

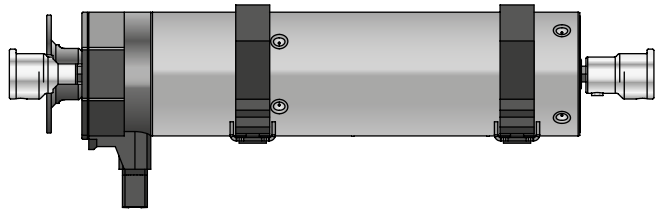
GEIGER

ANTRIEBSTECHNIK

Venetian blind motor:

GEIGER GJ56.. E14 Perfection with electronic end stop

For Venetian blinds and exterior blinds



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**Original assembly and
operating instructions**

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1. General information

Dear customer,

By purchasing a GEIGER motor you have decided on a quality product from GEIGER.

Thank you very much for your decision and the confidence placed in us.

Before you put this drive into operation please observe the following safety instructions. It serves for the prevention of danger and for the avoidance of personal injury and damage to property.

The installation and operating instructions contain important information for the installer, the specialist electrician and the user. Please pass on these instructions if you transfer the product. These instructions should be kept by the user.

2. Guarantee

In the case of incorrect installation contrary to the installation and operating instructions and/or constructional modification, the legal and contractual guarantee for property damage and product liability lapses.

3. Intended use

The motors of the model range **GJ56.. E14 Perfection** with electronic end stop are designed exclusively for the operation of Venetian blinds.

The motors may not be used for the operation of roller grilles, garage doors, furniture and lifting tools.

GJ	56	xx	x	
				Design options
				Torque in Nm
				For head rails at least 56 mm
				GEIGER Venetian blinds motor

4. Safety instructions



ATTENTION: Important safety instructions. For personal safety, it is important to follow these instructions. Please keep these instructions for future reference.

- ▶ Do not allow children to play with stationary controls. Keep remote controls away from children.
- ▶ The installation is to be checked regularly for defective balance, signs of wear or damaged cables and springs, if relevant.
- ▶ Do observe the moving sun protection system and keep persons away until it has closed completely.
- ▶ When operating the manual release with the sun protection system open, please be cautious as it can fall down quickly if springs or tapes wear off or are broken.
- ▶ Do not operate the device if operations such as, for example, window cleaning are to be carried out in the vicinity.
- ▶ Disconnect the automatic controlled device from the mains power supply if operations such as, for example, window cleaning are being carried out in the vicinity.
- ▶ During operation observe the danger zone.
- ▶ Do not use the installation if people or objects are in the danger zone.
- ▶ Urgently shut down damaged installations until repair.
- ▶ Unconditionally shut down the unit during maintenance and cleaning operations.
- ▶ Pinching and shearing points are to be avoided and must be secured.
- ▶ This appliance can be used by children aged 8 and above and persons whose physical, sensorial or mental capacities are impaired, or who have no experience or know-how if they have been supervised or been given instructions on the use of the appliance and if they understand the possible resulting dangers. Children are not permitted to play with the device. Cleaning and maintenance should not be carried out by children.
- ▶ The rated sound pressure level is less than 70 dB(A).
- ▶ Disconnect the device from the mains power supply for maintenance and replacement of parts.
If the motor is disconnected via a plug connection the operator must be able to control - from any place to which it has access – that the plug is removed.
If this is not possible - due to design or installation - the disconnection from the power supply must be ensured via locking in the disconnected position (e.g. isolator).
- ▶ The motor tube can get very hot during prolonged use.
When working on the unit, do not touch the tube before it has cooled down.

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5. Safety instructions for assembly



ATTENTION: Important safety instructions. Follow all installation instructions, as incorrect installation can lead to serious injuries.

- ▶ When mounting the motor without any mechanical protection of the driven parts and of the tube which may become hot, the motor must be installed at a height of at least 2.5 m above the ground or of another level which provides access to the drive.

