# CIB – Module of IR Interface, light sensor

Туре	■ DI	<b>DO</b>	■ AI	AO	Comm
C-RI-0401S	See Al		2 AI/DI, 1 × light sensor		CIB, IR

#### **Basic features**

- Module is combined module with primary function of receiver and transmitter of IR commands.
- Module can learn IR commands of remote controllers of different devices air-conditioning unit, audio/video devices etc. and store them in module memory. Subsequently, these commands can be reproduced by module transmitter on the base of signal from system.
- This is the way how to replace manual control by Foxtrot system.
- Module contains input for the light sensor.
- Module contains 2 universal AI/DI inputs for temperature sensors or potential-free contacts.
- These inputs can operate also as double balanced inputs for connection of security sensors.
- · Status is indicated by LED on module.

#### Connection

- Module is connected to two-wire CIB bus that provides both communication and power supply of module.
- Module is designed mostly for assembly into standard installation boxes in the wall or under device cover.
- Inputs, outputs and CIB bus are connected by stranded wires with sleeves.
- Module can be individually customized and built-in into the covers of wall switch design under the code C-RI-0401R-Design. Standard design is Time by ABB.

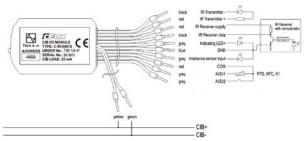
#### Use

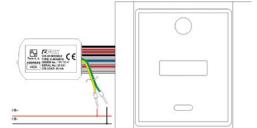
- Integration of infra red remote controlled devices. For example:
  - · Interior air-condition units
  - · audio, video
  - consumer electronics with IR control
- · Measurement of light in interiors.
- · Light intensity control in interiors.
- Specific sequence of actions can be defined in the system to expand the basic features of the original IR remote controller.



C-RI-0401S

#### **Connection example**





Variant: C-RI-0401R-Design

## IR receiver

III receiver	
Number of receivers	1
Galvanic isolation	No
Power supply	3.3 V
of receiver-demodulator	
Pilot frequency of demodulator	36 kHz

Ana	log/	digit	tal iı	nputs

No. of inputs	2
Galvanic isolation	No
Resolution	12 bit

#### IR transmitter

- ik transmitter	
Number of transmitters	1
Galvanic isolation	No
IR transmitter type	IR LED ( $I_F$ max =100 mA) + resistor according $I_F$
Power supply of transmitter	3.3 V
Short-circuit protection	No

#### Measurement ranges

Sensor type	Range
Potential-free contact	on/off
Balanced input	broken link/0/1/
(security system)	tamper
Pt1000	–90 320 °C
Ni1000	−60 200 °C
NTC 12k	–40 125 °C
KTY81-121	–55 125 °C
Resistance	0 – 160 kΩ
Analog input error	< 2 %

# Input for light sensor

- input for light school		
Number of inputs	1	
Galvanic isolation	No	
Sensor type/range/input error	photodiode,	
	0-50 000lx/<5%	

# Dimensions and weight

Dimensionsy	55×32×13 mm
Weight	8g

#### Operating conditions

Operating temperature	−20 +55 °C
Storage temperature	−25 +70 °C
Electric strength	according EN 60730
IP Degree of protection(IEC 529)	IP 10B
Overvoltage category	II
Degree of pollution IEC EN60664-1:2008	1
Working position	any
Installation	into installation box, under cover
Connection of CIB, AI/DI	Wires 0.5 mm <sup>2</sup> . grouped on 2
	connenctors inserted into module

### Power supply

Power supply and communication	24 V (27 V) from CIB bus
Typical load	25 mA
Maximal input power	0.5 W
Internal protection	No

#### Order number

TXN 133 47 C-RI-0401S; CIB input module for sensors 1 × IR, 1 × lighting, 2 × temperature, 1 × output for IR transmitter