

# **SHUTTER MODULE ROL02**

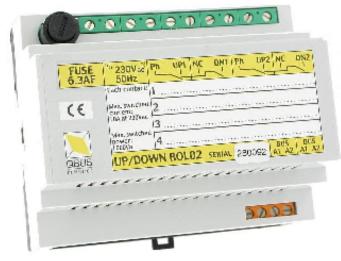


Figure 1 : Shutter module ROL02

# 1. Product Description

Module for DIN-rail, suitable for switching 2 shutters / blinds / curtains. The shutter module has 2X2 potential-free, normally open contacts that can each connect 16A at 230V ( $\cos\varphi$ =1). The second contact can only give power output when the first output is not activated. Thus avoiding a mutual signals on UP1(/UP2) and DN1(/DN2) when activating the 2 outputs at the same time.

For heavy inductive loads with a high capacity or bipolar applications, contactors need to be added. The shutter module contact will then activate the coil of the contactor.

Each module has a unique serial number enabling programming anywhere and anytime. All programming remains internally stored in a nonvolatile memory. After a voltage cut-off the outputs return to their latest position.

A bipolar automatic fuse of a maximum of 16A must be placed on the mains power.

# 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 authorised electrician in accordance with the country-specific regulations.
- This device is exclusively suitable for DIN-rail mounting EN 50022. It must be mounted in a closed distribution board.
- A safety disconnection of the device must be possible. Before carrying out the installation the ROL02 should be de-energized.
- Only one phase is fused. In case the fuse is blown hazardous live voltage can still be present in the ROL02.
- The device must not be opened.
- Electrical shock when live parts are touched.

# 3. Mounting and wiring

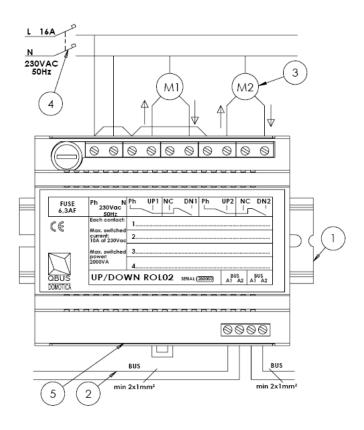


Figure 2 : Connection example for mains voltage and loads



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# FITTING **①**:

Snap device onto DIN rail to DIN EN 50022.

# BUS WIRING **(2)** :

It is recommended to use the protected green EIB wire  $(4 \times 0.5 \text{mm}2)$  as a bus lead. The conductors are guided per 2 in order to obtain a section of  $2 \times 1 \text{mm}2$ . IMPORTANT :

THE BUS MUST NEVER COME INTO CONTACT WITH THE EARTHING OR A LIVE WIRE!

### LOAD CIRCUITS ③:

Connect the loads according the connection example (Figure 2). Conductor cross section : maximum 1,5mm<sup>2</sup>. Remove approx 7mm of insulation from the wire and srew it into the terminals UP1/2 – DN1/2.

If sockets are to be connected to the domotics, this should be done with separate contactors (2P/20A contactor required).

### POWER SUPPLY ④:

A bipolare automatic fuse of a maximum of 16A must be placed on the mains power 230Vac.

Conductor cross section : maximum 1,5mm<sup>2</sup>.

Remove approx 7mm of insulation from the wire and srew it into the terminals Ph-N.

WARNING :

BEFORE WORKING ON THE DEVICE DISCONNECT THE SUPPLY VOLTAGE.

### LED INDICATION **⑤**:

Green light : power supply. Red light : start-up 2 seconds and during programming. Orange light 1-4 : Up1 / Up2 / Dn1/ Dn2 active.

# 4. Technical Data

### **GENERAL SPECIFICATIONS :**

- Power supply : 230Vac +-10%, 50Hz maximum protection 16A/2P
- Insulation voltage : 3KV tested
- Characteristic consumption : 2.8VA
- 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 : 10mA at nominal 13,8V
- Internal fuse : 6,3A single-phase
- Max installation altitude : 2.000m

#### **OUTPUTS**:

• UP1/2 – DN1/2 : 4 potential-free normally open single contacts

- UP1 DN1 and UP2 DN2 : internally locked contacts
- Rated current : 16A
- Contact resistance :  $100m\Omega$
- Set/Reset time : 15ms max / 5ms max
- Endurance : 20mil. operations
- Rated load : Resistive load (cosφ = 1) 16A at 230Vac 16A at 30VDC
  Inductive load (cosφ = 0,4; L/R = 7 ms) 8A at 230Vac 8A at 30VDC
- Maximum switching power :
  - Resistive load ( $\cos \phi = 1$ ) 2300VA at 230Vac
    - 300W at 30Vdc
  - Inductive load ( $\cos\varphi = 0.4$ ; L/R = 7 ms) 1150VA at 230Vac 150W at 30Vdc

We strongly recommend not to exceed these values, otherwise an external contactor should be used!

#### PHYSICAL SPECIFICATIONS

- Housing : Plastic, self-extinguishing acc. to UL94-V0
- Protection Degree : IP20, EN 60529
- Installation : rapid mounting on DIN-RAIL, width 6 modules
- Dimensions (HxWxL) : 62mm x 85mm x 104mm
- Weight : approx. 0,328 kg

### ELECTRICAL SAFETY

- Bus : 13,8VDC safety extra low voltage (according EN 60950 1 : 2006)
- Dielectric strength : 3.000VAC, 50/60 Hz for 1 min
- Non-toxic RoHS compliant

# CE

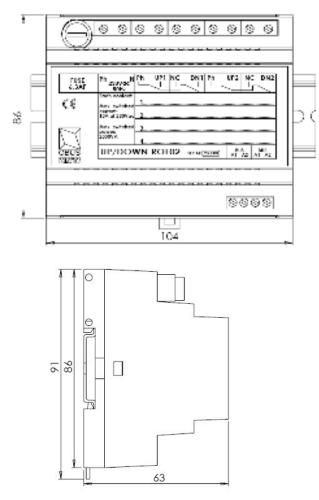
• Complies with the EMC regulations and low voltage regulations. The device complies with HBES – EN 50090-2-2.



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### 5. Dimension Diagram

Dimensions in mm.



Width = 6 modules. 1 Module = 17 mm.

### 6. Guarantee provisions

Period of guarantee : 2 years from date of delivery. Any faulty devices should be send postage-free with a description of the defect to our central customer service office :

#### QBUS N.V.

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