# INSTALLATION AND USER'S GUIDE

| | |
|---|---|
| Language manual | English |
| Product | **Z-8R-10A** |
| Description | **Relays board** |

***Contents:*** ***Pag.***

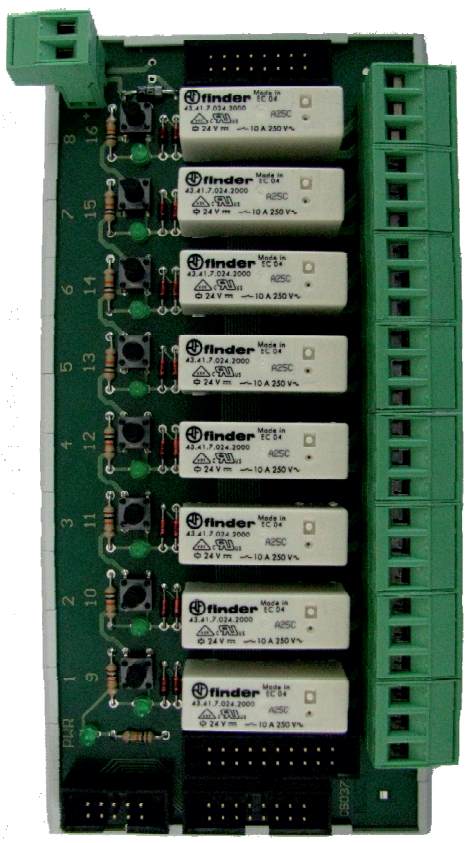

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# 1.0 DISCLAIMER



Before executing any operation it's mandatory to read all the content of this user manual. Only electrical-skilled technicians can use the module described in this user Manual.

Only the Manufacturer is authorized to repair the module or to replace damaged components.

No warranty is guaranteed in connection with faults resulting from improper use, from modifications or repairs carried out by Manufacturer-unauthorised personnel on the module, or if the content of this user Manual is not followed.

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UNI EN ISO 9001 CERTIFICATE Nr. 9115.SENE

# 2.0 DESCRIPTION AND GENERAL SPECIFICATIONS

## 2.1 Description

8 relais on PCB with carrying capacity of 250 Vac, 10 A

## 2.2 General specifications

- Power supply of 24 Vdc.
- Easy connection on din rail by rear support.
- Screw terminal with section 2.5 $mm^2$ ,pitch 5.08 mm
- Signallings of relay status from led
- Easy connection for seneca module by a specific connector for flat cable

# 3.0 TECHNICAL SPECIFICATIONS

## 3.1 Power supply

| | |
|---|---|
| Voltage supply | 24 Vdc |
| Consumption | 0,5 W |

## 3.2 Relays

| | |
|---|---|
| Number | 8 |
| Carrying capacity | 250 Vac, 10 A |

## 3.3 Connector

| | |
|---|---|
| Connector | IDC 10, 16(2), 20 pins for flat cable |
| | Screw terminals pitch 3,5 mm |

## 3.4 Environmental condition

| | |
|---|---|
| Temperture | -30 °C.. +70 °C |
| Humidity | 30 ..90% a 40 °C noncondensing |
| Altitude | Up to 3000 m above sea level |
| Storage temperature | -40 .. +85°C |

