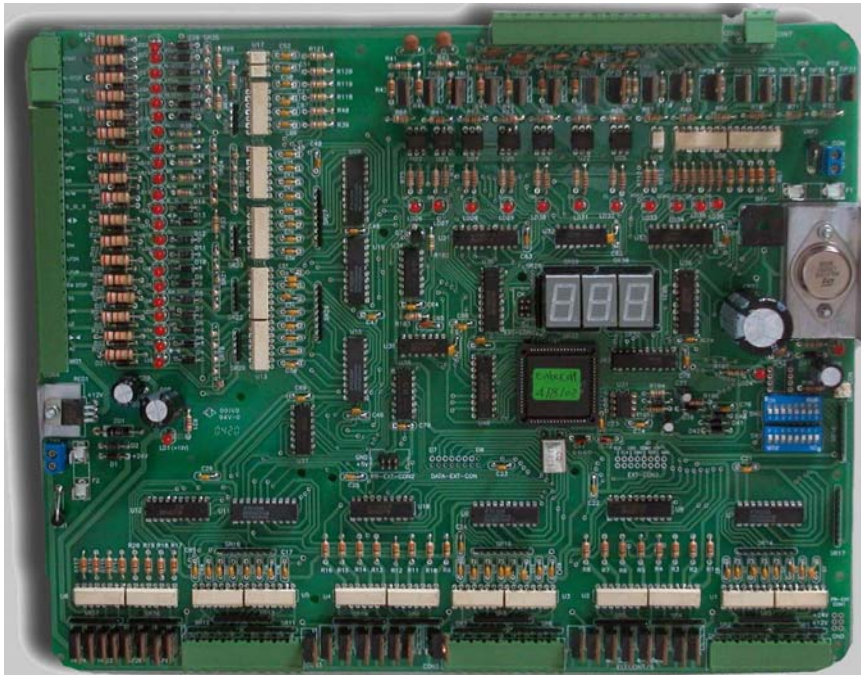


# Wissam Elevator Controller



## **BASIC FEATURES OF WISSAM CONTROLLER**

**Wissam elevator controller is an intelligent microcontroller based controller which incorporates all the features of elevators operating in Simplex or Duplex mode.**

**Wissam elevator controller is designed on a modular basis to facilitate maintenance and troubleshooting and utilizes opto\_isolation techniques to avoid fault propagation from input lines to internal circuits.**

**The important features of Wissam elevator controller are :**

1. AC Drive Two speed or VVVF (Variable Voltage Variable Frequency)
2. Serving up to 20 stops (12 stops on main board + 8 stops on an optional extension).
3. Manual or automatic door.
4. Collective down control for residential buildings and Collective selective control for office buildings.
5. Duplex feature through serial communication between controllers
6. All control inputs and load outputs are indicated on the printed boards through leds.
7. Position of car and states of controller are indicated on the printed boards through 7-segment digits.
8. Error tracking function and error code is displayed.
9. Load control (full load, over load).
10. Maintenance control.
11. Automatic car light.
12. Pre-announcing arrival gong on each stop and direction arrows during travel.
13. Reduced magnets are used as shaft information generator.

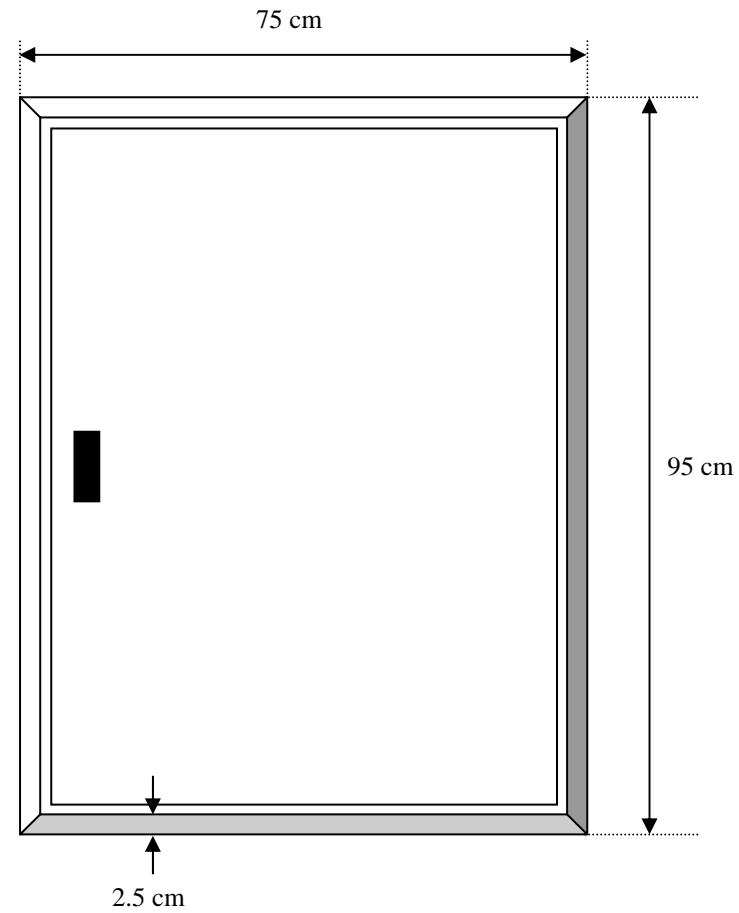
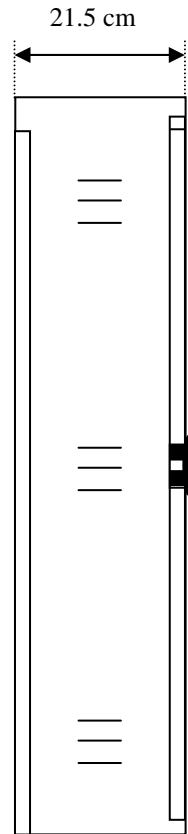
- 14. Reservation control function.
- 15. Door reversing control (To open / close door buttons).
- 16. Fire control function.
- 17. Attendant control function.

