



**CAR TOP INTERFACE**  
FOR PRE-WIRED DMG PUSHBUTTON PANEL  
cod. Q00ITCP.U

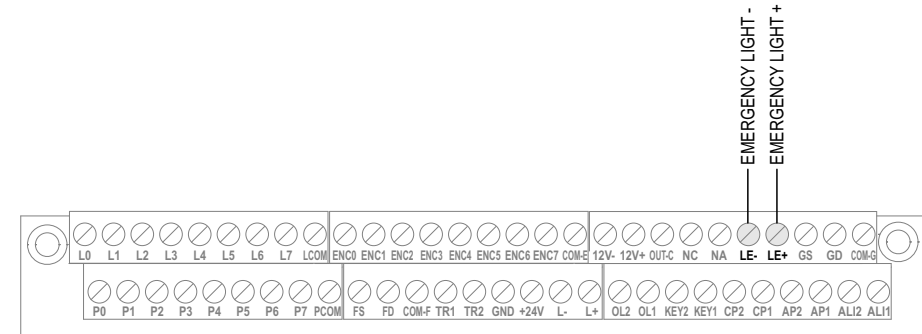
**DMG SpA**  
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*Use and installation manual*  
ENGLISH



### **Emergency light (terminals LE+ and LE-)**

Input for 12V emergency light power independent from all other terminals.  
The led emergency light (12V 40mA) is powered directly via this input.



### INSTALLATION TIPS

Position the device so that it is protected from grease and dust. After installation cover the circuit board with its cover.

Position the device so that it is not possible to step on it during normal lift maintenance operations.

Be very careful not to let electrical wire scrap fall on the circuit board during wiring operations.

Disconnect all the circuits to connect to the circuit board before starting the wiring operation.

Avoid connecting and disconnecting the 37 pole connector of the pushbutton panel when the circuits are powered.

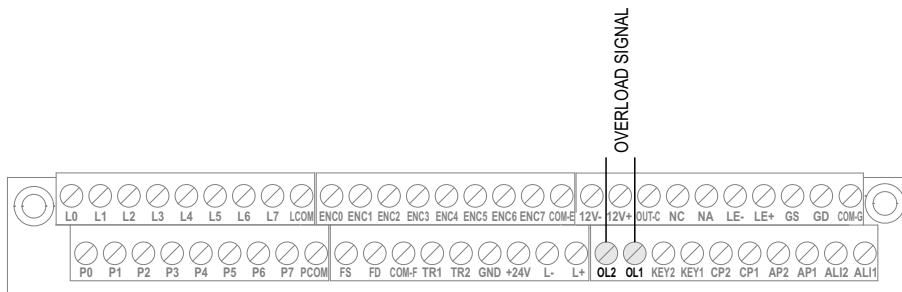
## Up/Down Gong (terminals GS/GD and COMG)

Inputs for acoustic signals for floor arrival 1 tone for up and 2 tones for down.  
 The inputs are opto-insulated, non-polarised with common independent from all the other terminals (12/24V AC/DC)  
 The input circuit impedance is 4 K ohms.



