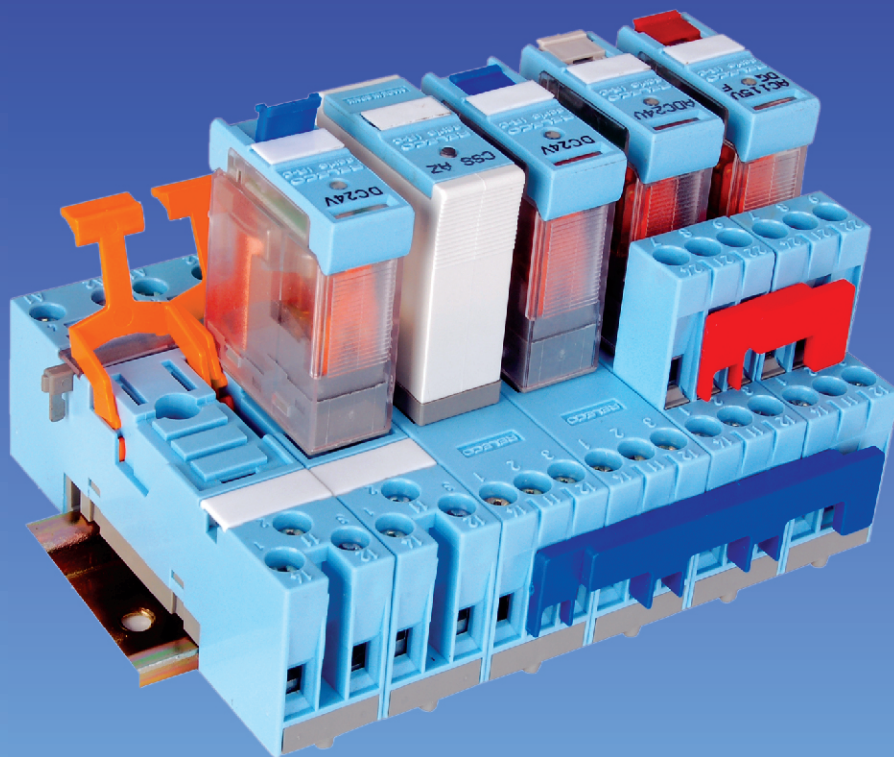


# RELECO PARAMOUNT

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## Catalogue Series IR-C



**DESIGN & FUNCTION**  
IN PERFECT HARMONY

# RELECO PARAMOUNT

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| Application                                      | Types    |                                       | Poles | AC Ratings | DC Ratings   | Page     |
|--|----------|---------------------------------------|-------|------------|--------------|----------|
| General Purpose Relays                           | C10-A10  | 5 Pin Miniature Faston 0.187 (4.75mm) | 1 CO  | 10A / 250V | 0.5 A / 110V | 1 / 1.3  |
|  | C10-G10  | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | 10A / 250V | 0.8 A / 110V | 1 / 1.4  |
|  | C14-A10E | 5 Pin Miniature Faston 0.187 (4.75mm) | 1 CO  | 10A / 250V | 0.5 A / 110V | 1 / 1.6  |
|  | C12 A21  | 8 Pin Miniature Faston 0.098 (2.5mm)  | 2 CO  | 5A / 250V  | 0.5 A / 110V | 1 / 1.8  |
|  | C12 G21  | 6 Pin Miniature Faston 0.098 (2.5mm)  | 2 NO  | 5A / 250V  | 0.8 A / 110V | 1 / 1.9  |
|  | C15-A21E | 8 Pin Miniature Faston 0.098 (2.5mm)  | 2 CO  | 5A / 250V  | 0.5 A / 110V | 1 / 1.10 |
| Twin Contact Relays for low current applications | C10 T13  | 5 Pin Miniature Faston 0.187 (4.75mm) | 1 CO  | 6A / 250V  | 0.5 A / 110V | 1 / 1.5  |
| Solid State Relays for Output application        | CSS AC   | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | 3A / 250V  | -            | 1 / 1.12 |
|  | CSS AZ   | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | 3A / 250V  | -            | 1 / 1.13 |
|  | CSS DCN  | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | -          | 2 A / 50V    | 1 / 1.14 |
|  | CSS DCP  | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | -          | 2 A / 50V    | 1 / 1.15 |
| Solid State Relays for Input application         | CSS DIP  | 4 Pin Miniature Faston 0.187 (4.75mm) | 1 NO  | -          | 100mA / 32V  | 1 / 1.16 |
|  | CSS DIN  | 4 Pin Miniature Faston 0.187 (4.75mm) | 2 NO  | -          | 100mA / 32V  | 1 / 1.17 |
| Din Rail Socket                                  | S10      |                                       | 1 CO  | 10A / 250V | -            | 1 / 1.18 |
|  | S10M     |                                       | 1 CO  | 16A / 250V | -            | 1 / 1.19 |
|  | S12      |                                       | 2 CO  | 5A / 250V  | -            | 1 / 1.20 |
| PCB Socket                                       | S10P     |                                       | 1 CO  | 10A / 250V | -            | 1 / 1.23 |
|  | S12P     |                                       | 2 CO  | 5A / 250V  | -            | 1 / 1.23 |

## Output Relay Module with 1 C/O Contact

4/8/16/32 Relay Modules Connection : Input / Output - Screw

4/8/16/32 Relay Modules Connection : Input / Output - Screw with Fuse & Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Screw with Fuse & Fuse Blow Indication & Jumper Selection for Wet and Dry Contacts

4/8/16/32 Relay Modules Connection : Input / Output - Detachable Screw Connector

4/8/16/32 Relay Modules Connection : Input / Output - Detachable Screw Connector with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Detachable Screw Connector with Fuse and Fuse Blow Indication & Jumper Selection for Wet and Dry Contacts

4/8/16/32 Relay Modules Connection : Input / Output - Cage Clamp

4/8/16/32 Relay Modules Connection : Input / Output - Cage Clamp with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Cage Clamp with Fuse and Fuse Blow Indication & Jumper Selection for Wet and Dry Contacts

4/8/16/32 Relay Modules Connection : Input / Output - D-Sub Connector

## Contents

Page No.

4/8/16/32 Relay Modules Connection : Input / Output - D-Sub Connector with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - D-Sub Connector with Fuse and Fuse Blow indication & Jumper Selection for Wet and Dry Contacts

4/8/16/32 Relay Modules Connection : Input / Output - Flat Ribbon Cable Connector

4/8/16/32 Relay Modules Connection : Input / Output - Flat Ribbon Cable Connector with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Flat Ribbon Cable Connector with Fuse and Fuse Blow Indication & Jumper Selection for Wet and Dry Contacts

### Output Relay Module with 2 C/O Contact

4/8/16/32 Relay Modules Connection : Input / Output - Screw

4/8/16/32 Relay Modules Connection : Input / Output - Detachable Screw Connector

4/8/16/32 Relay Modules Connection : Input / Output - Cage Clamp

4/8/16/32 Relay Modules Connection : Input / Output - D-Sub Connector

4/8/16/32 Relay Modules Connection : Input / Output - Flat Ribbon Cable Connector

### Input Relay Module with 1 N/O Contact

4/8/16/32 Relay Modules Connection : Input / Output - Screw with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Detachable Screw Connector with Fuse and Fuse Blow Indication

4/8/16/32 Relay Modules Connection : Input / Output - Cage Clamp with Fuse and Fuse Blow Indication.

**Ordering Information**

**C 1 0 - A 1 0    F X / AC230**

**Model Series Coil Voltage**

- C10** - Miniature Faston 0.187 (4.75mm)
- C12** - Miniature Faston 0.098 (2.50mm)

**Type**

- A** - Standard Change Over Contacts
- T** - Twin Contact (Bifurcated)
- G** - Open Contact

**Number of Contacts**

**Contact Materials**

- 0** - Standard
- 1** - Gold Flashed 0.2 μ Au for Twin Contact & C12 Relays
- 2** - Gold Plated 10 μ Au for Twin Contact Only
- 3** - Gold Plated 3 μ Au for Twin Contact Only

**Coil Voltage**

- DC** - 5, 12, 24, 48, 110
- AC** - 115, 230
- AC/DC** - 24, 48

**Additions to the coil**

- X** - LED (Not for latching)
- F** - Polarity & Free Wheeling Diodes (DC only)
- B** - Rectifying Bridge for AC / DC relays  
For 24 to 48V AC & DC Relays
- R** - RC Suppressor (No LED) for AC Coils

**Special Executions**

- E** - Cover for Flange Panel Mounting

### General Information

#### A Change-Over Contacts

General application

0.5A @ 110V DC                      0.2A @ 220V DC  
 Gap: 0.5 mm                      Isolation between contacts : 1000 V

#### G Open Contacts

DC application

0.8A @ 110V DC                      0.4A @ 220V DC  
 Gap: 1 mm                      Isolation between contacts : 2000 V

#### T Bifurcated contacts. Gold plated 3μ Au

Low Level applications                      PLC's input

1mA @ 5V DC    0.5 A @ 110VDC    0.4A @ 220V DC  
 Gap: 0.5 mm                      Isolation between contacts : 1000 V

### Contacts

Either a long storing or polluted ambient may cause some surface oxidation of silver contacts or its alloys, by creating a thin non-conducting surface film which may cause switching malfunction in low current and voltages. To prevent that oxidation, using of gold-plated contacts is recommended.

T Series relays standard contacts are gold-plated with 3μ Au and ideal for low current and signal input to PLC's

### Standard Versions

Available standard types and all possible options are shown in pages reading technical specification of each model.

Other types made according to customer specifications can be supplied, as special, and marked as RF N°....

### Protection against back EMF

When a relay coil is disconnected, reverse voltage peaks may arise and reach very high values. Said peaks can transmit to the coil associated line and other relays or semiconductors can be affected.

If triac, transistor etc, controls a relay, appropriate steps must be taken to avoid or reduce back EMF to a safe level.

Both Polarity and Free-Wheeling Diodes (FX), must be used to protect coils, to avoid malfunctions of DC coil relays when used with battery or DC supply.

Making or breaking motor, transformers or contactors in an industrial environment, may generate high voltage spikes, either isolated or burst, through the main line. The voltage level of those spikes may be high enough to affect the isolation of the coil.

### Specifications

Each relay specific data, refer to typical values and are measured at 20° C.

Electrical Life and Max. Load on DC tables show the typical performance reached at an ambient temperature of 20° C and a frequency of 1,200 ops/hour

### Ambient Temperature

Max. ambient temperature is -40° C ..... +70° C, without ice, for a single relay. On close cabinets with several relays in battery inside, ambient temperature may exceed 70° C.

Sockets S10-M and S12, mounted aside, assures a free space between relays for heat dissipation.

But it could be necessary an adequate ventilation inside the cabinet.

### Min. Pull-in Voltage

It is the minimum voltage that has to be applied to the coil, so the NO contacts close and the relay acts without vibration.

Given value of 0.8 x UN ensures the relay works at a temperature of 20° C

AC and DC relays pull-in voltages ≤ 0.8 x UN  
 Pull-in voltage increases with coil temperature

### Max. drop-out voltage

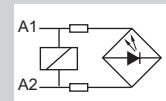
It is the voltage, higher than zero, at which the relay opens and the NC contacts close.

DC relays drop-out voltage 0.10 x UN  
 AC relays drop-out voltage 0.35 x UN

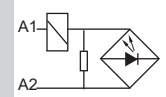
Drop-out time of relays with DC coil increases if free wheeling diode connected in parallel with the coil.

### LED and protection circuit connected to coil

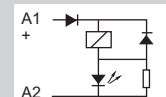
**X** LED with no polarity(standard)  
 Coils ≤ 12V... DC / AC  
 LED rectifier bridge in parallel



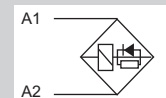
**X** LED with no polarity(standard)  
 Coils ≥ 12V... DC / AC  
 LED rectifier bridge in series



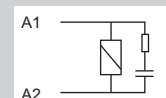
**FX** LED with polarity **A1+** (option)  
 Every DC coil voltage  
 Polarity and free wheeling diodes



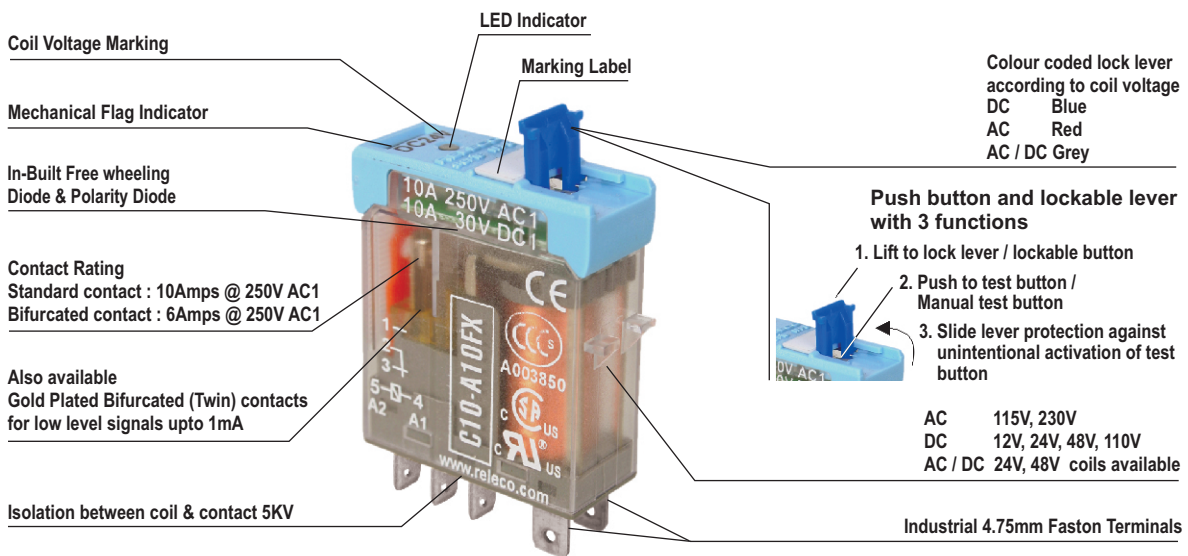
**BX** LED with no polarity (option)  
 Only 24V and 48V AC / DC coils  
 Rectifier bridge for AC / DC relays



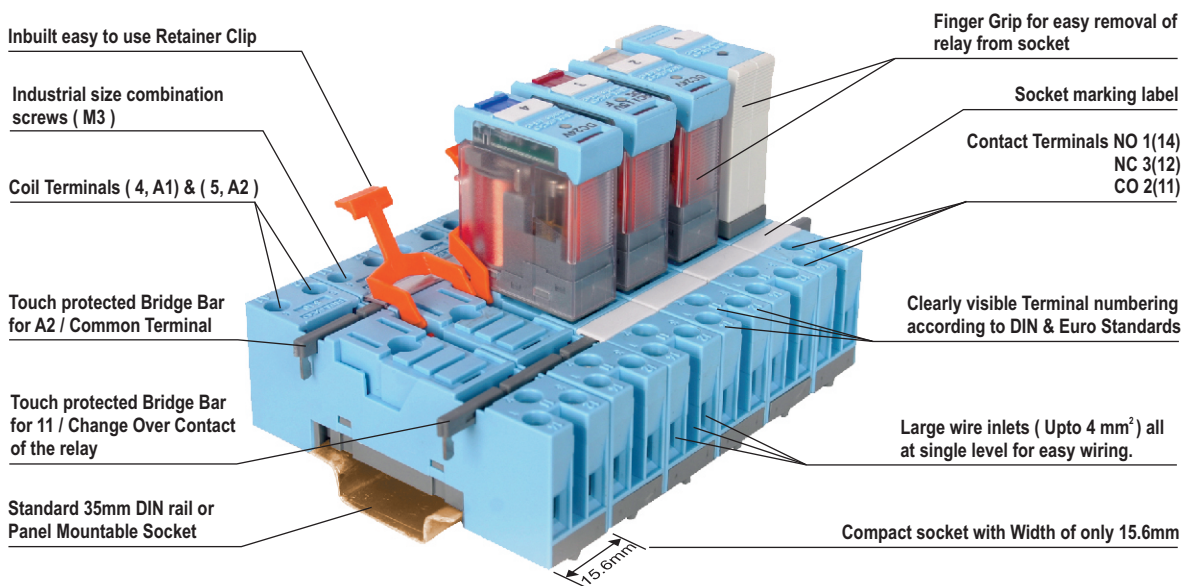
**R** LED not available (option)  
 All DC coil voltage  
 RC protection against pulses on AC



# Benefits of the new



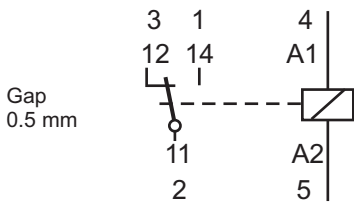
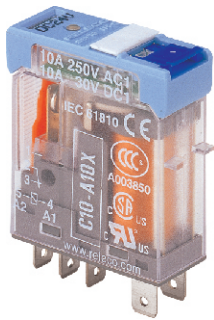
**C10 is a Single Pole full Featured Industrial Plugin Relay with all the In-Built Mechanical and Electronic features which are absolute must for Input / Output PLC applications.**



**S10 is a Single Pole Single Level Touch protected Interface Socket with Input / Output configuration Coil Terminals ( A1 & A2 ) on one side and Contact Terminals ( NO, NC, CO ) on the opposite side.**

1

1.3



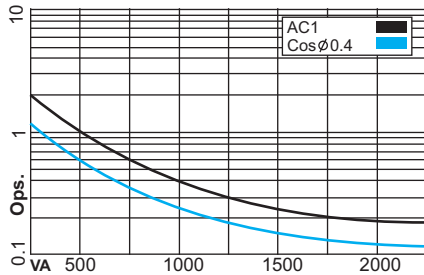
# C10-A10

One Pole, Change-Over Contact  
 10A 250V AC1 0.5A 110V DC1  
 10A 30V DC1 0.2A 220V DC1

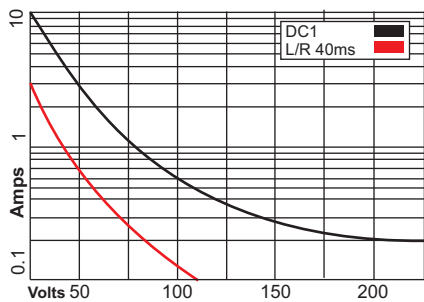
## Contacts

|                                   |               |
|-----------------------------------|---------------|
| Materials: Standard, code 0       | AgNi          |
| Optional, code 2                  | AgNi + 10µ Au |
| Max. switching current            | 10 A          |
| Max. Peak inrush current (20 ms.) | 30 A          |
| Max. Switching voltage            | 250 V         |
| Max. AC load (Table 1)            | 2.5 KVA       |
| Max. DC load                      | See Table 2   |

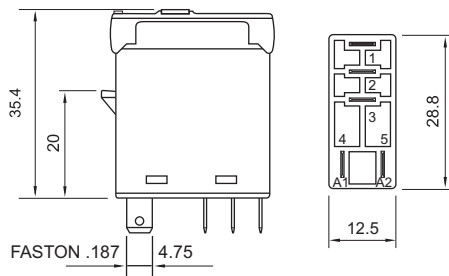
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



## Dimensions in mm.



Coils (Voltage ± 10% @ 20°C) ≤ 0.8 x Un  
 Drop-out voltage ≥ 0.1 x Un  
 Nominal Coil Power 1.1 VA (AC) / 0.7 W (DC)

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1200   | 23.0 | 24  | 742    | 32.0 |
| 115 | 7,300  | 9.5  | 48  | 3,500  | 13.7 |
| 230 | 28,800 | 4.7  | 110 | 19,900 | 5.5  |

## Insulation

|                                 |          |
|---------------------------------|----------|
| Dielectric strength (1 minute): |          |
| Open contacts                   | 1000 V   |
| Between Contacts & Coil         | 5 KV     |
| Insulation resistance at 500VDC | >3GΩ     |
| Isolation, IEC 61810-5:         | 4 KV / 3 |

## Specifications

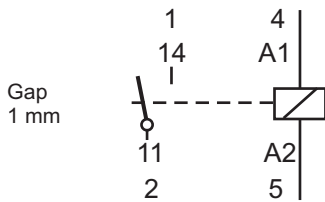
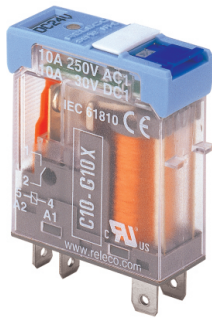
|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                              |
| Release Time + Bounce Time          | 8 ms.                               |
| Ambient Temperature                 | -40°C (no ice)... +70°C             |
| Mechanical life ops.                | 10 Million AC, 20 Million DC relays |
| Electrical life at nominal load     | > 100,000 ops.                      |
| Operating frequency at nominal load | 1,200 / hour                        |
| Protection Grade                    | IP40 / RT1                          |
| Weight Approx.                      | 21 gr.                              |

## Standard types

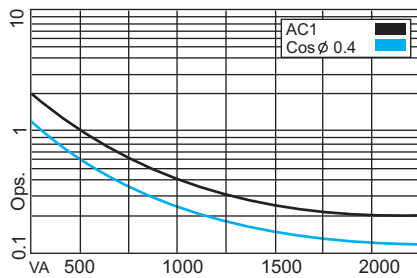
|   |          |
|---|----------|
| C10-A10   | .... VAC |
| C10-A10X  | .... VAC |
| C10-A10R  | .... VAC |
| AC 50 Hz, (60 Hz): 24, 48, 115, (120), 230, (240) |          |
| DC 12, 24, 48, 110                                |          |
| X = LED   |          |
| RC = LED Resistor                                 |          |
| F = Polarity & Free-Wheeling Diodes               |          |
| B = AC/DC Bridge Rectifier (24 or 48V)            |          |
| C10-A10   | .... VDC |
| C10-A10X  | .... VDC |
| C10-A10FX   | .... VDC |
| C10-A10BX   | .... VDC |

Note: White Marking Label, Mechanical Flag Indicator, Lockable Button and Manual Push Button are Standard Features

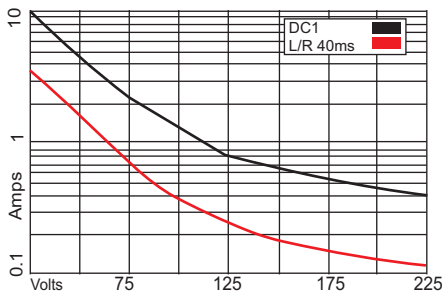




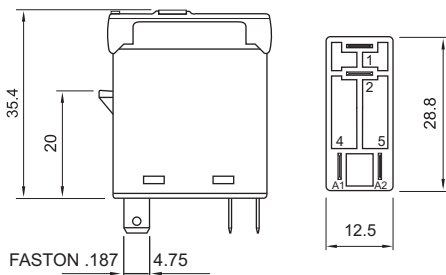
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



**Dimensions** in mm.



# C10-G10

One Pole, Open Contact

10A 250V AC 1 0.8A 110V DC 1  
10A 30V DC 1 0.4A 220V DC 1

1  
1.4

## Contacts

|                                   |              |
|-----------------------------------|--------------|
| Materials: Standard, code 0       | AgNi         |
| Optional, code 2                  | AgNi + 10μAu |
| Max. Switching current            | 10 A         |
| Max. Peak inrush current (20 ms.) | 30 A         |
| Max. Switching voltage            | 250 V        |
| Max. AC load (Table 1)            | 2.5 KVA      |
| Max. DC load                      | See Table 2  |

## Coils (Ohms ± 10% @ 20°C)

|                    |                          |
|--------------------|--------------------------|
| Pull-in voltage    | ≤ 0.8 x <b>Un</b>        |
| Drop-out voltage   | ≥ 0.1 x <b>Un</b>        |
| Nominal coil power | 1.1 VA (AC) / 0.7 W (DC) |

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1,200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7,300  | 9.5  | 48  | 3,500  | 13.7 |
| 230 | 28,800 | 4.7  | 110 | 19,900 | 5.5  |

## Insulation

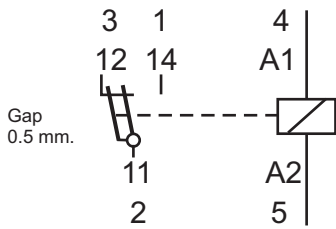
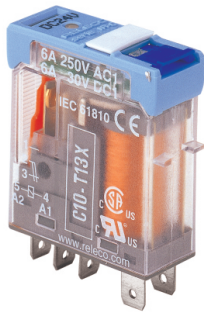
|                                 |          |
|---------------------------------|----------|
| Dielectric strength (1 minute): |          |
| Open contacts                   | 2,000 V  |
| Between contacts & coil         | 5 KV     |
| Insulation resistance at 500VDC | >3GΩ     |
| Isolation, IEC 61810-5:         | 4 KV / 3 |

- Operate Time + Bounce Time
- Release Time + Bounce Time
- Ambient Temperature
- Mechanical life ops.
- Electrical life at nominal load
- Specifications** at nominal load
- Protection degree
- Weight Approx.