**Dimensions:**

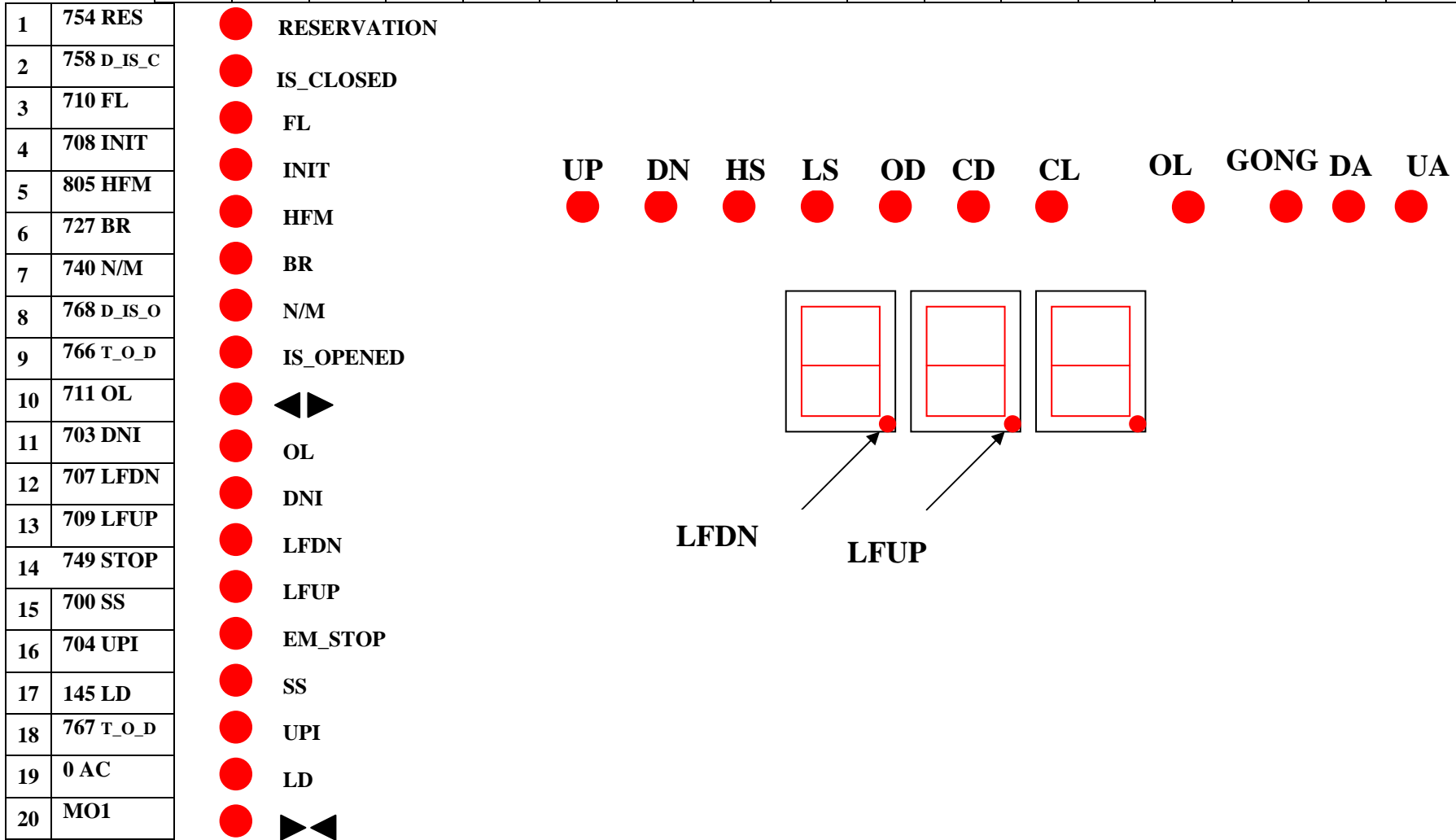
95X75X21.5 cm

**Net Weight:** 38 kg

**Growth Weight:** 50 kg



17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
MO1	0AC	6902 UP	6901 DN	6903 F	6904 S	6910 OD	6911 CD	6953 CL	2103 GONG	2102 DA	2101 UA	651 GC0	652 GC1	653 GC2	654 GC3	655 GC4























MO1	212	211	210	209	112	111	110	109
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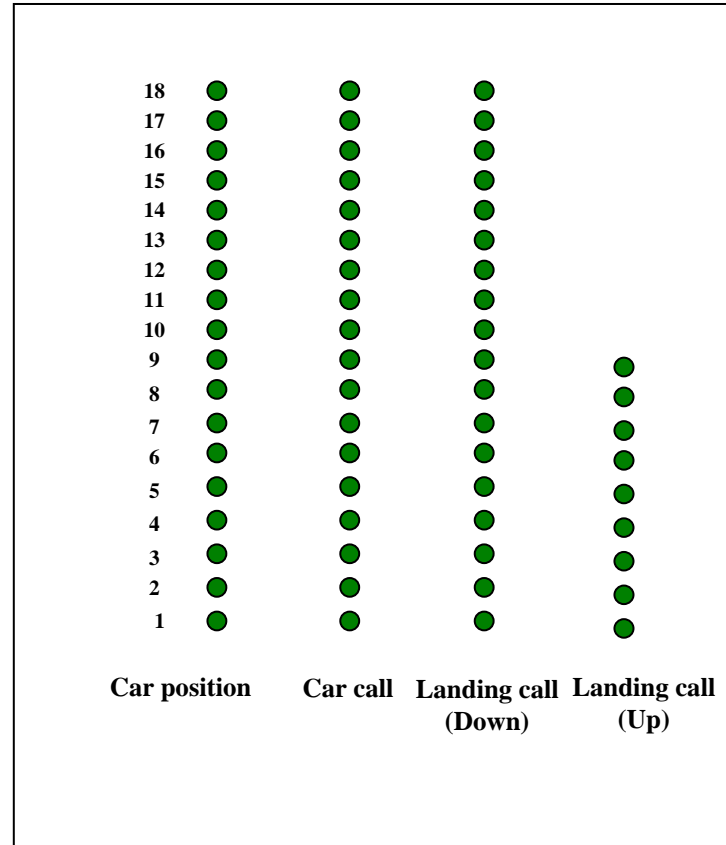
MO1	208	207	206	205	204	203	202	301
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MO!	108	107	106	105	104	103	102	101
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## CONTROL INPUT LEDS

LD19A		<b>RESERVATION</b>	Always OFF , when ON there is Reservation mode	
LD18A		<b>DOOR_IS_CLOSED</b>	OFF when door is closed	
LD17A		<b>FL</b>	Always OFF , when ON there is full load	
LD16A		<b>INIT</b>		
LD15A		<b>HFM</b>	Always OFF , when ON there is Hall fire mode	
LD14A		<b>BR</b>		
LD13A		<b>N/M</b>	Always OFF , when ON controller in maintenance mode	
LD12		<b>DOOR_IS_OPENED</b>	OFF when door is open	
LD11			Always ON , when OFF, TO OPEN DOOR is pressed	
LD10		<b>OL</b>	Always ON , when OFF, there is overload	
LD9		<b>DNI</b>	ON when stopping at magnet of DOWN INDUCTOR	<b>DNI</b>
LD8		<b>LFDN</b>	Always ON , when OFF, stopping at LIMIT	<b>LFDN</b>
LD7		<b>LFUP</b>	Always ON , when OFF, stopping at LIMIT FLOOR UP	<b>LFUP</b>
LD6		<b>EM_STOP</b>	Always ON , when OFF, stop button is pressed	
LD5		<b>SS</b>	Always ON , when OFF, there is a problem in safety circuit	
LD4		<b>UPI</b>	ON when stopping at magnet of UP INDUCTOR	<b>UPI</b>
LD3		<b>LD</b>	ON when all landing doors are closed	
LD2			Always OFF , when ON, TO CLOSE DOOR is pressed	

**Added board to display car and landing calls and car position**



The added board is optional board is used to display the position of car and the car calls and landing call to observe all calls and position of car where the maintenance man in the machine room looking to the elevator control

## CONTROL OPTIONS

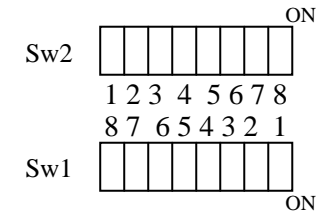
### DIP-SWITCH 2

**SW2 – (8) DON'T USE IT (keep it as it is)**

**SW2 – (7) Fast or Slow motor speed in MAINTENANCE mode (FAST if ON, SLOW if OFF)**

**SW2 – (6) Collective Down or Collective Selective (CD if ON, CS if OFF)**

**SW2 – (5, 4, 3, 2, 1) NUMBER OF STOPS (keep it as it is)**



### DIP-SWITCH 1

**SW1 – (1) Motor forced to stop by limit floor in MAINTENANCE mode (YES if ON, NO if OFF)**

**SW1 – (2) MASTER or SLAVE (use only in DUPLEX, MASTER if ON, SLAVE if OFF)**

**SW1 - (3) NORMAL or PULSE GONG (NORMAL IF OFF, PULSE IF ON)**

**SW1 - (4) Automatic door CLOSE or OPEN at no calls (use only in AUTOMATIC DOOR, keep door OPEN if OFF, door CLOSE after 20 sec if ON)**

**SW1 - (5, 6) Setting Time T to close door to serve another call**

SW1 – 6	SW1 - 5	TIME (T in sec)
OFF	OFF	3
OFF	ON	6
ON	OFF	10
ON	ON	15

**SW1- (7) Close door load RELEASE after door closing (YES if ON , NO if OFF) (only for automatic door)**

**SW1- (8) Car light load RELEASE after 30 sec if we keep door open in automatic door (YES if ON , NO if OFF) (only for automatic door)**

# CONTROLLER TERMINAL BLOCK

Reduced (Automatic door)

## DC-POWER

P4 +80V \*101 STOP  
 P3 +60V \*102 STOP  
 \*PO1 +22V .  
 \*MO1 GND .

