LEV-200/X
201/X
285/X

Unify Electronic
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Electronic Equipment

Automatic leveling for Aerial Platforms and Hydraulic systems

Proportional controls so the hydraulic cylinder leveling of the spacecraft platforms (Bridges developable), during the maneuvers of ascent and descent.

SPECIFICATIONS:

POWER: .....@ 8V to 32V
BURDEN: .....18mA @ 12V
CURRENT ADJUSTMENT
PROPORTIONAL SOLENOID: ..... @ 1.7A to 0.3A
OUTPUT SHORT CIRCUIT PROTECTED FROM
MAXIMUM CURRENT OUTPUT ON SECURITY-ZA: 1A
MAX CURRENT OUTPUT ON PRE-ALARM: 2A
OPTICAL SIGNALS LED INSIDE
TEMPERATURE RANGE: -15 ° C to 70 ..... ° C
TERMINATION: ..... DIN connectors 43650/ISO-4400/6952
DEGREE OF PROTECTION OF: IP55
DOES NOT FEAR CONDENSATION WATER TRANSPORT:
the electronics are completely covered with resin.

MODELLI:

LEV- 201 - 215 - 001
LEV- 201- 215 - 002
LEV- 200- 201 - 001
LEV- 200- 201- 002
LEV- 200- 201- 000
LEV- 285- 102 - 002
LEV- 285- 102- 001

DESCRIPTION CODE:

LEV 200 -215 - 001

Modello 200

1 2 proportional valves on / off at pre-5th 215
1 2 proportional valves on / off 201
1 proportional valve 2 on / off 102

001 1 alarm with bubbles mercury
002 2 alarm with bubbles mercury
000 no alarm bubble to mercury

Code Article: F200-XXX-XXX

OPERATION mod 200/201

The control unit LEV-200/2 controls the vertical position of the spacecraft of the bridge developable on which it is installed, adjusting as appropriate in the oil flow in the two chambers of the cylinder dedicated to the leveling of the nacelle itself.
It has two outputs for the consent valve supply commissioning general discharge with safety function released by 'electronic normal operation: These outputs provide a positive supply (2AMAX) when the inclination of the spacecraft is included, respectively, between -90 ° and +10 ° and between +90 ° and -10 °. From these outputs is possible to obtain a safety circuit of class '1 'according to the EN954-1 to prevent, inter alia, safety manual corrections that bring out the spacecraft.
An output pre-alarm occurs when the tilt, relative to the baseline acquired during installation, beyond the 5th in a way that is in the opposite direction.

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SETTING

During installation, you must allow the control unit LEV-200/2 auto-learn the horizontal position of the reference and the hydraulic and electrical properties of the aerial platform. To do this, insert the key into the internal connector for programming and power up the system after making sure that:

KEY PROGRAMMING

- The spacecraft is in the correct horizontal position, which must then maintain
- Have ability to move without hitting the ground or other obstacles
- There is availability of oil pressure to level the ship.

During this phase, which also requires a 2-minute wait, the unit LEV-200/2 will store the horizontal position of the reference to the action of 'solenoid valves as well as their thresholds opening by executing some small movements to the spacecraft. It is therefore necessary, at this stage, does not disturb in any way the inertial attitude of the spacecraft itself. This phase ends when the lights L1 and L2 all 'inside of the control unit are both flashing. Must first remove the power to the board, and then remove the programming key before giving the power on again.

Adjusting the sweetness of leveling

During the ascent or descent of the spacecraft leveling happen, rather than continuous action, with repeated adjustment of individual stocks, you will have to adjust the trimmer P1 (or P3 see below) and gently turn it counter-clockwise. If, on the contrary you had an adjustment insufficient to restore the leveling during maneuvers faster it will be necessary to rotate the trimmer P1 (or P3 see below) in a clockwise direction. P1 adjusts the sweetness of leveling in one direction, P3 in the opposite direction to know which of the two trimmer action is needed, it should be noted once removed the lid of the case, which of the two has the trimmer near LED lit during motion to correct .

Adjusting the speed of leveling

Sometimes, in large structures, it is necessary to reduce the speed of leveling in order to obviate the LEV-200 groped to correct any oscillations of an elastic structure with the consequent result of having swaying movements of the spacecraft. The trimmer P5 takes care to adjust the speed of leveling, rotating in anti-clockwise reduces the speed by adjusting the leveling system to the structures more voluminous, in a clockwise direction has a greater speed of response for the more rigid structures or smaller.

