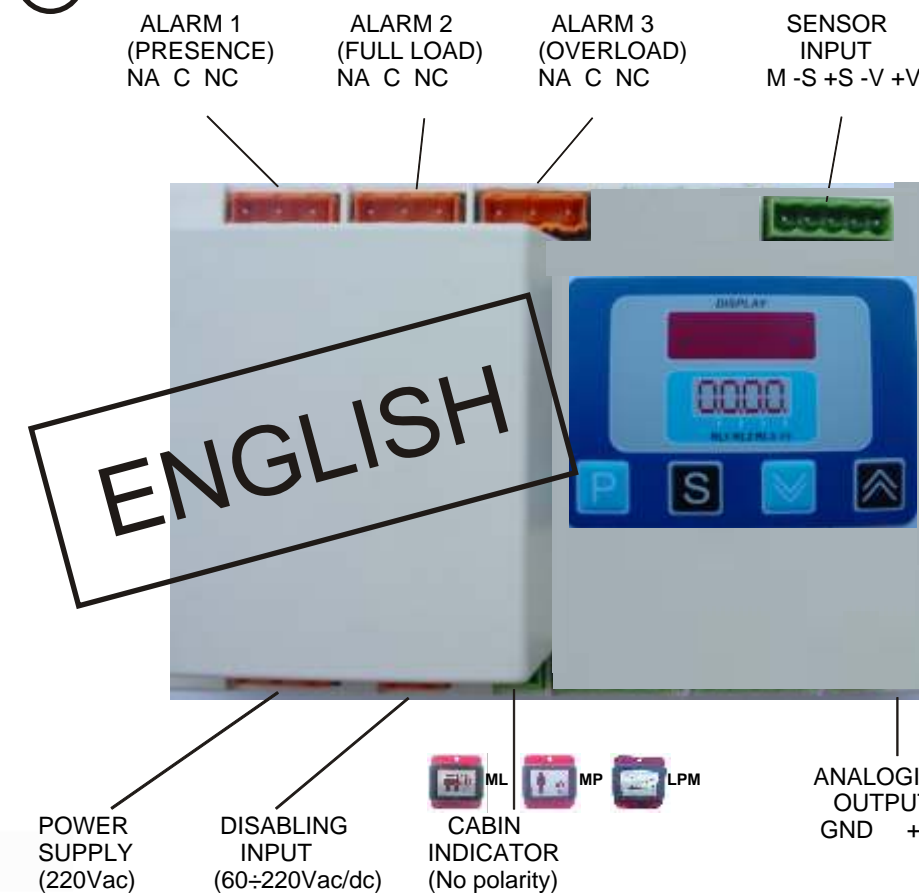


LM3D INSTALLATION PROCEDURE: (3 STEPS)



1 DIAGRAM OF CONNECTIONS:



SENSOR CONNECTING CODE:

M.....MESH
 - S.....Signal..YELLOW.
 +S.....+ Signal...GREEN.
 - V.....- Vdc.....BLACK.
 +V.....+ Vdc.....RED.

ALARM CONNECTING CODE:

NA.....NO=Normally open.
 C.....C=Common.
 NC.....NC=Normally closed.

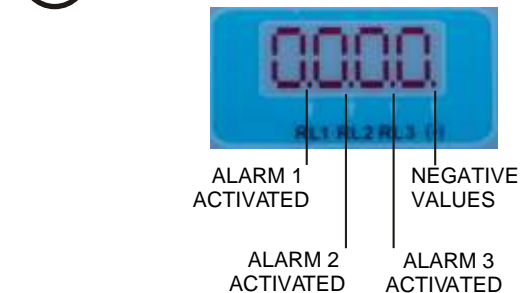
Relays electrical ratings:
 250Vdc / 3 A

Analogical output:
 The maximum value for the analogical output corresponds with the programmed alarm 3 value.

ANALOG OUTPUT CODE:

Inner jumper positions:
 4-20 mA: J1(1-2) / J2(1-2)
 0-20 mA: J1(2-3) / J2(2-3)
 0-24 mA: J1(1-2) / J2(2-3)

2 KEYS AND FIGURES:



Note: The display remains switched off after 5 minutes of normal operation. Pressing any key the display value is visualised again.

PROGRAMMING KEY "P"

This key allows to go through the different menus in order to perform the settings and to introduce the lift parameters. Once introduced, by pressing the "P" key parameters are saved in eeprom (a non volatile memory to save data in case of power failure.)

EXIT KEY "S"

It allows to leave the menus without saving data in eeprom. In the alarm menus, we go from one alarm to another without going through their parameters. In the measuring mode, keeping this key pressed on enables the visualisation of the installation's real weight without the compensating chain correction.

