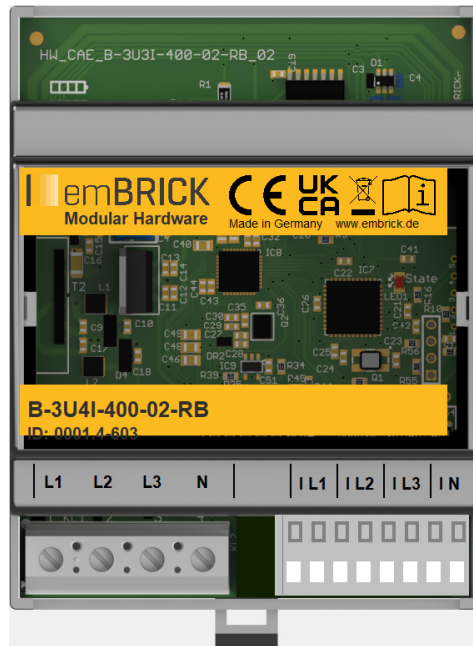


# CAE\_B-3U4I-400-01-RB



## 1.1 Description

ID: 4-602

Order No.: CAE\_B-3U4I-400-01-RB (-p)

Terminals:

- Voltage - Phoen04AKZ710/4 usable with one flex wire from 0.2 – 2.5 mm<sup>2</sup>

- Current - push-in (for  $\leq 1.5\text{mm}^2$ )

Size: 88mm x 72mm)

BBFCP: 2-1-1

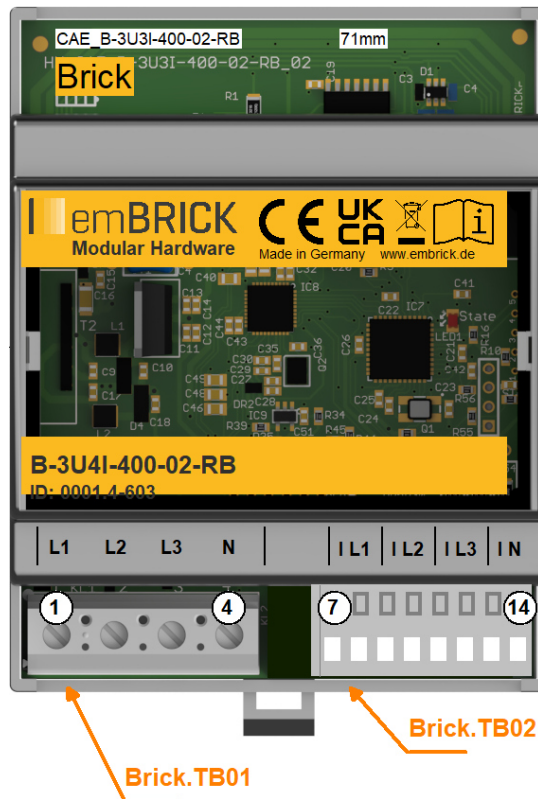
Weight: 85g

This module contains four independent 230Vac dimmer outputs that includes a phase angle control with a resolution of 20.000 steps per half wave.

Leading and trailing edge phase control can be selected via the brickBUS (Do not change the mode under load).

Each of these channels can control a permanent load (see notes) of max. 300W and contains a quick acting 1,6A melting fuse for output protection.

## 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 column) in the previous illustrations.

ID	Model	Model / Series	Grid	Num. of term.	connection	elec. usage
Brick.TB01	Screw Terminal	Weidmueller	7,62mm	4	up to 6 mm <sup>2</sup>	Power level
Brick.TB02	Cage Terminal	WAGO	3,5mm	8	up to 1.5mm <sup>2</sup>	signal level

### 1.2.2 Terminal assignment

Here the assignment of individual terminals and there affiliation 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 terminal description (T.desc.) in the previous illustration respectively.

In the column "usage" the technical-/ device-functional use is listed.

Te block	Te no.	T. descr.	Function	Usage
Brick.TB01	1	L1	Phase, Consumer	
Brick.TB01	2	L2	Phase, Consumer	
Brick.TB01	3	L3	Phase, Consumer	

