

Stainless steel motors

Installations- and Operating Instructions



**Reh fuss Drive Solutions GmbH
Vor dem Weißen Stein 21
72461 Albstadt, Germany**

**Fon +49 (0) 74 32 / 70 15 - 0
Fax +49 (0) 74 32 / 70 15 - 901**

**E-mail: info@rehfuss.com
nternet: www.rehfuss.com**

Stainless steel motors – Installations- and Operating Instructions

issued 07/2020

1 Important Notes

Always follow the safety and warning instructions in this manual!



Electrical hazard

Possible consequences: Severe or fatal injuries.



Hazard

Possible consequences: Severe or fatal injuries.



Hazardous situation

Possible consequences: Slight or minor injuries.



Harmful situation

Possible consequences: Damage to the drive and the environment.



Tips and useful information

A requirement of fault-free operation and fulfilment of any rights to claim under guarantee is that you adhere to the information in the operating instructions. Consequently, read the operating instructions before you start operating the drive!

Keep the operating instructions in the vicinity of the unit since they contain important information about servicing the unit.

2 Safety Notes

2.1 The following safety notes apply to the usage of stainless steel motors

When using geared motors please refer also to the safety notes for gearboxes in the corresponding operating manual

Also please note the additional safety notes in the individual chapters of this operating manual.

All transport, storage, fitting, connection, installation, as well as repair and maintenance works may only be performed by qualified personnel. The following points must be given particular consideration:

- corresponding detailed operating manual(s) and wiring diagrams
- warning labels on motor/geared motor
- system-specific regulations and requirements
- relevant national/regional regulations for safety and accident prevention



Severe damages to persons and property can be caused by:

- inappropriate usage
- faulty installation or handling
- impermissible removal of necessary protective covering or housing.



Special designs of motors may show surface temperatures of up to 110° depending on design / operation/ cooling.

In these cases a touch protection has to be placed on the surface of the motor.

Designated use

These motors are intended for industrial use; they correspond to the relevant standards and regulations and meet the requirements of the low voltage directive 73/23/EWG.

The technical data and information about the relevant regulations are to be found on the nameplate and in the documentation. All instructions must be strictly observed at all times!

2.2 Transport

Please check all shipments immediately upon receipt for possible damages in transport. Announce these without delay to the forwarding agent. Start up has to be eliminated if necessary.

If necessary use adequate sufficient means of transport. Please remove existing transport securities before start-up.

Stainless steel motors – Installations- and Operating Instructions

3 Mechanic Installation



Please follow the safety instructions in **chapter 2** when installing!

3.1 Before you start

The drive may only be fitted when the information on the nameplate of the drive corresponds with the mains voltage respectively the output voltage of the frequency inverter.
The drive is not damaged (no damage by transport or storage).

3.2 Installation of Motor



The motor respectively geared motor must only be installed in stated version on a flat, shock free and torsion tight surface.

Align motor and working machine thoroughly, so that output shafts will not be loaded inadmissibly. (Please note allowed lateral and axial forces).

Make sure no shock or eccentricity on shaft ends.

Balance parts which are drawn on shaft later with half key (motor shafts are balanced with half key).

Existing condensation drain holes are sealed and may only be opened when necessary. The condensation drain holes must generally be kept sealed in order to maintain the specified IP protection class.

Installation in damp locations

Terminal box should possibly be fixed so that cable entries are positioned downwards

Seal cable entries well.

Clean sealing faces of terminal box and terminal box cover well before reassembly. Do not use damaged seals for cable connections and blind plugs. Replace embrittled seals.

Check enclosure

4 Electrical Installation



It is essential to comply with the safety notes in **chapter 2** during installation!

Consider additional notes

In addition to general instructions for electric installation of low-voltage equipment (for example DIN VDE 0100, DIN VDE 0105 in Germany) it has to be considered.

Connect motors only according to the wiring diagram which is attached to the motor.

Do not connect or start up the motor if this wiring diagram is missing!

4.1 Wiring notes

Protecting motor protection devices against interference

Route separately shielded feeder cables together with switched-mode power lines in one cable

Do not route unshielded feeder cables together with switched-mode power lines in one cable.

4.2 Connection cable

Special designs of motors may show surface temperatures of up to 110° depending on design / operation/ cooling.
In these cases the operator has to fit connection cables apt for above mentioned temperature range.

Stainless steel motors – Installations- and Operating Instructions

5 Motor

5.1 Connect motor



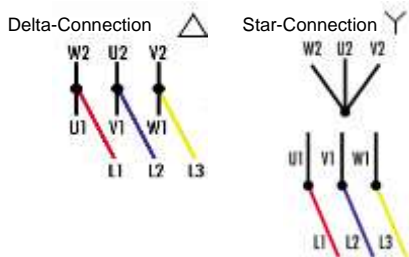
Please adhere to the valid wiring diagram without fail.

When missing the motor must not be connected or started. All works may only be performed by qualified personnel. Check cable cross section, as to rated power of motor, valid installations instructions and requirements in site.

Electrical connection

U1, V1, W1, U2, V2 and W2 are the motor leads

L1, L2 and L3 are the supply cables



1. Remove terminal box lid. Make sure that O-Ring Seal will not be damaged.



2. Setup motor cables in star or delta connection as required.



3. Pass cable through cable gland and tighten cable gland.



4. Strip back all motor and supply cables to a sufficient length. Attach shrink sleeve to cover completed connection thoroughly.



5. Solder, braze or crimp appropriate cables with the strand of the motor.



6. Cover connections with shrink sleeve. Make sure that earth wire is connected securely to earth screw of motor.



7. Replace terminal box lid ensuring that seal is correct position and not damaged. Fully tighten lid.

6 Maintenance

Bearings of motors sealed for life are maintenance-free for 10000 to 20000 operating hours under regular operating conditions, but no longer than 3 years.

Bearings should be checked regularly for running noise and replaced if necessary.

Seals should be checked regularly and replaced if necessary. Dismantling and maintenance of motor should only be carried out by authorized persons. Make sure that supply is insulated before terminal box is opened.

TEFC motors should be checked regularly for ventilation flow at fan cowl. Any inspection must be carried out using correct tools.

For any further questions regarding maintenance or installation of this products please contact us.