU	19	27	33	39	46	55	65	72	105	118	148	200	200	200	200	200	200	200
	180W 5GU	21	30	37	43	51	61	72	79	113	127	155	200	200	200	200	200	200	200
	6IK-200W 6GN/6GU	--	42	--	--	70	84	105	126	176	211	253	351	400	400	400	400	400	400
6IK-250W 6GN/6GU	--	48	--	--	79	95	118	142	198	237	285	395	400	400	400	400	400	400	

Gear Reduction Ratio		90	100	120	150	180	200	240	300	(360)	(500)	(750)	(1000)	(1200)	(1500)	(1800)	(2400)
Output Speed (RPM)		15	13.5	11.3	9	7.5	6.7	5.6	4.5	(3.7)	(2.7)	(1.8)	(1.35)	(1.12)	(0.9)	(0.75)	(0.56)
Rated Power	6W 2GN	30	30	30	30	30	30	30	30	--	--	--	--	--	--	--	--
	15W 3GN	50	50	50	50	50	50	50	50	--	--	--	--	--	--	--	--
	25W 4GN	80	80	80	80	80	80	80	80	--	--	--	--	--	--	--	--
	40W 5GN	100	100	100	100	100	100	100	77	100	100	100	100	100	100	100	100
	60W 5GU	200	200	200	200	200	200	200	118	164	196	200	200	200	200	200	200
	90W 5GU	200	200	200	200	200	200	200	178	200	200	200	200	200	200	200	200
	120W 5GU	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	150W 5GU	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	180W 5GU	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	6IK-200W 6GN/6GU	400	400	400	400	400	--	--	--	--	--	--	--	--	--	--	--
6IK-250W 6GN/6GU	400	400	400	400	400	--	--	--	--	--	--	--	--	--	--	--	

* Gear Reduction Ratio 2.1, 3.6 and 4.2 in installed with motor with 9T shaft.

() For 5GN / 5GU Parallel Shaft Gear Head, Gear Reduction Ratio 300 ~ 2400 can be achieved by adding Decimal Gear Reducer (5GN10X or 5GU10X).

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.



COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM COMPACT SPIRAL BEVEL GEAR REDUCER



5

- GN

- 225

- RH

-

Spiral Bevel Gear Reducer Model

- 4 : 80mm Sq. (3.15")
- 5 : 90mm Sq. (3.54")
- 6 : 104mm Sq. (4.09")

Gearhead Type

- GN** : For helical gear motor GN
25W ~ 250W
- GU** : For helical gear motor GX
40W ~ 250W

Gear Reduction Ratio

- (For 25W ~ 180W Motor)
6, 9, 15, 18, 22.5, 27,
37.5, 45, 54, 75, 90,
108, 150, 180, 225

Output Shaft Type

- RH** : Hollow Shaft
- RS** : Solid Output Shaft

Option

- [] : Normal Oil Seal
- VS** : Viton Oil Seal

Gear Reduction Ratio

- (For 6IK 200W ~ 250W)
7.5, 9, 15, 18, 25, 30,
37.5, 45, 63, 75, 95, 120

PERMISSIBLE OUTPUT TORQUE (4GN-RH, 5GN-RH & 5GU-RH)

Compact Spiral Bevel Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		6*	9	15	18	22.5	27	37.5	45	54	75	90	108	150	180	225
Output Speed (RPM)		225	150	90	75	60	50	36	30	25	18	15	12.5	9	7.5	6
Rated Power	25W (4GN)	--	12	20	24	30	36	50	61	73	100	100	100	100	100	100
	40W (5GN)	13	22	37	44	54	54	90	110	132	150	208	220	220	220	220
	60W (5GN)	21	34	57	68	83	83	140	170	204	220	220	220	220	220	220
	90W (5GN)	31	51	85	102	125	125	210	220	220	220	220	220	220	220	220
	120W (5GN)	39	65	108	130	159	159	220	220	220	220	220	220	220	220	220
	150W (5GN)	43	72	120	144	176	176	220	220	220	220	220	220	220	220	220
	180W (5GN)	47	79	132	158	193	193	220	220	220	220	220	220	220	220	220

Gear Reduction Ratio		(270)	(375)	(450)	(540)	(750)	(900)	(1080)	(1500)	(1800)	(2250)
Output Speed (RPM)		5	3.6	3	2.5	1.8	1.5	1.25	0.9	0.75	0.6
Rated Power	40W (5GN)	54	90	110	132	150	208	220	220	220	220
	60W (5GN)	83	140	170	204	220	220	220	220	220	220
	90W (5GN)	125	210	220	220	220	220	220	220	220	220
	120W (5GN)	159	220	220	220	220	220	220	220	220	220
	150W (5GN)	176	220	220	220	220	220	220	220	220	220
	180W (5GN)	193	220	220	220	220	220	220	220	220	220

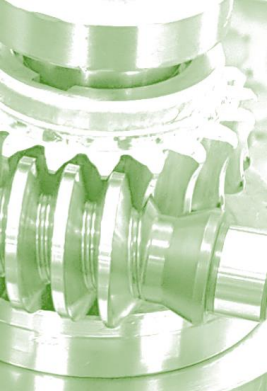
() For Spiral Bevel Gear Head, Gear Reduction Ratio 270 ~ 2250 can be achieved by adding Decimal Gear Reducer (5GN10X or 5GU10X).

PERMISSIBLE OUTPUT TORQUE (6GU-RH)

Compact Spiral Bevel Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		7.5	9	15	18	25	30	37.5	45	63	75	95	120
Output Speed (RPM)		180	150	90	75	54	45	36	30	21.5	18	14	11
Rated Power	200W (6GU)	85	102	169	203	282	339	423	508	600	600	600	600
	250W (6GU)	98	118	197	236	328	394	492	590	600	600	600	600

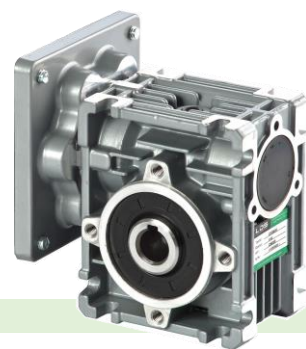
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COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM COMPACT WORM GEAR REDUCER



8MRV

050

-

-

80

-

CM10

Aluminium Worm Gear

Reducer Model

8MRV

DMRS

DMRV

Series (#)

#030 : Hollow Output Shaft Ø14mm

#040 : Hollow Output Shaft Ø18mm

#050 : Hollow Output Shaft Ø25mm

#063 : Hollow Output Shaft Ø25mm

Output Shaft Option

[] : Hollow Output Shaft

L : Single Output Shaft – Left

R : Single Output Shaft – Right

T : Double Output Shaft

Gear Reduction Ratio

1/5 ~ 1/80 (1/100*)

Input Flange Design

CM09 : Input Motor 40W ~ 180W (5IK)

CG09 : Double Gear Reduction (5GN/5GU Parallel Shaft Gearbox + Worm Gearbox)

CM10 : Input Motor 200W ~ 250W (6IK)

CG10 : Double Gear Reduction (6GN/6GU Parallel Shaft Gearbox + Worm Gearbox)

* Aluminium Worm Gear Reducer is applicable for Compact Gear Motor 40W ~ 250W only.

PERMISSIBLE OUTPUT TORQUE

#030 Series Worm Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		5	7.5	10	15	20	25	30	40	50	60	80	(100)	(135)	(150)	(180)	Double Gear Reduction Ratio 1/225 ~ 1/19,200 available upon request
Output Speed (RPM)		270	180	135	90	68	54	45	34	27	22.5	16.9	13.5	10	9	7.5	
Rated Power	40W	#030 Max Output Torque (kgcm)	14	21	28	42	56	70	84	112	140	168	210	210	210	210	210
	60W		17	26	34	51	68	85	102	136	170	204	210	210	210	210	210
	90W		25	38	50	75	100	125	150	200	210	210	210	210	210	210	210
	120W		34	50	67	101	134	168	210	210	210	210	210	210	210	210	210
	150W		42	62	83	125	166	208	210	210	210	210	210	210	210	210	210
	180W		49	74	98	147	196	210	210	210	210	210	210	210	210	210	210

() For Aluminium Worm Gear Reducer, Gear Reduction Ratio 100 ~ 19,200 can be achieved by adding Parallel Shaft Gear Reducer (5GN_K-N, 5GU_KB-N, 6GN_K-N, 6GU_KB-N).

PERMISSIBLE OUTPUT TORQUE

#040 Series Worm Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		5	7.5	10	15	20	25	30	40	50	60	80	(100)	(135)	(150)	(180)	Double Gear Reduction Ratio 1/225 ~ 1/19,200 available upon request	
Output Speed (RPM)		270	180	135	90	68	54	45	34	27	22.5	16.9	13.5	10	9	7.5		
Rated Power	40W	#040 Max Output Torque (kgcm)	14	21	28	42	56	70	84	112	140	168	224	280	378	400	400	
	60W		17	26	34	51	68	85	102	136	170	204	272	340	400	400	400	
	90W		25	38	50	75	100	125	150	200	250	300	400	400	400	400	400	
	120W		34	50	67	101	134	168	201	268	335	400	400	400	400	400	400	
	150W		42	62	83	125	166	208	249	332	400	400	400	400	400	400	400	
	180W		49	74	98	147	196	245	294	392	400	400	400	400	400	400	400	
	6IK-200W		63	94	125	188	250	313	375	400	400	400	400	400	--	--	--	--
	6IK-250W		76	113	150	226	300	376	400	400	400	400	400	400	--	--	--	--

() For Aluminium Worm Gear Reducer, Gear Reduction Ratio 100 ~ 19,200 can be achieved by adding Parallel Shaft Gear Reducer (5GN_K-N, 5GU_KB-N, 6GN_K-N, 6GU_KB-N).

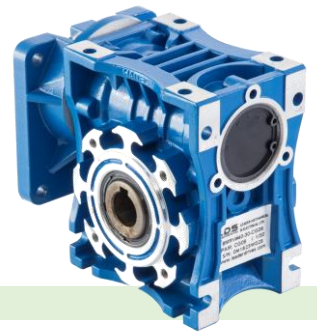
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COMPACT GEAR MOTOR

K SERIES

PRODUCT CODING SYSTEM COMPACT WORM GEAR REDUCER



PERMISSIBLE OUTPUT TORQUE

#050 Series Worm Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		5	7.5	10	15	20	25	30	40	50	60	80	100	(135)	(150)	(180)	Double Gear Reduction Ratio 1/225 ~ 1/19,200 available upon request
Output Speed (RPM)		270	180	135	90	68	54	45	34	27	22.5	16.9	13.5	10	9	7.5	
Rated Power	40W	#050 Max Output Torque (kgcm)	14	21	28	42	56	70	84	112	140	168	224	280	378	420	504
	60W		17	26	34	51	68	85	102	136	170	204	272	340	459	510	600
	90W		25	38	50	75	100	125	150	200	250	300	400	500	600	600	600
	120W		34	50	67	101	134	168	201	268	335	400	400	600	600	600	600
	150W		42	62	83	125	166	208	249	332	400	400	400	600	600	600	600
	180W		49	74	98	147	196	245	294	392	400	400	400	600	600	600	600
	6IK-200W		63	94	125	188	250	313	378	504	600	600	600	600	--	--	--
	6IK-250W		76	113	150	226	300	376	454	600	600	600	600	600	600	--	--

() For Aluminium Worm Gear Reducer, Gear Reduction Ratio 125 ~ 19,200 can be achieved by adding Parallel Shaft Gear Reducer (5GN_K-N, 5GU_KB-N, 6GN_K-N, 6GU_KB-N).

PERMISSIBLE OUTPUT TORQUE

#063 Series Worm Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		5	7.5	10	15	20	25	30	40	50	60	80	100	(135)	(150)	(180)	Double Gear Reduction Ratio 1/225 ~ 1/19,200 available upon request
Output Speed (RPM)		270	180	135	90	68	54	45	34	27	22.5	16.9	13.5	10	9	7.5	
Rated Power	40W	#063 Max Output Torque (kgcm)	--	--	--	--	--	--	--	--	--	--	--	--	378	420	504
	60W		--	--	--	--	--	--	--	--	--	--	--	--	459	510	612
	90W		--	--	--	--	--	--	--	--	--	--	--	--	675	750	900
	120W		--	--	--	--	--	--	--	--	--	--	--	--	918	1000	1000
	150W		--	--	--	--	--	--	--	--	--	--	--	--	1000	1000	1000
	180W		--	--	--	--	--	--	--	--	--	--	--	--	1000	1000	1000
	6IK-200W		63	94	125	188	250	313	375	504	630	756	1000	1000	1000	1000	1000
	6IK-250W		76	113	150	226	300	376	450	605	756	907	1000	1000	1000	1000	1000

() For Aluminium Worm Gear Reducer, Gear Reduction Ratio 125 ~ 19,200 can be achieved by adding Parallel Shaft Gear Reducer (5GN_K-N, 5GU_KB-N, 6GN_K-N, 6GU_KB-N).

PERMISSIBLE OUTPUT TORQUE

Worm Gear Reducer Ratio and Output Torque (Based on 4Pole Motor, 50Hz)

Gear Reduction Ratio		(225)	(270)	(375)	(450)	(540)	(750)	(900)	(1125)	(1350)	(1500)	(1800)	(2250)	(2270)	(3000)	Double Gear Reduction Ratio 1/3600 ~ 1/19,200 available upon request
Output Speed (RPM)		6	5	3.6	3	2.5	1.8	1.5	1.2	1	0.9	0.75	0.6	0.5	0.45	
#030	Max Output Torque (kgcm)	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
#040		400	400	400	400	400	400	400	400	400	400	400	400	400	400	
#050		600	600	600	600	600	600	600	600	600	600	600	600	600	600	
#063		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.



COMPACT GEAR MOTOR

K SERIES

INDUCTION MOTOR SINGLE PHASE (1Ø – CAPACITOR RUN)



The most common of all motors is the standard Induction Motor, it's designed for continuous 24/7 operation in one direction. While it is capable of going both forward and reverse, its main role is just single direction use.

General Specifications:

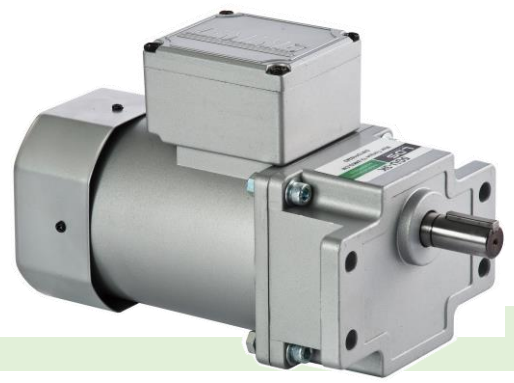
Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM		Capacity (µF)	VAC
6W	2IK6A-A2	2IK6GN-A2	1Ø110	50	0.25	0.44	0.45	1300	4P	2.5	250
				60	0.22	0.42	0.38	1600			
	2IK6A-C2	2IK6GN-C2	1Ø240	50	0.14	0.41	0.45	1300		0.8	450
				60	0.12	0.40	0.38	1600			
15W	3IK15A-A2	3IK15GN-A2	1Ø110	50	0.38	1.01	1.22	1300	4P	4	250
				60	0.34	0.98	0.98	1600			
	3IK15A-C2	3IK15GN-C2	1Ø240	50	0.2	0.88	1.22	1300		1.2	450
				60	0.18	0.86	0.98	1600			
25W	4IK25A-A2	4IK25GN-A2	1Ø110	50	0.45	1.3	1.87	1320	4P	6	250
				60	0.43	1.2	1.48	1620			
	4IK25A-C2	4IK25GN-C2	1Ø240	50	0.23	1.45	1.82	1320		1.5	450
				60	0.21	1.42	1.5	1620			
40W	5IK40A-A2 5IK40A-A2-N	5IK40GN-A2 5IK40GX-A2	1Ø110	50	0.83	2.26	3.0	1350	4P	10	250
				60	0.7	2.16	2.5	1650			
	5IK40A-C2 5IK40A-C2-N	5IK40GN-C2 5IK40GX-C2	1Ø240	50	0.4	2.17	3.4	1350		2.5	450
				60	0.37	2.15	2.84	1650			
60W	5IK60A-A2F 5IK60A-A2F-N	5IK60GN-A2F 5IK60GX-A2F	1Ø110	50	1.18	3.35	4.37	1350	4P	16	250
				60	1.1	3.1	4.3	1650			
	5IK60A-C2F 5IK60A-C2F-N	5IK60GN-C2F 5IK60GX-C2F	1Ø240	50	0.58	3.35	4.37	1350		3.5	450
				60	0.5	3.1	4.3	1650			
90W	5IK90A-A2F 5IK90A-A2F-N	5IK90GN-A2F 5IK90GX-A2F	1Ø110	50	1.58	4.5	6.2	1350	4P	20	250
				60	1.43	4.3	5.43	1650			
	5IK90A-C2F 5IK90A-C2F-N	5IK90GN-C2F 5IK90GX-C2F	1Ø240	50	0.80	4.6	6.2	1350		5.5	450
				60	0.74	4.4	5.43	1650			
120W	5IK120A-A2F 5IK120A-A2F-N	5IK120GN-A2F 5IK120GX-A2F	1Ø110	50	1.85	6.7	8.5	1350	4P	24	250
				60	1.60	5.8	7.3	1650			
	5IK120A-C2F 5IK120A-C2F-N	5IK120GN-C2F 5IK120GX-C2F	1Ø240	50	0.98	6.4	8.5	1350		6	450
				60	0.94	5.7	7.3	1650			
150W	5IK150A-C2F 5IK150A-C2F-N	5IK150GN-C2F 5IK150GX-C2F	1Ø240	50	1.10	7.0	9.94	1320	4P	8 (6)	450
				60	1.04	6.4	8.65	1620			
180W	5IK180A-C2F 5IK180A-C2F-N	5IK180GN-C2F 5IK180GX-C2F	1Ø240	50	1.15	7.8	11.3	1300	4P	8	450
				60	1.10	7.1	9.25	1600			
200W	6IK200A-C2F	6IK200GN-C2F	1Ø240	50	1.38	9.8	15.6	1350	4P	10	450
				60	1.31	9.2	13.6	1650			
250W	6IK250A-C2F	6IK250GN-C2F	1Ø240	50	1.45	10.6	16.9	1300	4P	12 (10)	450
				60	1.37	9.9	14.6	1600			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V Available upon request.



COMPACT GEAR MOTOR

K SERIES INDUCTION MOTOR THREE PHASE (3Ø)



The most common of all motors is the standard Induction Motor, it's designed for continuous 24/7 operation in one direction. While it is capable of going both forward and reverse, its main role is just single direction use.

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)		
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM			
25W	4IK25A-S	4IK25GN-S	3Ø220	50	0.23	3.0	2.06	1320	4P		
				60	0.21	2.6	1.63	1620			
	4IK25A-S4	4IK25GN-S4	3Ø415	50	0.14	2.6	1.75	1320			
				60	0.13	2.0	1.46	1620			
40W	5IK40A-S 5IK40A-S-N	5IK40GN-S 5IK40GX-S	3Ø220	50	0.36	4.7	3.17	1350	4P		
				60	0.33	4.2	2.8	1650			
	5IK40A-S4 5IK40A-S4-N	5IK40GN-S4 5IK40GX-S4	3Ø415	50	0.21	4.5	3.0	1350			
				60	0.19	4.3	2.9	1650			
	60W	5IK60A-SF 5IK60A-SF-N	5IK60GN-SF 5IK60GX-SF	3Ø220	50	0.5	7.4	4.9		1350	4P
					60	0.45	6.4	4.0		1650	
5IK60A-S4F 5IK60A-S4F-N		5IK60GN-S4F 5IK60GX-S4F	3Ø415	50	0.27	7.2	4.85	1350			
				60	0.25	6.2	3.88	1650			
90W	5IK90A-SF 5IK90A-SF-N	5IK90GN-SF 5IK90GX-SF	3Ø220	50	0.65	9.7	6.5	1350	4P		
				60	0.60	8.4	5.3	1650			
	5IK90A-S4F 5IK90A-S4F-N	5IK90GN-S4F 5IK90GX-S4F	3Ø415	50	0.37	9.7	6.5	1350			
				60	0.34	8.4	5.3	1650			
	120W	5IK120A-SF 5IK120A-SF-N	5IK120GN-SF 5IK120GX-SF	3Ø220	50	0.75	11.5	8.95		1350	4P
					60	0.72	9.5	7.5		1650	
5IK120A-S4F 5IK120A-S4F-N		5IK120GN-S4F 5IK120GX-S4F	3Ø415	50	0.43	11.5	8.95	1350			
				60	0.39	9.5	7.5	1650			
150W	5IK150A-SF 5IK150A-SF-N	5IK150GN-SF 5IK150GX-SF	3Ø220	50	0.95	12.8	10.7	1320	4P		
				60	0.88	10.2	9.5	1620			
	5IK150A-S4F 5IK150A-S4F-N	5IK150GN-S4F 5IK150GX-S4F	3Ø415	50	0.50	12.8	10.5	1320			
				60	0.46	10.2	9.3	1620			
180W	5IK180A-SF 5IK180A-SF-N	5IK180GN-SF 5IK180GX-SF	3Ø220	50	1.04	13.4	12.3	1300	4P		
				60	1.00	10.8	10.1	1600			
	5IK180A-S4F 5IK180A-S4F-N	5IK180GN-S4F 5IK180GX-S4F	3Ø415	50	0.59	13.4	12.3	1300			
				60	0.55	10.8	10.1	1600			
200W	6IK200A-SF	6IK200GN-SF	3Ø220	50	1.28	18.5	15.7	1350	4P		
				60	1.15	15.9	13.8	1650			
	6IK200A-S4F	6IK200GN-S4F	3Ø415	50	0.74	18.5	15.7	1350			
				60	0.62	15.9	13.8	1650			
250W	6IK250A-SF	6IK250GN-SF	3Ø220	50	1.42	21.6	17.3	1300	4P		
				60	1.23	19.2	15.1	1600			
	6IK250A-S4F	6IK250GN-S4F	3Ø415	50	0.85	21.6	17.3	1300			
				60	0.73	19.2	15.1	1600			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V, Dual-voltage motor 3ph220V/380V and 3ph240V/415V available upon request.
Voltage "U" represents Dual-voltage 220V/380V; and "TQ" represents Dual-voltage 240V/415V.



COMPACT GEAR MOTOR

K SERIES

INDUCTION MOTOR - 2POLE SINGLE PHASE (1Ø) / THREE PHASE (3Ø)



General Specifications (Single Phase Motor - 1Ø) :

Output Power (Watt)	Product Code	AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
	Round Shaft / Key Shaft					Torque (Kg.cm)	RPM		Capacity (µF)	VAC
60W	5IK60A-A2F-2P	1Ø110	50	0.95	1.8	2.0	2780	2P	16	250
	5IK60A-A2F-N-2P		60	0.90	1.8	1.8	3220			
	5IK60A-C2F-2P	1Ø240	50	0.48	1.8	2.0	2780		3.5	450
	5IK60A-C2F-N-2P		60	0.46	1.8	1.8	3220			
90W	5IK90A-A2F-2P	1Ø110	50	1.6	3	3.6	2780	2P	20	250
	5IK90A-A2F-N-2P		60	1.6	3	3.2	3220			
	5IK90A-C2F-2P	1Ø240	50	0.82	3	3.6	2780		5.5	450
	5IK90A-C2F-N-2P		60	0.78	3	3.2	3220			
120W	5IK120A-A2F-2P	1Ø110	50	2.0	4.2	5.0	2780	2P	25	250
	5IK120A-A2F-N-2P		60	2.0	4.2	4.3	3220			
	5IK120A-C2F-2P	1Ø240	50	1.0	4.2	5.0	2780		6	450
	5IK120A-C2F-N-2P		60	0.93	4.2	4.3	3220			
150W	5IK150A-SF-2P	1Ø240	50	1.2	5.3	6.1	2720	2P	8 (6)	450
	5IK150A-SF-N-2P		60	1.1	5.3	5.4	3160			
180W	5IK180A-C2F-2P	1Ø240	50	1.3	6.5	6.8	2720	2P	8	450
	5IK180A-C2F-N-2P		60	1.2	6.5	6.0	3160			

General Specifications (Three Phase Motor - 3Ø) :

Output Power (Watt)	Product Code	AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft / Key Shaft					Torque (Kg.cm)	RPM	
60W	5IK60A-SF-2P	3Ø220	50	0.32	9.6	2	2780	2P
	5IK60A-SF-N-2P		60	0.31	9.0	1.7	3220	
	5IK60A-S4F-2P	3Ø415	50	0.18	9.6	2	2780	
	5IK60A-S4F-N-2P		60	0.17	9.0	1.7	3220	
90W	5IK90A-SF-2P	3Ø220	50	0.70	16	3.6	2780	2P
	5IK90A-SF-N-2P		60	0.65	12	3.2	3220	
	5IK90A-S4F-2P	3Ø415	50	0.4	16	3.6	2780	
	5IK90A-S4F-N-2P		60	0.37	12	3.2	3220	
120W	5IK120A-SF-2P	3Ø220	50	1.0	20	4.4	2780	2P
	5IK120A-SF-N-2P		60	0.94	16	4.1	3220	
	5IK120A-S4F-2P	3Ø415	50	0.59	20	4.4	2780	
	5IK120A-S4F-N-2P		60	0.55	16	4.1	3220	
150W	5IK150A-SF-2P	3Ø220	50	1.3	23	5	2720	2P
	5IK150A-SF-N-2P		60	1.2	18	4.2	3160	
	5IK150A-S4F-2P	3Ø415	50	0.7	23	5	2720	
	5IK150A-S4F-N-2P		60	0.64	18	4.2	3160	
180W	5IK180A-SF-2P	3Ø220	50	1.5	25	5.5	2720	2P
	5IK180A-SF-N-2P		60	1.3	21	4.9	3160	
	5IK180A-S4F-2P	3Ø415	50	0.8	25	5.5	2720	
	5IK180A-S4F-N-2P		60	0.7	21	4.9	3160	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V, Dual-voltage motor 3ph220V/380V and 3ph240V/415V available upon request.
Voltage "U" represents Dual-voltage 220V/380V; and "TQ" represents Dual-voltage 240V/415V.



COMPACT GEAR MOTOR

K SERIES

REVERSIBLE MOTOR - RATED 30MIN SINGLE PHASE (1Ø)



The Reversible Motor is designed for start/stop operations with changes of direction frequently. It is rated at 30 minutes while used in this fashion. It uses a simple damping brake to slow the motor quickly to be able to change direction efficiently. This generates heat when the motor is frequently changing direction which is why all reversible motors are rated for 30 minutes only.

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM		Capacity (µF)	VAC
6W	2RK6A-A2	2RK6GN-A2	1Ø110	50	0.28	0.46	0.53	1300	4P	4	250
				60	0.24	0.44	0.4	1600			
	2RK6A-C2	2RK6GN-C2	1Ø240	50	0.15	0.43	0.47	1300		1.2	450
				60	0.13	0.42	0.4	1600			
15W	3RK15A-A2	3RK15GN-A2	1Ø110	50	0.42	1.06	1.28	1300	4P	6	250
				60	0.37	1.03	1.03	1600			
	3RK15A-C2	3RK15GN-C2	1Ø240	50	0.22	0.92	1.28	1300		1.5	450
				60	0.2	0.9	1.03	1600			
25W	4RK25A-A2	4RK25GN-A2	1Ø110	50	0.5	1.37	1.96	1320	4P	8	250
				60	0.47	1.26	1.55	1620			
	4RK25A-C2	4RK25GN-C2	1Ø240	50	0.25	1.52	1.91	1320		2	450
				60	0.23	1.49	1.58	1620			
40W	5RK40A-A2 5RK40A-A2-N	5RK40GN-A2 5RK40GX-A2	1Ø110	50	0.91	2.37	3.15	1350	4P	10	250
				60	0.77	2.27	2.63	1650			
	5RK40A-C2 5RK40A-C2-N	5RK40GN-C2 5RK40GX-C2	1Ø240	50	0.44	2.28	3.57	1350		3	450
				60	0.41	2.26	2.98	1650			
60W	5RK60A-A2F 5RK60A-A2F-N	5RK60GN-A2F 5RK60GX-A2F	1Ø110	50	1.3	3.52	4.59	1350	4P	16	250
				60	1.21	3.26	4.52	1650			
	5RK60A-C2F 5RK60A-C2F-N	5RK60GN-C2F 5RK60GX-C2F	1Ø240	50	0.64	3.52	4.59	1350		4	450
				60	0.55	3.26	4.52	1650			
90W	5RK90A-A2F 5RK90A-A2F-N	5RK90GN-A2F 5RK90GX-A2F	1Ø110	50	1.74	4.73	6.51	1350	4P	20	250
				60	1.57	4.73	5.7	1650			
	5RK90A-C2F 5RK90A-C2F-N	5RK90GN-C2F 5RK90GX-C2F	1Ø240	50	0.88	4.73	6.51	1350		6	450
				60	0.81	4.73	5.7	1650			
120W	5RK120A-A2F 5RK120A-A2F-N	5RK120GN-A2F 5RK120GX-A2F	1Ø110	50	2.04	7.04	8.93	1350	4P	24	250
				60	1.76	6.09	7.67	1650			
	5RK120A-C2F 5RK120A-C2F-N	5RK120GN-C2F 5RK120GX-C2F	1Ø240	50	1.01	6.72	8.93	1350		8 (6)	450
				60	0.94	5.97	7.67	1650			
150W	5RK150A-C2F 5RK150A-C2F-N	5RK150GN-C2F 5RK150GX-C2F	1Ø240	50	1.18	7.8	1.05	1320	4P	8	450
				60	1.09	7.2	9.85	1620			
200W	6RK200A-C2F	6RK200GN-C2F	1Ø240	50	1.42	9.8	16.5	1350	4P	10	450
				60	1.34	9.2	14.2	1650			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement. Single Phase 220V/230V available upon request.



COMPACT GEAR MOTOR

K SERIES

ELECTROMAGNETIC BRAKE MOTOR SINGLE PHASE (1Ø – CAPACITOR RUN) POWER-OFF ACTIVATED TYPE



Electromagnetic Brake motor is ideal for vertical application in which the load must be held. It's a load-holding brake motor with a power off activated type electromagnetic brake, where the motor stops instantaneously when the power is cut off, while still holding the load in position (optimal solution for emergency brakes and vertical load applications).

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM		Capacity (µF)	VAC
6W	2IK6A-A2B	2IK6GN-A2B	1Ø110	50	0.25	0.44	0.45	1300	4P	2.5	250
				60	0.22	0.42	0.38	1600			
	2IK6A-C2B	2IK6GN-C2B	1Ø240	50	0.14	0.41	0.45	1300		0.8	450
				60	0.12	0.4	0.38	1600			
15W	3IK15A-A2B	3IK15GN-A2B	1Ø110	50	0.38	1.01	1.22	1300	4P	4	250
				60	0.34	0.98	0.98	1600			
	3IK15A-C2B	3IK15GN-C2B	1Ø240	50	0.2	0.88	1.22	1300		1.2	450
				60	0.18	0.86	0.98	1600			
25W	4IK25A-A2B	4IK25GN-A2B	1Ø110	50	0.45	1.3	1.87	1320	4P	6	250
				60	0.43	1.2	1.48	1620			
	4IK25A-C2B	4IK25GN-C2B	1Ø240	50	0.23	1.45	1.82	1320		1.5	450
				60	0.21	1.42	1.5	1620			
40W	5IK40A-A2B 5IK40A-A2B-N	5IK40GN-A2B 5IK40GX-A2B	1Ø110	50	0.83	2.26	3.0	1350	4P	10	250
				60	0.7	2.16	2.5	1650			
	5IK40A-C2B 5IK40A-C2B-N	5IK40GN-C2B 5IK40GX-C2B	1Ø240	50	0.4	2.17	3.4	1350		2.5	450
				60	0.37	2.15	2.84	1650			
60W	5IK60A-A2FB 5IK60A-A2FB-N	5IK60GN-A2FB 5IK60GX-A2FB	1Ø110	50	1.18	3.35	4.37	1350	4P	16	250
				60	1.1	3.1	4.3	1650			
	5IK60A-C2FB 5IK60A-C2FB-N	5IK60GN-C2FB 5IK60GX-C2FB	1Ø240	50	0.58	3.35	4.37	1350		3.5	450
				60	0.5	3.1	4.3	1650			
90W	5IK90A-A2FB 5IK90A-A2FB-N	5IK90GN-A2FB 5IK90GX-A2FB	1Ø110	50	1.58	4.5	6.2	1350	4P	20	250
				60	1.43	4.5	5.43	1650			
	5IK90A-C2FB 5IK90A-C2FB-N	5IK90GN-C2FB 5IK90GX-C2FB	1Ø240	50	0.80	4.5	6.2	1350		5.5	450
				60	0.74	4.5	5.43	1650			
120W	5IK120A-A2FB 5IK120A-A2FB-N	5IK120GN-A2FB 5IK120GX-A2FB	1Ø110	50	1.85	6.7	8.5	1350	4P	25	250
				60	1.60	5.8	7.3	1650			
	5IK120A-C2FB 5IK120A-C2FB-N	5IK120GN-C2FB 5IK120GX-C2FB	1Ø240	50	0.98	6.4	8.5	1350		6	450
				60	0.94	5.7	7.3	1650			
150W	5IK150A-C2FB 5IK150A-C2FB-N	5IK150GN-C2FB 5IK150GX-C2FB	1Ø240	50	1.20	7.0	9.94	1320	4P	7	450
				60	1.12	6.4	8.65	1620			
180W	5IK180A-C2FB 5IK180A-C2FB-N	5IK180GN-C2FB 5IK180GX-C2FB	1Ø240	50	1.30	7.8	11.3	1300	4P	8	450
				60	1.23	7.1	9.25	1600			
200W	6IK200A-C2FB	6IK200GN-C2FB	1Ø240	50	1.38	9.8	15.6	1350	4P	10	450
				60	1.31	9.2	13.6	1650			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V Available upon request.



COMPACT GEAR MOTOR

K SERIES

ELECTROMAGNETIC BRAKE MOTOR THREE PHASE (3Ø) POWER-OFF ACTIVATED TYPE



Features:

- DC Electromagnetic Brake with built in Rectifier (Input voltage AC220V~240V)
- Brake Precision – The electromagnetic brake controls the rotation within 2-3 turns, making it suitable for forward/reverse operation
- Ideal for low frequency of braking operation (Maximum 6 cycles of start/stop per minute)
- Variable Speed Brake Motor and Asynchronous Brake Motor configurations available.

Electromagnetic Brake	Motor Rating	
	6W-25W	40W-180W
Static friction torque (kgcm)	5.1	10.2
Rated voltage (DC-V)	22~24	22~24
Input voltage (Rectifier)	220V~240V	220V~240V
Capacity (Watt)	4W	7W
Movement (Start/Stop Operation)	Maximum 6 braking cycles per minute with a 1~2 second braking interval	

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM	
25W	4IK25A-SB	4IK25GN-SB	3Ø220	50	0.23	3.0	2.06	1320	4P
				60	0.21	2.6	1.63	1620	
	4IK25A-S4B	4IK25GN-S4B	3Ø415	50	0.14	2.6	1.75	1320	
				60	0.13	2.0	1.46	1620	
40W	5IK40A-SB	5IK40GN-SB	3Ø220	50	0.36	4.7	3.17	1350	4P
				60	0.33	4.2	2.8	1650	
	5IK40A-S4B	5IK40GN-S4B	3Ø415	50	0.21	4.5	3.0	1350	
				60	0.19	4.3	2.9	1650	
60W	5IK60A-SFB	5IK60GN-SFB	3Ø220	50	0.5	7.4	4.9	1350	4P
				60	0.45	6.4	4.0	1650	
	5IK60A-S4FB	5IK60GN-S4FB	3Ø415	50	0.27	7.2	4.85	1350	
				60	0.25	6.2	3.88	1650	
90W	5IK90A-SFB	5IK90GN-SFB	3Ø220	50	0.65	9.7	6.5	1350	4P
				60	0.60	8.4	5.3	1650	
	5IK90A-S4FB	5IK90GN-S4FB	3Ø415	50	0.37	9.7	6.5	1350	
				60	0.34	8.4	5.3	1650	
120W	5IK120A-SFB	5IK120GN-SFB	3Ø220	50	0.75	11.5	8.95	1350	4P
				60	0.72	9.5	7.5	1650	
	5IK120A-S4FB	5IK120GN-S4FB	3Ø415	50	0.43	11.5	8.95	1350	
				60	0.39	9.5	7.5	1650	
150W	5IK150A-SFB	5IK150GN-SFB	3Ø220	50	0.95	12.8	10.7	1320	4P
				60	0.88	10.2	9.5	1620	
	5IK150A-S4FB	5IK150GN-S4FB	3Ø415	50	0.50	12.8	10.5	1320	
				60	0.46	10.2	9.3	1620	
180W	5IK180A-SFB	5IK180GN-SFB	3Ø220	50	1.10	13.4	12.3	1300	4P
				60	1.05	10.8	10.1	1600	
	5IK180A-S4FB	5IK180GN-S4FB	3Ø415	50	0.64	13.4	12.3	1300	
				60	0.60	10.8	10.1	1600	
200W	6IK200A-SFB	6IK200GN-SFB	3Ø220	50	1.28	18.5	15.7	1350	4P
				60	1.10	15.9	13.8	1650	
	6IK200A-S4FB	6IK200GN-S4FB	3Ø415	50	0.74	18.5	15.7	1350	
				60	0.62	15.9	13.8	1650	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
 Dual-voltage motor 3ph220V/380V and 3ph240V/415V available upon request.
 Voltage "U" represents Dual-voltage 220V/380V; and "TQ" represents Dual-voltage 240V/415V.



COMPACT GEAR MOTOR

K SERIES

REVERSIBLE ELECTROMAGNETIC BRAKE MOTOR SINGLE PHASE (1Ø – CAPACITOR RUN) POWER-OFF ACTIVATED TYPE



The Reversible Electromagnetic Brake Motor is designed for start/stop operations with changes of direction frequently. It uses a simple damping brake in addition to the electromagnetic brake to slow the motor more quickly to be able to change direction efficiently. This generates heat when the motor is frequently changing direction which is why all reversible electromagnetic brake motors are rated for 30 minutes only.