## Standard types

|   |  |
|---|--|
| 10 ms.  |  |
| 8 ms.   |  |
| -40°C (no ice)... +70°C                           |  |
| 10 Million AC, 20 Million DC relays               |  |
| C10-G10 100,000 ops. VAC                          |  |
| C10-G10X 1,200 Hour VAC                           |  |
| C10-G10R 1,200 Hour VAC                           |  |
| IP40 RFI  |  |
| 21 grs.   |  |
| AC 50 Hz, (60 Hz): 24, 48, 115, (120), 230, (240) |  |
| DC 12, 24, 48, 110                                |  |
| X = LED   |  |
| RC suppressor                                     |  |
| F = LED no polarity                               |  |
| F = Polarity & Free-Wheeling Diodes               |  |
| B = AC/DC Bridge Rectifier (24 or 48V)            |  |
| C10-G10 .... VDC                                  |  |
| C10-G10X .... VDC                                 |  |
| C10-G10R .... VDC                                 |  |
| C10-G10BX .... VDC                                |  |

Note: White Marking Label, Mechanical Flag Indicator, Push Button and Manual Push Button are Standard Features



# C10-T13

One Pole, Change-Over Twin Contact

**6A 250V AC 1 0.5A 110V DC 1**  
**6A 30V DC 1 0.2A 220V DC 1**

### Contacts

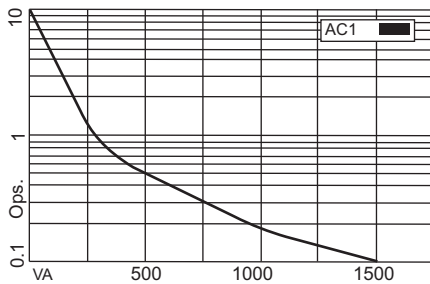
|                                   |                |
|-----------------------------------|----------------|
| Materials: Standard, code 1       | AgNi + 0.3μ Au |
| Optional, code 2                  | AgNi + 10μ Au  |
| Max. Switching current            | 6 A            |
| Max. Peak inrush current (20 ms.) | 15 A           |
| Max. Switching voltage            | 250 V          |
| Max. AC load (Table 1)            | 1.5 KVA        |
| Max. DC load                      | See Table 2    |

### Coils (Ohms ± 10% @ 20°C)

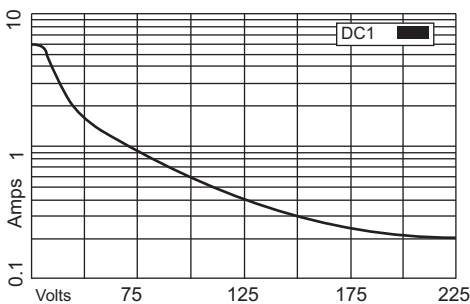
|                    |                          |
|--------------------|--------------------------|
| Pull-in voltage    | ≤ 0.8 x Un               |
| Drop-out voltage   | ≥ 0.1 x Un               |
| Nominal coil power | 1.1 VA (AC) / 0.7 W (DC) |

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1.200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7.300  | 9.5  | 48  | 3.500  | 13.7 |
| 230 | 28.800 | 4.7  | 110 | 19.900 | 5.5  |

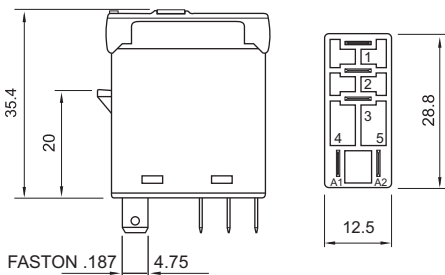
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



### Dimensions in mm.



### Insulation

|                                 |          |
|---------------------------------|----------|
| Dielectric strength (1 minute): |          |
| Open contacts                   | 1000 V   |
| Between contacts & coil         | 5 KV     |
| Insulation resistance at 500VDC | >3GΩ     |
| Isolation, IEC 61810-5 :        | 4 KV / 3 |

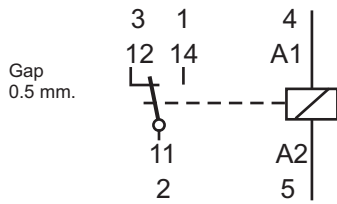
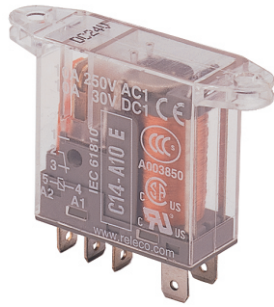
### Specifications

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                                |
| Release Time + Bounce Time          | 8 ms.                                 |
| Ambient Temperature                 | -40°C (no ice)... +70°C               |
| Mechanical life ops.                | 10 Million. AC, 20 Million. DC relays |
| Electrical life at nominal load     | >100,000 ops.                         |
| Operating frequency at nominal load | 1,200 / hour                          |
| Protection degree                   | IP40 / RT1                            |
| Weight Approx.                      | 21 gr.                                |

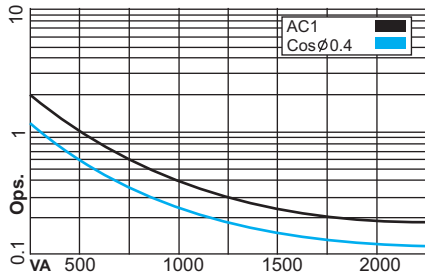
### Standard types

|  |                                |          |          |
|--|--------------------------------|----------|----------|
|  | C10-T13                        | .... VAC |          |
|  | C10-T13X                       | .... VAC |          |
| AC 50 Hz, (60 Hz):                     | 24, 48, 115, (120), 230, (240) | C10-T13R | .... VAC |
| DC                                     | 12, 24, 48, 110                |          |          |
| X = LED                                |                                |          |          |
| RC suppressor                          |                                |          |          |
| F = LED no polarity                    |                                |          |          |
| F = Polarity & Free-Wheeling Diodes    |                                |          |          |
| B = AC/DC Bridge Rectifier (24 or 48V) |                                |          |          |
|  | C10-T13                        | .... VDC |          |
|  | C10-T13X                       | .... VDC |          |
|  | C10-T13FX                      | .... VDC |          |
|  | C10-T13BX                      | .... VDC |          |

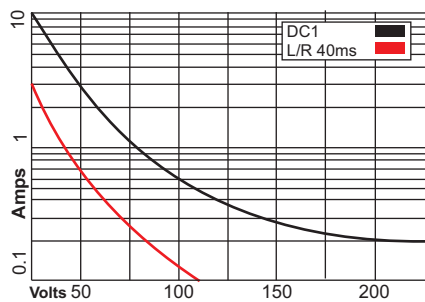
**Note:** White Marking Label, Mechanical Flag Indicator, Lockable Button and Manual Push Button are Standard Features



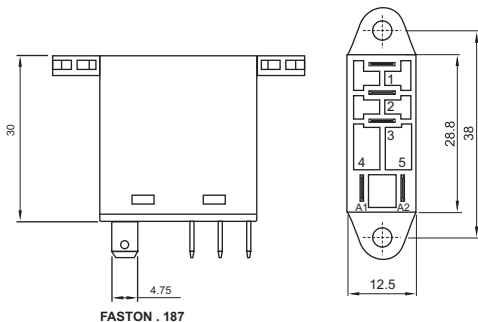
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



**Dimensions** mm.



FASTON . 187

# C10-A10E

One pole, change-over contact  
 10A 250V AC 1 0.5A 110V DC 1  
 10A 30V DC 1 0.2A 220V DC 1

1  
1.6

## Contacts

|                                   |               |
|-----------------------------------|---------------|
| Materials: Standard, code 0       | AgNi          |
| Optional, code 2                  | AgNi + 10μ Au |
| Max. switching current            | 10 A          |
| Max. Peak inrush current (20 ms.) | 30 A          |
| Max. Switching voltage            | 250 V         |
| Max. AC load (Table 1)            | 2.5 KVA       |
| Max. DC load                      | See Table 2   |

Coils (On resistance ± 10% @ 20°C) ≤ 0.8 x Un  
 Drop-out voltage ≥ 0.1 x Un  
 Nominal coil power 1.1 VA (AC) / 0.7 W (DC)

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1.200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7.300  | 9.5  | 48  | 3.500  | 13.7 |
| 230 | 28.800 | 4.7  | 110 | 19.900 | 5.5  |

## Insulation

|                                 |          |
|---------------------------------|----------|
| Dielectric strength (1 minute): |          |
| Open contacts                   | 1000 V   |
| Between contacts & coil         | 5 KV     |
| Insulation resistance at 500VDC | >3GΩ     |
| Isolation, IEC 61810-5:         | 4 KV / 3 |

## Specifications

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                              |
| Release Time + Bounce Time          | 8 ms.                               |
| Ambient Temperature                 | -40°C (no ice)... +70°C             |
| Mechanical life ops.                | 10 Million AC, 20 Million DC relays |
| Electrical life at nominal load     | > 100,000 ops.                      |
| Operating frequency at nominal load | 1,200 / hour                        |
| Protection degree                   | IP40 / RT1                          |
| Weight Approx.                      | 21 gr.                              |

## Standard types

AC 50 Hz, (60 Hz): 24, 48, 115, (120), 230, (240)

DC 12, 24, 48, 110

C10-A10E .... VAC

C14-A10E .... VDC

**Note:** C14A10E relays do not have - White Marking Label, Mechanical Flag Indicator, Lockable Button, Manual Push Button, LED, Free Wheeling & Polarity Diode and RC circuit.

# Benefits of the new



1  
1.7

**Coil Voltage Marking**

**Mechanical Flag Indicator**

**In-Built Free wheeling Diode & Polarity Diode**

**Contact Rating**  
Standard contact : 5Amps @ 250V AC1

**Contact Type: 2 Change Over Contact**

**Isolation between coil & contact 5KV**

**LED Indicator**

**Marking Label**

**Colour coded lock lever according to coil voltage**  
DC Blue  
AC Red  
AC / DC Grey

**Push button and lockable lever with 3 functions**

1. Lift to lock lever / lockable button
2. Push to test button / Manual test button
3. Slide lever protection against unintentional activation of test button

|                                  |                     |
|----------------------------------|---------------------|
| AC                               | 115V, 230V          |
| DC                               | 12V, 24V, 48V, 110V |
| AC / DC 24V, 48V coils available |                     |

**Industrial 2.5mm Faston Terminals**

**C12 is a Two Pole full Featured Industrial Plugin Relay with all the In-Built Mechanical and Electronic features which are absolute must for Input / Output PLC applications.**

**Inbuilt easy to use Retainer Clip**

**Industrial size combination screws ( M3 )**

**Socket marking label**

**Socket Part No. S10M for C10 & CSS relays**

**Standard 35mm DIN rail or Panel Mountable Socket**

**Finger Grip for easy removal of relay from socket**

**Socket Part No. S12M for C12 relays**

**Touch protected bridge bar (V10) for Contact Terminals**

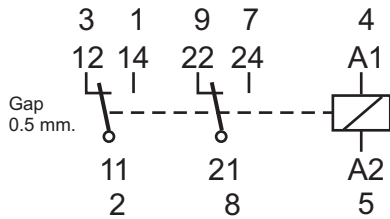
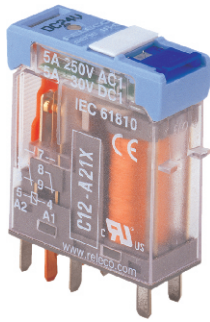
**Clearly visible Terminal numbering according to DIN & Euro Standards**

**Touch protected Bridge Bar (V40) for Contact Terminals**

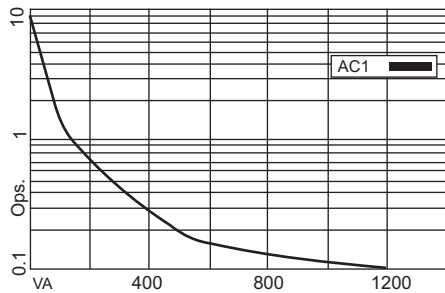
**Large wire inlets ( Upto 4sq mm ) all at single level for easy wiring.**

**Socket with Width of 16.9mm**

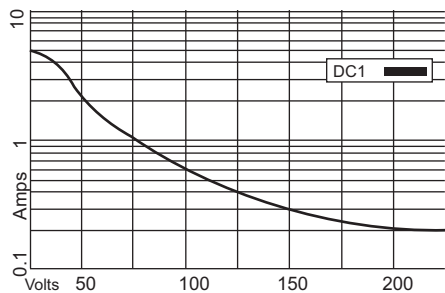
**S12 is a Two Pole Double Level Touch protected Interface Socket with Input / Output configuration Coil Terminals ( A1 & A2 ) on one side and Contact Terminals ( NO, NC, CO ) on the opposite side.**



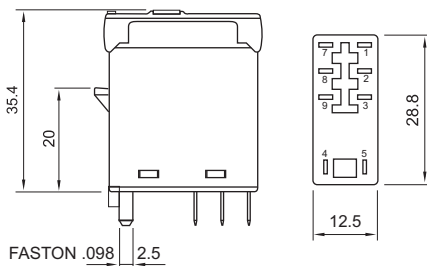
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



**Dimensions** in mm.



# C12-A21

Two Poles, Change-Over Contact

**5A 250V AC 1    0.5A 110V DC 1**  
**5A 30V DC 1    0.2A 220V DC 1**

**1**  
1.8

## Contacts

|                                   |                |
|-----------------------------------|----------------|
| Materials: Standard, code 1       | AgNi + 0.3μ Au |
| Optional, code 2                  | AgNi + 10μ Au  |
| Max. switching current            | 5 A            |
| Max. Peak inrush current (20 ms.) | 15 A           |
| Max. Switching voltage            | 250 V          |
| Max. AC load (Table 1)            | 1.2 KVA        |
| Max. DC load                      | See Table 2    |

## Coils (Ohms ± 10% @ 20°C)

|                    |                          |
|--------------------|--------------------------|
| Pull-in voltage    | ≤ 0.8 x Un               |
| Drop-out voltage   | ≥ 0.1 x Un               |
| Nominal coil power | 1.1 VA (AC) / 0.7 W (DC) |

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1.200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7.300  | 9.5  | 48  | 3.500  | 13.7 |
| 230 | 28.800 | 4.7  | 110 | 19.900 | 5.5  |

|                                 |                         |          |
|---------------------------------|-------------------------|----------|
| Dielectric strength (1 minute): | Open contacts           | 1.000 V  |
| Insulation                      | Between adjacent poles  | 3.000 V  |
|                                 | Between contacts & coil | 5 KV     |
| Insulation resistance at 500VDC |                         | > 3GΩ    |
| Isolation, IEC 61810-5 :        |                         | 4 KV / 3 |

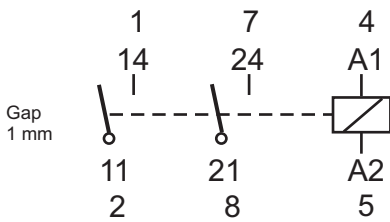
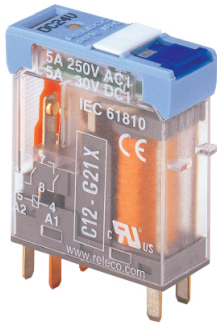
## Specifications

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                              |
| Release Time + Bounce Time          | 8 ms.                               |
| Ambient Temperature                 | -40°C (no ice)... +70°C             |
| Mechanical life ops.                | 10 Million AC, 20 Million DC relays |
| Electrical life at nominal load     | > 100,000 ops.                      |
| Operating frequency at nominal load | 1,200 / hour                        |
| Protection degree                   | IP40 / RT1                          |
| Weight Approx.                      | 21 grs.                             |

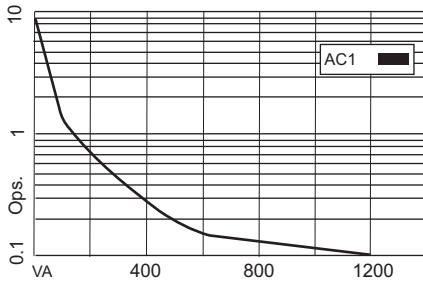
## Standard types

|  |                                |                   |
|--|--------------------------------|-------------------|
|  | C12-A21                        | .... VAC          |
|  | C12-A21X                       | .... VAC          |
| AC 50 Hz, (60 Hz):                     | 24, 48, 115, (120), 230, (240) | C12-A21R .... VAC |
| DC                                     | 12, 24, 48, 110                |                   |
| X = LED                                |                                |                   |
| RC suppressor                          |                                |                   |
| X = LED no polarity                    |                                |                   |
| F = Polarity & Free-Wheeling Diodes    |                                |                   |
| B = AC/DC Bridge Rectifier (24 or 48V) |                                |                   |
|  | C12-A21                        | .... VDC          |
|  | C12-A21X                       | .... VDC          |
|  | C12-A21R                       | .... VDC          |
|  | C12-A21BX                      | .... VDC          |

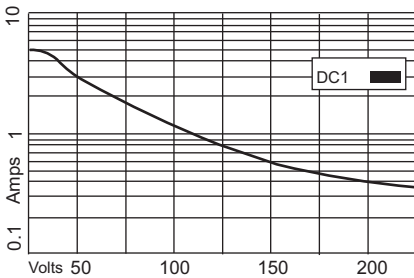
**Note:** White Marking Label, Mechanical Flag Indicator, Lockable Button and Manual Push Button are Standard Features



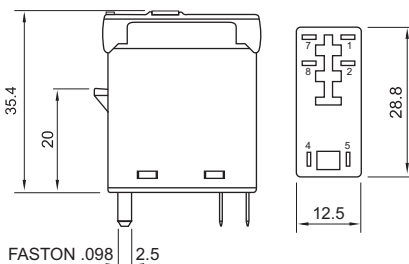
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



**Dimensions** in mm.



# C12-G21X

Two poles, open contact

5A 250V AC 1    0.8A 110V DC1  
5A 30V DC 1    0.4A 220V DC1

**Contacts**

|                                   |                |
|-----------------------------------|----------------|
| Materials: Standard, code 1       | AgNi + 0.3μ Au |
| Optional, code 2                  | AgNi + 10μ Au  |
| Max. switching current            | 5 A            |
| Max. Peak inrush current (20 ms.) | 15 A           |
| Max. Switching voltage            | 250 V          |
| Max. AC load (Table 1)            | 1.2 KVA        |
| Max. DC load                      | See Table 2    |

**Coils** (Ohms ± 10% @ 20°C)

|                    |                          |
|--------------------|--------------------------|
| Pull-in voltage    | ≤ 0.8 x Un               |
| Drop-out voltage   | ≥ 0.1 x Un               |
| Nominal coil power | 1.1 VA (AC) / 0.7 W (DC) |

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1.200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7.300  | 9.5  | 48  | 3.500  | 13.7 |
| 230 | 28.800 | 4.7  | 110 | 19.900 | 5.5  |

|                                   |          |
|-----------------------------------|----------|
| Dielectric strength (1 minute):   | 2.000 V  |
| Insulation between adjacent poles | 3.000 V  |
| Between contacts & coil           | 5 KV     |
| Insulation resistance at 500VDC   | > 3GΩ    |
| Isolation, IEC 61810-5 :          | 4 KV / 3 |

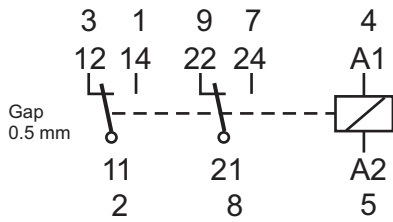
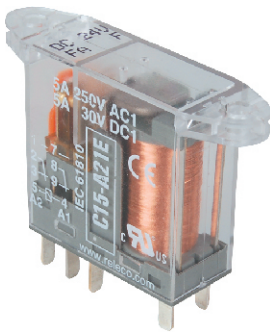
**Specifications**

|                                     |                                     |
|-------------------------------------|-------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                              |
| Release Time + Bounce Time          | 8 ms.                               |
| Ambient Temperature                 | -40°C (no ice)... +70°C             |
| Mechanical life ops.                | 10 Million AC, 20 Million DC relays |
| Electrical life at nominal load     | > 100,000 ops.                      |
| Operating frequency at nominal load | 1,200 / hour                        |
| Protection degree                   | IP40 / RT1                          |
| Weight Approx.                      | 21 gr.                              |

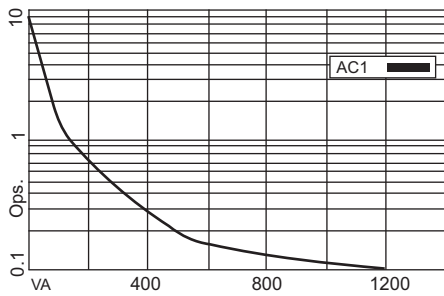
**Standard types**

|   |               |
|---|---------------|
| C12-G21   | .... VAC      |
| C12-G21X  | .... VAC      |
| C12-G21R  | .... VAC      |
| AC 50 Hz, (60 Hz): 24, 48, 115, (120), 230, (240) |               |
| DC 12, 24, 48, 110                                |               |
| X = LED   |               |
| RC suppressor                                     | C12-G21       |
| X = LED no polarity                               | C12-G21X      |
| F = Polarity & Free-Wheeling Diodes               | C12-G21FX     |
| B = AC/DC Bridge Rectifier (24 or 48V)            | C12-G21BX.... |
|   | .... VDC      |
|   | .... VDC      |
|   | .... VDC      |

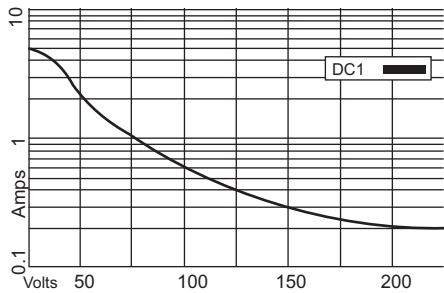
**Note:** White Marking Label, Mechanical Flag Indicator, Lockable Button and Manual Push Button are Standard Features



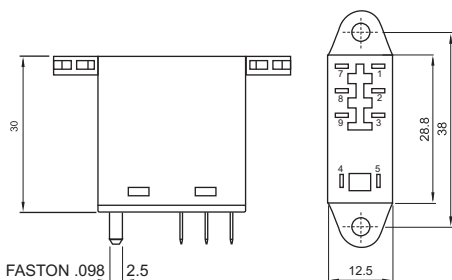
**Table 1** Electrical life, ops x 10<sup>6</sup>



**Table 2** Max. DC load



**Dimensions** in mm.



# C12-A21E

One pole, change-over contact  
 10A 250V AC 1 0.5A 110V DC1  
 10A 30V DC 1 0.2A 220V DC1

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1.10

**Contacts**

|                                   |               |
|-----------------------------------|---------------|
| Materials: Standard, code 0       | AgNi          |
| Optional, code 2                  | AgNi + 10µ Au |
| Max. switching current            | 10 A          |
| Max. Peak inrush current (20 ms.) | 30 A          |
| Max. Switching voltage            | 250 V         |
| Max. AC load (Table 1)            | 2.5 KVA       |
| Max. DC load                      | See Table 2   |

|                           |                          |
|---------------------------|--------------------------|
| Full in voltage           | 0.8 x Un                 |
| Coils (Ohms ± 10% @ 20°C) | 0.1 x Un                 |
| Drop-out voltage          |                          |
| Nominal coil power        | 1.1 VA (AC) / 0.7 W (DC) |

| VAC | Ω      | mA   | VDC | Ω      | mA   |
|-----|--------|------|-----|--------|------|
| 24  | 290    | 45.0 | 12  | 224    | 53.0 |
| 48  | 1.200  | 23.0 | 24  | 742    | 32.0 |
| 115 | 7.300  | 9.5  | 48  | 3.500  | 13.7 |
| 230 | 28.800 | 4.7  | 110 | 19.900 | 5.5  |

**Insulation**

|                                 |          |
|---------------------------------|----------|
| Dielectric strength (1 minute): |          |
| Open contacts                   | 1000 V   |
| Between contacts & coil         | 5 KV     |
| Insulation resistance at 500VDC | >3GΩ     |
| Isolation, IEC 61810-5:         | 4 KV / 3 |

**Specifications**

|                                     |                                       |
|-------------------------------------|---------------------------------------|
| Operate Time + Bounce Time          | 10 ms.                                |
| Release Time + Bounce Time          | 8 ms.                                 |
| Ambient Temperature                 | -40°C (no ice)... +70°C               |
| Mechanical life ops.                | 10 Million. AC, 20 Million. DC relays |
| Electrical life at nominal load     | > 100,000 ops.                        |
| Operating frequency at nominal load | 1,200 / hour                          |
| Protection degree                   | IP40 / RT1                            |
| Weight Approx.                      | 21 gr.                                |

**Standard types**

**AC 50 Hz, (60 Hz): 24, 48, 115, (120), 230, (240)**  
**C12-A21E .... VAC**

**DC 12, 24, 48, 110**  
**C12-A21E .... VDC**

**Note:** C15-A21E relays do not have - White Marking Label, Mechanical Flag Indicator, Lockable Button, Manual Push Button, LED, Free Wheeling & Polarity Diode and RC circuit.

### How to mount Solid State Relays as interface on PLC

1

1.11

#### Input

In every CSS relay, the input is on terminals A1 and A2. Bridges are available to join A2 terminals of adjacent sockets. A single voltage can be applied on terminals A1.

#### Output DC or AC (independent relays)

When using "a single relay" of any model, load can be connected either on terminal 1 or terminal 2 taking care of the polarity for DC output relays

#### Relays with DC output (CSS-DCP or CSS-DCN)

Range of voltage applied to the load will be 5... 50VDC

#### Relays with AC output (CSS-AC, inductive loads, or CSS-AZ, resistive load)

Range of voltage applied to the load will be 24...250 VAC, 50/60 Hz

#### Output on DC (relays in battery)

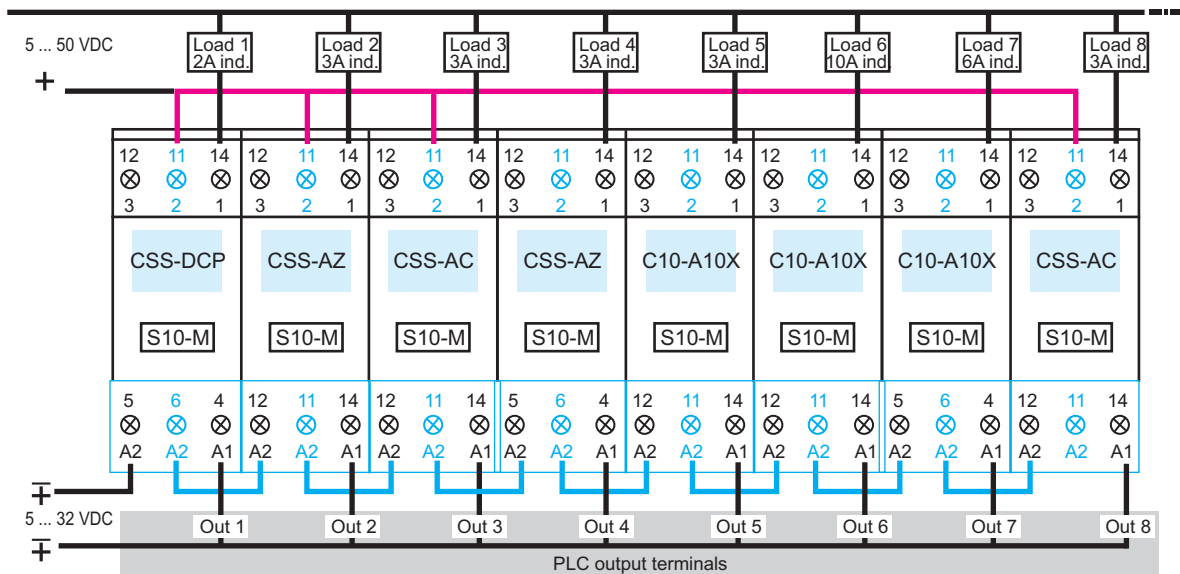
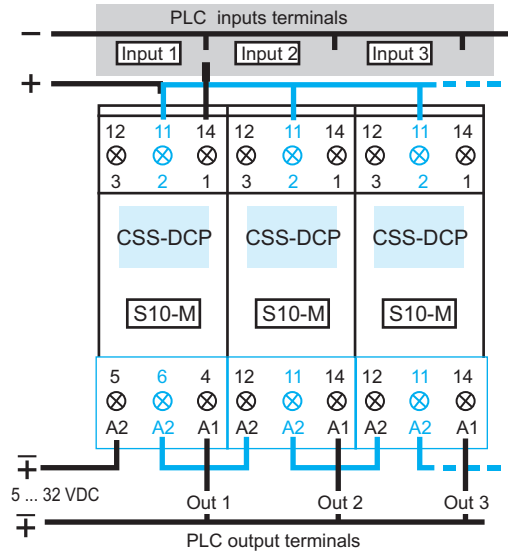
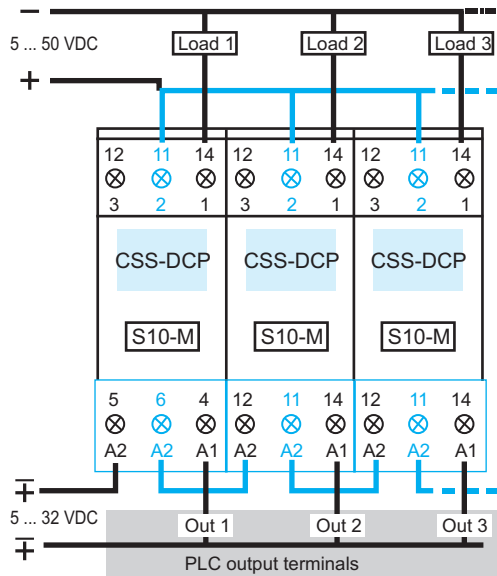
If power bridges are used with S10-M sockets in series of relays in line, it is necessary to attend the common polarity chosen to the loads connection.