- ▶ Before the motor is installed, all cables which are not needed are to be removed and all equipment which is not needed for power-operated actuation is to be put out of operation.
- ▶ The actuating element of a manual release must be mounted at a height of less than 1.8 m.
- ▶ If the motor is controlled by a switch or pushbutton, the switch or pushbutton must be mounted within eyeshot of the motor. The switch or pushbutton must not be located in the vicinity of moving parts. The height of installation must be at least 1.5 m above the floor.
- ▶ Permanently installed control devices must be attached visibly.
- ▶ In case of devices extending horizontally, a horizontal distance of at least 0.4 m must be respected between the fully extended part and any other fixed element.
- ▶ The rated speed and the rated torque of the motor must be compatible with the device.
- ▶ The mounting accessories that are used must be designed in accordance with the selected rated torque.
- ▶ Good technical knowledge and good mechanical skills are necessary for the motor installation. Incorrect installation can lead to serious injury.
Electrical work must be carried out by a qualified electrician in accordance with the regulations in force locally.
- ▶ Only use connecting cables that are suitable with the environmental conditions and which meet the construction requirements. (see accessories catalogue)
- ▶ If the device is not equipped with a connecting cable and a plug, or other means for disconnecting from the mains with a contact opening on each pole according to the conditions of the overvoltage category III for full disconnection, a disconnecting device of this type must be incorporated into the permanently installed electrical installation according to the wiring rules.
- ▶ Do not mount the connecting cables near hot surfaces.
- ▶ A plug for the disconnection of the motor from the power supply must be accessible after installation.
- ▶ Damaged connecting cables must be replaced by GEIGER connecting cables of the same type.
- ▶ The device must be mounted as described in the installation instructions. Fixations shall not be made with adhesives since they are regarded as unreliable.

6. Assembly note

When viewed from inside the room, the power supply connection of the **GJ56.. E14 Perfection** is located on the left side.

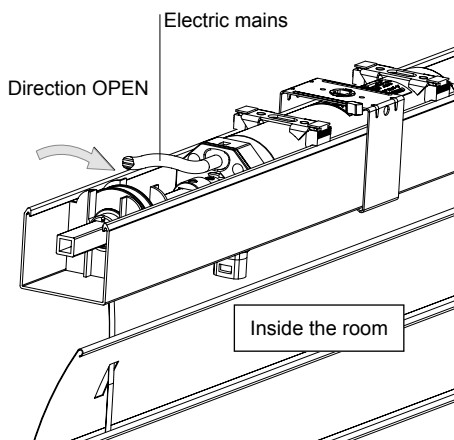
The straps are wound on the winding rollers from the outside.

The **GJ56.. E14 Perfection** must be installed in alignment with the turning bars.

It is important that the **GJ56.. E14 Perfection** is installed centrally. Please make sure that the load is evenly distributed.

Inclined installation:

The inclined installation is permitted till 45° maximum to level.



7. Installation instructions

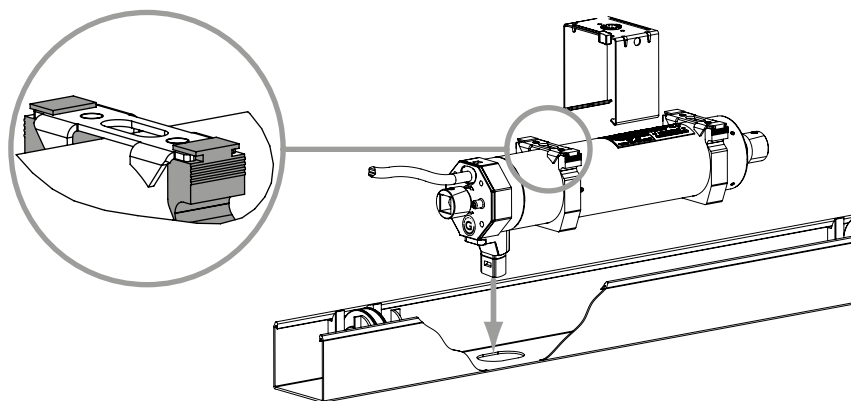
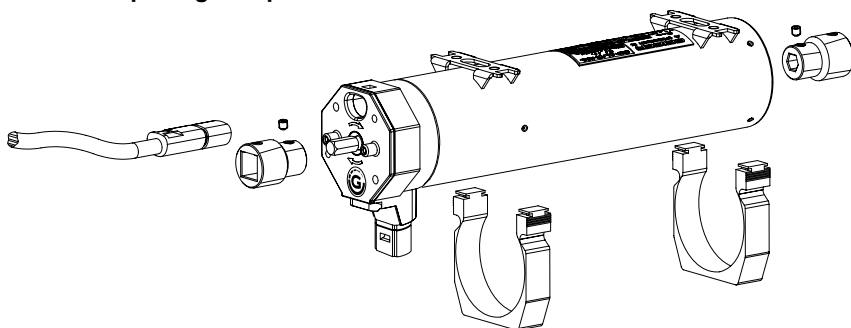


