

# LAB3 SELF LEVELLING DEVICE FOR AERIAL PLATFORMS



The Self leveling Device LAB3 meets the safety requirements:

- Category 3 (EN954-1)
- PL d (EN13849-1)

The card has two outputs PWM current feedback to control a proportional valve, a safety relay output to stop the movements, two digital output signal basket inclination, when exceeds 6°.

The optimization of working parameters can be easily done via serial connection and user interface software BPE\_Terminal.

Using BPE terminal can make the alignment of the zero level of the LAB3 with the zero tilt basket, set the minimum current to the proportional levelling valve, the current gain, change the operating angle of the two current outputs for the alert of 6° exceeding basket tilt, and finally adjust the width of the dead zone in correspondence of the zero grade requirements

EMC conformity 2004/108/CE

- EN61000-6-2
- EN61000-6-3

### LAB3

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### ORDERING CODE

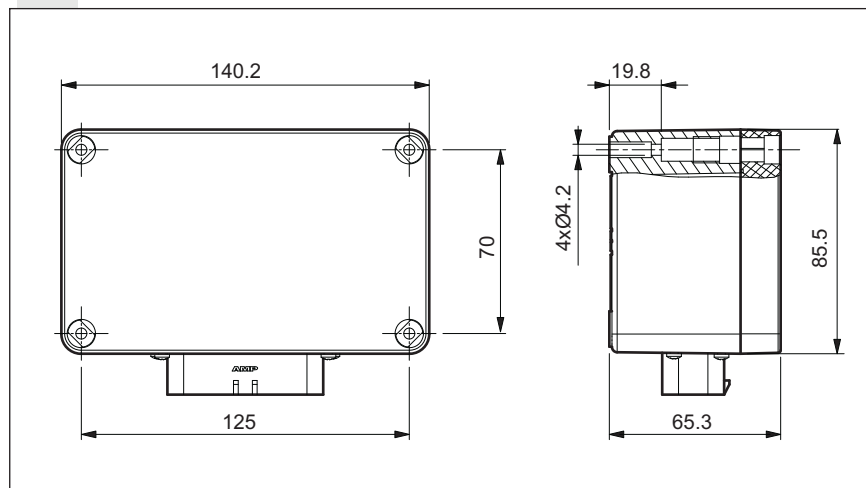
Code	Description
7.365.1186	Self Levelling Device for aerial platforms
7.003.055	Connector AMP seal 35 pole
7.045.068	Serial cable RS232 LAB3 , 4mt length
www.bpe.it	BPE Terminal software downloaded from www.bpe.it website

### Included in the furniture:

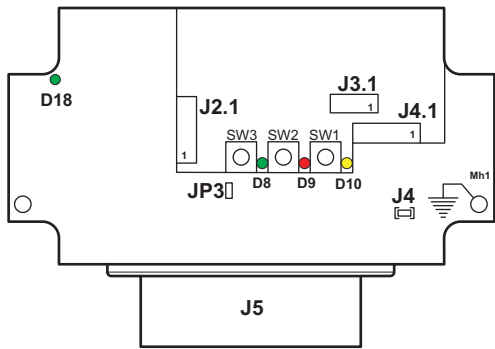
- Installation and use manual

Power supply	9 ÷ 33V
Proportional PWM output	current feedback, max load 3A
PWM frequency	4000 Hz
Dither frequency	100 Hz
Vertical position dead band	Yes
Coils current offset adjustment	Yes
Coils current gain adjustment	Yes
Output of safety relay to stops dangerous movements (10° of tilt basket, or device failure)	Max load 2Ampere
Two independent On/off current outputs (switch on at 6° tilt basket)	Max load 1Ampere
Serial link RS232	YES-for adjustment work parameters
Working ambient temperature	-40 ÷ +70 °C
Main connector	AMP seal 35 pole
Protection degree	IP66