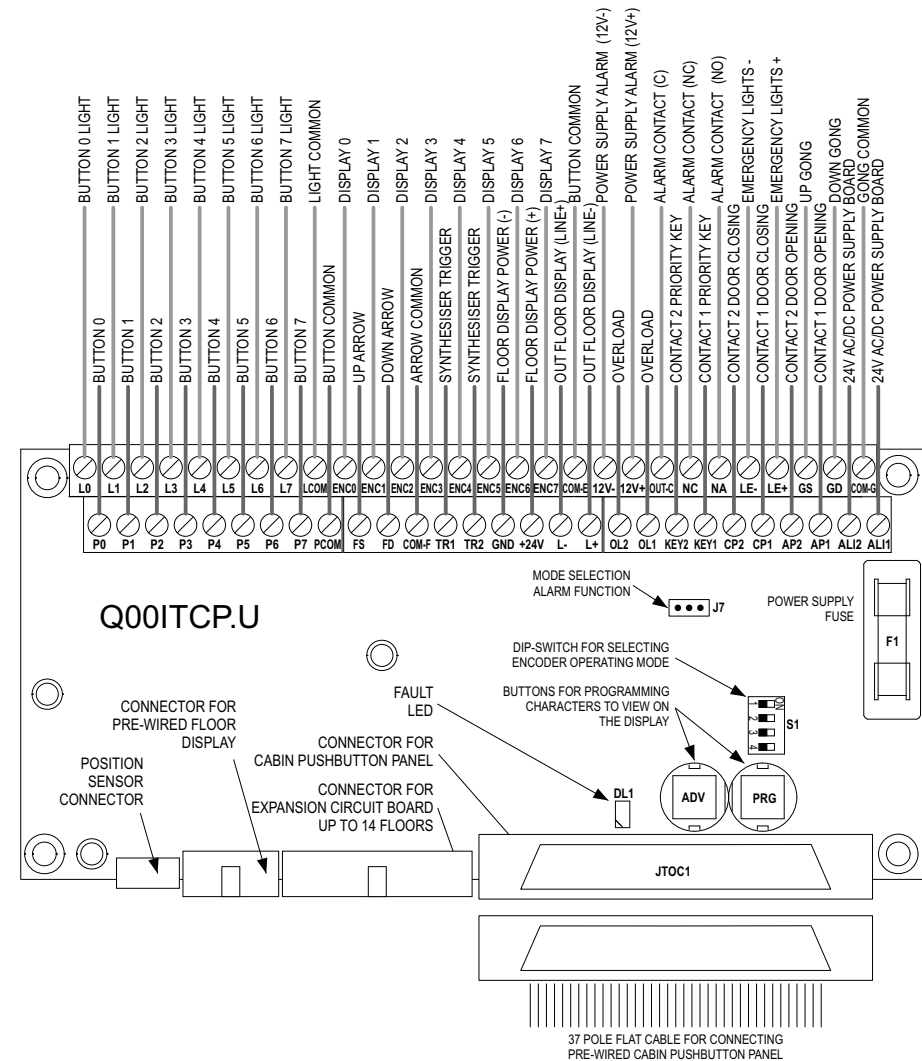
## Overload signal (terminals OL1 and OL2)

Opto-insulated input independent from all other terminals (12/24V AC/DC)  
 The input circuit impedance is 4 K ohms.

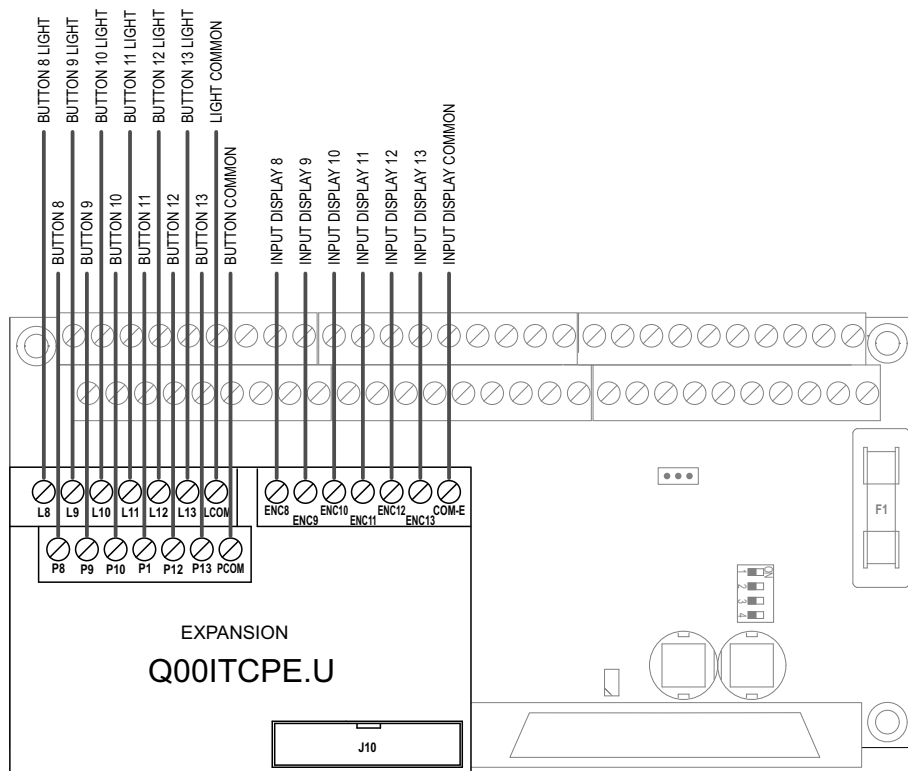


The TOC Q00ITCP.U circuit board is used to interface the cabin pre-wired DMG pushbutton panel with most of the control panels on the market. The connections are made via terminals with extractable screws to the control panel and via a 37 pole flat cable to the pushbutton panel.