Prior to installation please check to ensure there is no visible damage to the motor like cracks or open cables.

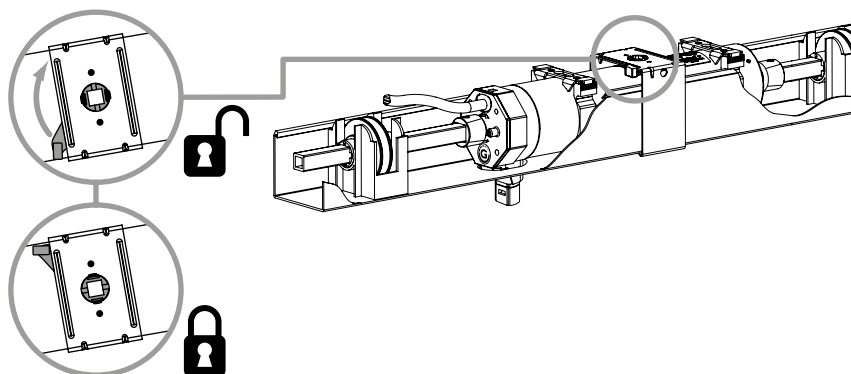


Before fixing please check the strength of the masonry and of the surface.

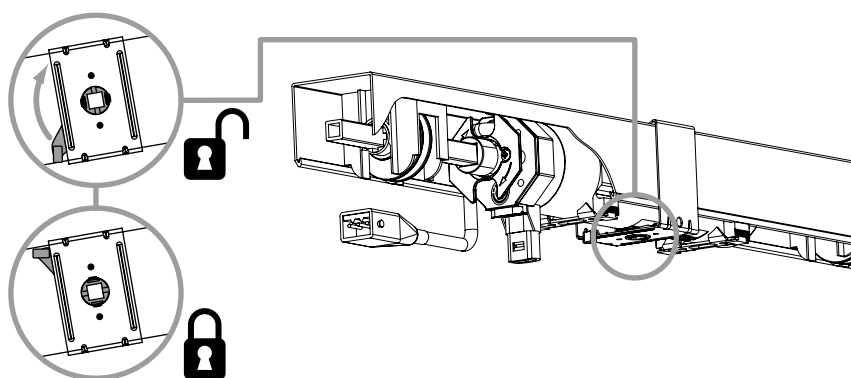
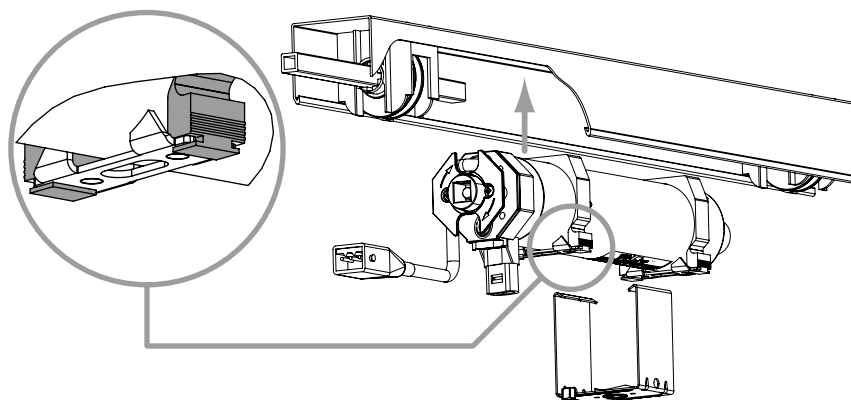
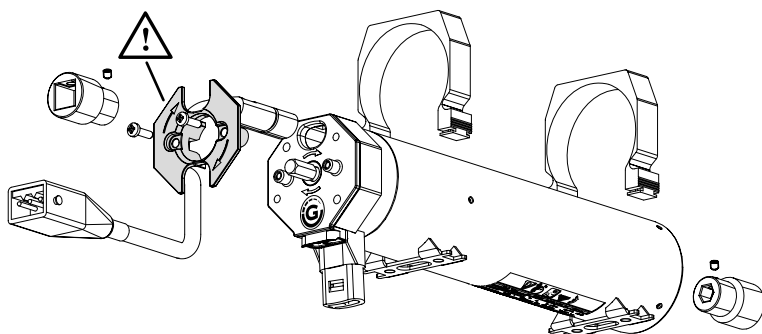
Head rail opening at top:



