OPTB_ Option Boards

OPTB_ option boards are installed in slots B, C, D or E. These boards are used to increase the number of control inputs and outputs. These boards may not be installed in slot A.

There are no board-related parameters for OPTB_ I/O expander boards, except for board OPTBB.

Table 19: OPTB_ Board Features

I/O Board	Allowed Slots	Digital Input (DI)	Digital Output (DO)	Analog Input (AI)	Analog Output (AO)	Relay Output (RO)	Thermistor Input (TI)	(PT-100)	42 – 240V AC Input	Other
OPTB8	B, C, D, E							3		

Option Board B8

OPTB8

Description: Temperature measuring board with three PT-100 sensor (3-wire) inputs. The measurable temperature range is -22 – 392°F (-30 – 200°C). Both 3-wire and 2-wire elements can be used.
Allowed slots: B, C, D, E
Type ID: 16952
Terminals: One terminal block; Screw terminals (M2.6) (see **Figure 46**)
Keying: None
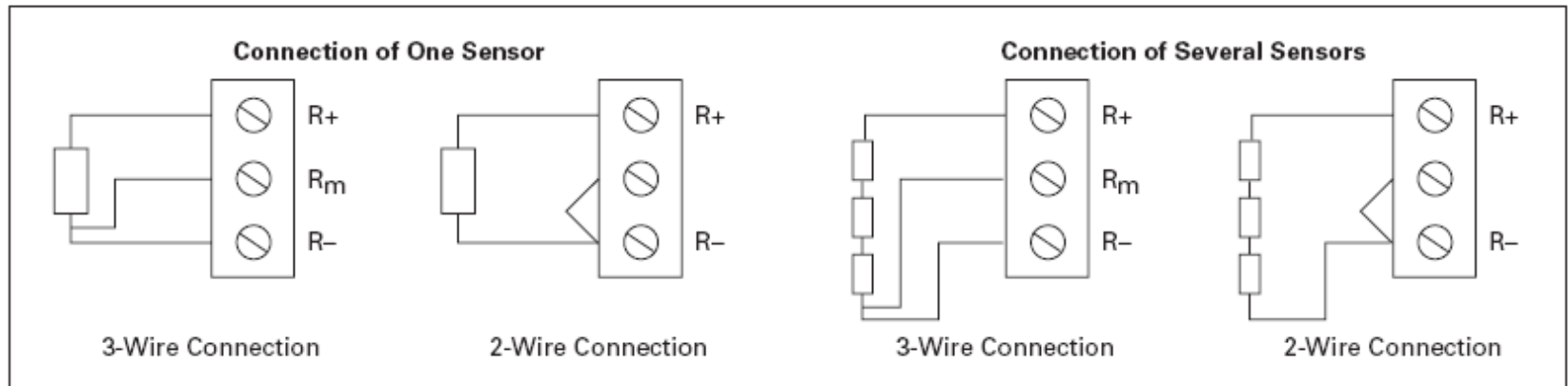**Jumpers:** 1; X2 (see **Figure 45**)
Board parameters: None

Table 24: Option Board B8 I/O Terminals

Terminal	Function	Keypad Parameter Reference	Technical Information
1	R1 +	AnIN: **X1**	PT-100 Input, -30 — 200°C, one sensor. Accuracy ≤ 1 °C. Sensor current 10 mA
2	R_m1		
3	R1 –		
4	R2 +	AnIN: **X2**	PT-100 Input, -30 — 200°C, one sensor. Accuracy ≤ 1 °C. Sensor current 10 mA
5	R_m2		
6	R2 –		
7	R3 +	AnIN: **X3**	PT-100 Input, -30 — 200°C, 1 — 3 sensors (see X2 jumper selections). Accuracy ≤ 1 °C. Sensor current 10 mA
8	R_m3		
9	R3 –		
10			Not connected

Note: This board can be installed in four different slots. The "**X**" in the Keypad Parameter Reference shall be replaced by the slot letter (B, C, D, or E) of the slot in which it is installed. See "Defining Functions to Inputs and Outputs" on **Page 7**. Insulation level 4 kV/√2 (DIN VDE 01 10-1). 2 kV in sensor and 2k V in option board.