QUEST' APPARECCHIO CONTIENE MERCURIO. CONSULTARE LE NORMATIVE LOCALI SUI RIFIUTI E SMALTIRLO CORRETTAMENTE

THIS APPARATUS CONTAIN MERCURY.TO CONSULT THE LOCALS NORMS ON THE REFUSALS AND TO SWALLOW CORRECTALY.

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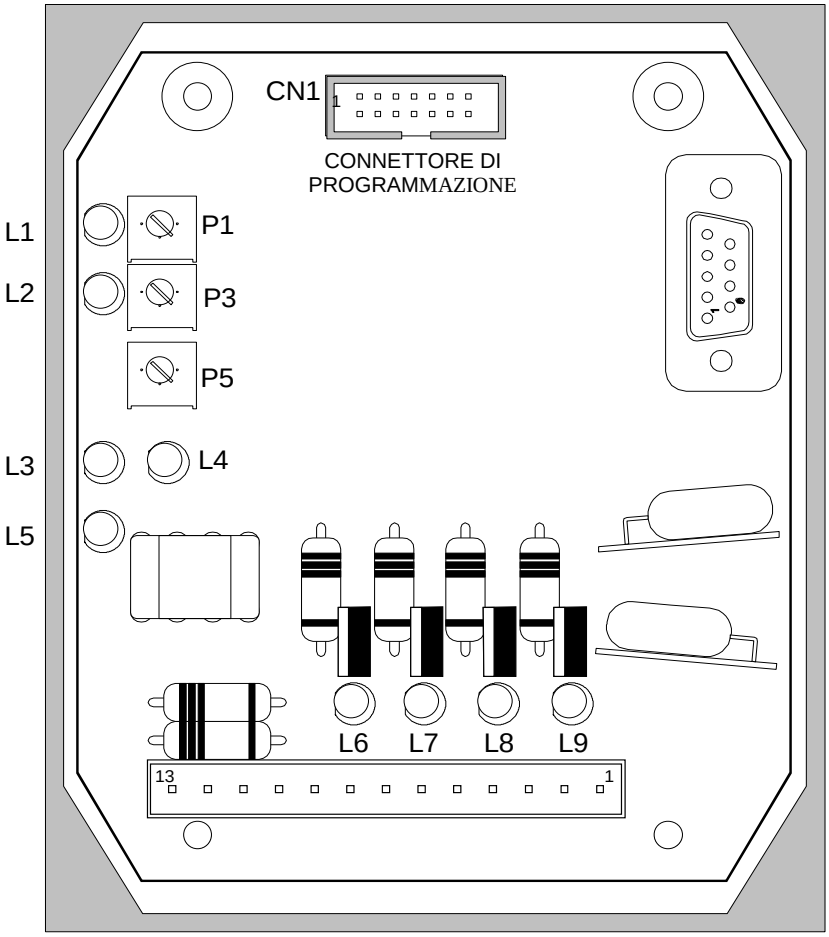
SEGNALAZIONI OTTICHE

L1, L2 = Inclinazione attuale
L3 = Cortocircuito sulle uscite
L4 = Alimentazione presente
L5 = Eccesso d'inclinazione
L6, L7 = Stato uscite proporzionali
L8, L9 = Stato uscite on/off

OPTICALS SIGNAL

L1, L2 = Actual inclination
L3 = Short circuit on the exit
L4 = Present alimentation
L5 = Except of inclination
L6, L7 = Exit proportional
L8, L9 = State exit on/off



OPERATION mod. 285

The control unit LEV-285/1 is used in charge of controlling the vertical position of the spacecraft of the bridge developable on which it is installed, activating the flow of oil into the two chambers of the cylinder dedicated to the leveling of the nacelle itself. If the angle exceeds ± 5 ° for more than 3s has a first block of darkness.

LEV-285/2 is equipped with two outputs for the consent valve supply commissioning general drain with safety function released by the electronics of normal operation: these outputs provide a positive supply (2AMAX) when the inclination of the spacecraft is comprised respectively, between -90 ° and +10 ° and between +90 ° and -10 °. From these outputs is possible to obtain a safety circuit of class '1 'according to the EN954-1 to prevent, inter alia, safety manual corrections that bring out the spacecraft.
LEV-285/1 instead is equipped with a single cumulative output for the main drain valve commissioning.