The dimensions of the device are:  
 195 x 110 x 80



A Q00ITCPE.U expansion circuit board for systems up to 14 floors can be added to the TOC Q00ITCP.U circuit board used for connections for systems up to 8 floors.

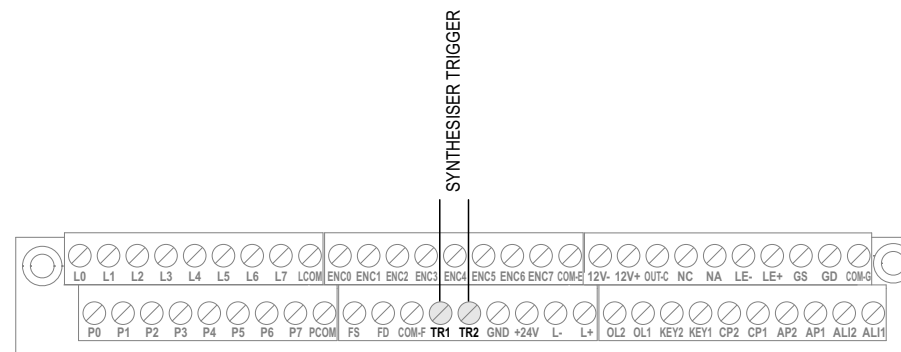


## Voice synthesiser (terminals TR1 and TR2)

It is possible to command a DMG serial voice synthesiser. For the selection of floor announcement what was described above for position indicators is valid.

Start-up of the announcements is obtained by powering up the TRIGGER (terminals TR1 and TR2) input with 12/24V AC/DC.

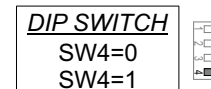
The input is opto-insulated and electrically independent from all other terminals. The input circuit impedance is 4 K ohms



If, as for the position indicators, the independent position sensor is used, it is possible to start the floor announcement without the TRIGGER command (timed command). This function can be selected with the DIP-SWITCH:

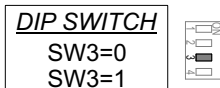
### Floor message start-up

- INPUT FROM TERMINALS
- INPUT FROM INDEPENDENT POSITION SENSOR



## Direction indicator

INPUT FROM TERMINALS  
INPUT FROM INDEPENDENT POSITION SENSOR



If the independent position sensor is used, it is possible to activate the direction arrows from the specific terminals or via the sensor itself.

## ENCODER PROGRAMMING PROCEDURE

### Factory settings

The characters to display for each input can be programmed and the encoder is already set up for displaying numeric characters (0, 1, 2, 3 etc.).

If necessary, it is possible to cancel all the data saved in the permanent memory and it is possible to set the desired offset value (e.g. Input 0 = display 1)

The function is executed by pressing the PROG and ADVANCE keys together for more than 3 seconds.

When finished the display shows the letters "PD" (Default Programming) when the keys are released "-0" (offset 0) is shown on the display, press the ADVANCE button to set the desired offset value.

### Programming characters to display

Used by the user to set the characters displayed at the selected floor.

For example it is possible to substitute the "0" signal with "P" or something else.

The procedure to follow is below:

- display the signal to change (for example in the case of 1 wire per floor, activate the corresponding input).
- press the PRG key for more than 3 seconds (when finished the letters "PU": User Programming) will appear on the display.
- Press the ADV button to replace the display of the tens
- Press the PRG button to confirm
- Press the ADV button to replace the display of the units
- Press the PRG button to confirm (the display will go off for a short time and the new display will be saved and shown).

If you want to return to the default programming it is necessary to carry out the procedure described in the previous paragraph.

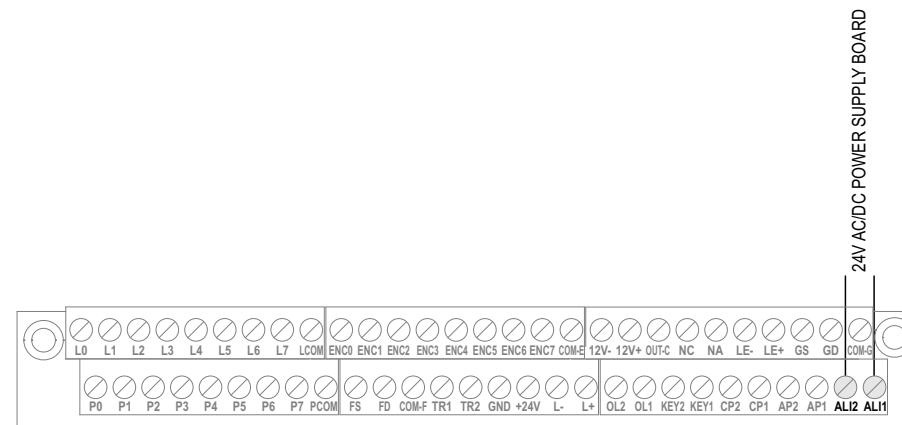
NOTE: if the programming is carried out on the cabin roof and it is not possible to see the cabin display, it is advisable to connect a DMG serial display to the terminals for the floor display (GND/+24V/L+/L-)

