OMEGA
An OMEGA Technologies Company

BS Series Model : 1

BCD parallel to serie RS-232 or RS-422 Interface coversion of 6 digits plus minus polarity

SPECIFICATIONS

INPUTS

Date, Holds and decimal points

(positive logic)	Level logic 1 : >4.3 Vdc. max. : 40 Vdc.
	Level logic 0 : <1.1 Vdc.
Consumption	4 mA at 24 Vdc.
(per channel)	1.5 mA at 12 Vdc.
	150 µA at 5 Vdc.

CONTROLS

Hold	One control pin for every digit and polarity.
Test	One control pin for all digits. (LT).
Blanking	One control pin for all digits. (BI).

OUTPUTS

Interface	RS-232 / RS-422 internal. jumper selectable.
Transmission rate	1200 Bauds.
Protocol	STX, ETX.
Date	ASCII, 8 bit no parity.

ELECTRICAL

Standard power supply . .	230 Vac. ±10% 50/60 Hz.
Consumption	2.8 VA max.

DATE OUTPUT.- Serie format, type RS-232 or RS-422, selectable by internal jumper. Transmission rate is 1200 Bauds.
INPUT.- The input accepts six digits in BCD parallel code (1, 2, 4, 8) minus sign and six decimal points.
HOLD.- One pin is available to achieve function HOLD, in each one of the digits, plus other pin for sign. This function allows the user to multiplex the data inputs. If this function is not activated, the interface unit transmits in a continuous way the BCD codes which are presents in data input.
The logic level by default is 0 and this function is activated when a logic level 1 is reached.
TEST (LT).- This function is activated when pin LT is linked to level logic 0 (GND). Numerical characters sent are -8.8.8.8.8.8.
BLANKING (BI).- This function is activated when pin BI is connected to level logic 0 (GND), in the output appears a string of blank characters. If the output is connected to a display it will switch off.
DECIMAL POINTS.- Until six decimal points can be controlled by the data inputs or by the wiring in the input connectors.
MULTIPLEX.- A multiplexed system can be achieved, using only one BCD parallel code, connecting all the parallel inputs and operating with function HOLD, to select the digit corresponding to the one sent it, by the BCD parallel code.
POLARITY.- With logic level 0, the sign is activated and it is switched off when a logic level 1 is applied.
CONNECTORS.- Two 25 pins Sub-D male connectors, for BCD data inputs.
One 9 pins Sub-D female connector, for the Serial data outputs.
One push-in cable connector, for Power Supply.

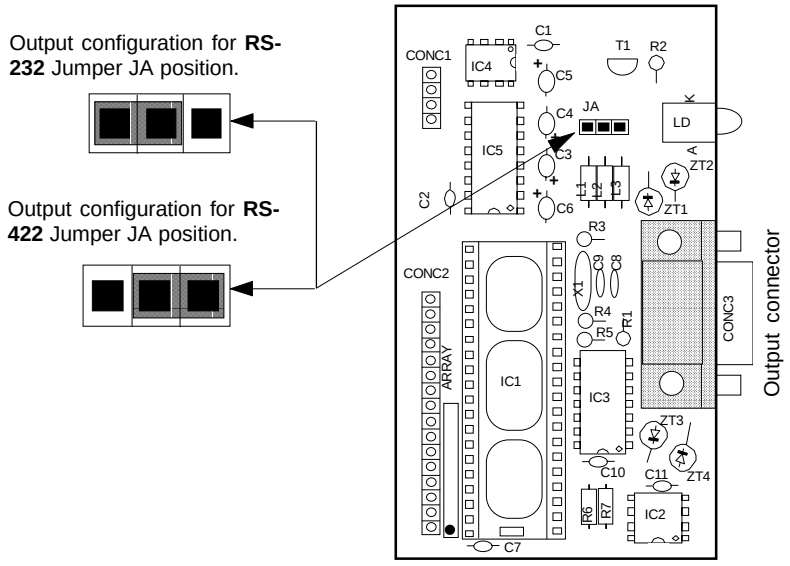
TABLE OF CHARACTERS

BCD Code	ASCII Hex Code	Character
0	30	0
1	31	1
2	32	2
3	33	3
4	34	4
5	35	5
6	36	6
7	37	7
8	38	8
9	39	9
10	41	A
11	42	b
12	43	C
13	44	d
14	45	E
15	40	Blanking

OUTPUT CONFIGURATION

Output configuration for **RS-232** Jumper JA position.