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Head rail opening at bottom:



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8. Information for the specialist electrician

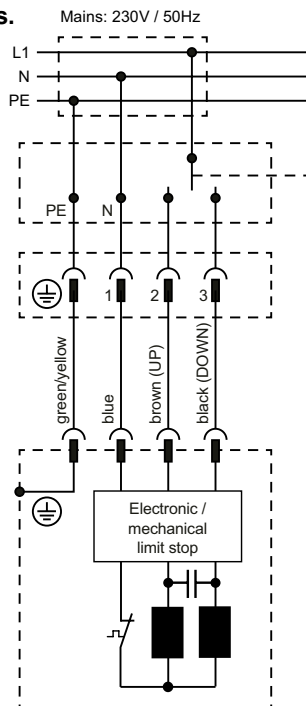


Caution: Important installation instructions.
Please follow all instructions since incorrect installation can lead to the destruction of the motor and the switching unit.

- An unlocked switch must be used for operation (simultaneous UP/DOWN command possible).
- The operations with the service clamps may be accomplished only by an electrical specialist.
- Motors with electronic limit stops can be connected in parallel.
- In this case the maximum load of the switching unit must not be exceeded.
- When changing the running direction the switchover must be effected through an off-position.
- When changing the running direction the switchover time must be at least 0.2 s.
- With a three-phase network, please use the same external conductor in order to control the UP and DOWN directions.
- Connecting cables with plug connectors of the Hirschmann Company are tested and approved with couplings of the Hirschmann Company.
- In order to prevent a malfunction caused by coupling, the supply line (ref. NYM) from the actuator/switch to the motor must not exceed 100m in case of motors with electronic end stops.



Attention! Only use connecting cable with GEIGER plug.



9. Setting of the end stops

General information

In order to set the end positions of the **GJ56.. E14 Perfection** motors, any setting switch can be used that has a programming key or that allows a simultaneous UP/DOWN command. In this case, the UP/DOWN keys must be activated simultaneously instead of the programming key. The motor can also be operated with the limit stop switch and a standard switch.

Article number / GEIGER setting switch	
M56F154	with service terminal (D), 4-wires
M56E399	Adapter cable with STAK3 and open cable ends



Important: please observe the connecting diagram on the back of the setting switch.

Factory setting

- The motor is set on the lower end position at the factory. The upper end stop is at the very other end. (at least lower end stop + 200 motor rotations).
- The motor command is in normal operation.
- The referencing is enabled on delivery.

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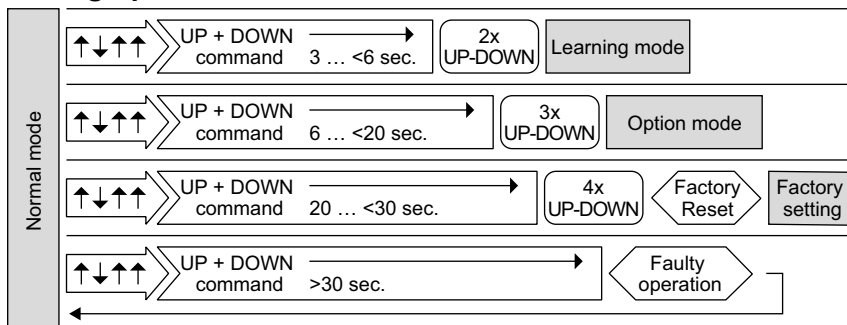


Note: If the motor is installed in a closed Venetian blind and if the limit stop switch is used the motor can be operated without further settings.