## CAR\_CALL

.  
 .  
 .  
 .  
 \*100+N NTH STOP

## LANDING CALLS

301 1<sup>ST</sup> stop call down  
 202  
 203  
 .  
 .  
 200+N nth stop call down  
 302  
 303  
 .  
 .  
 300+N nth stop call up

## AC-POWER

(2L1, 2L2, 2L3) 380v/50hz input  
 (U, V, W) input to motor  
 \*N Neutral  
 \*91L Ac to car light  
 43L1, 43L2, 43L3 Ac to fan of motors  
 30L1, 30L2, 30L3 380v/50hz for power supply  
 \*90L 220V  
 \*110 VAC (OF 110 VAC)  
 \* 0AC

## BRAKE

2580 Brake  
 \*MO1 GND

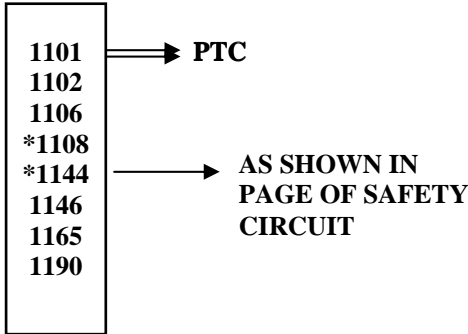
## ARROW

\*2101 UP ↑  
 \*2102 DN ↓  
 \*MO1 GND

## CONTROL INPUTS

\*703 DNI  
 \*704 UPI  
 707 Limit floor down (LFDN)  
 \*749 Stop in car  
 \*740 Maintenance  
 709 Limit floor up (LFUP)  
 \*710 Full-load  
 \*711 Over-load  
 \*754 Reservation  
 \*758 Door is closed  
 \*768 Door is opened  
 \*766 To open door  
 \*767 To close door  
 \*805 Fire Emergency  
 T Motor Thermal Switch

## SAFETY CIRCUIT



## OUTPUTS

\*651(G0) KCS0  
 \*652(G1) KCS1  
 \*653(G2) KCS2  
 \*654(G3) KCS3  
 \*655(G4) KCS4

## DUPLEX

RX  
 TX  
 GND  
 24V

## DOOR MOTOR

\*40L1  
 \*40L2  
 \*40L3

## GONG

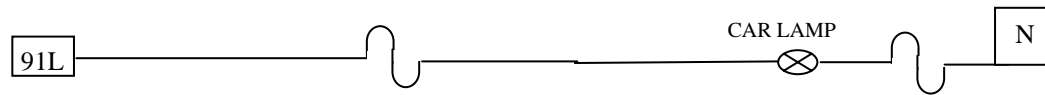
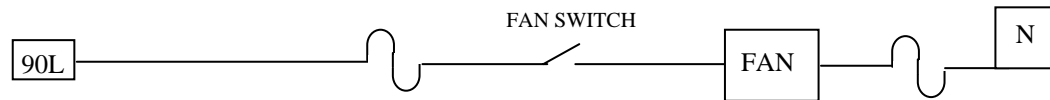
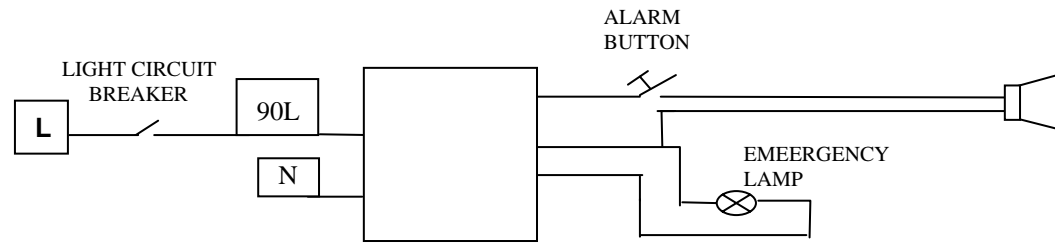
\*2103 GONG  
 \*MO1 GND

