

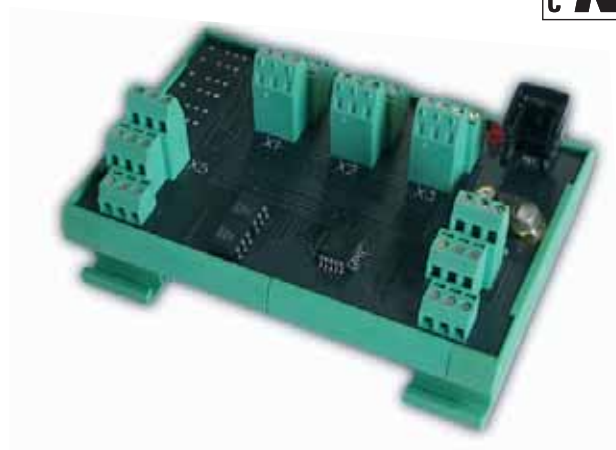


Electrical specifications

Input voltage	5 Vdc / 8÷24 Vdc
Input current with no output load	150 mA
Max output current per channel	20 mA LINE DRIVER 40 mA PUSH PULL
Max input current per channel	10 mA
Frequency response	100 KHz
Operating temperature	0° ÷ +40°C
Logic input levels IN1 and IN2 (Vdc)	"0" = 5÷24 "1" = 0÷3
Free contact characteristics	Vmax= 125 Vac/ 60 Vdc Imax= 0.5A Vmin= 5 Vdc Imin= 1mA
Fixing on frame	 



The EMD board

This board is used when is necessary to carry out a selected signal among a maximum of three inputs

The EMD board accepts as input signals coming from a maximum of three encoders and supplies as output the signals electronically selected of one of these.

The output signal is selected by opportunely supplying the two inputs, IN1 and IN2, according to the working diagram (see back side).

Output and encoder type to be connected have to be within the range described in the ordering code. All electronic types of the connected encoders have to be the same. Moreover, the EMD supplies three contacts normally open switching to close when the respective input is selected.

In order to better understand the use of this board the following example is provided.

We would like to realize a device reading three encoders input (or other sensors with compatible characteristics), in a sequential way. Encoders have to be choosen featuring the same electronics output, for example 5 Vdc line-driver. Instead, the device can acquire data with another electronic type; for example 24 Vdc push-pull.

In this case the EMD board realizes the commutation function of the connected encoders and adapts the electronics of those with the one required from the instrument.

The ordering code will be:

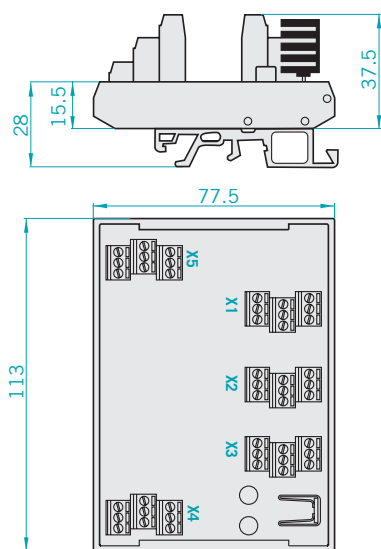
EMD5L8/249

5L indicates that inputs are 5 Vdc line-driver. 8/24P indicates that the output is with push-pull electronics and with an input voltage from 8 to 24 Vdc. The board input voltage has to be the highest between the requested: in this case 8/24 Vdc. The encoder commutation happens through a logic type signal at the IN1 and IN2 inputs on the Xn terminal board.

