

50W AC Geared Motor - Datasheet

For Use On Klargester Kingspan BA/BB Biodisc Sewage Treatment Tank

Replacement geared motors for the following part nrs:

Klargester Part Nrs: E3000, E3001, E4001, 010429, 015000 (115V)

Panasonic Part Nrs: M91C60GK4GE, M91C50GK4GE2, M91Z50GK4VM1, M9GS200B, MP9G200B

ZD Part Nrs: 5IK60GU-CT, 5GU200KS

(when supplied as a complete geared motor)

Gapp Automation's Compact AC Geared motor has been specifically designed and developed for use on the Klargester/ Kingspan BA & BB Biodisc sewage treatment tanks. Offering long life and maintenance free operation, this geared motor does not require servicing during the normal life of the product. The gearbox has grease lubricated bearings and gears, neither of which require maintenance, provided the product is operated within its rated specification.

- Totally Enclosed - IP65
- Compact Design
- Long Life
- Maintenance Free
- High Efficiency
- Continuously Rated

Gapp Stock Nr	Description	Motor Power (W)	Rated Current (A)	Rated Speed (rpm)	Supply Voltage (V)
GM-101711	K9IP50NCH-T5 K9P200BUFH-K6	50	0.47A	6.5	230
GM-102051	K9IP50NUH-T5 K9P200BUFH-K6	50	0.87A	6.5	115

Fitting & Operating Instructions

Fitting and operation should be done in accordance with this datasheet. To maximise the life of the motor, it is essential that there is sufficient free flow of air around the product. This Geared Motor is totally enclosed and therefore is self cooled. The surface temperature of the motor is rated to operate at around 80°C under normal operating conditions. The user should take care not to touch the surface of the motor or gearbox when it is being operated to avoid scalding.

When fitting the geared motor to the application, the output shaft bearing housing can be used as a locating spigot for mounting the unit. It is important that the motor and gearbox are not separated, as this could cause damage to the motor pinion.

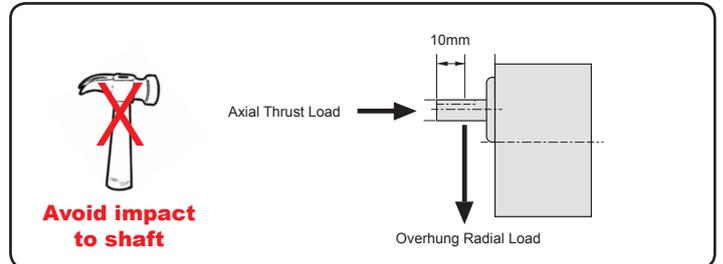
It is important that the timing belt used to rotate the biodisc is not overtightened to avoid excessive radial loading on the gearbox bearing.

Mounting Orientation

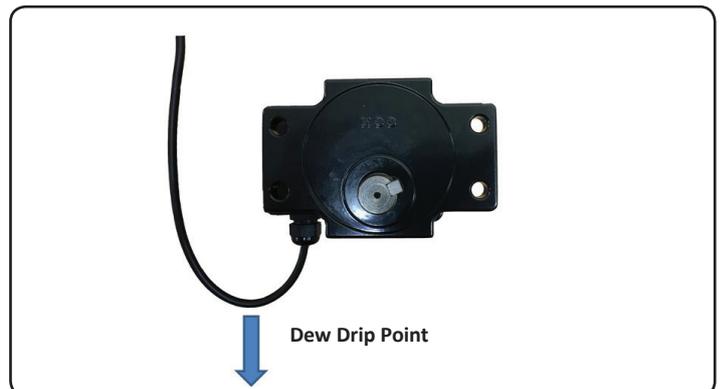
It is recommended that the geared motors are installed in the following orientation, to ensure that there is a natural dew drip point on the cable. The cable gland on the terminal box should be facing downwards. This helps avoid moisture build up inside the terminal box.



Radial and Axial Load Capacity



Gearbox Model	Ratio	Motor Power (W)	Radial Overhung Load (N)	Axial Thrust Load (N)	Bolt Size (mm)
K9P200BUF-K6	200	50	400	150	M6 x 20



WARNING!

Avoid impact to the gearbox shaft. Ensure pulley can be smoothly attached to the gearbox shaft. Impact damage to the gearbox shaft will result in premature failure.

Do not allow these motors to be submerged in water. If the motor is submerged this will result in premature failure. Avoid the motor being operated in stall conditions. Running the motors in stall conditions will result in premature failure. Ensure MAINS power is isolated before inspection/replacement.

Panasonic to GGM Cross Reference Guide

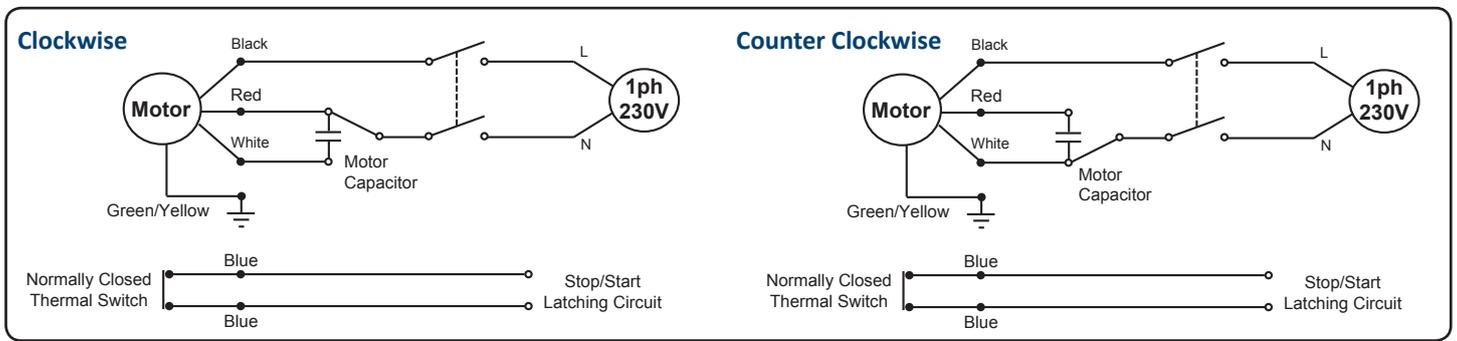
Panasonic Motor	GGM Motor
White Terminal (U1)	Black Terminal (BK)
Grey Terminal (U2)	Red Terminal (RD)
Black Terminal (Z2)	White Terminal (WT)

Motor Capacitor

These motors are supplied with a 3uF motor run capacitor. The capacitor **MUST** be connected between the **RED** and **WHITE** terminals. Failure to connect the capacitor correctly will result in loss of torque, motor overheating and premature failure. The capacitor should be mounted in the mains isolator switch control box. The capacitor is placed inside the terminal box during transit to avoid it getting lost.



Wiring Diagrams 230V and 115V Models



Motor Thermal Switch

This geared motor is supplied with a thermal switch. To ensure protection to the motor and to the installation it is recommended that the motor thermal switch is connected to a Stop/Start Latching Safety circuit. If there is no Latching Safety circuit installed, then the Thermal Switch can be wired in series with the Live to the motor. **HOWEVER** as this switch is an automatic reset type all relevant safety precautions should be followed. Under **NO CIRCUMSTANCES** should the user attempt to Inspect/Replace the motor until the Mains power is **FULLY ISOLATED**. When run continuously at rated load, these motors will experience heating up of the motor body. It is advisable that the user should not touch the motor until it has cooled down. To prevent premature failure the motor should not be run continuously in stall conditions.

