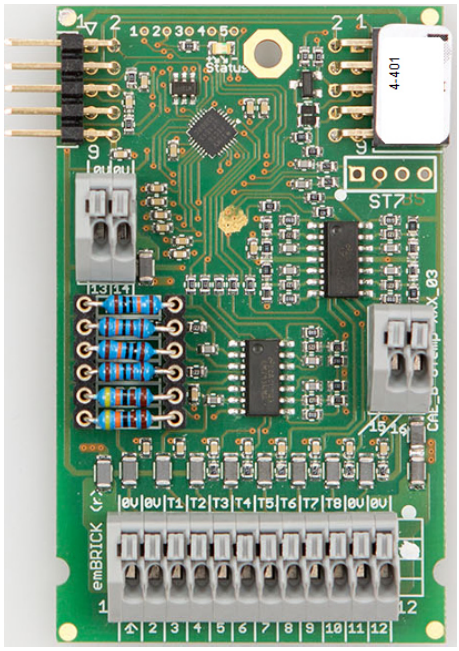
CAE_B-8Temp-01

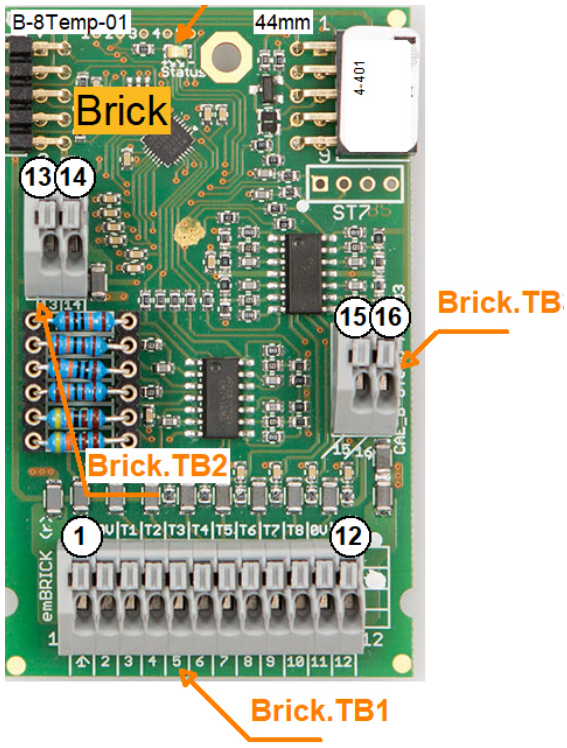


1.1 Description

ID: 4-401
Order No.: CAE_B-8Temp-01 (-p)
Terminal: push-in (≤ 0.5mm²)
Size: 4 eU (44mm x 72mm)
BBFCP: 1-1-1
Weight: 30g

This module includes eight inputs for a temperature sensor with different ranges.
It is typically used with a KTY with 2kOhm at 25°C. The module is equipped with enough clamps for the second connector of the sensor.

1.2 Connectors and Indication-/Operation-Elements



1.2.1 Terminal block (TB)

The following Illustration the technical details for Terminal blocks are listed. The location of a specific block is documented with the ID (left coloumn) in the preavious Illustrations.

ID	Model	Model / Series	Grid	Num. of term.	connection	elec. usage
Brick.TB01	Cage Terminal	WAGO250	2.5mm	12	up to 0.5mm² or 0,8mm	signal level
Brick.TB02	Cage Terminal	WAGO250	2.5mm	2	up to 0.5mm² or 0,8mm	signal level
Brick.TB03	Cage Terminal	WAGO250	2.5mm	2	up to 0.5mm² or 0,8mm	signal level

1.2.2 Terminal assignment

Here the assignment of individual terminals and there affilation to terminal blocks (Te block), terminal numbers (Te no.) and short description (T.desc.) aswell as there electrical function and usage are explained.
The associated mechanical and electrical properties are stated with the specific terminal block in the previous chapter. The position of a terminal is dedicated through the "Te block" and the actual terminal number (Te no.) or the therminal description (T.descr.) in the previous Illustration respectivly.
In the coloumn "usage" the technical-/ device-functional use is listed.

