ADCO CONTROLS

AD - OVERLOAD SYSTEM

(User Guide)

AD-Over Load System

ADCO CONTROLS

- **Rapid installation**
- **Cost effective**
- **Immune to outside disturbances and variations in supply voltage**
- **Stable measurements over long periods and in variable conditions**

FUNCTIONAL FEATURES:

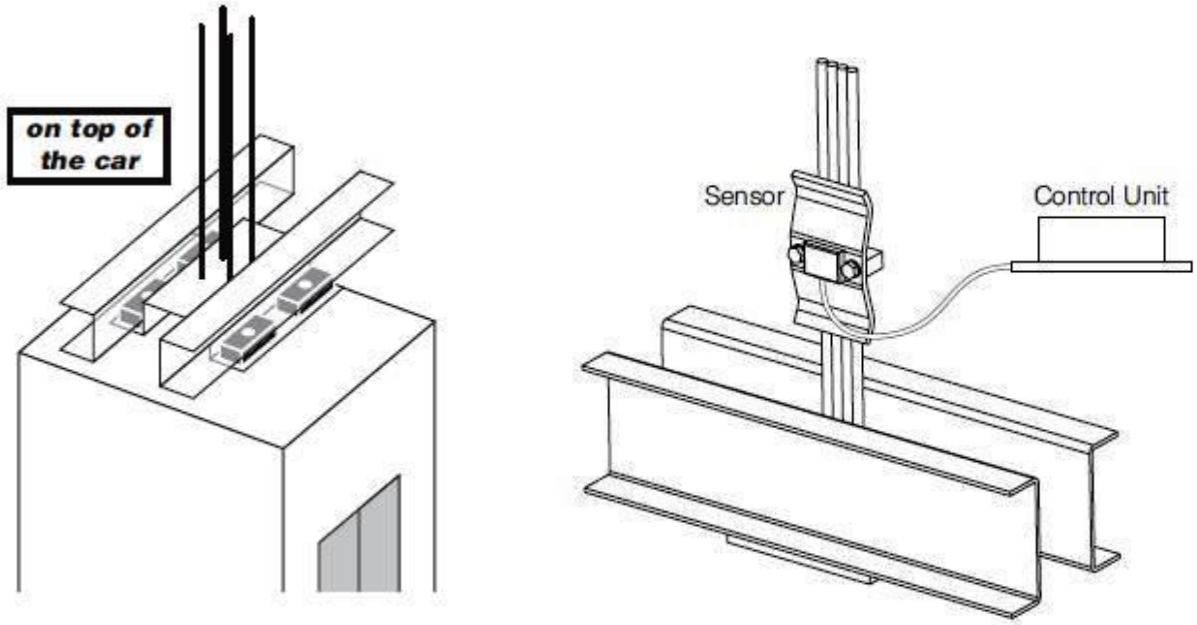
- Simulation of load with a known weight corresponding to at least 25% of the overload
- 2 levels to be selected by operator
- 3 push-buttons for level setting, scale and zero-setting
- 4 digits indicating weight and levels
- Outputs on clean relay contacts
- 2 LEDs to view state of relays
- 1 power LED to show electrical supply
- 3 LEDs to show state (weight, zero-setting,
- Supply input and relay output on connectors pitch 3,96 mm
- Elimination of brief variations in weight measure
- Constant automatic calibration of the device
- Weight block connection to eliminate weight variations during lift operation

ELECTRICAL FEATURES:

- Power input 230V AC 50Hz (with internal transformer)
- Maximum power absorbed 5VA
- Relay for levels C-NO-NC
- Protection fuse 1A
- Outputs: clean relay contacts 3A 220V AC / 1A 80V DC
- Weight block input 40mA _ 2A AC/DC