If the factory setting has been carried out and if the programming mode is activated, max. 100 revolutions can be done downwards. Reset to factory settings for a further run downwards.

10. Calling up the different modes



11. Activate the programming mode



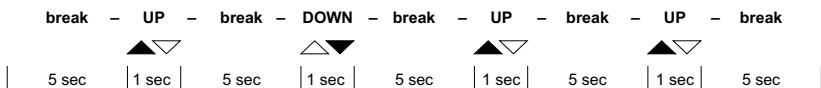
Prerequisite: The motor is positioned between the upper and the lower end position. The limit stop switch should not be pressed.



The GJ56.. E14 Perfection can be set with any setting switch that permits a simultaneous UP/DOWN command. In this case, the UP/DOWN keys must be simultaneously pressed instead of the programming key.

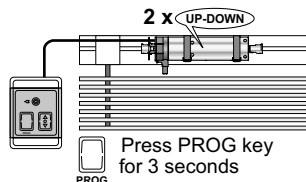
A) Activate the programming mode via limit stop switch

Activating the learning mode is effected by performing the following driving movements:



Please note: a break of at least 5 seconds must be observed between movements.

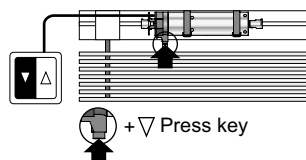
Press the PROG key of the limit stop switch or the UP/DOWN keys simultaneously until, after about 3 seconds, the drive confirms "end position programming activated" (2 x UP-DOWN). Then release the key.



B) Activate the programming mode on the motor

Activating the learning mode is done by pressing and holding the limit switch and the DOWN key on the blind switch. The motor moves for 1 second.

Keep both keys pressed for another 3 seconds. The motor confirms with a short movement downwards.



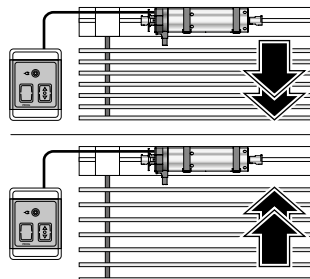
12. Programming/changing the end stops



Learning and referencing can be realized on the limit stop switch but also on torque if the system has been specially designed for this purpose. In this case, the installation parts are extremely stressed. Learning and referencing with torque shut-off must be separately tested and released by the sun protection manufacturer.

The upper and lower end stops can be programmed and changed independently of each other.

- Activate learning mode as described above.
- Move in the direction of the lower end position.
The motor briefly interrupts the movement to indicate that it is in programming mode.
- Press the PROG key or UP and DOWN keys simultaneously for approx. 1 second to store the end position. The drive confirms with a feedback signal (1 x UP-DOWN).
- Now the blind can be moved to the desired shade position. Once this is reached, the position is saved by pressing the PROG key or the UP and DOWN keys simultaneously for approx. 1 second. The drive confirms with a feedback signal (1 x UP-DOWN).
- Move the blind to the desired upper end position. The motor briefly interrupts the movement to indicate that it is in the programming mode.
- The end position is saved by pressing the PROG key or the UP and DOWN keys simultaneously for approx. 1 second. The drive confirms with a feedback (1 x UP-DOWN).
The programming mode is automatically terminated and changes to normal mode.



The referencing is automatically activated if the upper end position is programmed.
Note: when referencing, the motor runs over the set upper end position until the limit stop switch or switches off (torque shut-off).



If the upper end position is reprogrammed on position, after the end position had been programmed on the limit stop switch/torque, the referencing is automatically switched on. If the upper end position is programmed on position again, the referencing remains switched off or on.

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Limit stop switch or torque shut-off instead of upper end position

- If the direction UP should be turned off by the limit stop switch/torque, there is no need to program the upper end stop. The blind moves every time till the limit stop switch/switches off (torque shut-off) at top.
- If an upper end position is already programmed and you now want to switch off with the limit stop switch/torque, the programming mode must be activated and the blind moved against the limit stop switch/torque shut-off. The lower end position is unchanged and the programming is completed.
- The motor is now always turned off by the limit stop switch/switches off (torque shut-off) at top.