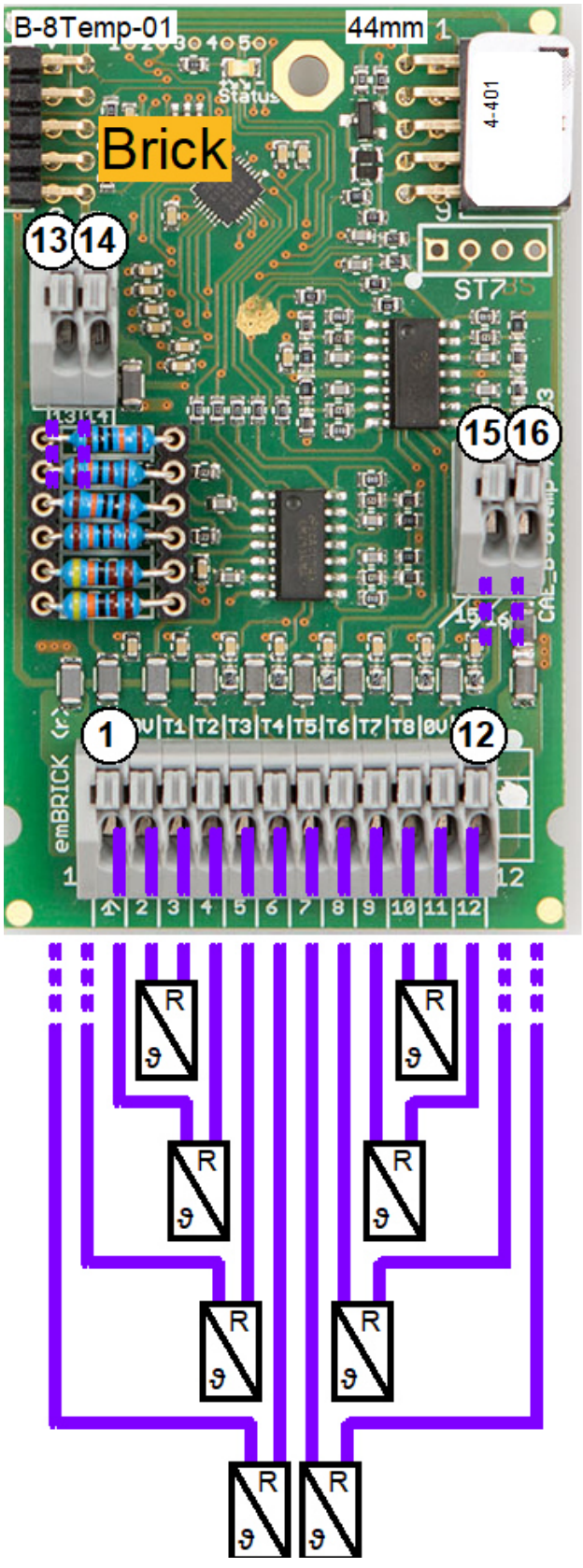
Te block	Te no.	T. descr.	Function	Usage
Brick.TB01	1	0V	Ground Sensor	Temp2
Brick.TB01	2	0V	Ground Sensor	Temp1
Brick.TB01	3	Tmp	Input Temperature Sensor	Temp1
Brick.TB01	4	Tmp	Input Temperature Sensor	Temp2
Brick.TB01	5	Tmp	Input Temperature Sensor	Temp3
Brick.TB01	6	Tmp	Input Temperature Sensor	Temp4
Brick.TB01	7	Tmp	Input Temperature Sensor	Temp5
Brick.TB01	8	Tmp	Input Temperature Sensor	Temp6
Brick.TB01	9	Tmp	Input Temperature Sensor	Temp7
Brick.TB01	10	Tmp	Input Temperature Sensor	Temp8
Brick.TB01	11	0V	Ground Sensor	Temp8
Brick.TB01	12	0V	Ground Sensor	Temp7
Brick.TB02	13	0V	Ground Sensor	Temp4
Brick.TB02	14	0V	Ground Sensor	Temp3
Brick.TB03	15	0V	Ground Sensor	Temp6
Brick.TB03	16	0V	Ground Sensor	Temp5

1.2.3 LED Indications

ID	Type	Specification	Type / Usage
Brick.StateLED	SMD-LED	yellow	communicationstate Brick

1.3 Input-/Output Scheme

The following diagram shows the adaption of the control unit. To avoid overlapping, some wires are displayed interrupted and dashed.



1.4 Technical Data

1.4.1 Analog Inputs

The control unit has the following analogue inputs / measuring inputs:

Identifier	Temp1
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp2
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp3
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp4
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s

Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp5
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp6
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp7
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-
Model / Series	KTY2k
Remark	

Identifier	Temp8
Type	Temperature input, KTY81-2k, -30...80°C
Range	-30 ... 80°C
Input/Load Resistor	-
Resolution	0.1%
Accuracy	2%
Linearity	1%
Filter	Tau = 1s
Linearization	-

Model / Series	KTY2k
Remark	

1.4.2 User Notes

• Blinking behavior StateLED:
Each Morse code is 3 seconds long!
not initialized = flashing continuously at approx. 5Hz
no communication = short-long-short
too little communication = short-short-short
disturbed communication = short-long-long
OK = continuous flashing at approx. 1Hz (0.6-1.5Hz)

1.5 History

On the following page you will find a list of changes that have been made to the product.

1.5.1 History

Date	Entry scope (HW, SWappl, SWapi, Release)	Entry type (enhancement, improvement, bugfix, release)	Version	Status (development, implemented, tested)	Responsible	Reason for the modification	Items of modification	Impact for (end-)customer	Comment	Location in model/source
xxxx-xx-xx		Release	0.99	Tested	NSt					

For questions please contact:

emBrick GmbH	Alfred-Nobel-Straße 2 D-55411 Bingen am Rhein	+49 (0)6721-48035-70	https://www.embrick.de/ https://www.embrick.de/shop/ support@embrick.de