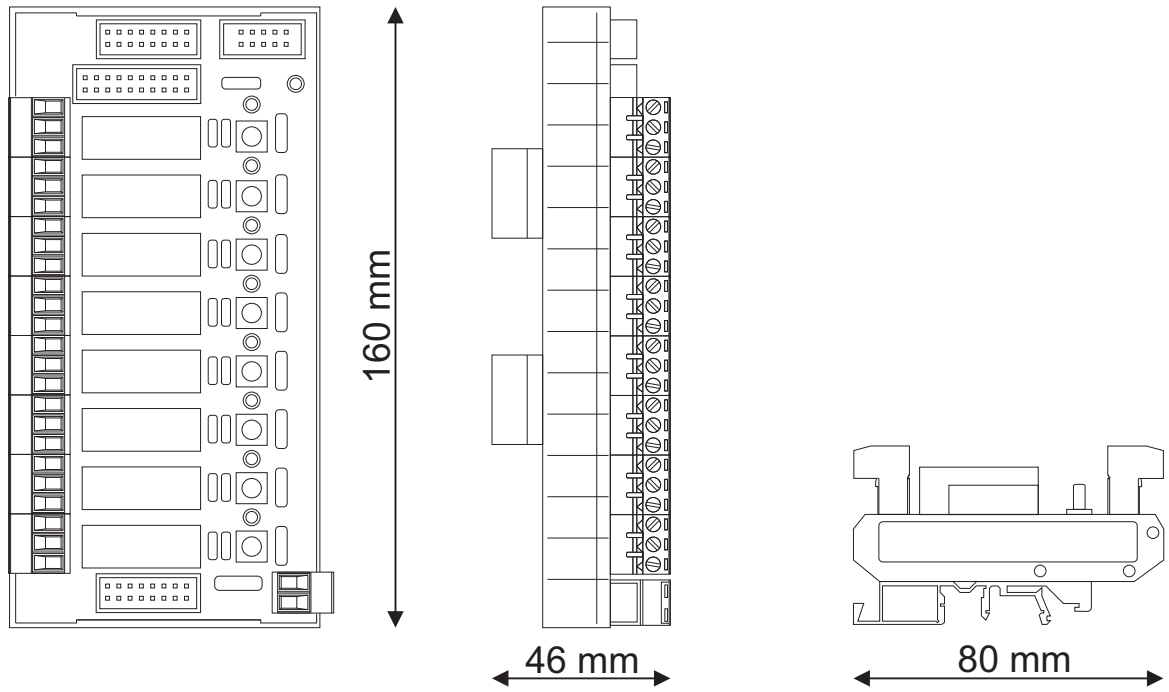


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## 3.5 Box

| | |
|---|---|
| Dimension | L: 160 mm x H: 80 mm x W: 46 mm |
| Box | Polyamide, grey |

## 3.6 Dimension




## *4.0 PRELIMINARY INSTRUCTION FOR USE*

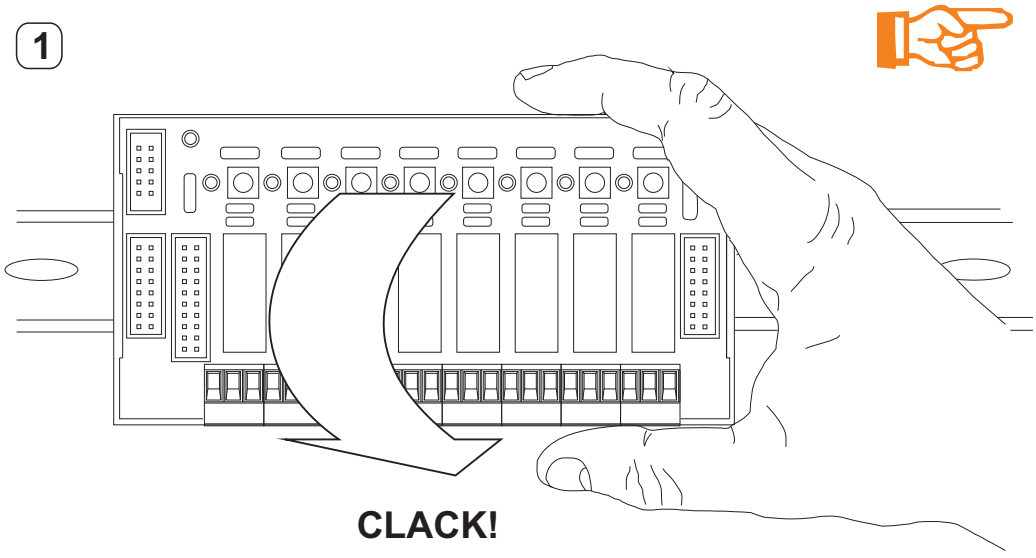
The module is designed to be installed on DIN 46277 rail in horizontal position (see picture 1).