All the planned functions and related connections are described below:

## Circuit board power supply (terminals ALI1 and ALI2)

Input 24VAC/DC max 2 A for power supply of the circuit board, cabin pushbutton panel and any floor displays.

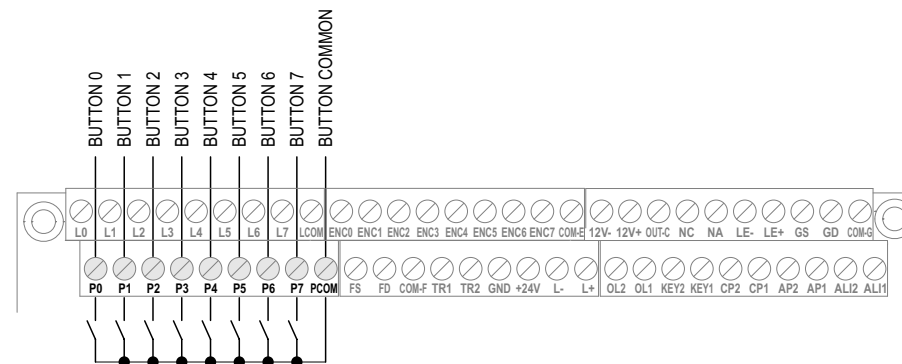
This power supply circuit is independent from all the remaining inputs and outputs (except for the connections to any floor displays).



## Call buttons (terminals P0/P7 and COMP)

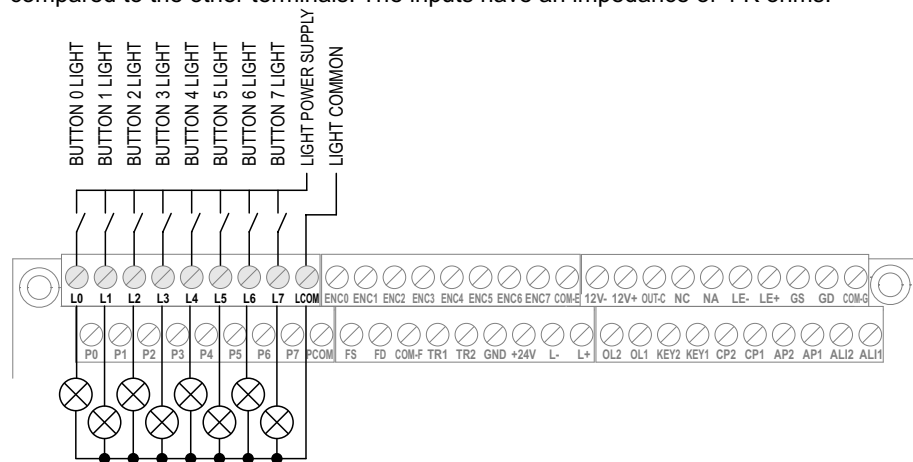
8 outputs with relay (1 A 48V AC/DC) with common independent compared to the other terminals.

The relays are activated by the call buttons on the pushbutton panel.



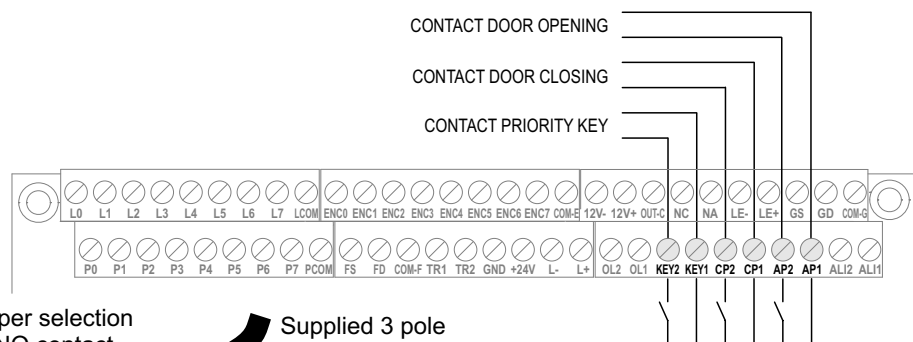
## Call button lighting (terminals L0/L7 and COML)

8 opto-insulated, non-polarised inputs with common independent (12/24V AC/DC) compared to the other terminals. The inputs have an impedance of 4 K ohms.