Usually the point 2 (11 DIN) is the common point of the socket where positive tension is applied to the loads.

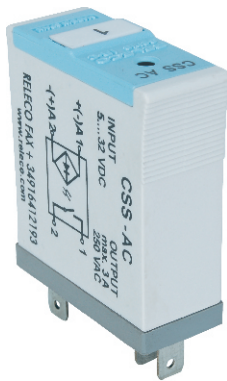
Then CSS-DCP relays must be connected where terminal 2 is common positive. Said disposition complies Norm EN-60204-1-5,3,3 where "cutting every active element of its feeding" is suggested, that means to switch from the positive

If point 2 of the socket is taken as negative, relays type CSS-DCN, where terminal 2 is negative must be connected.

In relays CSS-AC or CSS-AZ what concerns is only whether load is inductive or resistive has to be considered, as they have no polarity







# CSS-AC

Solid state relay

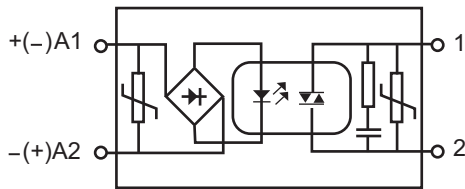
**AC inductive load switching.**

One open contact  
3A @ 24 ..... 250V AC, 50/60 Hz

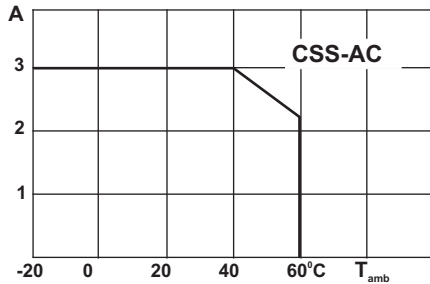
1

1.12

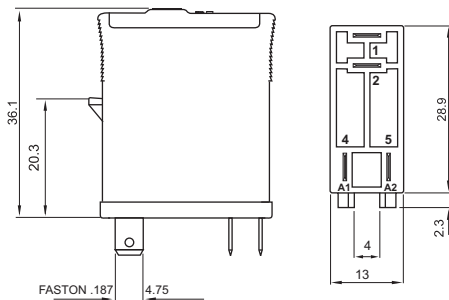
### CSS-AC AC instantaneous output



### CSS-AC Max. AC load vs. T<sub>amb.</sub>



### Dimensions in mm.



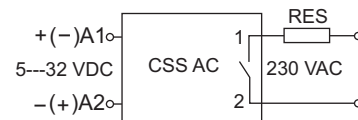
| Input                          | Polarity protected  |
|--------------------------------|---------------------|
| Range of input voltage         | 5 ..... 32 VDC      |
| Drop-out voltage               | < 2.5 VDC           |
| Input current                  | 5 ... 15 mA         |
| Current stabilizer             | Yes                 |
| Peak inrush voltage protection | EC-1000-4-5 level 1 |

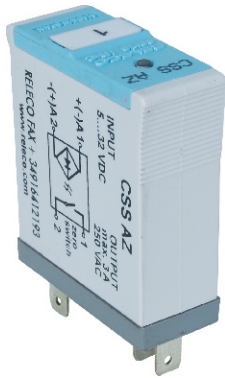
| Output, Instantaneous            |                      |
|----------------------------------|----------------------|
| Max. Output current              | 3 A                  |
| Minimum output current           | 50 mA                |
| Max. output voltage              | 250 VAC              |
| Minimum output voltage           | 24 VAC               |
| Max. drop out voltage            | < 1.5 VDC            |
| Max. leakage current at 48 Vdc   | 0.55 mA              |
| Max. Dv/dt                       | 500 V/μs             |
| I <sup>2</sup> t for 10 ms. fuse | 50 A <sup>2</sup> /s |

| Specifications                      |                  |
|-------------------------------------|------------------|
| Di-electric Strength Input / Output | 4 KV / 1 min.    |
| Operate Time                        | 1/2 cycle        |
| Release Time                        | 2 ms + 1/2 cycle |
| Working Temperature max.            | 60° C            |
| Storage Temperature                 | 100° C           |
| Weight                              | 28 gr. Max.      |

### Applications

It is specially suitable to switch inductive loads up to 3A / 250V AC. In switching loads with a high inrush or over current (max. di/dt 50A/μs) as transformers, motors or fluorescents, the maximum output current will limit to 2A.





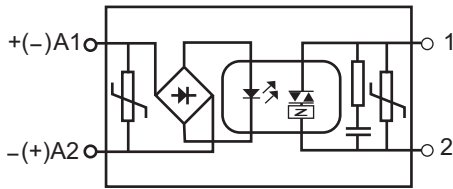
# CSS-AZ

Solid state relay

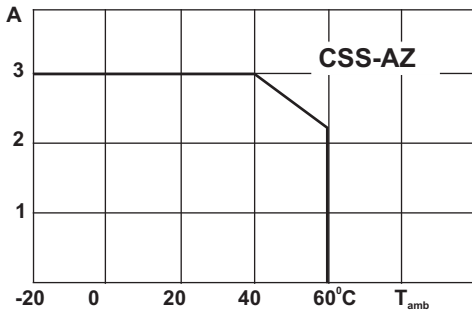
## AC resistive loads switching

One open contact  
3A @ 24 ..... 250V AC, 50/60 Hz

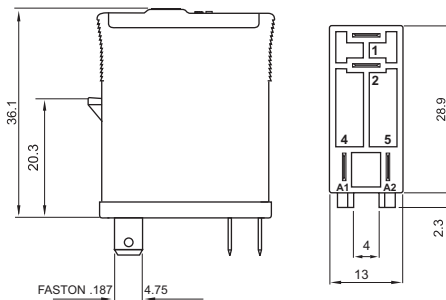
**CSS-AZ** AC, synchronized to zero



**Max. DC load vs. Ambient Temperature**



**Dimensions** in mm.



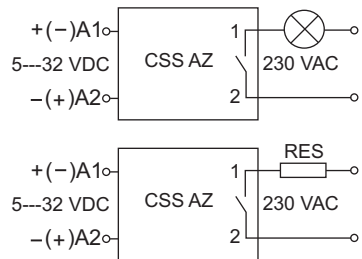
| Input                          | Polarity protected  |
|--------------------------------|---------------------|
| Range of input voltage         | 5 ..... 32 VDC      |
| Drop-out voltage               | < 2.5 VDC           |
| Input current                  | 5 ... 15 mA         |
| Current stabilizer             | Yes                 |
| Peak inrush voltage protection | EC-1000-4-5 level 1 |

| Output,                          | Synchronized to zero |
|----------------------------------|----------------------|
| Max. Output Current              | 3 A                  |
| Minimum Output Current           | 50 mA                |
| Max. Output Voltage              | 250 VAC              |
| Minimum Output Voltage           | 24 VAC               |
| Max. Drop Out Voltage            | < 1.5 VAC            |
| Max. Leakage Current at 48 VDC   | 0.55 mA              |
| Max. Dv/dt                       | 500 V/μs             |
| I <sup>2</sup> t for 10 ms. Fuse | 50 A <sup>2</sup> /s |

| Specifications                      |                  |
|-------------------------------------|------------------|
| Di-electric Strength Input / Output | 4 KV / 1 min.    |
| Operate Time                        | 1/2 cycle        |
| Release Time                        | 2 ms + 1/2 cycle |
| Working Temperature Max.            | 60° C            |
| Storage Temperature                 | 100° C           |
| Weight                              | 28 gr. Max.      |

**Applications**  
 It switches AC resistive loads up to 3A / 250V AC in the zero point of the tension and avoids any over current peak in the connection.  
 Suitable to switch resistors, incandescent lamp, signaling etc.

**Not suitable for inductive loads**





# CSS-DCN

Solid state relay

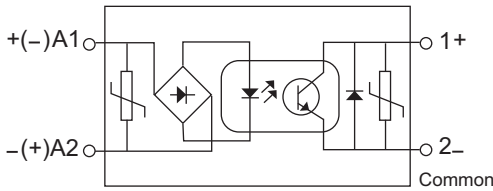
**DC Inductive or Resistive Load Switching.  
Negative Common Output**

One open contact  
2A @ 5 ..... 50V DC

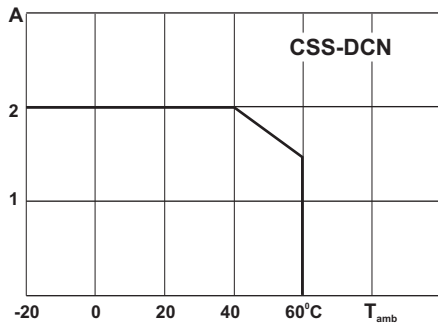
1

1.14

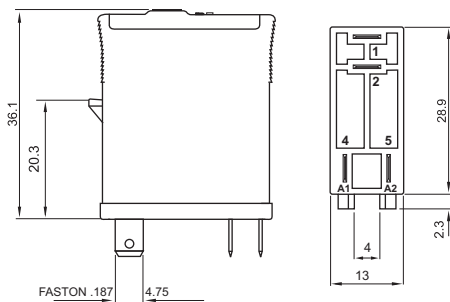
## CSS-DCN Common Negative



## Max. DC load vs. Ambient Temperature



## Dimensions in mm.



### Input

Range of Input Voltage  
 Drop-out Voltage  
 Input Current  
 Current Stabilizer  
 Peak Inrush Voltage Protection

### Polarity protected

5 .... 32 VDC  
 < 2.5 VDC  
 3 ± 1 mA  
 Yes  
 EC-1000-4-5 level 1

### Output, Common Negative

Max. Output Current  
 Max. Output Voltage  
 Minimum Output Voltage  
 Max. Drop Out Voltage  
 Max. Leakage Current at 48 VDC  
 Max. Over Current Pulse  
 Pulse Protection  
 Max. Current at Inverse Voltage

2 A  
 50 VDC  
 5 VDC  
 1.3 VDC  
 < 100 µA  
 5 A, 350 µs  
 IEC-1000-4-5 level 1  
 1 A

### Specifications

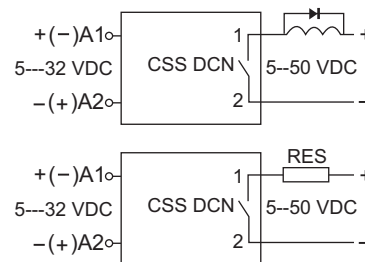
Di-Electric Strength Input / Output  
 Operate Time  
 Release Time  
 Working Temperature max.  
 Storage Temperature  
 Weight

4 KV / 1 min.  
 1 ms  
 max. 2ms  
 60° C  
 100° C  
 28 gr. Max.

### Applications

It is to switch, upto 50V DC, heating elements electro valves, motors, input / output signals on PLC's solenoids incandescent and fluorescent lamps etc.

**Inductive loads must be connected with a free wheeling diode in parallel.**

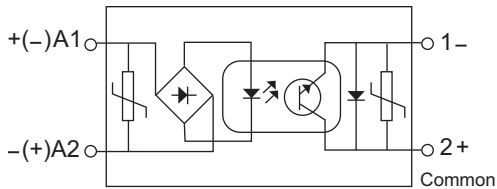


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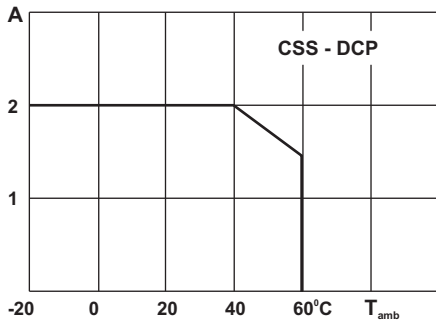
1.15



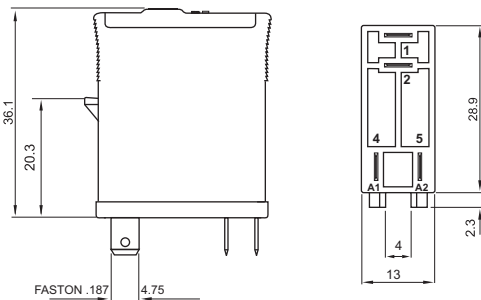
**CSS-DCP Common Positive**



**Max. DC load vs. Ambient Temperature**



**Dimensions in mm.**



**CSS-DCP**

Solid state relay

**DC Inductive or Resistive Load Switching. Positive Common Output**

One Open Contact

**2A @ 5 ..... 50V DC**

**Input**

Range of Input Voltage  
 Drop-out Voltage  
 Input Current  
 Current Stabilizer  
 Peak Inrush Voltage Protection

**Polarity protected**

5 ..... 32 VDC  
 < 2.5 VDC  
 3 ± 1 mA  
 Yes  
 EC-1000-4-5 level 1

**Output, Common Positive**

Max. Output Current  
 Max. Output Voltage  
 Minimum Output Voltage  
 Max. Voltage Drop  
 Max. Leakage Current at 48 VDC  
 Max. Over Current Pulse  
 Pulse Protection  
 Max. Current at Inverse Voltage

2 A  
 50 VDC  
 5 VDC  
 1.3 VDC  
 < 100 µA  
 5 A, 350 µs  
 IEC-1000-4-5 level 1  
 1 A

**Specifications**

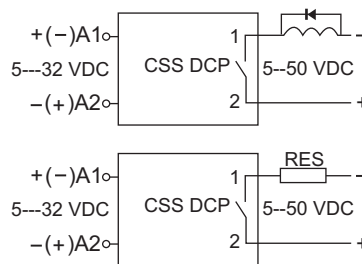
Di-Electric Strength Input / Output  
 Operate Time  
 Release Time  
 Working Temperature Max.  
 Storage Temperature  
 Weight

4 KV / 1 min.  
 1 ms  
 max. 2ms  
 60° C  
 100° C  
 28 gr. Max.

**Applications**

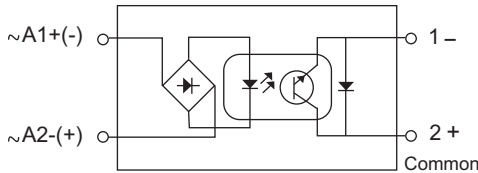
It is to switch, upto 50V DC, Heating Elements Electro Valves, motors, input / output signals on PLC's, Solenoids Incandescent and Fluorescent Lamps etc.

**Inductive loads must be connected with a free wheeling diode in parallel.**



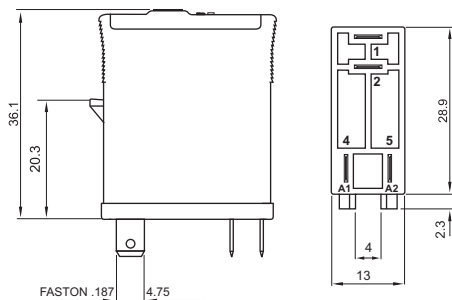


**CSS-DIP**



**Dimensions**

in mm.



**CSS-DIP**

Solid State Relay for Input Application

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1.16

**DC Resistive load**

Common Positive Output

One open contact

**100mAmps @ 32VDC Max**

**Input Parameters**

| Nominal Input Voltage | Operating Voltage Range |
|-----------------------|-------------------------|
| 5 VDC                 | 4V - 6V                 |
| 12 VDC                | 9.6V - 14.4V            |
| 24 VDC                | 19.2V - 28.8V           |
| 48 VDC                | 38.4V - 57.6V           |
| 110 VDC               | 88V - 132V              |
| 220 VDC               | 176V - 240V             |
| 115 VAC               | 92V - 138V              |
| 230 VAC               | 184V - 240V             |
| 100 -240 VAC          | 90V - 250V              |

**Input Current**

5 / 12 / 24 / 48 / 110 / 220 VDC  
115 / 230 / 100-240 VAC } 4mA max

**Output Parameters**

|                       |                      |
|-----------------------|----------------------|
| Max Output Current    | 100mA DC             |
| Max Output Voltage    | 32VDC                |
| Max. Voltage Drop     | 1.5VDC               |
| Max. Leakage Current  | 100micro Amps        |
| Must Drop Out Voltage | 10% of Rated Voltage |

**Specification**

|                                  |                    |
|----------------------------------|--------------------|
| Isolation between Input / Output | 4 KV / 1min.       |
| Operate Time @ Rated Voltage     | 5 msecs Max.       |
| Release Time @ Rated Voltage     | 6 msecs Max.       |
| Working Temperature Max.         | 60° C.             |
| Storage Temperature              | -40° C. to +85° C. |
| Weight                           | 28gr. Max.         |

**Application**

For input applications, for PLC controller,  
for low current / low voltage DC signaling application

**Standard Types**

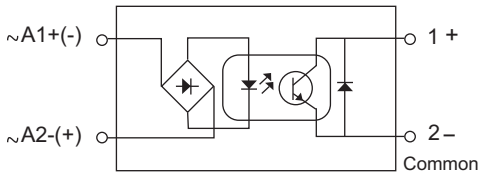
|                                     |                        |
|-------------------------------------|------------------------|
| DC : 5V, 12V, 24V, 48V, 110V, 220V. | CSS - DI Input Voltage |
| AC 50 Hz. : 115V, 230V              | CSS - DI .....VDC      |
| AC 50 Hz.: 100V - 240V              | CSS - DI .....VAC      |
|                                     | CSS - DIPW             |

1

1.17

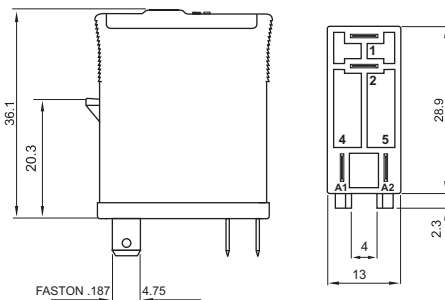


**CSS-DIN**



**Dimensions**

in mm.



**CSS-DIN**

Solid State Relay for Input Application

**DC Resistive load**  
 Common Negative Output  
 One open contact  
**100mAmps @ 32VDC Max**

**Input Parameters**

| Nominal Input Voltage | Operating Voltage Range |
|-----------------------|-------------------------|
| 5 VDC                 | 4V - 6V                 |
| 12 VDC                | 9.6V - 14.4V            |
| 24 VDC                | 19.2V - 28.8V           |
| 48 VDC                | 38.4V - 57.6V           |
| 110 VDC               | 88V - 132V              |
| 220 VDC               | 176V - 240V             |
| 115 VAC               | 92V - 138V              |
| 230 VAC               | 184V - 240V             |
| 100 -240 VAC          | 90V - 250V              |

**Input Current**

5 / 12 / 24 / 48 / 110 / 220 VDC } 4mA max  
 115 / 230 / 100-240 VAC

**Output Parameters**

Max Output Current 100mA DC  
 Max Output Voltage 32VDC  
 Max. Leakage current 100micro Amps  
 Must Drop Out voltage 10% of Rated Voltage

**Specification**

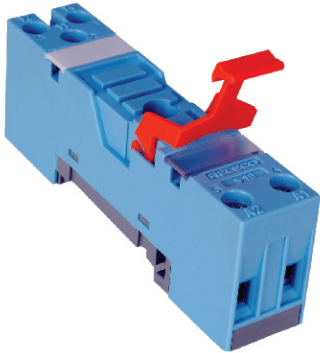
Isolation between Input / Output 4 KV / 1min  
 Operate Time @ Rated Voltage 5 msecs Max  
 Release Time @ Rated Voltage 6 msecs Max  
 Working Temperature Max. 60° C  
 Storage Temperature -40° C to +85° C  
 Weight 28gr Max

**Application**

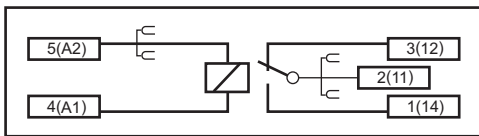
For input applications, for PLC controller,  
 for low current / low voltage DC signaling application

**Standard Types**

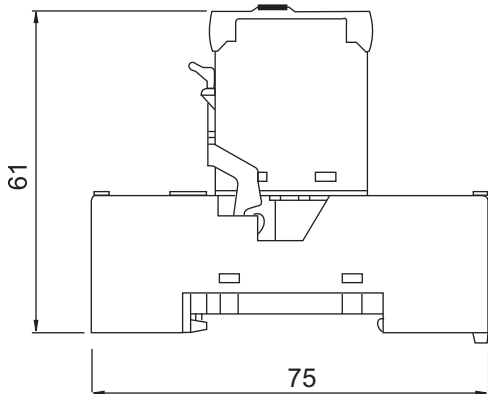
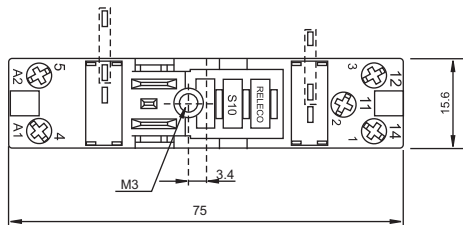
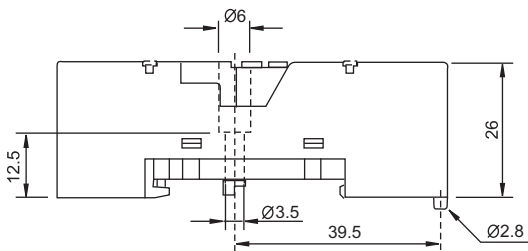
DC : 5V, 12V, 24V, 48V, 110V, 220V. CSS - DI Input Voltage  
 AC 50 Hz. : 115V, 230V CSS - DI .....VDC  
 AC 50 Hz.: 100V - 240V CSS - DI .....VAC  
 CSS - DINW



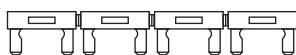
**Wiring Diagram**



**Dimensions** in mm.



S10 BB



# S10

**Input / Output Socket ( 10A )  
for C10-CSS relays**  
DIN rail or panel mountable

1

1.18

**Specifications**

Poles 1 Change Over Contact  
Nominal load : 10A / 250V

**Insulation:** Di-electric strength, 1minute  
Between contact and coil 5 KV  
Between all terminals and rail DIN 5 KV  
Between adjacent terminals 3 KV

Max. screw torque 1.2 Nm  
Screw dimensions M3, Pozi

**Wire in-lets capacity:**  
Solid Wire 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>  
Multi core 22 14 AWG  
Ferrule tip terminals 4 mm<sup>2</sup>

Weight Approx. 28 gr.

**Other Aspects**

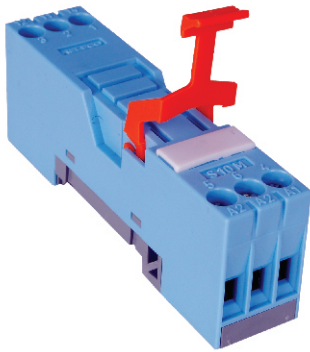
- DIN Rail / Panel Mountable
- EN / DIN Sequential Numbering according to EN 60947 & IEC 61810
- Integrated Hold Down Clip
- Removable White Marking Label
- Hard Brass Tin Plated Terminals
- Brass Tin Plated Screw

**Accessories**

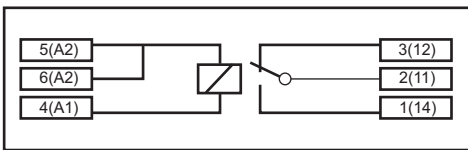
Bridge Bar S10BB for Coil Terminal ( A2 / 5 ) &  
Change Over Contact Terminal ( 11 / 2 )

**1**

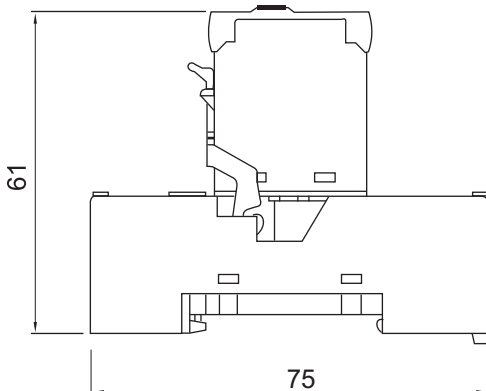
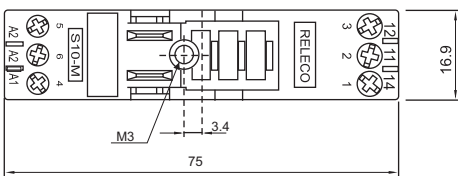
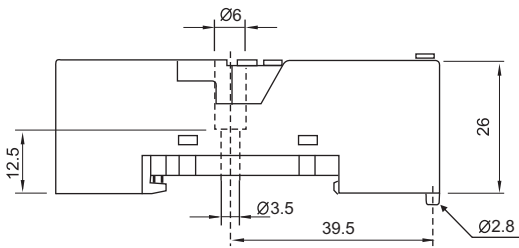
1.19



**Wiring Diagram**



**Dimensions** in mm.



**S10-M**

**Input / Output Socket ( 16A )  
for C10-CSS relays  
DIN rail or panel mountable**

**Specifications**

Poles 1 Change Over Contact  
Nominal load : 16A / 250V

**Insulation:** Di-electric strength, 1minute  
Between contact and coil 5 KV  
Between all terminals and DIN rail 5 KV  
Between adjacent terminals 3 KV

Max. screw torque 1.2 Nm  
Screw dimensions M3, Pozi

**Wire in-lets capacity:**  
Solid Wire 4 mm<sup>2</sup> or 2 x 2.25 Sq. mm  
Multi core 22 14 AWG  
Ferrule tip terminals 4 mm<sup>2</sup>  
Weight Approx. 30 gr.