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM		Capacity (µF)	VAC
6W	2RK6A-A2B	2RK6GN-A2B	1Ø110	50	0.28	0.46	0.53	1300	4P	4	250
				60	0.24	0.44	0.40	1600			
	2RK6A-C2B	2RK6GN-C2B	1Ø240	50	0.15	0.43	0.47	1300		1.2	450
				60	0.13	0.42	0.40	1600			
15W	3RK15A-A2B	3RK15GN-A2B	1Ø110	50	0.42	1.06	1.28	1300	4P	6	250
				60	0.37	1.03	1.03	1600			
	3RK15A-C2B	3RK15GN-C2B	1Ø240	50	0.22	0.92	1.28	1300		1.5	450
				60	0.2	0.9	1.03	1600			
25W	4RK25A-A2B	4RK25GN-A2B	1Ø110	50	0.5	1.37	1.96	1320	4P	8	250
				60	0.47	1.26	1.55	1620			
	4RK25A-C2B	4RK25GN-C2B	1Ø240	50	0.25	1.52	1.91	1320		2	450
				60	0.23	1.49	1.58	1620			
40W	5RK40A-A2B 5RK40A-A2B-N	5RK40GN-A2B 5RK40GX-A2B	1Ø110	50	0.91	2.37	3.15	1350	4P	14	250
				60	0.77	2.27	2.63	1650			
	5RK40A-C2B 5RK40A-C2B-N	5RK40GN-C2B 5RK40GX-C2B	1Ø240	50	0.44	2.28	3.57	1350		3	450
				60	0.41	2.26	2.98	1650			
60W	5RK60A-A2FB 5RK60A-A2FB-N	5RK60GN-A2FB 5RK60GX-A2FB	1Ø110	50	1.30	3.52	4.59	1350	4P	20	250
				60	1.21	3.26	4.52	1650			
	5RK60A-C2FB 5RK60A-C2FB-N	5RK60GN-C2FB 5RK60GX-C2FB	1Ø240	50	0.64	3.46	4.59	1350		4	450
				60	0.55	3.26	4.52	1650			
90W	5RK90A-A2FB 5RK90A-A2FB-N	5RK90GN-A2FB 5RK90GX-A2FB	1Ø110	50	1.74	4.73	6.51	1350	4P	24	250
				60	1.57	4.73	5.7	1650			
	5RK90A-C2FB 5RK90A-C2FB-N	5RK90GN-C2FB 5RK90GX-C2FB	1Ø240	50	0.88	4.73	6.51	1350		6	450
				60	0.81	4.73	5.7	1650			
120W	5RK120A-A2FB 5RK120A-A2FB -N	5RK120GN-A2FB 5RK120GX-A2FB	1Ø110	50	2.04	7.04	8.93	1350	4P	30	250
				60	1.96	6.09	7.67	1650			
	5RK120A-C2FB 5RK120A-C2FB-N	5RK120GN-C2FB 5RK120GX-C2FB	1Ø240	50	1.01	6.72	8.93	1350		7	450
				60	0.94	5.99	7.67	1650			
150W	5RK150A-C2FB 5RK150A-C2FB-N	5RK150GN-C2FB 5RK150GX-C2FB	1Ø240	50	1.10	7.8	9.94	1320	4P	8	450
				60	1.04	7.2	8.65	1620			

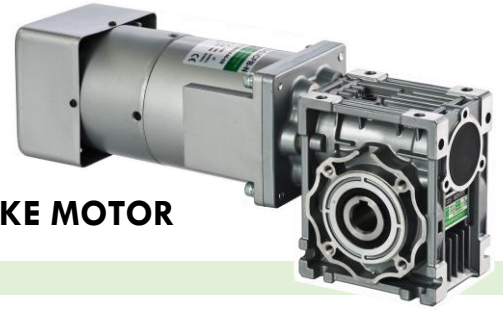
Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement. Single Phase 220V/230V Available upon request.



COMPACT GEAR MOTOR

K SERIES

REVERSIBLE ELECTROMAGNETIC BRAKE MOTOR THREE PHASE (3Ø) POWER-OFF ACTIVATED TYPE



Features:

- DC Electromagnetic Brake with built in Rectifier (Input voltage AC220V~240V)
- Brake Precision – The electromagnetic brake controls the rotation within 2-3 turns, making it suitable for forward/reverse operation
- Ideal for low frequency of braking operation (Maximum 6 cycles of start/stop per minute)
- Variable Speed Brake Motor and Asynchronous Brake Motor configurations available.

Electromagnetic Brake	Motor Rating	
	6W-25W	40W-180W
Static friction torque (kgcm)	5.1	10.2
Rated voltage (DC-V)	22~24	22~24
Input voltage (Rectifier)	220V~240V	220V~240V
Capacity (Watt)	4W	7W
Movement (Start/Stop Operation)	Maximum 6 braking cycles per minute with a 1~2 second braking interval	

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	RPM	
25W	4RK25A-SB	4RK25GN-SB	3Ø220	50	0.24	2.82	1.96	1300	4P
				60	0.22	2.44	1.55	1600	
	4RK25A-S4B	4RK25GN-S4B	3Ø415	50	0.15	2.44	1.66	1300	
				60	0.14	1.88	1.39	1600	
40W	5RK40A-SB 5RK40A-SB-N	5RK40GN-SB 5RK40GX-SB	3Ø220	50	0.38	4.42	3.01	1320	4P
				60	0.35	3.95	2.66	1620	
	5RK40A-S4B 5RK40A-S4B-N	5RK40GN-S4B 5RK40GX-S4B	3Ø415	50	0.22	4.23	2.85	1320	
				60	0.20	4.04	2.76	1620	
60W	5RK60A-SFB 5RK60A-SFB-N	5RK60GN-SFB 5RK60GX-SFB	3Ø220	50	0.61	6.96	4.66	1350	4P
				60	0.55	6.02	3.80	1650	
	5RK60A-S4FB 5RK60A-S4FB-N	5RK60GN-S4FB 5RK60GX-S4FB	3Ø415	50	0.34	6.77	4.61	1350	
				60	0.30	5.83	3.69	1650	
90W	5RK90A-SFB 5RK90A-SFB-N	5RK90GN-SFB 5RK90GX-SFB	3Ø220	50	0.74	9.12	6.18	1350	4P
				60	0.69	7.90	5.04	1650	
	5RK90A-S4FB 5RK90A-S4FB-N	5RK90GN-S4FB 5RK90GX-S4FB	3Ø415	50	0.46	9.12	6.18	1350	
				60	0.39	7.90	5.04	1650	
120W	5RK120A-SFB 5RK120A-SFB-N	5RK120GN-SFB 5RK120GX-SFB	3Ø220	50	0.99	10.81	8.50	1320	4P
				60	0.91	8.93	7.13	1620	
	5RK120A-S4FB 5RK120A-S4FB-N	5RK120GN-S4FB 5RK120GX-S4FB	3Ø415	50	0.51	10.81	8.50	1320	
				60	0.44	8.93	7.13	1620	
150W	5RK150A-SFB 5RK150A-SFB-N	5RK150GN-SFB 5RK150GX-SFB	3Ø220	50	1.05	12.0	10.7	1320	4P
				60	1.00	10.1	9.5	1620	
	5RK150A-S4FB 5RK150A-S4FB-N	5RK150GN-S4FB 5RK150GX-S4FB	3Ø415	50	0.55	12.0	10.5	1320	
				60	0.51	10.0	9.3	1620	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V, Dual-voltage motor 3ph220V/380V and 3ph240V/415V available upon request.
Voltage "U" represents Dual-voltage 220V/380V; and "TQ" represents Dual-voltage 240V/415V.



COMPACT GEAR MOTOR

K SERIES

CLUTCH & BRAKE MOTOR SINGLE PHASE (1Ø – CAPACITOR RUN) FREQUENT START-STOP OPERATION



The DC 24V Clutch and Brake motor use a high precision, highly responsive clutch & brake for frequent start/stop operation. When the brake is in use, the clutch will separate the link from the brake, so there are no overruns, making positioning precise and accurate.

Clutch & Brake Models	GN –CB Type		GU-CB Type	
	Brake	Clutch	Brake	Clutch
Static friction torque (kg.cm)	25	20	35	30
Rated voltage (DC-V)	24	24	24	24
Capacity (Watt)	5	6	5.76	6.72
Movement (Start/Stop Operation)	Max: 60-80 cycle per minute*			

General Specifications:

Output Power (Watt)	Product Code Spur Shaft (For Clutch & Brake only)	AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)	Capacitor	
						Torque (Kg.cm)	RPM		Capacity (µF)	VAC
40W	5IK40GB-A2	1Ø110	50	0.83	2.26	3.0	1350	4P	10	250
			60	0.7	2.16	2.5	1650			
	5IK40GB-C2	1Ø240	50	0.4	2.17	3.4	1350	4P	2.5	450
			60	0.37	2.15	2.84	1650			
60W	5IK60GB-A2F	1Ø110	50	1.18	3.35	4.37	1350	4P	16	250
			60	1.1	3.1	4.3	1650			
	5IK60GB-C2F	1Ø240	50	0.58	3.35	4.37	1350	4P	3.5	450
			60	0.5	3.1	4.3	1650			
90W	5IK90GB-A2F	1Ø110	50	1.58	4.5	6.2	1350	4P	20	250
			60	1.43	4.3	5.43	1650			
	5IK90GB-C2F	1Ø240	50	0.80	4.6	6.2	1350	4P	5.5	450
			60	0.74	4.4	5.43	1650			
120W	5IK120GB-A2F	1Ø110	50	1.85	6.7	8.5	1350	4P	24	250
			60	1.60	5.8	7.3	1650			
	5IK120GB-C2F	1Ø240	50	0.98	6.4	8.5	1350	4P	6	450
			60	0.94	5.7	7.3	1650			
150W	5IK150GB-C2F	1Ø240	50	1.20	7.0	9.94	1320	4P	8 (7)	450
			60	1.12	6.4	8.65	1620			
180W	5IK180GB-C2F	1Ø240	50	1.30	7.8	11.3	1300	4P	8	450
			60	1.23	7.1	9.25	1600			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
Single Phase 220V/230V Available upon request.



COMPACT GEAR MOTOR

K SERIES

CLUTCH & BRAKE MOTOR THREE PHASE (3Ø)

FREQUENT START-STOP OPERATION



Features:

- Variable Speed Clutch and Brake Motor and Asynchronous Clutch and Brake Motor configurations available.

Clutch & Brake Models	GN –CB Type		GU-CB Type	
	Brake	Clutch	Brake	Clutch
Static friction torque (kg.cm)	25	20	35	30
Rated voltage (DC-V)	24	24	24	24
Capacity (Watt)	5	6	5.76	6.72
Movement (Start/Stop Operation)	Max: 60-80 cycles per minute*			

General Specifications:

Output Power (Watt)	Product Code	AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Spur Shaft (For Clutch & Brake only)					Torque (Kg.cm)	RPM	
40W	5IK40GB-S	3Ø220	50	0.36	4.7	3.17	1350	4P
			60	0.33	4.2	2.8	1650	
	5IK40GB-S4	3Ø415	50	0.21	4.5	3.0	1350	
			60	0.19	4.3	2.9	1650	
60W	5IK60GB-SF	3Ø220	50	0.5	7.4	4.9	1350	4P
			60	0.45	6.4	4.0	1650	
	5IK60GB-S4F	3Ø415	50	0.27	7.2	4.85	1350	
			60	0.25	6.2	3.88	1650	
90W	5IK90GB-SF	3Ø220	50	0.65	9.7	6.5	1350	4P
			60	0.60	8.4	5.3	1650	
	5IK90GB-S4F	3Ø415	50	0.37	9.7	6.5	1350	
			60	0.34	8.4	5.3	1650	
120W	5IK120GB-SF	3Ø220	50	0.75	11.5	8.95	1350	4P
			60	0.72	9.5	7.5	1650	
	5IK120GB-S4F	3Ø415	50	0.43	11.5	8.95	1350	
			60	0.39	9.5	7.5	1650	
150W	5IK150GB-SF	3Ø220	50	0.95	12.8	10.7	1320	4P
			60	0.88	10.2	9.5	1620	
	5IK150GB-S4F	3Ø415	50	0.50	12.8	10.5	1320	
			60	0.46	10.2	9.3	1620	
180W	5IK180GB-SF	3Ø220	50	1.10	13.4	12.3	1300	4P
			60	1.05	10.8	10.1	1600	
	5IK180GB-S4F	3Ø415	50	0.64	13.4	12.3	1300	
			60	0.60	10.8	10.1	1600	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.
 Dual-voltage motor 3ph220V/380V and 3ph240V/415V available upon request.
 Voltage "U" represents Dual-voltage 220V/380V; and "TQ" represents Dual-voltage 240V/415V.



COMPACT GEAR MOTOR

K SERIES

VARIABLE SPEED MOTOR WITH ANALOGUE TYPE SPEED CONTROLLER – SINGLE PHASE



USM72

Variable Speed Motor uses an Induction Motor with a modular tacho-generator fitted to the rear of the motor. The tacho-generator is made of a magnet connected directly to the motor shaft and a stator coil that detects the magnetic poles, and generates an AC voltage at 12 cycles per revolution. The motor can run in either forward or reverse directions. It has independent powerful cooling fan to cool down motor in order to achieve longer lifespan.

General Specifications:

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Number of Pole (P)	Rated Speed (rpm)	Permissible Torque		Starting Torque (Kg.cm)	Capacitor	
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X						1200 rpm	90 rpm		Capacitor (µF)	VAC
6W	2IK6RA-A2	2IK6RGN-A2	1Ø110	50	0.25	4P	90 ~ 1300	0.46	0.25	0.33	2.5	250
				60			90 ~ 1600					
	2IK6RA-C2	2IK6RGN-C2	1Ø240	50	90 ~ 1300							
				60	90 ~ 1600							
15W	3IK15RA-A2	3IK15RGN-A2	1Ø110	50	0.38	4P	90 ~ 1300	1.22	0.42	0.55	4.0	250
				60			90 ~ 1600					
	3IK15RA-C2	3IK15RGN-C2	1Ø240	50	90 ~ 1300		0.55			1.2	450	
				60	90 ~ 1600							
25W	4IK25RA-A2	4IK25RGN-A2	1Ø110	50	0.43	4P	90 ~ 1320	1.76	0.45	1.20	6.0	250
				60			90 ~ 1620	1.40	0.45			
	4IK25RA-C2	4IK25RGN-C2	1Ø240	50	90 ~ 1320		1.76	0.45	1.20	1.5	450	
				60	90 ~ 1620		1.40	0.45				
40W	5IK40RA-A2	5IK40RGN-A2	1Ø110	50	0.8	4P	90 ~ 1350	2.80	0.55	1.90	10	250
				60			90 ~ 1650	2.20	0.55			
	5IK40RA-C2	5IK40RGN-C2	1Ø240	50	90 ~ 1350		2.80	0.55	1.90	2.5	450	
				60	90 ~ 1650		2.20	0.55				
60W	5IK60RA-A2F	5IK60RGN-A2F	1Ø110	50	1.2	4P	90 ~ 1350	5.00	0.70	3.00	16	250
				60			90 ~ 1650	4.20	0.70			
	5IK60RA-C2F	5IK60RGN-C2F	1Ø240	50	90 ~ 1350		5.00	0.70	3.00	3.5	450	
				60	90 ~ 1650		4.20	0.70				
90W	5IK90RA-A2F	5IK90RGN-A2F	1Ø110	50	1.58	4P	90 ~ 1350	6.60	0.86	4.50	20	250
				60			90 ~ 1650	5.30	0.86			
	5IK90RA-C2F	5IK90RGN-C2F	1Ø240	50	90 ~ 1350		6.60	0.86	4.50	5.5	450	
				60	90 ~ 1650		5.30	0.86				
120W	5IK120RA-A2F	5IK120RGN-A2F	1Ø110	50	1.85	4P	90 ~ 1350	7.50	0.97	5.50	24	250
				60			90 ~ 1650	6.50	0.97			
	5IK120RA-C2F	5IK120RGN-C2F	1Ø240	50	90 ~ 1350		8.10	0.97	5.50	6.0	450	
				60	90 ~ 1650		7.40	0.97				
150W	5IK150RA-C2F	5IK150RGN-C2F	1Ø240	50	1.1	4P	90 ~ 1320	9.10	1.08	6.40	8.0 (7.0)	450
				60			90 ~ 1620	7.85	1.08			
180W	5IK180RA-C2F	5IK180RGN-C2F	1Ø240	50	1.15	4P	90 ~ 1300	11.0	1.20	7.20	8.0	450
				60			90 ~ 1600	9.2	1.20			
200W	6IK200RA-C2F	6IK200RGN-C2F	1Ø240	50	1.38	4P	90 ~ 1350	9.10	1.08	9.20	10	450
				60			90 ~ 1650	7.85	1.08			

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement. Single Phase 220V/230V available upon request.

SPEED CONTROLLER OPTIONS



USM71 Series ▪ USM72 Series (Speed Range 90~1350rpm)

- > Unit Type Analogue Speed Controller (Non-LED display) / Panel Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 100V~110V (USM71) / 1phase 220V~240V (USM72), 50Hz/60Hz.

Key Features :

- > Simplest configuration and operation for all users.
- > Forward and Reverse operation via CW-Com / CCW-Com connection.
- > Offers basic functions : Adjustable speed, Forward/Reverse Running, On-off operation.



USM1000 Series ▪ USM2000 Series (Speed Range 90~1350rpm)

- > Unit Type Digital Display Speed Controller / Panel Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 100V~110V (USM1000) / 1phase 220V~240V (USM2000), 50Hz/60Hz.

Key Features :

- > Simplest configuration and operation for all users.
- > Digital display indicate motor running speed (rpm)
- > Offers basic functions : Adjustable speed, Forward/Reverse Running, On-off operation.



NEW

USP72 Series (Speed Range 150~1350rpm)

- > Unit Type Digital Display Speed Controller / Panel Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 220V~240V (USP72), 50Hz/60Hz.

Key Features :

- > Digital display shows real time motor speed (rpm) (optional setting) for ease of monitoring.
- > Allow acceleration and deceleration operation for soft-starting and soft-stopping.
- > Forward and reverse operation via digital setting (optional CW or CCW wiring).
- > Allow pre-set of Max/Min speed range between 200~1350rpm.



NEW

DSC72 Series (Speed Range 150~1350rpm)

- > Din Rail Type Digital Display Speed Controller with external VR / Din Rail Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 220V~240V (DSC72), 50Hz/60Hz.

Key Features :

- > Compact size / Space-saving slim design for adjustable speed operation with digital display
- > Digital output terminal (for brake control (on/off), alarm output signal / output signal when motor stop running).
- > Allow acceleration and deceleration operation for soft-starting and soft-stopping.
- > External Potentiometer (VR) enables long distance speed adjustment from controller.



SS61 Series ▪ SS62 Series (8pin) (Speed Range 90~1350rpm)

- > Din Rail Type Analogue Speed Controller with external VR / Din Rail Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 100V~110V (SS61) / 1phase 220V~240V (SS62), 50Hz/60Hz.

Key Features :

- > Compact design / space saving adjustable speed controller.
- > External VR enables long distance speed adjustment from controller.
- > Offers basic functions : Adjustable speed, Forward/Reverse Running, On-off operation



SD61 Series ▪ SD62 Series (8pin) (Speed Range 90~1350rpm)

- > Din Rail Type Analogue Speed Controller / Din Rail Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 100V~110V (SD61) / 1phase 220V~240V (SD62), 50Hz/60Hz.

Key Features :

- > Compact design / space saving adjustable speed controller.
- > Built-in Potentiometer (VR) reduces wiring and trunking demand in the panel box.



SS31 Series ▪ SS32 Series (11pin) (Speed Range 90~1350rpm)

- > Din Rail Type Analogue Brake Pack Speed Controller with external VR / Din Rail Mounting
- > Motor Rating : 6W ~ 250W (6W, 15W, 25W, 40W, 60W, 90W, 120W, 150W, 200W & 250W)
- > Input Voltage : 1phase 100V~110V (SS31) / 1phase 220V~240V (SS32), 50Hz/60Hz.

Key Features :

- > Simple adjustable speed controller with electronic braking.
- > To stops the motor instantly with an electronic brake (trigger by current).
- > External Potentiometer (VR) enables long distance speed adjustment from controller.



COMPACT GEAR MOTOR

K SERIES

ASYNCHRONOUS MOTOR WITH LED DIGITAL DISPLAY

IGBT INVERTER – SINGLE PHASE



Asynchronous Motor a.k.a. Inverter Duty Motor is designed for optimized performance to run with variable frequency drive. It offers longer product lifespan, consistent performance, and less vibration operation.

Features:

- The package include a 3phase motor operated by 1phase IGBT inverter with LED High Brightness Display.
- 120% | 150% Overload Protection with wide speed control range from 0-400Hz by operation panel or speed potentiometer.
- Spec-Key button on the panel allows preset of 2 different speeds, forward/reverse operation instantly.
- Acceleration and deceleration control enables soft-start and soft-stop operation. Setting of upper and lower speed limits, and counter function.
- Compatible mounting with conventional USM Type speed controller.
- Instantaneous reversal, electromagnetic brake, clutch & brake options available.

General Specifications (4 Pole Motor):

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	Rated Speed (RPM)	
25W	4IK25VA-S	4IK25VGN-S	3Ø220	50	0.23	3.0	2.06	90 ~ 1350	4P
				60	0.21	2.6	1.63	90 ~ 1650	
40W	5IK40VA-S 5IK40VA-S-N	5IK40VGN-S 5IK40VGX-S	3Ø220	50	0.36	4.7	3.17	90 ~ 1350	4P
				60	0.33	4.2	2.8	90 ~ 1650	
60W	5IK60VA-SF 5IK60VA-SF-N	5IK60VGN-SF 5IK60VGX-SF	3Ø220	50	0.5	7.4	4.9	90 ~ 1400	4P
				60	0.45	6.4	4.5	90 ~ 1700	
90W	5IK90VA-SF 5IK90VA-SF-N	5IK90VGN-SF 5IK90VGX-SF	3Ø220	50	0.65	9.7	6.5	90 ~ 1400	4P
				60	0.6	8.4	5.3	90 ~ 1700	
120W	5IK120VA-SF 5IK120VA-SF-N	5IK120VGN-SF 5IK120VGX-SF	3Ø220	50	0.75	11.5	8.95	90 ~ 1400	4P
				60	0.72	9.5	7.5	90 ~ 1700	
150W	5IK150VA-SF 5IK150VA-SF-N	5IK150VGN-SF 5IK150VGX-SF	3Ø220	50	0.95	12.8	10.7	90 ~ 1350	4P
				60	0.88	10.2	9.5	90 ~ 1650	
180W	5IK180VA-SF 5IK180VA-SF-N	5IK180VGN-SF 5IK180VGX-SF	3Ø220	50	1.04	13.4	12.3	90 ~ 1300	4P
				60	1.00	10.8	10.1	90 ~ 1600	
200W	6IK200VA-SF	6IK200VGN-SF	3Ø220	50	1.28	18.5	15.7	90 ~ 1400	4P
				60	1.10	15.9	13.8	90 ~ 1700	
250W	6IK250VA-SF	6IK250VGN-SF	3Ø220	50	1.42	21.6	17.3	90 ~ 1400	4P
				60	1.23	19.2	15.1	90 ~ 1700	

General Specifications (2 Pole Motor):

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft						Torque (Kg.cm)	Rated Speed (RPM)	
60W	5IK60VA-SF-2P 5IK60VA-SF-N-2P		3Ø220	50	0.48	9.6	2	200 ~ 2780	2P
				60	0.43	9.0	1.7	200 ~ 3280	
90W	5IK90VA-SF-2P 5IK90VA-SF-N-2P		3Ø220	50	0.62	16	3.6	200 ~ 2780	2P
				60	0.58	12	3.2	200 ~ 3280	
120W	5IK120VA-SF-2P 5IK120VA-SF-N-2P		3Ø220	50	0.72	20	4.4	200 ~ 2780	2P
				60	0.69	16	4.1	200 ~ 3280	
150W	5IK150VA-SF-2P 5IK150VA-SF-N-2P		3Ø220	50	0.98	23	5	200 ~ 2720	2P
				60	0.94	18	4.2	200 ~ 3160	
180W	5IK180VA-SF-2P 5IK180VA-SF-N-2P		3Ø220	50	1.17	25	5.5	200 ~ 2720	2P
				60	1.10	21	4.9	200 ~ 3160	

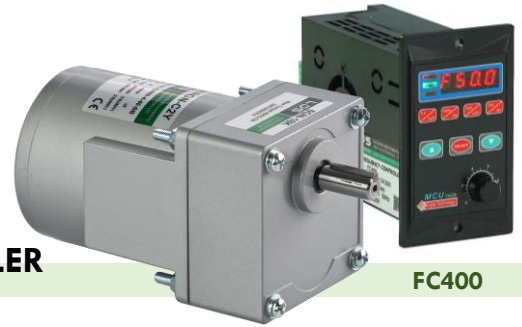
Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.



COMPACT GEAR MOTOR

K SERIES

ASYNCHRONOUS MOTOR WITH FC400 FREQUENCY CONTROLLER – SINGLE PHASE



Asynchronous Motor a.k.a. Inverter Duty Motor is designed for optimized performance to run with variable frequency drive. It offers longer product lifespan, consistent performance, and less vibration operation.

Features:

- The package include a 3phase motor operated by 1 phase Frequency Controller.
- Low cost with compact design controller for simple operation requirement.
- Economical construction offers basic controller functions with consistent performance.
- Allow acceleration and deceleration of speed to provide soft-starting and stopping.
- Direct replaceable - same size and mounting with major speed control motors (USM / USP / IGBT)

General Specifications (4 Pole Motor):

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft / Key Shaft	Helical Shaft / Helical Shaft-X					Torque (Kg.cm)	Rated Speed (RPM)	
25W	4IK25VA-S	4IK25VGN-S	3Ø220	50	0.23	3.0	2.06	90 ~ 1350	4P
				60	0.21	2.6	1.63	90 ~ 1650	
40W	5IK40VA-S 5IK40VA-S-N	5IK40VGN-S 5IK40VGX-S	3Ø220	50	0.36	4.7	3.17	90 ~ 1350	4P
				60	0.33	4.2	2.8	90 ~ 1650	
60W	5IK60VA-SF 5IK60VA-SF-N	5IK60VGN-SF 5IK60VGX-SF	3Ø220	50	0.5	7.4	4.9	90 ~ 1400	4P
				60	0.45	6.4	4.5	90 ~ 1700	
90W	5IK90VA-SF 5IK90VA-SF-N	5IK90VGN-SF 5IK90VGX-SF	3Ø220	50	0.65	9.7	6.5	90 ~ 1400	4P
				60	0.6	8.4	5.3	90 ~ 1700	
120W	5IK120VA-SF 5IK120VA-SF-N	5IK120VGN-SF 5IK120VGX-SF	3Ø220	50	0.75	11.5	8.95	90 ~ 1400	4P
				60	0.72	9.5	7.5	90 ~ 1700	
150W	5IK150VA-SF 5IK150VA-SF-N	5IK150VGN-SF 5IK150VGX-SF	3Ø220	50	0.95	12.8	10.7	90 ~ 1350	4P
				60	0.88	10.2	9.5	90 ~ 1650	
180W	5IK180VA-SF 5IK180VA-SF-N	5IK180VGN-SF 5IK180VGX-SF	3Ø220	50	1.04	13.4	12.3	90 ~ 1300	4P
				60	1.00	10.8	10.1	90 ~ 1600	
200W	6IK200VA-SF	6IK200VGN-SF	3Ø220	50	1.28	18.5	15.7	90 ~ 1400	4P
				60	1.10	15.9	13.8	90 ~ 1700	
250W	6IK250VA-SF	6IK250VGN-SF	3Ø220	50	1.42	21.6	17.3	90 ~ 1400	4P
				60	1.23	19.2	15.1	90 ~ 1700	

General Specifications (2 Pole Motor):

Output Power (Watt)	Product Code		AC Voltage (V)	Frequency (Hz)	Current (A)	Starting Torque (Kg.cm)	Rated		Number of Pole (P)
	Round Shaft						Torque (Kg.cm)	Rated Speed (RPM)	
60W	5IK60VA-SF-2P 5IK60VA-SF-N-2P		3Ø220	50	0.48	9.6	2	200 ~ 2780	2P
				60	0.43	9.0	1.7	200 ~ 3280	
90W	5IK90VA-SF-2P 5IK90VA-SF-N-2P		3Ø220	50	0.62	16	3.6	200 ~ 2780	2P
				60	0.58	12	3.2	200 ~ 3280	
120W	5IK120VA-SF-2P 5IK120VA-SF-N-2P		3Ø220	50	0.72	20	4.4	200 ~ 2780	2P
				60	0.69	16	4.1	200 ~ 3280	
150W	5IK150VA-SF-2P 5IK150VA-SF-N-2P		3Ø220	50	0.98	23	5	200 ~ 2720	2P
				60	0.94	18	4.2	200 ~ 3160	
180W	5IK180VA-SF-2P 5IK180VA-SF-N-2P		3Ø220	50	1.17	25	5.5	200 ~ 2720	2P
				60	1.10	21	4.9	200 ~ 3160	

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.



COMPACT INVERTER

IGBT SERIES

1PHASE INVERTER WITH 150% OVERLOAD PROTECTION



MODEL NO	IGBT - K100	IGBT - K200
Motor Rating (maximum)	25W ~ 120W (1/6HP)	25W ~ 250W (1/3 HP)
Rated Output Capacity	0.4kVA	0.6kVA
Rated Output Current	1 Amp	1.5 Amp
Rated Output Voltage	AC 3 Phase 220V (3Ø220V)	
Range of Output Frequency	0.1Hz ~ 400Hz	
Power Source Voltage	AC 1 Phase 200V~240V (1Ø), 50Hz/60Hz	
Input Current	2 Amp	3 Amp
Permissible AC Power Source Fluctuation	200V ~ 240V, 50Hz/60Hz, ± 5%	
Overload Protection	120% 150% of rated output current for 1 minute	
Cooling Method	Self-cooling	
Protection Level	IP20	
Dimension	Body 52 x 127 x 60mm • Mounting Frame: 60 x 100 x 3mm	
Weight	0.4KG	
Options	With Braking Transistor / Without Braking Transistor	
Remark	Product dimension and mounting compatible with US Type Speed Controller (USM71-USM72 / US71-US72)	

GENERAL SPECIFICATIONS / CONTROL CHARACTERISTICS

Control Method:	Voltage vector sinusoidal PWM control (V/F control) Switching frequency : 800~16kHz	Other Functions:	Automatic operation for energy-saving • Automatic torque compensation • Automatic adjustment for output voltage stability • Automatic adjustment of switching frequency • Slip compensation / Counter function • Restart after instantaneous power failure • Modbus (RS-485) communication • Over-torque detection • Jump frequency • Setting for upper and lower limits of output frequency • 8-preset speeds • S-curve acceleration & deceleration • Temperature management • Parameters duplication
Frequency Range:	0.1Hz ~ 400.00Hz	Frequency Setting Signal:	Operation panel (including KP-601A keypad): ▲▼ Analogue Signal: (DC 0 ~ 10V) / 0~100% Digital Signal: Jog speed, 8-preset speeds Modbus (RS485) Communication
Resolution:	Digital Command : 0.01Hz • Analogue Command: 0.06Hz / 60Hz	Operation Signal:	Operation panel (including KP-601A keypad): RUN / STOP • Digital Signal: FWD (forward) / REV (reverse) rotation control • Modbus (RS-485) communication
Overload Protection:	150% of rated output current for 1 minute	Multi-Function Inputs:	3 programmable input terminal: X1~X3 • Response time (1~255, unit 1ms) • Refer to the F5.19~F5.21 functions setting description.
DC Braking:	Start/Stop Braking Time: 0 ~ 60.0 second • Stop Braking Frequency : 0.1Hz ~ 60Hz • Braking Ability: 0~150% of rated current	Analogue Inputs:	1 set of analogue input: VI (DC 0 ~ 10V) • Analogue filter (0~255, unit 5ms), the dead band of analogue frequency, gain and bias are adjustable
Braking Torque:	Approximately 20%		
V/F Pattern:	Linear, Energy-Saving mode (automatic adjusting V/F pattern according to the load condition) • Square of 1.5, 1/7 and 2 curves. • V/F pattern (2 V/F points) • Output voltage adjustment of V/F pattern • (Variable voltage adjustment of V/F pattern for acceleration and deceleration).		



COMPACT INVERTER

IGBT SERIES

1PHASE INVERTER WITH 150% OVERLOAD PROTECTION



The compact IGBT inverter is especially advantageous for standard application by virtue of its user friendliness. It offers simple and safe operability, energy saving, compact design as well as superior performance. The inverter is used in numerous applications such as conveyor drives, feeders, machining tool and door drives. It is compatible with Unit Type AC Speed Controller (US series).

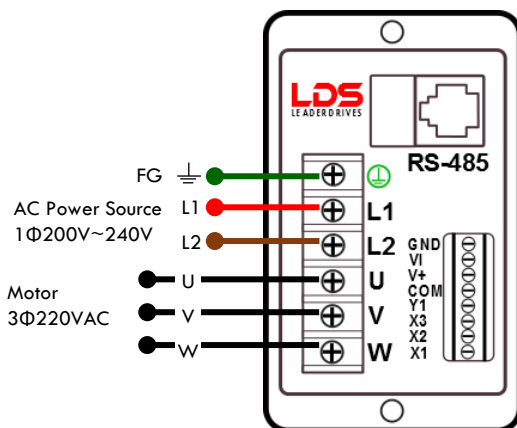
Features:

- 150% Overload Protection.
- Wide speed control range from 0-400Hz by operation panel or speed potentiometer.
- Spec-Key button on panel allows switch of 2 different speeds, forward/reverse operation instantly.
- Acceleration and Deceleration control enables soft-start and soft-stop operation.
- Setting of upper and lower speed limits, DC braking, and counter function.
- Compact design enables panel mounting and space saving.

Function Key	
	Start
	Stop • Reset
	Up • Down
	Enter or Exit the Function Mode
	Set • Switch Monitor Mode
	Switch Function • Group • Number
	Special Function Key

- Status Display I**
Indicator : Frequency • Voltage • Current • Operation
- Status Display II**
Power Indicator • SPEC • START Key Indicator
- Main LED Display (high brightness)**
Display of Setting & Error Code
- Potentiometer / Knob**
Fast Setting and Input

MAIN CONTROL CIRCUIT TERMINALS



PORTABLE KEYPAD

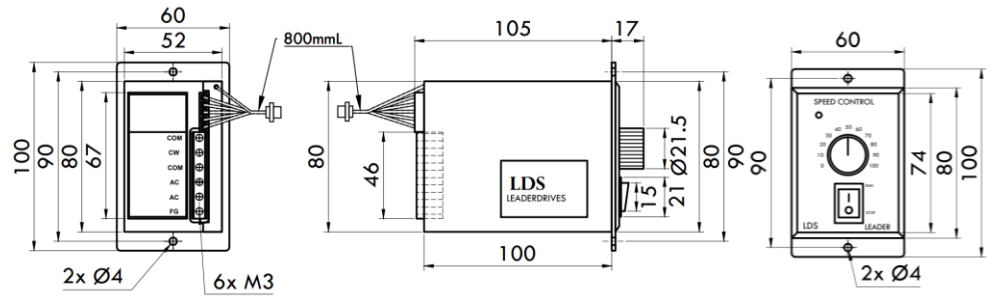
The keypad

- Enable remote control of the inverter via Modbus (RS485) Communication.
- Duplication of parameter from Inverter to Inverter.

Acrylic Protective Cover

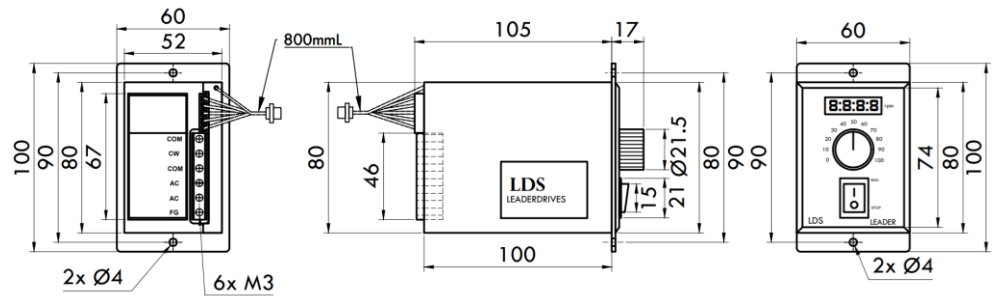
Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement. Comprehensive Product Manual of the Inverter available upon request.