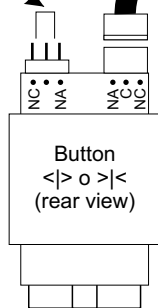
## DOOR OPEN, DOOR CLOSE AND CABIN PRIORITY KEY buttons (terminals AP1-2/CP1-2/KEY1-2)

3 outputs with relay (1 A 48V AC/DC) with common independent compared to the other terminals. The relays are activated by the corresponding buttons/key on the pushbutton panel.



Jumper selection NC/NO contact

Supplied 3 pole cable



### SELECTION OF THE NO/NC CONTACT

It is possible to select the NO/NC contact for the door opening and closing buttons by moving the jumper on the button.

### 2nd DOOR OPEN AND DOOR CLOSED BUTTON CONTACT

Door opening and closing button can be supplied with a second contact (C/NC/NO) upon request. The connection is made with the supplied cable.

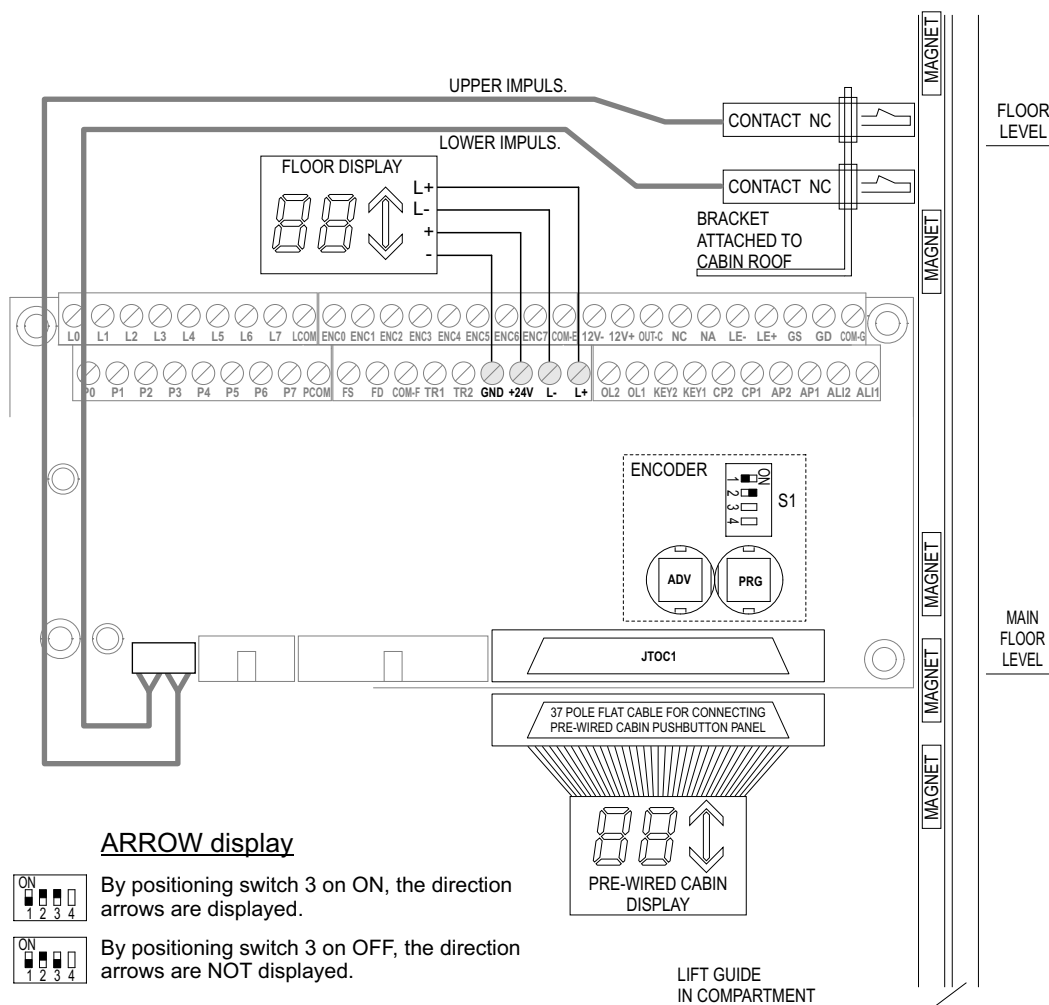
## INPUT INDEPENDENT POSITION SENSOR

DIP SWITCH  
SW1=0 SW2=1



For operation of the independent sensor, it is necessary to connect 2 NC magnetic sensors to the TOC board and position 2 magnets for each floor (both the free sensors with lift at floor level). A third magnet only needs to be positioned at the main floor which engages both sensors when the lift is at the floor.