### OVERALL DIMENSIONS



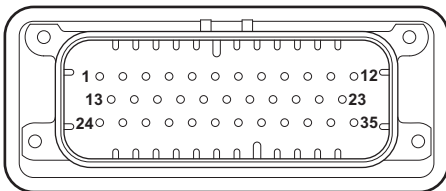
LED AND CONNECTORS LAYOUT



Conn. Description

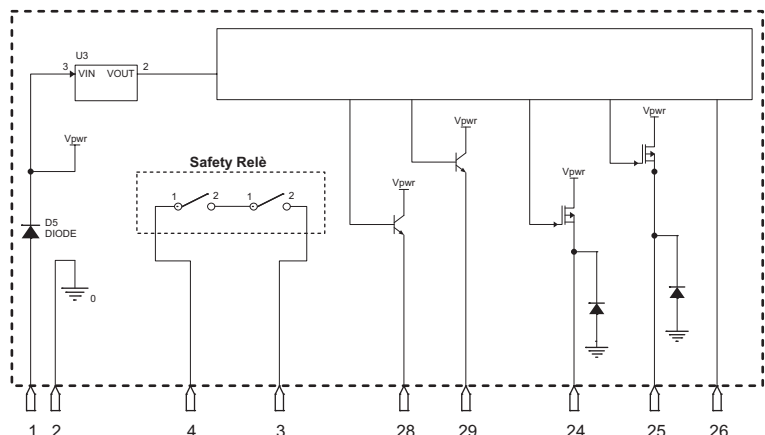
J5	Main connector AMP seal 35 poli
J3.1	Inside connector for RS232 communication with (BPE Terminal software)
J2.1	Reserved
J4.1	Reserved
D18	Status of power on
D8	Show the status error codes of LAB3 (green)
D9	Show the status error codes of LAB3 (red)
D10	Show the status error codes of LAB3 (yellow)
SW1	Push button, for self calibrating procedures
SW2	Push button, for self calibrating procedures
SW3	Push button, for self calibrating procedures

MAIN CONNECTOR (WIRING DETAILS)



