# User's Manual
## (Ethernet relay EREL112)

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# 1. Product Specifications

The EREL112 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, metering- and monitoring devices, etc

EREL112 has
- 2 optically isolated inputs
- 2 cut-in contact relay outputs
- real-time clock (RTC)/calendar
- connector for type-K thermocouple
- 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: 100 mm
Width:  89 mm
Height: 33 mm

## 1.2 Interface
10/100 Mbps Ethernet interface

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

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

Two 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

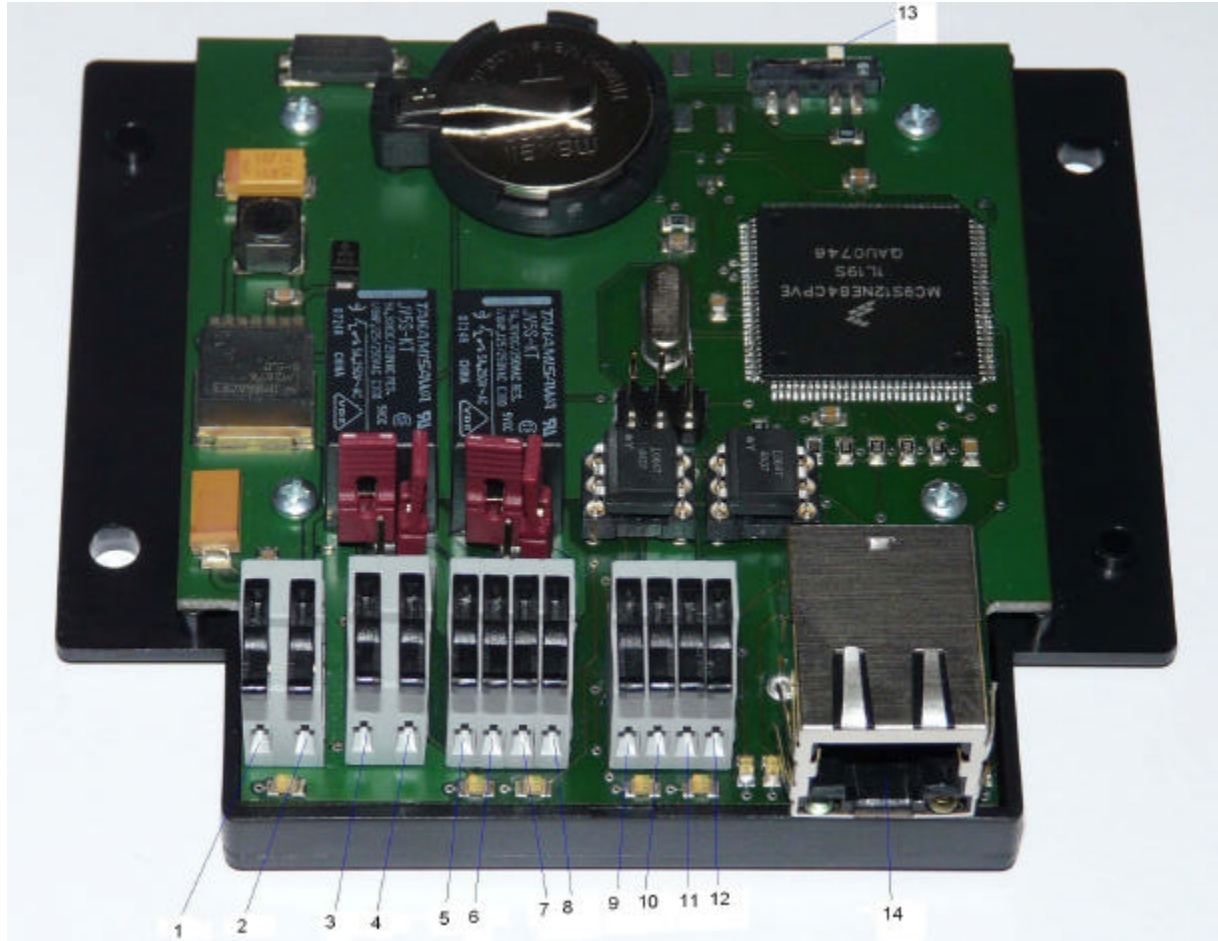Operating temperature:  -40 $^{0}$C to +80 $^{0}$C

## 1.5 Software
User's Manual
EREL11XC SDK - Software Development Kit
EREL112Demo – I/O board demo application

# 2. Hardware Installation

## 2.1 Connectors description



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

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.
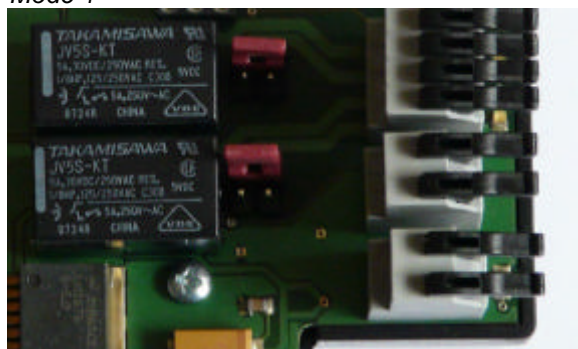
## 2.2 Internal Connectors

*The output of relay will be configured as*
- *cut-in relay (mode 1)*
- *commutation power supply contacts 1,2 to 5,6 and 1,2 to 7,8 (mode 2)*

*Red 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 winconerel112.exe utility allows to change specific parameters. If the IP address of EREL112 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).*
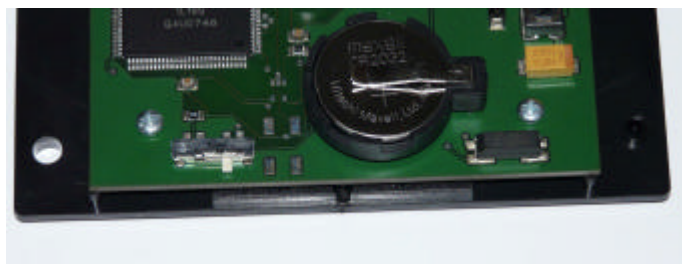


*The IP address is taken from user configuration (on the outermost left).*