This magnet is used to reset the circuit after a power failure or any counting errors



### ARROW display



By positioning switch 3 on ON, the direction arrows are displayed.

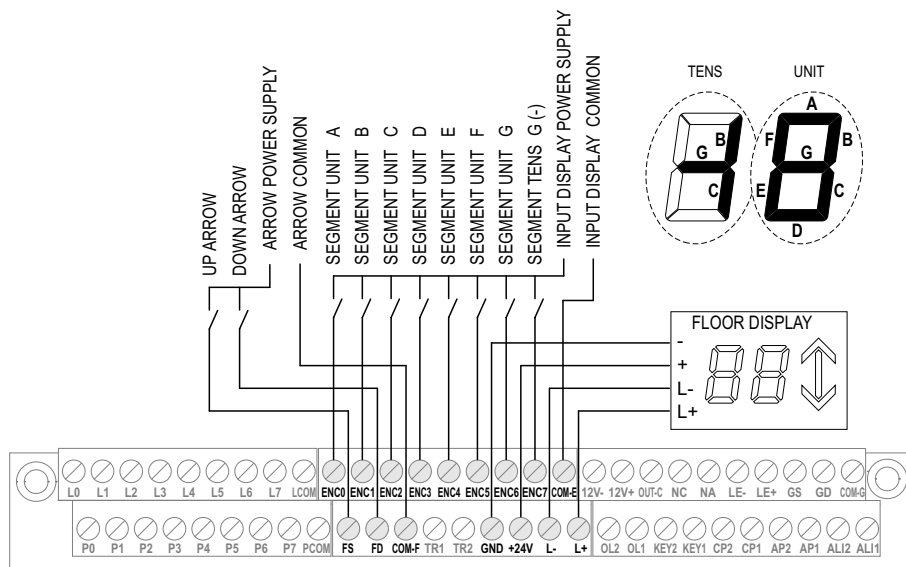


By positioning switch 3 on OFF, the direction arrows are NOT displayed.

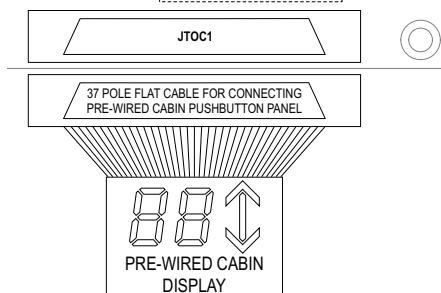
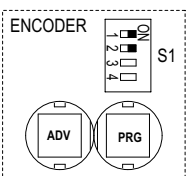
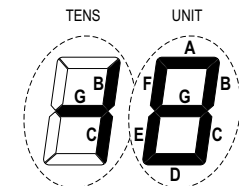
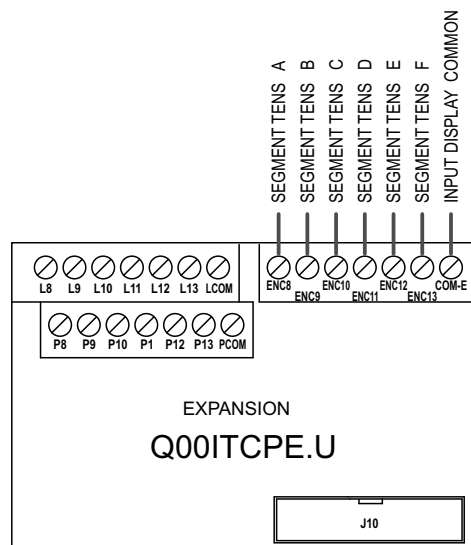
Pre-wired sensor kit + magnet and bracket available on request

INPUT 1 WIRE PER SEGMENT

DIP SWITCH  
SW1=1 SW2=1



If tens segments are present, the related connections need to be made on the expansion circuit board.