① **USM71 - USM72 SERIES**
 UNIT TYPE SPEED CONTROLLER
 POWER RATING : 6W ~ 250W
 INPUT VOLTAGE : 1-PHASE 110V/240V



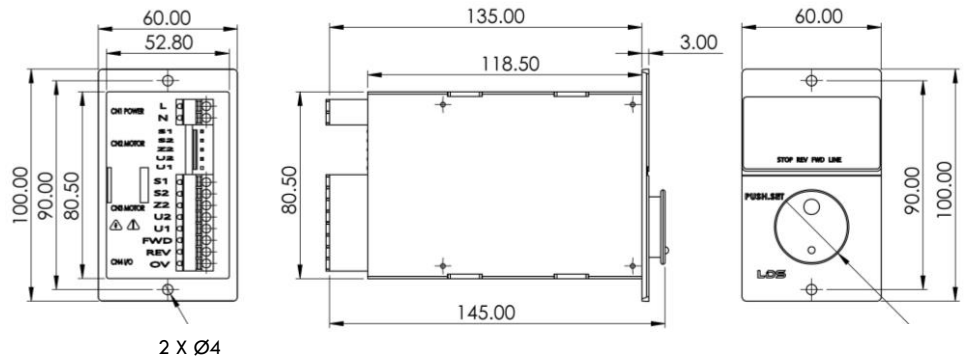
Cable Length of Controller : 800mm

② **USM1000 - USM2000 SERIES**
 UNIT TYPE SPEED CONTROLLER WITH LED DIGITAL DISPLAY
 POWER RATING : 6W ~ 250W
 INPUT VOLTAGE : 1-PHASE 110V/240V



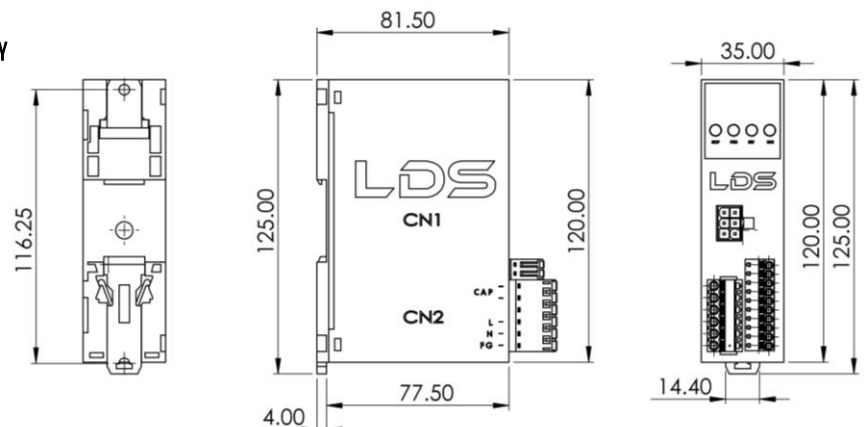
Cable Length of Controller : 800mm

③ **USP72 SERIES**
 UNIT TYPE SPEED CONTROLLER
 POWER RATING : 6W ~ 250W
 INPUT VOLTAGE : 1-PHASE 220V

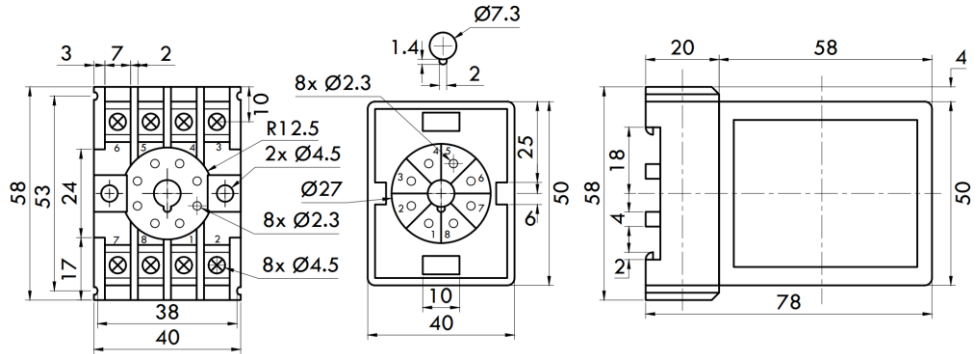


Cable Length of Controller : 800mm

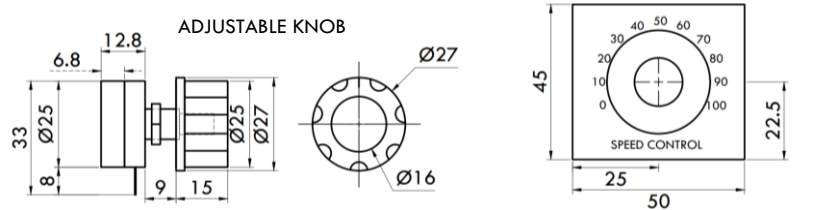
④ **DSC72 SERIES**
 DIN RAIL TYPE SPEED CONTROLLER WITH DIGITAL DISPLAY
 WITH EXTERNAL POTENTIOMETER (VVR)
 POWER RATING :
 6W ~ 250W
 INPUT VOLTAGE :
 1-PHASE 220V



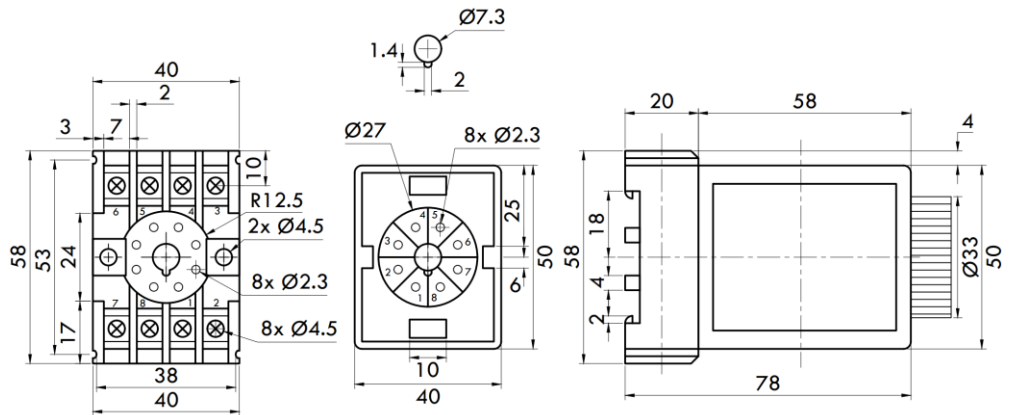
⑤ SS61 - SS62 SERIES
DIN RAIL TYPE SPEED CONTROLLER WITH EXTERNAL POTENTIOMETER (VR)
POWER RATING : 6W ~ 180W
INPUT VOLTAGE : 1-PHASE 110V/240V



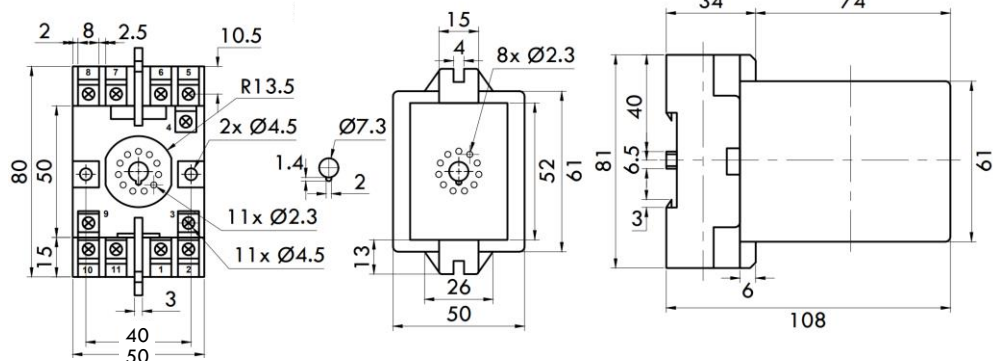
EXTERNAL SPEED POTENTIOMETER (VR KNOB)
FOR DIN RAIL TYPE SPEED CONTROLLER
POTENTIOMETER RESISTANCE : 20K OHM (20KΩ), 1W



⑥ SD61 - SD62 SERIES
DIN RAIL TYPE SPEED CONTROLLER
POWER RATING : 6W ~ 180W
INPUT VOLTAGE : 1-PHASE 110V/240V



⑦ SS31 - SS32 SERIES
DIN RAIL TYPE BRAKE PACK SPEED CONTROLLER
WITH EXTERNAL POTENTIOMETER (VR)
POWER RATING : 6W ~ 180W
INPUT VOLTAGE : 1-PHASE 110V/240V



Unit of measurement : mm (millimeter)

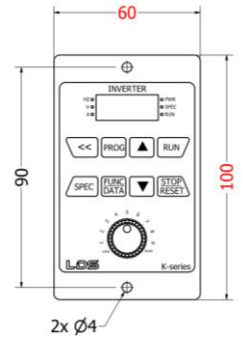
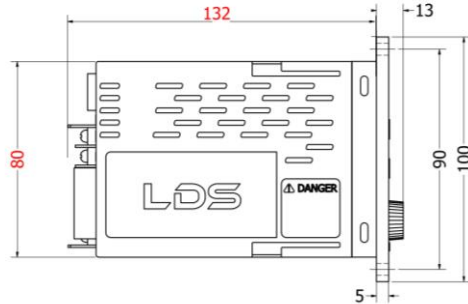
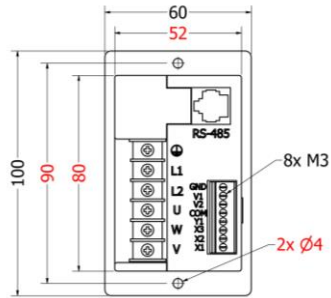
① IGBT-K060 ▪ IGBT-K100 ▪ IGBT-K180 ▪ IGBT-K200 ▪ IGBT-K250 SERIES

COMPACT IGBT INVERTER WITH LED DIGITAL DISPLAY

POWER RATING : 25W ~ 250W

INPUT VOLTAGE : 1-PHASE 220V~240V

OUTPUT VOLTAGE : 3-PHASE 220V



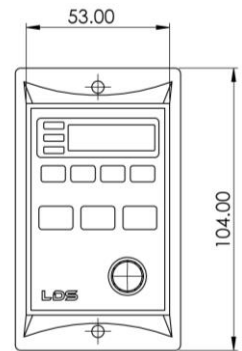
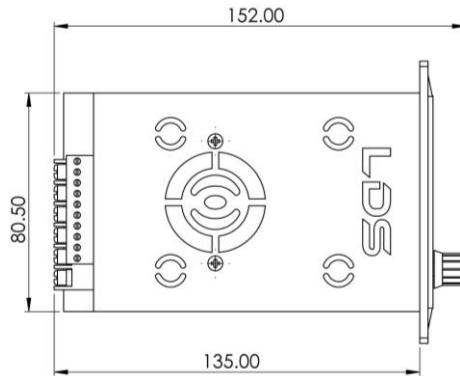
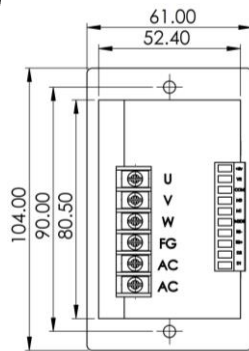
② USM1000 ▪ USM2000 SERIES

COMPACT FREQUENCY CONTROLLER WITH DIGITAL DISPLAY

POWER RATING : 25W ~ 400W

INPUT VOLTAGE : 1-PHASE 220V

OUTPUT VOLTAGE : 3-PHASE 220V



BLANK

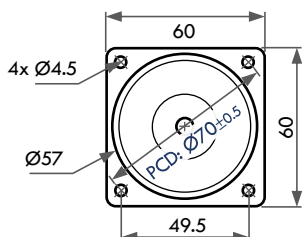
DIMENSION : COMPACT AC MOTOR



6W

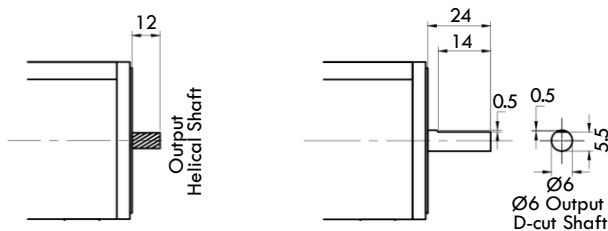
1 MOTOR FRAME DIMENSION FOR ALL 6W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
SPEED CONTROL MOTOR



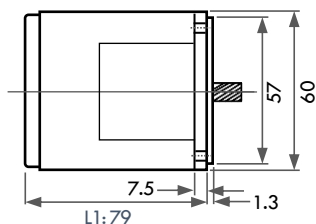
2 MOTOR OUTPUT SHAFT TYPE FOR ALL 6W MOTOR

HELICAL-SHAFT (PINION-SHAFT) OUTPUT ROUND-SHAFT (D-CUT)
21K6GN-□ 21K6A-□
21K6RG-N-□ 21K6RA-□
2RK6GN-□ 2RK6A-□
2RK6RG-N-□ 2RK6RA-□



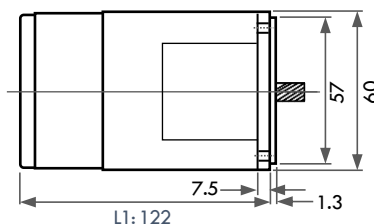
3 INDUCTION MOTOR 6W

21K6GN-□
REVERSIBLE MOTOR 6W
2RK6GN-□



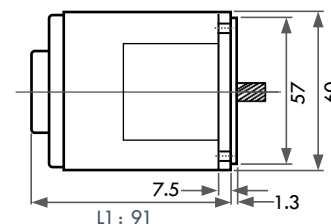
4 ELECTROMAGNETIC BRAKE MOTOR 6W

21K6GN-□-B
REVERSIBLE BRAKE MOTOR 6W
2RK6GN-□-B



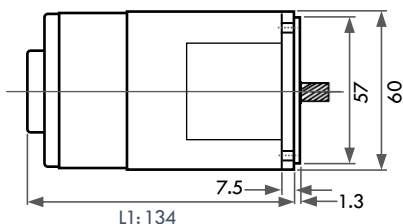
5 SPEED CONTROL MOTOR 6W

21K6RG-N-□
REVERSIBLE SPEED CONTROL MOTOR 6W
2RK6RG-N-□



6 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 6W

21K6RG-N-□-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 6W
2RK6RG-N-□-B



NOTE:

□ INPUT VOLTAGE OF ELECTRIC MOTOR
A : 1PHASE 100V (50/60HZ)
A2 : 1PHASE 110V (50/60HZ)
C : 1PHASE 220V (50/60HZ)
C2 : 1PHASE 240V (50/60HZ)

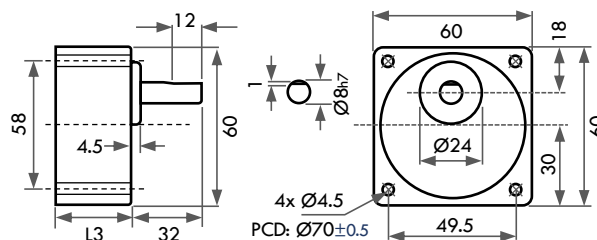
L1 : BODY LENGTH OF STANDARD MOTOR

DIMENSION : COMPACT GEARHEAD



7 2GN-K PARALLEL SHAFT GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
2GN5K ~ 2GN18K	5, 6, 7.5, 9, 12.5, 15, 18	30
2GN3K, 2GN25K ~ 2GN75K	3, 25, 30, 36, 50, 60, 75	35
2GN90K ~ 2GN300K	90, 100, 120, 150, 180, 240, 300	41



Gearhead Shaft Size : Ø8mm x 27.5mmL (D-cut)

Unit of measurement : mm (millimeter)

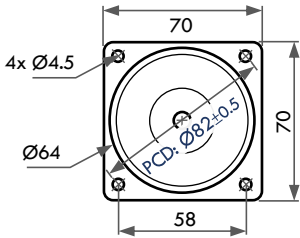
DIMENSION : COMPACT AC MOTOR



15W

1 MOTOR FRAME DIMENSION FOR ALL 15W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
SPEED CONTROL MOTOR

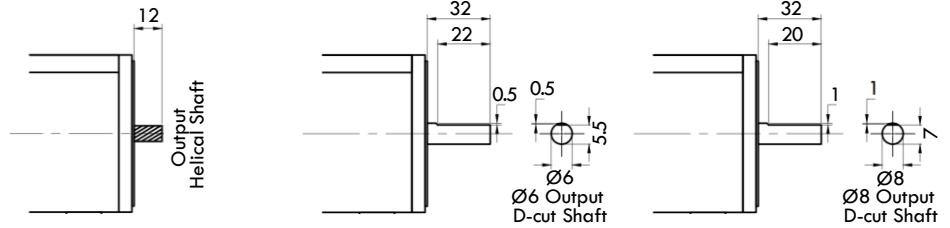


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 15W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
3IK15GN-□
3IK15RGN-□
3RK15GN-□
3RK15RGN-□

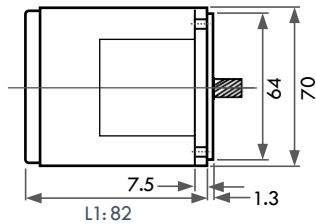
OUTPUT ROUND-SHAFT (D-CUT)
3IK15A-□
3IK15RA-□
3RK15A-□
3RK15RA-□

OUTPUT ROUND-SHAFT (D-CUT)
3IK15A-□-S8
3IK15RA-□-S8
3RK15A-□-S8
3RK15RA-□-S8



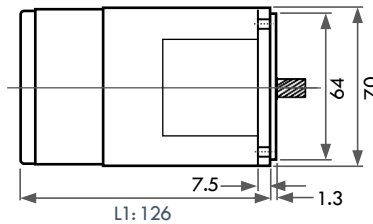
3 INDUCTION MOTOR 15W

3IK15GN-□
REVERSIBLE MOTOR 15W
3RK15GN-□



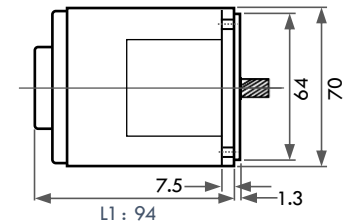
4 ELECTROMAGNETIC BRAKE MOTOR 15W

3IK15GN-□-B
REVERSIBLE BRAKE MOTOR 15W
3RK15GN-□-B



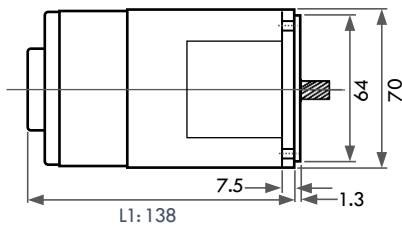
5 SPEED CONTROL MOTOR 15W

3IK15RGN-□
REVERSIBLE SPEED CONTROL MOTOR 15W
3RK15RGN-□



6 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 15W

3IK15RGN-□-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 15W
3RK15RGN-□-B



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)

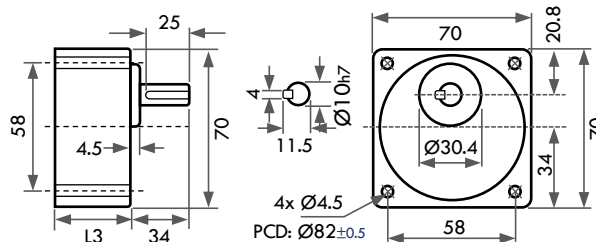
L1 : BODY LENGTH OF STANDARD MOTOR

DIMENSION : COMPACT GEARHEAD



7 3GN-K PARALLEL SHAFT GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
3GN5K ~ 3GN18K	5, 6, 7.5, 9, 12.5, 15, 18	31
3GN3K, 3GN25K ~ 3GN75K	3, 25, 30, 36, 50, 60, 75	37
3GN90K ~ 3GN240K	90, 100, 120, 150, 180, 240	43



Gearhead Shaft Size : Ø10mm x 27.5mm (4x4mm Keyway)

Unit of measurement : mm (millimeter)

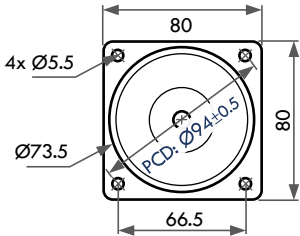
DIMENSION : COMPACT AC MOTOR



25W

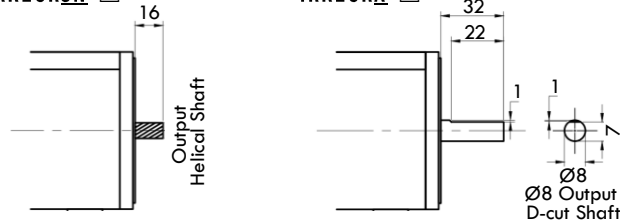
1 MOTOR FRAME DIMENSION FOR ALL 25W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
SPEED CONTROL MOTOR

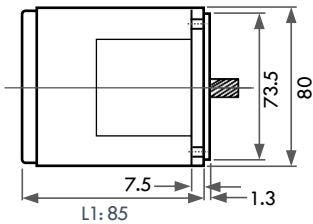


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 25W MOTOR

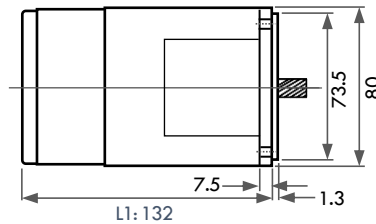
HELICAL-SHAFT (PINION-SHAFT) OUTPUT ROUND-SHAFT (D-CUT)
41K25GN-□ 41K25A-□
41K25RGN-□ 41K25RA-□
41K25VGN-□ 41K25VA-□
4RK25GN-□ 4RK25A-□
4RK25RGN-□ 4RK25RA-□



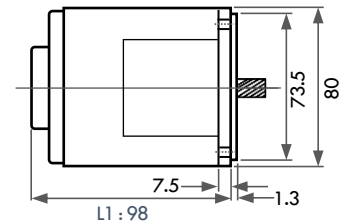
3 INDUCTION MOTOR 25W 41K25GN-□ / 41K25VGN-□ REVERSIBLE MOTOR 25W 4RK25GN-□



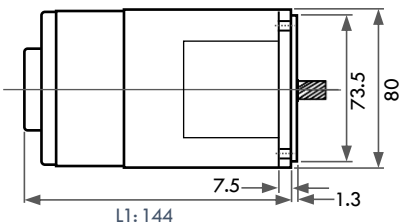
4 ELECTROMAGNETIC BRAKE MOTOR 25W 41K25GN-□-B / 41K25VGN-□-B REVERSIBLE BRAKE MOTOR 25W 4RK25GN-□-B



5 SPEED CONTROL MOTOR 25W 41K25RGN-□ REVERSIBLE SPEED CONTROL MOTOR 25W 4RK25RGN-□

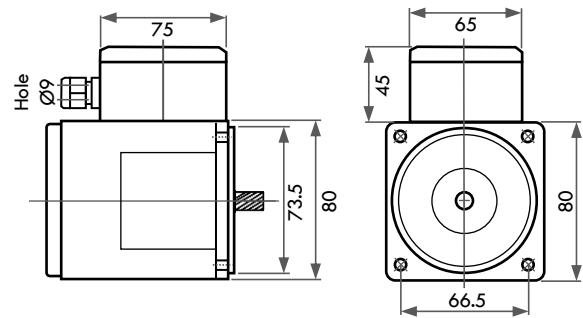


6 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 25W 41K25RGN-□-B REVERSIBLE SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 25W 4RK25RGN-□-B



7 MOTOR WITH TERMINAL BOX (IP44)

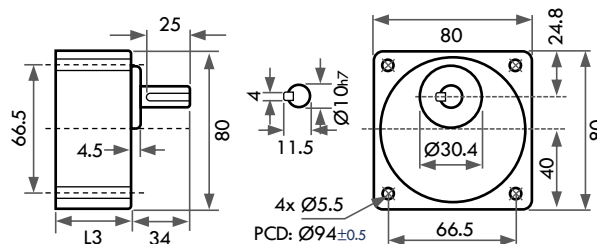
41K25A-□T
41K25GN-□T
41K25VGN-□T
41K25RA-□T
41K25RGN-□T
41K25GN-□BT
4RK25A-□T
4RK25GN-□T
4RK25RGN-□T
4RK25GN-□BT



DIMENSION : COMPACT GEARHEAD

8 4GN-K PARALLEL SHAFT GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
4GN5K ~ 4GN18K	5, 6, 7.5, 9, 12.5, 15, 18	33
4GN3K, 4GN25K ~ 4GN75K	3, 25, 30, 36, 50, 60, 75	40
4GN90K ~ 4GN300K	90, 100, 120, 150, 180, 240, 300	47



Gearhead Shaft Size : Ø10mm x 27.5mmL (4x4mm Keyway)

NOTE:

□ INPUT VOLTAGE OF ELECTRIC MOTOR

- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR

Unit of measurement : mm (millimeter)

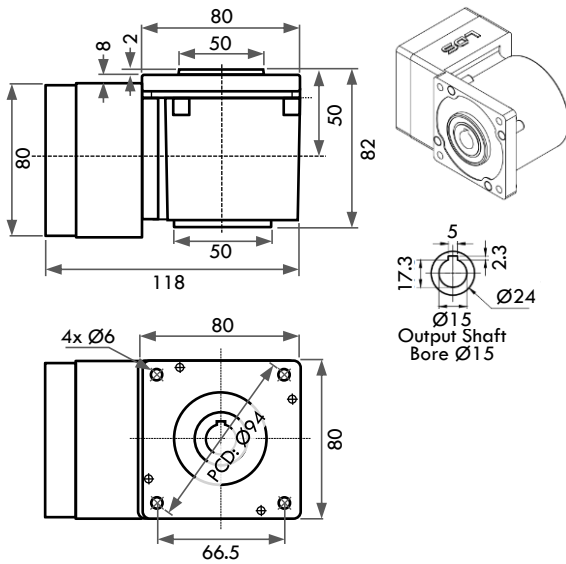
DIMENSION : COMPACT SPIRAL BEVEL GEARHEAD



25W

9 4GN-RH HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)
4GN9RH ~ 4GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225



Unit of measurement : mm (millimeter)

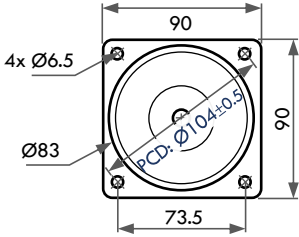
DIMENSION : COMPACT AC MOTOR



40W

1 MOTOR FRAME DIMENSION FOR ALL 40W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

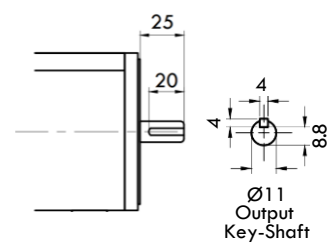
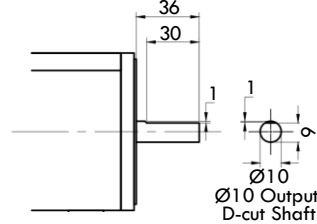
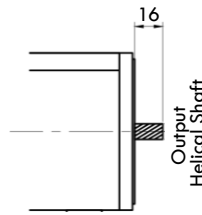


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 40W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
51K40GN/ØX-□
51K40RGN/RGX-□
51K40VGN/VGX-□
5RK40GN/ØX-□
5RK40RGN/RGX-□

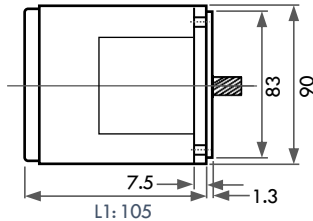
OUTPUT ROUND-SHAFT (D-CUT)
51K40A-□
51K40RA-□
51K40VA-□
5RK40A-□
5RK40RA-□

OUTPUT KEY-SHAFT
51K40A-□-N
51K40RA-□-N
51K40VA-□-N
5RK40A-□-N
5RK40RA-□-N



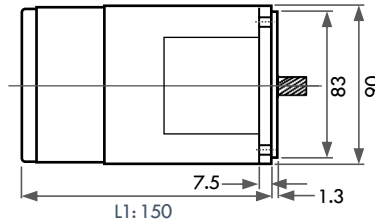
3 INDUCTION / ASYNCHRONOUS MOTOR 40W

51K40GN-□ / 51K40VGN-□
REVERSIBLE MOTOR 40W
5RK40GN-□



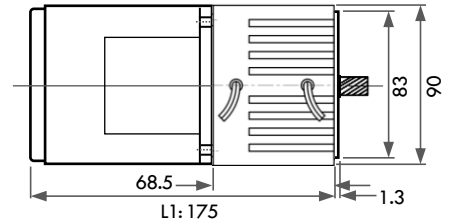
4 ELECTROMAGNETIC BRAKE MOTOR 40W

51K40GN-□-B / 51K40VGN-□-B
REVERSIBLE BRAKE MOTOR 40W
5RK40GN-□-B



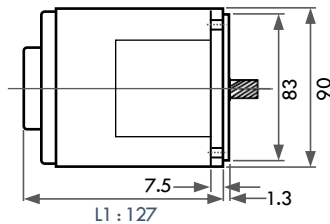
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 40W

51K40GB-□ & 5GU-CB
51K40VGB-□ & 5GU-CB



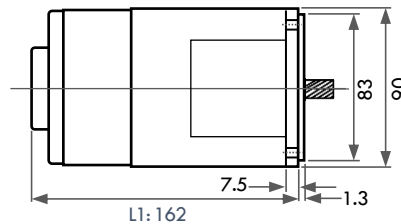
6 SPEED CONTROL MOTOR 40W

51K40RGN-□
REVERSIBLE SPEED CONTROL MOTOR 40W
5RK40RGN-□



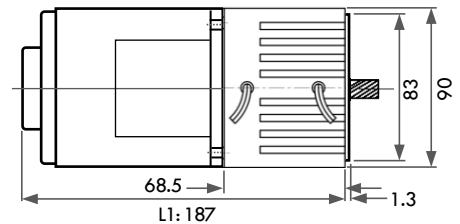
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 40W

51K40RGN-□-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 40W
5RK40RGN-□-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 40W

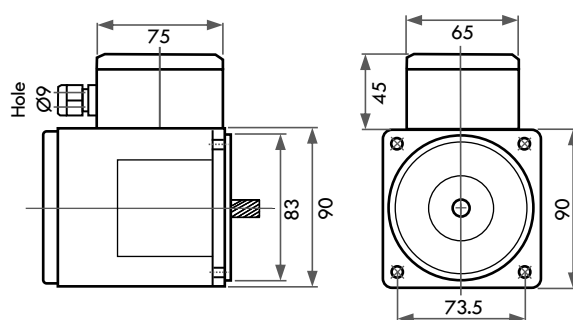
51K40RGB-□ & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

51K40A-□T 5RK40A-□T
51K40GN-□T 5RK40GN-□T
51K40GX-□T 5RK40GX-□T
51K40GB-□T 5RK40GB-□T
51K40VGN-□T 5RK40VGN-□T
51K40RGN-□T 5RK40RGN-□T
51K40RGX-□T 5RK40RGX-□T
51K40RGB-□T 5RK40RGB-□T
51K40GN-□BT 5RK40GN-□BT
51K40GX-□BT 5RK40GX-□BT
51K40GB-□BT 5RK40GB-□BT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

40W



MOTOR WITH PARALLEL SHAFT GEARHEAD
5GN-K



MOTOR WITH DECIMAL GEAR (DOUBLE REDUCTION GEARHEAD)
5GN10X + 5GU-KB



MOTOR WITH RIGHT ANGLE WORM GEARHEAD
DMRV030 (8MRV030)



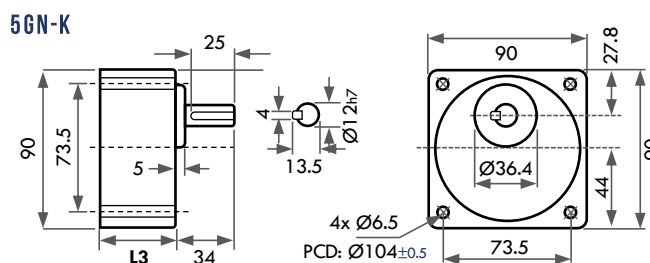
MOTOR WITH WORM GEARHEAD (DOUBLE REDUCTION GEARHEAD)
5GN-K-N + 8MRV030



MOTOR WITH RIGHT ANGLE SPIRAL BEVEL GEARHEAD
5GU-RH

10 5GN-K PARALLEL SHAFT GEARHEAD

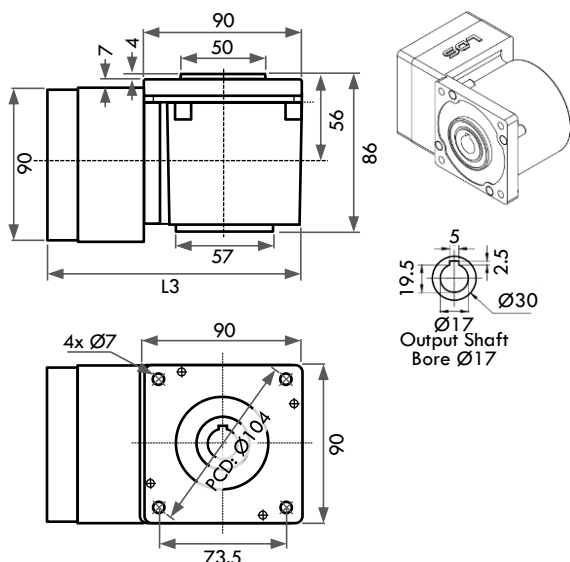
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
SINGLE GEARHEAD		
5GN3K ~ 5GN18K	3, 5, 6, 7.5, 9, 12.5, 15, 18	43
5GN25K ~ 5GN75K	25, 30, 36, 50, 60, 75	51
5GN90K ~ 5GN240K	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD		
5GN30K ~ 5GN75K (COUPLE WITH 5GN10X)	300, 360, 500, 600, 750	104
5GN90K ~ 5GN240K (COUPLE WITH 5GN10X)	900, 1000, 1200, 1500, 1800, 2400	113



Gearhead Shaft Size : Ø12mm x 29mmL
(4x4mm Keyway)

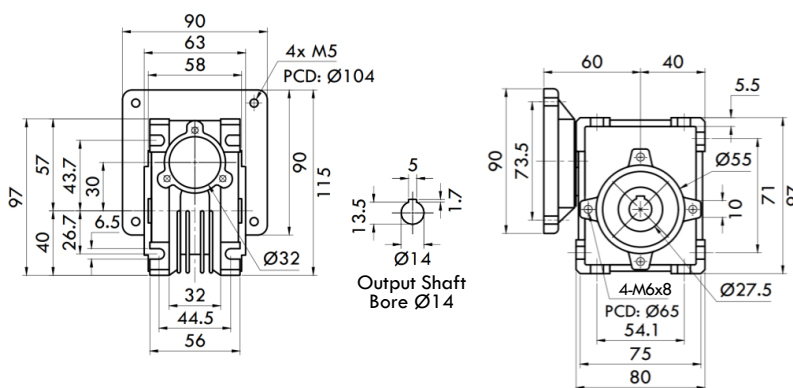
11 5GU-RH HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GU9RH ~ 5GU225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GU27RH ~ 5GU225RH + 5GX10X (DOUBLE REDUCTION) (COUPLED WITH DECIMAL GEAR)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250	198



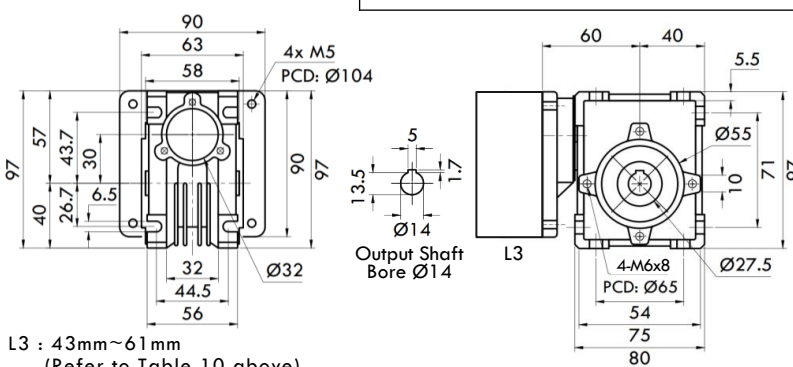
12 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



13 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200
(COUPLED WITH PARALLEL SHAFT GEARHEAD)	



L3 : 43mm~61mm
(Refer to Table 10 above)

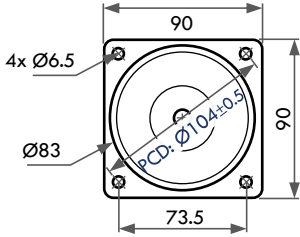
DIMENSION : COMPACT AC MOTOR



60W

1 MOTOR FRAME DIMENSION FOR ALL 60W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

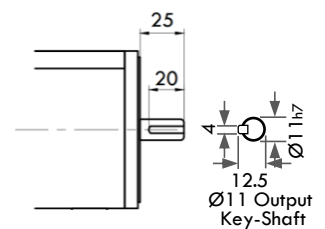
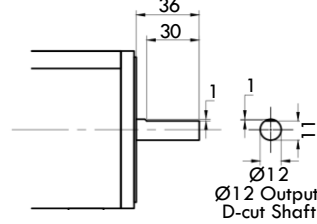
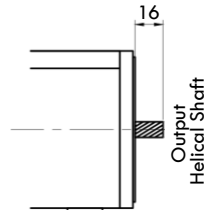


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 60W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
5IK60GN/GX-□F
5IK60RGN/RGX-□F
5IK60VGN/VGX-□F
5RK60GN/GX-□F
5RK60RGN/RGX-□F

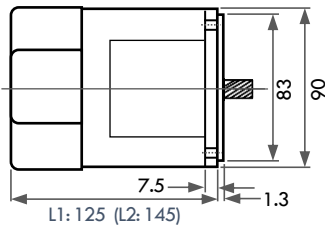
OUTPUT ROUND-SHAFT (D-CUT)
5IK60A-□F
5IK60RA-□F
5IK60VA-□F
5RK60A-□F
5RK60RA-□F

OUTPUT KEY-SHAFT
5IK60A-□F-N
5IK60RA-□F-N
5IK90VA-□F-N
5RK60A-□F-N
5RK60RA-□F-N



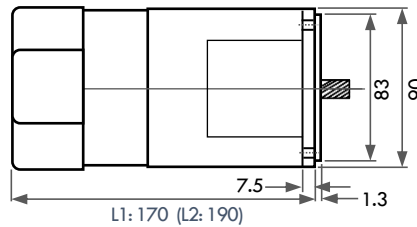
3 INDUCTION / ASYNCHRONOUS MOTOR 60W

5IK60GN-□F / 5IK60VGN-□F
REVERSIBLE MOTOR 60W
5RK60GN-□F



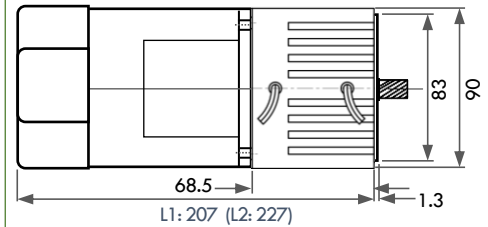
4 ELECTROMAGNETIC BRAKE MOTOR 60W

5IK60GN-□F-B / 5IK60VGN-□F-B
REVERSIBLE BRAKE MOTOR 60W
5RK60GN-□F-B



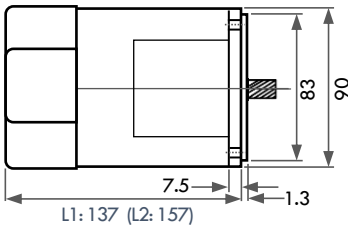
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 60W

5IK60GB-□F & 5GU-CB
5IK60VGB-□F & 5GU-CB



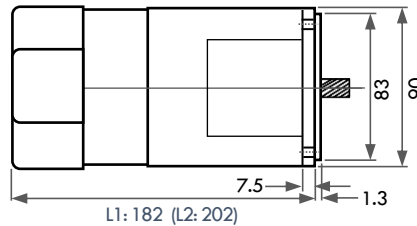
6 SPEED CONTROL MOTOR 60W

5IK60RGN-□F
REVERSIBLE SPEED CONTROL MOTOR 60W
5RK60RGN-□F



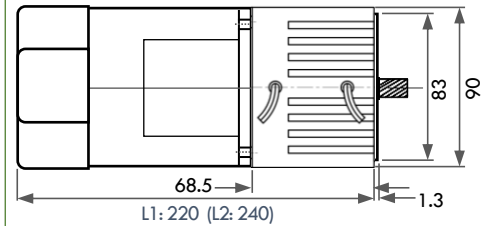
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 60W

5IK60RGN-□F-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 60W
5RK60RGN-□F-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 60W

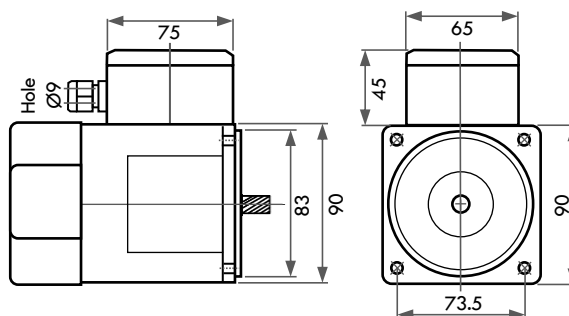
5IK60RGB-□F & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

5IK60A-□FT 5RK60A-□FT
5IK60GN-□FT 5RK60GN-□FT
5IK60GX-□FT 5RK60GX-□FT
5IK60GB-□FT 5RK60GB-□FT
5IK60VGN-□FT 5RK60VGN-□FT
5IK60RGN-□FT 5RK60RGN-□FT
5IK60RGX-□FT 5RK60RGX-□FT
5IK60RGB-□FT 5RK60RGB-□FT
5IK60GN-□FBT 5RK60GN-□FBT
5IK60GX-□FBT 5RK60GX-□FBT
5IK60GB-□FBT 5RK60GB-□FBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR
L2 : BODY LENGTH OF MOTOR WITH
COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

60W



MOTOR WITH
PARALLEL SHAFT GEARHEAD
5GU-KB

MOTOR WITH TERMINAL BOX AND
HINGE TYPE GEARHEAD
5GU-K

CLUTCH & BRAKE MOTOR WITH
PARALLEL SHAFT GEARHEAD AND
CO-ACTIVE POWERFUL COOLING FAN

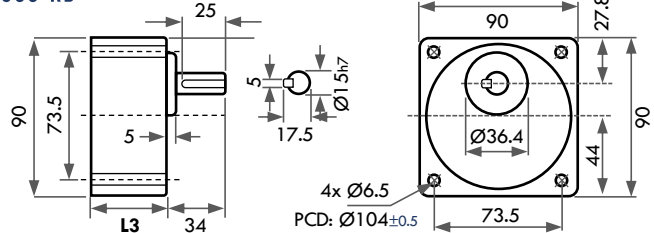
MOTOR WITH WORM GEARHEAD
(DOUBLE REDUCTION GEARHEAD)
5GN-K-N + 8MRV030

MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH

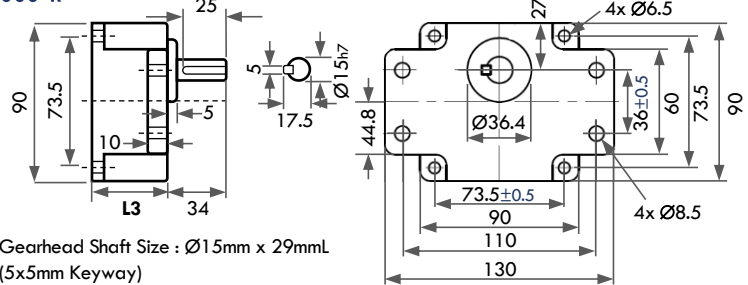
10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX) 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD		L3
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD		L3
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113