Output "call oil" occurs when the angle, relative to the baseline acquired during installation, requires correction of horizontality.

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Automatic leveling for Aerial Platforms and Hydraulic systems

SETTING

KEY PROGRAMMING

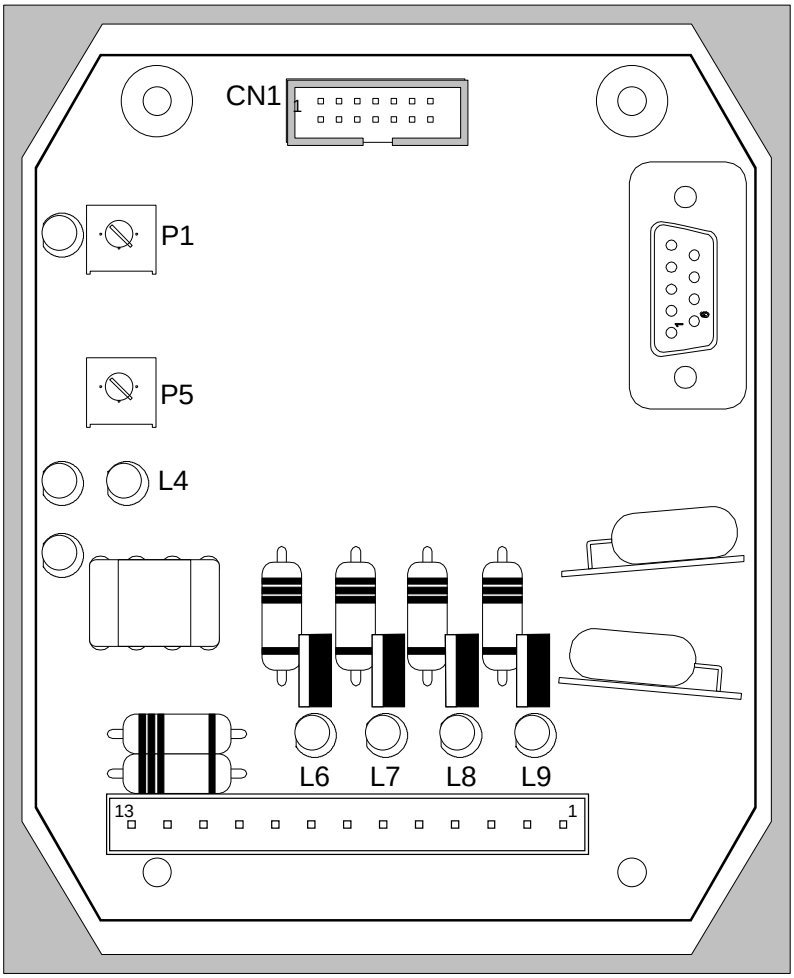
During installation, you must allow the control unit LEV-285 self-learn the horizontal position of the reference and the mechanical and electrical characteristics of the aerial platform. To do this, insert the key into the internal connector for programming and power up the system after making sure that:

- The spacecraft is in the correct horizontal position, which must then maintain
- Have ability to move without hitting the ground or other obstacles
- There is availability of oil pressure to level the ship.

During this phase, the control unit LEV-285 will store the reference position as well as to maintain the direction of action of the solenoid, making perform two small movements to the spacecraft. It is therefore necessary, at this stage, does not disturb in any way the inertial attitude of the spacecraft itself. This phase ends when the lamp L1 is flashing inside the control unit. It is therefore necessary to first remove the programming key then turn off the power to the card.

This unit contais mercury. Refer to your local hazardous waste and dispose of it properly.