## Alarm button

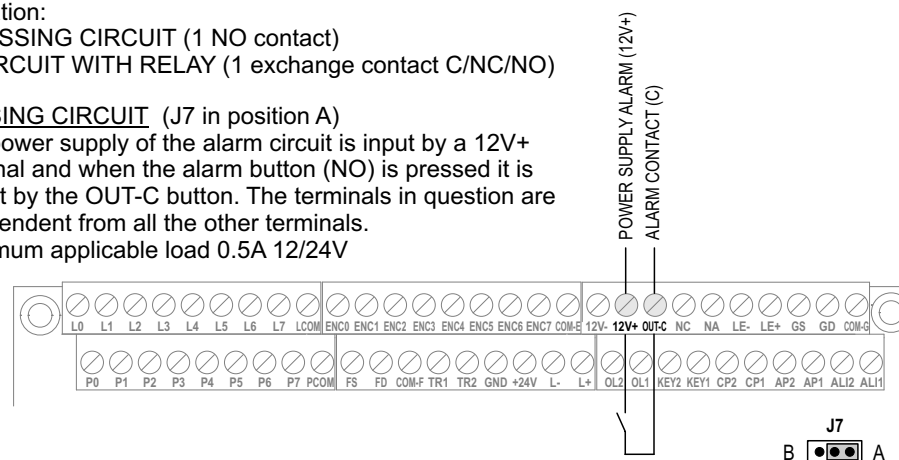
It is possible to select two different types of alarm circuit operation:

- 1) PASSING CIRCUIT (1 NO contact)
- 2) CIRCUIT WITH RELAY (1 exchange contact C/NC/NO)

### PASSING CIRCUIT (J7 in position A)

The power supply of the alarm circuit is input by a 12V+ terminal and when the alarm button (NO) is pressed it is output by the OUT-C button. The terminals in question are independent from all the other terminals.

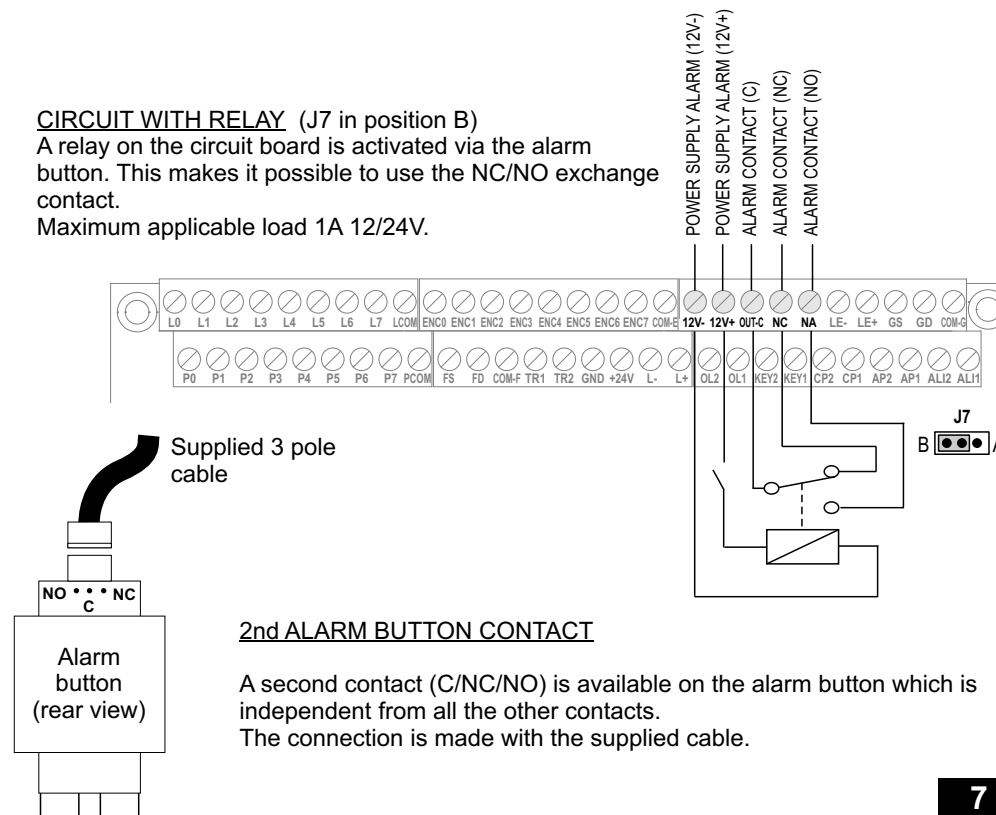
Maximum applicable load 0.5A 12/24V



### CIRCUIT WITH RELAY (J7 in position B)

A relay on the circuit board is activated via the alarm button. This makes it possible to use the NC/NO exchange contact.