5GU-KB



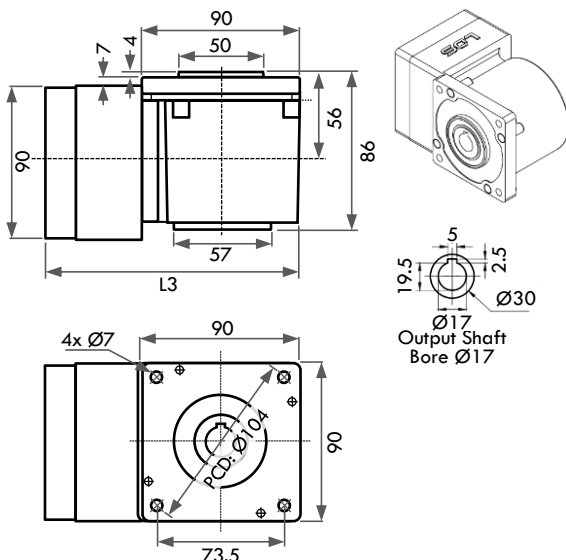
5GU-K



Gearhead Shaft Size : Ø15mm x 29mmL
(5x5mm Keyway)

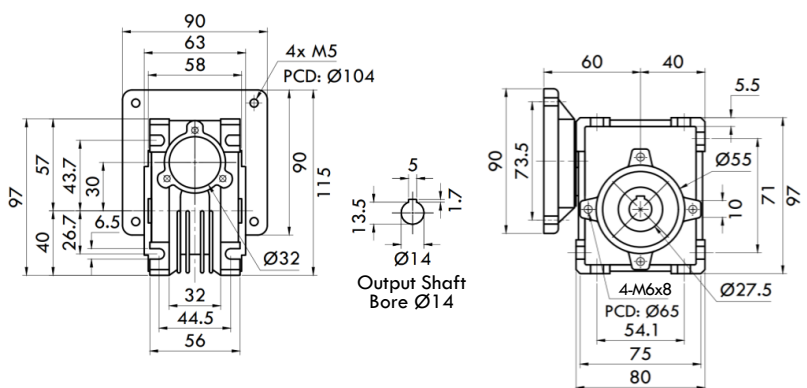
11 5GU-RH HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GU9RH ~ 5GU225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GU27RH ~ 5GU225RH + 5GX10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



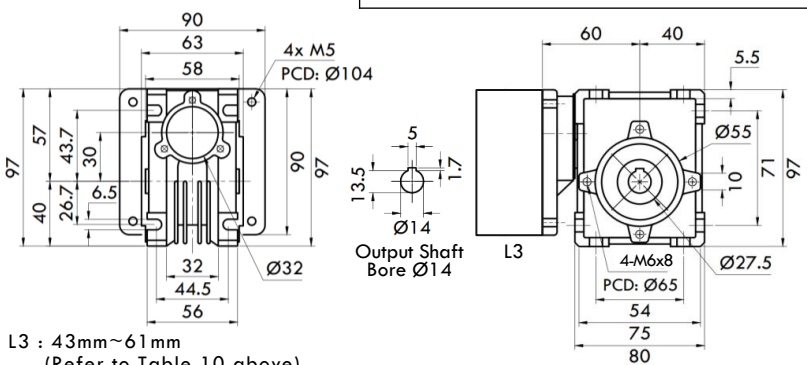
12 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



13 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N (COUPLED WITH PARALLEL SHAFT GEARHEAD)	100, 135, 150, 180, 225, 270 ~ 19,200



L3 : 43mm~61mm
(Refer to Table 10 above)

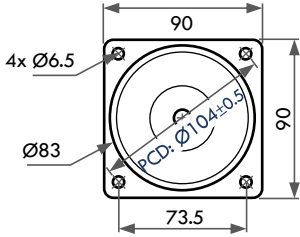
DIMENSION : COMPACT AC MOTOR



90W

1 MOTOR FRAME DIMENSION FOR ALL 90W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

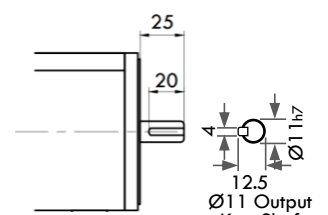
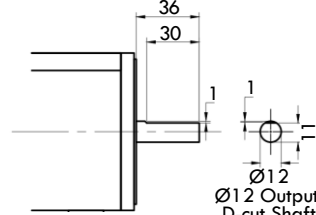
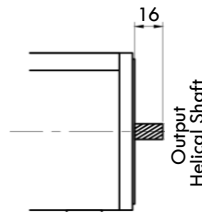


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 90W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
51K90GN/ØX-□F
51K90RGN/RGX-□F
51K90VGN/VGX-□F
5RK90GN/ØX-□F
5RK90RGN/RGX-□F

OUTPUT ROUND-SHAFT (D-CUT)
51K90A-□F
51K90RA-□F
51K90VA-□F
5RK90A-□F
5RK90RA-□F

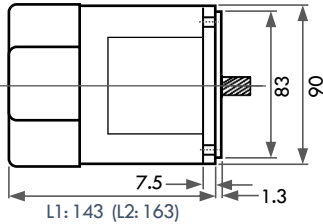
OUTPUT KEY-SHAFT
51K90A-□F-N
51K90RA-□F-N
51K90VA-□F-N
5RK90A-□F-N
5RK90RA-□F-N



Note : Ø12mmx35mmL output key-shaft available upon request

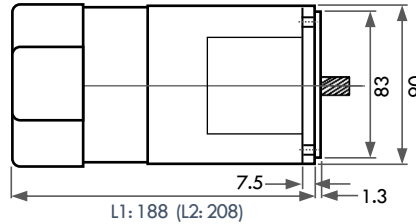
3 INDUCTION / ASYNCHRONOUS MOTOR 90W

51K90GN-□F / 51K90VGN-□F
REVERSIBLE MOTOR 90W
5RK90GN-□F



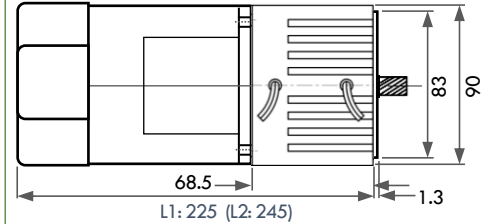
4 ELECTROMAGNETIC BRAKE MOTOR 90W

51K90GN-□F-B / 51K90VGN-□F-B
REVERSIBLE BRAKE MOTOR 90W
5RK90GN-□F-B



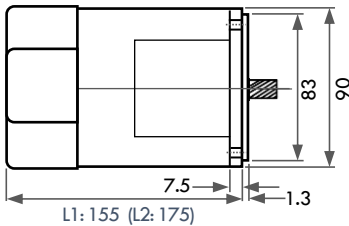
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 90W

51K90GB-□F & 5GU-CB
51K90VGB-□F & 5GU-CB



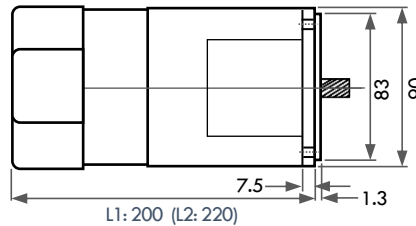
6 SPEED CONTROL MOTOR 90W

51K90RGN-□F
REVERSIBLE SPEED CONTROL MOTOR 90W
5RK90RGN-□F



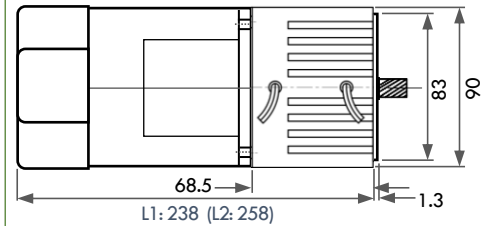
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 90W

51K90RGN-□F-B
REVERSIBLE SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 90W
5RK90RGN-□F-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 90W

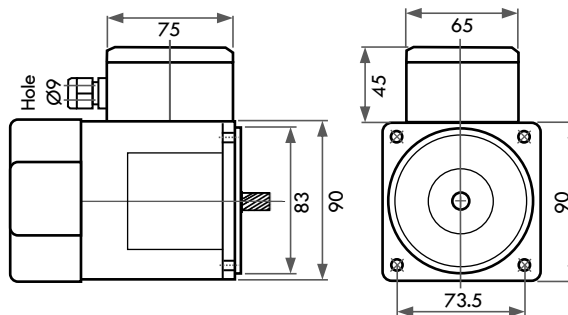
51K90RGB-□F & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

51K90A-□FT	5RK90A-□FT
51K90GN-□FT	5RK90GN-□FT
51K90GX-□FT	5RK90GX-□FT
51K90GB-□FT	5RK90GB-□FT
51K90VGN-□FT	5RK90VGN-□FT
51K90RGN-□FT	5RK90RGN-□FT
51K90RGX-□FT	5RK90RGX-□FT
51K90RGB-□FT	5RK90RGB-□FT
51K90GN-□FBT	5RK90GN-□FBT
51K90GX-□FBT	5RK90GX-□FBT
51K90GB-□FBT	5RK90GB-□FBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR
L2 : BODY LENGTH OF MOTOR WITH COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

90W



MOTOR WITH
PARALLEL SHAFT GEARHEAD
5GU-KB



ELECTROMAGNETIC BRAKE MOTOR WITH
PARALLEL SHAFT GEARHEAD AND
CO-ACTIVE POWERFUL COOLING FAN



MOTOR WITH RIGHT ANGLE
WORM GEARHEAD
DMRV030



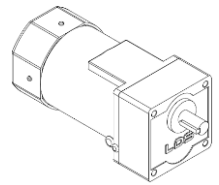
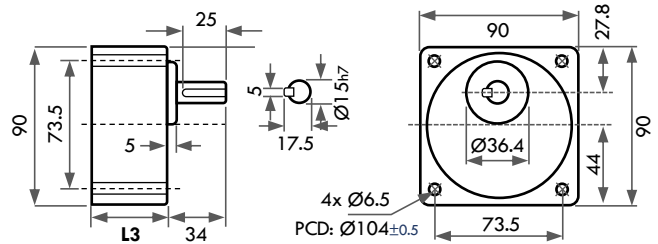
MOTOR WITH WORM GEARHEAD
(DOUBLE REDUCTION GEARHEAD)
5GN-K-N + 8MRV040-CG09



MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH

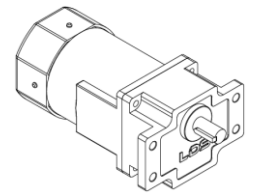
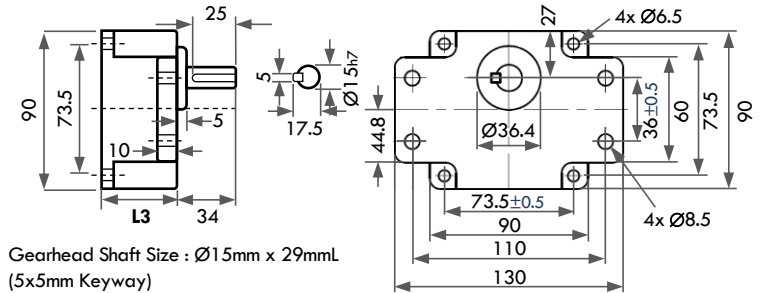
10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD	L3	
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD	L3	
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113



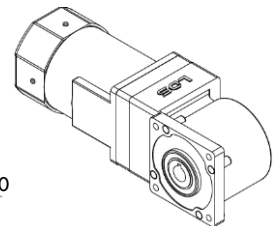
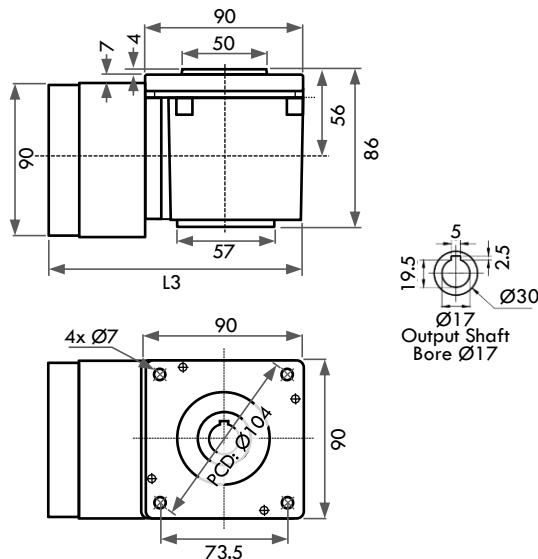
11 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD – HINGE TYPE	L3	
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60



12 5GN-RH (5GU-RH) HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

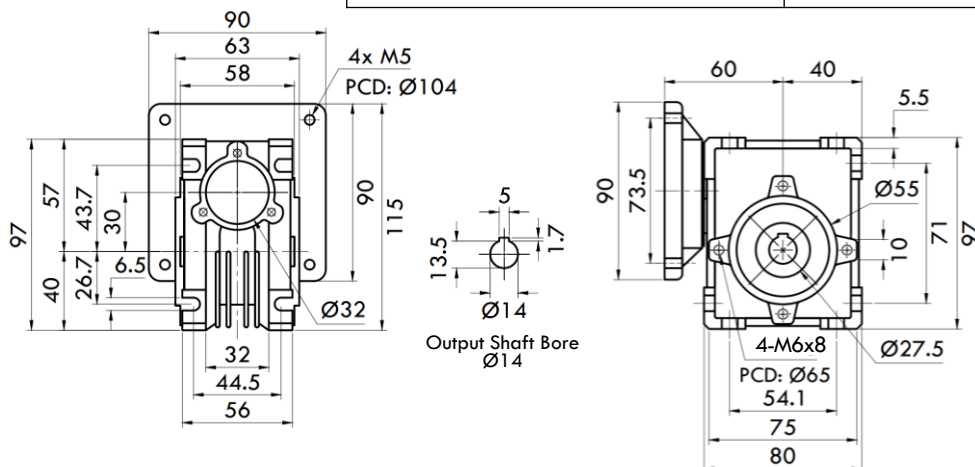
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GN9RH ~ 5GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GN27RH ~ 5GN225RH + 5GN10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



DIMENSION : COMPACT GEARHEAD

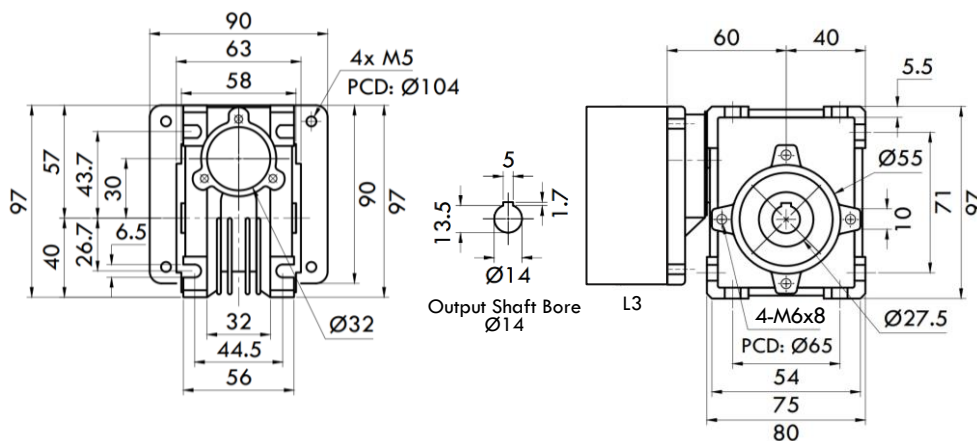
13 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



14 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

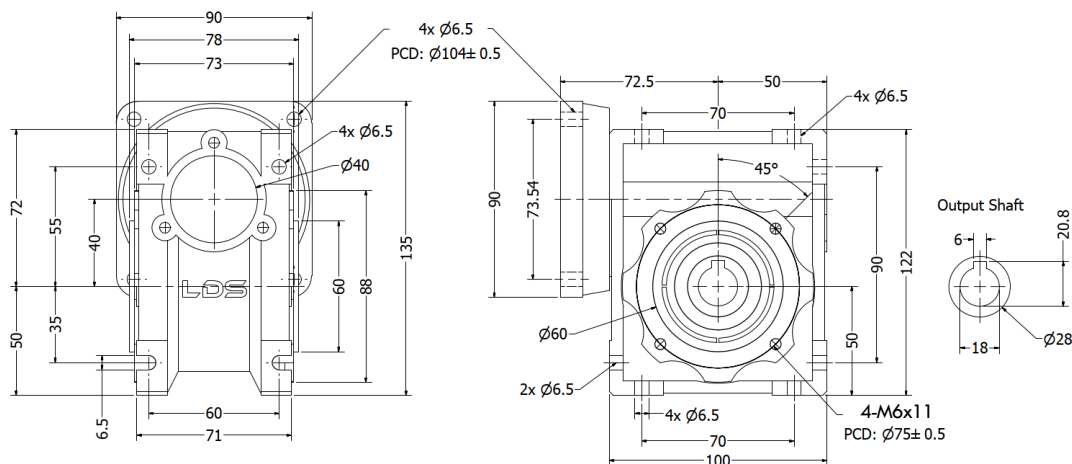
PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm
(Refer to Table 10 above)

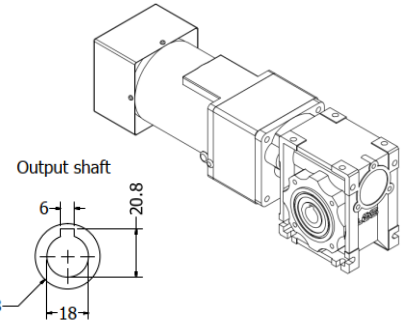
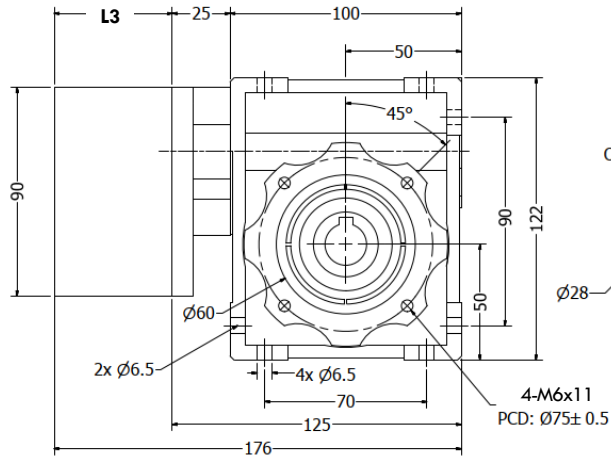
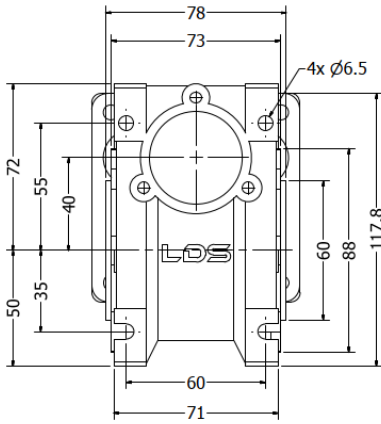
15 8MRV040-CM09 DMRS040-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM09 ~ 8MRV040-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



16 8MRV040-CG09 & 5GN~K-N
DMRS040-CG09 & 5GN~K-N
HOLLOW SHAFT WORM GEARHEAD

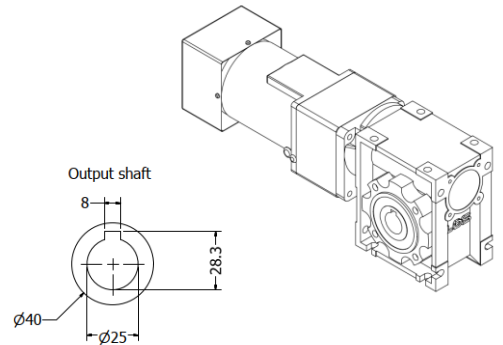
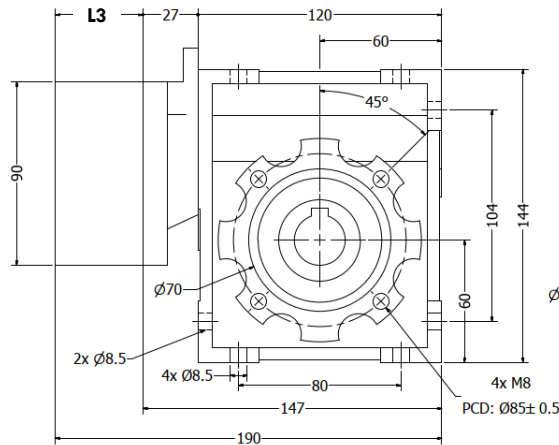
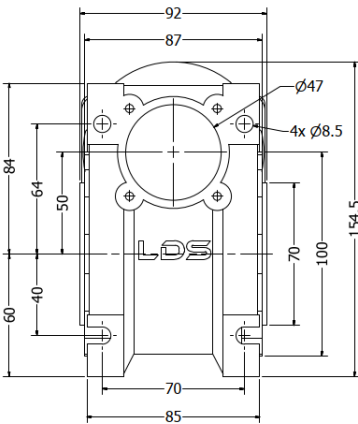
PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-15-CG09 & 5GN-K-N ~ 8MRV040-80-CG09 & 5GN-K-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

17 8MRV050-CG09 & 5GU~KB-N
DMRS050-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

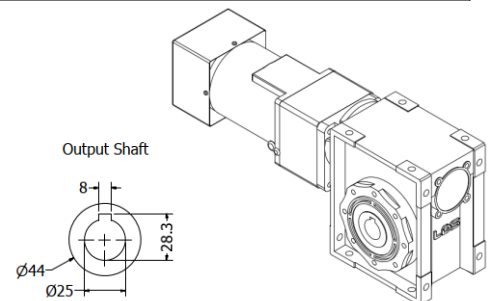
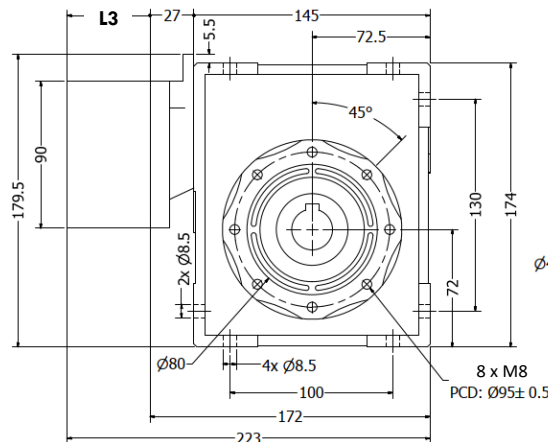
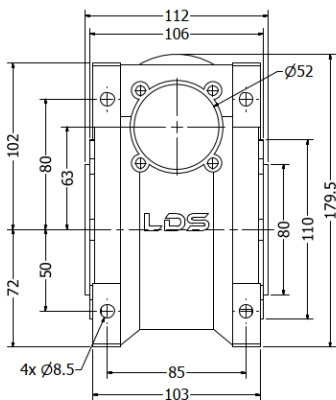
PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-15-CG09 & 5GU-KB-N ~ 8MRV050-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

18 8MRV063-CG09 & 5GU~KB-N
DMRS063-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG09 & 5GU-KB-N ~ 8MRV063-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

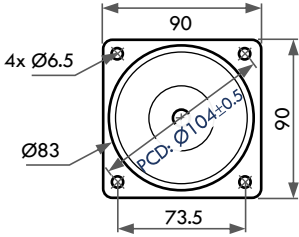
DIMENSION : COMPACT AC MOTOR



120W

1 MOTOR FRAME DIMENSION FOR ALL 120W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

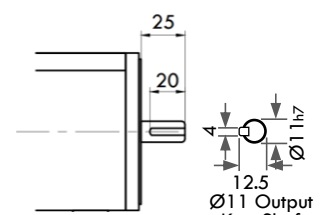
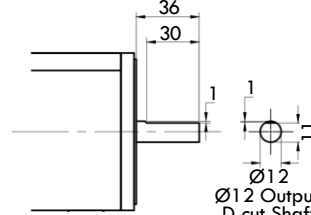
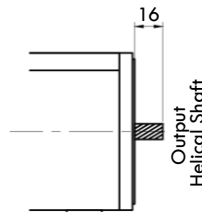


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 120W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
5IK120GN/GX-□F
5IK120RGN/RGX-□F
5IK120VGN/VGX-□F
5RK120GN/GX-□F
5RK120RGN/RGX-□F

OUTPUT ROUND-SHAFT (D-CUT)
5IK120A-□F
5IK120RA-□F
5IK120VA-□F
5RK120A-□F
5RK120RA-□F

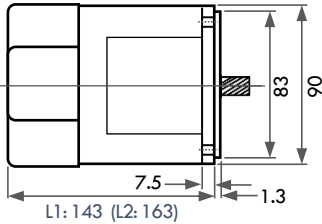
OUTPUT KEY-SHAFT
5IK120A-□F-N
5IK120RA-□F-N
5IK120VA-□F-N
5RK120A-□F-N
5RK120RA-□F-N



Note : Ø12mmx35mmL output key-shaft available upon request

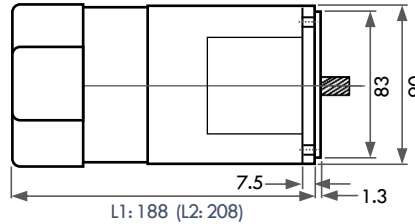
3 INDUCTION / ASYNCHRONOUS MOTOR 120W

5IK120GN-□F / 5IK120VGN-□F
REVERSIBLE MOTOR 120W
5RK120GN-□F



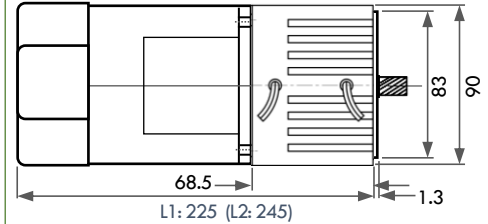
4 ELECTROMAGNETIC BRAKE MOTOR 120W

5IK120GN-□F-B / 5IK120VGN-□F-B
REVERSIBLE BRAKE MOTOR 120W
5RK120GN-□F-B



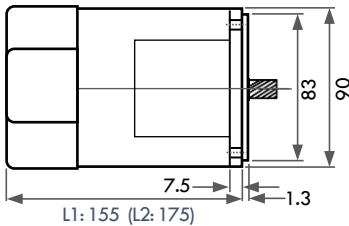
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 120W

5IK120GB-□F & 5GU-CB
5IK120VGB-□F & 5GU-CB



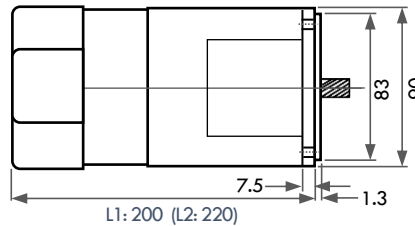
6 SPEED CONTROL MOTOR 120W

5IK120RGN-□F
REVERSIBLE SPEED CONTROL MOTOR 120W
5RK120RGN-□F



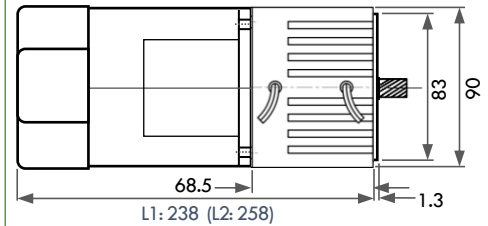
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 120W

5IK120RGN-□F-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 120W
5RK120RGN-□F-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 120W

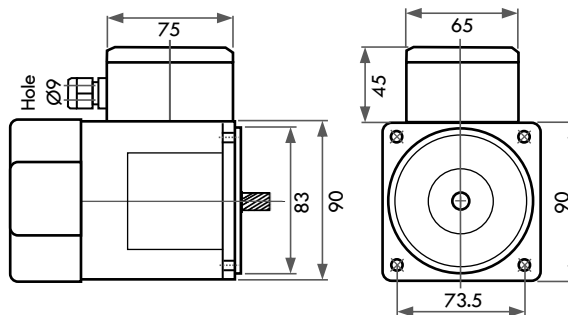
5IK120RGB-□F & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

5IK120A-□FT 5RK120A-□FT
5IK120GN-□FT 5RK120GN-□FT
5IK120GX-□FT 5RK120GX-□FT
5IK120GB-□FT 5RK120GB-□FT
5IK120RGN-□FT 5RK120RGN-□FT
5IK120RGX-□FT 5RK120RGX-□FT
5IK120RGB-□FT 5RK120RGB-□FT
5IK120GN-□FBT 5RK120GN-□FBT
5IK120GX-□FBT 5RK120GX-□FBT
5IK120GB-□FBT 5RK120GB-□FBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- A : 1PHASE 100V (50/60HZ)
- A2 : 1PHASE 110V (50/60HZ)
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR
L2 : BODY LENGTH OF MOTOR WITH
COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

120W



MOTOR WITH TERMINAL BOX
AND HINGE TYPE GEARHEAD
5GU-K



MOTOR WITH DECIMAL GEAR
(DOUBLE REDUCTION GEARHEAD)
5GU10X + 5GU-KB



MOTOR WITH RIGHT ANGLE
WORM GEARHEAD
DMRV030



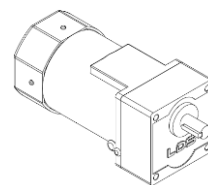
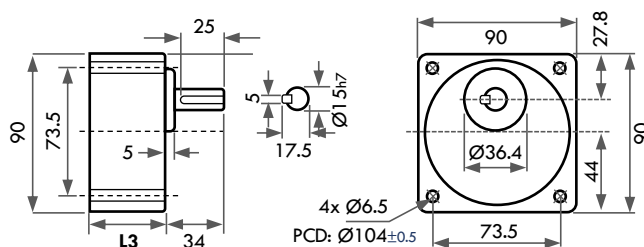
MOTOR WITH RIGHT ANGLE
WORM GEARHEAD
8MRV040-CM09



MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH

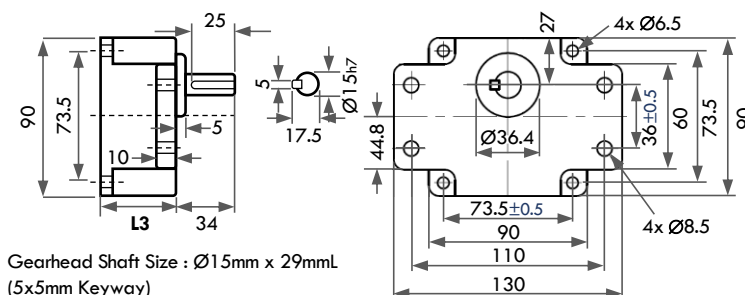
10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD	L3	
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD	L3	
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113

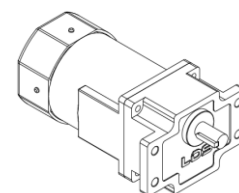


11 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD – HINGE TYPE	L3	
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60

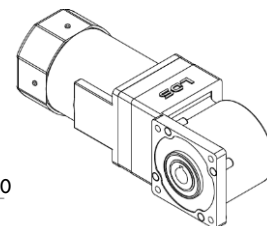
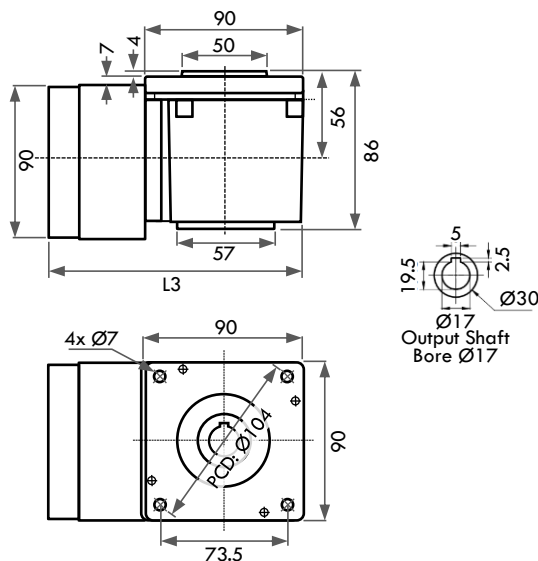


Gearhead Shaft Size : Ø15mm x 29mmL
(5x5mm Keyway)



12 5GN-RH (5GU-RH) HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

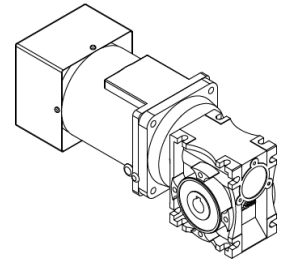
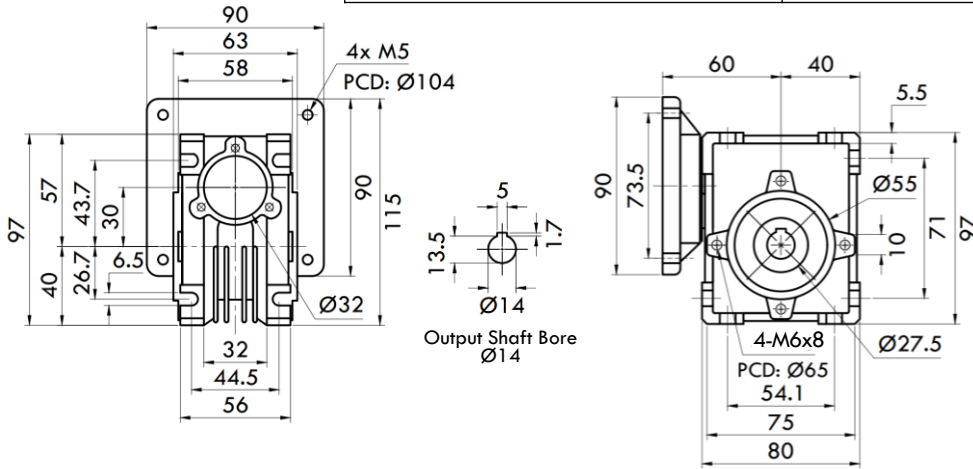
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GN9RH ~ 5GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GN27RH ~ 5GN225RH + 5GN10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



DIMENSION : COMPACT GEARHEAD

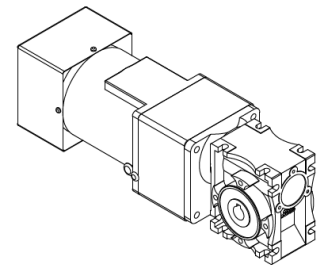
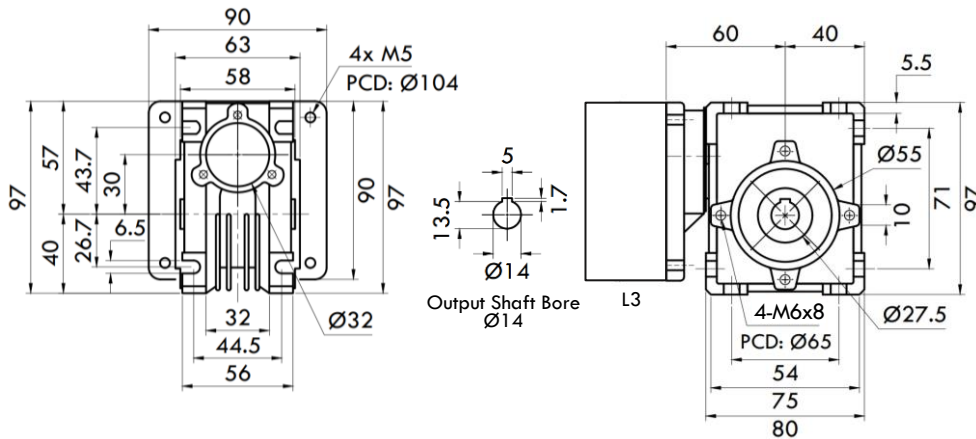
13 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



14 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

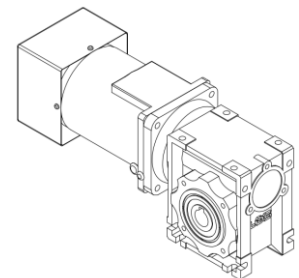
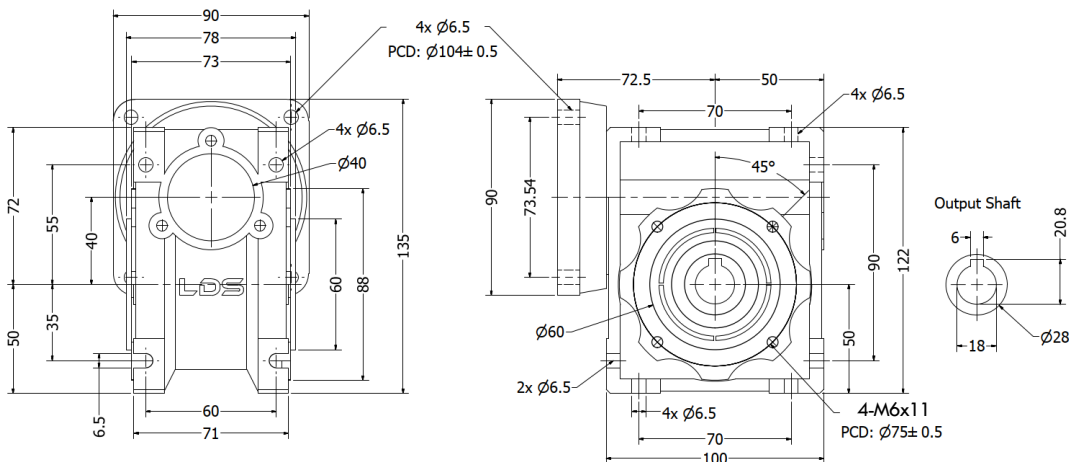
PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm
(Refer to Table 10 above)

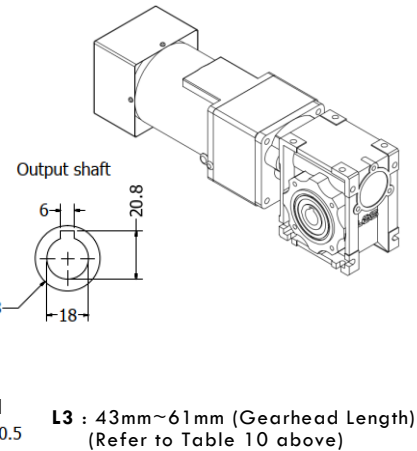
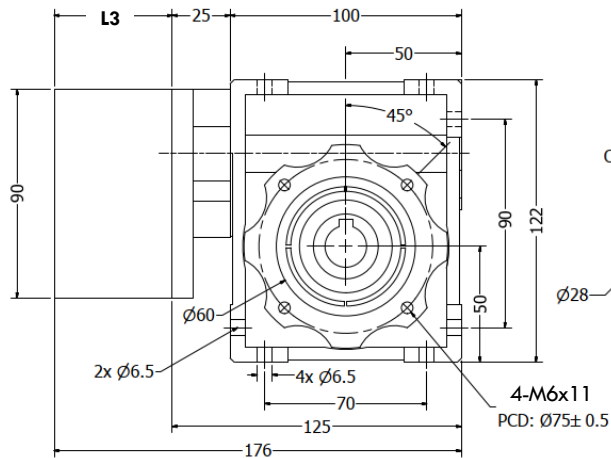
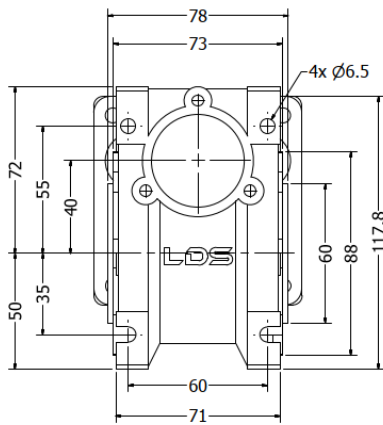
15 8MRV040-CM09 DMRS040-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM09 ~ 8MRV040-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



