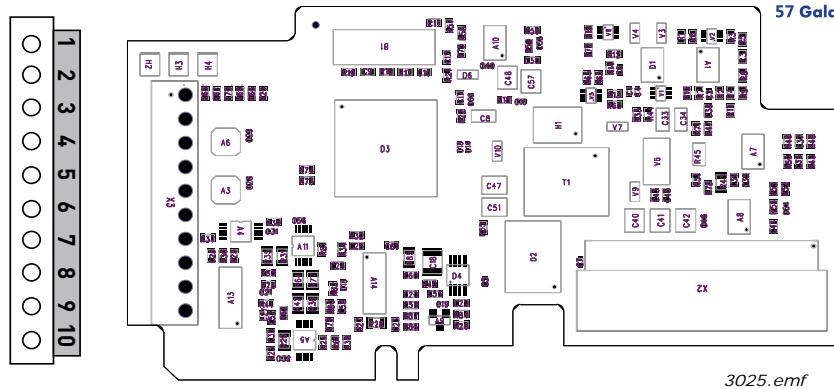


## 3.7 BOARD OPTBH



3025.emf

- Description:** Temperature measurement board with three individual channels.
- Supported sensors:** PT100, PT1000, NI1000, KTY84-130, KTY84-150, KTY84-131
- Type ID:** 16968
- Terminals:** One terminal block; Screw terminals (M2.6); No coding
- Jumpers:** None

## 3.7.1 I/O TERMINALS ON OPTBH

Table 13. I/O Terminals on OPTBH

Terminal	Parameter reference Keypad	Technical information	
1	R1.1	Temperature sensor input 1, -50...200 °C Accuracy ±1°C	
2	R1.2		
3	R1.3		
4	R2.1	AnIn:X.2	Temperature sensor input 2, -50...200 °C Accuracy ±1°C
5	R2.2		
6	R2.3		
7	R3.1	AnIn:X.3	Temperature sensor input 3, -50...200 °C Accuracy ±1°C
8	R3.2		
9	R3.3		
10	NC		

### 3.7.2 OPTBH ACCURACY

The following tables represent the results of accuracy measurements in laboratory environment. In the tests, Draga JAMAK cable was used. Testing covered different sensor setups and sensor type combinations.

Table 14. PT100 accuracy

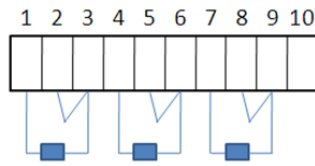
Cable length (m)	3-wire	2-wire	Accuracy (°C)
<=300	x		$-1 < x < 3$
50		x	$-1 < x < 14$

Table 15. PT1000, KTY84 and Ni1000 (Ni1000 DIN) accuracy

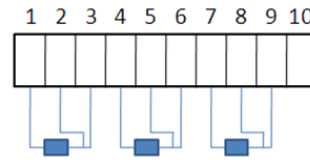
Cable length (m)	3-wire	2-wire	Accuracy (°C)
<=300	x		$-1 < x < 1$
150		x	$-1 < x < 5$
50		x	$-1 < x < 3$

### 3.7.3 OPTBH OPTION BOARD WIRING SCHEME:

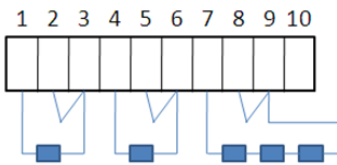
Use shielded cables and connect the cable shield to grounding clamp in the drive.  
Allowed sensor configurations are shown in the figures below:



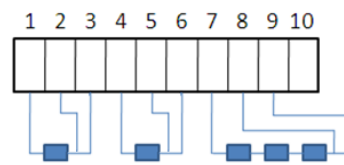
Two-wire configuration



Three-wire configuration



Two-wire configuration



Three-wire configuration

### 3.7.4 OPTBH BOARD PARAMETERS

**NOTE!** The correct sensor for the correct channel must be selected. Always configure unused channels to 0 = No sensor

Code	Parameter	Min	Max	Unit	Default	ID	Description
7.x.1.1	Sensor 1 type	0	6		0		<b>0</b> = No Sensor <b>1</b> = PT100 <b>2</b> = PT1000 <b>3</b> = Ni1000 <b>4</b> = KTY84 <b>5</b> = 2 x PT100 <b>6</b> = 3 x PT100
7.x.1.2	Sensor 2 type	0	6		0		<b>See above</b>
7.x.1.3	Sensor 3 type	0	6		0		<b>See above</b>