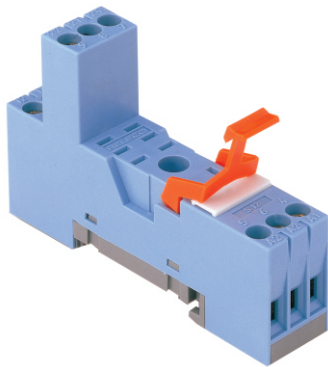
**Other Aspects**

- DIN Rail / Panel Mountable
- EN / DIN Sequential Numbering according to EN 60947 & IEC 61810
- Integrated Hold Down Clip
- Removable White Marking Label
- Hard Brass Tin Plated Terminals
- Brass Tin Plated Screw

**Accessories**

- Bridge Bar V40 & V10 for NC or NO or CO Terminals. Maximum current through Bridge Bar 40 Amps.
- Bridge Bar B20 for Coil Terminal A2





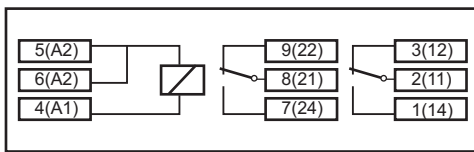
# S12

**Input / Output Socket ( 5A )  
for C12 Relays**  
DIN rail or panel mountable

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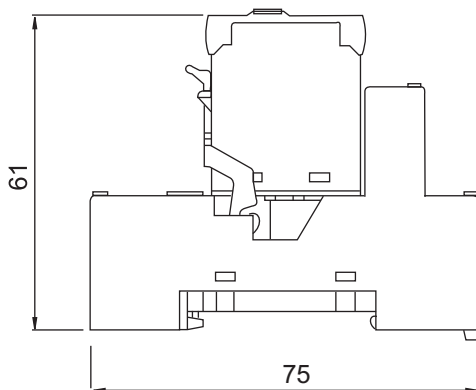
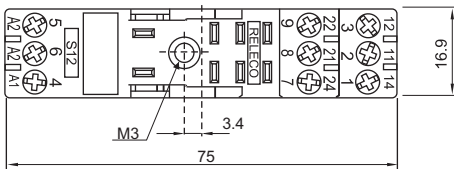
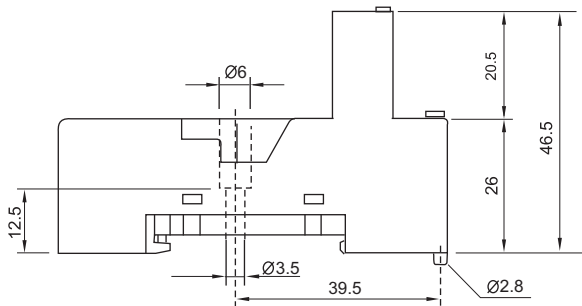
1.20

### Wiring Diagram



### Dimensions

in mm.



### Specifications

Poles 2 Change Over Contact

Nominal load : 5A / 250V

**Insulation:** Di-electric strength, 1minute

Between contact and coil 5 KV

Between all terminals and rail DIN 5 KV

Between adjacent terminals 3 KV

Max. screw torque 1.2 Nm

Screw dimensions M3, Pozi

### Wire in-lets capacity:

Solid Wire 4 mm<sup>2</sup> or 2 x 2.25 mm<sup>2</sup>

Multi core 22 14 AWG

Ferrule tip terminals 4 mm<sup>2</sup>

Weight Approx. 38 gr.

### Other Aspects

DIN Rail / Panel Mountable

EN / DIN Sequential Numbering according to EN 60947 & IEC 61810

Integrated Hold Down Clip

Removable White Marking Label

Hard Brass Tin Plated Terminals

Brass Tin Plated Screw

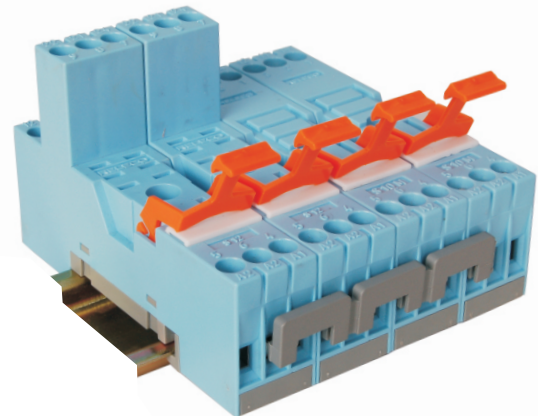
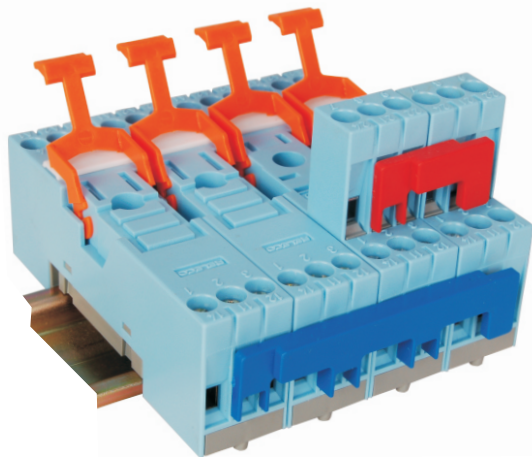
### Accessories

Bridge Bar V40 & V10 for NC or NO or CO Terminals.  
Maximum current through Bridge Bar 40 Amps.

Bridge Bar B20 for Coil Terminal A2

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S10-M & S12 are sockets for 1 & 2 contacts with inlets inline and identical disposition of contacts and coil terminals on both sockets.

S10-M & S12 follow an identical sequence of coil & contacts

Coil Terminal on level 1 (A2, A2, A1)

Contact Terminal on level 1 (12, 11, 14)

Contact Terminal on level 2 (22, 21, 24)

S10M & S12 sockets and the bridges V40, V10 & B20 permit an easy interconnection of sockets ( both S10-M & S12) in any combination of voltages coils or contacts.

V40, V10 & B20 bridges are available in Grey colour (Standard), Red(AC), Blue(DC), following the same colour coding as used in the test button to identify the type of relays.

### V40

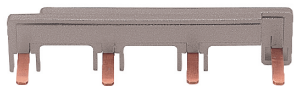
Power Bridge bars for S10-M and S12 sockets

### V10

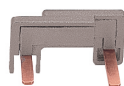
### B20

Coil bridge bars for sockets S10-M and S12

### V10



V40-G



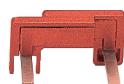
V10-G



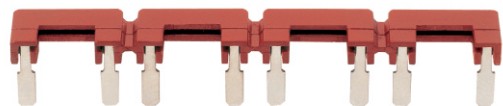
B20-G



V40-R



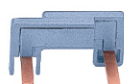
V10-R



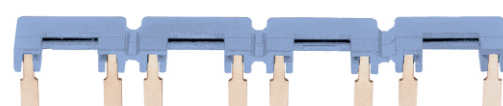
B20-R



V40-A



V10-A



B20-A

**V40 & V10 bridge bars for contact terminals of S10M & S12 sockets**

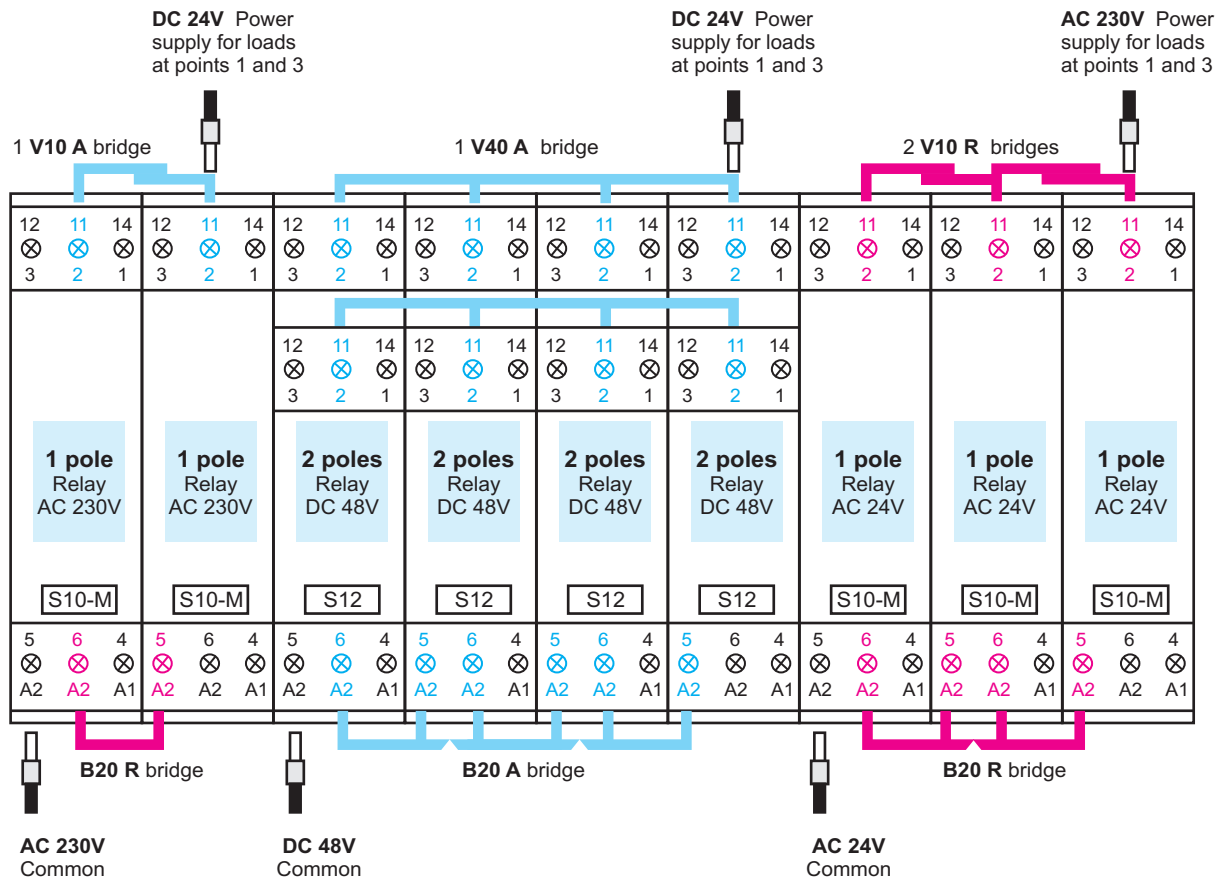
V40 & V20 bridges allow the interconnection of the common points on the S10M & S12 sockets, usually the C/O contacts ( 11 on level 1, 21 on level 2). They can be also used to bridge NC or NO terminals .

V40 bridges join 4 similar points in 4 or multiple of 4 adjacent S10M or S12 or combination S10M & S12 sockets V40 bridges can be used individually or in combination with V10 bridges to bridge unlimited number of sockets For example if you need to bridge 5 sockets you can either use 1 V40 + 1 V10 or 4 V10 bridges.

V10 bridges can be used to connect 2 or more adjacent S10M or S12 or combination of S10M & S12 sockets Both V40 & V10 bridges are made of copper with a current capacity of 40A

It is necessary that the total sum of loads in a relay group, will not exceed the maximum of 40A. permitted by the power bridges. If exceeded, the thicker power cables must be connected, to share the current and avoid overheating in the bridges. Every inlet terminal can accommodate ferrule tips upto 4 sq.mm.

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1.22



**B20 bridge bars for Coil Terminals of S10M & S12 sockets**

Both terminals 5 & 6 (on S10M & S12) are internally connected. Each B20 bridge connects terminal 6 of the first socket to terminal 5 of the next socket leaving free terminal 5 of the first socket and terminal 6 of the last socket to connect the common polarity cable. Coil control voltage connect to points A1.

Bridge B20 is composed by four units which can be divided into 1 or 2 or 3 individual elements.

**1**

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# S10-P

**Printed Circuit Socket for 1 Pole C10 & CSS relays**

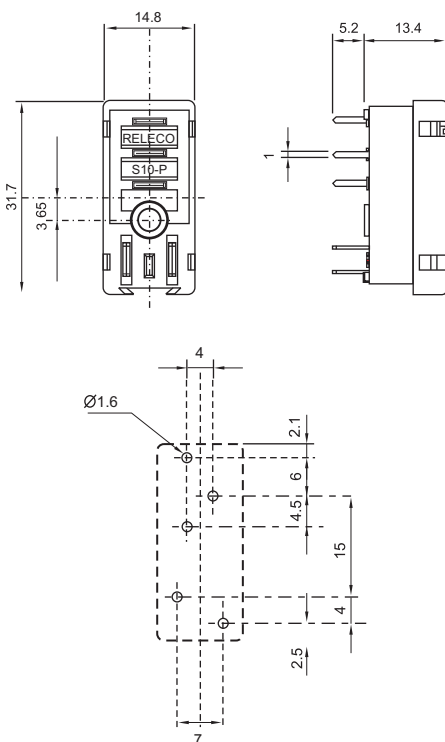


### Specifications

|                                 |             |
|---------------------------------|-------------|
| Nominal load                    | 10A / 250 V |
| Dielectric strength 1 min.      |             |
| Coil terminals to contacts      | 5 KV        |
| Hard brass tin-plated terminals | 0.5 x 1mm   |
| Integrated hold-down clip       |             |

### Dimensions

in mm.



# S12-P

**Printed circuit socket for 2-pole C12 relays**

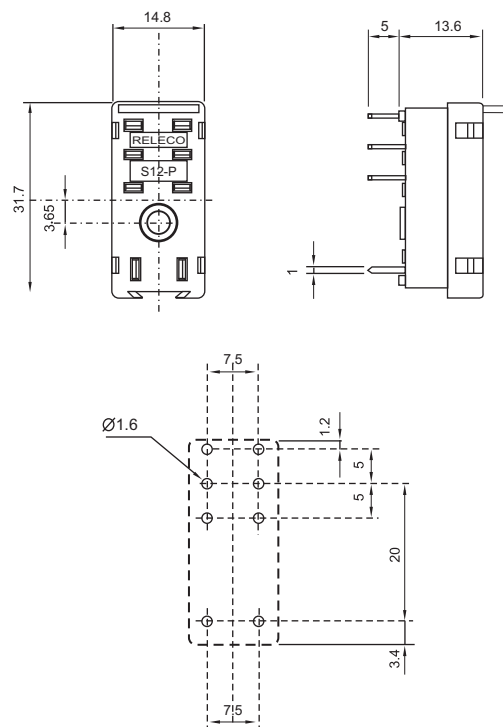


### Specifications

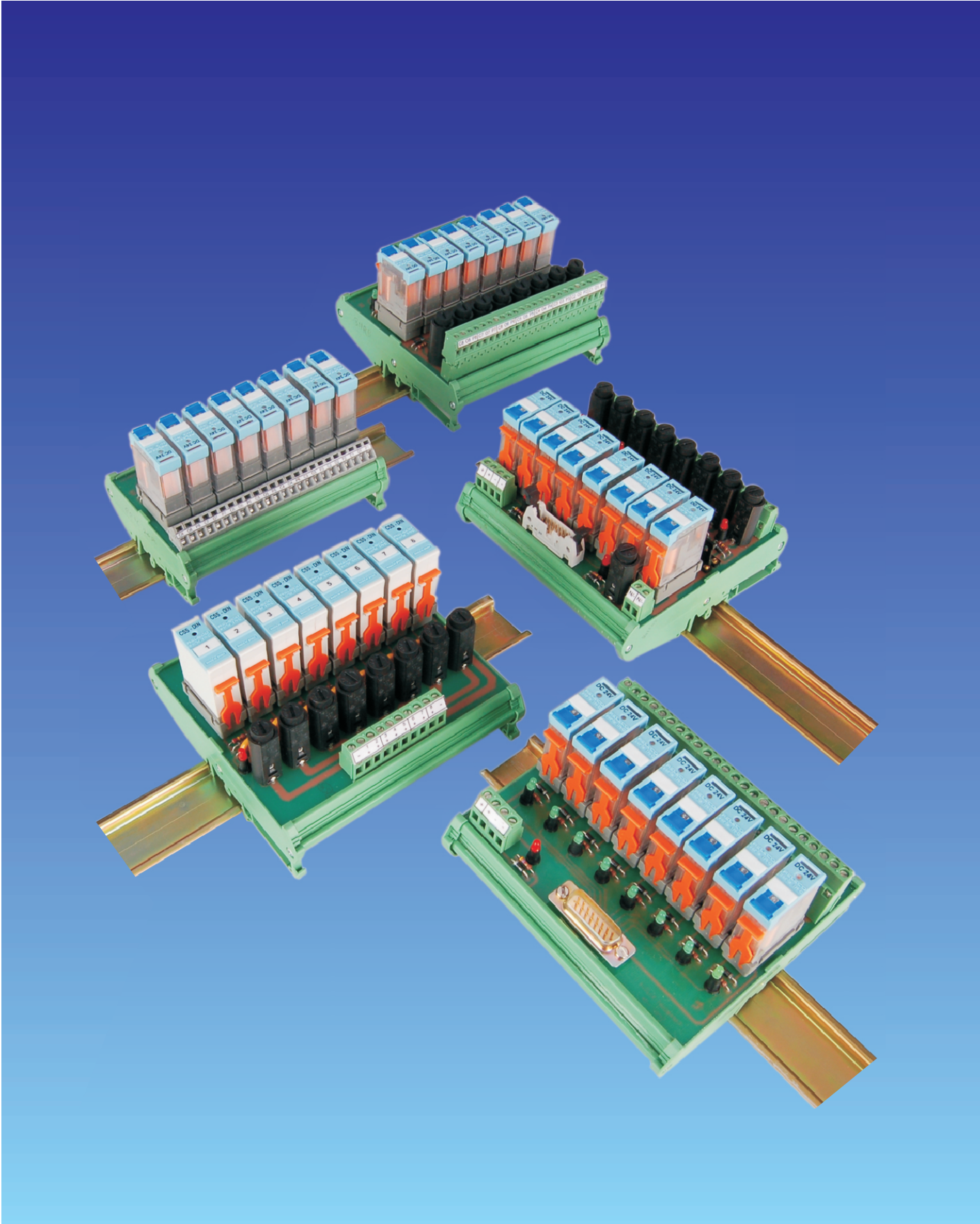
|                                 |            |
|---------------------------------|------------|
| Nominal load                    | 5A / 250 V |
| Dielectric strength 1 min.      |            |
| Coil terminals to contacts      | 5 KV       |
| Hard brass tin-plated terminals | 0.5 x 1mm  |
| Integrated hold-down clip       |            |

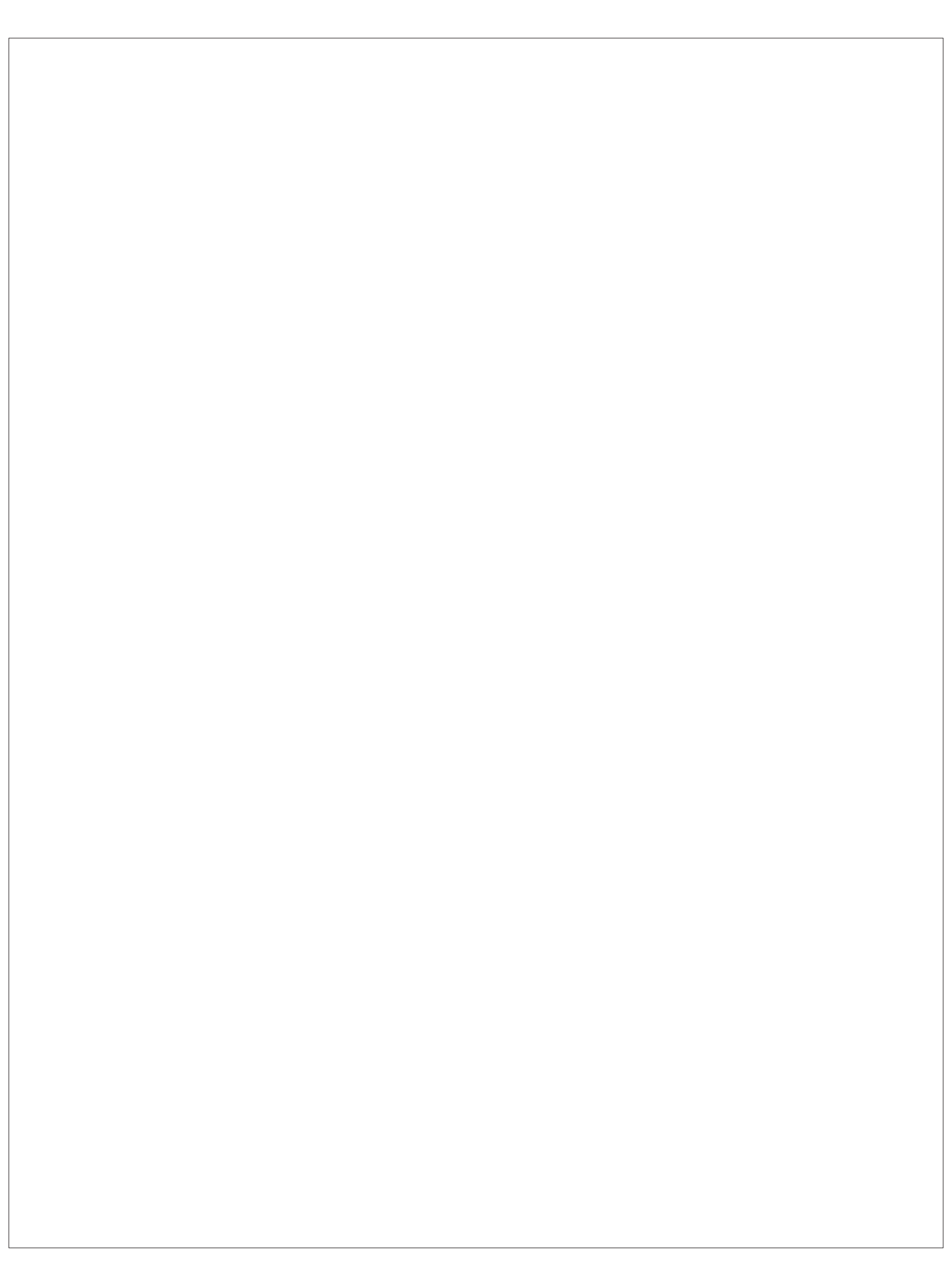
### Dimensions

in mm.



# Relay Modules





Standard 35 mm DIN Rail Mounting

Input : Screw Connection

Output : Screw Connection

All Relays are Socket (S10P) Mounted

Relay : C10 A10...VAC / VDC

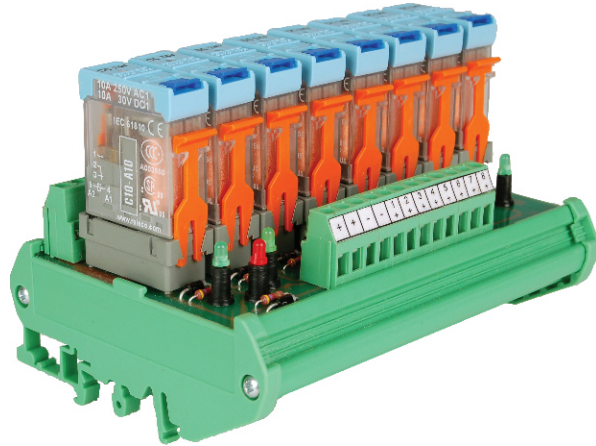
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request

## Output Module with 1 C/O Contact - 4, 8, 16, 32 Relays



### Input Data

|                                 |       |
|---------------------------------|-------|
| Board Power ON LED              | Red   |
| Status Indication LED Per Relay | Green |

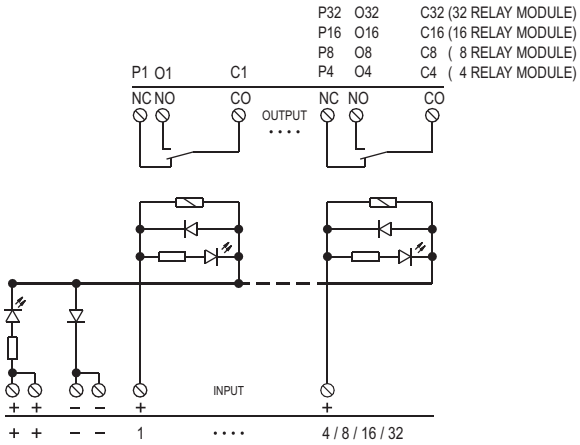
### Output Data

|                           |                  |
|---------------------------|------------------|
| Contact Type              | SPDT             |
| Maximum Switching Voltage | 240 VAC / 24 VDC |
| Maximum Switching Current | 10 Amps          |

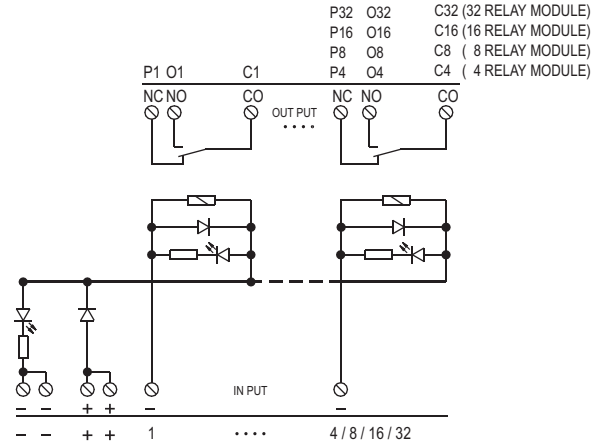
### General Data

|                                    |  |
|------------------------------------|--|
| Conductor Cross Section            | Solid : 0.2 - 4mm <sup>2</sup> AWG 24 - 12   |
| Insulation Stripping Length        | 8 mm   |
| Module Length                      | 90 mm  |
| Module Height above 35 mm DIN Rail | 80 mm Max.   |
| Dielectric Strength                | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range        | -20°C to +60°C   |
| Relay Standard Features            | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |

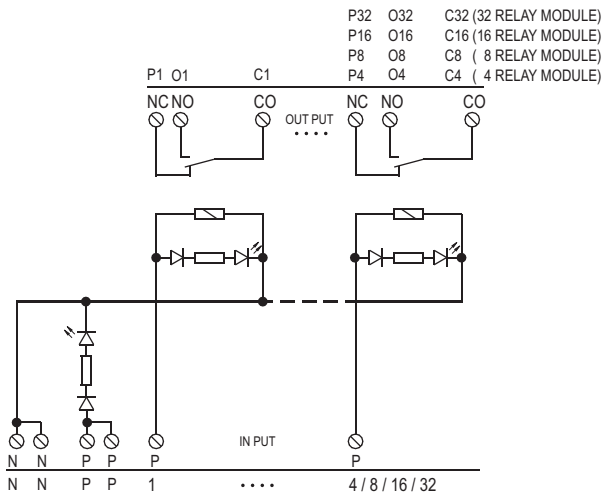
2.1



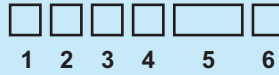
2.2



2.3



Ordering Information



Model Number Legend

- 1 : Number of Relays 4 or 8 or 16 or 32
- 2 : Output O
- 3 : No. of Contacts (1CO) 1
- 4 : Connection ( Screw Type Only ) S
- 5 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 6 : Common Input + for positive - for negative



| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Screw</b>                         |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1S24DC+       | 2.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1S24DC-       | 2.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1S110DC+      | 2.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1S110DC-      | 2.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1S115AC       | 2.3                   | 65                 |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1S230AC       | 2.3                   | 65                 |
|  |                 |                       |                    |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1S24DC+       | 2.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1S24DC-       | 2.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1S110DC+      | 2.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1S110DC-      | 2.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1S115AC       | 2.3                   | 130                |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1S230AC       | 2.3                   | 130                |
|  |                 |                       |                    |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1S24DC+      | 2.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1S24DC-      | 2.1                   | 250                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1S110DC+     | 2.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1S110DC-     | 2.1                   | 250                |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1S115AC      | 2.3                   | 250                |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1S230AC      | 2.3                   | 250                |
|  |                 |                       |                    |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1S24DC+      | 2.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1S24DC-      | 2.1                   | 500                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1S110DC+     | 2.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1S110DC-     | 2.1                   | 500                |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1S115AC      | 2.3                   | 500                |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1S230AC      | 2.3                   | 500                |

Standard 35 mm DIN Rail Mounting

Input : Screw Connection

Output : Screw Connection

All Relays are Socket (S10P) Mounted

Relay : C10 A10...VAC / VDC.

Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

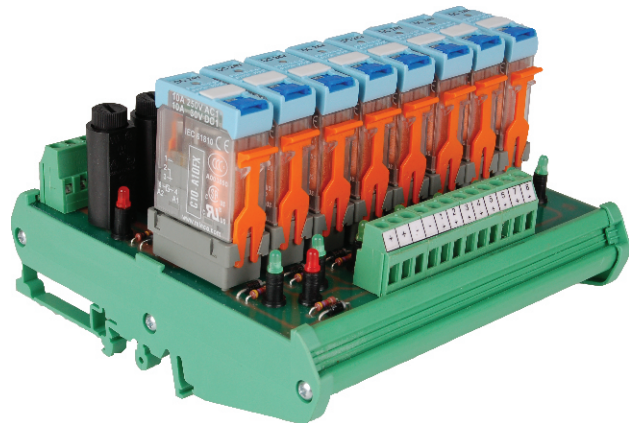
Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

Relay Module with Fuse in series with Change Over Contact of Relay

Fuse Blow Indication (Red LED)

### Output Module with 1 C/O Contact with Fuse - 4, 8, 16, 32 Relays



#### Input Data

|                                 |       |
|---------------------------------|-------|
| Board Power ON LED              | Red   |
| Status Indication LED Per Relay | Green |

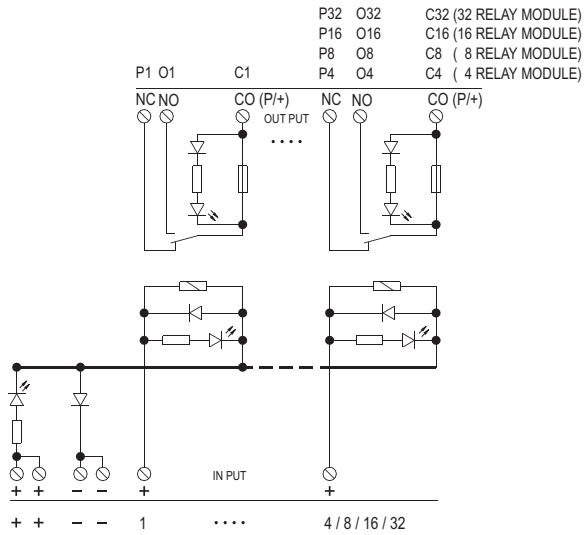
#### Output Data

|                                 |                  |
|---------------------------------|------------------|
| Contact Type                    | SPDT             |
| Maximum Switching Voltage       | 240 VAC / 24 VDC |
| Maximum Switching Current       | 10 Amps          |
| Fuse Blow Indication Status LED | Red              |
| Protectuion Fuse                | 5Amps            |

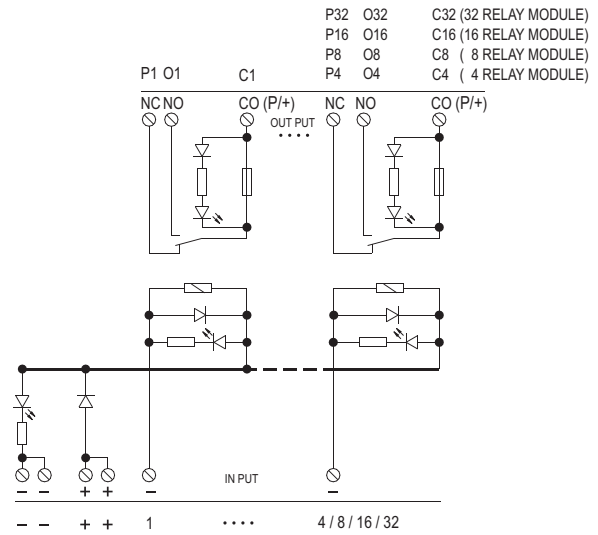
#### General Data

|                             |  |
|-----------------------------|--|
| Conductor Cross Section     | Solid : 0.2 - 4mm <sup>2</sup> AWG 24 – 12   |
| Insulation Stripping Length | 8 mm   |
| Module Length               | 126 mm   |
| Module Height on DIN Rail   | 80 mm Max.   |
| Dielectric Strength         | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range | - 20°C to +60° C   |
| Relay Standard Features     | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |

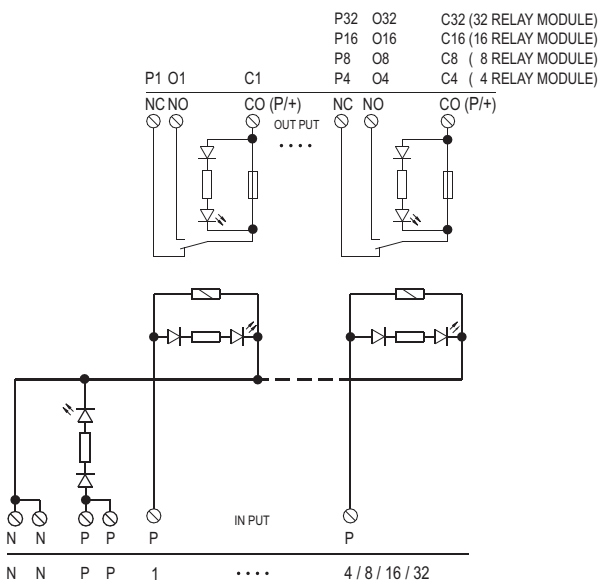
## 2.4



## 2.5



## 2.6



### Ordering Information

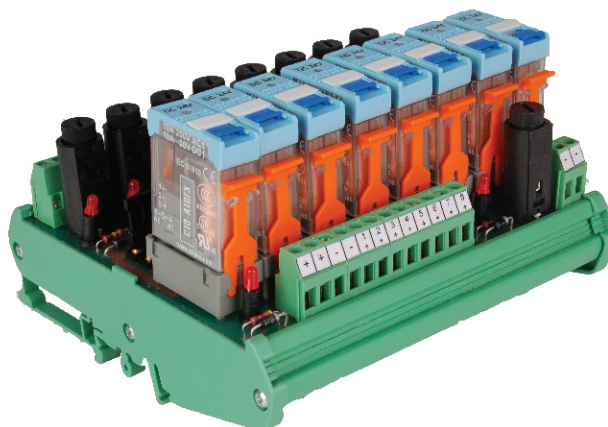


Model Number Legend

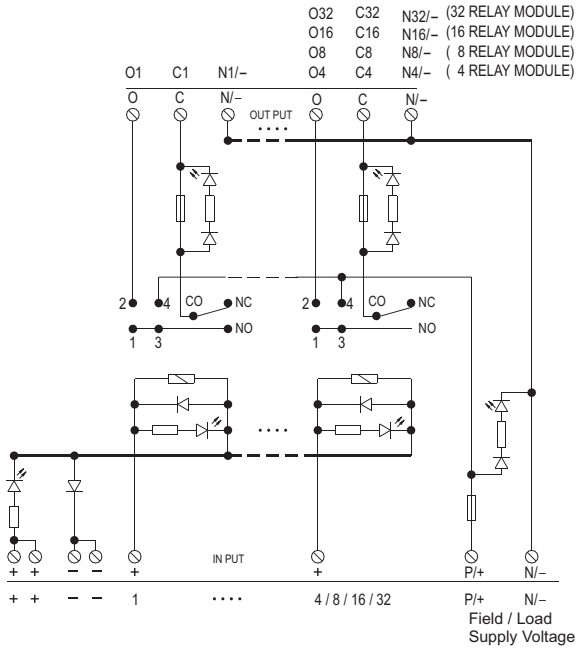
|   |                                  |                                 |
|---|----------------------------------|---------------------------------|
| 1 | : Number of Relays               | 4 or 8 or 16 or 32              |
| 2 | : Output Module                  | O                               |
| 3 | : No. of Contacts (1CO)          | 1                               |
| 4 | : Connection ( Screw Type Only ) | S                               |
| 5 | : Fuse + Fuse Blow Indication    | B                               |
| 6 | : Coil voltage                   | 24 or 110 VDC or 115 or 230 VAC |
| 7 | : Common Input                   | + for positive - for negative   |
| 8 | : Load Voltage                   | XXX 24VDC or 115VAC or 230VAC   |

| <b>Standard Part Nos.</b>  |                  |                |             |  |
|--|------------------|----------------|-------------|--|
| Connection : Input / Output - Screw                                |                  |                |             |  |
| Description  | Part No.         | Wiring Diagram | Width in mm |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1SB24DC+ XXX   | 2.5            | 65          |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1SB24DC- XXX   | 2.4            | 65          |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1SB110DC+ XXX  | 2.5            | 65          |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1SB110DC- XXX  | 2.4            | 65          |  |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1SB115AC XXX   | 2.6            | 65          |  |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1SB230AC XXX   | 2.6            | 65          |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1SB24DC+ XXX   | 2.5            | 130         |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1SB24DC- XXX   | 2.4            | 130         |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1SB110DC+ XXX  | 2.5            | 130         |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1SB110DC- XXX  | 2.4            | 130         |  |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1SBV115AC XXX  | 2.6            | 130         |  |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1SB230AC XXX   | 2.6            | 130         |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1SB24DC+ XXX  | 2.5            | 250         |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1SB24DC- XXX  | 2.4            | 250         |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1SB110DC+ XXX | 2.5            | 250         |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1SB110DC- XXX | 2.4            | 250         |  |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1SB115AC XXX  | 2.6            | 250         |  |
| 16 Relay, Output Module, 1C/O, 250V AC Coil Input                  | 16O1SB230AC XXX  | 2.6            | 250         |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1SB24DC+ XXX  | 2.5            | 500         |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1SB24DC- XXX  | 2.4            | 500         |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1SB110DC+ XXX | 2.5            | 500         |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1SB110DC- XXX | 2.4            | 500         |  |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1SB115AC XXX  | 2.6            | 500         |  |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1SB230AC XXX  | 2.6            | 500         |  |

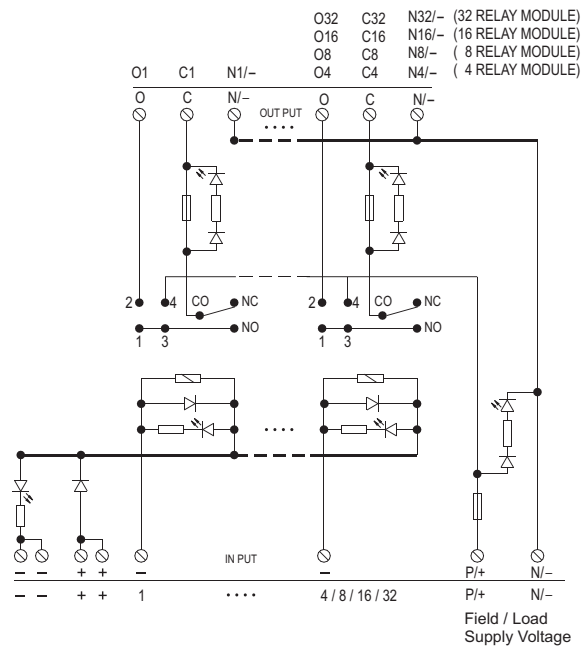
|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module 1 C/O Contact with Fuse &amp; Jumper - 4, 8, 16, 32 Relays</b>        |
| Input : Screw Connection  |  |
| Output : Screw Connection   |  |
| All Relays are Socket (S10P) Mounted  |  |
| Relay : C10 A10X.....VAC<br>C10 A10 FX...VDC                                  |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |
| Other Coil Voltages are available on request.                                 |  |
| Customised Modules available on request.                                      |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |
| Relay module with Fuse in series with Change Over Contact of Relay            |  |
| Fuse Blow Indication (Red LED)  |  |
| Jumper(Gold plated) on Contact Side for Wet and Dry Contact Selection         |  |
| <b>Input Data</b>   |  |
| Board Power ON LED  | Red  |
| Status Indication LED Per relay   | Orange   |
| Status Indication for Field Supply  | Green  |
| <b>Output Data</b>  |  |
| Contact Type  | SPDT   |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |
| Maximum Switching Current   | 10 Amps  |
| Fuse Blow Indication Status LED   | Red  |
| Protection Fuse   | 5Amps  |
| <b>General Data</b>   |  |
| Conductor Cross Section   | Solid : 0.2 - 4 mm <sup>2</sup> AWG 24 – 12  |
| Insulation Stripping Length   | 8 mm   |
| Module Length   | 126 mm   |
| Module Height on DIN Rail   | 80 mm Max.   |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range   | - 20°C to +60° C   |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |



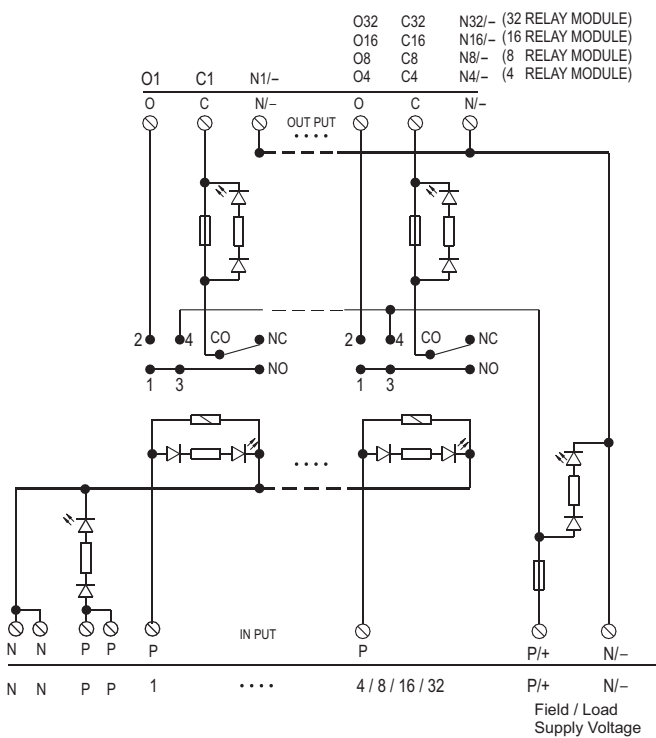
2.7



2.8



2.9



Ordering Information

|   |   |   |   |   |   |   |   |   |     |                     |
|---|---|---|---|---|---|---|---|---|-----|---------------------|
| □ | □ | □ | □ | □ | □ | □ | □ | □ | XXX | Model Number Legend |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |     |                     |

1 : Number of Relays 4 or 8 or 16 or 32

2 : Output Module O

3 : No. of Contacts (1CO) 1

4 : Connection ( Screw Type Only) S

5 : Fuse + Fuse Blow Indication B

6 : Jumper J

7 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC

8 : Common Input + for positive - for negative

9 : Field / Load Voltage [XXX] 24VDC or 115 or 230VAC

Note: Field / Load Voltage for Wet Contact Only

|             | Jumper Position | Output Terminals      |
|-------------|-----------------|-----------------------|
| Wet Contact | 4-3             | C1 (P/+)..., N1/ -... |
| Dry Contact | 1-2             | O1..., C1...          |

Relay Type : C10 A10X...VAC & C10 A10FX...VDC

Note- All the Relays have Electronics built inside.

(X : LED, F : Free Wheeling & Polarity Diode)

| <b>Standard Part Nos.</b>  |                   |                |             |
|--|-------------------|----------------|-------------|
| <b>Connection : Input / Output - Screw</b>                         |                   |                |             |
| Description  | Part No.          | Wiring Diagram | Width in mm |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1SBJ24DC+ XXX   | 2.8            | 65          |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1SBJ24DC- XXX   | 2.7            | 65          |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1SBJ110DC+ XXX  | 2.8            | 65          |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1SBJ110DC- XXX  | 2.7            | 65          |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1SBJ115AC XXX   | 2.9            | 65          |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1SBJ230AC XXX   | 2.9            | 65          |
|  |                   |                |             |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1SBJ24DC+ XXX   | 2.8            | 130         |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1SBJ24DC- XXX   | 2.7            | 130         |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1SBJ110DC+ XXX  | 2.8            | 130         |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1SBJ110DC- XXX  | 2.7            | 130         |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1SBJV115AC XXX  | 2.9            | 130         |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1SBJ230AC XXX   | 2.9            | 130         |
|  |                   |                |             |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1SBJ24DC+ XXX  | 2.8            | 250         |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1SBJ24DC- XXX  | 2.7            | 250         |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1SBJ110DC+ XXX | 2.8            | 250         |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1SBJ110DC- XXX | 2.7            | 250         |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1SBJ115AC XXX  | 2.9            | 250         |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1SBJ230AC XXX  | 2.9            | 250         |
|  |                   |                |             |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1SBJ24DC+ XXX  | 2.8            | 500         |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1SBJ24DC- XXX  | 2.7            | 500         |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1SBJ110DC+XXX  | 2.8            | 500         |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1SBJ10DC- XXX  | 2.7            | 500         |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1SBJ115AC XXX  | 2.9            | 500         |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1SBJ230AC XXX  | 2.9            | 500         |

Standard 35 mm DIN Rail Mounting

### Output Module with 2 C/O Contacts - 4, 8, 16, 32 Relays

Input : Screw Connection

Output : Screw Connection

All Relays are Socket (S12P) Mounted

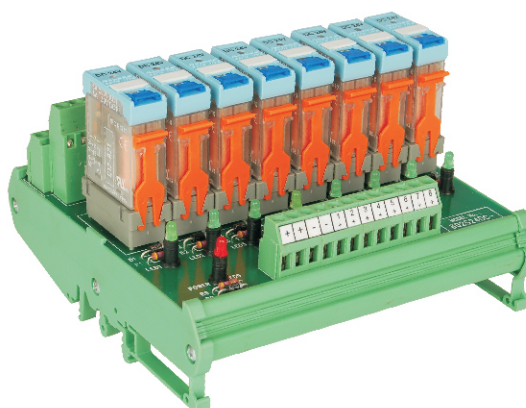
Relay : C12A21 ...VAC / VDC

Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.



#### Input Data

Board Power ON LED

Red

Status Indication LED Per relay

Green

#### Output Data

Contact Type

DPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

5 Amps

#### General Data

Conductor Cross Section

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12

Insulation Stripping Length

8 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

- 20°C to +60° C

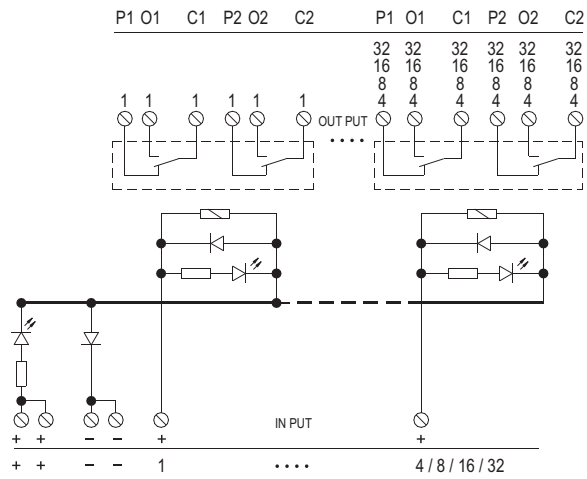
Relay Standard Features

Mechanical Flag Indicator, Manual Push Button,

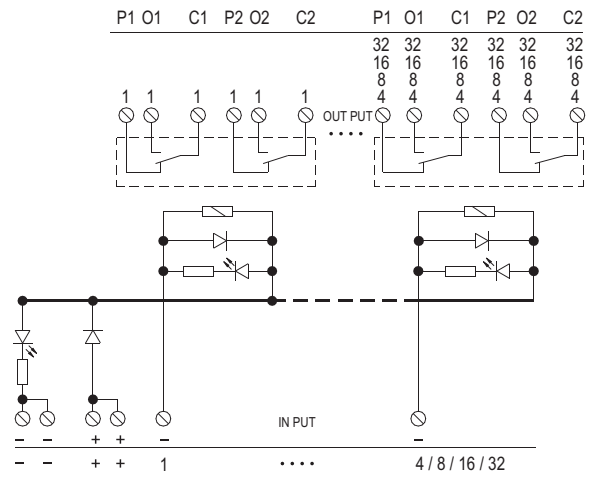
Lockable Test Button & Marking Label



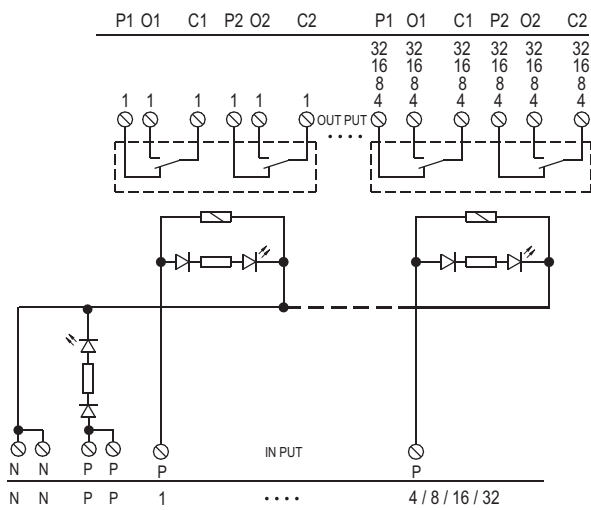
## 2.10



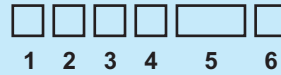
## 2.11



## 2.12



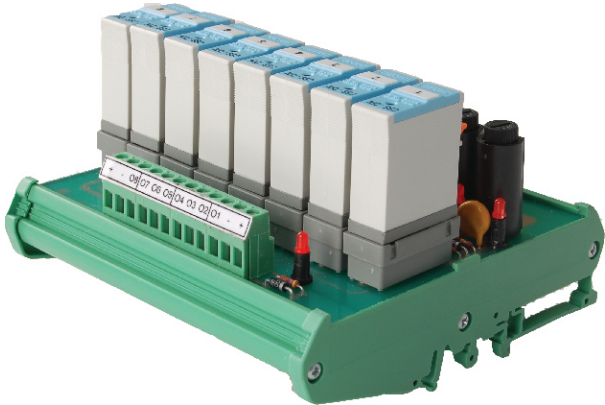
### Ordering Information



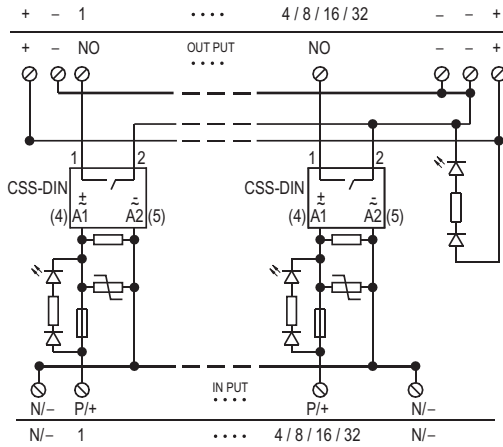
Model Number Legend

|   |                                |                                 |
|---|--------------------------------|---------------------------------|
| 1 | : Number of Relays             | 4 or 8 or 16 or 32              |
| 2 | : Output Module                | O                               |
| 3 | : No. of Contacts (2CO)        | 2                               |
| 4 | : Connection (Screw Type Only) | S                               |
| 5 | : Coil Voltage                 | 24 or 110 VDC or 115 or 230 VAC |
| 6 | : Common Input                 | + for positive - for negative   |

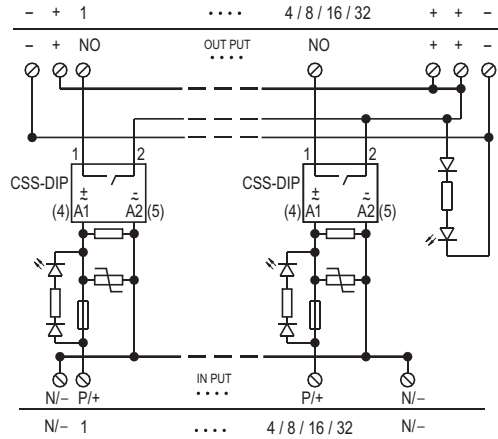
| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Screw</b>                         |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input   | 4O2S24DC+       | 2.11                  | 65                 |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 4O2S24DC-       | 2.10                  | 65                 |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 4O2S110DC+      | 2.11                  | 65                 |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 4O2S110DC-      | 2.10                  | 65                 |
| 4 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 4O2S115AC       | 2.12                  | 65                 |
| 4 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 4O2S230AC       | 2.12                  | 65                 |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input   | 8O2S24DC+       | 2.11                  | 130                |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 8O2S24DC-       | 2.10                  | 130                |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 8O2S110DC+      | 2.11                  | 130                |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 8O2S110DC-      | 2.10                  | 130                |
| 8 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 8O2S115AC       | 2.12                  | 130                |
| 8 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 8O2S230AC       | 2.12                  | 130                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 16O2S24DC+      | 2.11                  | 250                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 16O2S24DC-      | 2.10                  | 250                |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 16O2S110DC+     | 2.11                  | 250                |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 16O2S110DC-     | 2.10                  | 250                |
| 16 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 16O2S115AC      | 2.12                  | 250                |
| 16 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 16O2S230AC      | 2.12                  | 250                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 32O2S24DC+      | 2.11                  | 500                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 32O2S24DC-      | 2.10                  | 500                |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 32O2S110DC+     | 2.11                  | 500                |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 32O2S110DC-     | 2.10                  | 500                |
| 32 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 32O2S115AC      | 2.12                  | 500                |
| 32 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 32O2S230AC      | 2.12                  | 500                |

|   |  |
|---|--|
| Standard 35mm DIN Rail Mounting               | <b>Input Module with ( SSR ) 1 N/O Contact with Fuse - 4, 8, 16, 32 Relays</b>     |
| Input : Screw Connection                      |  |
| Output : Screw Connection                     |  |
| All Relays are Socket (S10P) Mounted          |  |
| Relay : CSS DIP / CSS DIN                     |  |
| Inputs are Polarised                          |  |
| Other Coil Voltages are available on request. |  |
| Customised Modules available on request.      |  |
| Inputs are provided with Fuse                 |  |
| Fuse Blow Indication (Red LED)                |  |
|   |  |
| <b>Input Data</b>                             |  |
| Input Status Indication LED Per relay         | Orange   |
| Fuse Blow Indication Status LED               | Red  |
| Protection Fuse                               | 100 mA   |
| <b>Output Data</b>                            |  |
| Contact Type                                  | 1 N/O Solid State Relay ( SSR )  |
| Board Power ON LED on Output side             | Red  |
| Maximum Switching Voltage                     | 32 VDC   |
| Maximum Switching Current                     | 100 mA   |
| <b>General Data</b>                           |  |
| Conductor Cross Section                       | Solid : 0.2 - 2.5 mm <sup>2</sup> AWG 24 – 12                                      |
| Insulation Stripping Length                   | 8 mm   |
| Module Length                                 | 126 mm   |
| Module Height on DIN Rail                     | 81 mm Max.   |
| Dielectric Strength                           | 2.5 KV between Input and Output of Relay Module                                    |
| Operating Temperature Range                   | 0° C to + 60° C  |
| Standard Features                             | Built in LED Indicator ( Orange ) inside the Relay                                 |
|   |  |
|   |  |

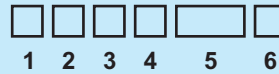
2.13



2.14



Ordering Information



Model Number Legend

|   |                                 |                                 |
|---|---------------------------------|---------------------------------|
| 1 | : Number of Relays              | 4 or 8 or 16 or 32              |
| 2 | : Input Module                  | I                               |
| 3 | : Connection ( Screw Type Only) | S                               |
| 4 | : Fuse + Fuse Blow Indication   | B                               |
| 5 | : Coil Voltage                  | 24 or 110 VDC or 115 or 230 VAC |
| 6 | : Common Output                 | + for Positive - for Negative   |

Note 1 :- All the Solid State Relays have 1 NO Contact

Note 2 :- Modules with Common +ve o/p have CSS DIP Relays

Note 3 :- Modules with Common -ve o/p have CSS DIN Relays

| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Screw</b>                          |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common +ve Output   | 4ISB24DC +      | 2.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common -ve Output   | 4ISB24DC -      | 2.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common +ve Output  | 4ISB110DC +     | 2.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common -ve Output  | 4ISB110DC -     | 2.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common +ve Output  | 4ISB115AC +     | 2.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common -ve Output  | 4ISB115AC -     | 2.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common +ve Output  | 4ISB230AC +     | 2.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common -ve Output  | 4ISB230AC -     | 2.13                  | 65                 |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common +ve Output   | 8ISB24DC +      | 2.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common -ve Output   | 8ISB24DC -      | 2.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common +ve Output  | 8ISB110DC +     | 2.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common -ve Output  | 8ISB110DC -     | 2.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common +ve Output  | 8ISB115AC +     | 2.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common -ve Output  | 8ISB115AC -     | 2.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common +ve Output  | 8ISB230AC +     | 2.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common -ve Output  | 8ISB230AC -     | 2.13                  | 130                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common +ve Output  | 16ISB24DC +     | 2.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common -ve Output  | 16ISB24DC -     | 2.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common +ve Output | 16ISB110DC +    | 2.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common -ve Output | 16ISB110DC -    | 2.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common +ve Output | 16ISB115AC +    | 2.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common -ve Output | 16ISB115AC -    | 2.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common +ve Output | 16ISB230AC +    | 2.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common -ve Output | 16ISB230A C -   | 2.13                  | 250                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common +ve Output  | 32ISB24DC +     | 2.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common -ve Output  | 32ISB24DC -     | 2.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common +ve Output | 32ISB110DC +    | 2.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common -ve Output | 32ISB110DC -    | 2.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common +ve Output | 32ISB115AC +    | 2.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common -ve Output | 32ISB115AC -    | 2.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common +ve Output | 32ISB230AC +    | 2.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common -ve Output | 32ISB230AC -    | 2.13                  | 500                |

Standard 35 mm DIN Rail Mounting

Input : Detachable Screw Connector

Output : Detachable Screw Connector

All Relays are Socket (S10P) Mounted

Relay : C10 A10 ...VAC / VDC.