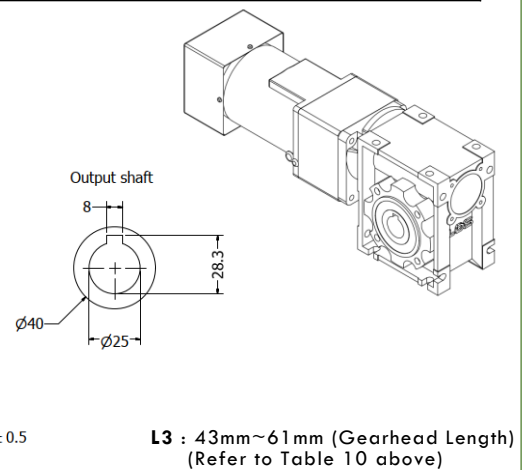
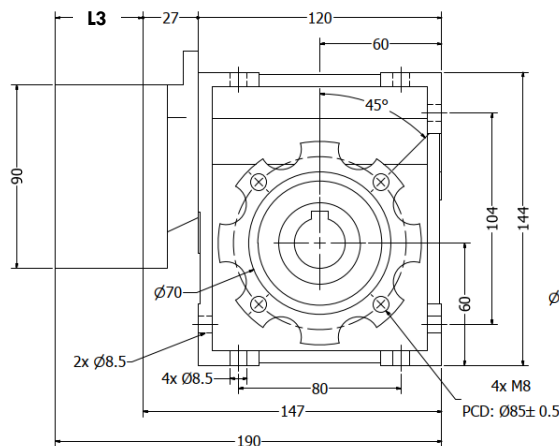
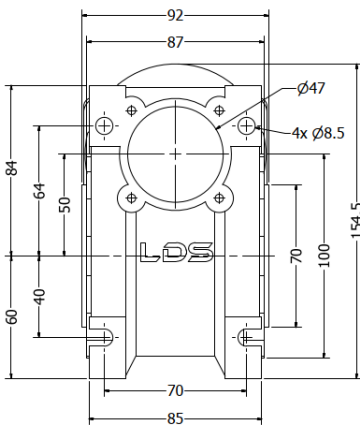
16 8MRV040-CG09 & 5GN~K-N
DMRS040-CG09 & 5GN~K-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-15-CG09 & 5GN-K-N ~ 8MRV040-80-CG09 & 5GN-K-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



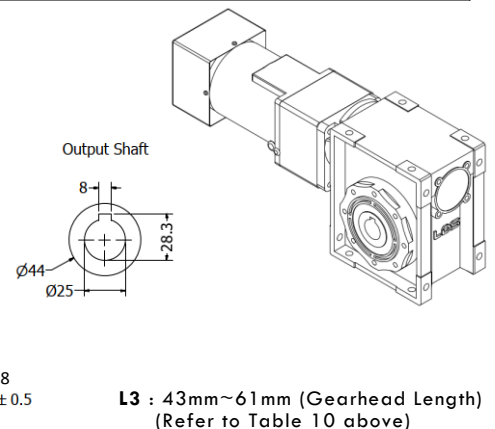
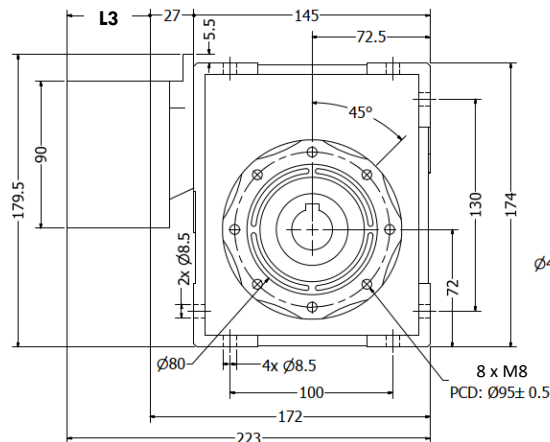
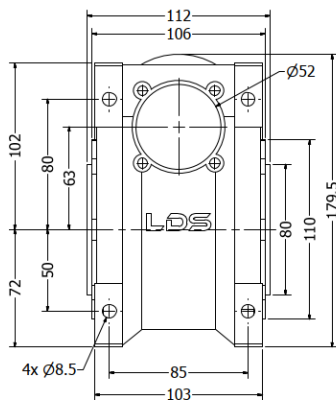
17 8MRV050-CG09 & 5GU~KB-N
DMRS050-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-15-CG09 & 5GU-KB-N ~ 8MRV050-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



18 8MRV063-CG09 & 5GU~KB-N
DMRS063-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG09 & 5GU-KB-N ~ 8MRV063-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



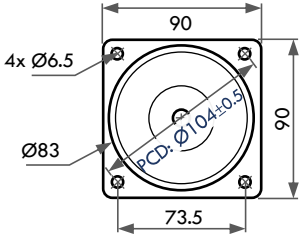
DIMENSION : COMPACT AC MOTOR



150W

1 MOTOR FRAME DIMENSION FOR ALL 150W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

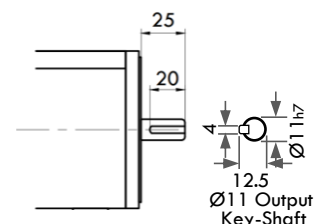
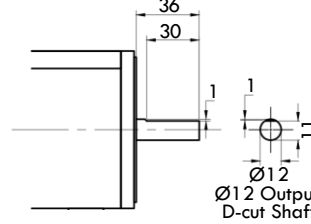
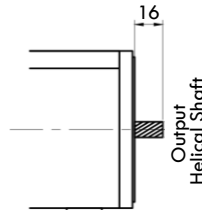


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 150W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
5IK150GN/GX-□EF
5IK150RGN/RGX-□EF
5IK150VGN/VGX-□EF
5RK150GN/GX-□EF
5RK150RGN/RGX-□EF

OUTPUT ROUND-SHAFT (D-CUT)
5IK150A-□EF
5IK150RA-□EF
5IK150VA-□EF
5RK150A-□EF
5RK150RA-□EF

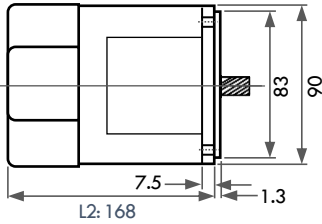
OUTPUT KEY-SHAFT
5IK150A-□EF-N
5IK150RA-□EF-N
5IK150VA-□EF-N
5RK150A-□EF-N
5RK150RA-□EF-N



Note : Ø12mmx35mmL output key-shaft available upon request

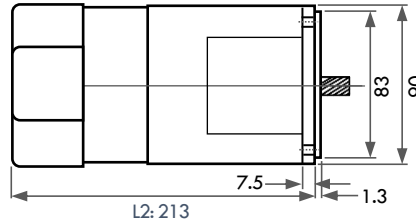
3 INDUCTION / ASYNCHRONOUS MOTOR 150W

5IK150GN-□EF / 5IK150VGN-□EF
REVERSIBLE MOTOR 150W
5RK150GN-□EF



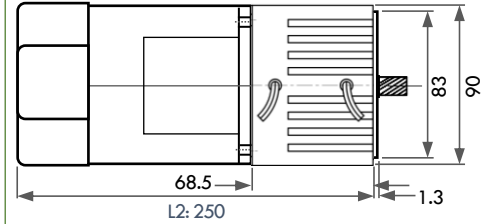
4 ELECTROMAGNETIC BRAKE MOTOR 150W

5IK150GN-□EF-B / 5IK150VGN-□EF-B
REVERSIBLE BRAKE MOTOR 150W
5RK150GN-□EF-B



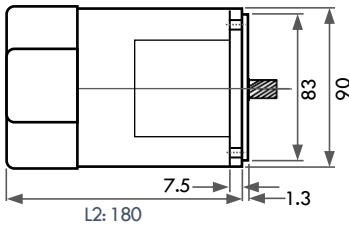
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 150W

5IK150GB-□EF & 5GU-CB
5IK150VGB-□EF & 5GU-CB



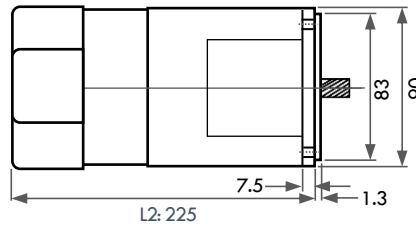
6 SPEED CONTROL MOTOR 150W

5IK150RGN-□EF
REVERSIBLE SPEED CONTROL MOTOR 150W
5RK150RGN-□EF



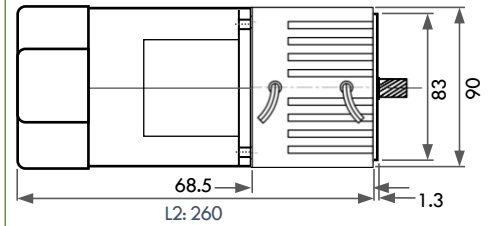
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 150W

5IK150RGN-□EF-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 150W
5RK150RGN-□EF-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 150W

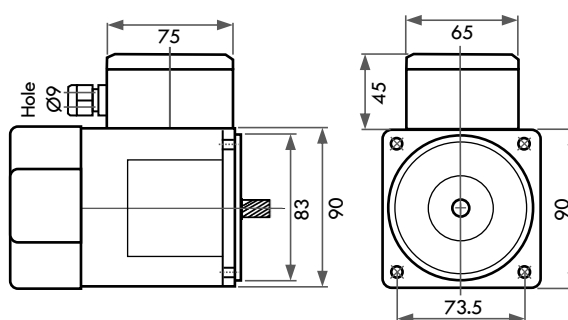
5IK150RGB-□EF & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

5IK150A-□EFT 5RK150A-□EFT
5IK150GN-□EFT 5RK150GN-□EFT
5IK150GX-□EFT 5RK150GX-□EFT
5IK150GB-□EFT 5RK150GB-□EFT
5IK150VGN-□EFT 5RK150VGN-□EFT
5IK150RGN-□EFT 5RK150RGN-□EFT
5IK150RGX-□EFT 5RK150RGX-□EFT
5IK150RGB-□EFT 5RK150RGB-□EFT
5IK150GN-□EFBT 5RK150GN-□EFBT
5IK150GX-□EFBT 5RK150GX-□EFBT
5IK150GB-□EFBT 5RK150GB-□EFBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

- L1 : BODY LENGTH OF STANDARD MOTOR
- L2 : BODY LENGTH OF MOTOR WITH COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

150W



**MOTOR WITH
PARALLEL SHAFT GEARHEAD
5GU-KB**



**MOTOR WITH DECIMAL GEAR
(DOUBLE REDUCTION GEARHEAD)
5GU10X + 5GU-KB**



**CLUTCH & BRAKE MOTOR WITH
PARALLEL SHAFT GEARHEAD AND
COACTIVE POWERFUL COOLING FAN**



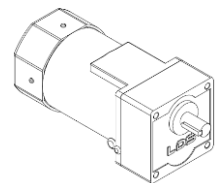
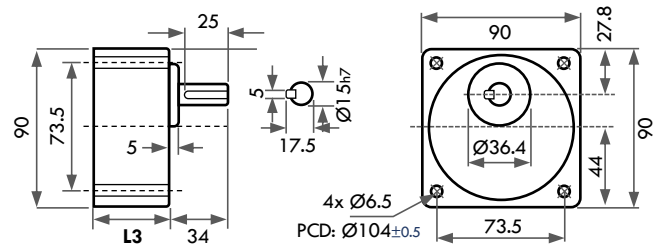
**MOTOR WITH WORM GEARHEAD
(DOUBLE REDUCTION GEARHEAD)
5GN-K-N + 8MRV040-CG09**



**MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH**

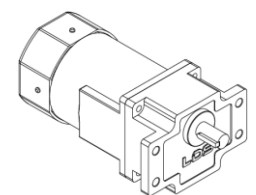
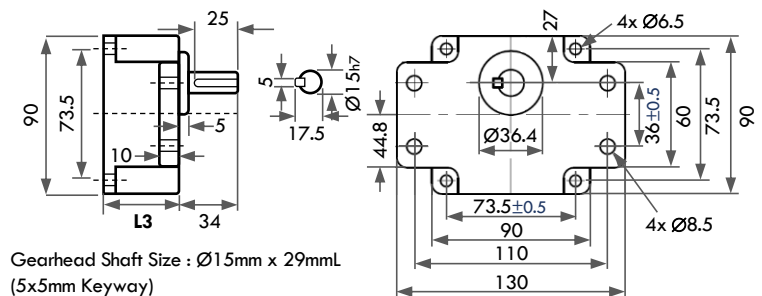
10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD	L3	
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD	L3	
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113



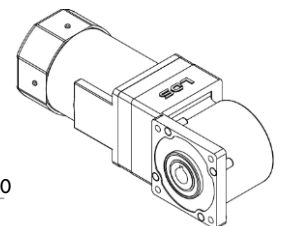
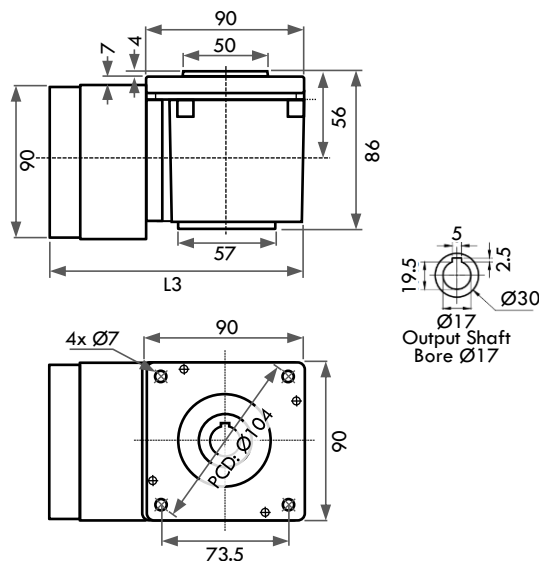
11 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD – HINGE TYPE	L3	
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60



12 5GN-RH (5GU-RH) HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

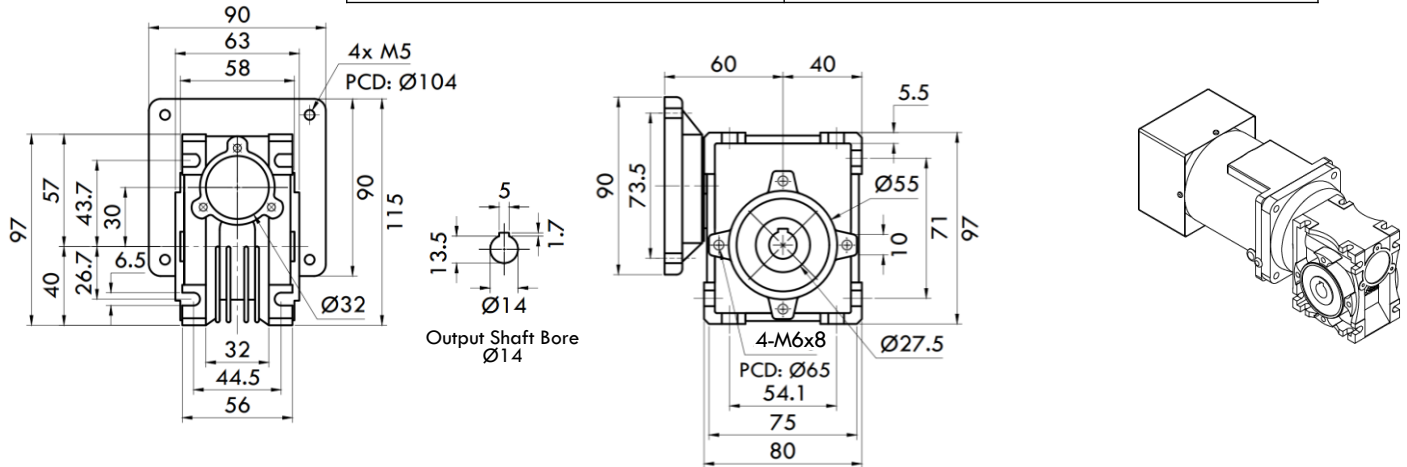
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GN9RH ~ 5GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GN27RH ~ 5GN225RH + 5GN10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



DIMENSION : COMPACT GEARHEAD

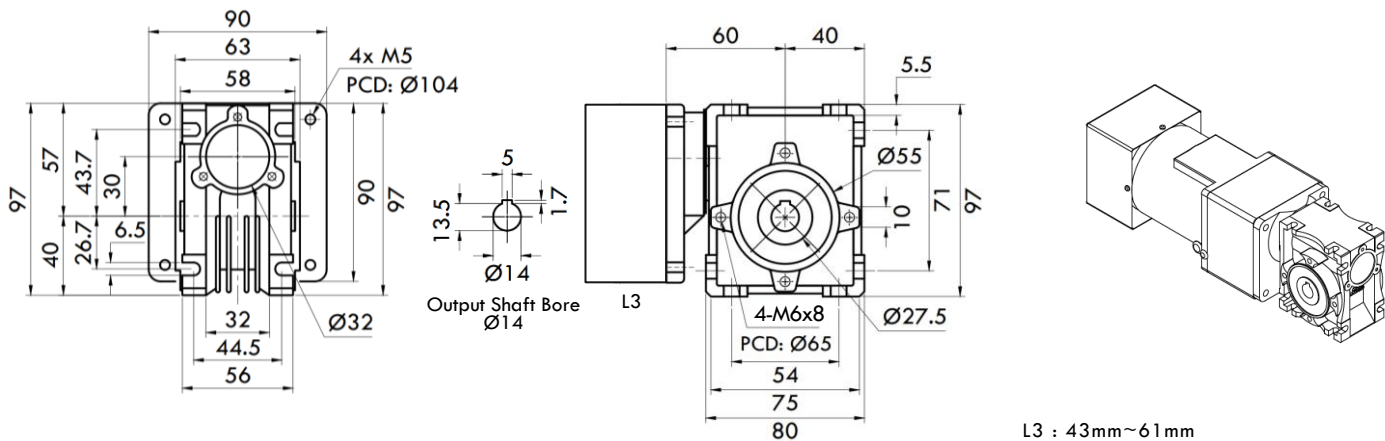
13 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



14 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

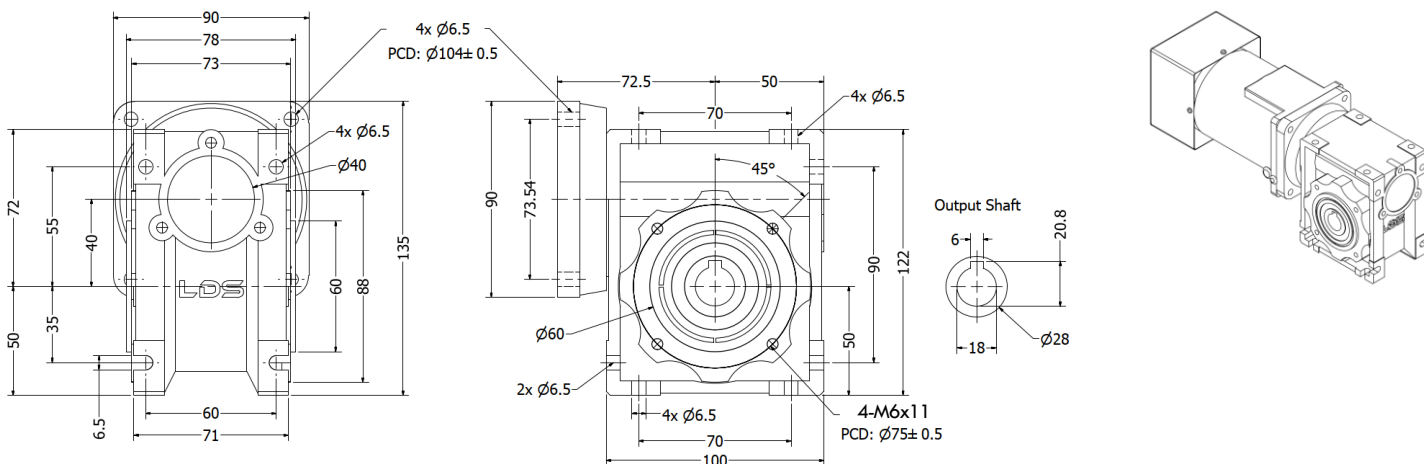
PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm
(Refer to Table 10 above)

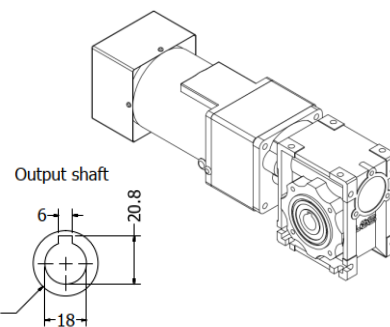
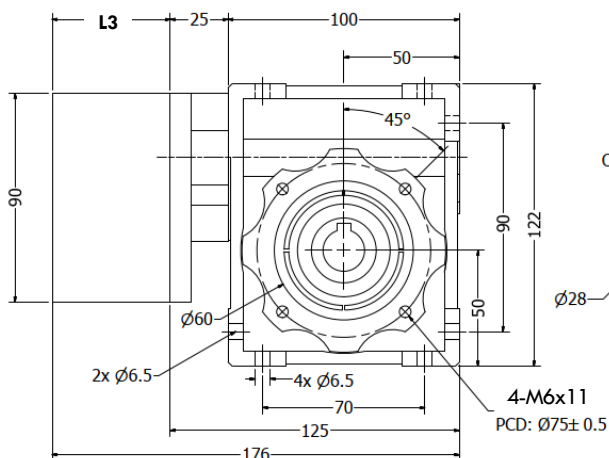
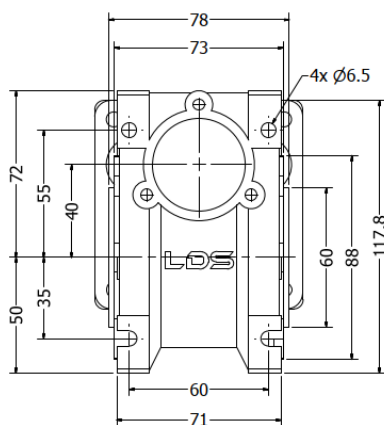
15 8MRV040-CM09 DMRS040-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM09 ~ 8MRV040-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



16 8MRV040-CG09 & 5GN~K-N
DMRS040-CG09 & 5GN~K-N
HOLLOW SHAFT WORM GEARHEAD

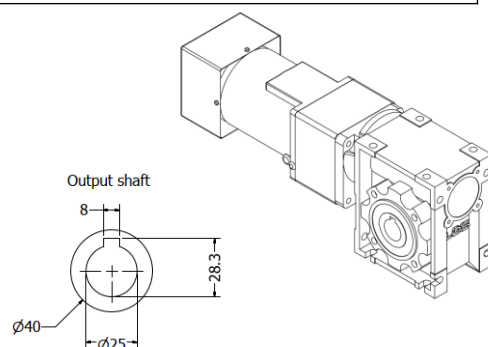
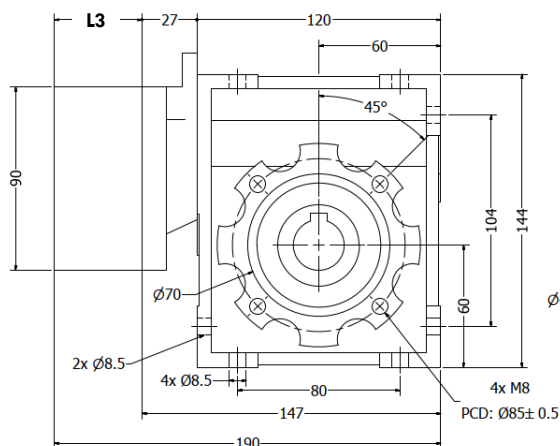
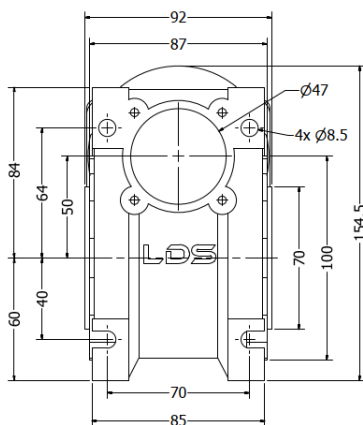
PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-15-CG09 & 5GN-K-N ~ 8MRV040-80-CG09 & 5GN-K-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

17 8MRV050-CG09 & 5GU~KB-N
DMRS050-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

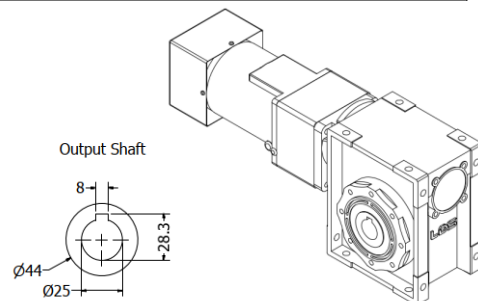
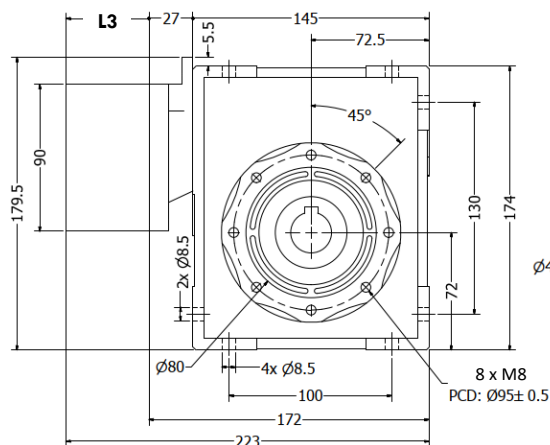
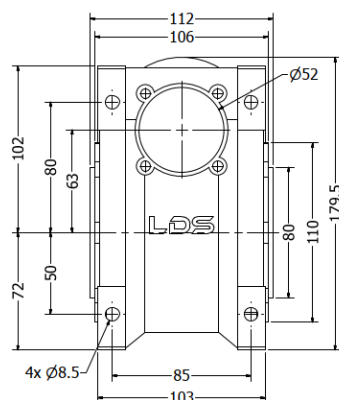
PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-15-CG09 & 5GU-KB-N ~ 8MRV050-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

18 8MRV063-CG09 & 5GU~KB-N
DMRS063-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG09 & 5GU-KB-N ~ 8MRV063-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm (Gearhead Length)
(Refer to Table 10 above)

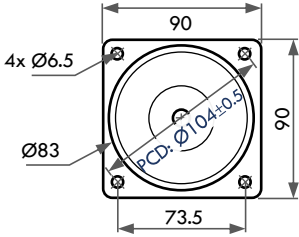
DIMENSION : COMPACT AC MOTOR



180W

1 MOTOR FRAME DIMENSION FOR ALL 180W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

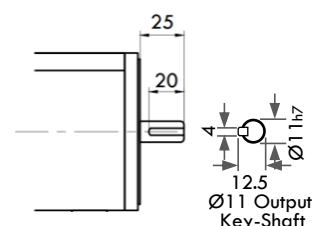
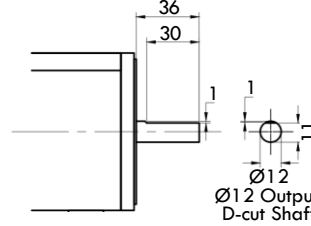
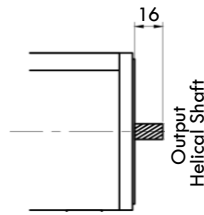


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 180W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
5IK180GN/GX-□EF
5IK180RGN/RGX-□EF
5IK180VGN/VGX-□EF
5RK180GN/GX-□EF
5RK180RGN/RGX-□EF

OUTPUT ROUND-SHAFT (D-CUT)
5IK180A-□EF
5IK180RA-□EF
5IK180VA-□EF
5RK180A-□EF
5RK180RA-□EF

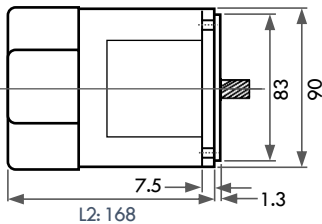
OUTPUT KEY-SHAFT
5IK180A-□EF-N
5IK180RA-□EF-N
5IK180VA-□EF-N
5RK180A-□EF-N
5RK180RA-□EF-N



Note : Ø12mmx35mmL output key-shaft available upon request

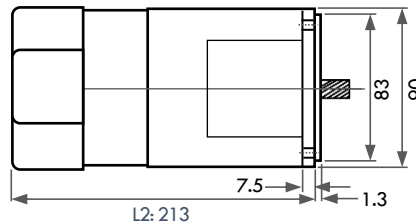
3 INDUCTION / ASYNCHRONOUS MOTOR 180W

5IK180GN-□EF / 5IK180VGN-□EF
REVERSIBLE MOTOR 180W
5RK180GN-□EF



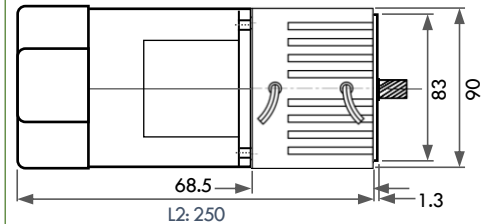
4 ELECTROMAGNETIC BRAKE MOTOR 180W

5IK180GN-□EF-B / 5IK180VGN-□EF-B
REVERSIBLE BRAKE MOTOR 180W
5RK180GN-□EF-B



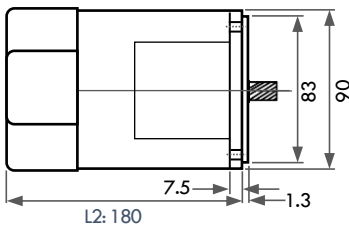
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 180W

5IK180GB-□EF & 5GU-CB
5IK180VGB-□EF & 5GU-CB



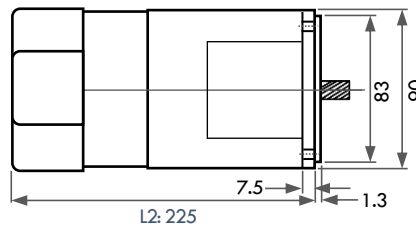
6 SPEED CONTROL MOTOR 180W

5IK180RGN-□EF
REVERSIBLE SPEED CONTROL MOTOR 180W
5RK180RGN-□EF



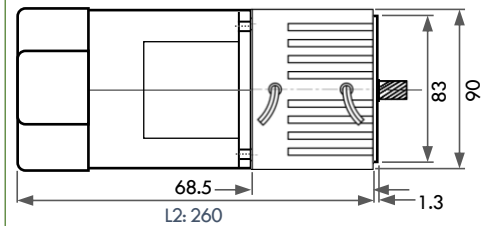
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 180W

5IK180RGN-□EF-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 180W
5RK180RGN-□EF-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 180W

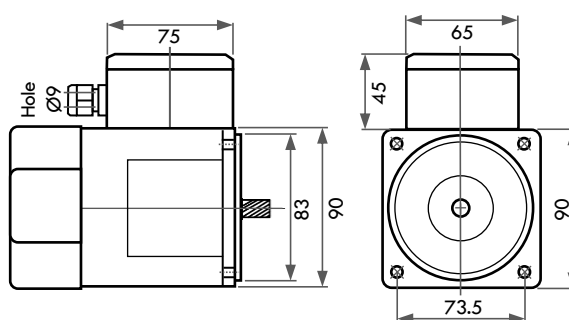
5IK180RGB-□EF & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

5IK180A-□EFT 5RK180A-□EFT
5IK180GN-□EFT 5RK180GN-□EFT
5IK180GX-□EFT 5RK180GX-□EFT
5IK180GB-□EFT 5RK180GB-□EFT
5IK180VGB-□EFT 5RK180VGB-□EFT
5IK180RGN-□EFT 5RK180RGN-□EFT
5IK180RGX-□EFT 5RK180RGX-□EFT
5IK180RGB-□EFT 5RK180RGB-□EFT
5IK180GN-□EFBT 5RK180GN-□EFBT
5IK180GX-□EFBT 5RK180GX-□EFBT
5IK180GB-□EFBT 5RK180GB-□EFBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR
L2 : BODY LENGTH OF MOTOR WITH
COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

180W



MOTOR WITH TERMINAL BOX
AND HINGE TYPE GEARHEAD
5GU-K



MOTOR WITH DECIMAL GEAR
(DOUBLE REDUCTION GEARHEAD)
5GU10X + 5GU-KB



CLUTCH & BRAKE MOTOR WITH
PARALLEL SHAFT GEARHEAD AND
COACTIVE POWERFUL COOLING FAN



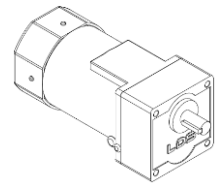
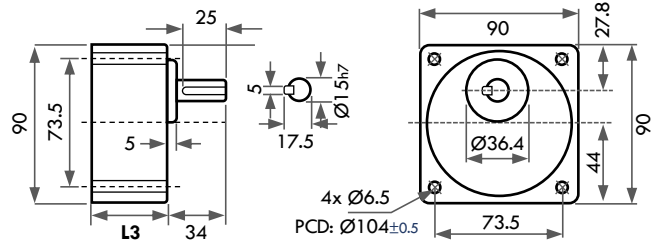
MOTOR WITH RIGHT ANGLE
WORM GEARHEAD
8MRV040-CM09



MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH

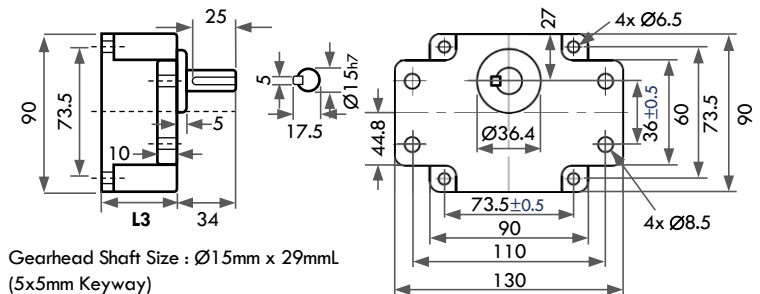
10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD		
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	L3 43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60
DOUBLE GEARHEAD		
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	L3 104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113

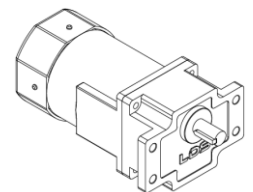


11 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD – HINGE TYPE		
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	L3 51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60

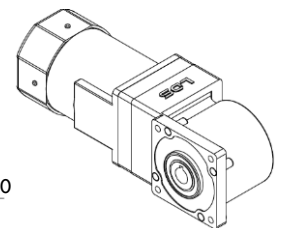
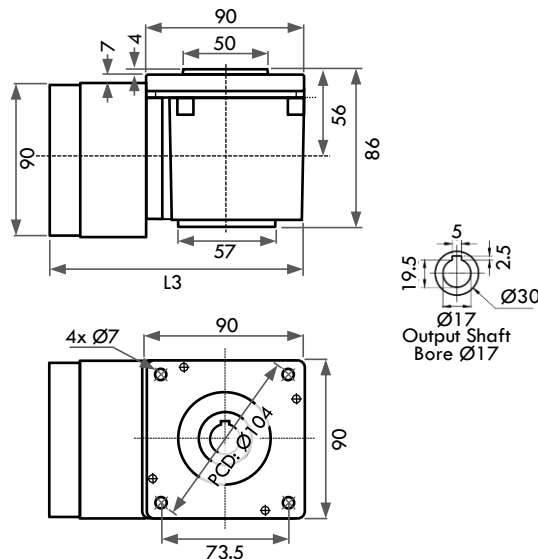


Gearhead Shaft Size : $\varnothing 15\text{mm} \times 29\text{mmL}$
(5x5mm Keyway)



12 5GN-RH (5GU-RH) HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

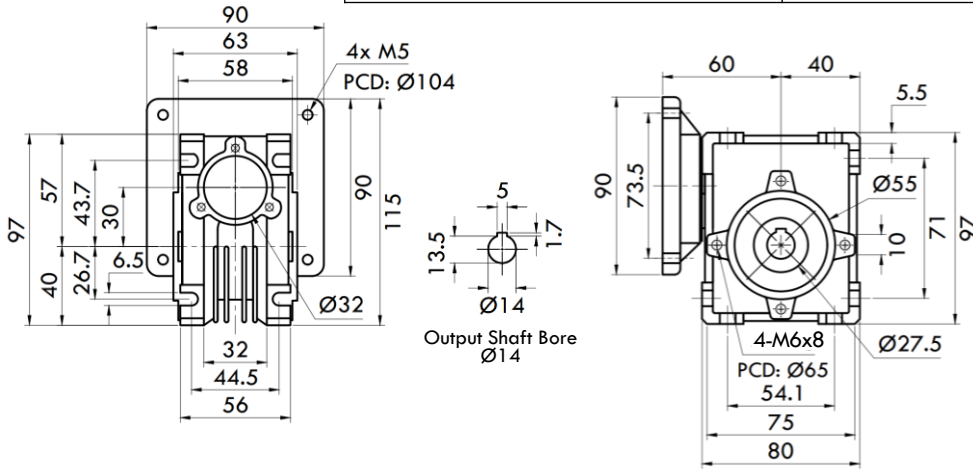
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GN9RH ~ 5GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GN27RH ~ 5GN225RH + 5GN10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



DIMENSION : COMPACT GEARHEAD

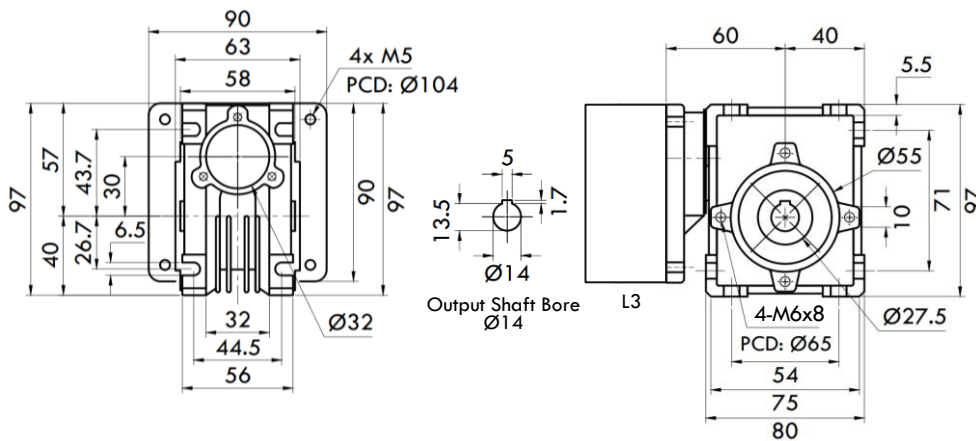
13 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