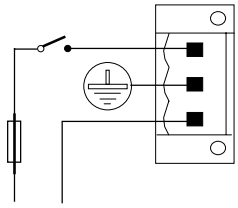
Output configuration for **RS-422** Jumper JA position.



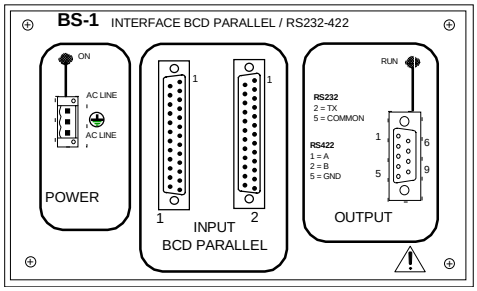
1.- Remove the 4 screws on the frontal face.
2.- Remove the frontal face.
3.- Place the jumper JA on the position corresponding to the desired type of output.
4.- Install the frontal face using the 4 screws removed before.

WIRING

Recommended power supply.

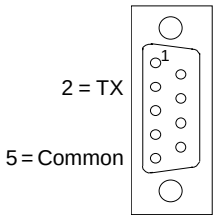


Power supply.
(See characteristics label).
Recommended fuse : 63 mA time-lag type.

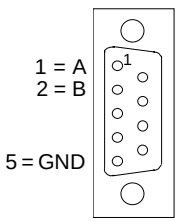


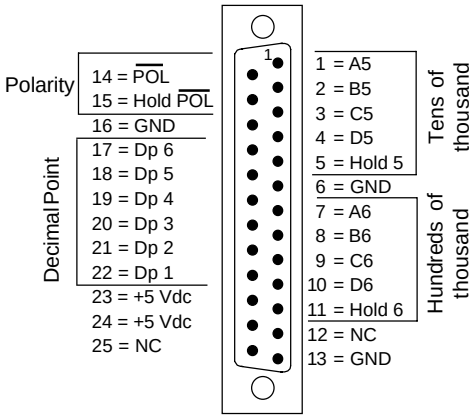
OUTPUT CONFIGURATED AS :

RS-232

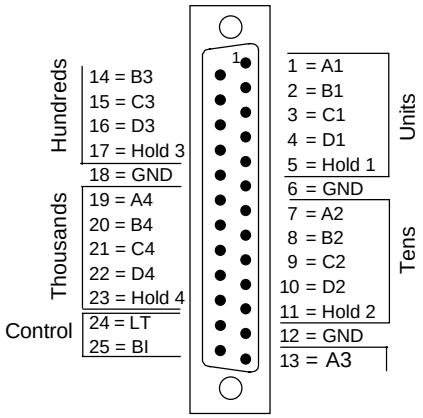


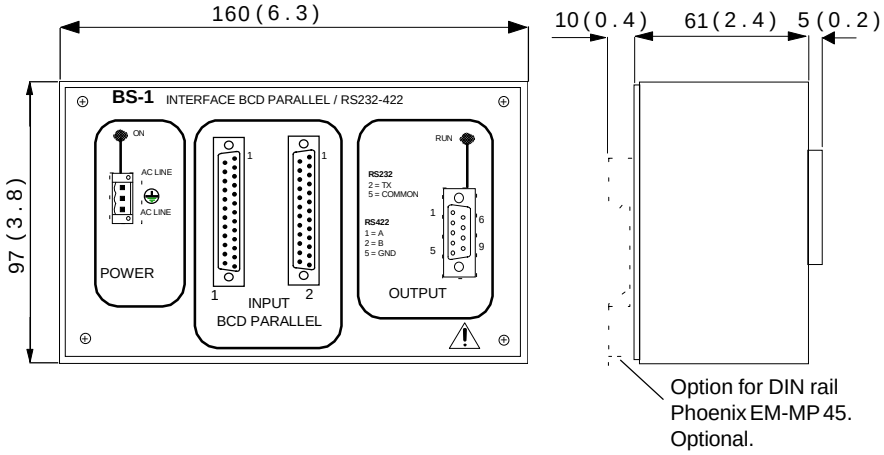
RS-422





CONNECTOR 1



CONNECTOR 2

MECHANICAL DIMENSIONS mm. (Inch.)