It is forbidden to install the module near heat sources.

## *5.0 ELECTRICAL CONNECTIONS*

**Power off the module before connecting the relays output.**

### 5.1 Installation on DIN 46277 rail




For a proper installation:

-Attach to the DIN rail the top of the rear support .

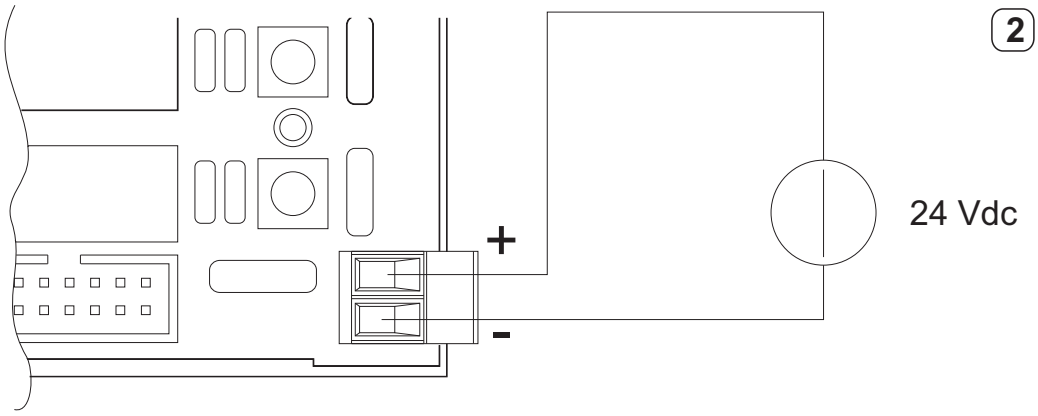
-Push down the relays board and press towards the din rail to hook the bottom of the rear support



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## 5.2 Power supply

The 2-way screw terminal is only suitable to provided a 24 Vdc power supply to used Z-8R-10A in order to execute a relay test (modality test), optional connection.
Otherwise in the normal modality the Z-8R-10A only must use the flat cable connection, althought the 24 Vdc must be provided to digital output screw terminals of connected module.(see par. 5.4)

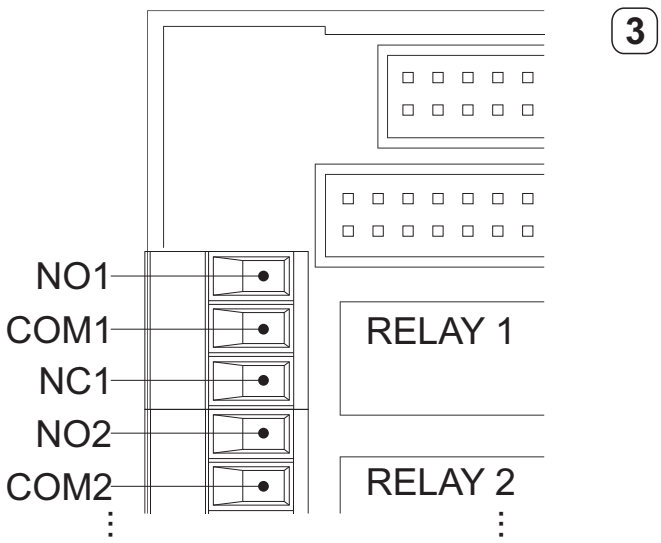



If the Z-8R-10A is powered correctly the green led «PWR» will light.

If the supply comes from Seneca's module and from flat it is possible to execute a test of relays operations.
To test the Z-8R-10A, execute in the order the following operations:
- Push an button
- Verify that the corrisponding relay functions properly
- Verify that the corrisponding led is on.

## 5.3 Relay output connection

It's possible to connect the outputs relay by use the screw terminal connectors.




