

O4RM

4-line relay module with Morse contact on EtherCAT bus

Electrical characteristics

Supply voltage: +5 V +/- 5% 110 mA without encoder
MTBF: 70 000 h 50 °C

Mechanical characteristics

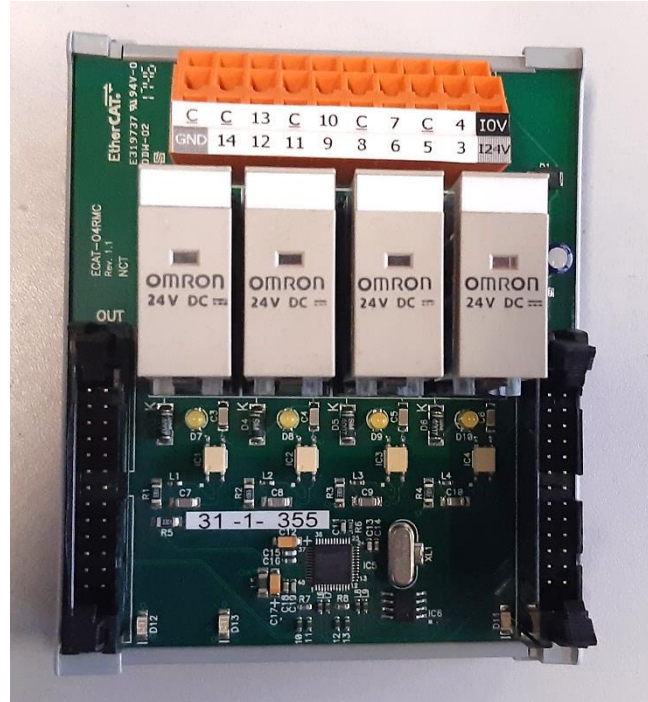
Dimensions: 88×108×72 mm
Weight: kg

Environmental characteristics

Operating temperature: +0 °C ... +50 °C
Storage temperature: -24 °C ... +85 °C
Operating relative humidity: max. 95% (no condensation)
Storage relative humidity: max. 95% (no condensation)
Sea-level altitude: -300 m ... +3000 m
Shock resistance: 15 g / 0,33 ms
Vibration: 1 g / 5 ... 2000 Hz

EMC

EN 61000-4-2 (ESD)
EN 61000-4-4 (burst)
EN 61000-4-10 (voltage drop, interruption, change)



Description

1. Relay output

The O4RM module actuates 4 relays with Morse contact (Output Relay 0...3). The drive of each relay is galvanically isolated.

A separate power supply of 24 VDC must be provided for pulling in the relay coils (I24V and I0V).

LEDs indicate the pulled in status of the relays (Output LED0...3).

The relays can be switched via EtherCAT (LVDS) bus.

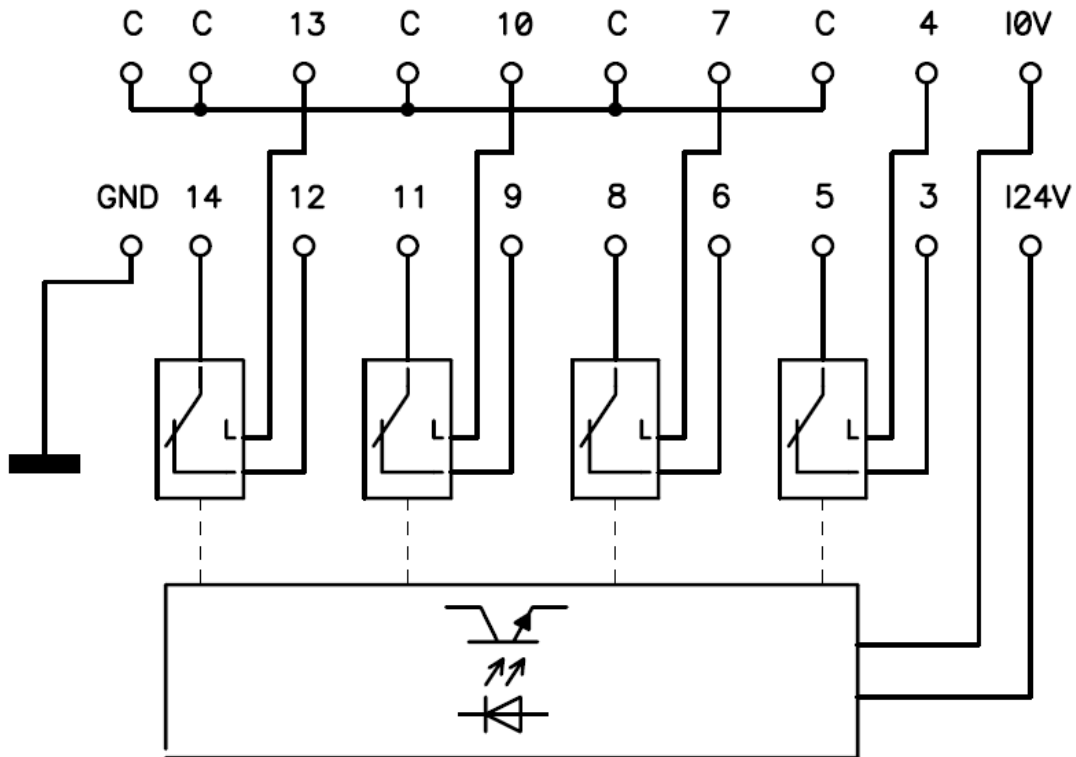
Low (0): the relay switched off

High (1): the relay switched on

Loadability of the contacts:

in the case of 24 VDC:	8 A at ohmic load
	2 A at inductive load
in the case of 230 VAC:	8 A at ohmic load
	3 A at inductive load

In the case of inductive load, protective elements (diode, resistance-capacity filter, etc.) must be used!!!



2. EtherCAT electronics

It is the EtherCAT-LVDS bus via which the module communicates with the control system. The module must be connected to the EPU unit or to a module connected to the EPU unit already, via the LVDS input. The LVDS output connector can be used to connect a subsequent module.

The LEDs on the card and their functions

Link/Act In: the EtherCAT input port works

Link/Act Out: the EtherCAT output port works

Run: when the LED light is off: the unit is in INIT status

when the LED light is blinking: the unit is in PRE-OPERATIONAL status

when the LED light flashes: the unit is in SAFE-OPERATIONAL status

when the LED light is on: the unit is in OPERATIONAL status