110VAC

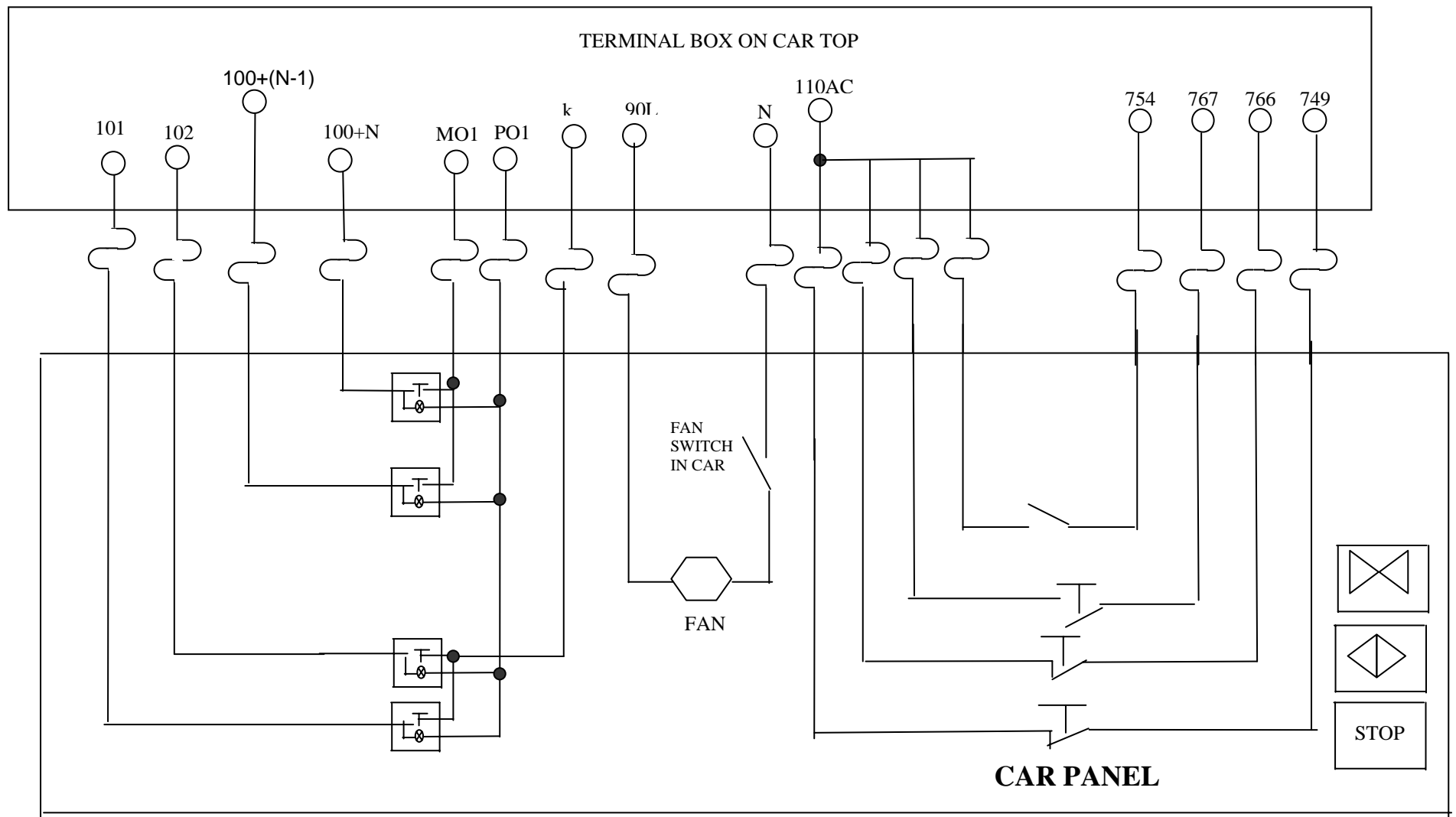
711

-: \_\_\_\_\_

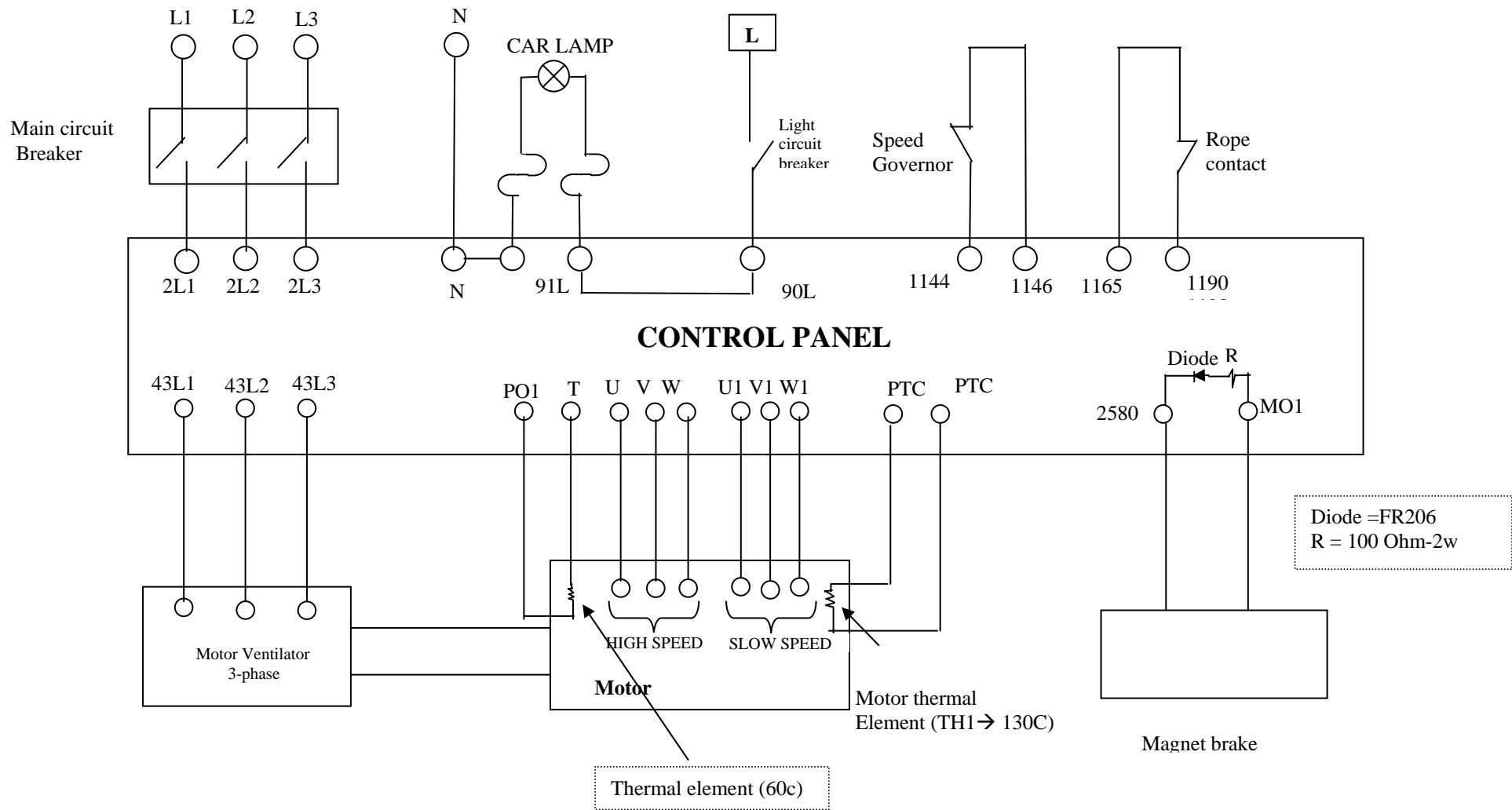
\*



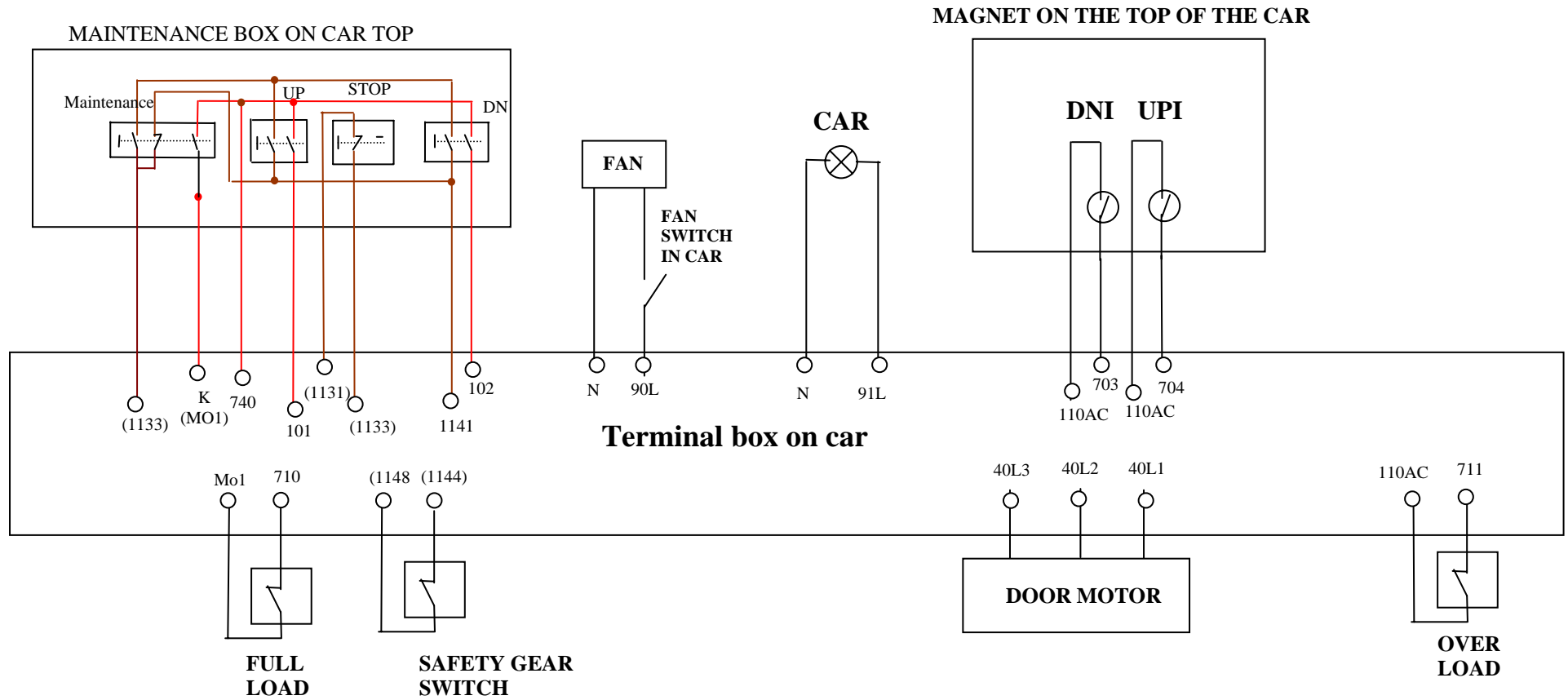
**LIGHT CIRCUIT SWITCH AND ALARM BELL**



**CAR OPERATING PANEL WIRING DIAGRAM**



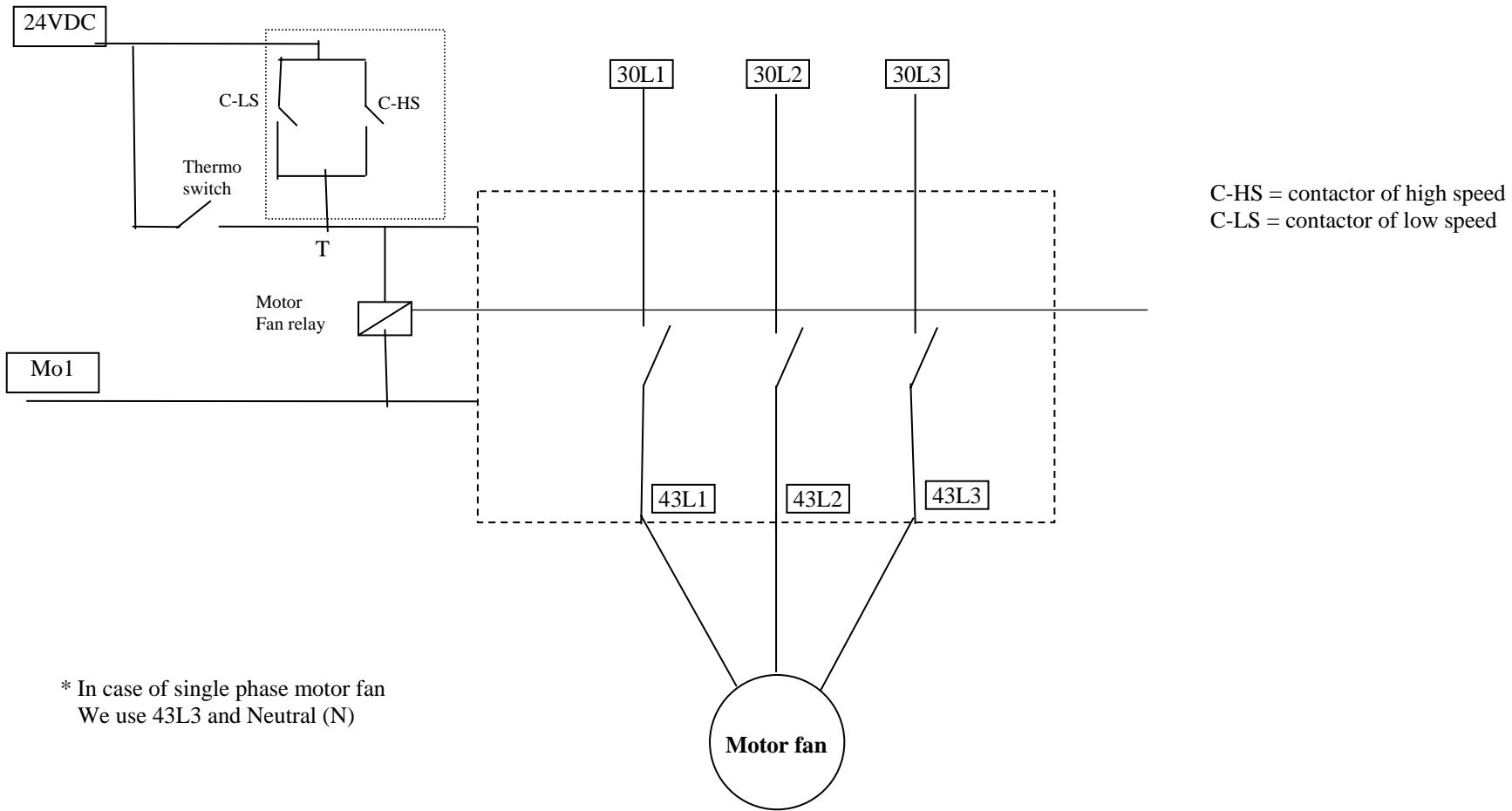
