



2. General Description

Drive System

The car is made to, accelerate - run - decelerate and stop, through movement of the piston in and out of the cylinder by hydraulic fluid (oil under pressure). This hydraulic fluid is delivered through piping, by an electrical motor/pump assembly submerged for smooth and quiet operation, in the storage tank, situated in the motor room or cabinet.

By receiving signals from the control panel the flow of hydraulic fluid is controlled through an electrically operated solenoid valve block fitted to the storage tank. This control panel also operates the pump/motor. The tank, motor/pump and valve block are assembled as a complete power unit, with a pipe-run to the hydraulic ram situated in the lift well.

The motor/pump operates to send hydraulic fluid into the cylinder, driving the piston out and thus making the lift car travel up. When the motor/pump stops, a non-return valve in the hydraulic system prevents the fluid returning to the tank, and thus holds the car stationary. To make the car travel down, an electrically operated down direction valve is opened, permitting the fluid to return to the tank at a controlled rate, thus the ram retracts into the cylinder under the gravitational force of ..

Doors 3s3s, 2s2s, 2c2c

The lift shaft is protected by landing doors which couple with the car door(s). The car and landing doors are constructed in solid panels, are of the horizontally sliding type, power driven open by a car door motor only when the lift is standing at floor level. An electro - mechanical interlock is fitted on the landing doors. The release of this interlock is provided by a skate on the car door. This interlock prevents movement of the car until the car and landing doors are both electrically and mechanically locked.

An emergency release mechanism is provided at every landing door. In the event of an emergency, or during maintenance, the landing doors may be opened by an authorised person with the use of a special door lock release key.