OPTICAL SIGNALS
L1 = End auto-calibration
L3 = Excess of inclination
L4 = Power on
L5 = Short circuit on the outputs
L6, L7 = Status output leveling
L8 = Status output "called oil"
L9 = Not used



Automatic leveling for Aerial Platforms and Hydraulic systems

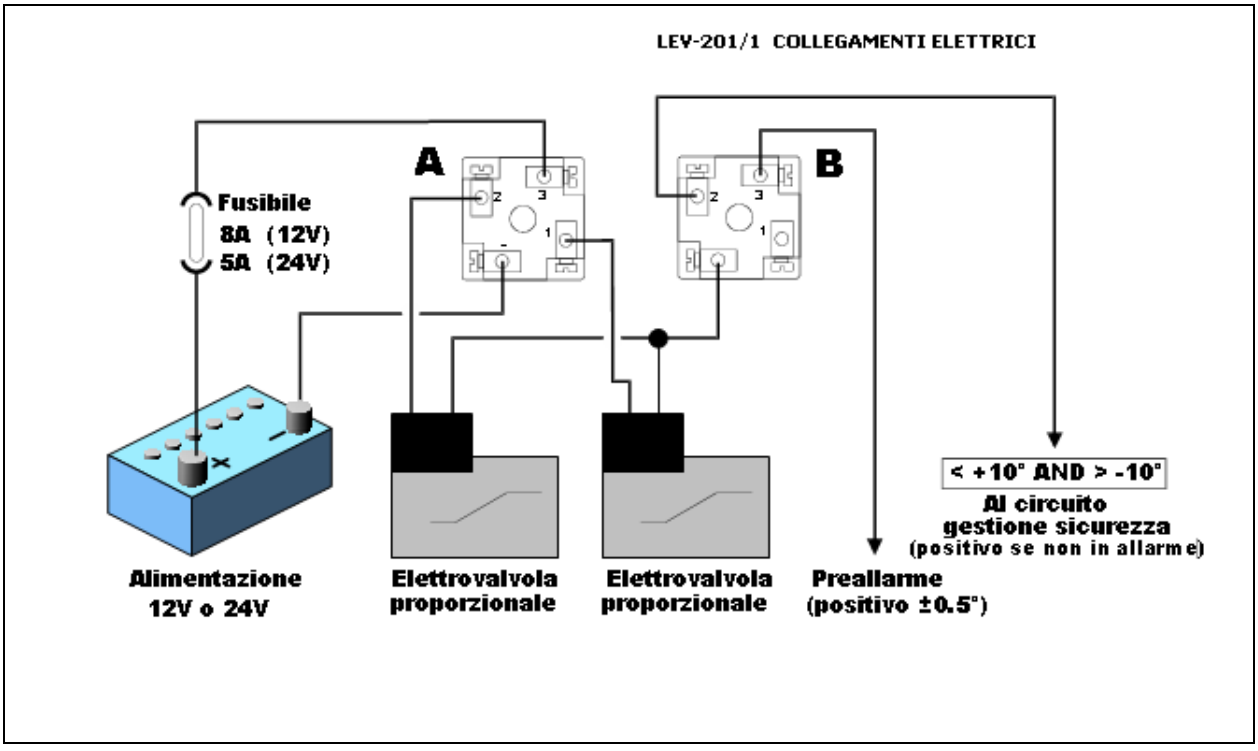
Adjusting the tilt maximum tolerated (dead band)

The trimmer P1 adjusts the amplitude of the "dead band" that is, the maximum error of horizontality that does not require the intervention of the card. Clockwise such amplitude increases, in a counter-clockwise such amplitude decreases. Setting range from 0.2 to 10 degrees total.

Adjusting the speed of intervention

Sometimes, in large structures, it is necessary to reduce the speed of leveling in order to obviate the LEV-285 groped to correct any oscillations of an elastic structure, with the consequent result of having swaying movements of the spacecraft. The trimmer P5 takes care to adjust the speed of leveling, turning clockwise reduces the rapidità di livellamento adeguando il sistema alle strutture più voluminose, in senso anti-orario si ha una maggior rapidità di risposta per le strutture più rigide o più piccole. Regolazione da 0.1s a 4s.