14 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

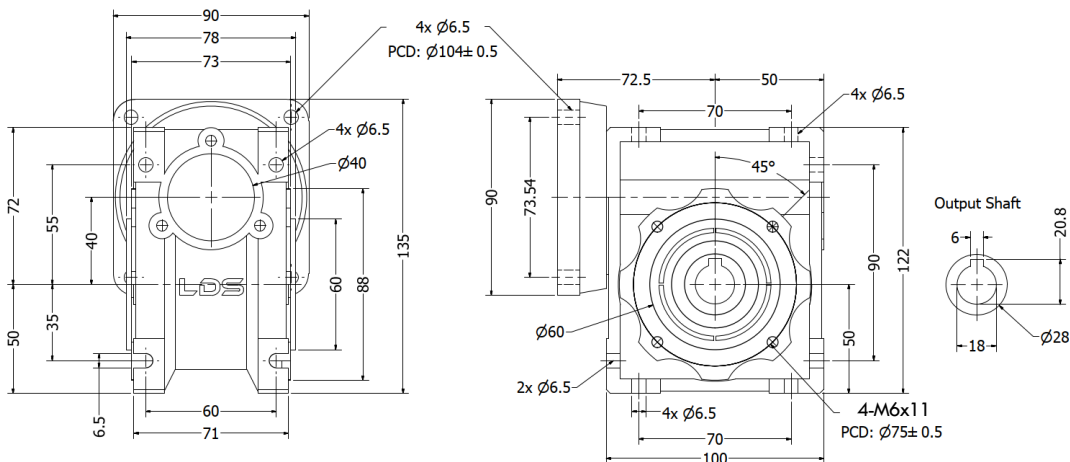
PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm
(Refer to Table 10 above)

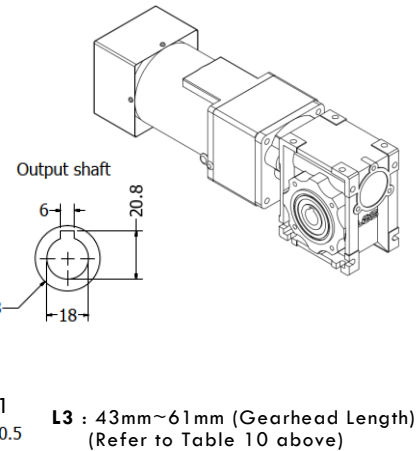
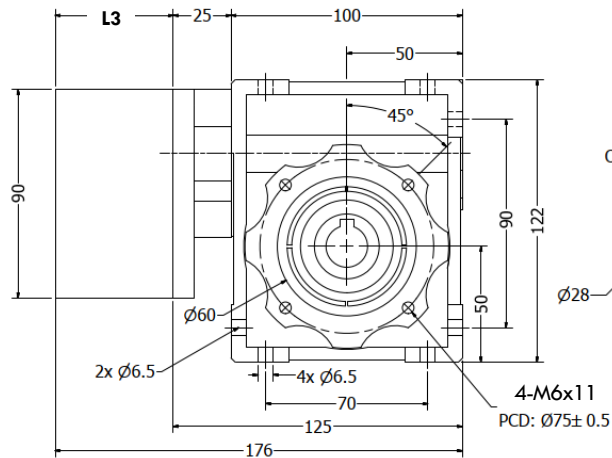
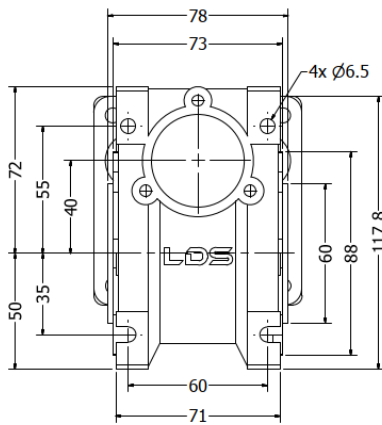
15 8MRV040-CM09 DMRS040-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM09 ~ 8MRV040-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



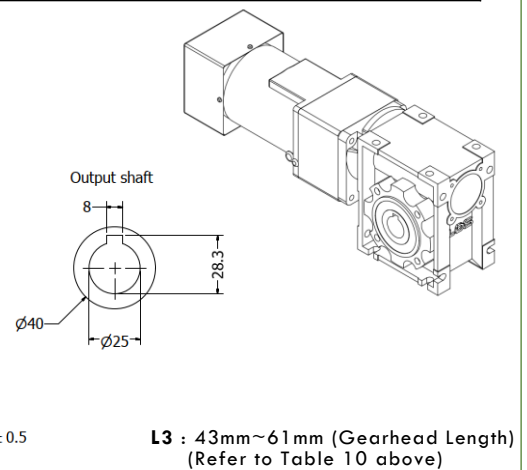
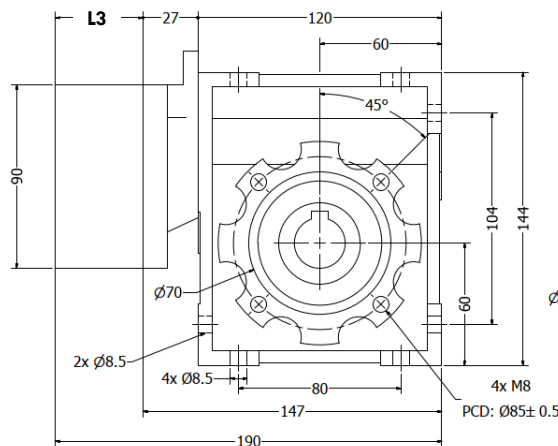
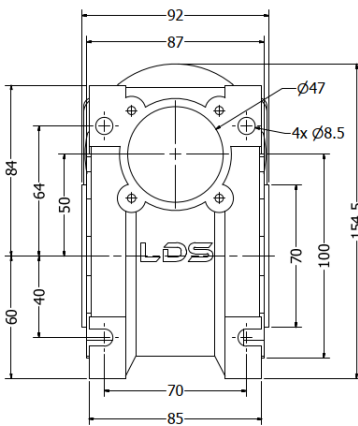
16 8MRV040-CG09 & 5GN~K-N
DMRS040-CG09 & 5GN~K-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-15-CG09 & 5GN-K-N ~ 8MRV040-80-CG09 & 5GN-K-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



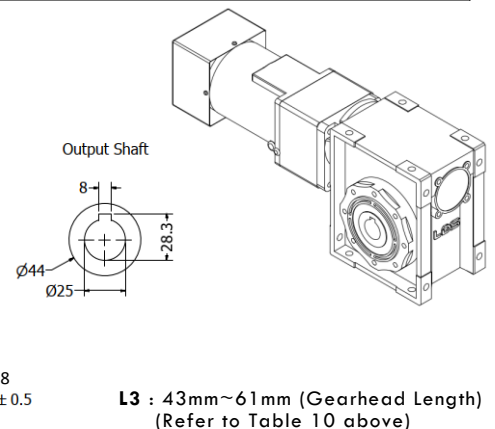
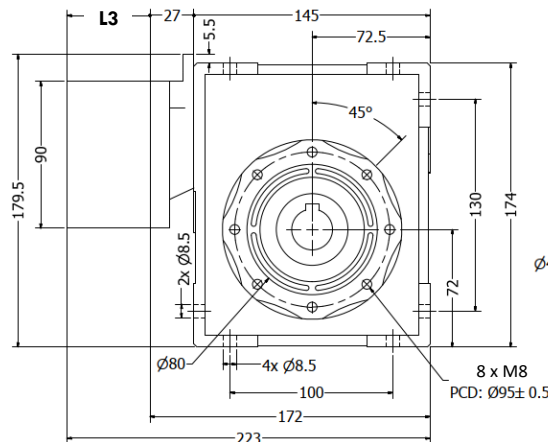
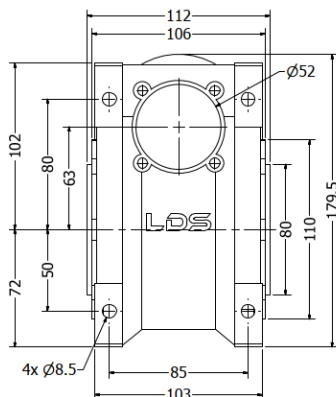
17 8MRV050-CG09 & 5GU~KB-N
DMRS050-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-15-CG09 & 5GU-KB-N ~ 8MRV050-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



18 8MRV063-CG09 & 5GU~KB-N
DMRS063-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG09 & 5GU-KB-N ~ 8MRV063-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



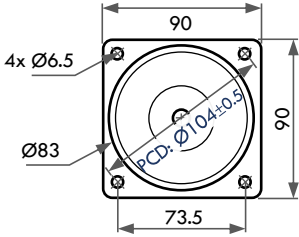
DIMENSION : COMPACT AC MOTOR



200W

1 MOTOR FRAME DIMENSION FOR ALL 200W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR

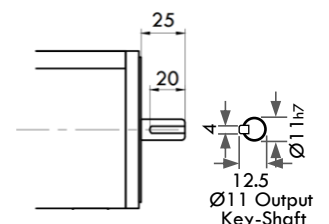
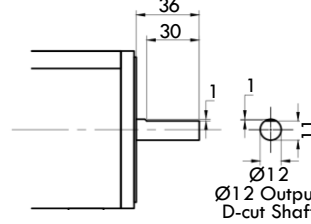
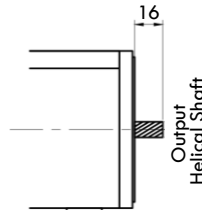


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 200W MOTOR

HELICAL-SHAFT (PINION-SHAFT)
51K200GN/GX-□EF
51K200RGN/RGX-□EF
51K200VGN/VGX-□EF
5RK200GN/GX-□EF
5RK200RGN/RGX-□EF

OUTPUT ROUND-SHAFT (D-CUT)
51K200A-□EF
51K200RA-□EF
51K200VA-□EF
5RK200A-□EF
5RK200RA-□EF

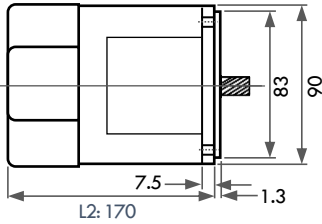
OUTPUT KEY-SHAFT
51K200A-□EF-N
51K200RA-□EF-N
51K200VA-□EF-N
5RK200A-□EF-N
5RK200RA-□EF-N



Note : Ø12mmx35mmL output key-shaft available upon request

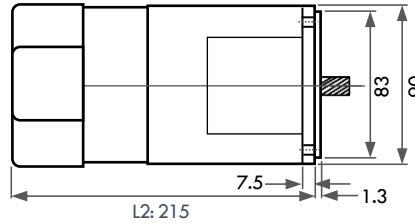
3 INDUCTION / ASYNCHRONOUS MOTOR 200W

51K200GN-□EF / 51K200VGN-□EF
REVERSIBLE MOTOR 200W
5RK200GN-□EF



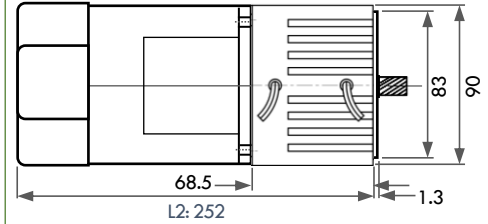
4 ELECTROMAGNETIC BRAKE MOTOR 200W

51K200GN-□EF-B / 51K200VGN-□EF-B
REVERSIBLE BRAKE MOTOR 200W
5RK200GN-□EF-B



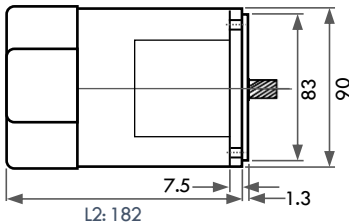
5 ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 200W

51K200GB-□EF & 5GU-CB
51K200VGB-□EF & 5GU-CB



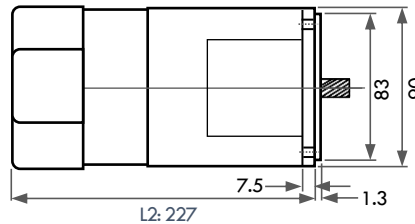
6 SPEED CONTROL MOTOR 200W

51K200RGN-□EF
REVERSIBLE SPEED CONTROL MOTOR 200W
5RK200RGN-□EF



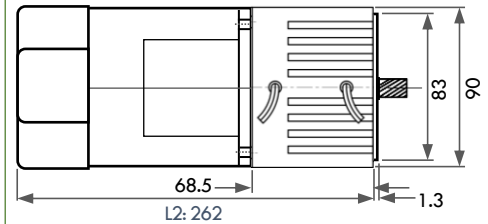
7 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 200W

51K200RGN-□EF-B
REVERSIBLE SPEED CONTROL
ELECTROMAGNETIC BRAKE MOTOR 200W
5RK200RGN-□EF-B



8 SPEED CONTROL ELECTROMAGNETIC CLUTCH & BRAKE MOTOR 200W

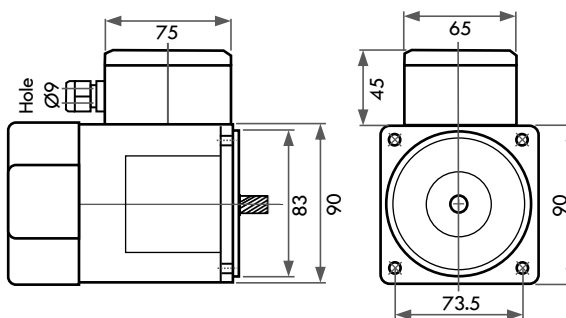
51K200RGB-□EF & 5GU-CB



MOTOR WITH TERMINAL BOX

9 MOTOR WITH TERMINAL BOX (IP44)

51K200A-□EFT 5RK200A-□EFT
51K200GN-□EFT 5RK200GN-□EFT
51K200GX-□EFT 5RK200GX-□EFT
51K200GB-□EFT 5RK200GB-□EFT
51K200VGN-□EFT 5RK200VGN-□EFT
51K200RGN-□EFT 5RK200RGN-□EFT
51K200RGX-□EFT 5RK200RGX-□EFT
51K200RGB-□EFT 5RK200RGB-□EFT
51K200GN-□EFBT 5RK200GN-□EFBT
51K200GX-□EFBT 5RK200GX-□EFBT
51K200GB-□EFBT 5RK200GB-□EFBT



NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR
L2 : BODY LENGTH OF MOTOR WITH
COACTIVE POWERFUL COOLING FAN (+20)

Unit of measurement : mm (millimeter)

DIMENSION : COMPACT GEARHEAD

200W



MOTOR WITH
PARALLEL SHAFT GEARHEAD
5GU-KB



MOTOR WITH DECIMAL GEAR
(DOUBLE REDUCTION GEARHEAD)
5GU10X + 5GU-KB



CLUTCH & BRAKE MOTOR WITH
PARALLEL SHAFT GEARHEAD AND
COACTIVE POWERFUL COOLING FAN



MOTOR WITH RIGHT ANGLE
WORM GEARHEAD
8MRV040-CM09

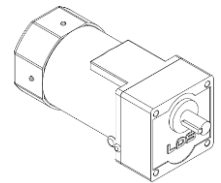
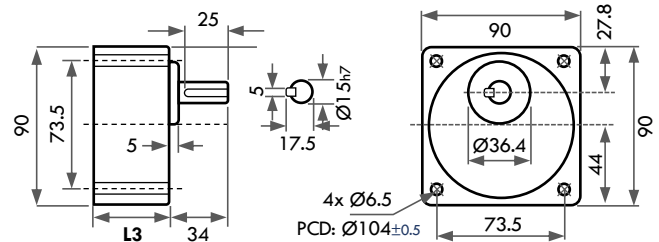


MOTOR WITH RIGHT ANGLE
SPIRAL BEVEL GEARHEAD
5GU-RH

10 5GU-KB PARALLEL SHAFT GEARHEAD (SQUARE GEARBOX)

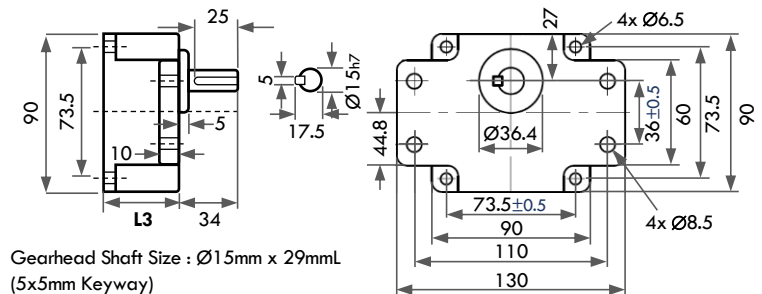
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD		
5GU3KB ~ 5GU18KB	3, 5, 6, 7.5, 9, 12.5, 15, 18	L3 43
5GU25KB ~ 5GU75KB	25, 30, 36, 50, 60, 75	51
5GU90KB ~ 5GU240KB	90, 100, 120, 150, 180, 240	60

DOUBLE GEARHEAD		L3
5GU30KB ~ 5GU75KB + (COUPLE WITH 5GU10X)	300, 360, 500, 600, 750	104
5GU90KB ~ 5GU240KB (COUPLE WITH 5GU10X)	900, 1000, 1200, 1500, 1800, 2400	113

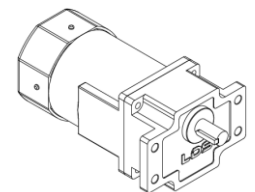


11 5GU-K PARALLEL SHAFT GEARHEAD (HINGE TYPE GEARBOX)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	
SINGLE GEARHEAD – HINGE TYPE		
5GU3K ~ 5GU75K	3, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75	L3 51
5GU90K ~ 5GU240K	90, 100, 120, 150, 180, 240	60

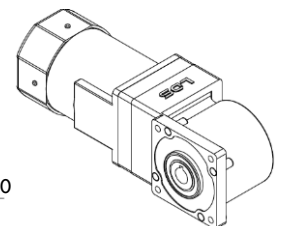
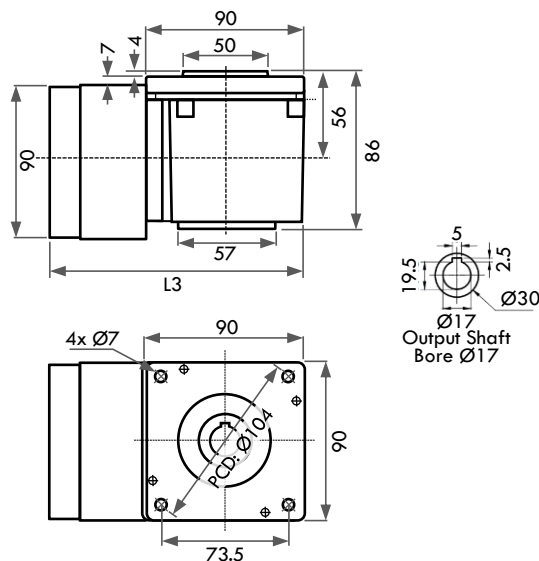


Gearhead Shaft Size : Ø15mm x 29mmL
(5x5mm Keyway)



12 5GN-RH (5GU-RH) HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

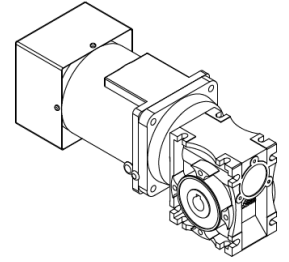
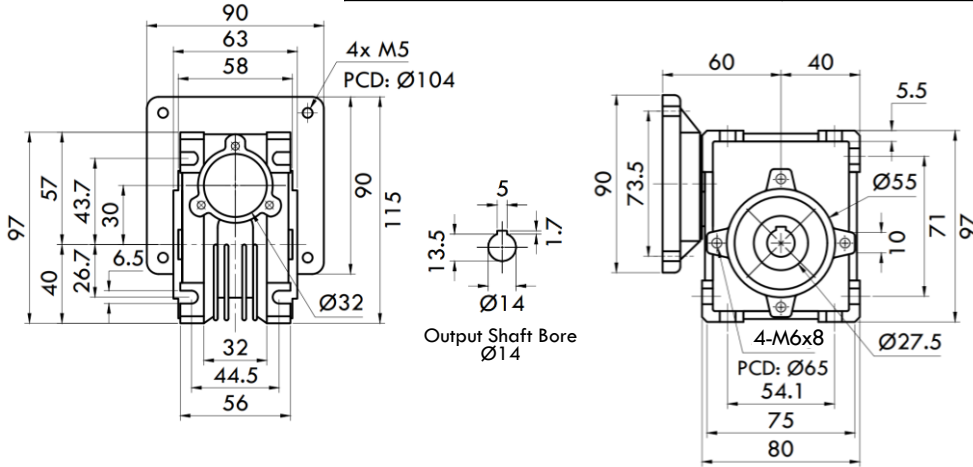
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
5GN9RH ~ 5GN225RH (SINGLE REDUCTION)	9, 15, 18, 22.5, 27, 37.5, 45, 54, 75, 90, 108, 150, 180, 225	145
5GN27RH ~ 5GN225RH + 5GN10X (DOUBLE REDUCTION)	270, 375, 450, 540, 750, 900, 1080, 1500, 1800, 2250 (COUPLED WITH DECIMAL GEAR)	198



DIMENSION : COMPACT GEARHEAD

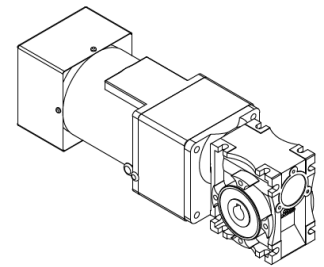
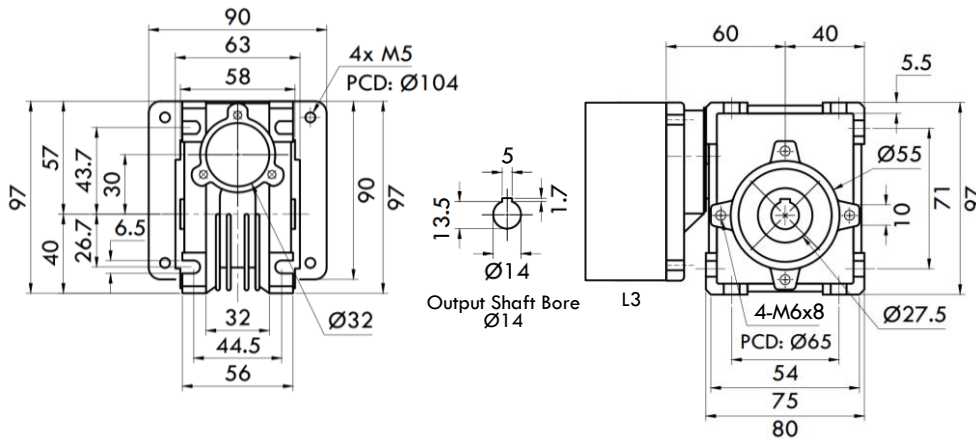
13 8MRV030-CM09 DMRV030-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-5-CM09 ~ 8MRV030-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



14 8MRV030-CG09 DMRV030-CG09 HOLLOW SHAFT WORM GEARHEAD

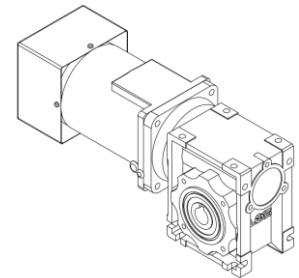
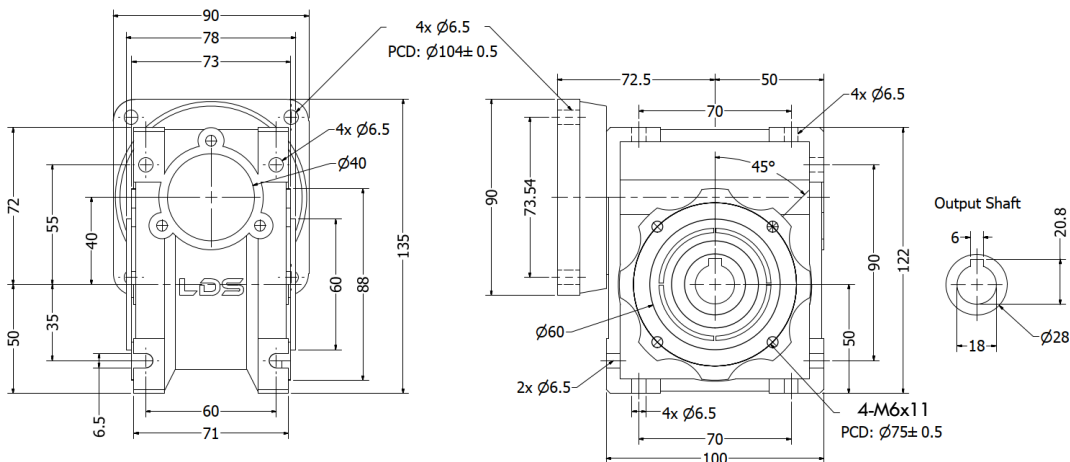
PRODUCT CODE	GEAR RATIO (1/X)
8MRV030-CG09 + 5GN-K-N	100, 135, 150, 180, 225, 270 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



L3 : 43mm~61mm
(Refer to Table 10 above)

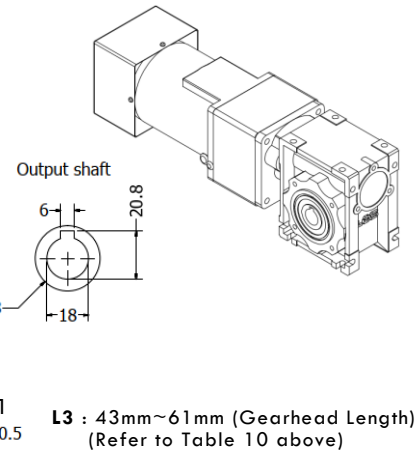
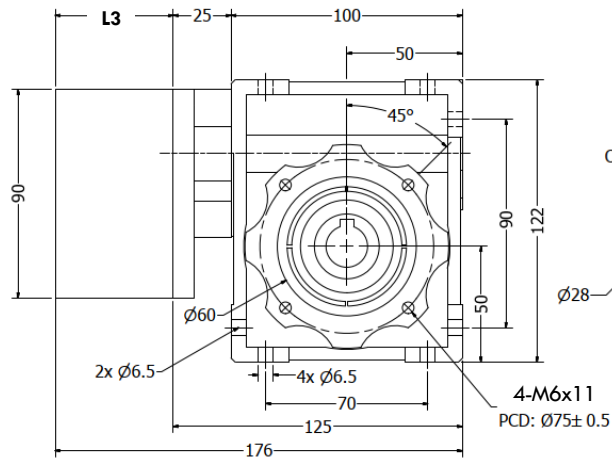
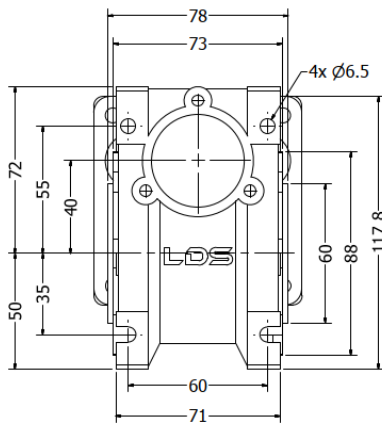
15 8MRV040-CM09 DMRS040-CM09 HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM09 ~ 8MRV040-80-CM09	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



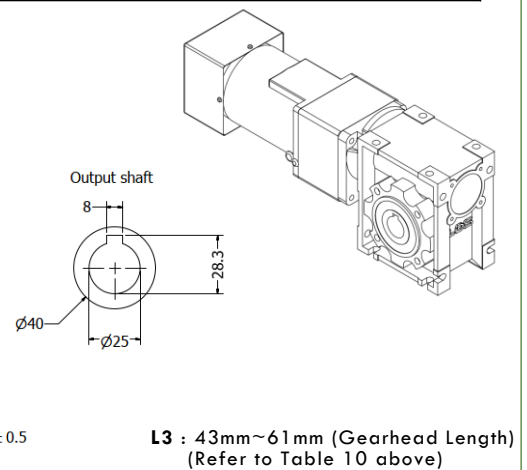
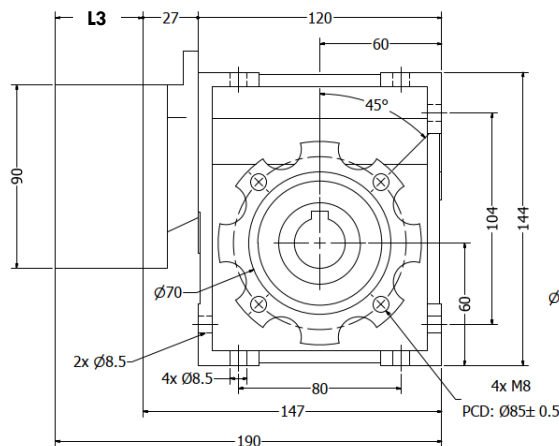
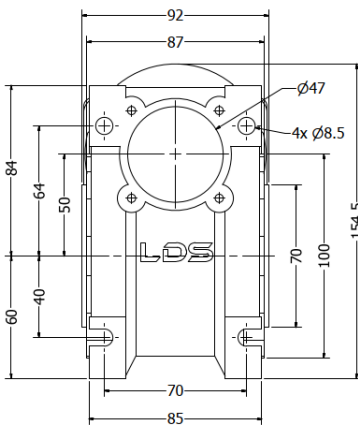
16 8MRV040-CG09 & 5GN~K-N
DMRS040-CG09 & 5GN~K-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-15-CG09 & 5GN-K-N ~ 8MRV040-80-CG09 & 5GN-K-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



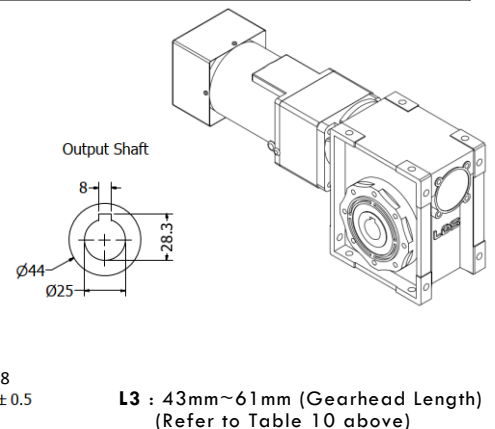
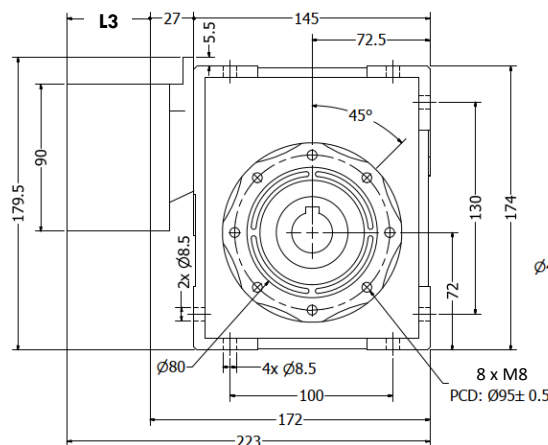
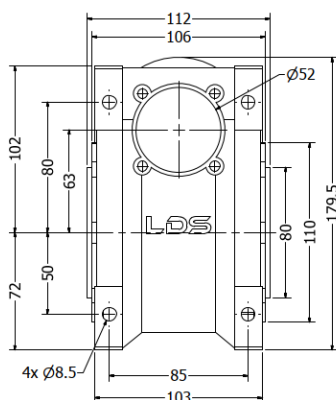
17 8MRV050-CG09 & 5GU~KB-N
DMRS050-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-15-CG09 & 5GU-KB-N ~ 8MRV050-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



18 8MRV063-CG09 & 5GU~KB-N
DMRS063-CG09 & 5GU~KB-N
HOLLOW SHAFT WORM GEARHEAD

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG09 & 5GU-KB-N ~ 8MRV063-100-CG09 & 5GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)





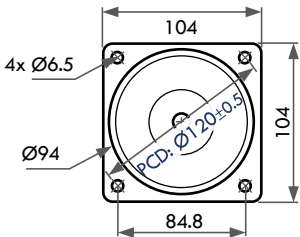
NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR

1 MOTOR FRAME DIMENSION FOR ALL 200W MOTOR

INDUCTION MOTOR
REVERSIBLE MOTOR
ELECTROMAGNETIC BRAKE MOTOR
CLUTCH & BRAKE MOTOR
SPEED CONTROL MOTOR



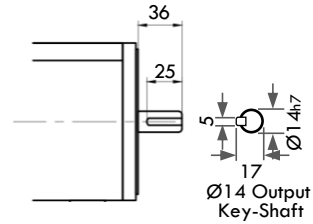
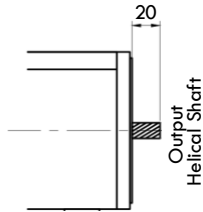
2 MOTOR OUTPUT SHAFT TYPE FOR ALL 200W MOTOR

HELICAL-SHAFT (PINION-SHAFT)

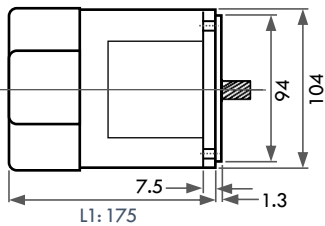
- 6IK200GN/GX-□F
- 6IK200RG/ RGX-□F
- 6IK200VGN/VGX-□F
- 6RK200GN/GX-□F
- 6RK200RG/ RGX-□F

OUTPUT KEY-SHAFT

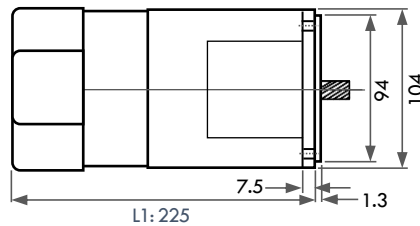
- 6IK200A-□F
- 6IK200RA-□F
- 6IK200VA-□F
- 6RK200A-□F
- 6RK200RA-□F



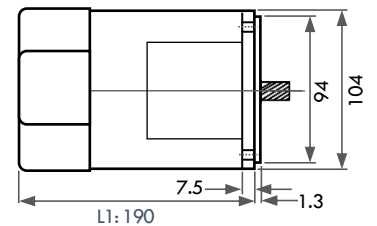
3 INDUCTION / ASYNCHRONOUS MOTOR 200W
6IK200GN-□F / 6IK200VGN-□F
REVERSIBLE MOTOR 200W
6RK200GN-□F



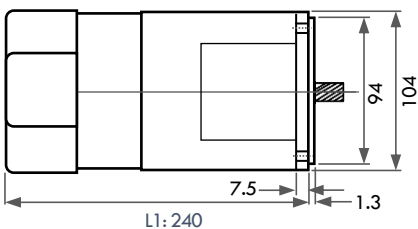
4 ELECTROMAGNETIC BRAKE MOTOR 200W
6IK200GN-□F-B / 6IK200VGN-□F-B
REVERSIBLE BRAKE MOTOR 200W
6RK200GN-□F-B



5 SPEED CONTROL MOTOR 200W
6IK200RG-□F
REVERSIBLE SPEED CONTROL MOTOR 200W
6RK200RG-□F

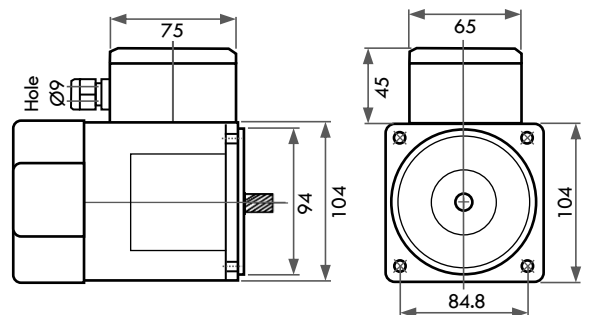


6 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 200W
6IK200RG-□F-B
REVERSIBLE SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 200W
6RK200RG-□F-B



7 MOTOR WITH TERMINAL BOX (IP44)

- 6IK200A-□FT
- 6IK200GN-□FT
- 6IK200VGN-□FT
- 6IK200RG-□FT
- 6IK200GN-□FBT
- 6RK200A-□FT
- 6RK200GN-□FT
- 6RK200VGN-□FT
- 6RK200RG-□FT
- 6RK200GN-□FBT

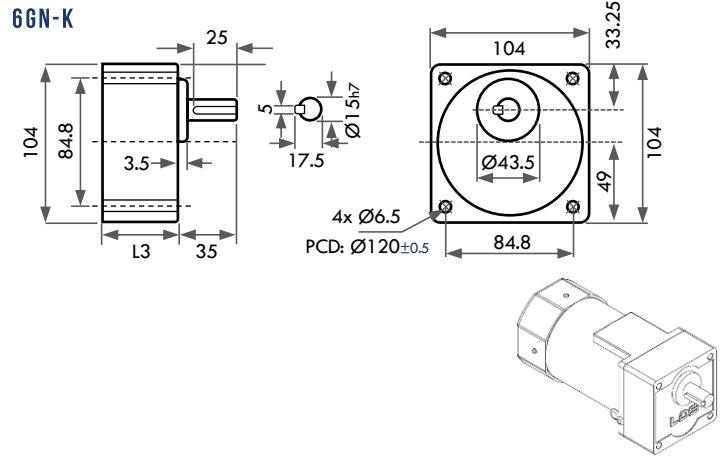


6IK - 200W

DIMENSION : COMPACT GEARHEAD

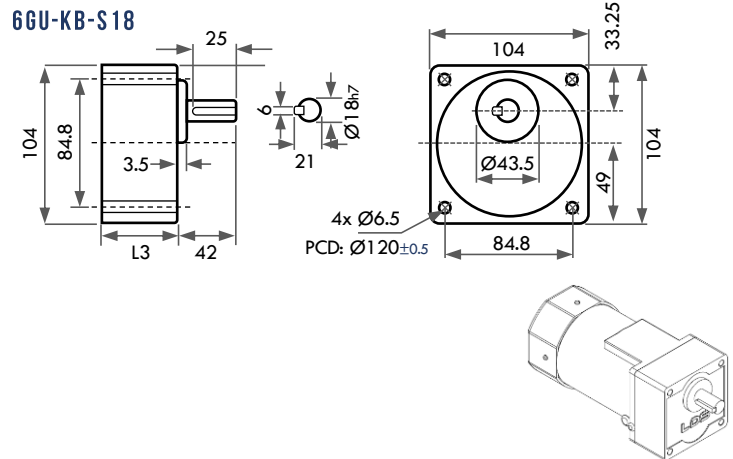
8 6GN-K PARALLEL SHAFT GEARHEAD (OUTPUT SHAFT DIA. 15MM)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
SINGLE GEARHEAD		
6GN3K ~ 6GN18K	3, 5, 6, 7.5, 9, 12.5, 15, 18	53
6GN25K ~ 6GN75K	25, 30, 36, 50, 60, 75	61
6GN90K ~ 6GN180K	90, 100, 120, 150, 180	70



