

AUXILIARY SAFETY LIFT DEVICE FOR ELEVATOR

ABSTRACT OF THE DISCLOSURE

An auxiliary safety lift device for an elevator includes a main elevator power system, a spare electric power system, a secondary motor, a secondary speed reducer, and an electromagnetic clutch. The electromagnetic clutch includes an electromagnetic disk, a transmission disk for rotating the main shaft of the main motor of the main elevator power system, a drive disk rotated by the secondary speed reducer, and a spring sheet secured on the drive disk. When the electromagnetic disk is energized by the spare electric system, the spring sheet is attracted by the electromagnetic disk to engage the transmission disk so that the transmission disk is rotated with the drive disk to rotate the main shaft of the main motor. Accordingly, when the power of the main elevator power system is cutoff, the spare electric power system is started to drive the secondary motor to drive the secondary speed reducer which cooperates with the electromagnetic clutch to rotate the main shaft of the main motor to drive the main speed reducer of the main elevator system for lifting the elevator.

Figure 2