User's Manual
(Ethernet relay EREL114)
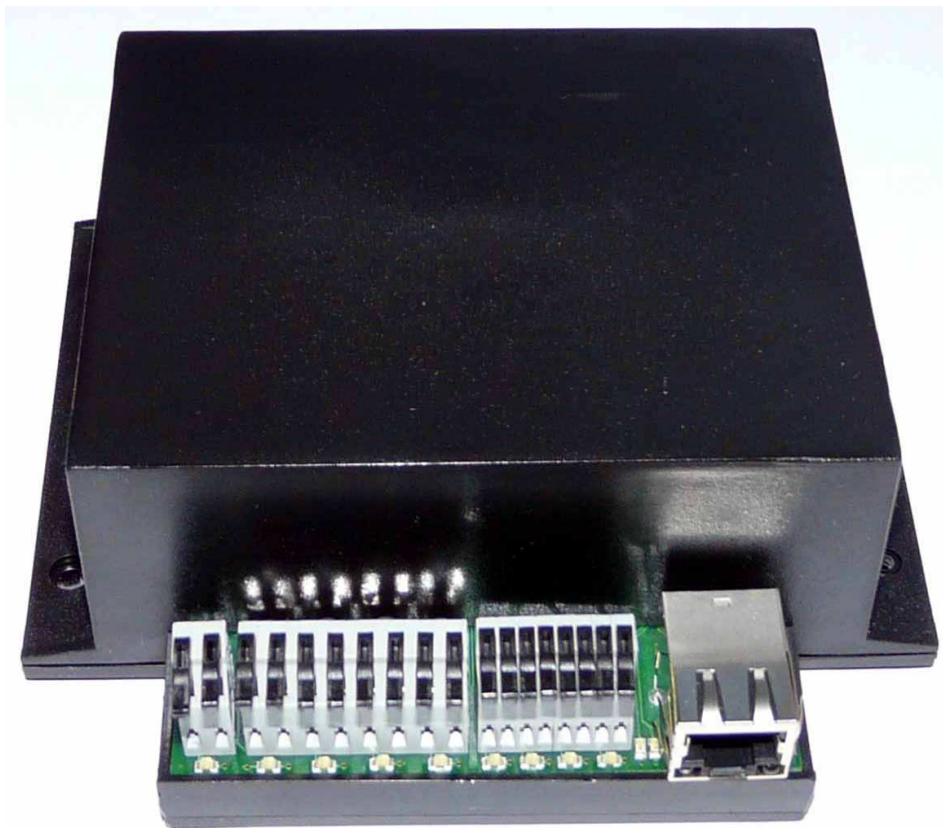
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1. Product Specifications

The EREL114 Ethernet I/O board is a low-cost solution for professional control and monitoring tasks. It is designed for easy integration in industrial machinery, office- or household devices and monitoring devices, etc

EREL114 has
- 4 optically isolated AC inputs
- 4 cut-in contact relay outputs
- real-time clock (RTC)/calendar
- 10/100 Mbps Ethernet interface
- default IP address switch (default IP address: 192.168.100.5 port 5000)

1.1 External Dimensions (with box)
Length: 130 mm
Width: 110 mm
Height: 44 mm

1.2 Interface
10/100 Mbps Ethernet interface

1.3 Power supply
The range of supply voltage: VDC 8-27V

1.4 Other
Four inputs:
Voltage levels of 5-24 VDC.
An input current of approx. 10mA

Four outputs:
Rating (resistive) 5 A 250 VAC or 5 A 30 VDC
Maximum Carrying Current 5 A
Maximum Switching Power 1,250 VA, 150 W
Maximum Switching Voltage 250 VAC, 150 VDC
Maximum Switching Current 5 A
Minimum Switching Load*1 100mA 5 VDC

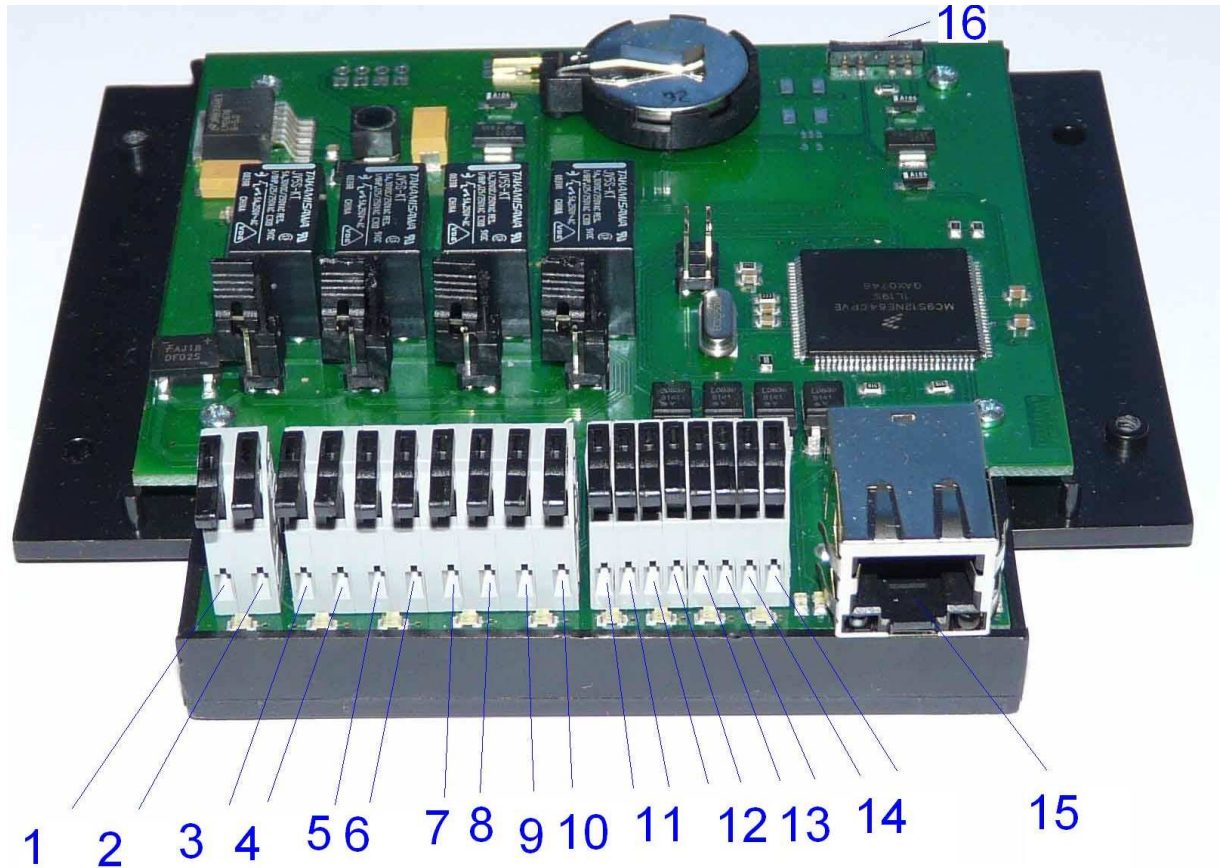Operating temperature: -40 ^{0}C to +80 ^{0}C