13. Correction of the end positions or the shade position

Changing an end position or the shade position is done in the same way as programming. If a position is not to be changed, press the PROG key or the UP and DOWN keys simultaneously to change to the next position.

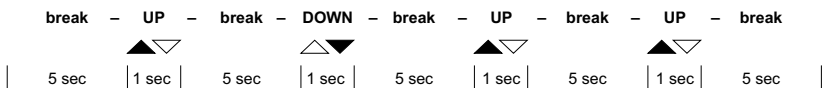
14. Moving to the shade position

By pressing the UP and DOWN keys simultaneously, the blind is moved into the shade position.

15. Activating the option mode

NOTE: The options can be activated via a setting switch or an unlocked control switch.

Activating the option mode is achieved by performing the following driving movements:



Please note: there must be a pause of at least 5 seconds between the movements.

Then press and hold the PROG key or UP and DOWN keys simultaneously on the setting switch. The drive reacts between 3 and 6 seconds (2 x UP-DOWN). Continue to hold down the programming keys until, after approx. 6 to max. 20 seconds, the drive confirms the option mode item with the feedback (3 x UP-DOWN).

Switching on referencing

Switch on the referencing by pressing the UP key. The motor moves in UP direction and interrupts with 1 x Stop-Go. The motor changes to normal mode.

Switching off referencing

Press the DOWN key to switch off the referencing. The motor moves in DOWN direction and interrupts with 2 x Stop-Go. The motor switches to normal mode.

Activate direct shade position

Pressing the UP and DOWN keys simultaneously for approx. 3 to 6 seconds activates the direct shadow position. The motor confirms with 1 x UP-DOWN. The motor changes to normal mode.

Activating the indirect shade position

Pressing the UP and DOWN keys simultaneously for approx. 6 sec. activates the indirect shadow position. The motor confirms with 2 x UP-DOWN. The motor changes to normal mode.

16. Referencing on the limit stop switch/torque

The referencing on the limit stop switch can compensate a possible drifting of the upper end position due to the modified winding behaviour of the lifting tapes.

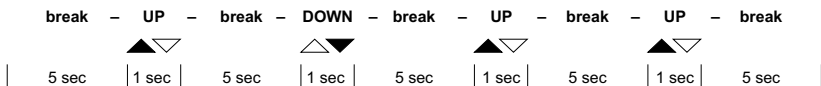
If the referencing has been activated (see below), the next UP run is done till the limit stop switch/torque shut-off.

The variation in distance between the upper limit position and the limit stop switch is stored. After 1, 5, 20 and then every 50 cycles on the upper end stop, the motor runs against the limit stop switch in order to test if the variations in distance have changed. If this is the case, the upper end position is readjusted.

The motor stops on the limit stop switch/at top by the reference runs.

17. Resetting to factory setting

Activating the programming mode is achieved by performing the following driving movements:



Please note: there must be a pause of at least 5 seconds between the movements.

Press and hold the programming keys (programming key/UP and DOWN key/limit stop switch and DOWN key). The drive reacts between 3 and 6 sec. (2 x UP-DOWN), between 6 and 20 sec. (3 x UP-DOWN) and after 20 to < 30 sec. with 4 x UP-DOWN. As soon as the drive starts the UP-DOWN 4 times, the programming keys can be released. After that, the drive is reset to the factory setting and the referencing is switched on.

Please note: The position at which the drive was reset to factory setting is now defined as the lower end position and can be adjusted by activating the learning mode.

18. Blocking detection and anti-freeze protection

The drive has a blockage detection in the UP direction. After a blockage detection (e.g. due to freezing of the blind on the window sill), the UP direction is blocked.

The UP direction is released again by a short move command in the DOWN direction.

