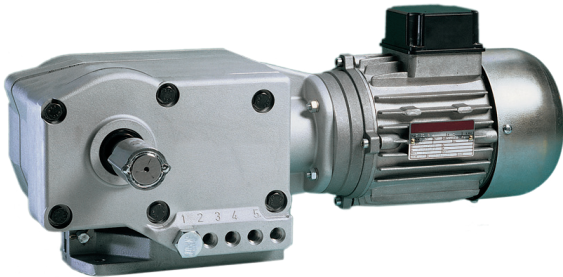




# LG403 & LG405 GEAR MOTOR



## The ultimate in ventilation and screen system automation

### Highlights

- Torque stop settings are in five steps
- Other torque settings are available on request
- Opening and closing torque are set simultaneously

The LG403 and LG405 gear motors have been developed specially for the automatic opening of ventilation and screen systems in greenhouses. The construction of the gear motors makes them suitable for operation with the various existing rack-and-pinion systems.

### LG403 with torque stop

Torque stop ensures the gear motor stops running at a set torque. This means the vents are closed completely, as the gear does not stop until a certain pressure is reached from the vent onto the greenhouse construction.

In addition, torque stop gives additional security, as the motor stops in case of obstruction to the vent closing, for example frozen vents. In this way damage to the vents and the vent opening system by an obstruction is prevented.

Screen systems also benefit, as torque stop gives extra security against a too-strong pull on the screen wires. The motor stops when the torque becomes too high, and prevents the screen system from being torn apart.

### LG405 – Double Limit Stop

LG405 is, like LG403, developed for the opening of top or side vents in greenhouses, and for screen systems. LG405 is equipped with double fixed limit stops, which gives extra security against damage in case of a faulty connection, or by errors in the motor relay. Interchange of the phases during the installation may damage one of the fixed limit stops, but there is still the other fixed limit stop to ensure a correct stop of the motor.

### LG403/5 – Safety Stop

The latest variant from Senmatic is LG403 and LG405 with safety stop, meaning the gears are equipped with the fixed limit stop from the LG405 and also the torque stop from LG403. The fixed limit stop and the torque stop are set respectively as on LG405 and LG403. The torque stop now functions as an extra security if the fixed limit stop, for example due to incorrect installation, fails to stop the motor.

### Maximum Protection

Full utilization of the double fixed limit stop or safety stop is only achieved when the gear motor is connected to motor relay RO901/902. With faults caused by, for example, lightning or overvoltage, the motor relay will disconnect the power completely, and the gear cannot be restarted until a service engineer has carried out a fault-finding procedure.

### Technically Sophisticated

In order to facilitate the installation, LG403 and LG405 are lightweight gears weighing just 19 kg (42 lb). Both gears have a performance of 400 Nm (3600 in-lb). A standard flange motor is mounted on the gearbox so it is easy to disassemble without opening the gearbox. Potentiometers for position feedback can be built-in.



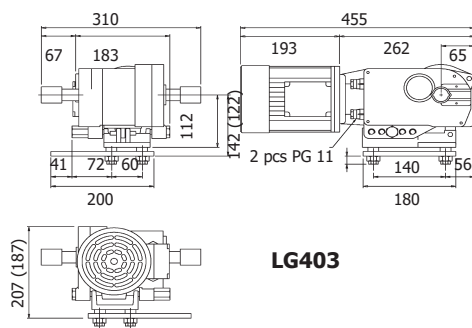
# SPECIFICATIONS / LG403 AND LG405 GEAR MOTOR

## Technical specifications

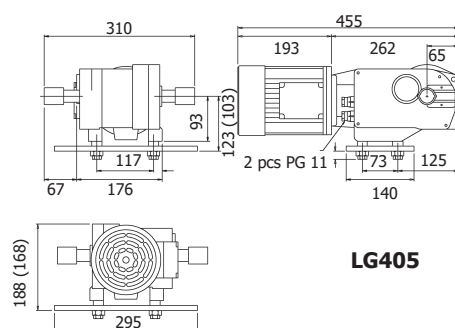
Type	LG403	LG403	LG403	LG403	LG403	LG403	LG403	LG405	LG405
Speed, R/min	1.3 1.6	3.4 3.8	6.8 7.6	1.6	3.8	4.1	3.8	4.1	3.2
Torque, Nm	350	400	350	350	275	400	200	400	275
Torque, IN-LB	3150	3600	3150	3150	2475	3600	1800	3600	2475
Input power, kW	0.37	0.37	0.55	0.37	0.37	0.37	0.37	0.37	0.37
Voltage, V	3 x 220-240 / 380-415 3 x 220-254 / 380-440	3 x 220- 240 / 380-415 3 x 220- 254 / 380-440	3 x 220- 240 / 380-415	3 x 220- 240 / 380-440	1 x 220- 230	3 x 220- 254 / 380-440	1 x 115	208-254 / 380-440	220-230
Current, A	1.96-2.04 / 1.14-1.10 1.84-1.78 / 1.06-1.02	1.96-2.04 / 1.14- 1.19 1.84-1.78 / 1.06- 1.02	2.50-1.44 2.50-1.44	1.88-1.90 / 1.08- 1.10	3.90	1.88- 1.90 / 1.08- 1.10	6.80	1.88-1.90 / 1.08-1.10	2.85 / 2.85
Frequency, Hz	50, 60	50, 60	50, 60	60	60	60	60	60	50
CSA:	-	-	-	X	X	X	X	X	-

## Physical specifications

Temperature, surrounding:	0 - 70° C (32 - 158° F)
Max. working temperature	100° C (212° F)
Proofing	IP55F
Emission	EN50081-1
Immunity	EN50082-1
Dimensions L x W x H:	455 x 183 x 220 mm (18 x 7 x 9")
Weight:	19 kg (42 lb)



LG403



LG405

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