Connection of PT-100 sensors

One PT-100 sensor can be connected to each of the first two inputs (terminals 1 to 3 and 4 to 6) and up to three sensors to the third input (terminals 7 to 9). The sensors must be connected in *series* with a two- or three-wire connection.

Figure 44: Option Board B8 PT-100 Connections

Jumper Selections

Up to three PT-100 sensors can be connected to the third PT-100 input. Select the number of sensors in use with jumper block X2:
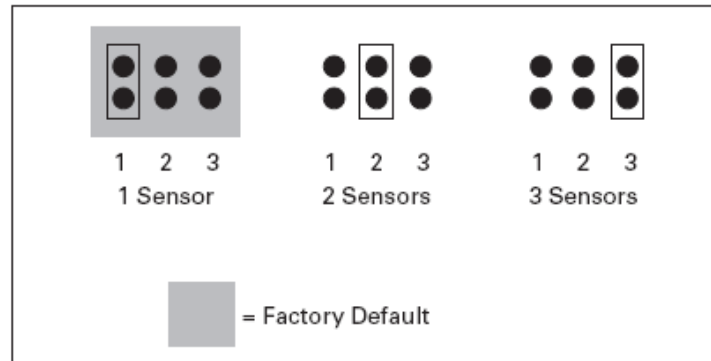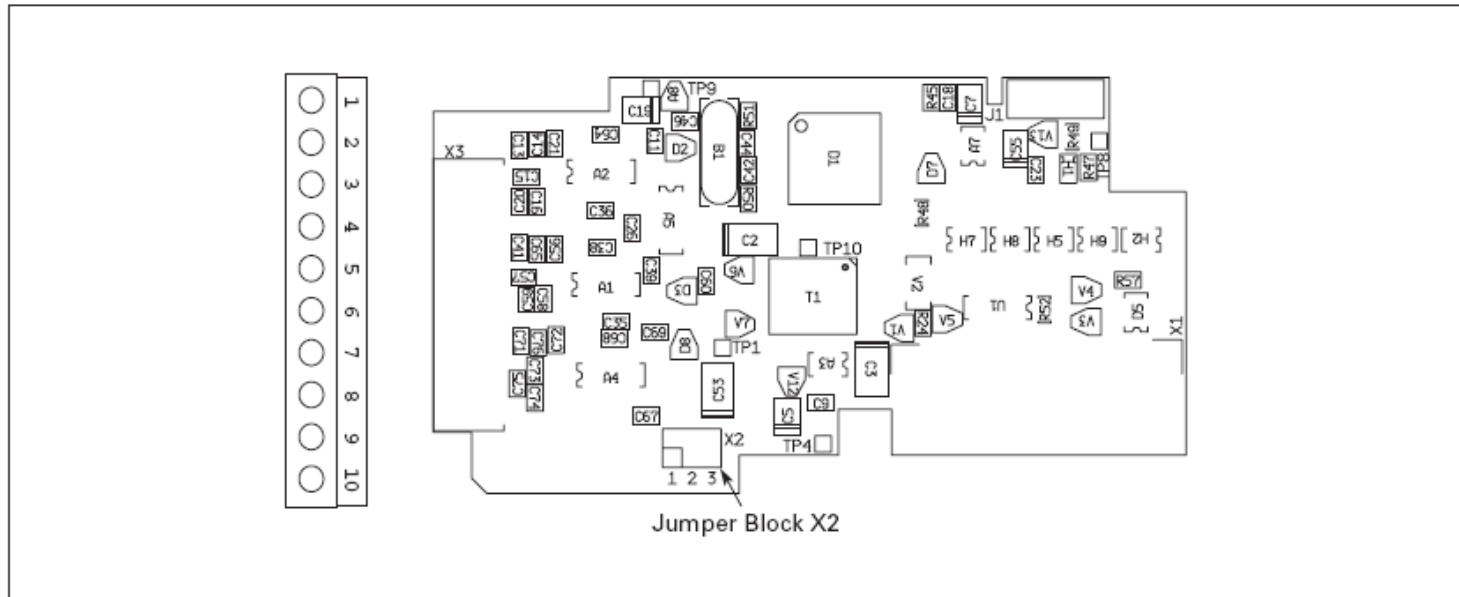

Figure 45: Option Board B8 Jumper Selections

Figure 46: Option Board B8 Terminal Locations