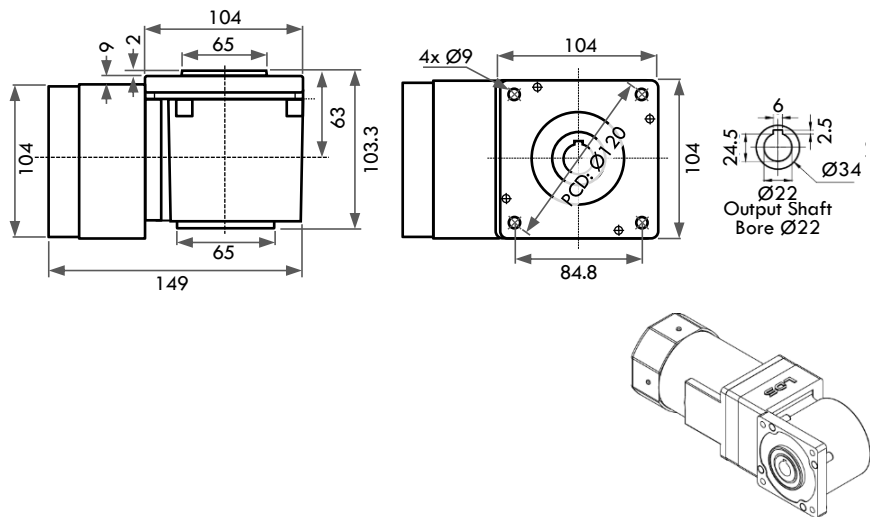
9 6GU-KB-S18 PARALLEL SHAFT GEARHEAD (OUTPUT SHAFT DIA. 18MM)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
SINGLE GEARHEAD		
6GU3KB-S18 ~ 6GU18KB-S18	5, 6, 7.5, 9, 12.5, 15, 18	53
6GU25KB-S18 ~ 6GU75KB-S18	3, 25, 30, 36, 50, 60, 75	61
6GU90KB-S18 ~ 6GU180KB-S18	90, 100, 120, 150, 180	70



10 6GU-RH HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

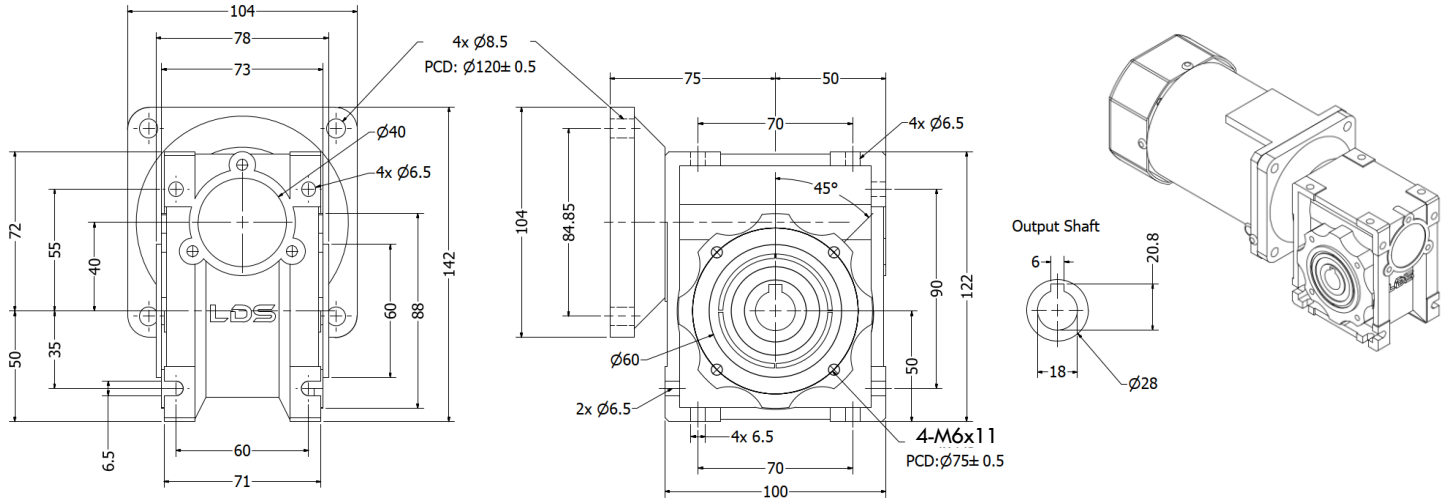
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)
6GU9RH ~ 6GU120RH (SINGLE REDUCTION)	7.5, 9, 15, 18, 25, 30, 37.5, 45, 63, 75, 95, 120



Unit of measurement : mm (millimeter)

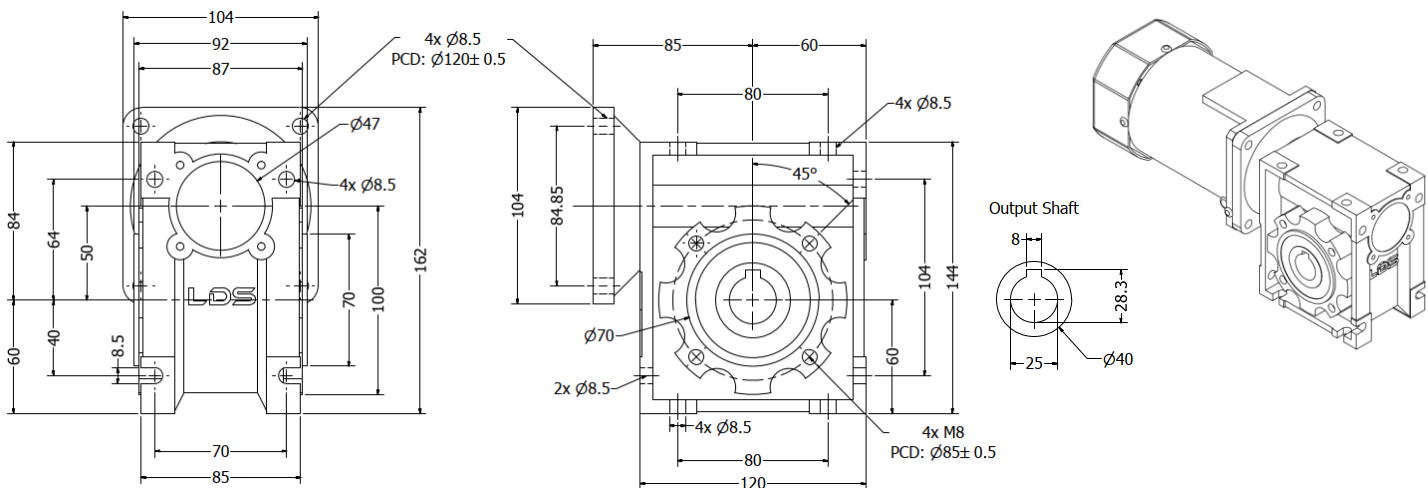
**11 8MRV040-CM10
DMRS040-CM10
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM10 ~ 8MRV040-80-CM10	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



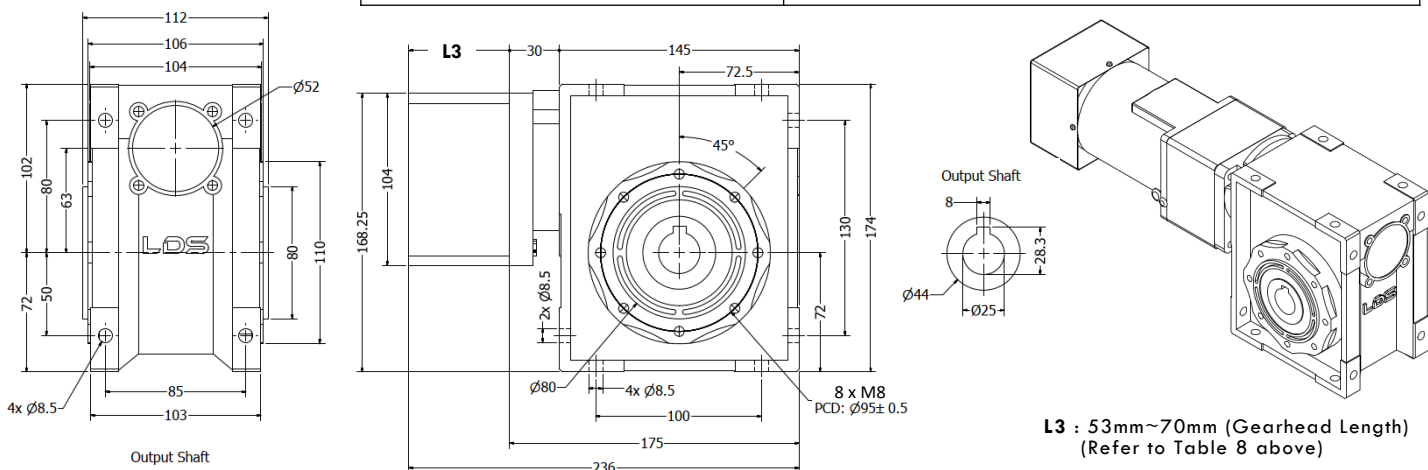
**12 8MRV050-CM10
DMRS050-CM10
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-5-CM10 ~ 8MRV050-100-CM10	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100



**13 8MRV063-CG10 & 6GU~KB-N
DMRS063-CG10 & 6GU~KB-N
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG10 & 6GU-KB-N ~ 8MRV063-100-CG10 & 6GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)



**L3 : 53mm~70mm (Gearhead Length)
(Refer to Table 8 above)**

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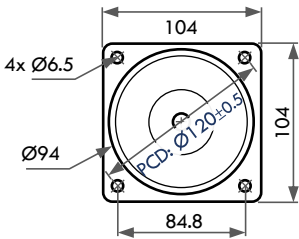
NOTE:

- INPUT VOLTAGE OF ELECTRIC MOTOR
- C : 1PHASE 220V (50/60HZ)
- C2 : 1PHASE 240V (50/60HZ)
- S : 3PHASE 220V (50/60HZ)
- S4 : 3PHASE 415V (50/60HZ)
- TQ : 3PHASE 240/415V (50/60HZ)
- U : 3PHASE 220/380V (50/60HZ)

L1 : BODY LENGTH OF STANDARD MOTOR

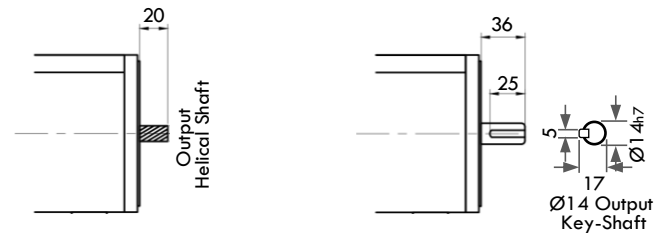
1 MOTOR FRAME DIMENSION FOR ALL 250W MOTOR

- INDUCTION MOTOR
- REVERSIBLE MOTOR
- ELECTROMAGNETIC BRAKE MOTOR
- CLUTCH & BRAKE MOTOR
- SPEED CONTROL MOTOR

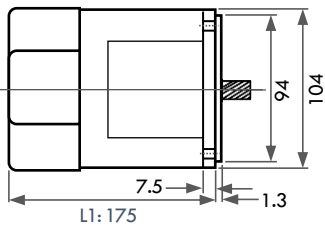


2 MOTOR OUTPUT SHAFT TYPE FOR ALL 250W MOTOR

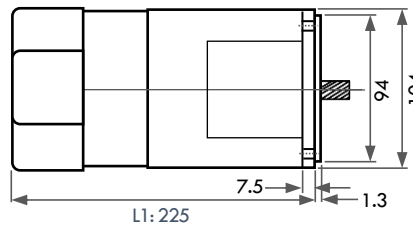
- | | |
|-------------------------------------|-------------------------|
| HELICAL-SHAFT (PINION-SHAFT) | OUTPUT KEY-SHAFT |
| 6K250GN/GX-□F | 6K250A-□F |
| 6K250RGN/RGX-□F | 6K250RA-□F |
| 6K250VGN/VGX-□F | 6K250VA-□F |
| 6RK250GN/GX-□F | 6RK250A-□F |
| 6RK250RGN/RGX-□F | 6RK250RA-□F |



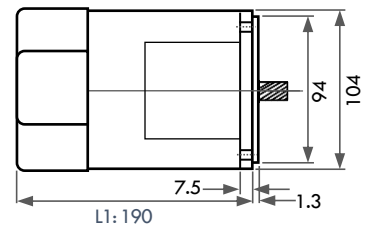
3 INDUCTION / ASYNCHRONOUS MOTOR 250W
6K250GN-□F / 6K250VGN-□F
REVERSIBLE MOTOR 250W
6RK250GN-□F



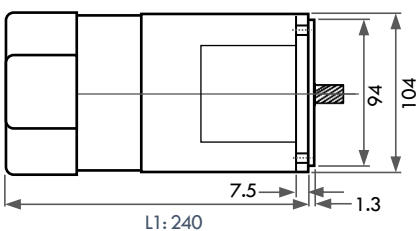
4 ELECTROMAGNETIC BRAKE MOTOR 250W
6K250GN-□F-B / 6K250VGN-□F-B
REVERSIBLE BRAKE MOTOR 250W
6RK250GN-□F-B



5 SPEED CONTROL MOTOR 250W
6K250RGN-□F
REVERSIBLE SPEED CONTROL MOTOR 250W
6RK250RGN-□F

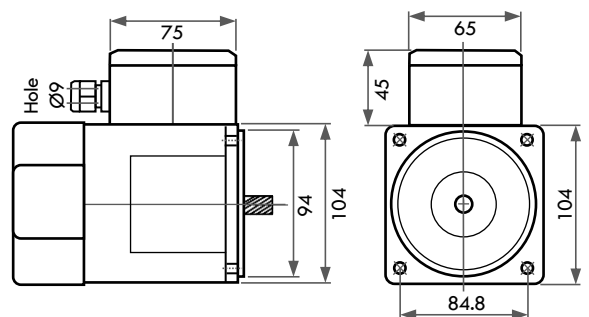


6 SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 250W
6K250RGN-□F-B
REVERSIBLE SPEED CONTROL ELECTROMAGNETIC BRAKE MOTOR 250W
6RK250RGN-□F-B



7 MOTOR WITH TERMINAL BOX (IP44)

- 6K250A-□FT
- 6K250GN-□FT
- 6K250VGN-□FT
- 6K250RGN-□FT
- 6K250GN-□FBT
- 6RK250A-□FT
- 6RK250GN-□FT
- 6RK250VGN-□FT
- 6RK250RGN-□FT
- 6RK250GN-□FBT

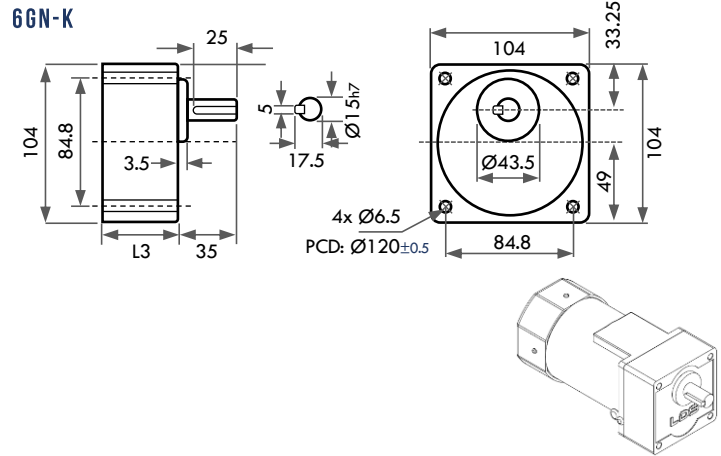


6IK - 250W

DIMENSION : COMPACT GEARHEAD

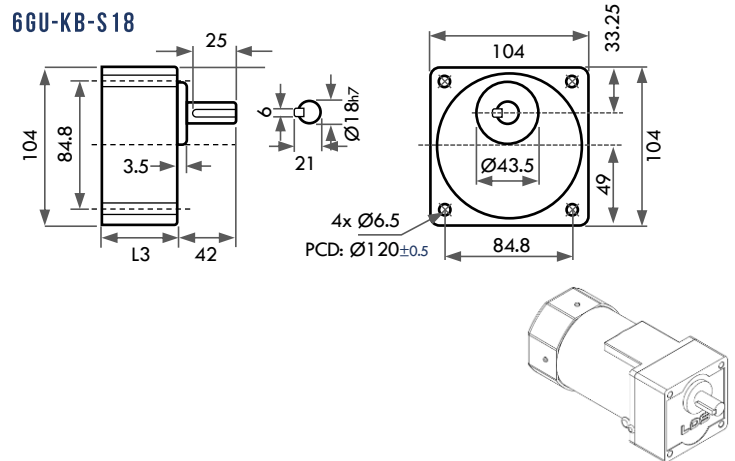
8 6GN-K PARALLEL SHAFT GEARHEAD (OUTPUT SHAFT DIA. 15MM)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
SINGLE GEARHEAD		
6GN3K ~ 6GN18K	3, 5, 6, 7.5, 9, 12.5, 15, 18	53
6GN25K ~ 6GN75K	25, 30, 36, 50, 60, 75	61
6GN90K ~ 6GN180K	90, 100, 120, 150, 180	70



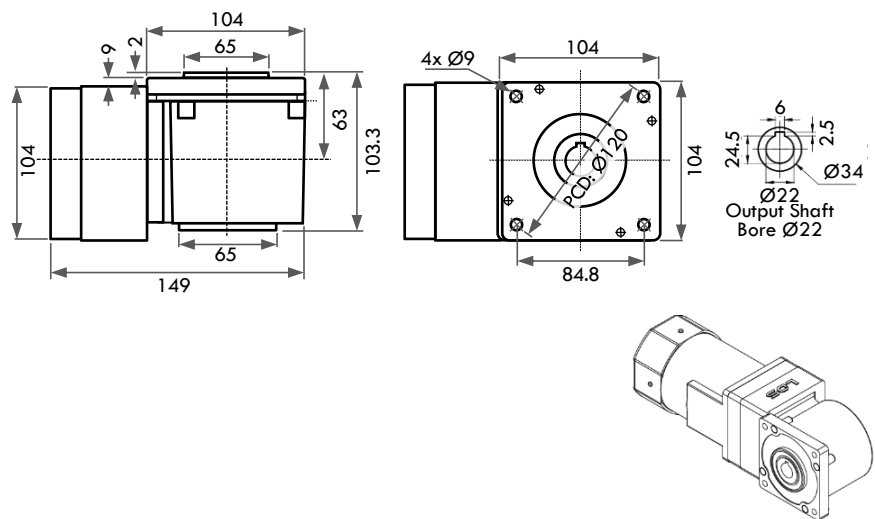
9 6GU-KB-S18 PARALLEL SHAFT GEARHEAD (OUTPUT SHAFT DIA. 18MM)

PRODUCT CODE	GEAR REDUCTION RATIO (1/X)	L3
SINGLE GEARHEAD		
6GU3KB-S18 ~ 6GU18KB-S18	5, 6, 7.5, 9, 12.5, 15, 18	53
6GU25KB-S18 ~ 6GU75KB-S18	3, 25, 30, 36, 50, 60, 75	61
6GU90KB-S18 ~ 6GU180KB-S18	90, 100, 120, 150, 180	70



10 6GU-RH HOLLOW SHAFT SPIRAL BEVEL GEARHEAD

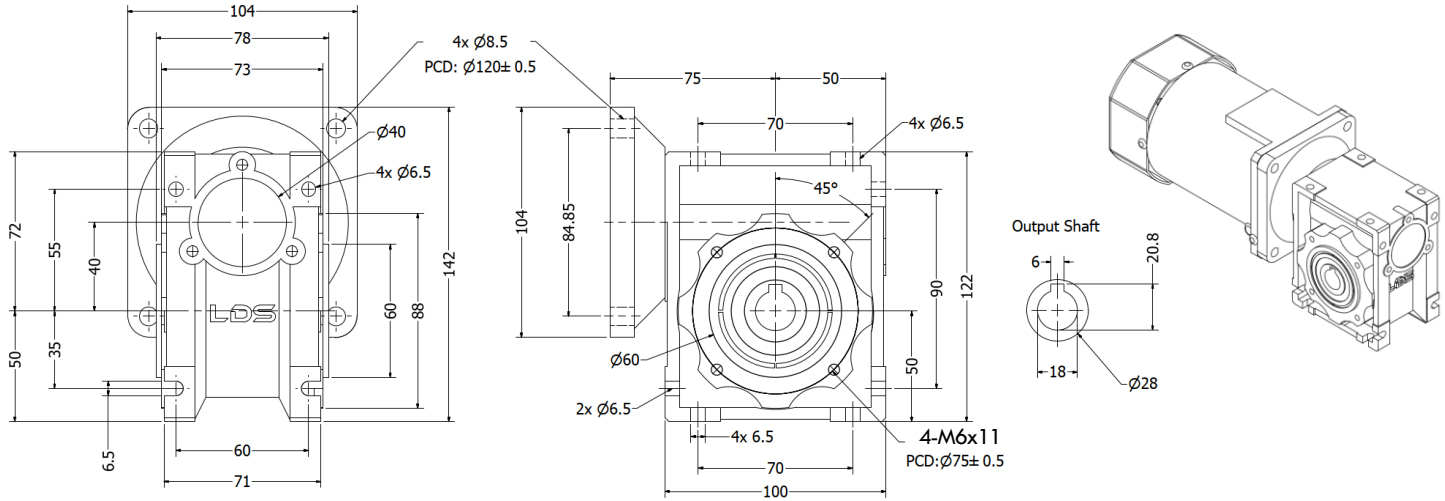
PRODUCT CODE	GEAR REDUCTION RATIO (1/X)
6GU9RH ~ 6GU120RH (SINGLE REDUCTION)	7.5, 9, 15, 18, 25, 30, 37.5, 45, 63, 75, 95, 120



Unit of measurement : mm (millimeter)

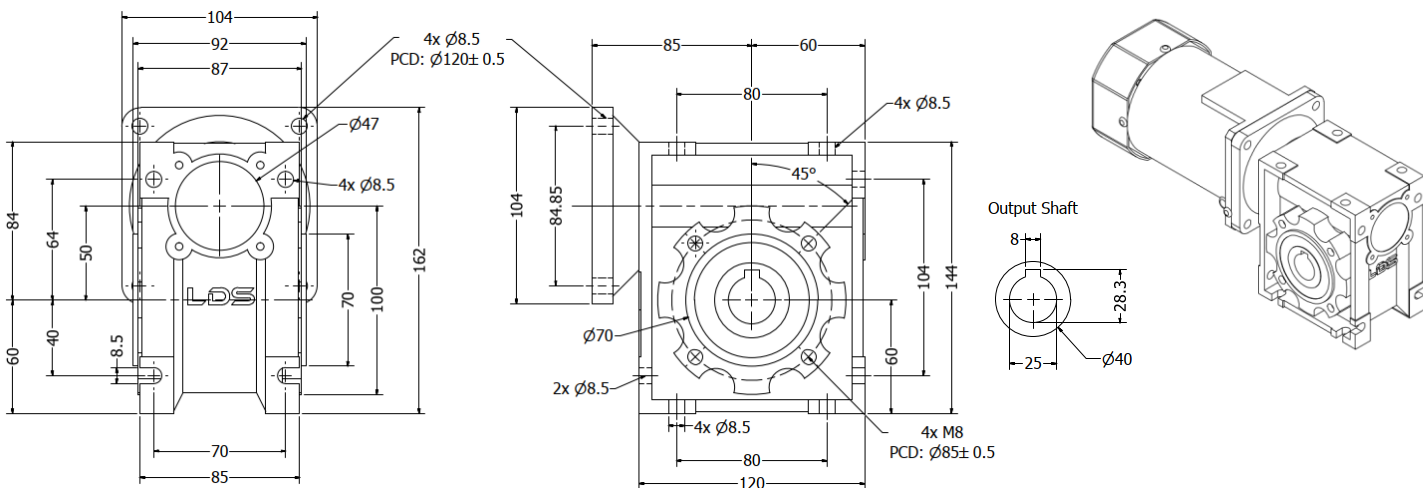
**11 8MRV040-CM10
DMRS040-CM10
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV040-5-CM10 ~ 8MRV040-80-CM10	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80



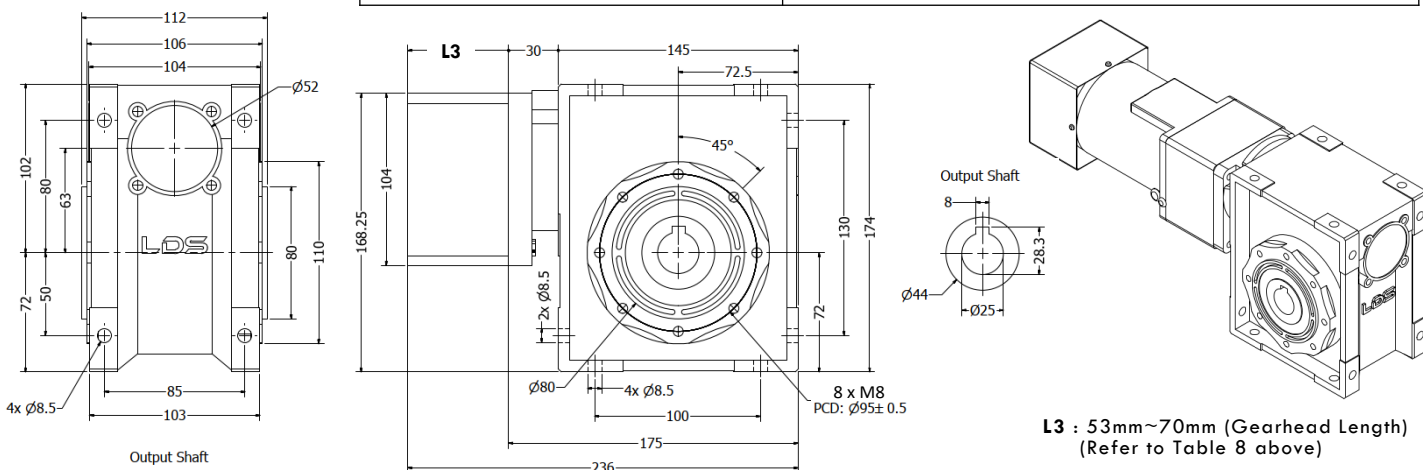
**12 8MRV050-CM10
DMRS050-CM10
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV050-5-CM10 ~ 8MRV050-100-CM10	5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100



**13 8MRV063-CG10 & 6GU~KB-N
DMRS063-CG10 & 6GU~KB-N
HOLLOW SHAFT WORM GEARHEAD**

PRODUCT CODE	GEAR RATIO (1/X)
8MRV063-15-CG10 & 6GU-KB-N ~ 8MRV063-100-CG10 & 6GU-KB-N	75, 100, 125, 135, 150, 180, 225, 270, 375, 450 ~ 19,200 (COUPLED WITH PARALLEL SHAFT GEARHEAD)

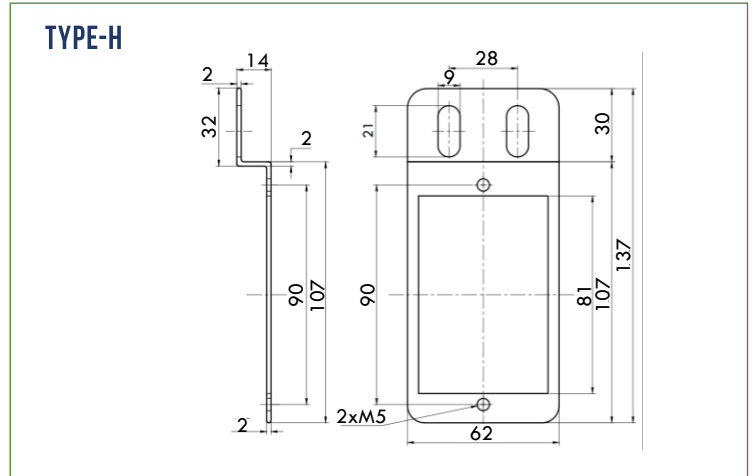


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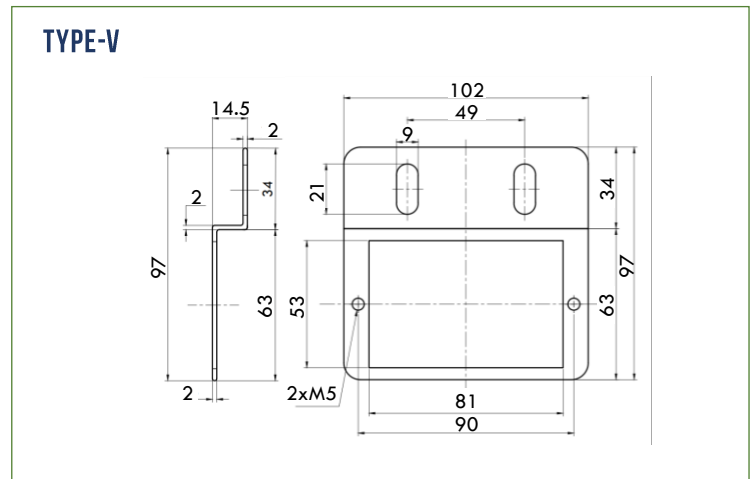
DIMENSION : ACCESSORIES OF COMPACT GEAR MOTOR

MOUNTING BRACKET FOR SPEED CONTROLLER AND COMPACT IGBT INVERTER

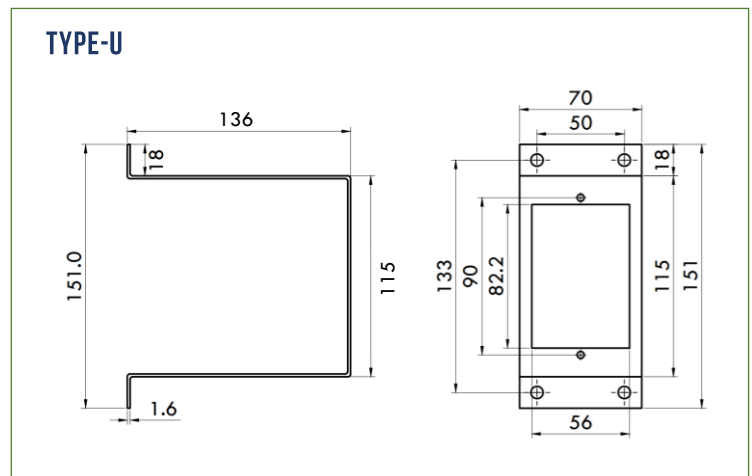
TYPE-H
(TOP-MOUNT)
FOR IGBT INVERTER &
USM SPEED CONTROLLER



TYPE-V
(SIDE MOUNT)
FOR IGBT INVERTER &
USM SPEED CONTROLLER



TYPE-U
(WALL-MOUNT)
FOR IGBT INVERTER &
USM SPEED CONTROLLER



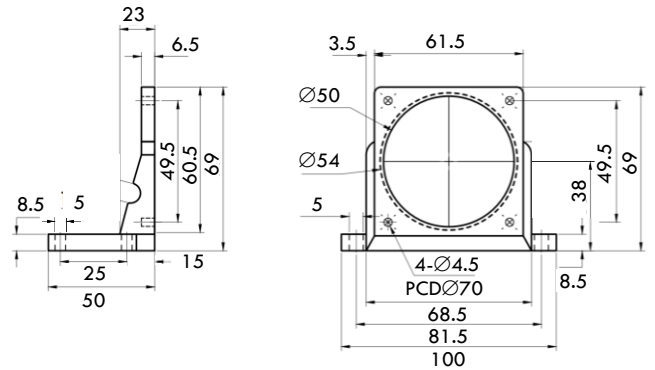
DIMENSION : ACCESSORIES OF COMPACT GEAR MOTOR

MOUNTING BRACKET COMPACT GEAR MOTOR

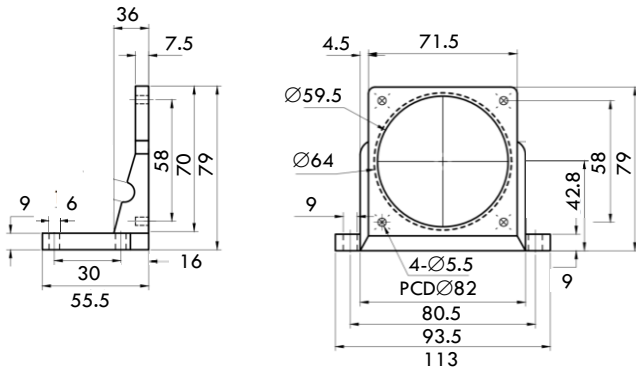


TYPE-F2 (FOOT MOUNTING)
FOR 40W ~ 200W
COMPACT GEAR MOTOR

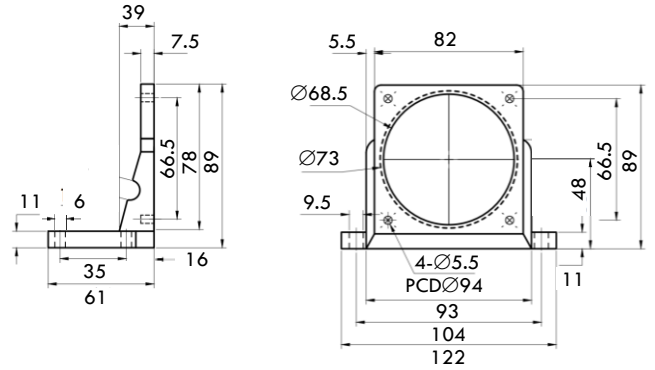
TYPE-F2#2 (FOR 6W MOTOR - 2IK & 2RK / 2GN GEAR HEAD)



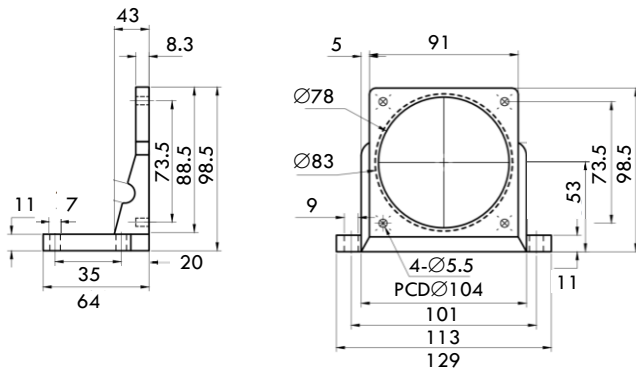
TYPE-F2#3 (FOR 15W MOTOR - 3IK & 3RK / 3GN GEARHEAD)



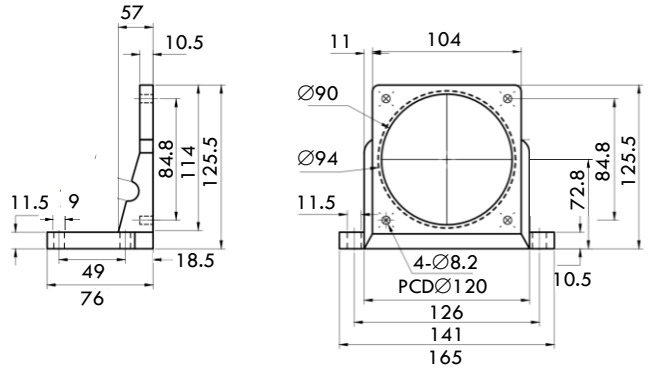
TYPE-F2#4 (FOR 25W MOTOR - 4IK & 4RK / 4GN GEAR HEAD)



TYPE-F2#5 (FOR 40W-200W MOTOR - 5IK & 5RK / 5GN & 5GU GEARHEAD)



TYPE-F2#6 (FOR 200W-250W MOTOR - 6IK & 6RK / 6GU GEAR HEAD)



COMPACT GEAR ACCESSORIES :



AXIAL COOLING FAN 40CFM
(COACTIVE POWERFUL COOLING FAN)
1.7W / 32DBA / BLDC WITH
VAPOR BEARING



**ACRYLIC PROTECTIVE
COVER FOR
IGBT INVERTER**
(ACRYLIC MADE)



EXTENSION CABLE
FOR VARIABLE SPEED MOTOR.
AVAILABLE IN 1M - 1.5M - 2M
- 3M LENGTH



4-PIN CAPACITOR
0.8 ~ 24
MICROFARED



**OUTPUT FLANGE
FOR WORM GEAR
REDUCER**
#30F • #40F

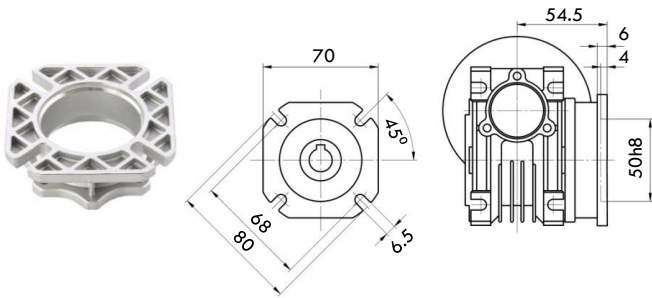


**PROTECTIVE ENCLOSURE
FOR WORM GEAR
REDUCER**
8MRV#30 • 8MRV#40

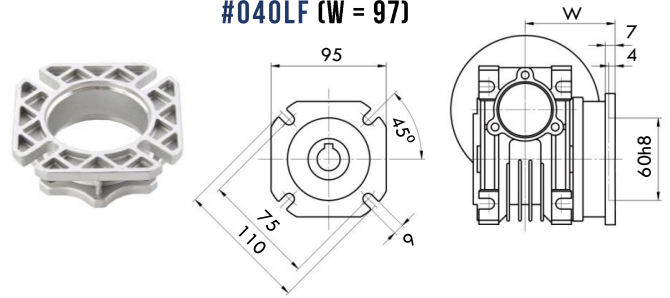
DIMENSION : ACCESSORIES OF COMPACT GEAR MOTOR

OUTPUT FLANGE FOR ALUMINIUM WORM GEAR REDCER

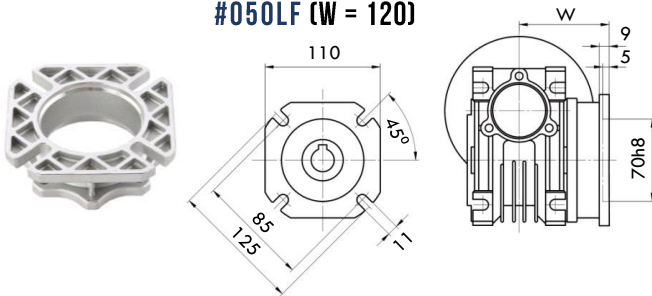
OUTPUT FLANGE : #030F



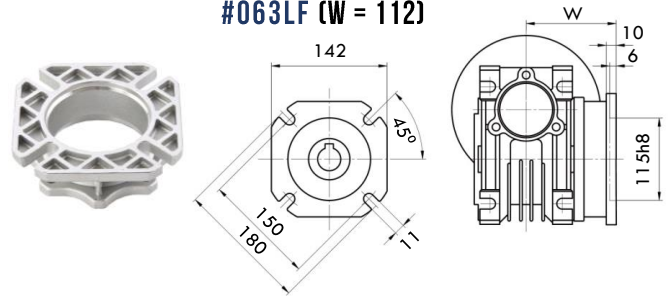
**OUTPUT FLANGE : #040F (W = 67)
#040LF (W = 97)**



**OUTPUT FLANGE : #050F (W = 90) -
#050LF (W = 120)**

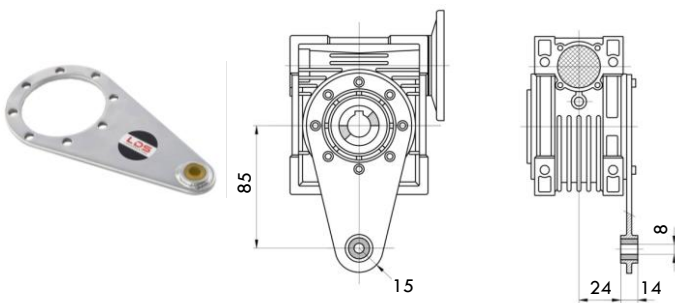


**OUTPUT FLANGE : #063F (W = 82)
#063LF (W = 112)**

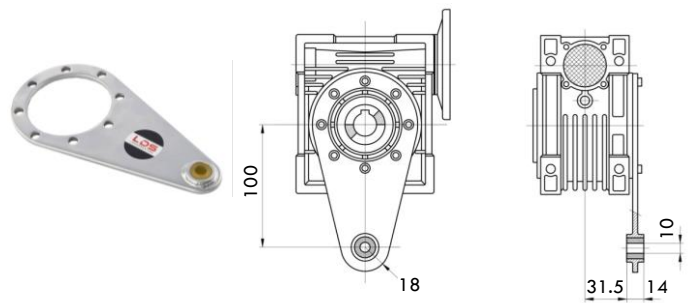


TORQUE ARM FOR ALUMINIUM WORM GEAR REDCER

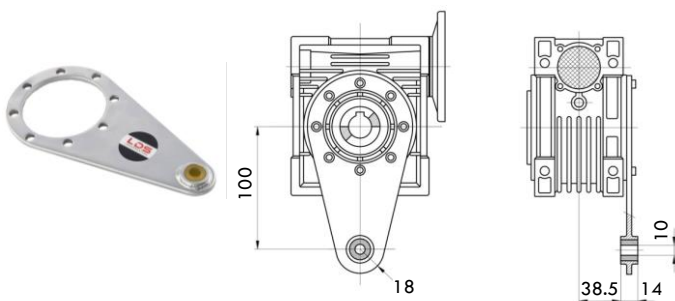
TORQUE ARM : #030TA



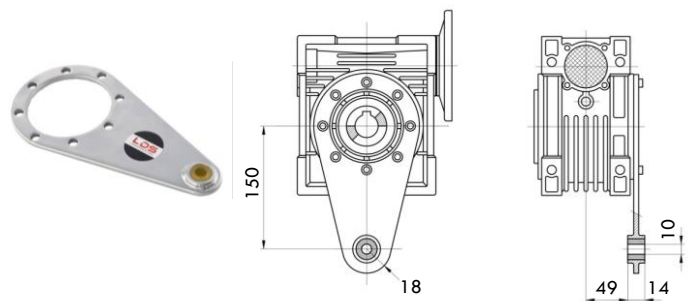
TORQUE ARM : #040TA



TORQUE ARM : #050TA



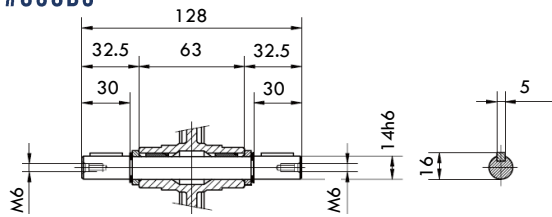
TORQUE ARM : #063TA



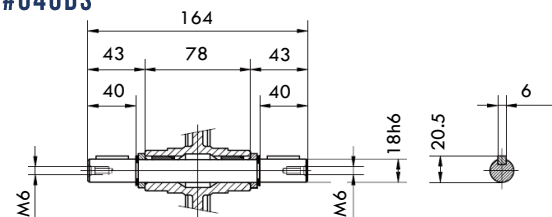
DIMENSION : ACCESSORIES OF COMPACT GEAR MOTOR

LOW SPEED OUTPUT SHAFT FOR ALUMINIUM WORM GEAR REDUCER

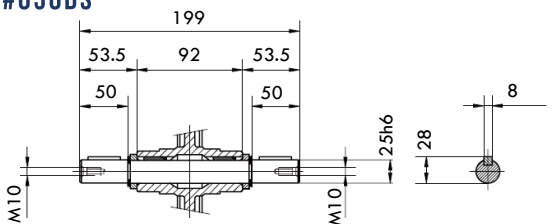
SINGLE OUTPUT SHAFT : #030SS
DOUBLE OUTPUT SHAFT : #030DS



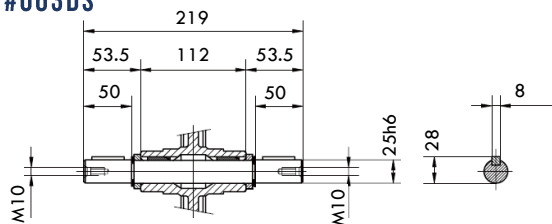
SINGLE OUTPUT SHAFT : #040SS
DOUBLE OUTPUT SHAFT : #040DS



SINGLE OUTPUT SHAFT : #050SS
DOUBLE OUTPUT SHAFT : #050DS



SINGLE OUTPUT SHAFT : #063SS
DOUBLE OUTPUT SHAFT : #063DS



CONNECTION DIAGRAM

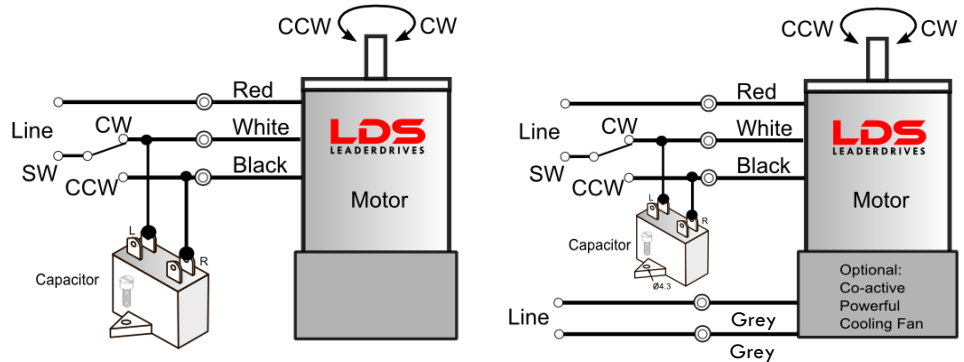
INDUCTION MOTOR ▪ REVERSIBLE MOTOR (1PHASE)

Motor Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

Coactive Fan Input Voltage : AC 100~110V ▪ AC 220~240V

Direction of Rotation:

To change the rotation, switch to CW or CCW connection.