19. What to do if...

Problem	Solution
Motor does not run.	<ul style="list-style-type: none"> Motor not plugged in. Please check the plug connection. Check connecting cable for possible damage. Check the mains voltage and allow the cause of the voltage breakdown to be tested by a specialist electrician.
Instead of in the downwards direction, motor runs upwards.	<ul style="list-style-type: none"> The control leads are interchanged. Exchange black/brown control leads.
Motor only runs in one direction.	<ul style="list-style-type: none"> Motor in the end position. Run motor in the opposite direction. Readjust the end positions, if necessary.
After running several times, the motor breaks down and no longer responds.	<ul style="list-style-type: none"> The motor became too hot and has switched off. Try it again after a cooling time of about 15 min.
The blind is in the upper position, actuates the limit stop switch and can no longer be moved downwards.	<ul style="list-style-type: none"> The motor was installed upside down or the lower end position has been overrun and the lift tapes were wound up incorrectly. Allow free mobility of the limit stop switch. Reset the end stops.

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20. Declaration of conformity

GEIGER
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EU Declaration of Conformity

Gerhard Geiger GmbH & Co. KG
Antriebstechnik
Schleifmühle 6
D-74321 Bietigheim-Bissingen

Product designation:

Venetian blinds motor, motor for rolling shutters, motor for awnings

Type designation:

GJ56.., GR45.., GU45.., GSI56.., GB45.., GB35..

Applied directives:

2006/42/EG
2014/53/EU
2011/65/EU + (EU)2015/863 + (EU)2017/2102

Applied standards:

EN 60335-1:2012
EN 60335-1:2012/AC:2014
EN 60335-1:2012/A11:2014
EN 60335-1:2012/A13:2017
EN 60335-1:2012/A1:2019
EN 60335-1:2012/A14:2019
EN 60335-1:2012/A2:2019
EN 60335-2-97:2006+A11:2008+A2:2010+A12:2015
EN 62233:2008
EN 62233 Ber.1:2008
EN 55014-1:2017
EN 55014-2:2015
EN 61000-3-2:2019
EN 61000-3-3:2013

ETSI EN 301 489-1 V2.2.0(2017-03)
ETSI EN 301 489-3 V2.1.1(2019-03)
ETSI EN 300 220-2 V3.1.1(2017-02)

DIN EN IEC 63000:2019-05

Authorized representative for technical data:

Gerhard Geiger GmbH & Co. KG

Address:

Schleifmühle 6, D-74321 Bietigheim-Bissingen

Bietigheim-Bissingen, 20.04.2022


Roland Kraus (General Manager)

Gerhard Geiger GmbH & Co. KG

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Komplementär: Geiger Verwaltungs-GmbH | Sitz Bietigheim-Bissingen | Amtsgericht Stuttgart HRB 300481
Geschäftsführer: Roland Kraus | WEEE-Reg.-Nr. DE47902323

100W1518 en 0422

Current declarations of conformity are available under www.geiger.de

21. Technical data

Technical data GJ56.. E14 Perfection with electronic end stop				
	GJ5606k	GJ5606 ¹⁾	GJ5610	GJ5620
Voltage	230 V~/50 Hz			
Current	0,40 A	0,40 A	0,60 A	0,85 A
Cos Phi (cos φ)	> 0,95			
Inrush current (factor)	x 1,2			
Power	93 W	90 W	135 W	190 W
Torque	6 Nm	6 Nm	10 Nm	2 x 10 Nm
Speed	26 rpm			
Protection class	IP 54			
Limit switch range	200 rotations			
Operating mode	S2 4 min.	S2 6 min.	S2 4 min.	S2 4 min.
Length	324,5 mm	329,5 mm	334,5 mm	361,7 mm
Diameter	55 mm			
Weight	ca. 1,50 kg	ca. 1,60 kg	ca. 1,70 kg	ca. 2,20 kg
Air humidity	dry and non-condensing place			
Storage temperature	T = -15°C .. +70°C			

¹⁾ Run-time optimized version

Subject to technical modifications. Please find information to the ambient temperature range of our GEI/GER motors under www.geiger.de

22. Maintenance

The drive is maintenance-free.

23. Notes on waste disposal

Recycling of packaging materials

In the interest of environmental protection, please contact your local government's recycling or solid waste management department to learn more about the services it provides.

Waste disposal of electric and electronic equipment

Electrical and electronic equipment must be collected and disposed of separately in accordance with EU regulations.

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