INSTALLATION



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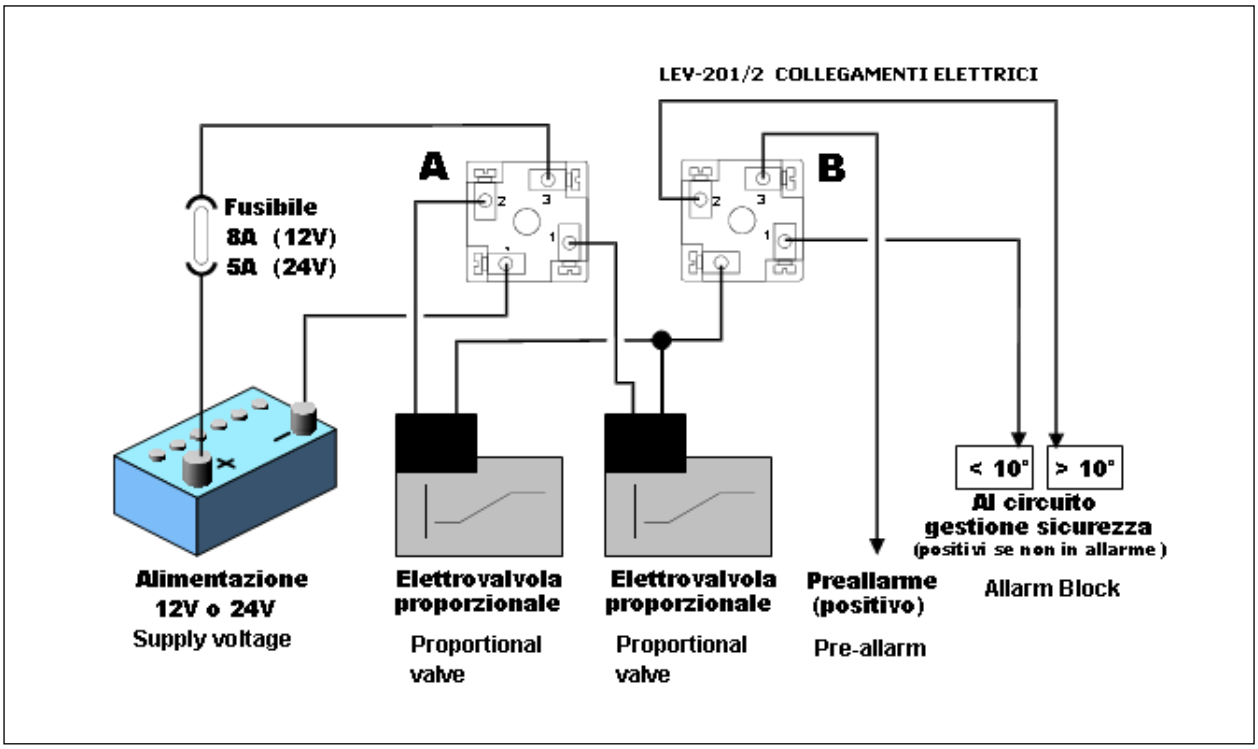

