

# CAE\_P-2Rel4Di2Ai-01



## 1.1 Description

ID: 5-131 Order No.: CAE\_P-2Rel4Di2Ai-01 Terminal: push-in (for  $\leq 0.5$ mm<sup>2</sup>) Size: 6 eU (66mm x 72mm) BBFCP: 1-1-1 Weight: 50g

The Module includes two potential free relays, four digital inputs and 2 analog inputs with power supply.

The digital inputs are designed for an external switch / open collector to ground. The analog inputs are voltage (0..10V) inputs.



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.TB1	Cage Terminal	WAGO250	2.5mm	6	up to 1.5mm <sup>2</sup>	signal level
Brick.TB2	Cage Terminal	WAGO250	2.5mm	14	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 respectively. In the coloumn "usage" the technical-/ device-functional use is listed.

Te block	Te no.	T. descr.	Function	Usage



Brick.TB01	1	NC	Relay, normally close contact, isolated	Rel1
Brick.TB01	2	С	Relay, change over contact, isolated	Rel1
Brick.TB01	3	NO	Relay, normally open contact, isolated	Rel1
Brick.TB01	4	NC	Relay, normally close contact, isolated	Rel2
Brick.TB01	5	С	Relay, change over contact, isolated	Rel2
Brick.TB01	6	NO	Relay, normally open contact, isolated	Rel2
Brick.TB01	7	IN	Switching Input, ext.contact	Di1
Brick.TB01	8	0V	Ground	Di1
Brick.TB01	9	IN	Switching Input, ext.contact	Di2
Brick.TB01	10	0V	Ground	Di2
Brick.TB01	11	IN	Switching Input, ext.contact	Di3
Brick.TB01	12	0V	Ground	Di3
Brick.TB01	13	IN	Switching Input, ext.contact	Di4
Brick.TB01	14	0V	Ground	Di4
Brick.TB01	15	24V	Sensor supply +24V	Ai1
Brick.TB01	16	IN	Input	Ai1
Brick.TB01	17	0V	Ground	Ai1
Brick.TB01	18	24V	Sensor supply +24V	Ai2
Brick.TB01	19	IN	Input	Ai2
Brick.TB01	20	0V	Ground	Ai2

## 1.2.3 LED Indications

ID	Туре	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 Digital Inputs

The control unit has the following digital inputs / switch inputs:

Identifier	Di1
Туре	Digital-Inputs
Low Volt.	< 5V
High Volt.	> 15V
Input Current	< 5mA @ 24V
Component	-
Remark	

Identifier	Di2
Туре	Digital-Inputs
Low Volt.	< 5V
High Volt.	> 15V
Input Current	< 5mA @ 24V
Component	-
Remark	

Identifier	Di3
Туре	Digital-Inputs
Low Volt.	< 5V
High Volt.	> 15V
Input Current	< 5mA @ 24V
Component	-
Remark	

Identifier	Di4
Туре	Digital-Inputs
Low Volt.	< 5V
High Volt.	> 15V
Input Current	< 5mA @ 24V
Component	-
Remark	

## 1.4.2 Digital Outputs

The control unit has the following digital outputs / switching outputs:

Identifier	Rel1
Туре	Relay, change over contact, isolated

Build:20220915-042250-4025035NSt



max. Switching Volt.	250V AC
max. Switching Cur.	5A AC, Contact 6A
max. Perm. Current	3A AC
nom. Cycles	see datasheet
Component	FTR, LYCA024V
Remark	-

Identifier	Rel2
Туре	Relay, change over contact, isolated
max. Switching Volt.	250V AC
max. Switching Cur.	5A AC, Contact 6A
max. Perm. Current	3A AC
nom. Cycles	see datasheet
Component	FTR, LYCA024V
Remark	-

#### 1.4.3 Analog Inputs

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

Identifier	Ai1
Туре	Voltage Input
Range	0 10V
Input/Load Resistor	>50k
Resolution	
Accuracy	0.5%
Linearity	0.2%
Filter	100Hz
Linearization	
Model / Series	
Remark	Sensor power supply (24V) is provided; note overall capacity

Identifier	Ai2		
Туре	Voltage Input		
Range	0 10V		
Input/Load Resistor	>50k		
Resolution			
Accuracy	0.5%		
Linearity	0.2%		
Filter	100Hz		
Linearization			
Model / Series			
Remark	Sensor power supply (24V) is provided; note overall capacity		



#### 1.4.4 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	+49 (0)6721-48035-70	https://www.embrick.de/
	D-55411 Bingen am Rhein		https://www.embrick.de/shop/
			support@embrick.de