INDUCTION MOTOR (3PHASE)

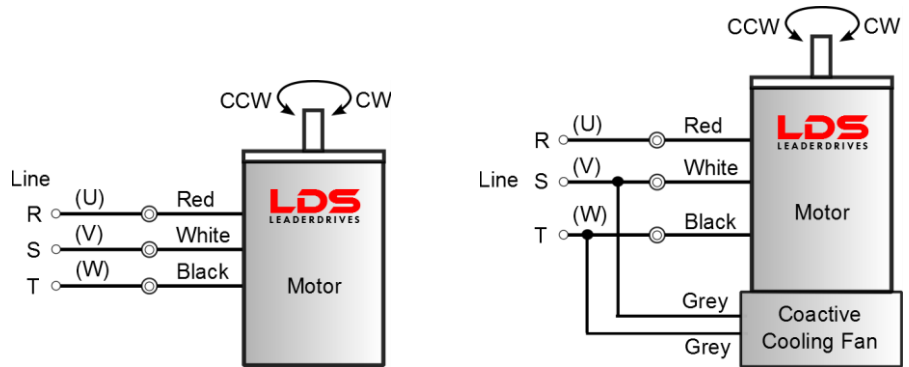
Motor Input Voltage : AC 3Ø 220~240V

Coactive Fan Input Voltage : AC 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U, V and W.

* If the motor is powered by an inverter or electronic soft starter, use separate Power Supply 220V to connect to the Coactive Cooling Fan.



INDUCTION MOTOR (3PHASE - 6 WIRES)

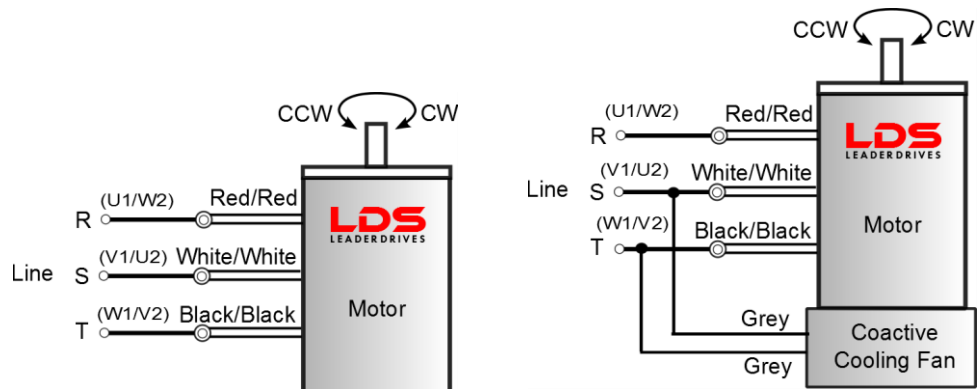
Motor Input Voltage : AC 3Ø 220~240V

Coactive Fan Input Voltage : AC 3Ø 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U1/W2, V1/U2, and W1/V2.

* If the motor is powered by an inverter or electronic soft starter, use separate Power Supply 220V to connect to the Coactive Cooling Fan.



Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.

CONNECTION DIAGRAM

INDUCTION MOTOR (3PHASE - 6 WIRES)

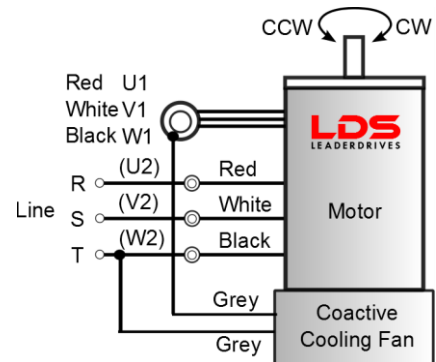
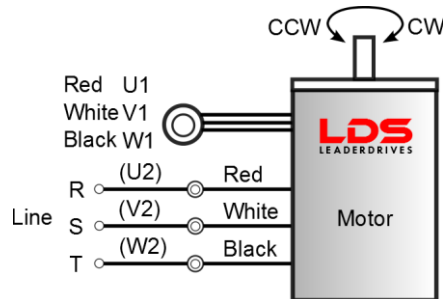
Motor Input Voltage : AC 3Ø 380~415V

Coactive Fan Input Voltage : AC 3Ø 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U2, V2 and W2.

*If the motor is powered by an inverter or electronic soft starter, use separate Power Supply 220V to connect to the Coactive Cooling Fan.



INDUCTION MOTOR WITH TERMINAL BOX (3PHASE)

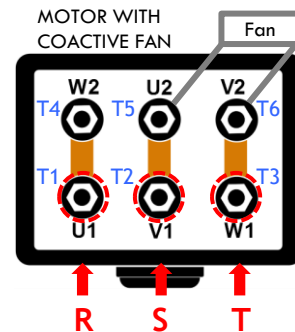
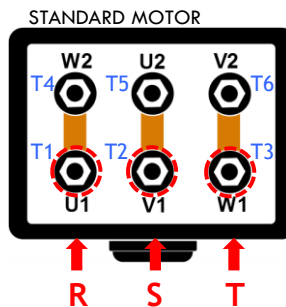
Motor Input Voltage : AC 3Ø 220~240V

Coactive Fan Input Voltage : AC 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U1, V1 and W1.

* If the motor is powered by an inverter or electronic soft starter, use separate Power Supply 220V to connect to the Coactive Cooling Fan.



INDUCTION MOTOR WITH TERMINAL BOX (3PHASE)

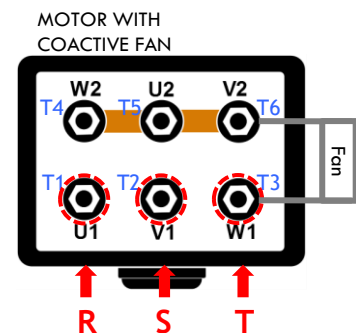
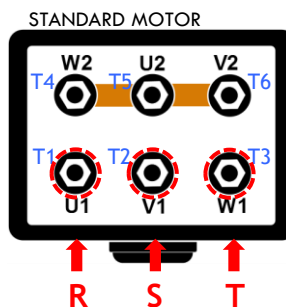
Motor Input Voltage : AC 3Ø 380~415V

Coactive Fan Input Voltage : AC 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U1, V1 and W1.

* If the motor is powered by an inverter or electronic soft starter, use separate Power Supply 220V to connect to the Coactive Cooling Fan.



CONNECTION DIAGRAM

ELECTROMAGNETIC BRAKE MOTOR REVERSIBLE ELECTROMAGNETIC BRAKE MOTOR (1PHASE)

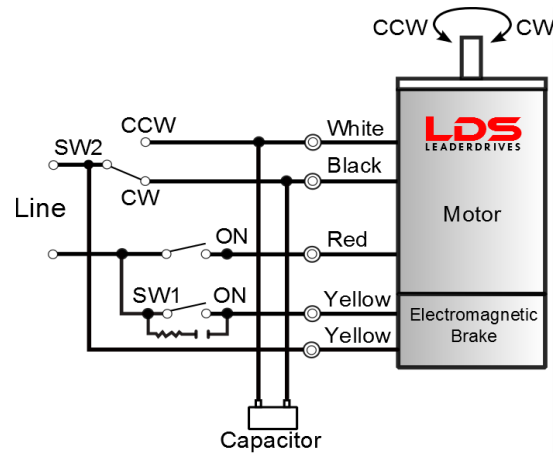
Motor Input Voltage : AC 1Ø 100~110V ▪
AC 1Ø 220~240V

Brake Input Voltage : AC 100~110V ▪
AC 220~240V
(Build-in AC to DC Rectifier Included)

Operation :

Run/Stop: SW 1 operates motor and electromagnet brake action. Motor will rotate when SW1 is switched to ON (short circuit). When SW1 is switched to OFF (open), the motor stopped immediately by the electromagnet brake and holds the load.

To release the brake while the motor is stopped, apply voltage between only two brake lead wires (yellow). The electromagnet brake is release and the motor shaft can be rotated easily by hand.



ELECTROMAGNETIC BRAKE MOTOR (3PHASE)

Motor Input Voltage : AC 3Ø 220~240V

Brake Input Voltage : AC 220~240V (Build-in AC to DC Rectifier Included)

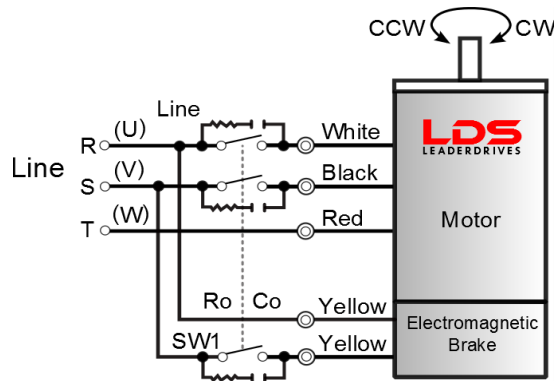
Operation :

Run/Stop: SW 1 operates motor and electromagnet brake action. Motor will rotate when SW1 is switched to ON (short circuit). When SW1 is switched to OFF (open), the motor stopped immediately by the electromagnet brake and holds the load.

To release the brake while the motor is stopped, apply voltage between only two brake lead wires (yellow). The electromagnet brake is release and the motor shaft can be rotated easily by hand.

Direction of Rotation: To change the rotation, exchange any two wires between U, V and W.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.



ELECTROMAGNETIC BRAKE MOTOR (3PHASE – 6 WIRES)

Motor Input Voltage : AC 3Ø 380~415V

Brake Input Voltage : AC 220~240V
(Build-in AC to DC Rectifier Included)

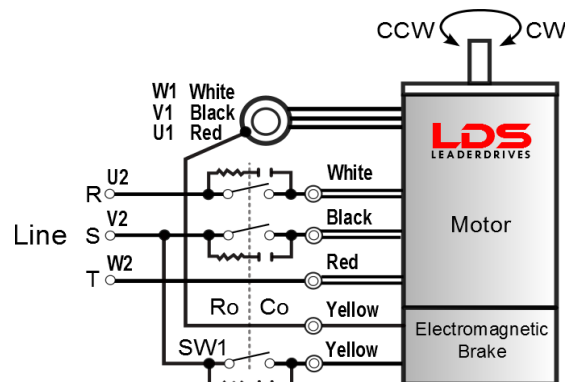
Operation :

Run/Stop: SW 1 operates motor and electromagnet brake action. Motor will rotate when SW1 is switched to ON (short circuit). When SW1 is switched to OFF (open), the motor stopped immediately by the electromagnet brake and holds the load.

To release the brake while the motor is stopped, apply voltage between only two brake lead wires (yellow). The electromagnet brake is release and the motor shaft can be rotated easily by hand.

Direction of Rotation: To change the rotation, exchange any two wires between U2, V2 and W2.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.



CONNECTION DIAGRAM

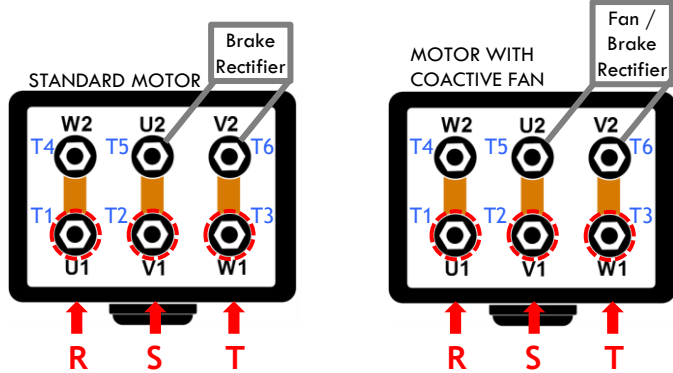
ELECTROMAGNETIC BRAKE MOTOR TERMINAL BOX (3PHASE)

Motor Input Voltage : AC 3Ø 220~240V
 Brake Input Voltage : AC 220~240V
 (Build-in AC to DC Rectifier Included)
 Coactive Fan Input Voltage : AC 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U1, V1 and W1.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.



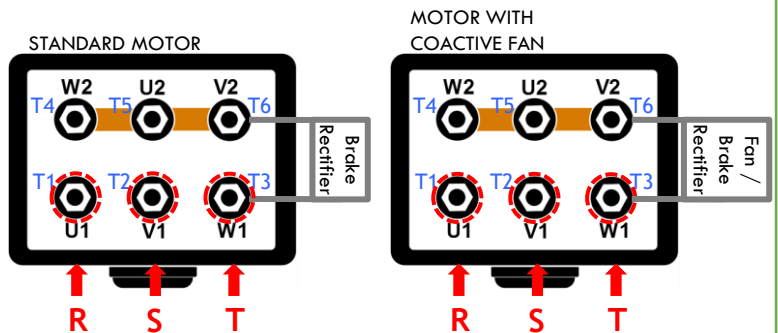
ELECTROMAGNETIC BRAKE MOTOR TERMINAL BOX (3PHASE)

Motor Input Voltage : AC 3Ø 380~415V
 Brake Input Voltage : AC 220~240V
 (Build-in AC to DC Rectifier Included)
 Coactive Fan Input Voltage : AC 220~240V

Direction of Rotation:

To change the rotation, exchange any two wires between U1, V1 and W1.

* If the motor is powered by an inverter or electronic soft starter, use Relay or separate Power Supply 220V for Brake Rectifier.



Operation :

Run/Stop: The brake systems are wired to the motor terminal block. When power is applied to the motor, the brake release (the motor stopped immediately by the electromagnetic brake and holds the load)

To release the brake while the motor is stopped, apply voltage between only two brake lead wires (yellow). The electromagnetic brake is release and the motor shaft can be rotated easily by hand.

Note: The contents of this data sheet are subject to change without prior notice for the purpose of continuous product improvement.

CONNECTION DIAGRAM

CLUTCH & BRAKE MOTOR (1PHASE)

Motor Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

Clutch & Brake Input Voltage : DC 24V

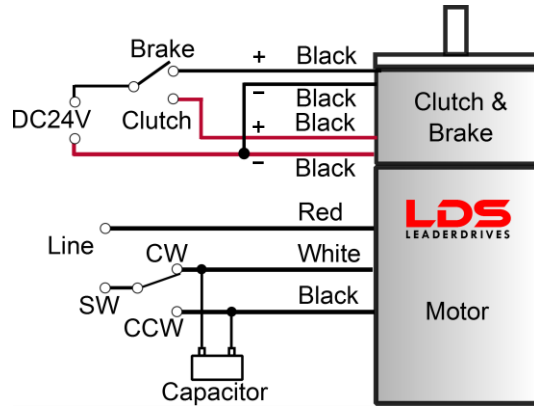
Operation:

Use separate power supply for the motor (AC) and the clutch and brake (AC to DC).

When the motor is rotating, connect the switch to the clutch, the output shaft will start rotating and transmits power accordingly.

When the motor is rotating, connect the switch to the brake, it will stop instantly and hold great retention force.

When the DC power is off, the output shaft can rotate freely.



CLUTCH & BRAKE MOTOR (3PHASE)

Motor Input Voltage : AC 3Ø 220~240V

Clutch & Brake Input Voltage : DC 24V

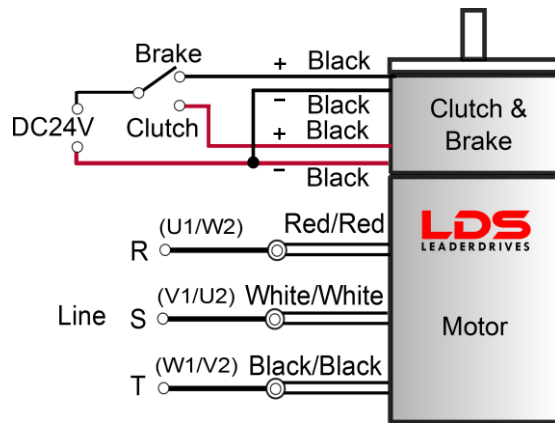
Operation:

Use separate power source for the motor (AC) and the clutch and brake (AC to DC).

When the motor is rotating, connect the switch to the clutch, the output shaft will start rotating and transmits power accordingly.

When the motor is rotating, connect the switch to the brake, it will stop instantly and hold great retention force.

When the DC power is off, the output shaft can rotate freely.



CLUTCH & BRAKE MOTOR (3PHASE)

Motor Input Voltage : AC 3Ø 380~415V

Clutch & Brake Input Voltage : DC 24V

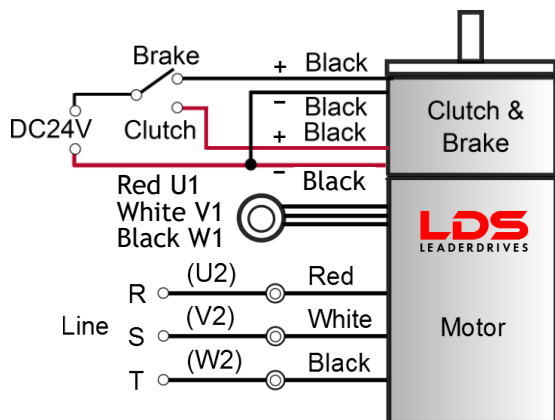
Operation:

Use separate power source for the motor (AC) and the clutch and brake (AC to DC).

When the motor is rotating, connect the switch to the clutch, the output shaft will start rotating and transmits power accordingly.

When the motor is rotating, connect the switch to the brake, it will stop instantly and hold great retention force.

When the DC power is off, the output shaft can rotate freely.



CONNECTION DIAGRAM

VARIABLE SPEED MOTOR WITH USM TYPE SPEED CONTROLLER (1PHASE)

Motor Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

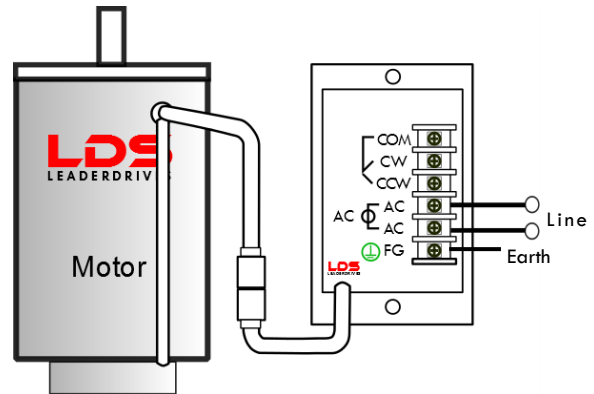
Controller Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

Operation:

Connect the motor lead wires connectors to the control unit (speed controller). Then connect the power cord to the power source.

Direction of Rotation:

To change the rotation, switch COM-CW to COM-CCW connection, and vice versa.



VARIABLE SPEED MOTOR WITH ELECTROMAGNETIC BRAKE AND USM TYPE SPEED CONTROLLER (1PHASE)

Motor Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

Controller Input Voltage : AC 1Ø 100~110V ▪ 1Ø 220~240V

Brake Input Voltage : AC 100~110V ▪ 220~240V
(Build-in AC to DC Rectifier Included)

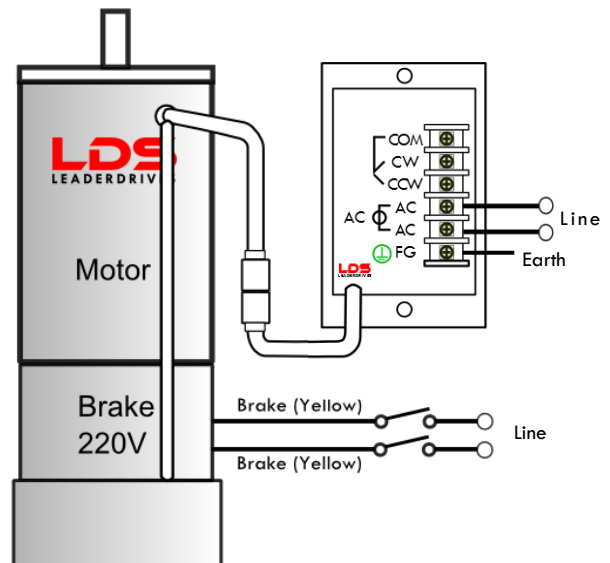
Operation:

Connect the motor lead wires connectors to the control unit (speed controller). Then connect the power cord to the power source.

Use Relay or separate Power Supply 110V/220V for the Brake Rectifier (Yellow Wire).

Direction of Rotation:

To change the rotation, switch COM-CW to COM-CCW connection, and vice versa.



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CONNECTION DIAGRAM

VARIABLE SPEED MOTOR WITH DIN RAIL TYPE SPEED CONTROLLER SS - SD SERIES (8 PIN, 1PHASE)

Motor Input Voltage :

AC 1Ø 100~110V ▪

AC 1Ø 220~240V

Controller Input Voltage :

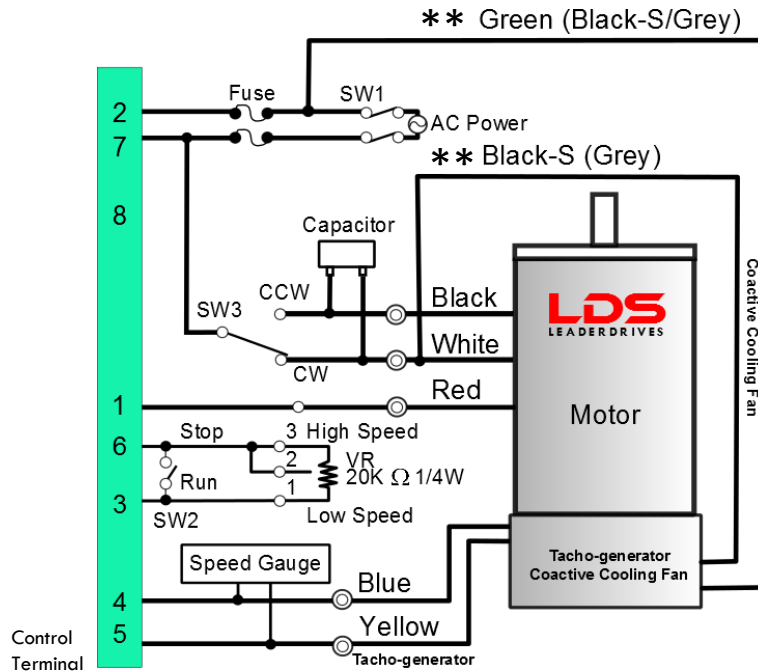
AC 1Ø 100~110V ▪

AC 1Ø 220~240V

Direction of Rotation:

To change the rotation, switch to CW or CCW connection (SW3).

** Connect Green wire and Black-S wire to respective terminal if u use LDS Extension Cable.



VARIABLE SPEED MOTOR WITH ELECTROMAGNETIC BRAKE AND DIN RAIL TYPE SPEED CONTROLLER SS - SD SERIES (8 PIN, 1PHASE)

Motor Input Voltage :

AC 1Ø 100~110V ▪

AC 1Ø 220~240V

Controller Input Voltage :

AC 1Ø 100~110V ▪

AC 1Ø 220~240V

Brake Input Voltage :

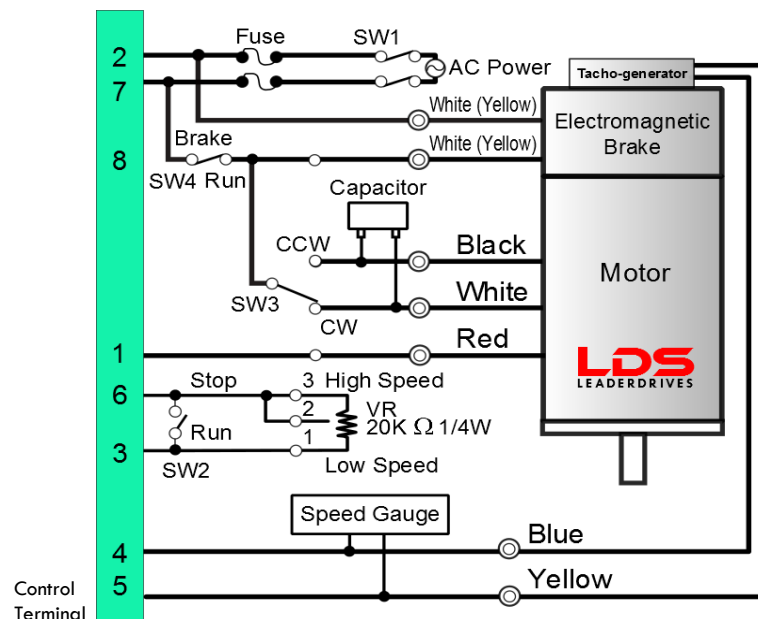
AC 100~110V ▪

AC 220~240V

(Build-in AC to DC Rectifier Included)

Direction of Rotation:

To change the rotation, switch to CW or CCW connection (SW3).



CONNECTION DIAGRAM

VARIABLE SPEED MOTOR WITH BRAKE PACK SS31 - SS32 SERIES (11 PIN, 1PHASE)

Motor Input Voltage :

AC 1Ø 100~110V •

AC 1Ø 220~240V •

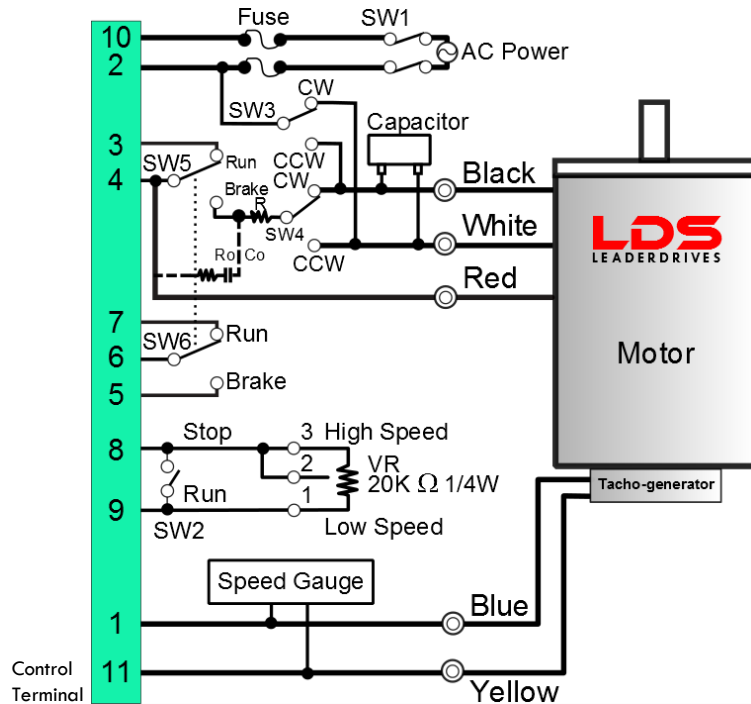
Controller Input Voltage :

AC 1Ø 100~110V

AC 1Ø 220~240V

Direction of Rotation:

To change the rotation, switch to CW or CCW connection (SW3).



VARIABLE SPEED MOTOR WITH ELECTROMAGNETIC BRAKE AND BRAKE PACK SS31 - SS32 SERIES (11 PIN, 1PHASE)

Motor Input Voltage :

AC 1Ø 100~110V •

AC 1Ø 220~240V

Controller Input Voltage :

AC 1Ø 100~110V •

AC 1Ø 220~240V

Brake Input Voltage :

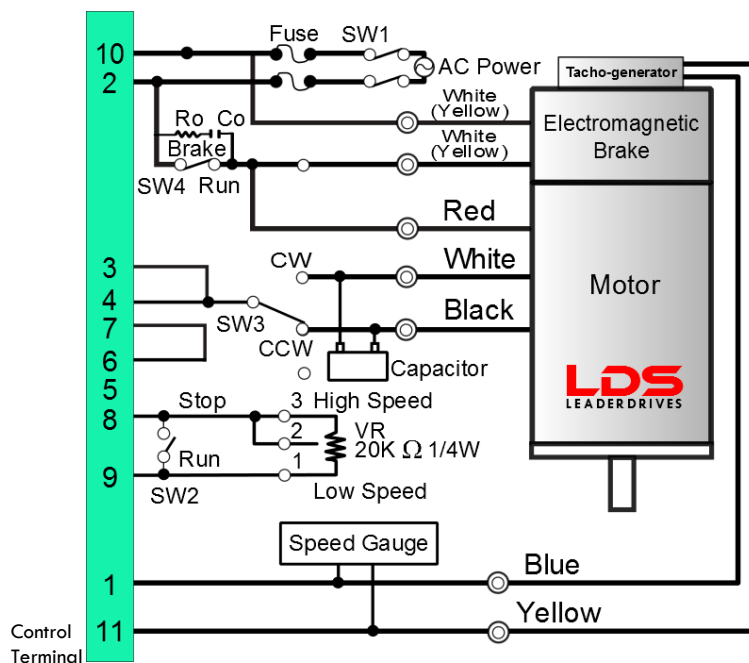
AC 100~110V •

AC 220~240V

(Build-in AC to DC Rectifier Included)

Direction of Rotation:

To change the rotation, switch to CW or CCW connection (SW3).



CONNECTION DIAGRAM

ASYNCHRONOUS MOTOR (3PHASE) WITH COMPACT IGBT INVERTER (1PHASE)

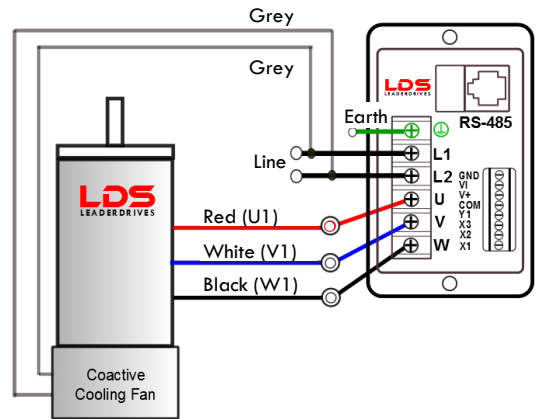
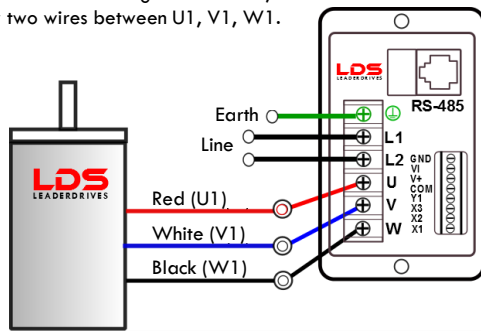
Motor Input Voltage : AC 3Ø 220~240V

Inverter Input Voltage : AC 1Ø 220~240V

Coactive Fan Input Voltage : AC 220~240V

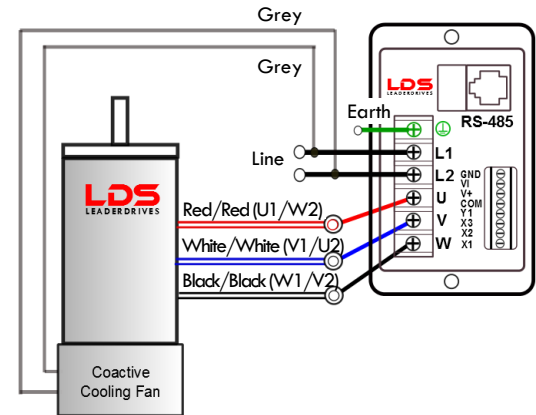
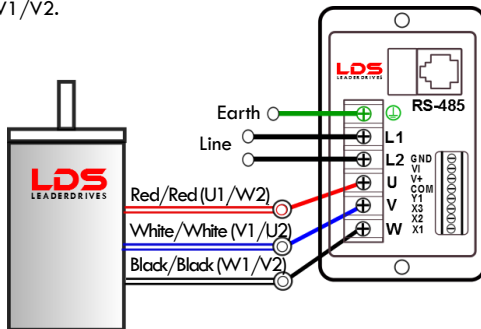
MOTOR WITH 3 LEADWIRES

Direction of Rotation: To change the rotation, exchange any two wires between U1, V1, W1.

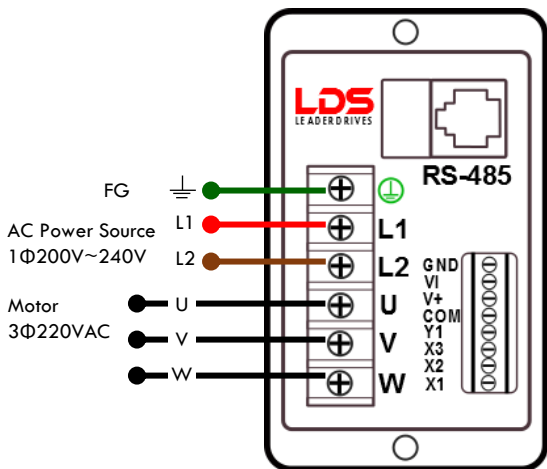


MOTOR WITH 6 LEADWIRES

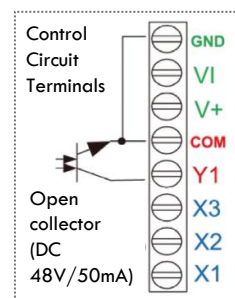
Direction of Rotation: To change the rotation, exchange any two wires between U1/W2, V1/U2 and W1/V2.



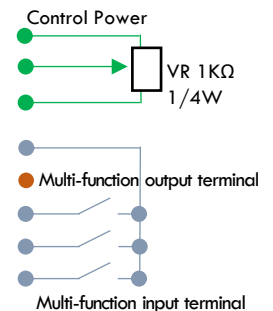
COMPACT IGBT INVERTER (1PHASE) MAIN CONTROL CIRCUIT TERMINALS



KP-601A/Modbus Port



Common terminal for analog input control
 Analog input terminal
 Power terminal for control signal
 Input/output common terminal
 Output Terminal 1
 Input terminal 3
 Input terminal 2
 Input terminal 1



* Use Relay or separate Power Supply 220V for Brake Rectifier and Coactive Cooling Fan.

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