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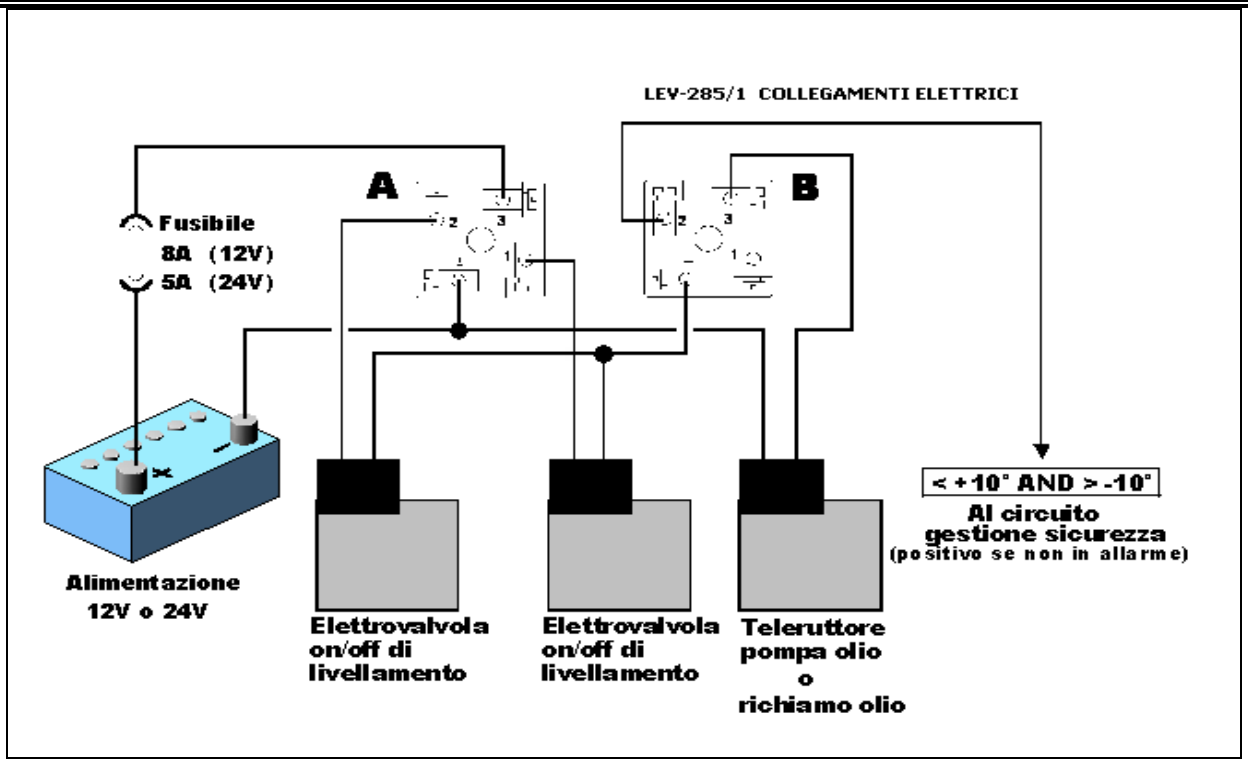
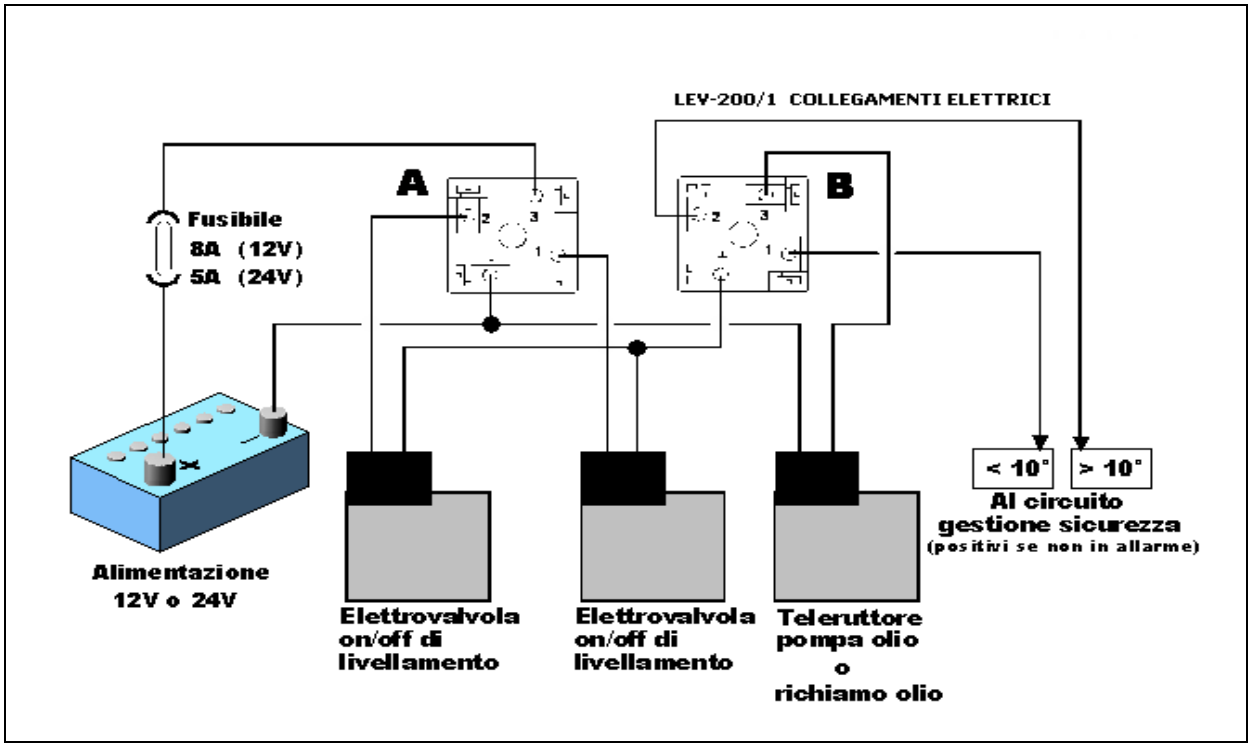
Automatic leveling for Aerial Platforms and Hydraulic systems