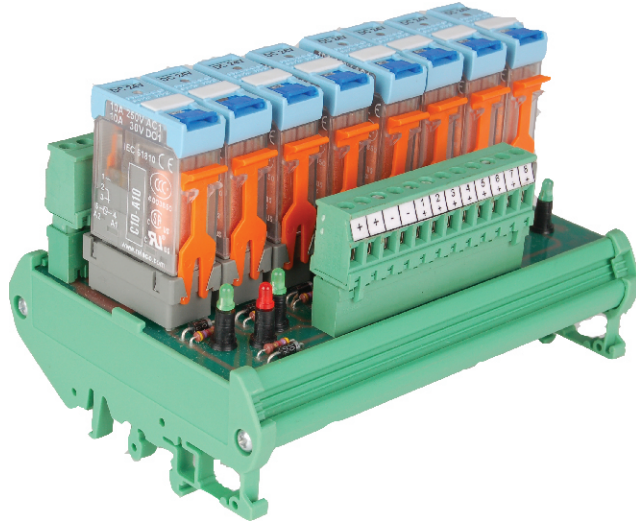
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

### Output Module with 1 C/O Contact- 4, 8, 16, 32 Relays



#### Input Data

Board Power ON LED

Red

Status Indication LED Per Relay

Green

#### Output Data

Contact Type

SPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

10 Amps

#### General Data

Conductor Cross Section

Solid : 0.2 - 2.5mm<sup>2</sup> AWG 24 – 12

Insulation Stripping Length

7 mm

Module Length

90 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

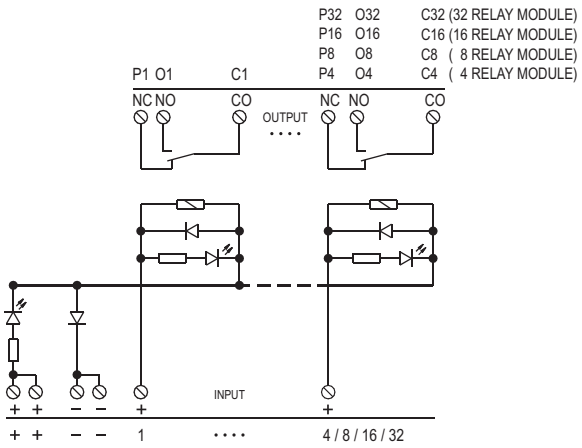
- 20° C to + 60° C

Relay Standard Features

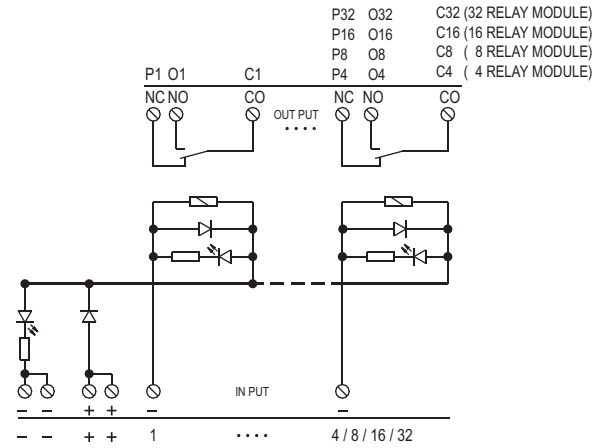
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

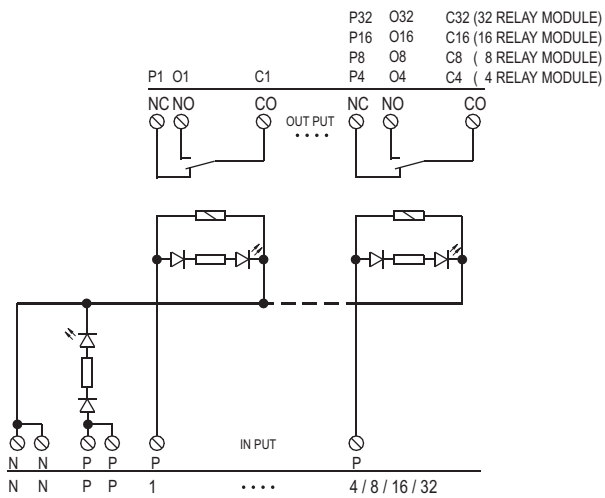
### 3.1



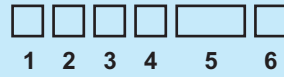
### 3.2



### 3.3



#### Ordering Information

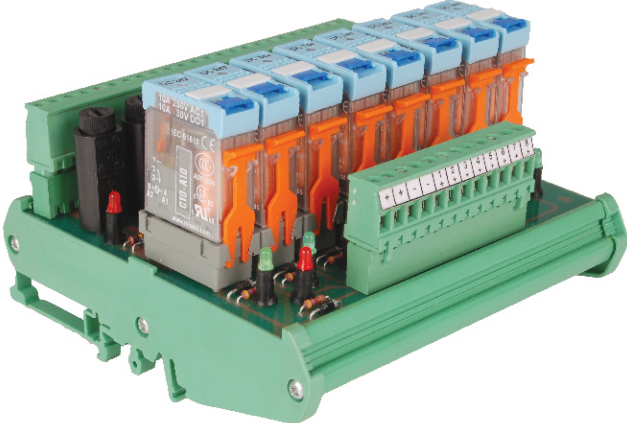


Model Number Legend

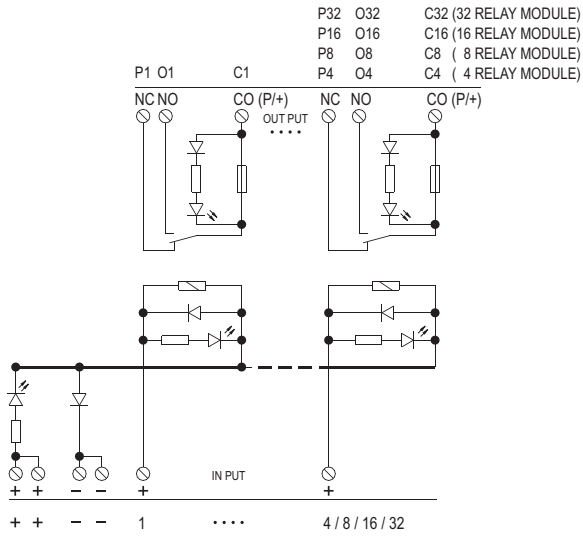
|   |   |                                 |
|---|---|---------------------------------|
| 1 | : Number of Relays                          | 4 or 8 or 16 or 32              |
| 2 | : Output                                    | O                               |
| 3 | : No. of Contacts (1CO)                     | 1                               |
| 4 | : Connection ( Detachable Screw Type Only ) | R                               |
| 5 | : Coil Voltage                              | 24 or 110 VDC or 115 or 230 VAC |
| 6 | : Common Input                              | + for Positive - for Negative   |

| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Detachable Screw Connector</b>    |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1R24DC+       | 3.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1R24DC-       | 3.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1R110DC+      | 3.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1R110DC-      | 3.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1R110AC       | 3.3                   | 65                 |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1R230AC       | 3.3                   | 65                 |
|  |                 |                       |                    |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1R24DC+       | 3.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1R24DC-       | 3.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1R110DC+      | 3.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1R110DC-      | 3.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1R115AC       | 3.3                   | 130                |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1R230AC       | 3.3                   | 130                |
|  |                 |                       |                    |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1R24DC+      | 3.2                   | 255                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1R24DC-      | 3.1                   | 255                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1R110DC+     | 3.2                   | 255                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1R110DC-     | 3.1                   | 255                |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1R115AC      | 3.3                   | 255                |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1R230AC      | 3.3                   | 255                |
|  |                 |                       |                    |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1R24DC+      | 3.2                   | 510                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1R24DC-      | 3.1                   | 510                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1R110DC+     | 3.2                   | 510                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1R110DC-     | 3.1                   | 510                |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1R115AC      | 3.3                   | 510                |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1R230AC      | 3.3                   | 510                |

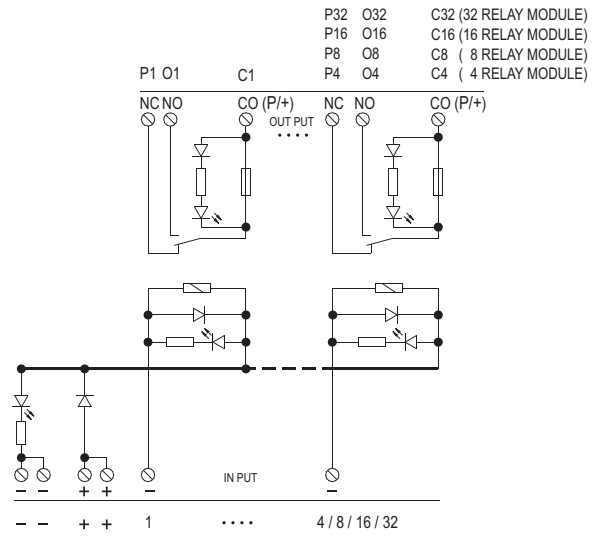


|   |  |  |  |  |
|---|--|--|--|--|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module with 1 C/O Contact with Fuse - 4, 8, 16, 32 Relays</b>                |  |  |  |
| Input : Detachable Screw Connector  |  |  |  |  |
| Output : Detachable Screw Connector   |  |  |  |  |
| All Relays are Socket (S10P) Mounted  |  |  |  |  |
| Relay : C10 A10 ...VAC / VDC.   |  |  |  |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |  |  |  |
| Other Coil Voltages are available on request.                                 |  |  |  |  |
| Customised Modules available on request.                                      |  |  |  |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |  |  |  |
| Relay Module with Fuse in series with Change Over Contact of Relay            |  |  |  |  |
| Fuse Blow Indication (Red LED)  |  |  |  |  |
| <b>Input Data</b>   |  |  |  |  |
| Board Power ON LED  | Red  |  |  |  |
| Status Indication LED Per relay   | Green  |  |  |  |
| <b>Output Data</b>  |  |  |  |  |
| Contact Type  | SPDT   |  |  |  |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |  |  |  |
| Maximum Switching Current   | 10 Amps  |  |  |  |
| Fuse Blow Indication Status LED   | Red  |  |  |  |
| Protection Fuse   | 5 Amps   |  |  |  |
| <b>General Data</b>   |  |  |  |  |
| Conductor Cross Section   | Solid : 0.2 - 2.5 mm <sup>2</sup> AWG 24 – 12  |  |  |  |
| Insulation Stripping Length   | 7 mm   |  |  |  |
| Module Length   | 126 mm   |  |  |  |
| Module Height on DIN Rail   | 80 mm Max.   |  |  |  |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |  |  |  |
| Operating Temperature Range   | - 20°C to +60° C   |  |  |  |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |  |  |  |
|   |  |  |  |  |

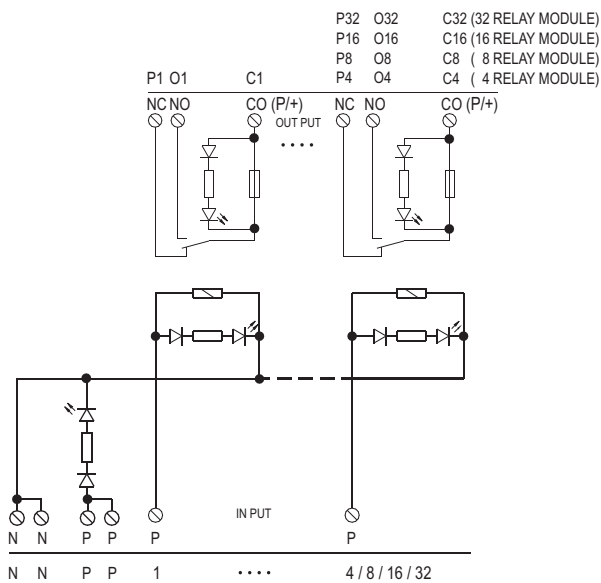
3.4



3.5



3.6



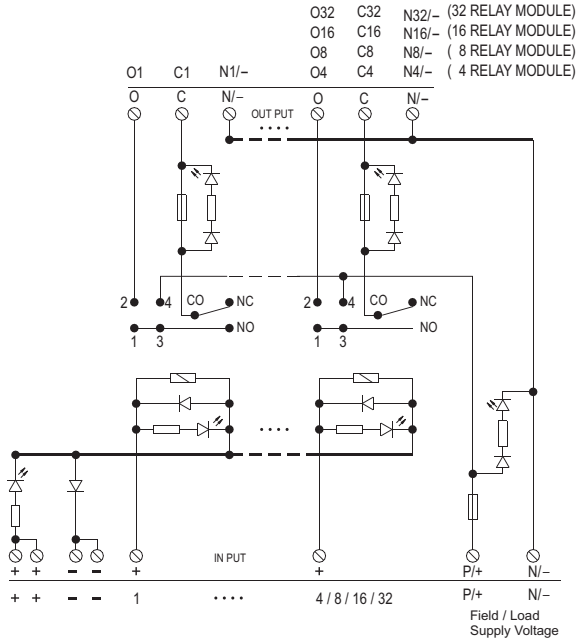
Ordering Information

| 1 | 2   | 3 | 4 | 5 | 6 | 7 | 8   | Model Number Legend             |
|---|---|---|---|---|---|---|-----|---------------------------------|
| 1 | 2   | 3 | 4 | 5 | 6 | 7 | XXX | Model Number Legend             |
| 1 | : Number of Relays                          |   |   |   |   |   |     | 4 or 8 or 16 or 32              |
| 2 | : Output Module                             |   |   |   |   |   |     | O                               |
| 3 | : No. of Contacts (1CO)                     |   |   |   |   |   |     | 1                               |
| 4 | : Connection ( Detachable Screw Type Only ) |   |   |   |   |   |     | R                               |
| 5 | : Fuse + Fuse Blow Indication               |   |   |   |   |   |     | B                               |
| 6 | : Coil Voltage                              |   |   |   |   |   |     | 24 or 110 VDC or 115 or 230 VAC |
| 7 | : Common Input                              |   |   |   |   |   |     | + for positive - for negative   |
| 8 | : Load Voltage                              |   |   |   |   |   |     | XXX 24VDC or 115VAC or 230VAC   |

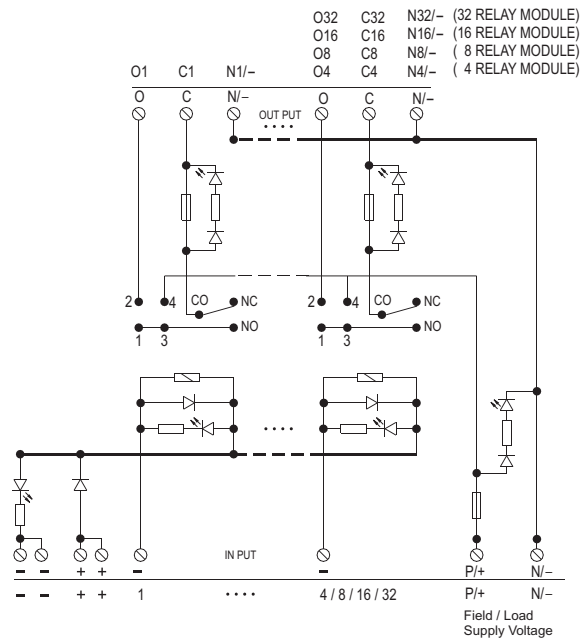
| <b>Standard Part Nos.</b>  |                  |                       |                    |  |
|--|------------------|-----------------------|--------------------|--|
| <b>Connection : Input / Output - Detachable Screw Connector</b>    |                  |                       |                    |  |
| <b>Description</b>   | <b>Part No.</b>  | <b>Wiring Diagram</b> | <b>Width in mm</b> |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1RB24DC+ XXX   | 3.5                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1RB24DC- XXX   | 3.4                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1RB110DC+ XXX  | 3.5                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1RB110DC- XXX  | 3.4                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1RB115AC XXX   | 3.6                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1RB230AC XXX   | 3.6                   | 65                 |  |
|  |                  |                       |                    |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1RB24DC+ XXX   | 3.5                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1RB24DC- XXX   | 3.4                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1RB110DC+ XXX  | 3.5                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1RB110DC- XXX  | 3.4                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1RB115AC XXX   | 3.6                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1RB230AC XXX   | 3.6                   | 130                |  |
|  |                  |                       |                    |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1RB24DC+ XXX  | 3.5                   | 255                |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1RB24DC- XXX  | 3.4                   | 255                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1RB110DC+ XXX | 3.5                   | 255                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1RB110DC- XXX | 3.4                   | 255                |  |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1RB115AC XXX  | 3.6                   | 255                |  |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1RB230AC XXX  | 3.6                   | 255                |  |
|  |                  |                       |                    |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1RB24DC+ XXX  | 3.5                   | 510                |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1RB24DC- XXX  | 3.4                   | 510                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1RB110DC+ XXX | 3.5                   | 510                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1RB110DC- XXX | 3.4                   | 510                |  |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1RB115AC XXX  | 3.6                   | 510                |  |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1RB230AC XXX  | 3.6                   | 510                |  |

|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module 1 C/O Contact with Fuse &amp; Jumper - 4, 8, 16, 32 Relays</b>        |
| Input : Detachable Screw Connector  |  |
| Output : Detachable Screw Connector   |  |
| All Relays are Socket (S10P) Mounted  |  |
| Relay : C10 A10 X....VAC<br>C10 A10 FX...VDC                                  |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |
| Other Coil Voltages are available on request.                                 |  |
| Customised Modules available on request.                                      |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |
| Relay Module with Fuse in series with Change Over Contact of Relay            |  |
| Fuse Blow Indication (Red LED)  |  |
| Jumper (Gold Plated) on Contact Side for Wet and Dry Contact Selection.       |  |
| <b>Input Data</b>   |  |
| Board Power ON LED  | Red  |
| Status Indication LED Per relay   | Green  |
| Status Indication LED for Field Supply  | Green  |
| <b>Output Data</b>  |  |
| Contact Type  | SPDT   |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |
| Maximum Switching Current   | 10 Amps  |
| Fuse Blow Indication Status LED   | Red  |
| Protection Fuse   | 5 Amps   |
| <b>General Data</b>   |  |
| Conductor Cross Section   | Solid : 0.2 - 2.5 mm <sup>2</sup> AWG 24 – 12  |
| Insulation Stripping Length   | 7 mm   |
| Module Length   | 126 mm   |
| Module Height on DIN Rail   | 80 mm Max.   |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range   | - 20° C to + 60° C   |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |

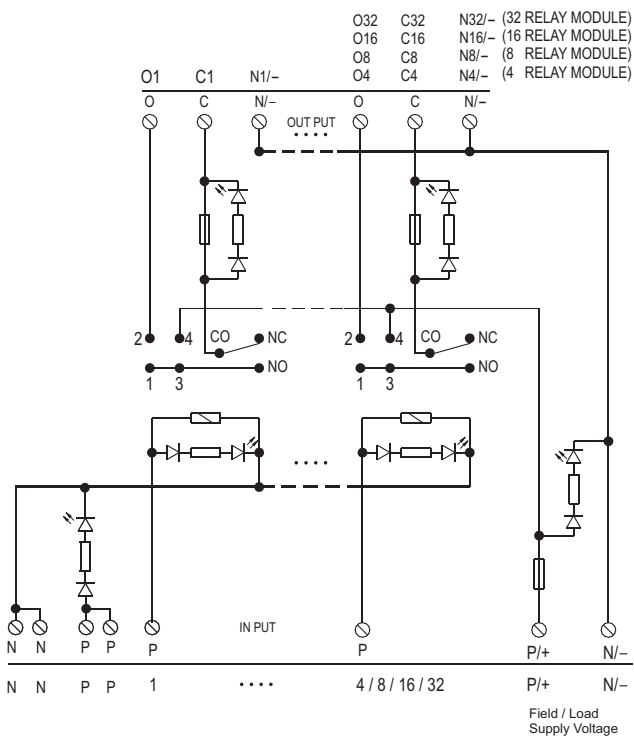
### 3.7



### 3.8



### 3.9



#### Ordering Information

XXX Model Number Legend  
 1 2 3 4 5 6 7 8 9

1 : Number of Relays 4 or 8 or 16 or 32

2 : Output Module O

3 : No. of Contacts (1CO) 1

4 : Connection ( Detachable Screw Type Only ) R

5 : Fuse + Fuse Blow Indication B

6 : Jumper J

7 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC

8 : Common Input + for positive - for negative

9 : Field / Load Voltage XXX 24VDC or 115 or 230VAC

Note: Field / Load Voltage for Wet Contact Only

|             | Jumper Position | Output Terminals      |
|-------------|-----------------|-----------------------|
| Wet Contact | 4-3             | C1 (P/+)..., N1/ -... |
| Dry Contact | 1-2             | O1..., C1...          |

Wet Contact 4-3 C1 (P/+)..., N1/ -...

Dry Contact 1-2 O1..., C1...

Relay Type : C10 A10X...VAC & C10 A10FX...VDC

Note- All the relays have Electronics built inside.

(X : LED, F : Free Wheeling & Polarity Diode)

| <b>Standard Part Nos.</b>  |                   |                       |                    |
|--|-------------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Detachable Screw Connector</b>    |                   |                       |                    |
| <b>Description</b>   | <b>Part No.</b>   | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1RBJ24DC+ XXX   | 3.8                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1RBJ24DC- XXX   | 3.7                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1RBJ110DC+ XXX  | 3.8                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1RBJ110DC- XXX  | 3.7                   | 65                 |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1RBJ115AC XXX   | 3.9                   | 65                 |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1RBJ230AC XXX   | 3.9                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1RBJ24DC+ XXX   | 3.8                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1RBJ24DC- XXX   | 3.7                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1RBJ110DC+ XXX  | 3.8                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1RBJ110DC- XXX  | 3.7                   | 130                |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1RBJ115AC XXX   | 3.9                   | 130                |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1RBJ230AC XXX   | 3.9                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1RBJ24DC+ XXX  | 3.8                   | 255                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1RBJ24DC- XXX  | 3.7                   | 255                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1RBJ110DC+ XXX | 3.8                   | 255                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1RBJ110DC- XXX | 3.7                   | 255                |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1RBJ115AC XXX  | 3.9                   | 255                |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1RBJ230AC XXX  | 3.9                   | 255                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1RBJ24DC+ XXX  | 3.8                   | 510                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1RBJ24DC- XXX  | 3.7                   | 510                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1RBJ110DC+ XXX | 3.8                   | 510                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1RBJ110DC- XXX | 3.7                   | 510                |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1RBJ115AC XXX  | 3.9                   | 510                |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1RBJ230AC XXX  | 3.9                   | 510                |

Standard 35 mm DIN Rail Mounting

Input : Detachable Screw Connector

Output : Detachable Screw Connector

All Relays are Socket (S12P) Mounted

Relay : C12 A21...VAC / VDC.