DOWN KEY "▼"

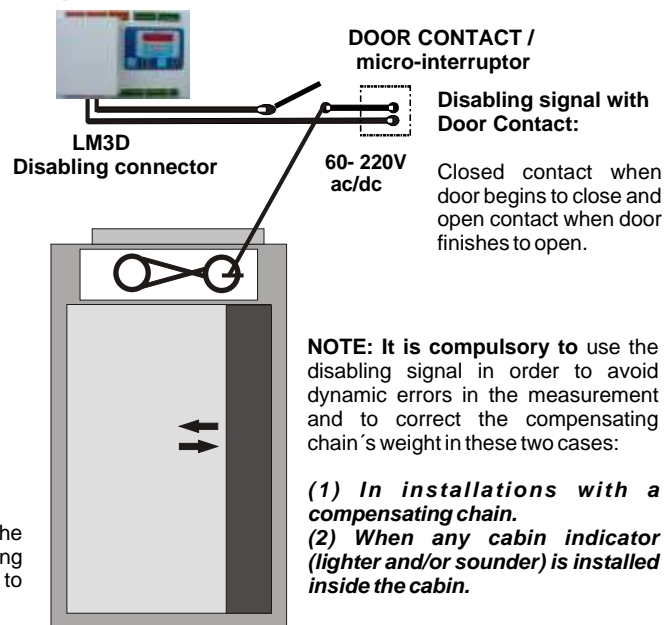
This key enables the user to decrease the parameter values in each menu. It has two speeds; one by one or, if pressed on, twenty by twenty.

UP KEY "▲"

This key enables the user to increase the parameter values in each menu. It has two speeds; one by one or, if pressed on, twenty by twenty.

3 DISABLING OR BLOCKING VOLTAGE:

The disabling signal range is (60-220 V ac/dc);



NOTE: It is compulsory to use the disabling signal in order to avoid dynamic errors in the measurement and to correct the compensating chain's weight in these two cases:

- (1) In installations with a compensating chain.
- (2) When any cabin indicator (lighter and/or sounder) is installed inside the cabin.

The LM3D must continuously receive a blocking signal during all the time the lift is travelling, from the moment the doors are closing until the cabin gets on floor and the lift opens doors again.

NOTE: Continuously. (Voltage 60-220Vac/dc)

The display value will keep freed after receiving this signal.

Connect the disabling or blocking wires using for example a (door contact micro) fed with voltage once the door begins to close.

LM3D PROGRAMMING PROCEDURE: (7 STEPS)



Press the "P" key during 3 seconds to begin the programming procedure.

1 ZERO CALIBRATION: "TARE" (at upper floor)

Make the zero setting with empty cabin at upper floor, selecting "YES". It is recommended to jump before inside the cabin in order to avoid any possible cabin "hooks" on the guide rails. After that, pressing the "P" key the equipment begins to flicker for 15 seconds to permit the installer to leave the cabin totally empty.

2 SENSOR CONFIGURATION:

The setting procedure can be performed automatically or by means of a well-known weight.

LMC: wire rope sensor **DISC:** Rope Hitch sensor.

**** LMC: we must introduce the following data.**

Type of installation: 1:1 2:1 4:1

Number of persons: from 2 to 30.

Adjustment Mode:

- **Automatically:** DIAM = Diameter. the diameter in millimetres of the wire ropes has to be introduced from 6.0 to 16.0 mm.

- **Manually:** LOAD = place inside the cabin a real known weight, which must be - at least - half the useful load. Introduce by means of the keys this weight value.

**** DISC: we must introduce the following data.**

Type of installation: MER:MEC:MHL

Number of persons: from 2 to 30.

Adjustment Mode:

- **Automatically:** AUTO.

- **Manually:** LOAD = place inside the cabin a real known weight, which must be - at least - half the useful load. Introduce by means of the keys this weight value.

3 WIRE ROPES WEIGHT: "CHAI" (at lowest floor).

In the CHAI menu we must send the cabin to the lowest floor. After pressing the "P" key the display will show the wire ropes weight. If ERR 6 appears this means that at this floor we have got a "hook" on guide rails higher than the wire ropes weight, and then we have to send the cabin one floor up and make the "CHAI" tare again, or go to the point 7 ("CHAI" parameter correction), and change this value manually with the up and down keys.

4 ALARM VALUES:

The electronic control unit has three alarms:

Alarm 3 (AL3): It is always assigned to **OVERLOAD (100% Useful Load.)**

Alarm 2 (AL2): It can be assigned to **FULL LOAD (80% Useful Load.)**

Alarm 1 (AL1): It can be assigned to **PRESENCE** or **ANTINUISANCE**.

5 CABIN INDICATOR: "INDI"

"NO" = No indicator installed inside the cabin.