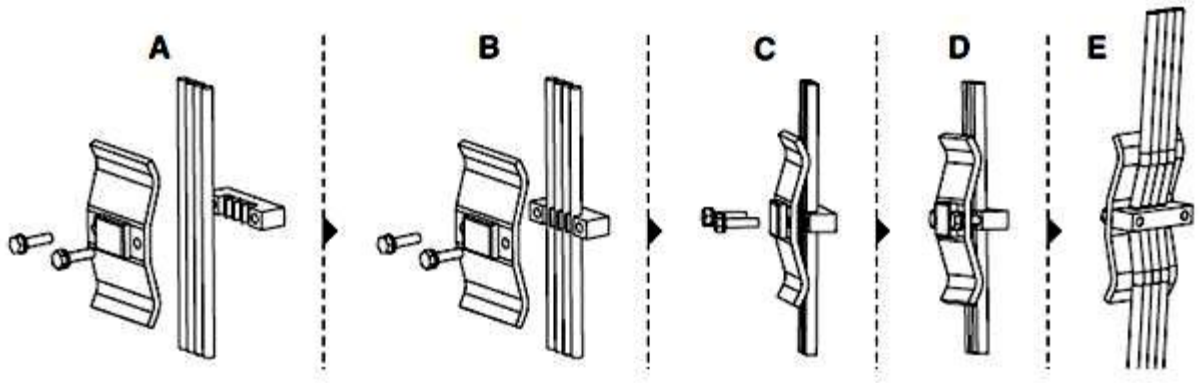
MECHANICAL INSTALLATION:

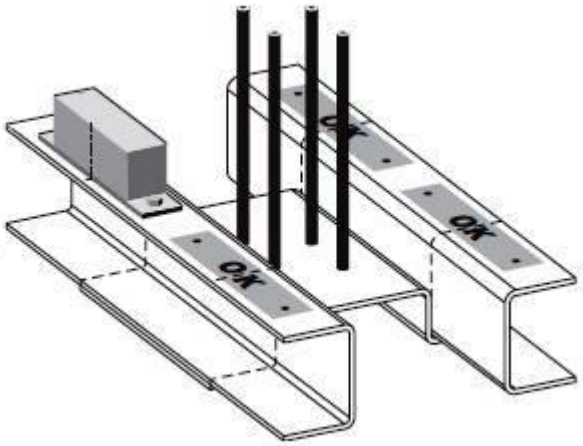
The metal sensor plate must be installed on the traction ropes. It can be positioned near the car frame as shown in the figure.



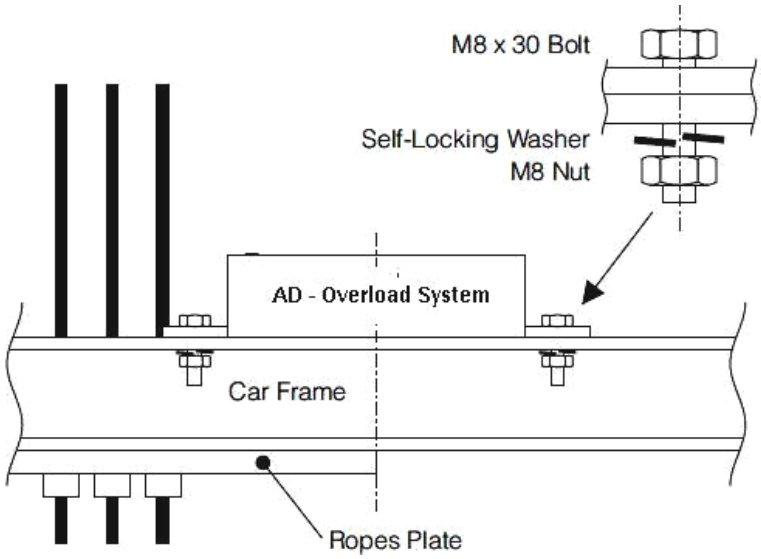
For the sensor fixing use the following instructions (Fig) :

1. Bring the comb near to the ropes, after having inserted them and to push it until the complete ropes fitting.
2. Bring the sensor near to the comb in order to position the ropes between the sensor and the comb.
3. Insert the fixing bolts and the washers into the sensor holes.
4. Bring the comb near to the sensor and screw hardly the bolts into the comb's hole.
5. Continue to screw with the spanner until the sensor and the comb are parallel and then in contact between them.
6. Screw tight the bolts.