Maximum applicable load 1A 12/24V.



### 2nd ALARM BUTTON CONTACT

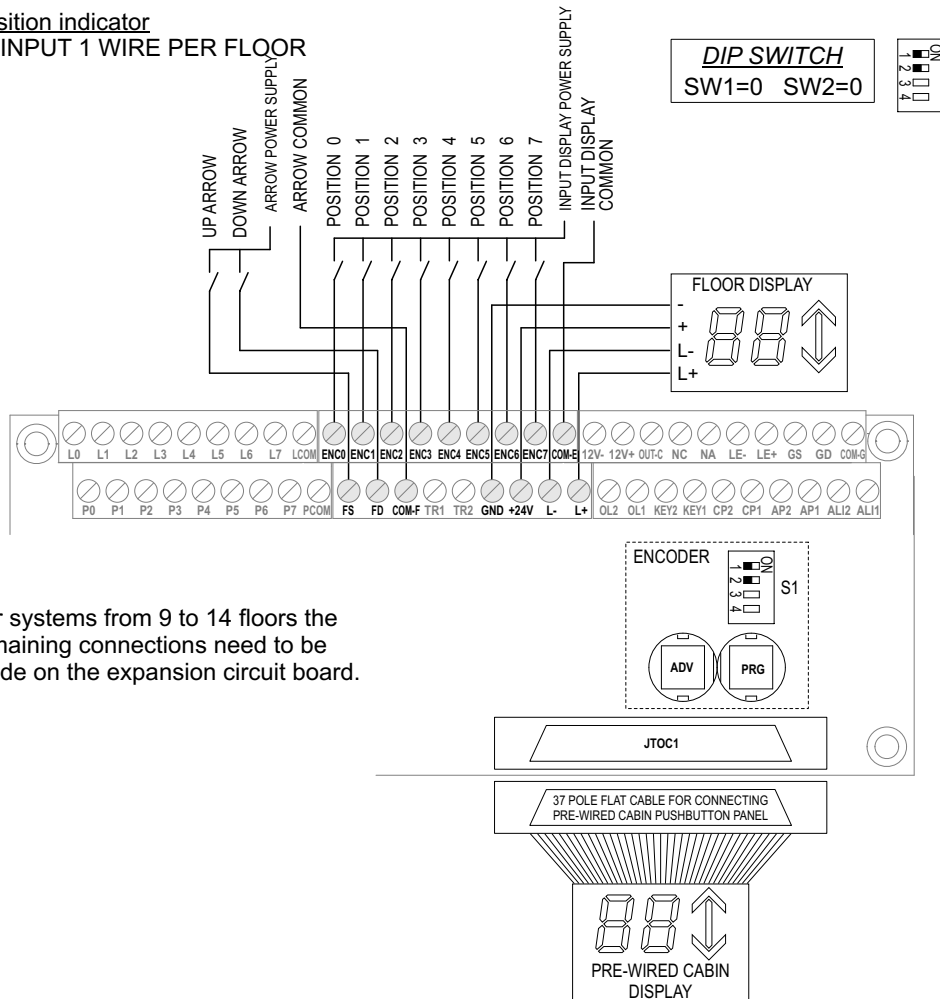
A second contact (C/NC/NO) is available on the alarm button which is independent from all the other contacts. The connection is made with the supplied cable.

## Position indicator (terminals ENC0/ENC7 and COME + FS/FD and COMF + SUP/SDW and COMS)

An encoder is present on the circuit board for connection to the DMG serial display. The displayed characters can be programmed with the ADV and PRG buttons. A serial output is present for connection to any floor displays. The inputs for the display and arrows have separated commons, they are opto-insulated, non-polarised and with common independent (12/24V AC/DC). The opto-insulated inputs have an impedance of 4 K ohms. For systems which do not have a position indicator command, it is possible to connect two NC magnetic impulsors (with 2 magnets per floor) through which the circuit board calculates the position and direction of the cabin and can be used to display it. It is possible to select the encoder operation mode via DIP-SWITCH.

### Position indicator

INPUT 1 WIRE PER FLOOR



For systems from 9 to 14 floors the remaining connections need to be made on the expansion circuit board.

GRAY INPUT (5 inputs max.)

**DIP SWITCH**  
SW1=1 SW2=0



The default programming of the encoder includes the Gray code. However, it is possible to use any binary code, by opportunely reprogramming the encoder using the ADV/PRG keys it is possible to associate the displaying of the desired characters with each combination of inputs.