"PROG" = MICELECT progressive models (MP or LPM)

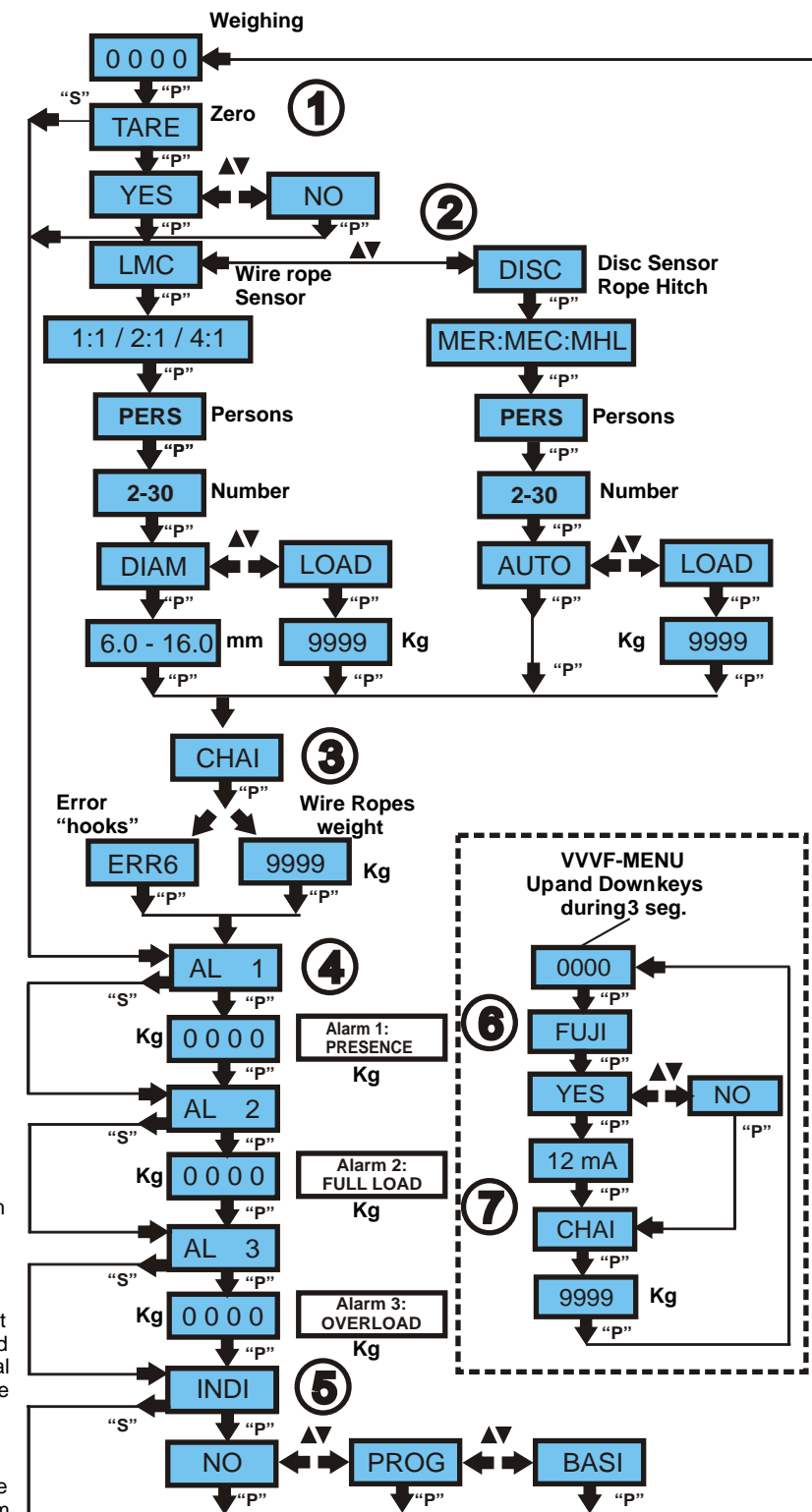
"BASI" = MICELECT basic indicator ML model or any lighter-sounder system powered by 24Vdc

6 VVVF INVERTER: "FUJI"

We enter this menu from the weighing mode pressing the up & down keys at the same time during 3 seconds. After FUJI appears we press the "P" key and we select "Yes" to send to the controller through the analogical output the signal proportional to half of the useful weight = 12 mA. All this is done to calibrate the VVVF unit with no need to use a known weight inside the cabin.

7 "CHAI" PARAMETER CORRECTION:

If we want to correct the wire ropes weight in the CHAI menu due to some registered hooks on the guide rails, we can do it by means of this menu. From the weighing mode (after pressing up&down keys at the same time during 3 seconds and passing through the FUJI menu selecting "No") we enter CHAI menu and pressing the "P" key the display will show the previous weight of the wire ropes registered in the chai menu. We can change this value using the up&down keys.



ERROR CODES:

- ERR1....No saved Data.
- ERR2...Overload.
- ERR3...Power Supply Low.
- ERR4...Negative Known weight.
- ERR5...Known weight Low/High

SOLUTIONS:

- ERR1....Make again the settings.
- ERR2...Useful Load > 9999 Kg.
- ERR3...Check the Power Supply.
- ERR4...Some possible "Hooks" / Wrong wiring Sensor. (Check sensor colour code).
- ERR5...See part 2 Programming procedure (Load), Correct Useful Load.

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