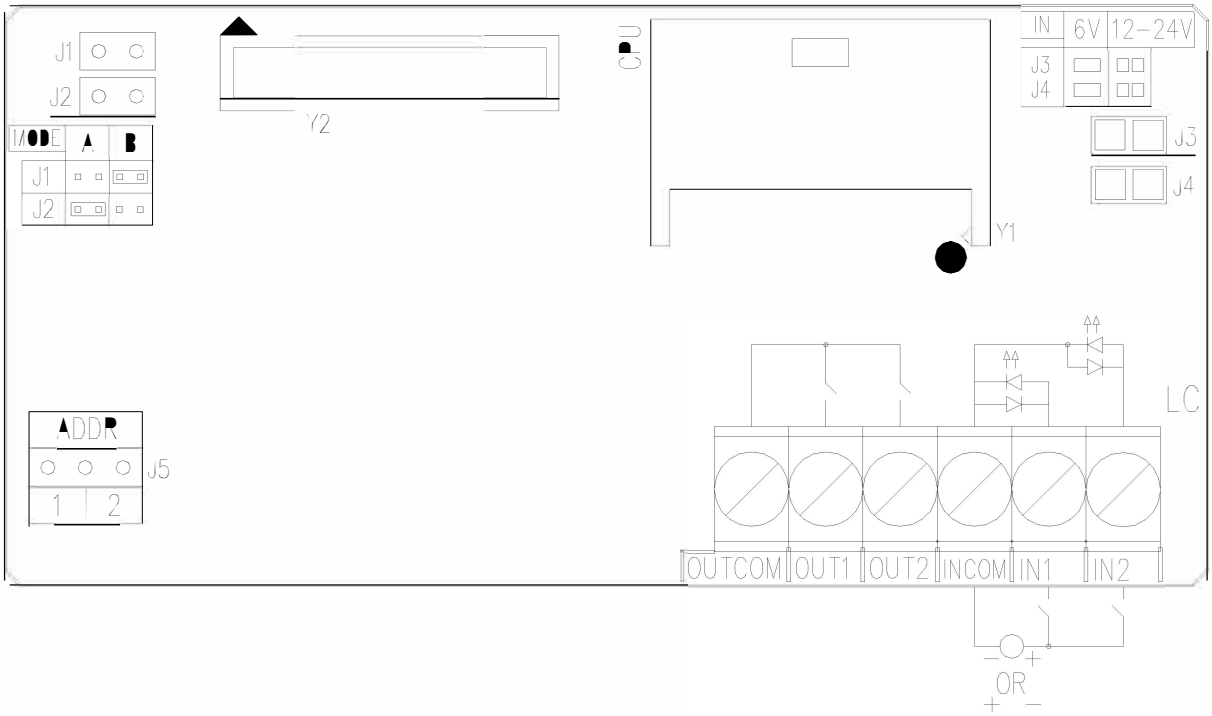
5.4 I/O optional expansion card with 2 inputs and 2 outputs



INPUTS (OPTOISOLATOR PHOTOCOUPLERS)
Power supply: 12 Vdc ÷ 24 Vdc (standard configuration: J3 and J4 open); 6Vdc (J3 and J4 close); min 5 mA - max 20 mA.

PHOTOMOSFET OUTPUTS
Maximum power: 48 Vac or 60 Vdc, 150 mA max., 10 ohm max

NOTE: Make sure that J1 is open and J2 is close.

It is possible to connect two expansion cards having 2 inputs and 2 outputs each. The first I/O board is connected through a 350 mm cable which connects the BOOT connector (on the indicator board) and the Y1 connector (on the I/O board); the second board instead is connected “in cascade” to the first one with a 350 mm cable (equal to the previous one) which connects the two Y1 and Y2 connectors.

With the jumper J5 in two positions (1 and 2) one selects whether the board should manage inputs 1 and 2 and outputs 1 and 2 (J5 in position 1) or whether it should manage inputs 3 and 4 and relays 3 and 4 (J5 in position 2).

J5	Management of Inputs and Outputs
1	IN1, IN2, OUT1, OUT2
2	IN3, IN4, OUT3, OUT4

Therefore the correct configuration with two cascade boards is:

BOARD 1:	J5 on 1 (therefore Input 1, Input 2, Output 1, Output 2)
BOARD 2:	J5 on 2 (therefore Input 3, Input 4, Output 3, Output 4)

The inputs will be put outside the instrument with a 12 X 0,5 mm multipolar cable connected in this way:

MEANING	**COLOUR**
OUT1	WHITE
OUT2	GREY
OUTCOM (common outputs)	BLACK
IN1	RED
IN2	BLUE
INCOM (common input)	BROWN
+ VE (+12 Vdc)	WHITE - GREEN
- VE (GND)	WHITE - BROWN

ONLY WITH SECOND CONNECTED I/O CARD:	
OUT3	PINK
OUT4	GREEN
IN3	YELLOW
IN4	PURPLE

The optoisolation of the inputs is not correct anymore if these are activated with a voltage available on the indicator (for example the VE); an external voltage must be used instead. However, for convenience's sake the VE of the indicator is brought onto the multipolar cable.

!!!WARNING!!!

Be careful not to short-circuit the wires of the VE (WHITE – BROWN and WHITE – GREEN wires) since this would cause permanent damages to the electronic card.