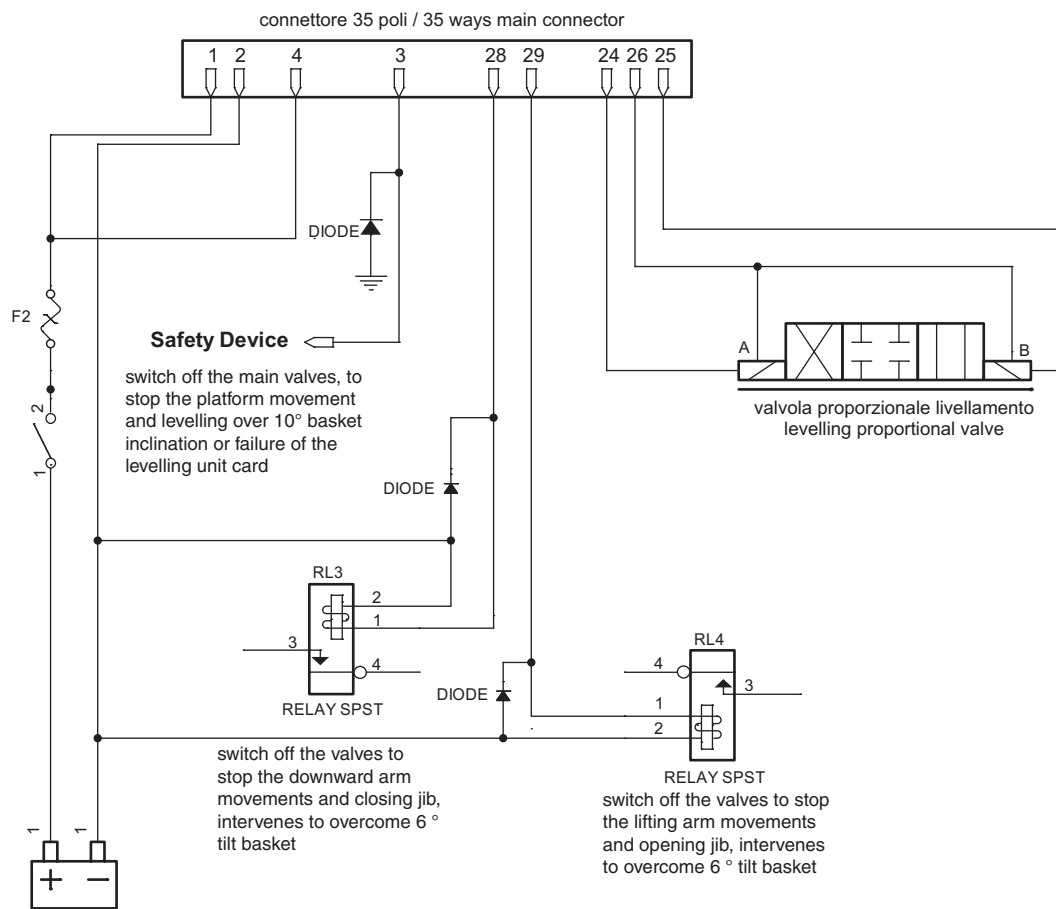
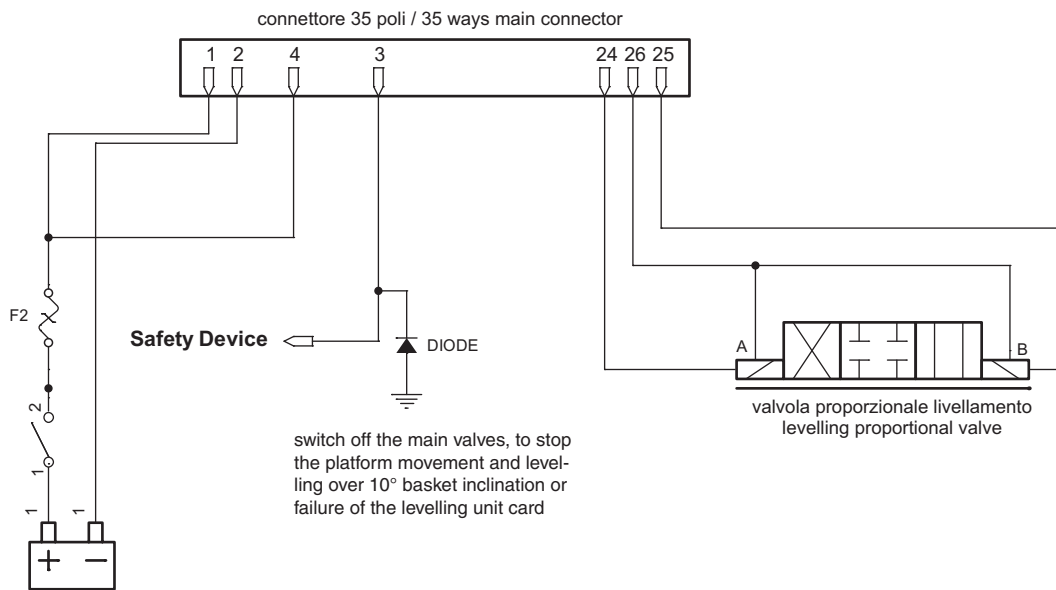
Pin	Function	Note
1	Positiv Supply Voltage	Connects to battery positive
2	Negativ Supply Voltage	Connects to battery negative
3	Output of safety relay to stops dangerous movements (10° of tilt basket, or device failure)	Maximum load 2 Ampere
4	Input of safety relay to stops dangerous movements (10° of tilt basket, or device failure)	Connects to battery positive
24	Output PWM - coil A	Maximum current 3 Ampere
25	Output PWM - coil B	Maximum current 3 Ampere
26	Return of coils A and B	
28	On/off current output (switch on at 6° tilt basket)	Maximum load 1 Ampere
29	On/off current output (switch on at 6° tilt basket)	Maximum load 1 Ampere

ELECTRICAL CIRCUIT



ELECTRICAL CONNECTIONS

LAB3 connection examples to replace the model SE3LN33240804 and SE3LN33121604



Connection only for example Before proceeding with the calibration on the machine, read the use and installation manual.

MOUNTING EXAMPLE