## MACHINE ROOM WIRING DIAGRAM



-: \_\_\_\_\_

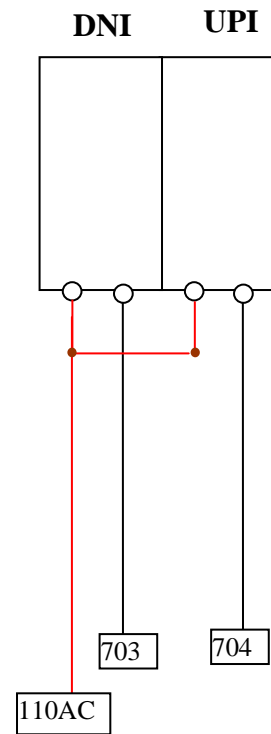
(SAFETY)

## CAR WIRING FOR AUTOMATIC CAR DOOR



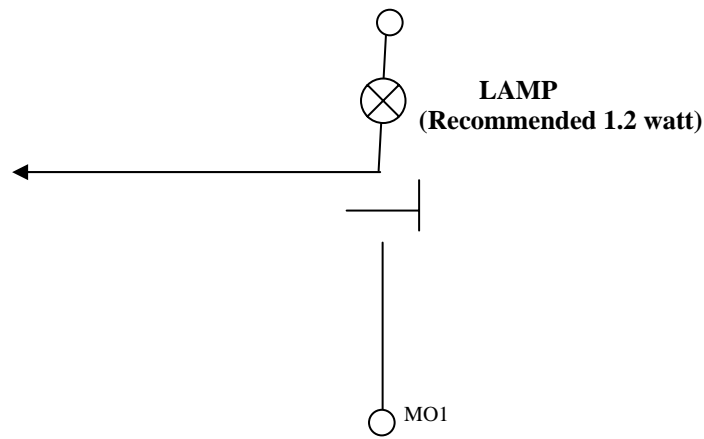
\* In case of single phase motor fan  