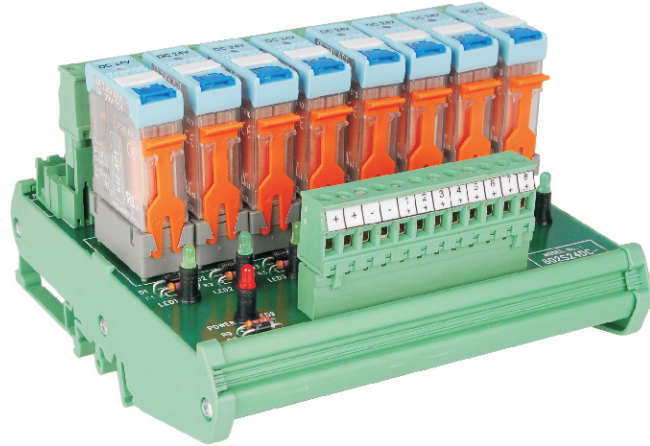
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

### Output Module with 2 C/O Contacts - 4, 8, 16, 32 Relays



#### Input Data

Board Power ON LED

Red

Status Indication LED Per Relay

Green

#### Output Data

Contact Type

DPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

5 Amps

#### General Data

Conductor Cross Section

Solid : 0.2 - 2.5 mm<sup>2</sup> AWG 24 – 12

Insulation Stripping Length

7 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

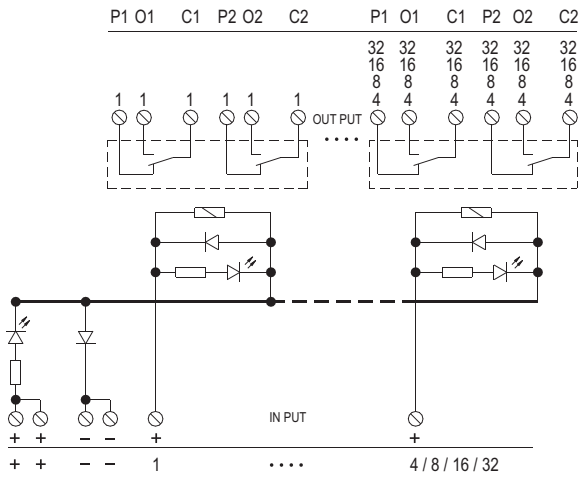
- 20° C to + 60° C

Relay Standard Features

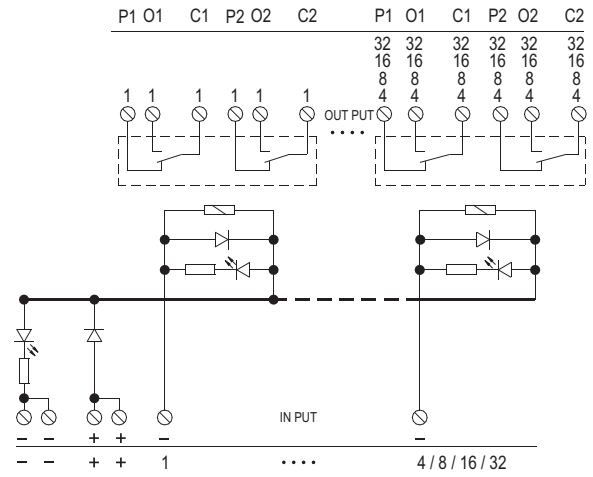
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

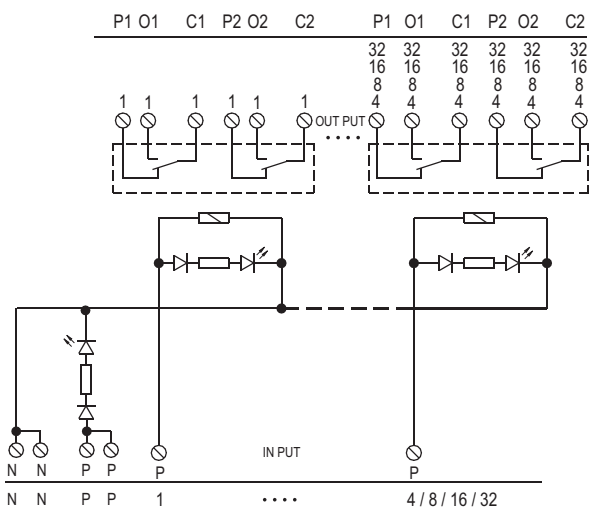
3.10



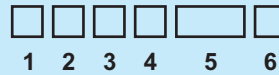
3.11



3.12



Ordering Information

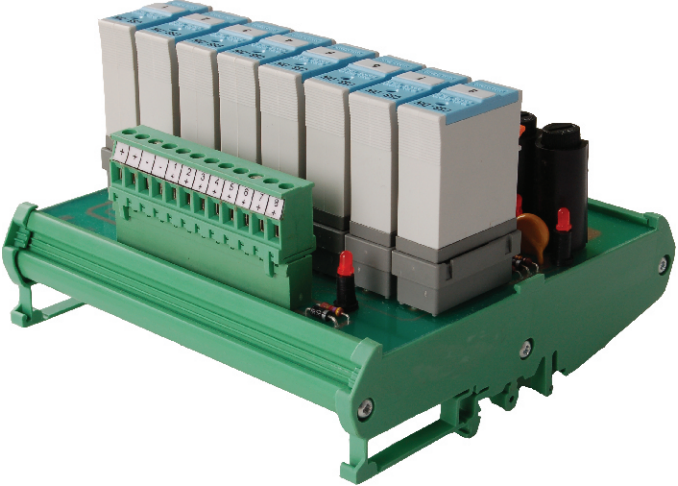


Model Number Legend

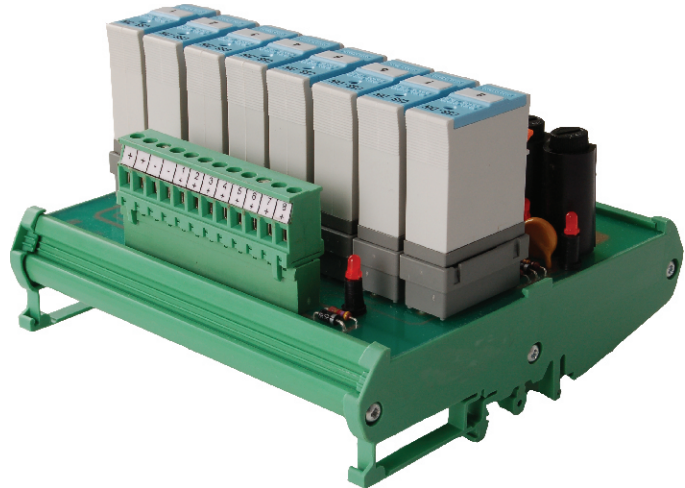
- 1 : Number of Relays 4 or 8 or 16 or 32
- 2 : Output Module O
- 3 : No. of Contacts (2CO) 2
- 4 : Connection ( Detachable Screw Type Only ) R
- 5 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 6 : Common Input + for Positive - for Negative



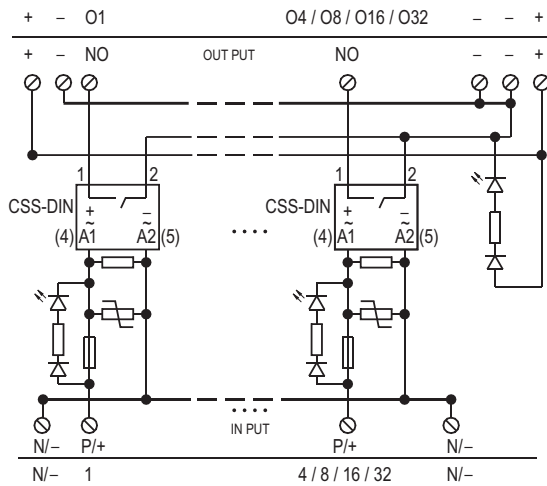
| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Detachable Screw Connector</b>    |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input   | 4O2R24DC+       | 3.11                  | 65                 |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 4O2R24DC-       | 3.10                  | 65                 |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 4O2R110DC+      | 3.11                  | 65                 |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 4O2R110DC-      | 3.10                  | 65                 |
| 4 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 4O2R115AC       | 3.12                  | 65                 |
| 4 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 4O2R230AC       | 3.12                  | 65                 |
|  |                 |                       |                    |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input   | 8O2R24DC+       | 3.11                  | 130                |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 8O2R24DC-       | 3.10                  | 130                |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 8O2R110DC+      | 3.11                  | 130                |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 8O2R110DC-      | 3.10                  | 130                |
| 8 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 8O2R115AC       | 3.12                  | 130                |
| 8 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 8O2R230AC       | 3.12                  | 130                |
|  |                 |                       |                    |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 16O2R24DC+      | 3.11                  | 255                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 16O2R24DC-      | 3.10                  | 255                |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 16O2R110DC+     | 3.11                  | 255                |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 16O2R110DC-     | 3.10                  | 255                |
| 16 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 16O2R115AC      | 3.12                  | 255                |
| 16 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 16O2R230AC      | 3.12                  | 255                |
|  |                 |                       |                    |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 32O2R24DC+      | 3.11                  | 510                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 32O2R24DC-      | 3.10                  | 510                |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 32O2R110DC+     | 3.11                  | 510                |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 32O2R110DC-     | 3.10                  | 510                |
| 32 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 32O2R115AC      | 3.12                  | 510                |
| 32 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 32O2R230AC      | 3.12                  | 510                |

|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting              |  |
| Input : Detachable Screw Connector            |  |
| Output : Detachable Screw Connector           |  |
| All Relays are Socket (S10P) Mounted          |  |
| Relay : CSS DIP / CSS DIN                     |  |
| Inputs are Polarised                          |  |
| Other Coil Voltages are available on request. |  |
| Customised Modules available on request.      |  |
| Inputs are provided with Fuse                 |  |
| Fuse Blow Indication (Red LED)                |  |
| <b>Input Data</b>                             |  |
| Input Status Indication LED Per Relay         | Orange   |
| Fuse Blow Indication Status LED               | Red  |
| Protection Fuse                               | 100 mA   |
| <b>Output Data</b>                            |  |
| Contact Type                                  | 1 N/O Solid State Relay ( SSR )  |
| Board Power ON LED on Output Side             | Red  |
| Maximum Switching Voltage                     | 32 VDC   |
| Maximum Switching Current                     | 100 mA   |
| <b>General Data</b>                           |  |
| Conductor Cross Section                       | Solid : 0.2 - 2.5 mm <sup>2</sup> AWG 24 – 12                                      |
| Insulation Stripping Length                   | 7 mm   |
| Module Length                                 | 126 mm   |
| Module Height on DIN Rail                     | 81 mm Max.   |
| Dielectric Strength                           | 2.5 KV between Input and Output of Relay Module                                    |
| Operating Temperature Range                   | 0° C to + 60° C  |
| Relay Standard Features                       | Built in LED indicator ( Orange ) inside the Relay                                 |
|   |  |
|   |  |

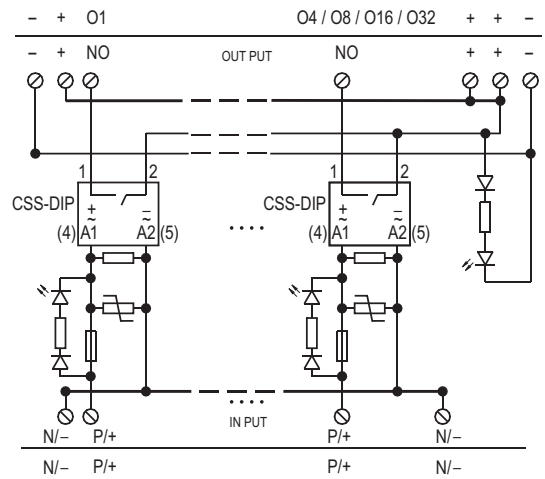
**Input Module with ( SSR ) 1 N/O Contact with Fuse - 4, 8, 16, 32 Relays**



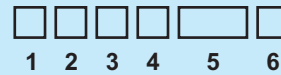
### 3.13



### 3.14



#### Ordering Information



Model Number Legend

|   |   |  |                                 |
|---|---|--|---------------------------------|
| 1 | : | Number of Relays                               | 4 or 8 or 16 or 32              |
| 2 | : | Input Module                                   | I                               |
| 3 | : | Connection Type ( Detachable Screw Type Only ) | R                               |
| 4 | : | Fuse + Fuse Blow Indication                    | B                               |
| 5 | : | Coil Voltage                                   | 24 or 110 VDC or 115 or 230 VAC |
| 6 | : | Common Output                                  | + for Positive - for Negative   |

Note 1 :- All the Solid State Relays have 1 NO Contact

Note 2 :- Modules with Common +ve O/P have CSS DIP Relays

Note 3 :- Modules with Common -ve O/P have CSS DIN Relays

| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Detachable Screw Connector</b>          |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output   | 4IRB24DC +      | 3.14                  | 70                 |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output   | 4IRB24DC -      | 3.13                  | 70                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output  | 4IRB110DC +     | 3.14                  | 70                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output  | 4IRB110DC -     | 3.13                  | 70                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output  | 4IRB115AC +     | 3.14                  | 70                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output  | 4IRB115AC -     | 3.13                  | 70                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output  | 4IRB230AC +     | 3.14                  | 70                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output  | 4IRB230AC -     | 3.13                  | 70                 |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output   | 8IRB24DC +      | 3.14                  | 135                |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output   | 8IRB24DC -      | 3.13                  | 135                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output  | 8IRB110DC +     | 3.14                  | 135                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output  | 8IRB110DC -     | 3.13                  | 135                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output  | 8IRB115AC +     | 3.14                  | 135                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output  | 8IRB115AC -     | 3.13                  | 135                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output  | 8IRB230AC +     | 3.14                  | 135                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output  | 8IRB230AC -     | 3.13                  | 135                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output  | 16IRB24DC +     | 3.14                  | 255                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output  | 16IRB24DC -     | 3.13                  | 255                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output | 16IRB110DC +    | 3.14                  | 255                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output | 16IRB110DC -    | 3.13                  | 255                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output | 16IRB115AC +    | 3.14                  | 255                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output | 16IRB115AC -    | 3.13                  | 255                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output | 16IRB230AC +    | 3.14                  | 255                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output | 16IRB230AC -    | 3.13                  | 255                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output  | 32IRB24DC +     | 3.14                  | 510                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output  | 32IRB24DC -     | 3.13                  | 510                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output | 32IRB110DC +    | 3.14                  | 510                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output | 32IRB110DC -    | 3.13                  | 510                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output | 32IRB115AC +    | 3.14                  | 510                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output | 32IRB115AC -    | 3.13                  | 510                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output | 32IRB230AC +    | 3.14                  | 510                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output | 32IRB230AC -    | 3.13                  | 510                |

### Output Module with 1 C/O Contact - 4, 8, 16, 32 Relays

Standard 35 mm DIN Rail Mounting

Input : Screwless Spring Connector

Output : Screwless Spring Connector

All Relays are Socket (S10P) Mounted

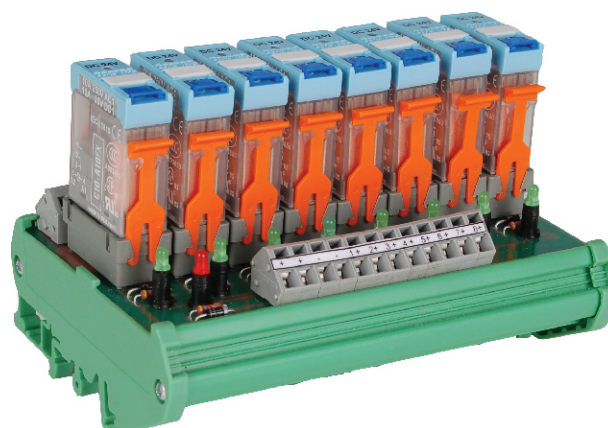
Relay : C10 A10...VAC / VDC.

Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.



#### Input Data

Board Power ON LED

Red

Status Indication LED Per Relay

Green

#### Output Data

Contact Type

SPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

10 Amps

#### General Data

Conductor Cross Section

Solid : 0.08 - 2.5 mm<sup>2</sup> AWG 28 – 12

Insulation Stripping Length

5 - 6 mm

Module Length

90 mm

Module Height on DIN Rail

80 mm

Dielectric Strength

2.5 KV between Input and Output of Relay Module

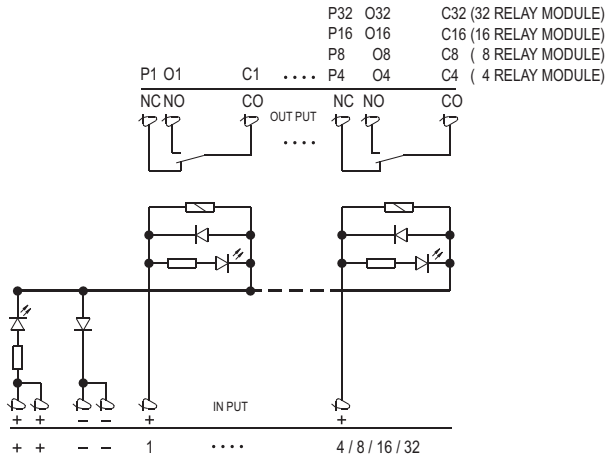
Operating Temperature Range

- 20°C to +60° C

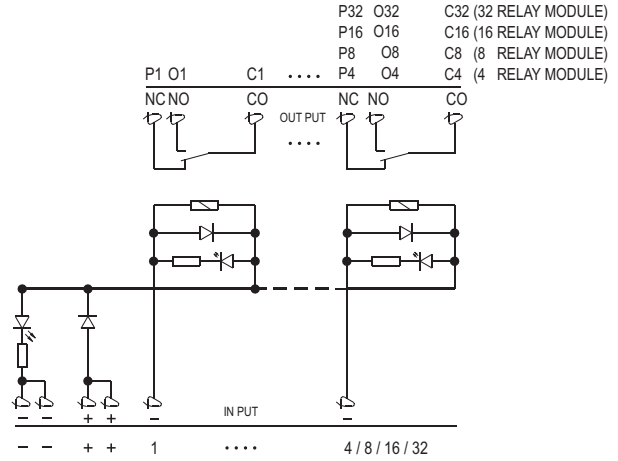
Relay Standard Features

Mechanical Flag Indicator, Manual Push Button,  
Lockable Test Button & Marking Label

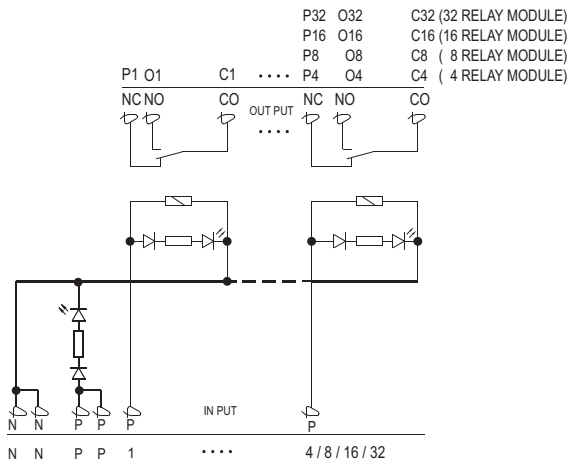
### 4.1



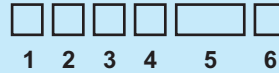
### 4.2



### 4.3



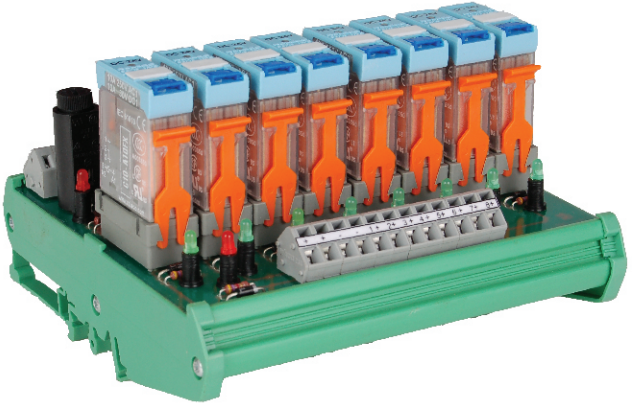
#### Ordering Information



Model Number Legend

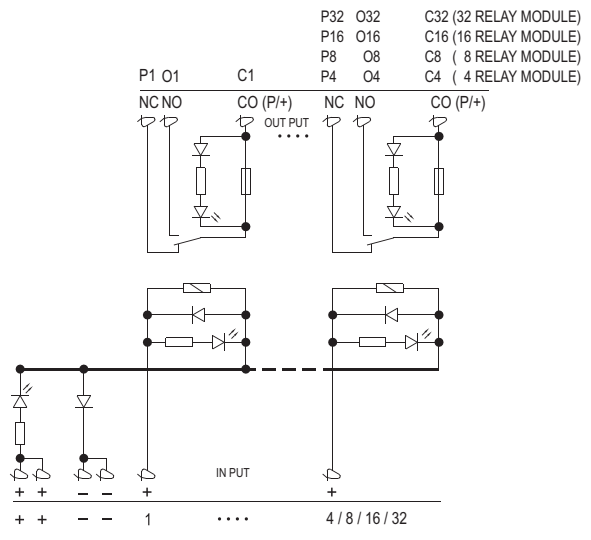
- 1 : Number of Relays 4 or 8 or 16 or 32
- 2 : Output O
- 3 : No. of Contacts (1CO) 1
- 4 : Connection type ( Screwless Spring ) C
- 5 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 6 : Common Input + for Positive - for Negative

| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Screwless Spring Connector</b>    |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1C24DC+       | 4.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1C24DC-       | 4.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1C110DC+      | 4.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1C110DC-      | 4.1                   | 65                 |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1C115AC       | 4.3                   | 65                 |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1C230AC       | 4.3                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1C24DC+       | 4.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1C24DC-       | 4.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1C110DC+      | 4.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1C110DC-      | 4.1                   | 130                |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1C115AC       | 4.3                   | 130                |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1C230AC       | 4.3                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1C24DC+      | 4.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1C24DC-      | 4.1                   | 250                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1C110DC+     | 4.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1C110DC-     | 4.1                   | 250                |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1C115AC      | 4.3                   | 250                |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1C230AC      | 4.3                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1C24DC+      | 4.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1C24DC-      | 4.1                   | 500                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1C110DC+     | 4.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1C110DC-     | 4.1                   | 500                |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1C115AC      | 4.3                   | 500                |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1C230AC      | 4.3                   | 500                |

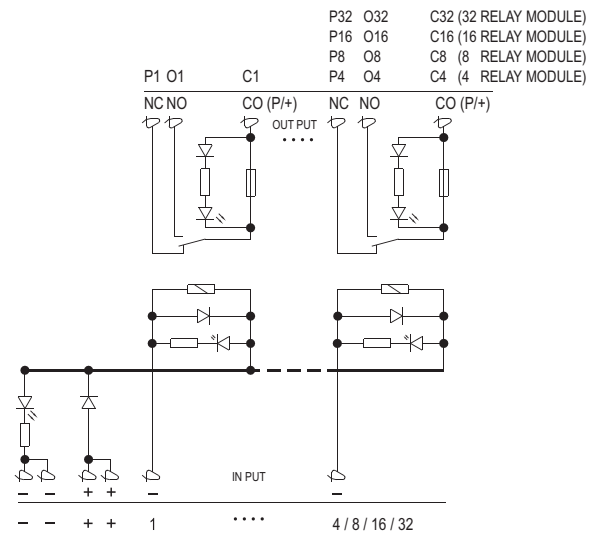
|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module with 1 C/O Contact with Fuse - 4, 8, 16, 32 Relays</b>            |
| Input : Screwless Spring Connector  |  |
| Output : Screwless Spring Connector   |  |
| All Relays are Socket (S10P) Mounted  |  |
| Relay : C10 A10...VAC / VDC.  |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |
| Other Coil Voltages are available on request.                                 |  |
| Customised Modules available on request.                                      |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |
| Relay Module with in series with Change Over Contact of Relay                 |  |
| Fuse Blow Indication (Red LED)  |  |
|   |  |
|   |  |
|   |  |
| <b>Input Data</b>   |  |
| Board Power ON LED  | Red  |
| Status Indication LED Per Relay   | Green  |
| <b>Output Data</b>  |  |
| Contact Type  | SPDT   |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |
| Maximum Switching Current   | 10 Amps  |
| Fuse Blow Indication Status LED   | Red  |
| Protection Fuse   | 5 Amps   |
| <b>General Data</b>   |  |
| Conductor Cross Connection  | Solid : 0.08 - 2.5 mm <sup>2</sup> AWG 28 – 12                                     |
| Insulation Stripping Length   | 5 - 6 mm   |
| Module Length   | 126 mm   |
| Module Height on DIN Rail   | 80 mm  |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module                                    |
| Operating Temperature Range   | - 20°C to +60° C   |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,                                     |
|   | Lockable Test Button & Marking Label   |
|   |  |



