Didactic industrial lift three floors operativ part

The operativ part should be equipped with the following elements as: a real life elevator

Over speed governors diameter approx. 150 mm, nominal speed max 0.25m/s

Industrial lift

3 commands :

-PLC
-Microprocessor
-Circuit Board

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The equipment consists of a real lift scaled down to 1:4. The model exactly simulates all the characteristics, operations and structure of a full-size lift for a three-story building. The lift includes real safety device against ropes breakage or stretching, control devices for the normal run of the cabin and fault simulator so that the students can observe the automatic operation of the electrical emergency swutches and the fast cabin braking.

8 poles cable for hall panels

37 poles cable for car panels

final-limit switch

Emergency operation box

pit-stop

Top-bottom reset switch

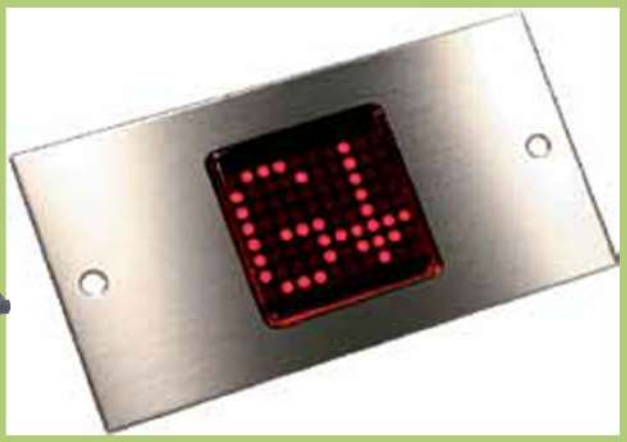
The operative part mounted on wheels is built in stuctural steel.
the essential parts are mounted in the operative part in order to have all the commands at the students disposal during any excercise including (microprossesor, plc, ext...)
the operative part is ready in a :
circuit break
panel for 10 fault simulators
instruction manual.

dimension approx: 540x570x2450mm

gear machine
speed: 0.25 m/s

iNSPECTION BOX : 4 BUTTONS

guide rail: 5mm
thickness: 5mm



VV3 Frontplate

- Dimensions H x W: 150 x 80 mm
- Distance between notches: 130 mm
- Material: stainless steel brushed
- Recess suitable for VV3

-Retiring cams and electromagnets
-semiautomatic locks with mobile part
-hydraulic door-closer for swing door
-door contact
-4 guide shoe support
-buffer

door lock

guide shoes

caged bearing (closed)
diameter : 12mm

the car inside the lift is equiped with a guide, the caged bearing and the counter-weight.

electical circuit command:

digital reading floor panel

dimension approx: 140x45x45cm

electical circuit command:

3
1. GENERAL DESCRIPTION
1.1 MAIN FEATURES
Platform Microcontroller
Type AC 1 speed – AC 2 speed - VVVF – Hydraulic1
Self diagnostic Error codes describing common faults related to periphery inputs
On-board display
8-characters by 2-lines LCD alphanumeric display is used for floor, error messages and menu
Push buttons Three push buttons used to access different parameter and the menu
Shaft information
End of shaft in the up direction
End of shaft in the down direction
Slow down and final stop in the up direction
Slow down and final stop in the down direction
Car position is saved following a power failure2
Indicator signal
Gray Code or
Binary Code or
Enhanced Code (when using S.&A.S. scrolling display) or
7-Segment code or
Decimal
Number of stops
10 stops collective down – 6 stops collective selective
(when using Gray code or Binary code or Enhanced code or 7-segment)
9 stops collective down only when using 7-segment negative
9 stops collective down – 5 stops collective selective using Decimal code
5 stops Down collective with no multiplexing stages
Door type Swinging or automatic door or half automatic door1
Door controls3 Input for re-open, photocell and door jam switch + input to bypass closing delay4
Door status3 Parking with door opened or door closed1
Floor Stop time Variable from 0 to 9.9 seconds1
Car light Automatic switch off after delay - 0 to 25.0 seconds1
Inspection mode5
For installation and maintenance purposes using slow speed (bypasses all shaft information)
PTC Input Motor PTC input halts lift operation when motor overheats
Outputs Indicator and Call outputs are short circuit protected
Terminals All terminals are individually labeled according to function to facilitate identification
1.2 TECHNICAL DATA
Supply voltages
Board supply: 17vac +15% -25% - 120mA
Periphery supply: 22vdc +15% -25%
Inputs
Each input has a led to indicate its status – all inputs are optically isolated
Input active voltage level is 22vdc
Control outputs
Each output has a led to indicate its status – all outputs are dry relay contacts
Rated at 250Vac 10A6
Call terminals
Each call has a led to indicate its status
Call are optically isolated
Call active voltage level is zero volts (GND)
Call terminals are capable of driving 15mA leds on 22vdc
The + and – supplies of Car and Hall are short circuit protected
Indicator outputs
Each output has a led to indicate its status – all outputs are optically isolated
For A,B,C,D: Red LED On = Output voltage level is 22vdc (P)
For a, b, c, d, e, f, g: Green LED On = Output voltage level is 0vdc (GND)
For arrow up and arrow down: Green LED On = Output voltage