We use 43L3 and Neutral (N)

## **MOTOR FAN CONNECTION (380volt, 3-phase)**



**MAGNET SWITCHES ON THE TOP OF CAR**

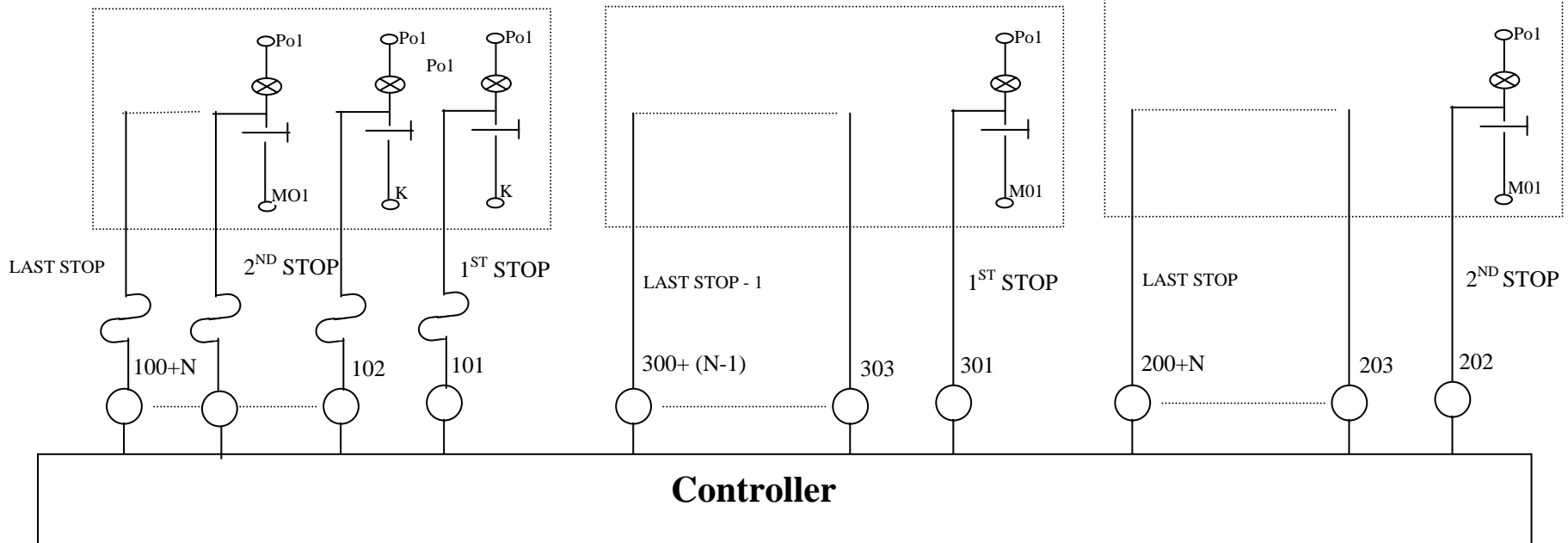
(CAR-CALL) 101.....100+N  
 (DN-LANDING-CALL) 202.....200+N  
 (UP-LANDING-CALL) 301.....300+ (N-1)



