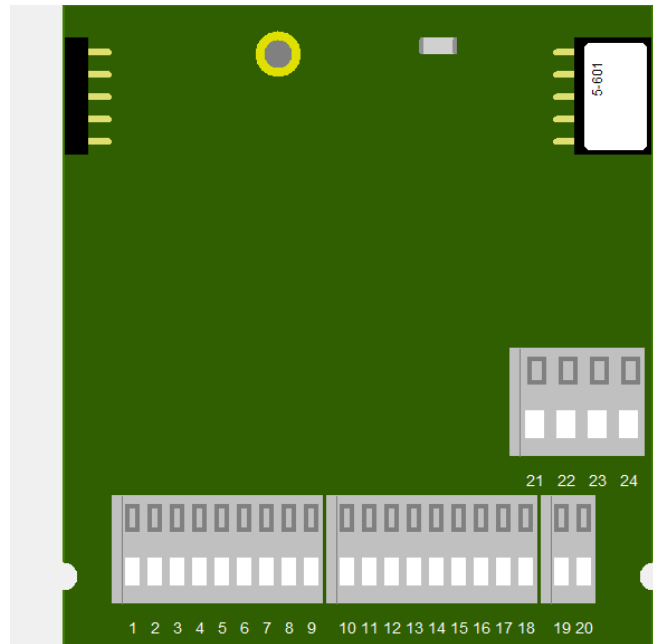


# CAE\_P-2CcvCav4Do2Imp-01



## 1.1 Description

ID: 5-601

Order No.: CAE\_P-2CcvCav4Do2Imp-01

Terminal: push-in (for  $< 0.5\text{mm}^2$ )

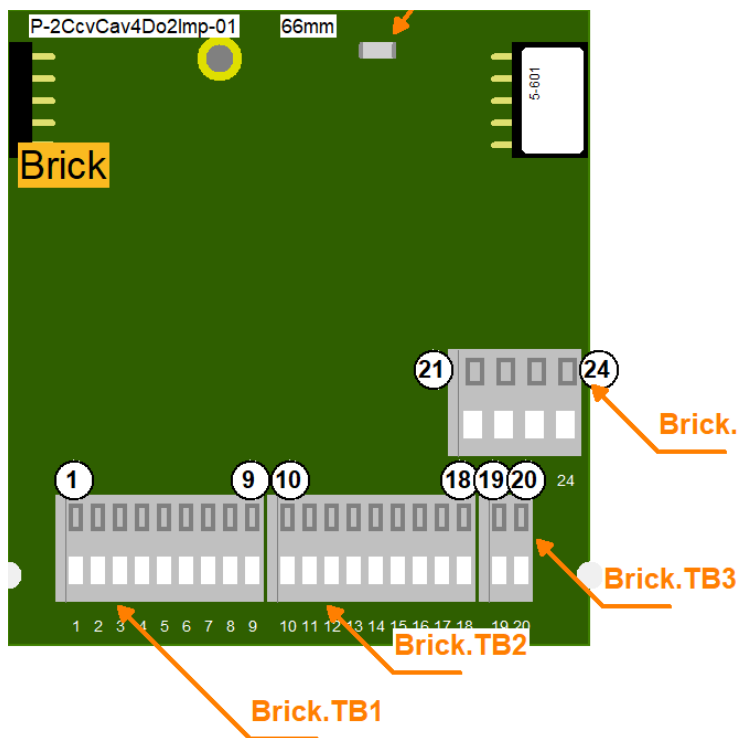
Size: 6 eU (66mm x 72mm)

BBFCP: 1-1-1

Weight: 30g

The module is created to control two Clack-Filter-Valves and one Clack-Alternator-Valve. Each of the three valve heads contains a DC-motor that is controlled by current (to set the torque) and a voltage/current measurement to detect the running state and end positions. The two filter valves also contain an encoder (position determination) and a flow meter (pulse based). The 4 digital outputs are connected to the signal LEDs "production" and "regeneration" on the filter valves. The third motor controller is realized without an encoder and can only move to the end positions. In the middle no defined positioning is possible. The module only offers the native In-/Outputs without any own functionality. The control itself has to be achieved by the bus master application. Note: This module also requires the adaptor board inside the Clack-Filter- Valves such as the CAE\_X-Clack9-01.

## 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	9	up to 1.5mm <sup>2</sup>	signal level
Brick.TB2	Cage Terminal	WAGO250	2.5mm	9	up to 0.5mm <sup>2</sup> or 0,8mm	signal level
Brick.TB3	Cage Terminal	WAGO250	2.5mm	2	up to 0.5mm <sup>2</sup> or 0,8mm	signal level
Brick.TB3	Cage Terminal	WAGO250	2.5mm	4	up to 1.5mm <sup>2</sup>	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 thterminal description (T.descr.) in the previous Illustration respectively. In the coloumn "usage" the technical-/ device-functional use is listed.

