CLAIMS

1. A winch for an elevator having a car, a counterweight and hoisting ropes connecting the car and the counterweight to each other, said winch being to be provided in the elevator to move the hoisting ropes, wherein:

the winch comprises a sheave about which the hoisting ropes are to be wrapped, a gearless motor for driving and rotating the sheave, a motor and sheave shaft for transmitting drive force of the gearless motor to the sheave, and a double brake for braking the gearless motor.

2. The winch according to claim 1, further comprising a flywheel attached to the motor and sheave shaft.

3. A renewal method of renewing a winch in an elevator from an existing winch of a gear reduction type to the winch according to claim 1, wherein:

the existing winch is renewed by disassembling a motor, a brake, gears, a sheave and a sheave shaft from the existing winch, and in the existing winch in a state of having been disassembled, assembling the sheave, gearless motor, motor and sheave shaft and double brake of the winch according to claim 1.

CLAIMS

1. A winch for an elevator having a car, a counterweight and hoisting ropes connecting the car and the counterweight to each other, said winch being to be provided in a machine room of the elevator to move the hoisting ropes, wherein:

the winch comprises a sheave about which the hoisting ropes are to be wrapped, a gearless motor for driving and rotating the sheave, a motor and sheave shaft of which a size is set to be larger than a size of a body of the winch in an axial direction of the sheave and which is configured to transmit drive force of the gearless motor to the sheave, and a double brake for braking the gearless motor, and wherein the sheave is attached to one end of the motor and sheave shaft, and the gearless motor is positioned on an opposite side of the sheave across the body of the winch and is attached to the other end of the motor and sheave shaft.

2. The winch according to claim 1, further comprising a flywheel attached to the motor and sheave shaft.

3. A renewal method of renewing a winch in an elevator from an existing winch of a gear reduction type to the winch according to claim 1, wherein:

the existing winch is renewed by disassembling a motor, a brake, gears, a sheave and a sheave shaft from the existing winch, and in the existing winch in a state of having been disassembled, assembling the sheave, gearless motor, motor and sheave shaft and double brake of the winch according to claim 1.