The control unit linked to the sensor with cable length - 3 m. must be fixed near the sensor. For the control unit fixing use the suitable screws.



ELECTRICAL INSTALLATION

Please follow the instruction below:

1. POWER SUPPLY CONNECTION :

Make sure that your power supply fits the above values (230 AC, 50 Hz) and then connect it to the main connector into the Overload System (Fig.).

2. RELAY CONNECTION :

Connect the outputs of the relays “RELAY1” and “RELAY2” to the control board in the most suitable way for your installation, considering that the relay accept maximum 3A at 220V AC and 3A at 30V DC.

3. MEASURING BLOCK CONNECTION (OPTIONAL):

AD- Overload System has an electronic device measuring variations while lift is moving. With the “Measuring Block” connections such variations can be completely eliminated. **The detected weight will be memorized while lift is moving**. To activate the option “Measuring Block” proceed as follows:

Connect the “Measuring Block” Connections as

- **Connect GND with the MAIN CONTROL PANEL Ground**
- **Connect CIL1/CIL2 with UP/DOWN or CIL command form the MAIN CONTROL PANEL (while door closed).**
- **When Control Unit receives CIL signal, LED indicated by “CIL” will be ON.**

When the lift doors are closed, the current to the terminals should be between 40mA and 4A AC/DC: CONTROL UNIT will not to be affected by weight variations when lift moves. The car load variations do not affect the status of relays “RELAY1”, “RELAY2” (overload) and the weight indication on the displays.

CALIBRATION PROCEDURE

Calibration procedure for lift capacity EQUAL or INFERIOR than 999 kilos

Please follow the sequence:

1.After the perfect and careful **Mechanical Installation** of both Sensor and Control Unit as explained above, Move the Lift from TOP to BOTTOM at least five times through its way for **Mechanical Stress Adjustment**.

2.For calibration process stop the lift at **CENTRE FLOOR** and leave doors open. The units on the display indicator are turned off.

3. Connect AD-Overload system power supply connector completely plugged in.

4. SWICH ON the control unit.

5.Wait at least 10 minutes before to begin with calibration procedure (thermic settle).

The Zero Setting process

AD – Overload System is provided with ZERO SETTING When NO LOAD on the plate.

6. Now press " UP " , for the NEW ZERO SETTING process at **Current Site Location**.
(" UP " button has a dual function . It is used for "**Increment"** if in Edit Mode else for **" Zero Setting"**)
When unit is in Zero Setting mode then LED indicated by "ZERO" will start blinking. The reading on display at that time is due to the Unloaded Cabin weight.

7.Now move the **Zero Setting POT** such a way that the reading will display 200 kg(because cabin-car load is initially set at 200kg).

8. Press "UP" again to Exit from Zero Setting Process.

9. After Exit from Zero Setting Process the Display will indicate " 00 ".

The Parameter Setting process

1. Press "Enter" to set parameters.

   Enter correct Password.(if wrong Password then "Eror" will be Displayed.)

   COMPANY PASSWARD : P. 09

   NOTE : DON'T FORGET THE PASSWORD IF YOU CHANGE IT.

   Press again "Enter" to set next parameters.

2. Press "UP" or "DOWN" to set following Parameters.

Set Full load	***(F.) = 300 Kg (Used for Relay 1)***
Set Overload	***(H.) = 350 Kg (Used for Relay 2 + BUZZER)***
Set Carload	***(C.) = 200 Kg***
Set Tolerance	***(t.) = 25 Kg***
Set Difference	***(d.) = 25 Kg***
Set Password	***(P.) = 09 (Company Password)***

3 . Press "Enter" to Exit from **Parameter Setting process.**

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