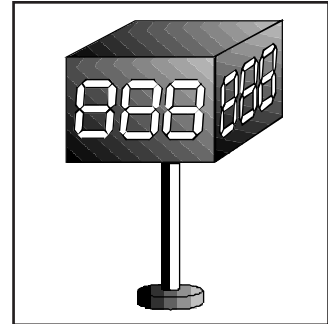


# DN-107/3B OPERATION MANUAL

## NUMÉRIC DISPLAY FOR PLC OF 57 mm. HEIGHT

The numeric display DN-107/3B in shape of a cube with four sides and three digits of **57mm** height.



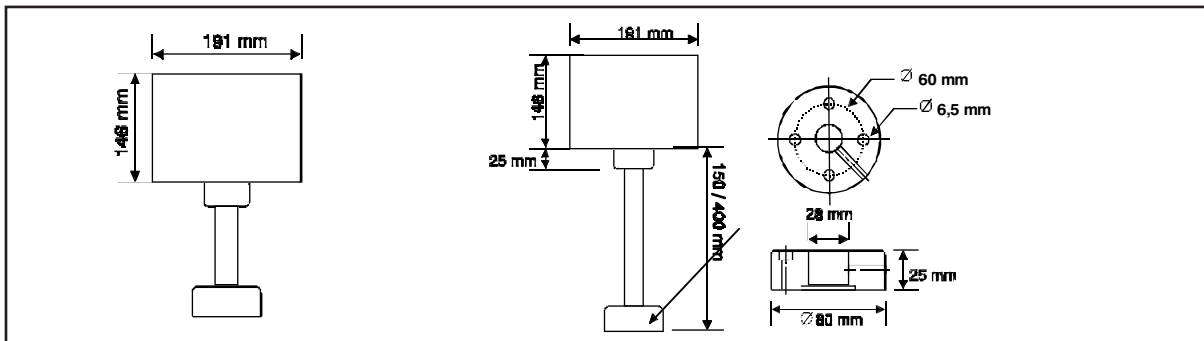
### REFERÉNCIE:

**DN-107/3B** Power supply = 24V DC/AC.  
**DN-107/3B-115** Power supply = 115V AC 50Hz.  
**DN-107/3B-230** Power supply = 230V AC 50Hz.

### SPECIFICATIONS

4 Sides..... 7 segments Led Display of 57mm. height.  
Approximated viewing distance..... 30 meters.  
Maximum environmental lighting..... 1000 lux.  
Power supply:  
    **DN107/3B**..... 24 VDC (±20%) 1A / 24 VAC (±10%) 1A.  
    **DN107/3B-115**..... 115 VAC (±10%) 300mA.  
    **DN107/3B-230**..... 230 VAC (±10%) 150mA.  
Auxiliary power supply for inputs ..... 12 VDC 200 mA.  
Data input voltage ..... 12 a 26 VDC.  
Data input current at **24 VDC** ..... 10 mA.  
Polarity type of inputs: **NPN, PNP or CONTACT.**  
IEC rating ..... IP-43.

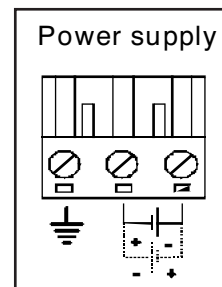
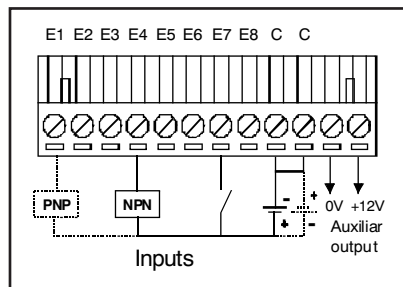
### DIMENSIONS



### CONNECTION DIAGRAM

Wiring the power supply and control signals is made with the supplied female connectors. To connect, first open the box unscrewing the four screw located on two sides. The following diagrams illustrate the pin alignment of each connector.

- E1: BIT 0 Code
- E2: BIT 1 Code
- E3: BIT 2 Code
- E4: BIT 3 Code
- E5: BIT 0 Selection
- E6: BIT 1 Selection
- E7: NO CONECTED
- E8: STROBE
- C: Inputs common



The DN107/3B at 24VDC could be connected to both DC and AC power supply, using the DC power supply the polarity is not important.

## CONTROL MODE

To control the DN-107/3B use any PLC having PNP, NPN or relay digital outputs. The control codes are as follows:

DISPLAY VALUE	INPUT CODE					DIGIT / DECIMAL POINT SELECTION		
	E4	E3	E2	E1			E6	E5
0	0	0	0	0	NO DECIM. POINT	Sel. POINT	0	0
1	0	0	0	1	POINT DIGIT 1	DIGIT 1	0	1
2	0	0	1	0	POINT DIGIT 2	DIGIT 2	1	0
3	0	0	1	1	POINT DIGIT 3	DIGIT 3	1	1
4	0	1	0	0				
5	0	1	0	1				
6	0	1	1	0				
7	0	1	1	1				
8	1	0	0	0				
9	1	0	0	1				
A	1	0	1	0				
B	1	0	1	1				
C	1	1	0	0				
D	1	1	0	1				
-	1	1	1	0				
WHITE SPACE	1	1	1	1				

To display a value, first you need to select the digit position using inputs E5 and E6, and assign a value using inputs E1 to E4. The next step is apply a strobe to input E8, then the new value will be shown. The time from data bits E1 - E6 transition to strobe pulse must be 50 ms minimum. Strobe time isn't significant.