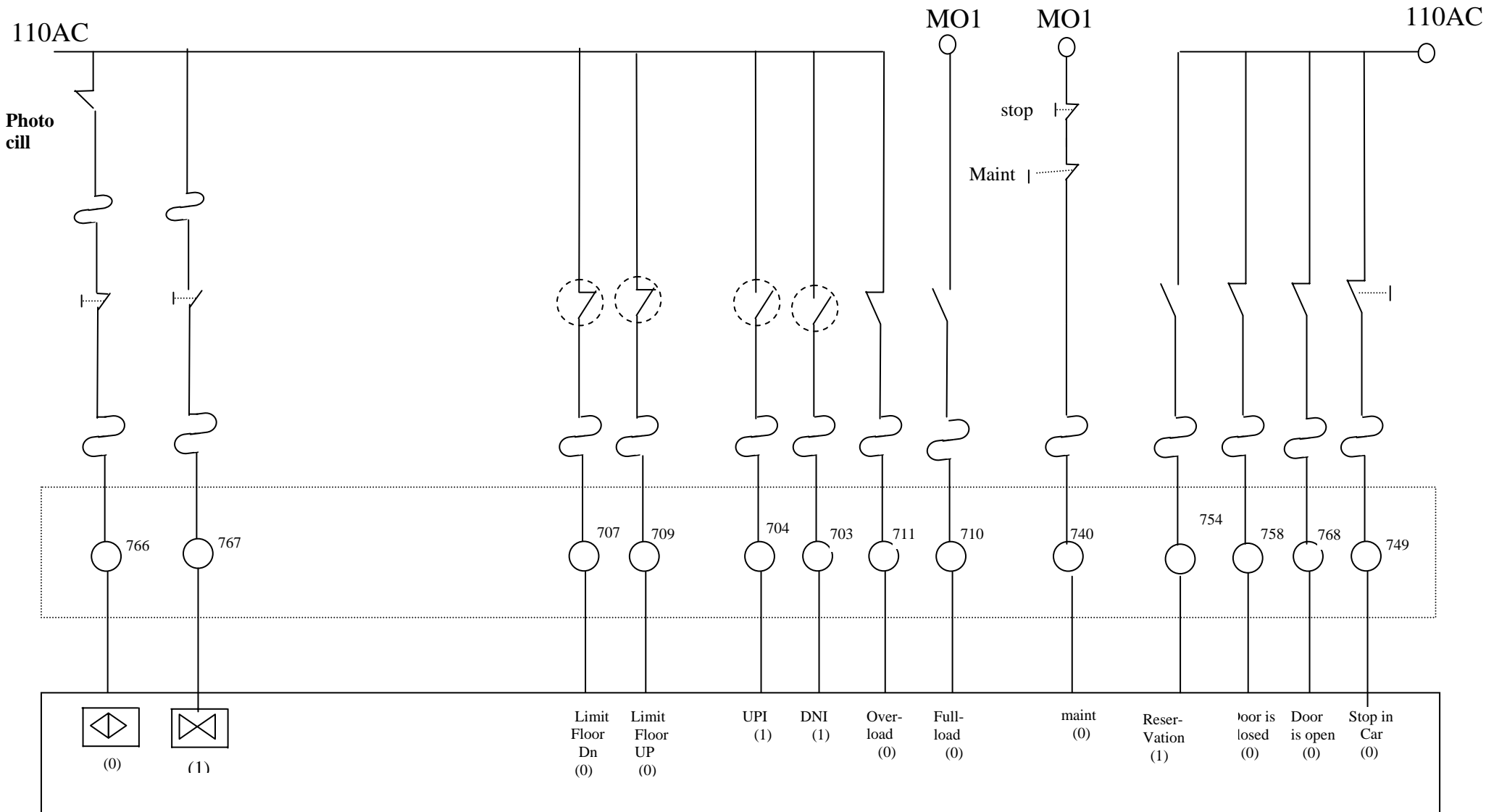
### Car Calls

### UP Landing Calls

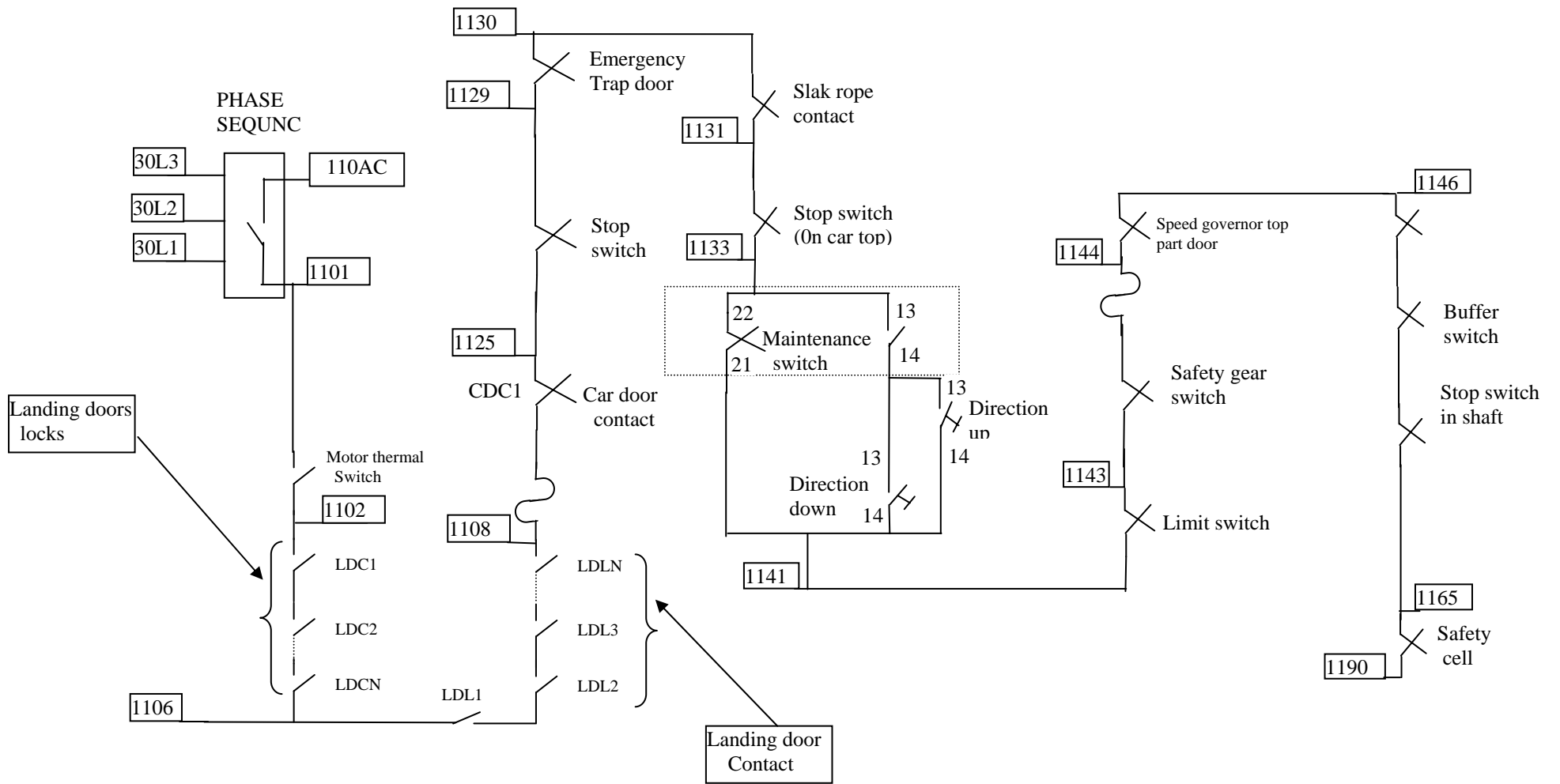
### DN Landing Calls



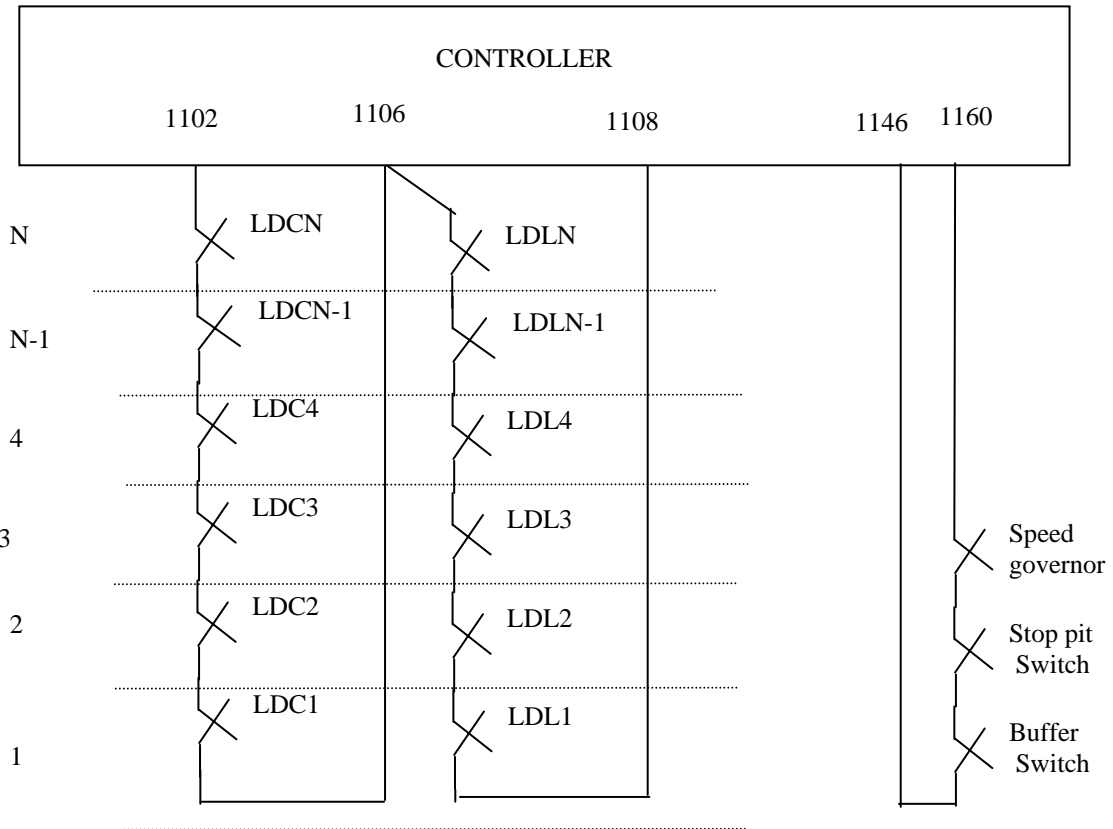
## CAR CALLS AND LANDING CALLS WIRING DIGRAM