## 5.4 Connection to the seneca module

The connected Seneca module can control the Z-8R-10A.
Use the following Seneca module to control the Z-8R-10A:

Z-10-D-OUT
ZC-24DO
ZC-16DI8DO



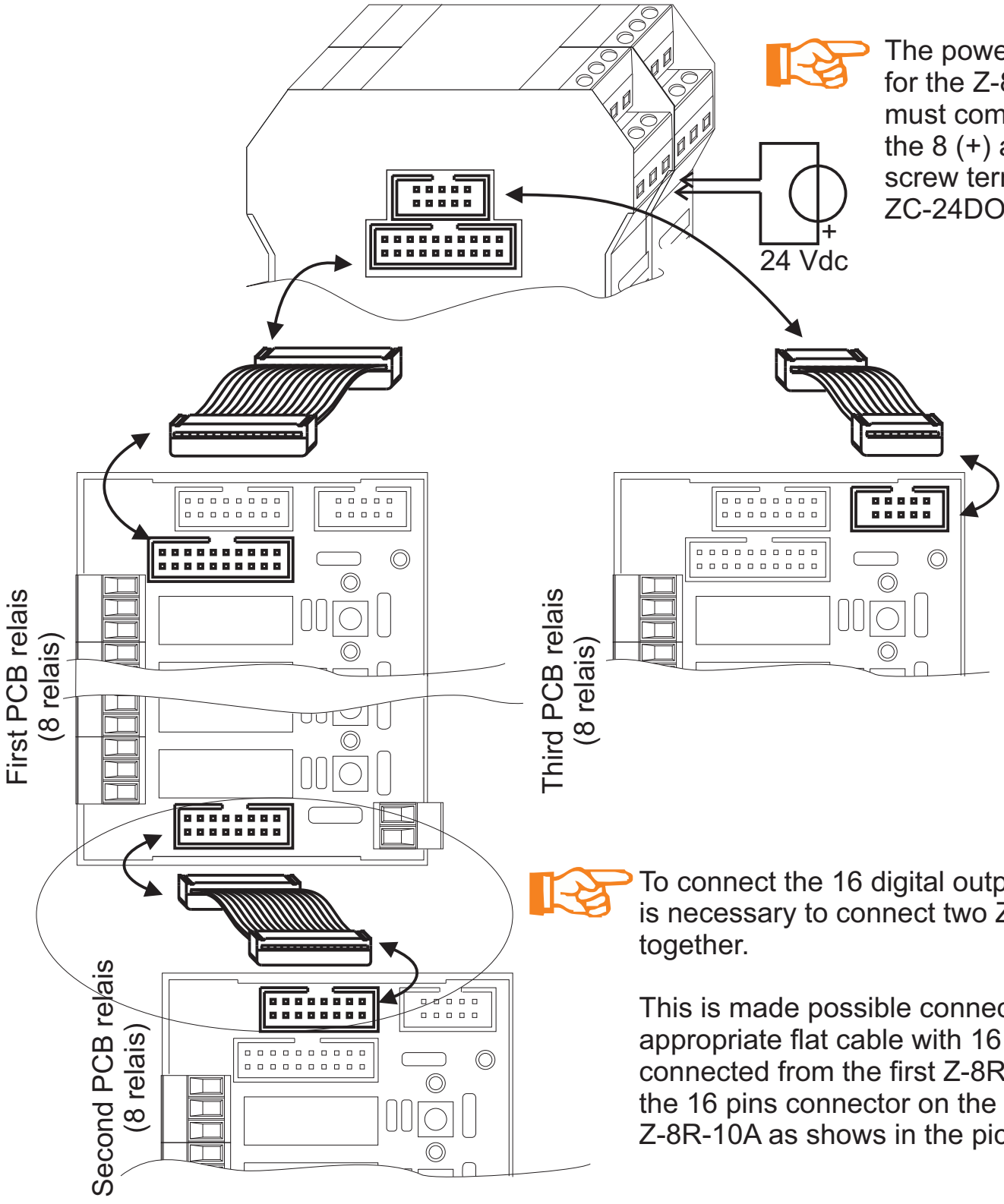
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In the following paragraphs you will learn how to connect a Seneca module to the Z-8R-10A.