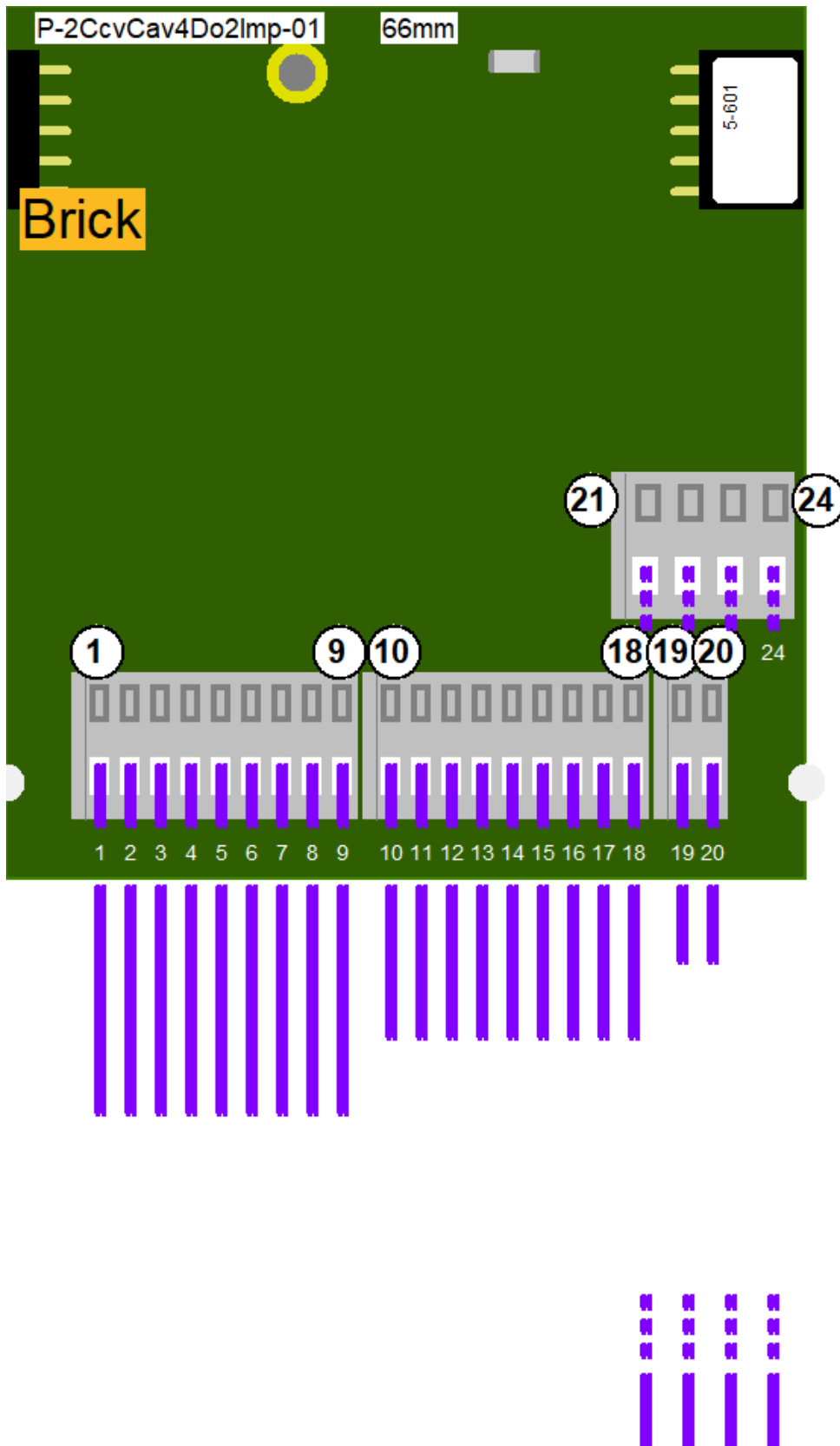
Te block	Te no.	T. descr.	Function	Usage
Brick.TB01	1	Mot A	Motor Pin A	Clack Control Valve
Brick.TB01	2	Mot B	Motor Pin B	Clack Control Valve
Brick.TB01	3	+5V	+5V	Clack Control Valve
Brick.TB01	4	GND	GND	Clack Control Valve
Brick.TB01	5	Res IN	Resolver In	Clack Control Valve
Brick.TB01	6	Res LED	Resolver LED	Clack Control Valve
Brick.TB01	7	Flow	Flow Sensor input	Clack Control Valve
Brick.TB01	8	Prod	Production LED	Clack Control Valve
Brick.TB01	9	Reg	Regeneration LED	Clack Control Valve
Brick.TB02	10	Mot A	Motor Pin A	Clack Control Valve
Brick.TB02	11	Mot B	Motor Pin B	Clack Control Valve
Brick.TB02	12	+5V	+5V	Clack Control Valve
Brick.TB02	13	GND	GND	Clack Control Valve
Brick.TB02	14	Res IN	Resolver In	Clack Control Valve
Brick.TB02	15	Res LED	Resolver LED	Clack Control Valve
Brick.TB02	16	Flow	Flow Sensor input	Clack Control Valve
Brick.TB02	17	Prod	Production LED	Clack Control Valve
Brick.TB02	18	Reg	Regeneration LED	Clack Control Valve
Brick.TB03	19	Mot A	Motor Pin A	Clack Alternator Valve
Brick.TB03	20	Mot B	Motor Pin B	Clack Alternator Valve

### 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 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:

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