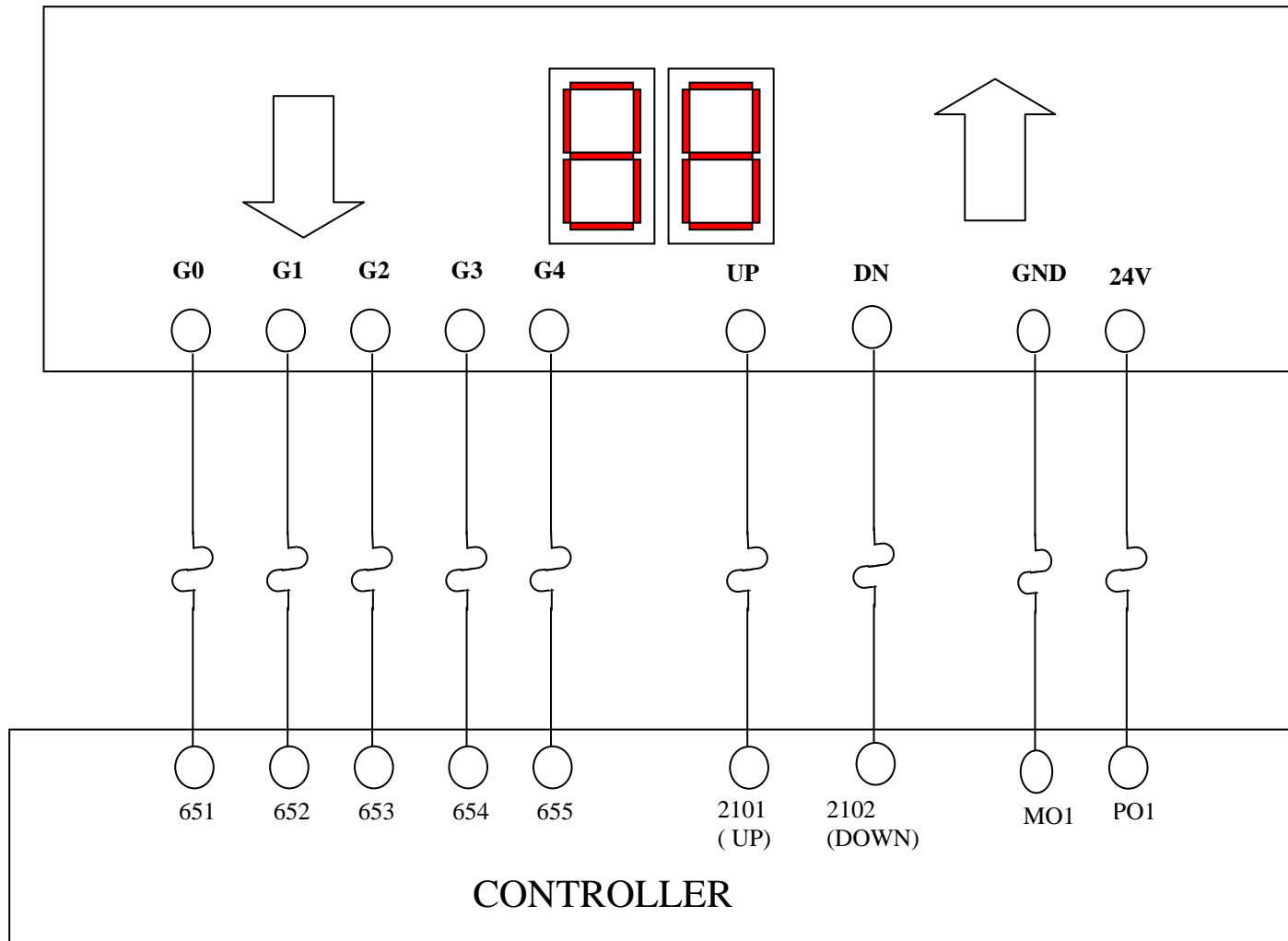
## CONTROL INPUTS



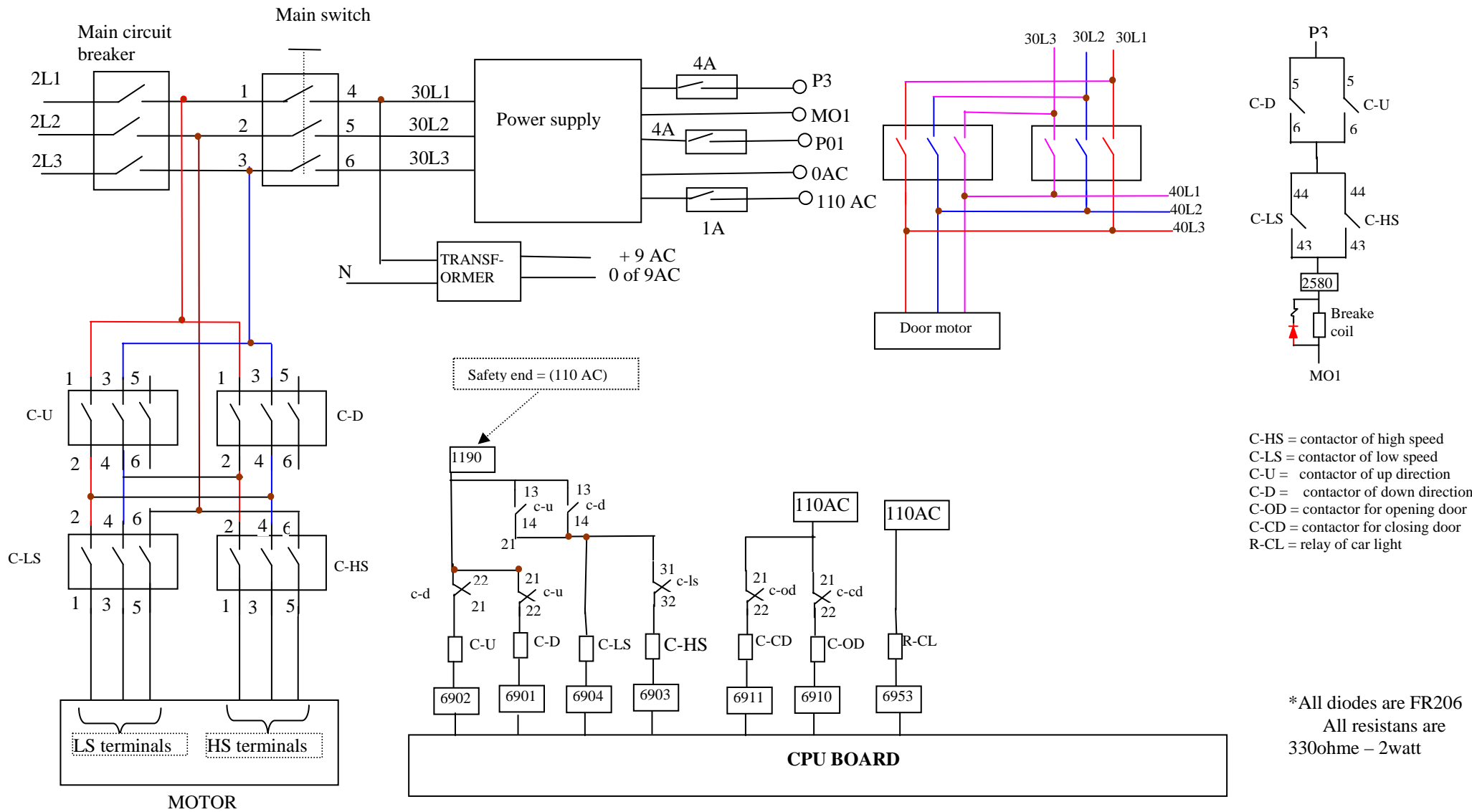
**SAFETY CIRCUITS**



**LIFIT WELL WIRING DIGRAM**



**CAR POSITION INDICATOR**



- C-HS = contactor of high speed
- C-LS = contactor of low speed
- C-U = contactor of up direction
- C-D = contactor of down direction
- C-OD = contactor for opening door
- C-CD = contactor for closing door
- R-CL = relay of car light

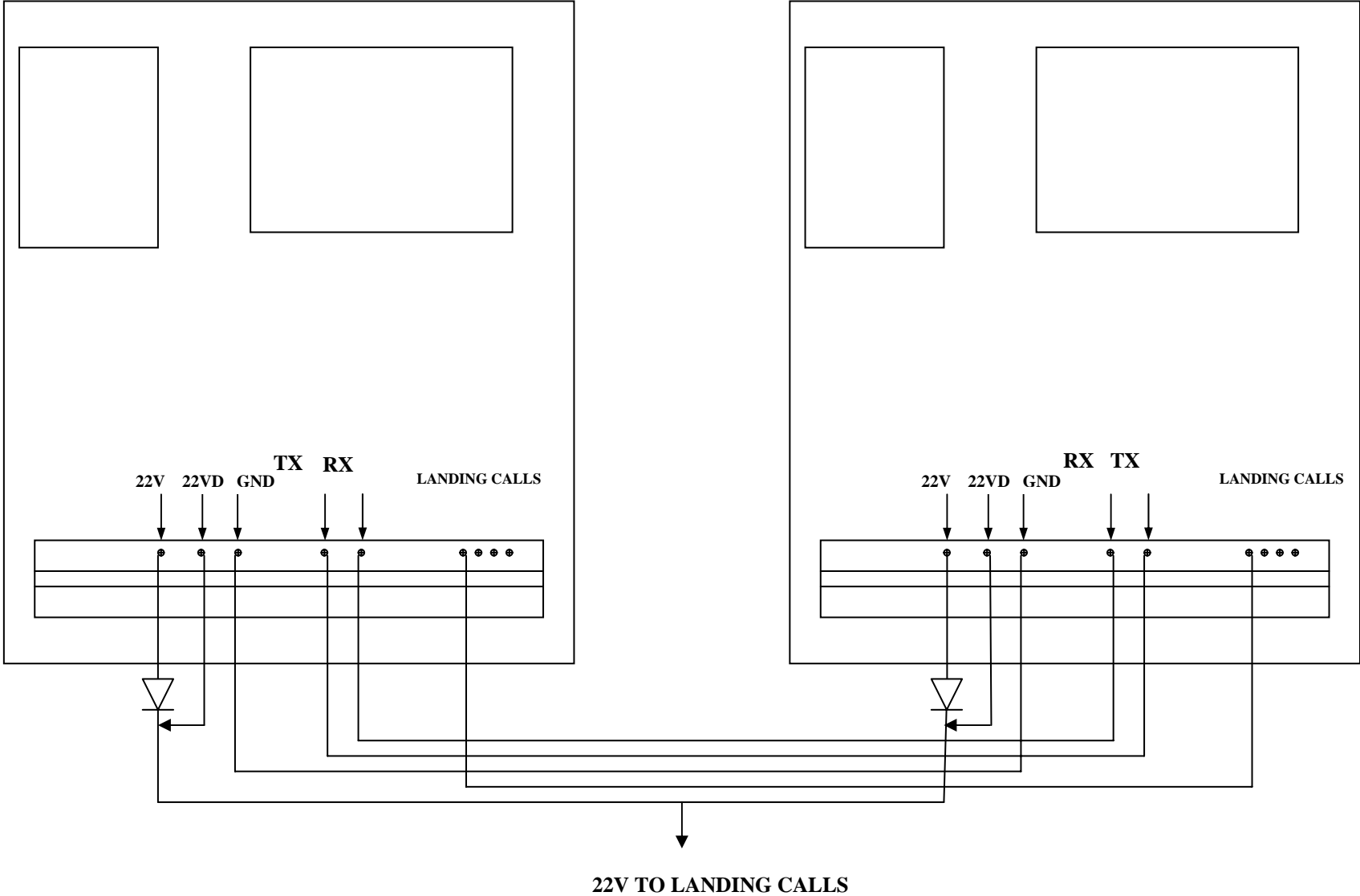
\*All diodes are FR206  
 All resistans are 330ohme – 2watt

## **SCHEMATIC DIAGRAM FOR AUTOMATIC DOOR**

# DUPLEX CONNECTION

**CABIN #1**

**CABIN #2**



# Magnets Slides And Limit Floor Up (LFUP) And Limit Floor Down (LFDN) Positions

## Notes

- All dimensions in centimetre