### 5.4.1. Connection to ZC-24DO

To connect all 24 digital outputs will need to use 3 Z-8R-10A. The picture below shows how to connect the 24 digital outputs of ZC-24DO to the 3 Z-8R-10A with the flat cables. Read the note below to know how to connect two Z-8R-10A together.

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The power supply for the Z-8R-10A must come from the 8 (+) and 7(-) screw terminals of ZC-24DO.

To connect the 16 digital outputs is necessary to connect two Z-8R-10A together.

This is made possible connecting an appropriate flat cable with 16 pins connected from the first Z-8R-10A to the 16 pins connector on the second Z-8R-10A as shows in the picture.

### 5.4.2. Connection to ZC-16DI8DO

To connect 8 digital outputs of the ZC-16DI8DO, replicate the connection saw in the ZC-24DO in the third Z-8R-10A.

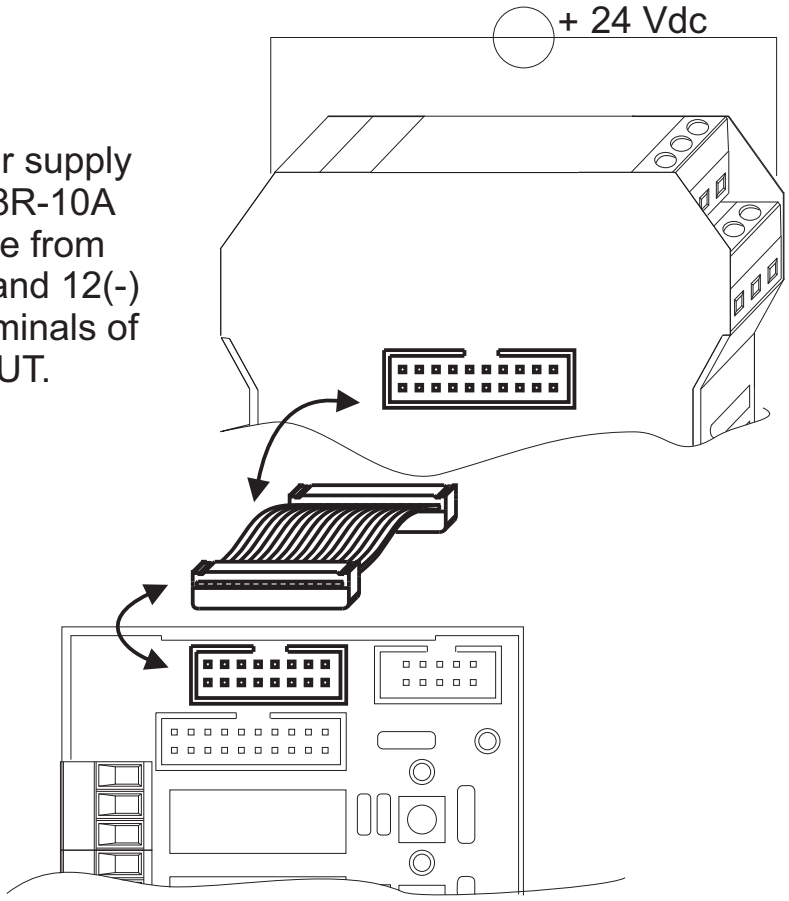


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## 5.4.3. Connection to Z-10-D-OUT

To connect the Z-10-D-OUT to the Z-8R-10A use the flat cable with 16 pins

The power supply for the Z-8R-10A must come from the 1 (+) and 12(-) screw terminals of Z-10-D-OUT.




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## 6.0 Correspondence between relays and Seneca digital outputs modules.

