

Title (en)

VALVE CONTROL UNIT FOR A HYDRAULIC ELEVATOR

Title (de)

STEUERVENTILEINHEIT FÜR EINEN HYDRAULISCHEN AUFZUG

Title (fr)

UNITE SOUPAPE DE COMMANDE POUR UN ASCENSEUR HYDRAULIQUE

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Application

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Abstract (en)

[origin: WO0202974A2] The invention relates to a valve control device (28) for a hydraulic elevator. Said valve control device comprises two control valves (5, 15) which are used to control the flow of hydraulic oil from a lifting cylinder driving the elevator car or from the lifting cylinder to the tank. During the upward journey of the elevator car, hydraulic oil is fed from the tank to the lifting cylinder via the valve control unit (28) by means of a pump which is driven by an electric motor. During the downward journey of the elevator car, the hydraulic oil flows to the tank via the valve control unit (28) without the pump being in operation. According to the invention, a respectively individual control valve (5, 15) is provided in the valve control unit in order to control the upward and downward journeys of the elevator car, whereby each valve functions as a return valve and a proportional valve. Each control valve (5, 15) is provided with a throttle element (35; 55) which can move in relation to the seat (36; 56). A readjusting spring (37; 57) and a relay valve (5v; 15v) act upon the throttle element (35; 55) and can be actuated by an electrically controllable proportional magnet (5m; 15m). The valve control unit (28) is easily constructable and can therefore be produced at low cost. One particular advantage of the invention is that adjusting elements are not required.

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