

# CIB – Universal dimming module RLC load on CIB bus 230 V/AC

Type	DI	DO	AI	AO	Comm
<b>C-DM-0402M</b> <b>RLC</b>			4x AI/DO	2x phase controlled voltage 230 V AC (0-100%)	CIB

## Basic features

- The module is an actuator with 2 independent outputs (channels) for proportional control of light sources powered by 230 V AC.
- Dimmer is well designed for high reliability and immune to interferences in the main and interference of ripple control.
- Each channel is individually addressable and controlled via CIB bus in range 0-100%.
- Module may be switched to manual mode, where each inputs may be switched on/off by button.
- The right function for loads of various characters RL, LC or LED/ CFL is to be chosen in SW configuration of module via CIB.
- Each channel may control load up to 500 VA.
- Channels enable parallel arrangement of both output channels for increasing of controlled load up to 1 000 VA.
- To increase controlled load, we may parallelly arrange up to 4 outputs of independent modules. In such case both modules have to be on one branch CIB.
- In the case of parallel arrangement, all channels have to be control synchronal by the same commands via CIB bus. In the case of manual control, other active outputs may be overloaded.
- Outputs have internal protection against overload and overheating.

- Module contains 4 universal inputs for general purpose.
- To universal inputs we may connect voltage-free contacts, RTD temperature sensors or double-balanced circuits with security detectors.
- Status is indicated by LED on module.

## Connection

- The module is connected on two wires CIB bus, which holds communication, power supplying and control of module.
- CIB bus, inputs and outputs are connected to screw terminals.
- While designing the project, we have to calculate allowed load capacity of each connector.
- The module is designated for assembly into distribution box on DIN rail.

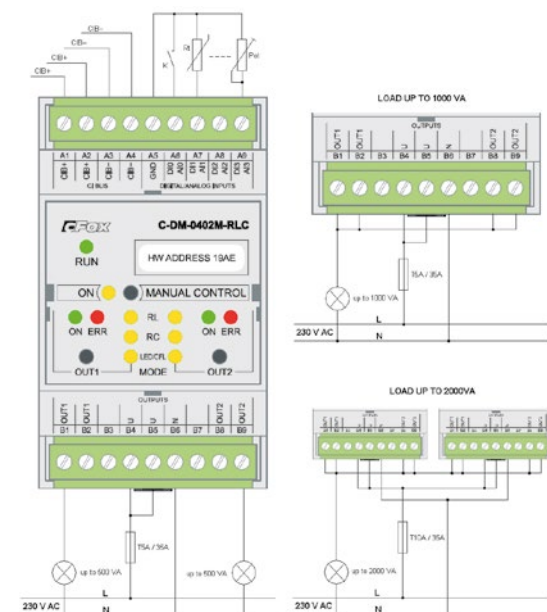
## Use

- Resistance load control up to 500 VA (resp. 1 000 up to 2 000 VA with parallel arrangement).
- Inductive load (RL) control up to 500 VA on channel. Typically standard transformers, motor loads, bulbs.
- Capacity load (RC) control up to 500 VA. Typically electronic transformers, Compact Fluorescent Lamp and LEDs on 230 V AC.



C-DM-0402M RLC

## Connection example



## Outputs for continuous load control 230 V AC

<b>Number and type of outputs</b>	2x 0-100%, phase control, 2x NMOS power transistor
<b>Load type</b>	R, L, C, dimmable LED and CFL
<b>Operation voltage</b>	230 V AC
<b>Output current</b>	max. 2,2 A/channel
<b>Switched load on channel</b>	500 VA (1000 VA, 2000 VA at parallel arranging)
<b>Galvanic separation of outputs from CIB bus</b>	Yes – 3,75 kV

## Measured ranges

Sensor type	Range	Basic accuracy
Voltage-free contact	0/1	0 if > 1.5 kΩ 1 if < 0.5 kΩ
Balanced output (security detectors)	Interrupted wire /0/1/tamper	for 2x 1k1 balanced resistor
Pt1000	–90 .. 320°C	0,5%
Ni1000	–60 .. 200°C	0,5%
NTC 12 k	–40 .. 125°C	0,5%
KTY81-121	–55 .. 125°C	0,5%
Resistor	0-160 kΩ	0,5%

## Dimensions and weight

<b>Dimensions</b>	90 x 58 x 53 mm
<b>Weight</b>	120 g

## Power supply of module

<b>Power supply for load</b>	230 V AC
<b>Max. output current of load</b>	2x 2,2 A in total
<b>Module power supply</b>	24 V (27 V) from CIB bus
<b>Typical load from CIB</b>	20 mA
<b>Typical/max. input power from CIB</b>	0.46 W
<b>Internal protection</b>	Yes, recovering fuse

## Operating conditions

<b>Operating temperature for load below 400 VA</b>	0 .. +40 °C; without forced circulation of air
<b>Operating temperature for load above 400 VA</b>	0 .. +40 °C; with forced circulation of air
<b>Storage and transport temperature</b>	–25 .. +85 °C
<b>Electric strength</b>	according EN 60730
<b>IP Degree of protection IP (IEC 529)</b>	IP20
<b>Overvoltage category</b>	II
<b>Degree of pollution</b>	1
<b>Working position</b>	vertical
<b>Installation</b>	on DIN rail
<b>Connection</b>	Screw connector
<b>Connections loads, inputs, CIB</b>	Screw connector max. 2,5 mm <sup>2</sup>

## Order number

<b>TXN 133 58</b>	C-DM-0402M-RLC, CIB – 2x dimmer RLC, 230 V AC, 2x 500 VA
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