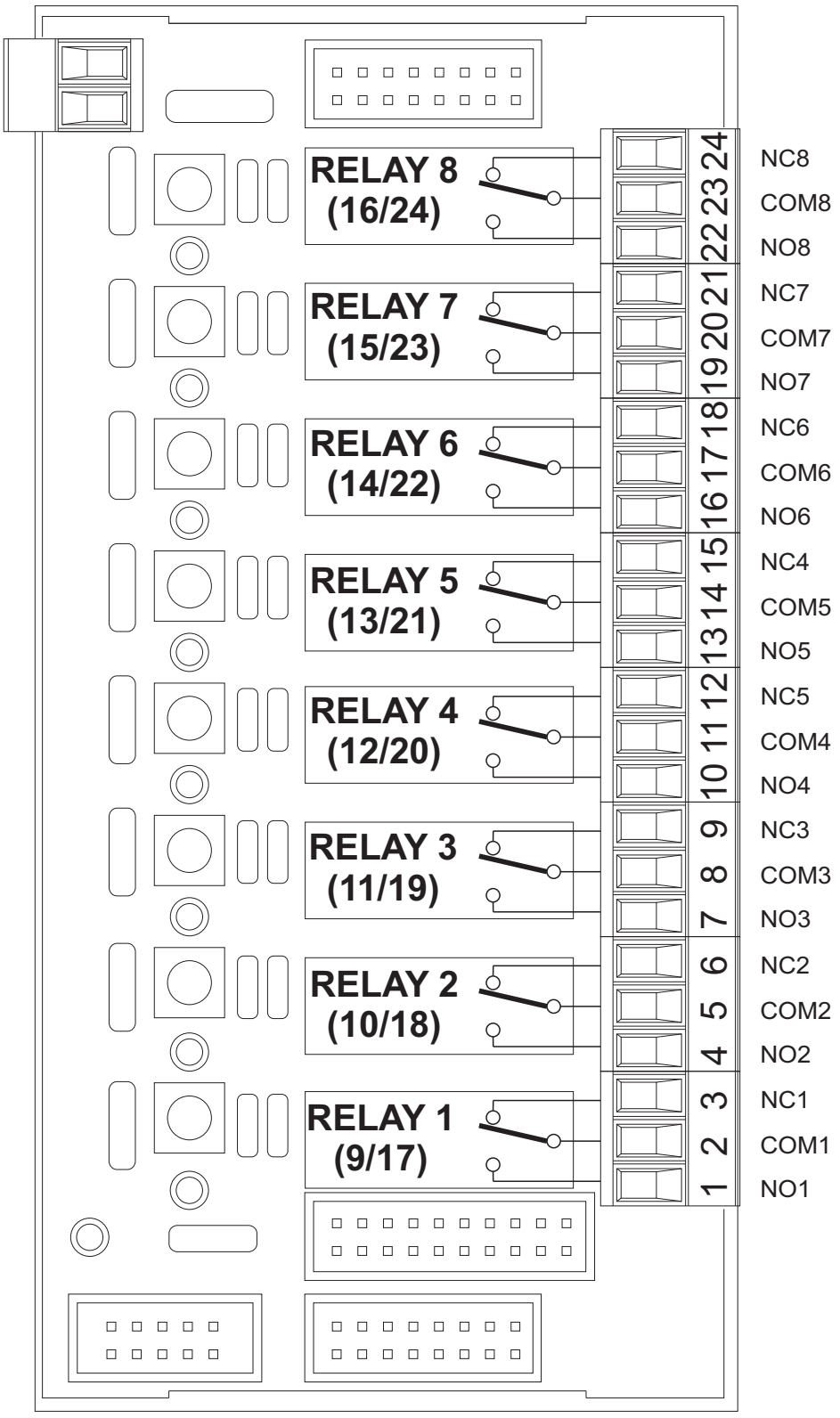
| Seneca's module | Digital Output | Board N° (Z-8R-10A) | Relays Correspondence |
|---|---|---|---|
| ZC-24DO | 1..8 | 1 | Relay1..8 |
| | 9..16 | 2 | Relay9..16 |
| | 16..24 | 3 | Relay17..24 |
| ZC-16DI8DO | 1..8 | 1 | Relay1..8 |
| Z-10-D-OUT | 1..8 | 1 | Relay1..8 |

The table above shown the correspondence between the relays on Z-8R-10A and the digital outputs came from Seneca's module.

The picture of Z-8R-10A in the following page shows the screw terminals and relays numbering.



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