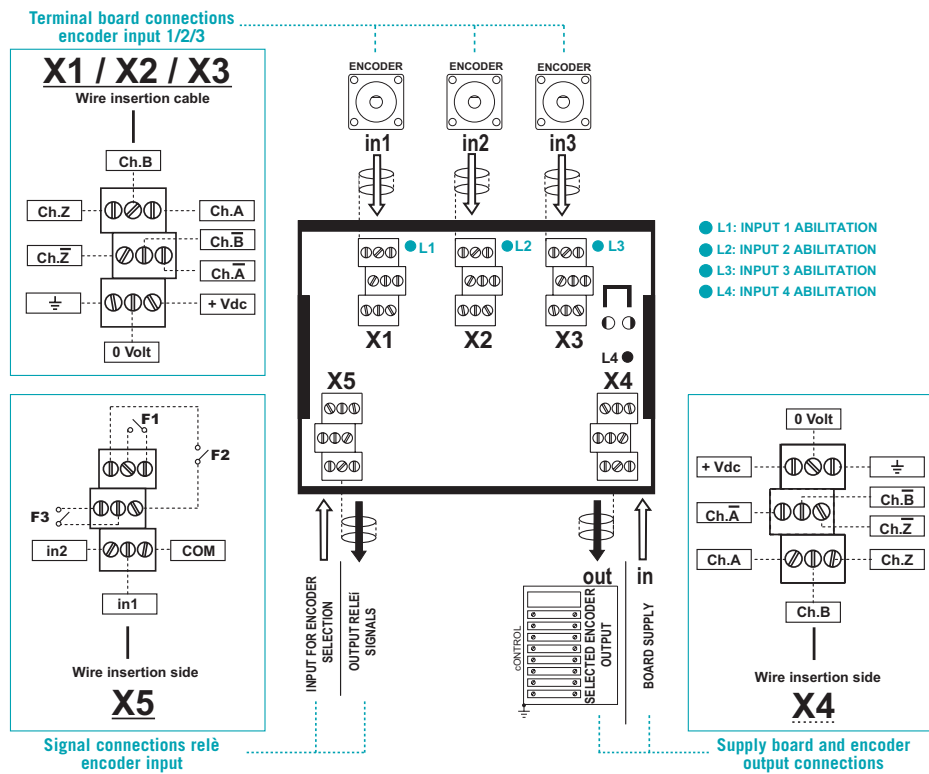
The logic level "1" is obtained by connecting the above mentioned inputs to a voltage included between +5 and +24 Vdc.

Instead, for the "0" level, the voltage must be between 0 and +3 Vdc. The combination of the logic levels at IN1 and IN2 configures the terminal board of output in 4 different mode as described in the table in the following page.

Overall dimension



Working diagram and terminal connections board

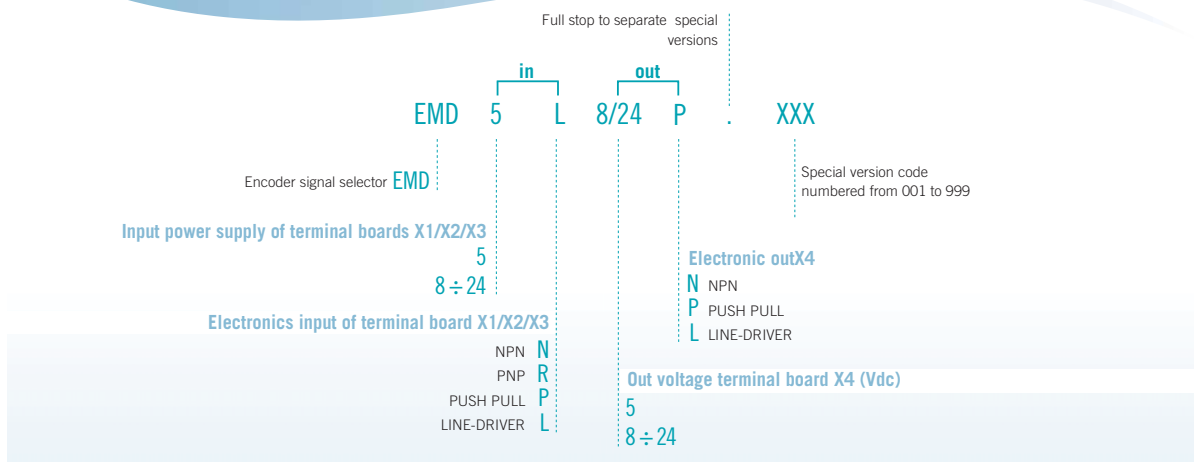


Logic status table

The table indicates the output status on the X4 connector and on the free contacts on X5, according to the logics status present on in1 and in2 on the X5 terminal board.

Logic status on X5		Encoder selected on X4			Contact selected on X5		
in1	in2	X1	X2	X3	F1	F2	F3
0	0	—	—	—	—	—	—
1	0	●	—	—	●	—	—
0	1	—	●	—	—	●	—
1	1	—	—	●	—	—	●

Ordering code



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