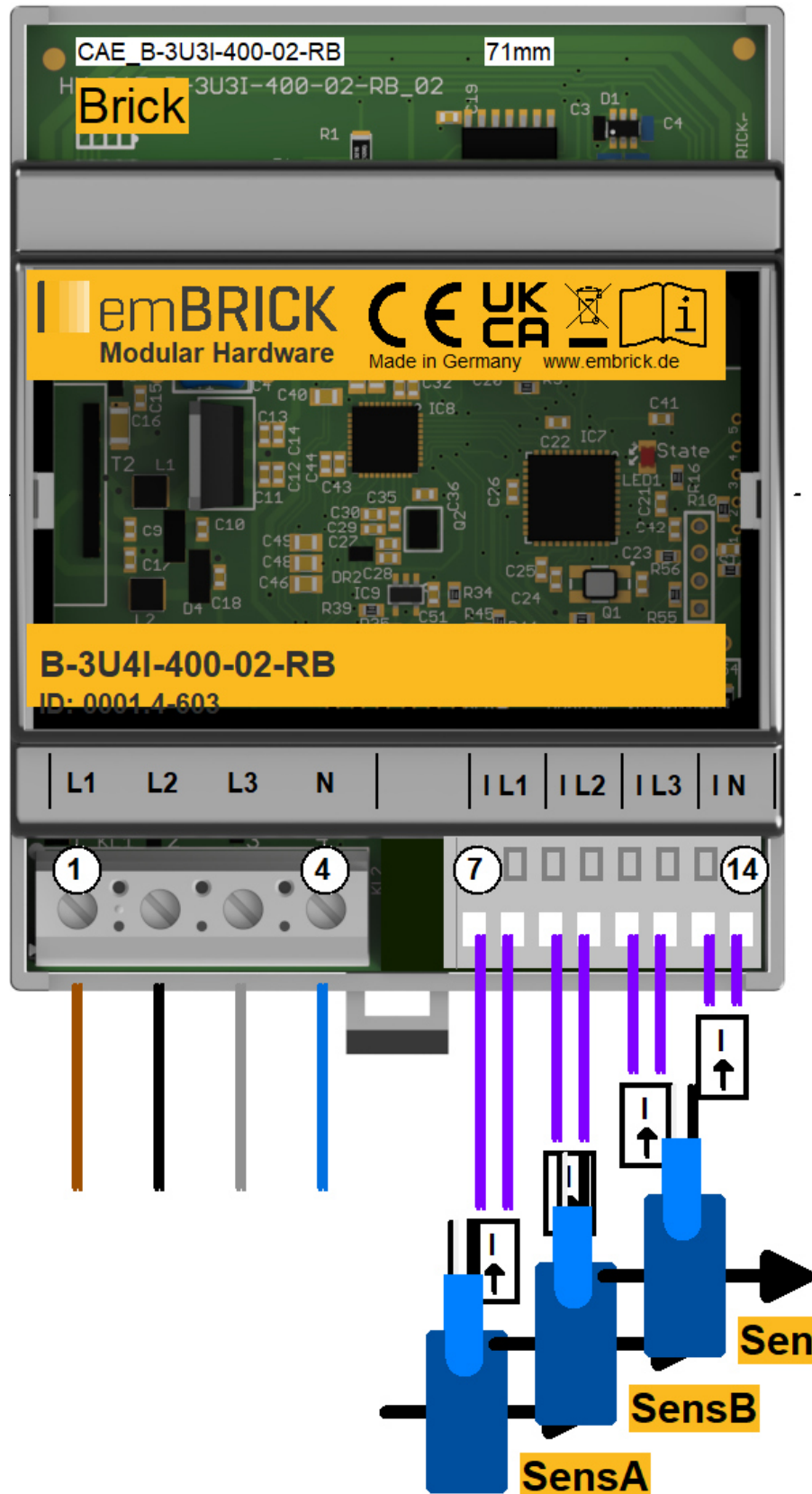
Brick.TB01	4	N	Neutral, Consumer	
Brick.TB01	7	L1	Current transformer, inductive	
Brick.TB01	8	L1	Sensor ground	
Brick.TB01	9	L1	Current transformer, inductive	
Brick.TB01	10	L2	Sensor ground	
Brick.TB01	11	L3	Current transformer, inductive	
Brick.TB01	12	L3	Sensor ground	
Brick.TB01	13	N	Current transformer, inductive	
Brick.TB01	14	N	Sensor ground	

### 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	Ai1
Type	Consumptor current mesasurement
Range	0 ... 2/20A ac
Input/Load Resistor	-
Resolution	0.5%
Accuracy	2%
Linearity	1%
Filter	Tau=1s
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor current mesasurement
Range	0 ... 2/20A ac
Input/Load Resistor	-
Resolution	0.5%
Accuracy	2%
Linearity	1%
Filter	Tau=1s
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor current mesasurement
Range	0 ... 2/20A ac
Input/Load Resistor	-
Resolution	0.5%
Accuracy	2%
Linearity	1%
Filter	Tau=1s
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor current mesasurement
Range	depends on current transformer, 0 ... 100mA at brick input
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	

Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor current mesasurement
Range	depends on current transformer, 0 ... 100mA at brick input
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor current mesasurement
Range	depends on current transformer, 0 ... 100mA at brick input
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor power measurment
Range	Watt
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor power measurment
Range	Watt
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-

Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Consumptor power measurment
Range	Watt
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Supply measurement
Range	0 ... 700Vac
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Supply measurement
Range	0 ... 700Vac
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	Supply measurement
Range	0 ... 700Vac
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000

Remark	
--------	--

Identifier	Ai1
Type	phase angle between current and voltage
Range	-90 ... 90°
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	phase angle between current and voltage
Range	-90 ... 90°
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
Remark	

Identifier	Ai1
Type	phase angle between current and voltage
Range	-90 ... 90°
Input/Load Resistor	-
Resolution	0.1%
Accuracy	0.5%
Linearity	0.2%
Filter	
Linearization	-
Model / Series	via ADE9000
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 the 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	<a href="https://www.embrick.de/">https://www.embrick.de/</a> <a href="https://www.embrick.de/shop/">https://www.embrick.de/shop/</a> <a href="mailto:support@embrick.de">support@embrick.de</a>
--------------	--	----------------------	--