



Before starting the gear reducer, read the following instructions carefully.  
 ATEX homologation is not valid if the following instructions are not strictly fulfilled.  
 If necessary ask for the complete manual regarding "user and maintenance" instructions.

**1. INSTALLATION**

Before starting the unit it is necessary to carry out the following verification:

- Verify that the supply corresponds to what you have ordered.
- Verify that the nameplate data are in accordance with the application: group, category, area, max. superficial temperature
- Verify that the data relating to ATEX homologation written on the motor match those of the gear reducer
- The fixing to the machine must be secure and without vibrations; the structure must not be torsionally stressed.
- Min. quality for fastening screws is 8.8 and be careful not to strain the gear cases because of an incorrect fixing.
- Avoid direct sunlight or other heat sources: cooling air temperature must not exceed 40°C.
- Verify that any component connected to the gear reducer is in conformity with ATEX.
- For those units supplied with shrink disk, use the protection cover.

**2. LUBRICATION**

- The gear reducer can be assembled only in the mounting position specified on the nameplate: only Motovario can authorize a different mounting position. Angle variations admitted between +/-5° respect to the horizontal axis.
- Verify if there are any oil leaks, if yes do not go on with the assembly of the unit.
- In case of repair, please restore the correct oil quantity.

**3. STARTING**

- Verify the correct oil quantity through the oil level plug, if present. In the units without the oil level plug, the correct oil quantity is guaranteed by Motovario.
- In case of vertical mounting positions verify if there is any anomalous noise or high heating during the first running hour: in this case stop the motor immediately.
- After 3 running hours with complete load it is necessary to verify the superficial temperature: the hottest point must not exceed the data written on the nameplate less 10°C. In case the value of the nameplate is exceeded stop the motor immediately
- After stopping the motor wait 30 minutes before proceeding with the disassembly.

**4. SUPERFICIAL TEMPERATURE**

- The temperature written on the nameplate is the max. admitted on the gear reducer in normal ambient conditions, any modification on the standard ambient conditions can produce remarkable temperature variations.
- Ambient temperature must be between -5°C and +40°C (-25°C/+50°C for NMRV030-105). It is possible to use the gear reducer also with different ambient temperature if authorized by Motovario

**5. INSPECTION AND MAINTENANCE**

- It is necessary to verify that there isn't any dust coating thicker than 5 mm. on the gear reducer.
- Verify the correct oil quantity through the oil level plug, if present.
- Each 1000 hour verify the good condition of oil seals, gaskets, if necessary replace the oil seals.
- After 10000 hours, replace the oil, obviously this limit can be different depending on the type of service. This operation is not necessary for the units supplied lubricated for life
- Periodically verify that there isn't any dust on the hole of the breather plug, if present.
- In normal circumstances do not remove the gear casing closing cover for any reason. In the case of planned maintenance, only by a qualified person, it is possible to disassemble the unit ensuring the casing has first reached normal ambient temperature and ensuring no foreign bodies are allowed into the inside of the unit and when reassembled the unit is tested to ensure to original specification.

**NONE ELECTRIC UNITS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE**

If the gear reducer is used as per the attached instructions, they can be used in the following ambient:

**Group II**  
**category 2GD**  
**area 1/21 for gas and dust**

- Protection against starting:
- EN13463-5 (c) constructive safety
- EN13463-8 (k) immersion in liquid

These units are not included in standard manufacture and therefore will be personalized to be suitable for the norms of above mentioned directive.

**Group II**  
**category 3GD**  
**area 2/22 for gas and dust**

- Protection against starting:
- EN13463-5 (c) constructive safety

These units are included in standard manufacture and will be marked to be suitable for the norms of above mentioned directive.

<b>MOTOVARIO</b> MADE IN ITALY		
Type	<input style="width: 100%;" type="text"/>	i <input style="width: 50%;" type="text"/>
Nr	<input style="width: 100%;" type="text"/>	m.p. <input style="width: 50%;" type="text"/>
n2	<input style="width: 100%;" type="text"/>	n1 <input style="width: 50%;" type="text"/>
Tech. file Ref.		<input style="width: 100%;" type="text"/>
M2 max	<input style="width: 50%;" type="text"/>	Fr max <input style="width: 50%;" type="text"/>
<b>Lubricated AGIP</b>		

Information of the nameplate data :

- Type: abbreviation of the gear reducer
- i: reduction ratio
- Nr: serial number
- m.p.: mounting position
- n2: output r.p.m. (1/min)
- n1: input r.p.m. (1/min)
- ATEX area
- M2 max: max. torque admitted by the unit (Nm)
- Fr max: max. admitted radial load on the output shaft (N).
- file: n° technical file