

# ENERGY COUNTER MODULE ECM04

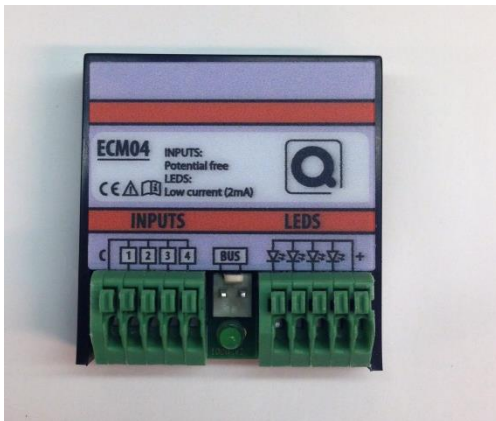


Figure 1 : Input module ECM04

ALWAYS USE POTENTIAL-FREE CONTACTS!  
NEVER CONNECT OR DISCONNECT MODULES  
WHILE THE BUS IS ENERGIZED!

## 2. Safety Instructions

Read the complete manual before carrying out the installation and activating the system.



### WARNING

- The device must be mounted and commissioned by an authorized electrician in accordance with the country-specific regulations.
- Never connect an AC or DC voltage to an input for a potential-free contact. This will damage the input module.
- The device must not be opened. The guarantee provisions will be void when the module has been opened.

## 1. Product Description

Module which counts and processes pulses received from a pulse meter. Any pulse meter can be connected to the ECM04 as long as the contacts are potential-free. The ECM04 can receive a pulse every 250ms. Alarms can be triggered based on a set number of pulses, for example to receive green energy certificates every kW generated by solar panels.

The maximum length of the conductor between the ECM04 and the potential free input is 1 meter.

The input contacts can be selected and set using the Qbus configuration software:

- Push button = button that is open when inactive – only active when pushed shortly (e.g. doorbell).
- Normal open = contact that is open when inactive.
- Normal closed = contact that is closed when inactive.

**WARNING:** ALWAYS USE NORMAL OPEN OR NORMAL CLOSE CONTACTS WHEN INPUTS ARE CONNECTED THAT GIVE AN EXTENDED CONTACT (E.G. MAGNETIC WINDOW-CONTACT, SMOKE OR MOTION DETECTOR,...). THESE INPUTS ARE ON FOR AN EXTENDED PERIOD OF TIME. ONLY USE THE “PUSH BUTTON” SETTING FOR SHORT CONTACTS.

The four low-current LEDs that can be connected to ECM04 show the status of the mode that has been selected (push button, normal open, normal close).

The ECM04 is connected on the bus, and gets its power from the bus.

Each module has 1 unique serial number for programming via the Qbus configuration software.

## 3. Mounting and wiring

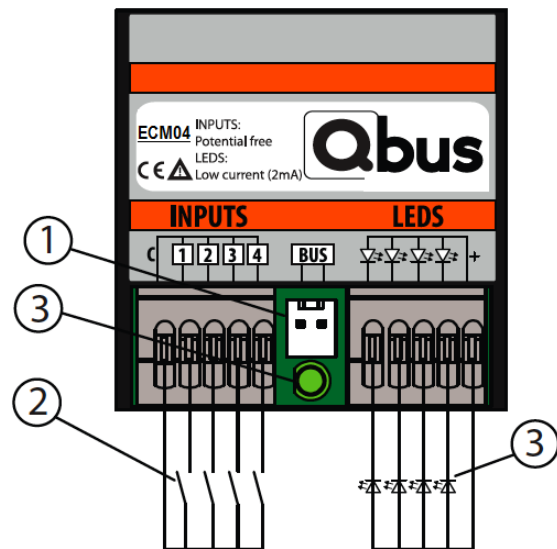


Figure 2 : Connection example for mains voltage and inputs

### BUSCONNECTOR ①:

It is recommended to use the Qbus cable or any other cable with minimum 2 x 1mm<sup>2</sup> conductors as a bus lead. The green protected EIB wire is also allowed when the conductors are guided per 2 in order to obtain a section of minimum 2 x 1mm<sup>2</sup>.

**IMPORTANT :** THE BUS CABLE SHOULD BE SHIELDED AND GROUNDED! THE GROUNDING SHOULD BE CONNECTED TO THE OVERALL GROUNDING OF THE BUILDING

# ENERGY COUNTER MODULE ECM04

## INPUTS ② :

Connect the inputs according the connection example (figure 2). Both solid and stranded wire can be used (for stranded use a screwdriver to push on the connection when inserting the wire). Conductor cross section : maximum 0.5 mm<sup>2</sup>. Remove approx 7mm of insulation from the wire and push it into the terminals IN1 – IN4. By pushing with a screwdriver on the connector, the wire can be removed from the connector.

## LED INDICATION ③ :

Green LED: power supply ok.

External LEDs (when connected): show the status of the mode that has been selected (push button, normal open, normal close, switch).

## 4. Technical Data

### GENERAL SPECIFICATIONS :

- Power supply : bus
- Characteristic consumption : 2.3VA
- Ambient temperature :  
Working temp. range : 10°C to 50°C  
Storage temp. range : -10°C to 60°C
- Maximum humidity : 93%, no moisture condensation
- Bus load without LEDs: 8mA, with all LEDs on 10mA
- Max installation altitude : 2.000m

### INPUTS :

- IN1 – IN4 : 4 potential-free single contacts
- Input signal delay :  
- when closing the contact : max 100ms  
- after opening the contact : max 100ms
- Input function : to be set by Qbus Configuration Software (System Manager).

### PHYSICAL SPECIFICATIONS

- Housing : Plastic with resin-filling, self-extinguishing acc. to UL94-V0
- Protection Degree : IP30
- Installation : bus-connector, push-connector for inputs and LEDs
- Dimensions (HxWxL) : 12mm x 40mm x 41mm
- Weight : approx. 0,035 kg

### ELECTRICAL SAFETY

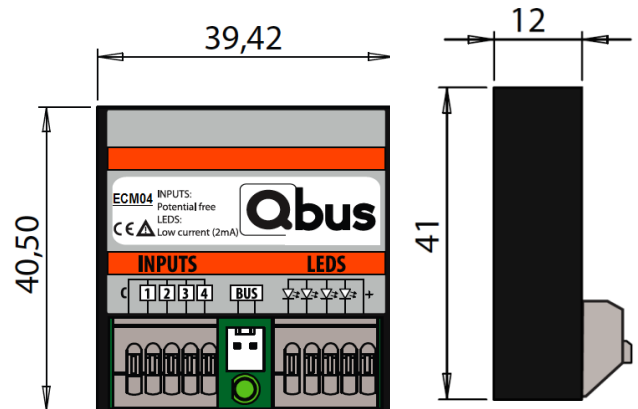
- Bus : 13,8VDC safety extra low voltage (according EN 60950 – 1 : 2006)
- Non-toxic WEEE/RoHS compliant

CE

- Complies with the EMC regulations and low voltage regulations. The device complies with EN50090-2-2 (1996) +A1(2002) +A2 (2007) en EN61000-6-3, EN61000-6-1 (2007)

## 5. Dimension Diagram

Dimensions in mm.



## 6. Guarantee provisions

Period of guarantee : 2 years from date of delivery.

Guarantee will not be accepted if the device has been opened!

Any faulty devices should be send postage-free with a description of the defect to our central customer service office :

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