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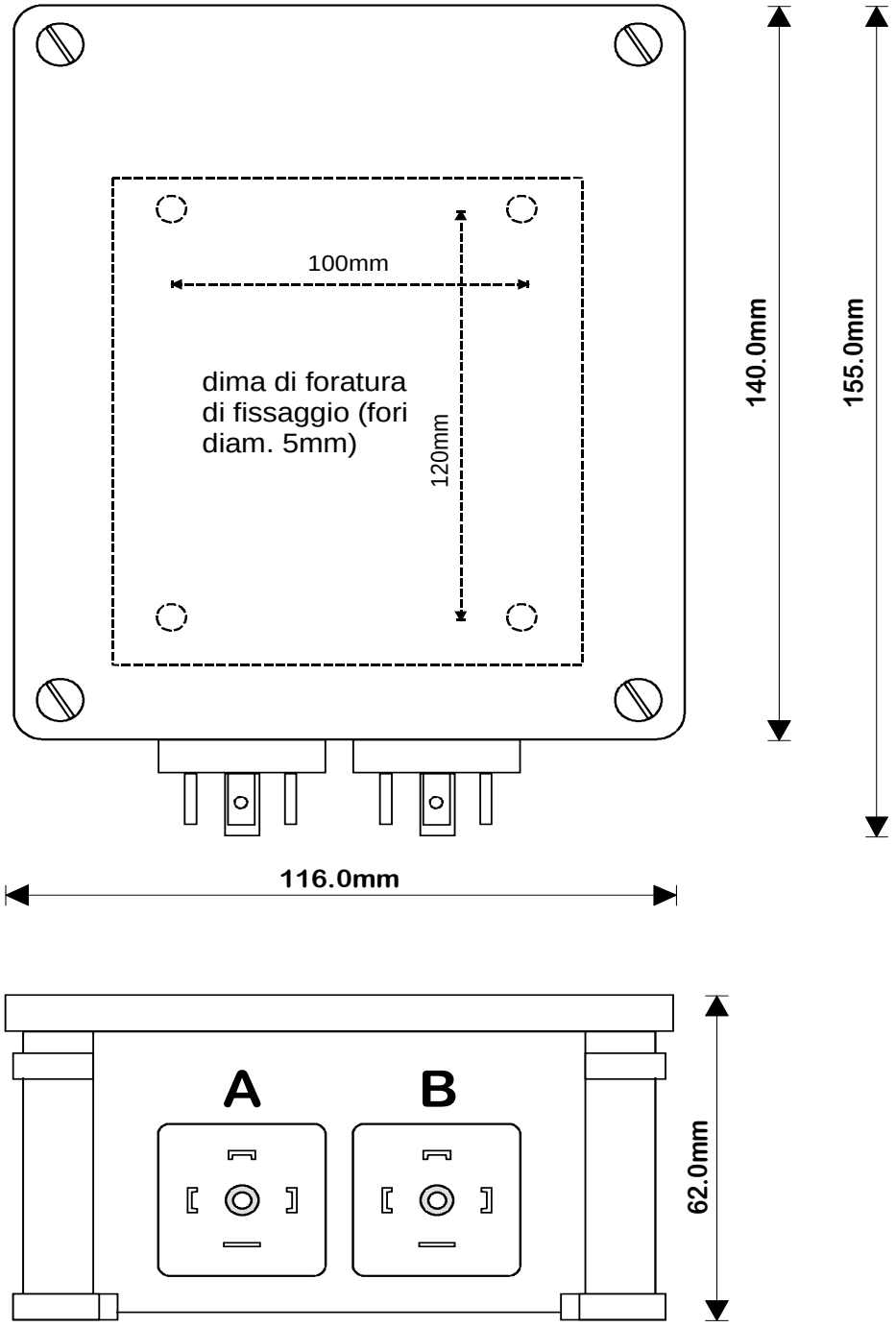
DIMENSIONS



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