

The invention relates to the mechanical engineering, in particular to motors-gear boxes, which may be used for driving the operating machines.

The motor-gear box, according to the first variant, includes a body, wherein there is placed an electric motor, containing a stator and a rotor with windings, and a gear box. The gear box contains a double satellite gear-unit, one gear ring of which is in engagement with the immobile gear-wheel, rigidly fixed into the body, the other one – with the mobile gear-wheel, which is mounted onto the driven shaft and supported in radial and axial bearings. Into the hub of the satellite gear-unit there is made a through axial hole with annular central prominence. Into the hole it is placed the stator of the electric motor, made in the form of a disc and mounted onto an axle, rigidly fixed into the body, and two rotors symmetrically placed on both sides of the stator, each being made in the form of disk with winding, placed into the face thereof, made inclined and oriented towards the stator winding. Into the sockets of the inclined faces of the two rotors there are placed bearing balls, coming in contact with the bearing surfaces of the annular central prominence of the satellite gear-unit hub. At the same time, the motor-gear box contains an input rotation transducer, the immobile part of which is installed into the body from the end of the immobile gear-wheel mounted therein, and the mobile one – onto the rotor adjacent thereto, and an output rotation transducer coupled with the input transducer by means of an analyser, the immobile part of the output transducer being installed into the body from the end of the mobile gear-wheel, and the mobile one – onto the driven shaft.

Claims: 3

Fig.: 3