1.5 Software
User's Manual
EREL11XC SDK - Software Development Kit
EREL11xDemo – I/O board demo application

2. Hardware Installation

2.1 Connectors description

- 1-2 is power supply connector.
- 3-4, 5-6, 7-8 and 9-10 are output connectors for relays.
  (3-4 – relay 1), (5-6 relay 2), (7-8 relay 3) and (9-10) relay 4
- 11, 12, 13 and14 are input pair contacts.
- 15 is ethernet RJ45 connector.
- 16 is default IP address switch.

The inputs are optically coupled type inputs, which assure a galvanic separation to connected devices. This separation represents an effective protection against damages due to overvoltage. According to model selection, inputs are designed for voltage levels of 5-24VDC.
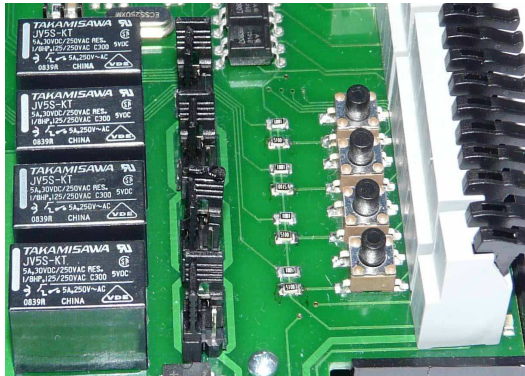
2.2 Internal Connectors
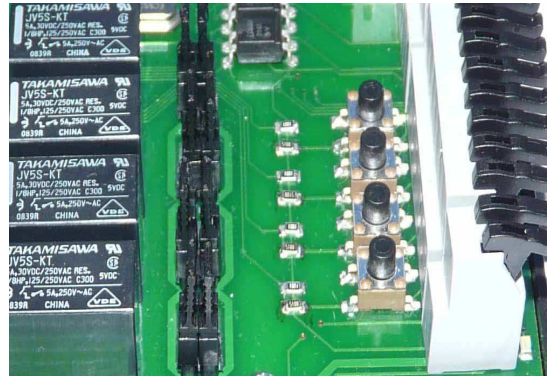
The output of relay will be configured as
- *cut-in relay (mode 1)*
- *commutation power supply contacts (1,2 to 3,4), (1,2 to 5,6), (1,2 to 7,8), (1,2 to 9,10) (mode 2)*

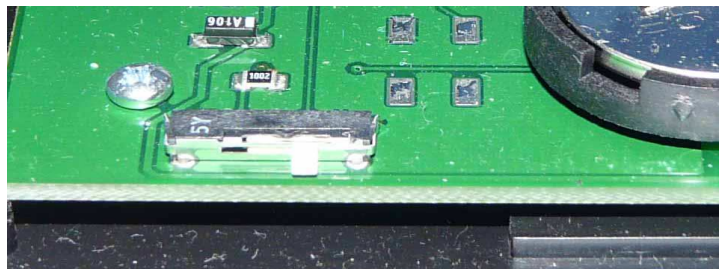*Black jumper is used to change the mode.*
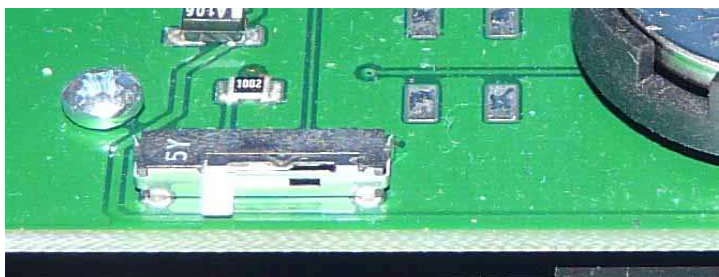
Mode 1

Mode 2

2.3 Default IP address switch

The Ethernet relay has a capability to change the IP address. The winconerel11x.exe utility allows change the specific parameters. If the IP address of EREL114 is forgotten, it's possible to use the default IP address by switch. The default IP address is 192.168.100.5 port 5000

The default IP address position of switch (on the outermost right).

The IP address is taken from user configuration (on the outermost left).

2.4 Manual switch buttons

The EREL114 has switch button for each output channel. The button lets to switch the output status manually. The button activity can be disabled by winconerel11x.exe utility.