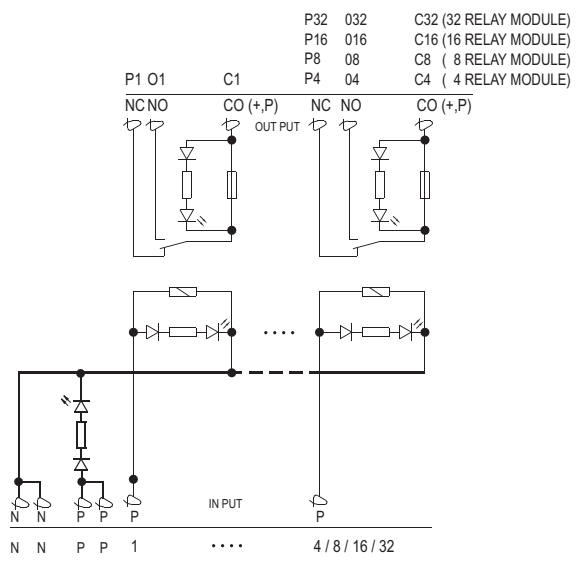
### 4.4



### 4.5



### 4.6

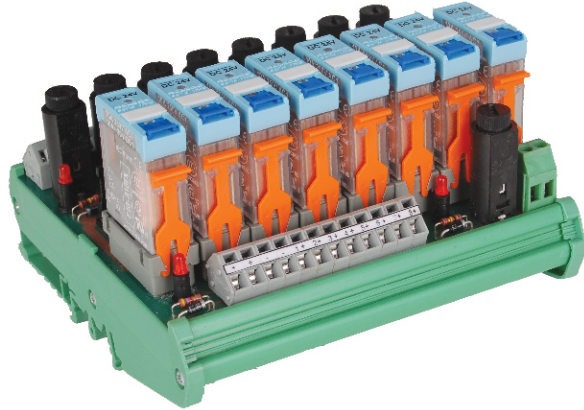


### Ordering Information

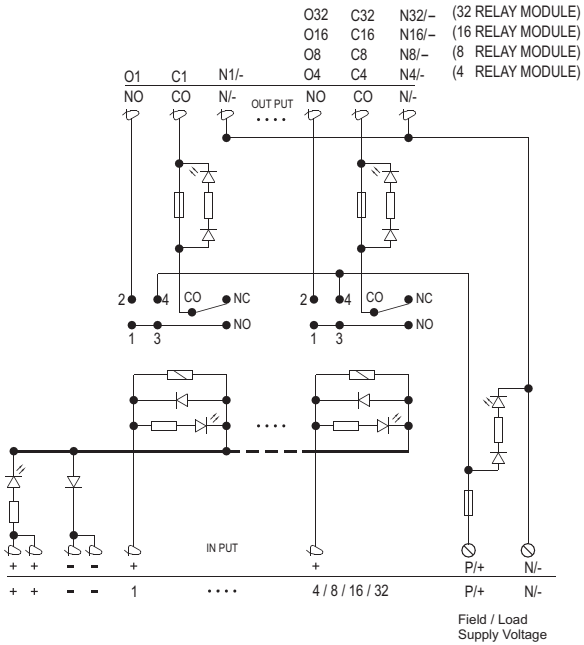
| 1 | 2 | 3                                    | 4                               | 5 | 6 | 7 | 8   | Model Number Legend |
|---|---|--------------------------------------|---------------------------------|---|---|---|-----|---------------------|
| 1 | : | Number of Relays                     |                                 |   |   |   | XXX | 4 or 8 or 16 or 32  |
| 2 | : | Output Module                        |                                 |   |   |   |     | O                   |
| 3 | : | No. of Contacts (1CO)                |                                 |   |   |   |     | 1                   |
| 4 | : | Connection type ( Screwless Spring ) |                                 |   |   |   |     | C                   |
| 5 | : | Fuse + Fuse Blow Indication          |                                 |   |   |   |     | B                   |
| 6 | : | Coil Voltage                         | 24 or 110 VDC or 115 or 230 VAC |   |   |   |     |                     |
| 7 | : | Common Input                         | + for positive - for negative   |   |   |   |     |                     |
| 8 | : | Load Voltage                         | XXX 24VDC or 115VAC or 230VAC   |   |   |   |     |                     |

| <b>Standard Part Nos.</b>  |                  |                       |                    |  |
|--|------------------|-----------------------|--------------------|--|
| <b>Connection : Input / Output - Screwless Spring Connector</b>    |                  |                       |                    |  |
| <b>Description</b>   | <b>Part No.</b>  | <b>Wiring Diagram</b> | <b>Width in mm</b> |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1CB24DC+ XXX   | 4.5                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1CB24DC- XXX   | 4.4                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1CB110DC+ XXX  | 4.5                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1CB110DC- XXX  | 4.4                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1CB115AC XXX   | 4.6                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 250V AC Coil Input                   | 4O1CB230AC XXX   | 4.6                   | 65                 |  |
|  |                  |                       |                    |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1CB24DC+ XXX   | 4.5                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1CB24DC- XXX   | 4.4                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1CB110DC+ XXX  | 4.5                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1CB110DC- XXX  | 4.4                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1CB115AC XXX   | 4.6                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1CB230AC XXX   | 4.6                   | 130                |  |
|  |                  |                       |                    |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1CB24DC+ XXX  | 4.5                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1CB24DC- XXX  | 4.4                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1CB110DC+ XXX | 4.5                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1CB110DC- XXX | 4.4                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1CB115AC XXX  | 4.6                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1CB230AC XXX  | 4.6                   | 250                |  |
|  |                  |                       |                    |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1CB24DC+ XXX  | 4.5                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1CB24DC- XXX  | 4.4                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1CB110DC+ XXX | 4.5                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1CB110DC- XXX | 4.4                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1CB115AC XXX  | 4.6                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1CB230AC XXX  | 4.6                   | 500                |  |

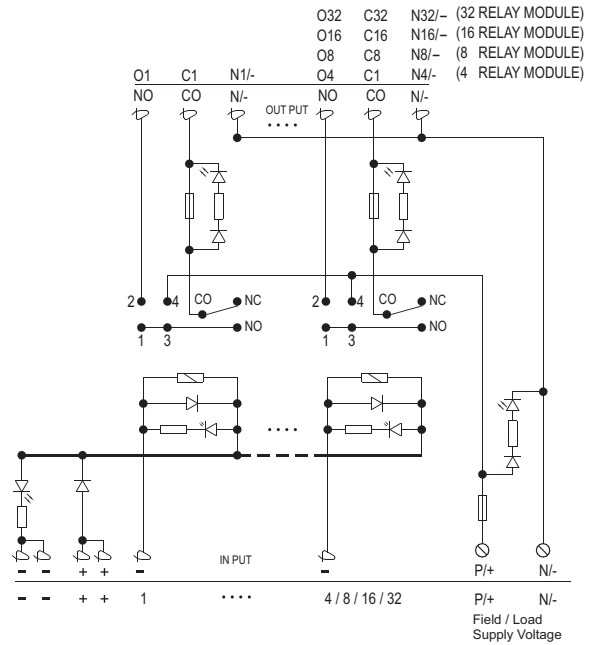
|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module 1 C/O Contact with Fuse &amp; Jumper - 4, 8, 16, 32 Relays</b>        |
| Input : Screwless Spring Connector  |  |
| Output : Screwless Spring Connector   |  |
| All Relays are Socket (S10P) Mounted  |  |
| Relay : C10 A10X.....VAC<br>C10 A10 FX...VDC                                  |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |
| Other Coil Voltages are available on request.                                 |  |
| Customised Modules available on request.                                      |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |
| Relay Module with Fuse in series with Change Over Contact of Relay            |  |
| Fuse Blow Indication (Red LED)  |  |
| Jumper (Gold Plated) on Contact Side for Wet and Dry Contact Selection.       |  |
| <b>Input Data</b>   |  |
| Board Power ON LED  | Red  |
| Status Indication LED Per Relay   | Green  |
| Status Indication LED for Field Supply  | Green  |
| <b>Output Data</b>  |  |
| Contact Type  | SPDT   |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |
| Maximum Switching Current   | 10 Amps  |
| Fuse Blow Indication Status LED   | Red  |
| Protection Fuse   | 5 Amps   |
| <b>General Data</b>   |  |
| Conductor Cross Section   | Solid : 0.08 - 2.5 mm <sup>2</sup> AWG 28 – 12   |
| Insulation Stripping Length   | 5 - 6 mm   |
| Module Length   | 126 mm   |
| Module Height on DIN Rail   | 80 mm  |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range   | - 20°C to +60° C   |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |



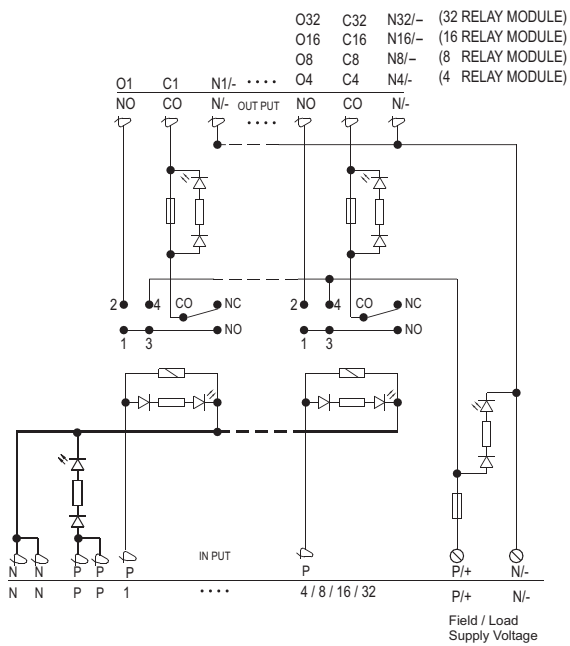
4.7



4.8



4.9



Ordering Information

1 2 3 4 5 6 7 8 9 XXX Model Number Legend

- 1 : Number of Relays 4 or 8 or 16 or 32
- 2 : Output Module O
- 3 : No. of Contacts (1CO) 1
- 4 : Connection type ( Screwless Spring ) C
- 5 : Fuse + Fuse Blow Indication B
- 6 : Jumper J
- 7 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 8 : Common Input + for Positive - for Negative
- 9 : Field / Load Voltage XXX 24VDC or 115 or 230VAC

Note: Field / Load Voltage for Wet Contact only

|             | Jumper Position | Output Terminals       |
|-------------|-----------------|------------------------|
| Wet Contact | 4-3             | C1 (P/+),..., N1/ -... |
| Dry Contact | 1-2             | O1..., C1...           |

Relay Type : C10 A10X...VAC & C10 A10FX...VDC

Note- All the relays have Electronics built inside.

(X : LED, F : Free Wheeling & Polarity Diode)

| <b>Standard Part Nos.</b>  |                  |                       |                    |  |
|--|------------------|-----------------------|--------------------|--|
| <b>Connection : Input / Output - Screwless Spring Connector</b>    |                  |                       |                    |  |
| <b>Description</b>   | <b>Part No.</b>  | <b>Wiring Diagram</b> | <b>Width in mm</b> |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O1CBJ24DC+ XXX  | 4.8                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 4O1CBJ24DC- XXX  | 4.7                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 4O1CBJ110DC+ XXX | 4.8                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 4O1CBJ110DC- XXX | 4.7                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 4O1CBJ115AC XXX  | 4.9                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 4O1CBJ230AC XXX  | 4.9                   | 65                 |  |
|  |                  |                       |                    |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 8O1CBJ24DC+ XXX  | 4.8                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input   | 8O1CBJ24DC- XXX  | 4.7                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input  | 8O1CBJ110DC+ XXX | 4.8                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input  | 8O1CBJ110DC- XXX | 4.7                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 115V AC Coil Input                   | 8O1CBJ115AC XXX  | 4.9                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 230V AC Coil Input                   | 8O1CBJ230AC XXX  | 4.9                   | 130                |  |
|  |                  |                       |                    |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 16O1CBJ24DC+ XXX | 4.8                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 16O1CBJ24DC- XXX | 4.7                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 16O1CBJ110DC+XXX | 4.8                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 16O1CBJ110DC-XXX | 4.7                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 16O1CBJ115AC XXX | 4.9                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 16O1CBJ230AC XXX | 4.9                   | 250                |  |
|  |                  |                       |                    |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 32O1CBJ24DC+ XXX | 4.8                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 32O1CBJ24DC- XXX | 4.7                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Positive Input | 32O1CBJ110DC+XXX | 4.8                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 110V DC Coil, Common Negative Input | 32O1CBJ110DC-XXX | 4.7                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 115V AC Coil Input                  | 32O1CBJ115AC XXX | 4.9                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 230V AC Coil Input                  | 32O1CBJ230AC XXX | 4.9                   | 500                |  |

Standard 35 mm DIN Rail Mounting

Input : Screwless Spring Connector

Output : Screwless Spring Connector

All Relays are Socket (S12P) Mounted

Relay : C12 A21...VAC / VDC.

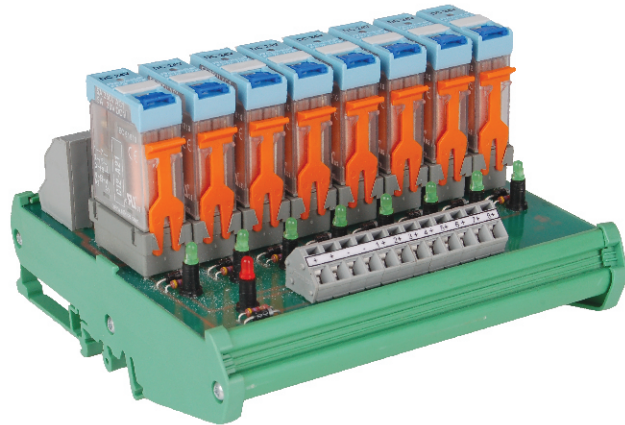
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

### Output Module with 2 C/O Contacts - 4, 8, 16, 32 Relays



#### Input Data

Board Power ON LED

Red

Status Indication LED Per Relay

Green

#### Output Data

Contact Type

DPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

5 Amps

#### General Data

Conductor Cross Connection

Solid : 0.08 - 2.5 mm<sup>2</sup> AWG 28 – 12

Insulation Stripping Length

5-6 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

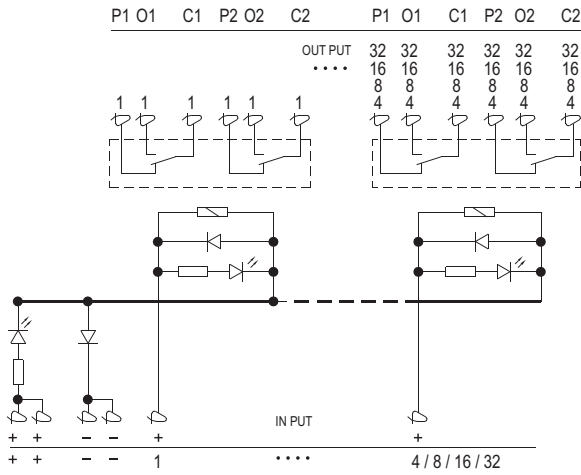
- 20° C to +60° C

Relay Standard Features

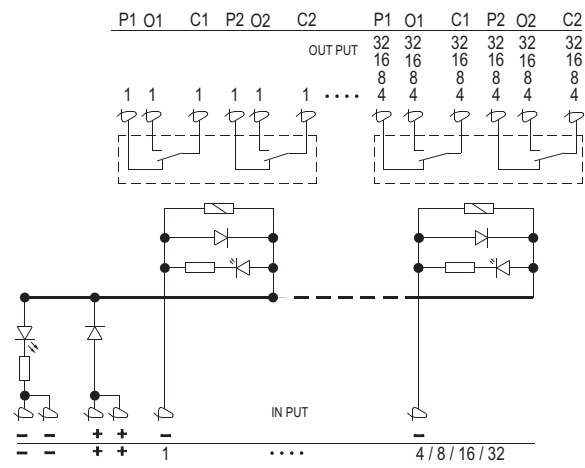
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

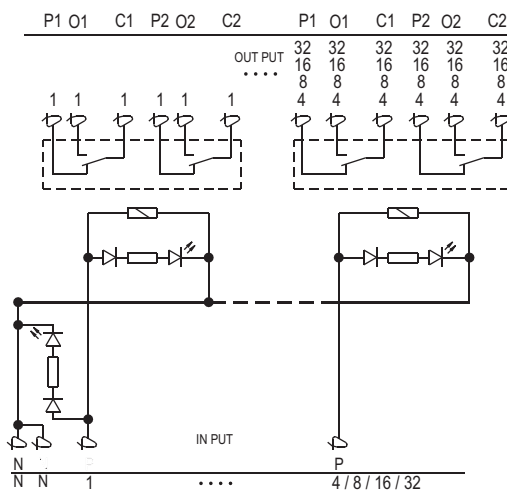
### 4.10



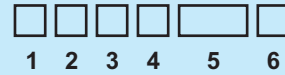
### 4.11



### 4.12



#### Ordering Information



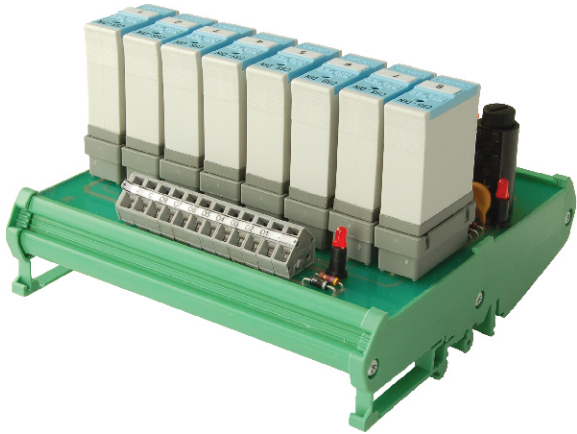
Model Number Legend

- 1 : Number of Relays 4 or 8 or 16 or 32
- 2 : Output Module O
- 3 : No. of Contacts 2
- 4 : Connection type ( Screwless Spring ) C
- 5 : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 6 : Common Input + for positive - for negative

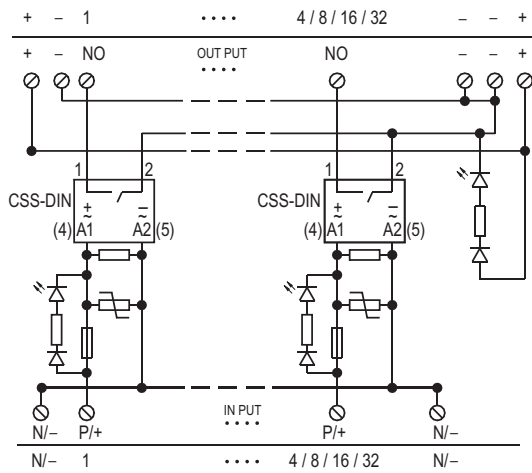
**Standard Part Nos.****Connection : Input / Output - Screwless Spring Connector**

| Description  | Part No.    | Wiring Diagram | Width in mm |
|--|-------------|----------------|-------------|
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input   | 4O2C24DC+   | 4.11           | 65          |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 4O2C24DC-   | 4.10           | 65          |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 4O2C110DC+  | 4.11           | 65          |
| 4 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 4O2C110DC-  | 4.10           | 65          |
| 4 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 4O2C115AC   | 4.12           | 65          |
| 4 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 4O2C230AC   | 4.12           | 65          |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input   | 8O2C24DC+   | 4.11           | 130         |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input   | 8O2C24DC-   | 4.10           | 130         |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input  | 8O2C110DC+  | 4.11           | 130         |
| 8 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input  | 8O2C110DC-  | 4.10           | 130         |
| 8 Relay, Output Module, 2C/O, 115V AC Coil Input                   | 8O2C115AC   | 4.12           | 130         |
| 8 Relay, Output Module, 2C/O, 230V AC Coil Input                   | 8O2C230AC   | 4.12           | 130         |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 16O2C24DC+  | 4.11           | 250         |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 16O2C24DC-  | 4.10           | 250         |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 16O2C110DC+ | 4.11           | 250         |
| 16 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 16O2C110DC- | 4.10           | 250         |
| 16 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 16O2C115AC  | 4.12           | 250         |
| 16 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 16O2C230AC  | 4.12           | 250         |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 32O2C24DC+  | 4.11           | 500         |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 32O2C24DC-  | 3.10           | 500         |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Positive Input | 32O2C110DC+ | 4.11           | 500         |
| 32 Relay, Output Module, 2C/O, 110V DC Coil, Common Negative Input | 32O2C110DC- | 4.10           | 500         |
| 32 Relay, Output Module, 2C/O, 115V AC Coil Input                  | 32O2C115AC  | 4.12           | 500         |
| 32 Relay, Output Module, 2C/O, 230V AC Coil Input                  | 32O2C230AC  | 4.12           | 500         |

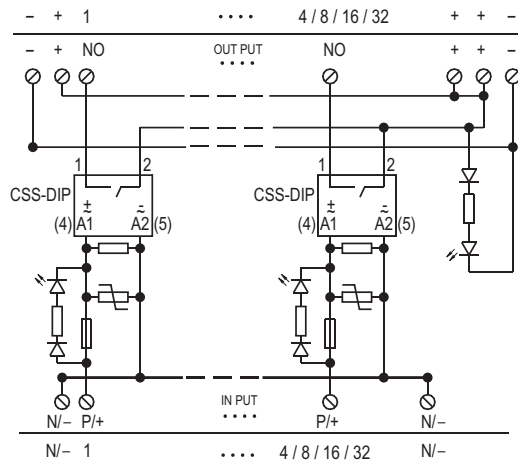


|   |  |
|---|--|
| Standard 35 mm DIN Rail Mounting              | <b>Input Module with ( SSR )1 N/O Contact with Fuse - 4, 8, 16, 32 Relays</b>      |
| Input : Screwless Spring Connector            |  |
| Output : Screwless Spring Connector           |  |
| All Relays are Socket (S10P) Mounted          |  |
| Relay : CSS DIP / CSS DIN                     |  |
| Inputs are Polarised                          |  |
| Other Coil Voltages are available on request. |  |
| Customised Modules available on request.      |  |
| Inputs are provided with Fuse                 |  |
| Fuse Blow Indication (Red LED)                |  |
|   |  |
|   |  |
| <b>Input Data</b>                             |  |
| Input Status Indication LED Per Relay         | Orange   |
| Fuse Blow Indication Status LED               | Red  |
| Protection Fuse                               | 100 mA   |
| <b>Output Data</b>                            |  |
| Contact Type                                  | 1 N/O Solid State Relay (SSR)  |
| Board Power ON LED on Output side             | Red  |
| Maximum Switching Voltage                     | 32 VDC   |
| Maximum Switching Current                     | 100 mA   |
| <b>General Data</b>                           |  |
| Conductor Cross Section                       | Solid : 0.08 - 2.5 mm <sup>2</sup> AWG 28 – 12                                     |
| Insulation Stripping Length                   | 5-6 mm   |
| Module Length                                 | 126 mm   |
| Module Height on DIN Rail                     | 81 mm Max.   |
| Dielectric Strength                           | 2.5 KV between Input and Output of Relay Module                                    |
| Operating Temperature Range                   | 0° C + 60° C   |
| Relay Standard Features                       | Built in LED ( Orange) inside the Relay  |
|   |  |
|   |  |

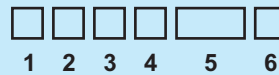
### 4.13



### 4.14



#### Ordering Information



Model Number Legend

- 1** : Number of Relays 4 or 8 or 16 or 32
- 2** : Input Module I
- 3** : Connection type ( Screwless Spring ) C
- 4** : Fuse + Fuse Blow Indication B
- 5** : Coil Voltage 24 or 110 VDC or 115 or 230 VAC
- 6** : Common Output + for Positive - for Negative

Note 1 :- All the Solid State Relays have 1 NO Contact

Note 2 :- Modules with Common +ve O/P have CSS DIP Relays

Note 3 :- Modules with Common -ve O/P have CSS DIN Relays

| <b>Standard Part Nos.</b>  |                 |                       |                    |
|--|-----------------|-----------------------|--------------------|
| <b>Connection : Input / Output - Screwless Spring Connector</b>          |                 |                       |                    |
| <b>Description</b>   | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output   | 4ICB24DC +      | 4.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output   | 4ICB24DC -      | 4.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output  | 4ICB110DC +     | 4.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output  | 4ICB110DC -     | 4.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output  | 4ICB115AC +     | 4.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output  | 4ICB115AC -     | 4.13                  | 65                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output  | 4ICB230AC +     | 4.14                  | 65                 |
| 4 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output  | 4ICB230AC -     | 4.13                  | 65                 |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output   | 8ICB24DC +      | 4.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output   | 8ICB24DC -      | 4.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output  | 8ICB110DC +     | 4.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output  | 8ICB110DC -     | 4.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output  | 8ICB115AC +     | 4.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output  | 8ICB115AC -     | 4.13                  | 130                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output  | 8ICB230AC +     | 4.14                  | 130                |
| 8 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output  | 8ICB230AC -     | 4.13                  | 130                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output  | 16ICB24DC +     | 4.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output  | 16ICB24DC -     | 4.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output | 16ICB110DC +    | 4.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output | 16ICB110DC -    | 4.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output | 16ICB115AC +    | 4.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output | 16ICB115AC -    | 4.13                  | 250                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output | 16ICB230AC +    | 4.14                  | 250                |
| 16 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output | 16ICB230AC -    | 4.13                  | 250                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Positive Output  | 32ICB24DC +     | 4.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 24V DC Coil Input, Common Negative Output  | 32ICB24DC -     | 4.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Positive Output | 32ICB110DC +    | 4.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 110V DC Coil Input, Common Negative Output | 32ICB110DC -    | 4.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Positive Output | 32ICB115AC +    | 4.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 115V AC Coil Input, Common Negative Output | 32ICB115AC -    | 4.13                  | 500                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Positive Output | 32ICB230AC +    | 4.14                  | 500                |
| 32 Relay, Input Module, 1N/O, 230V AC Coil Input, Common Negative Output | 32ICB230AC -    | 4.13                  | 500                |

Standard 35 mm DIN Rail mounting

Input : D-Sub Connector

Output : Screw Connector

Relays are Socket (S10P) Mounted

Relay : C10 A10 - VAC / VDC.

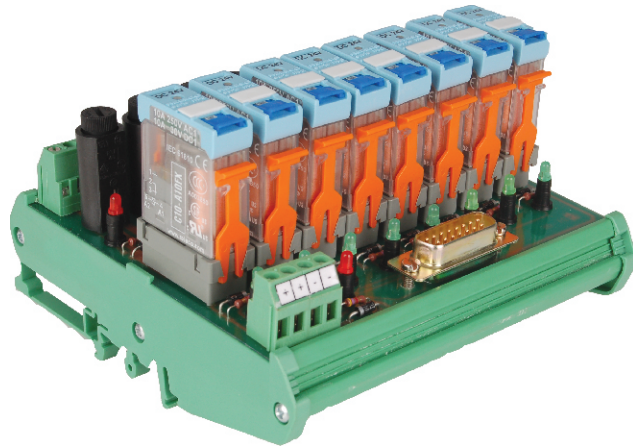
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

### Output Module with 1 C/O Contact - 4, 8, 16, 32 Relays



#### Input Data

Board Power ON LED

Red

Status Indication LED Per relay

Green

#### Output Data

Contact Type

SPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

10 Amps

#### General Data

Conductor Cross Section

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12

Insulation Stripping Length

8 mm

Module Length

90 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

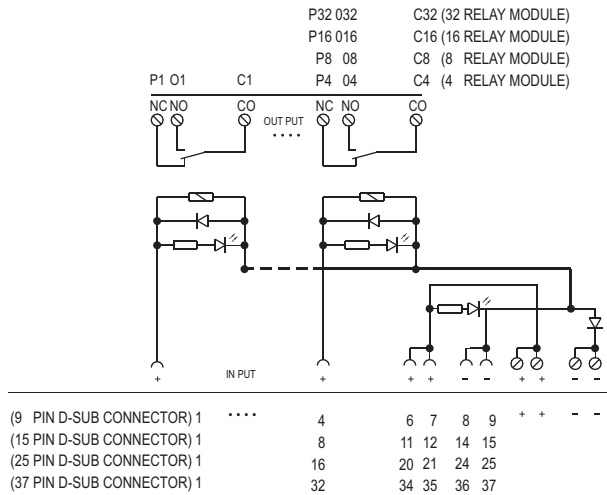
- 20°C to +60° C

Relay Standard Features

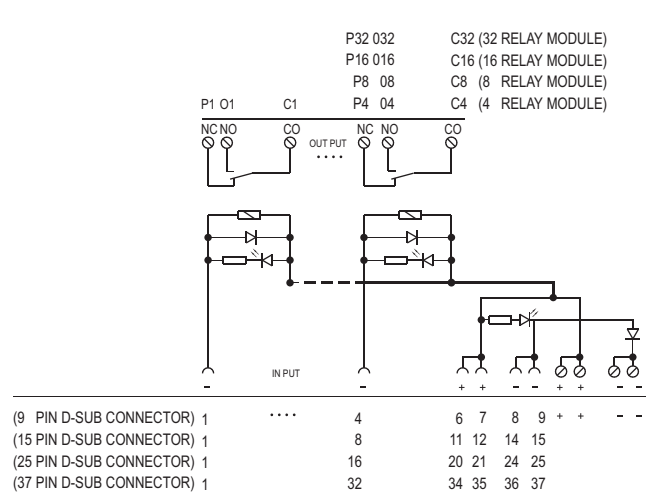
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

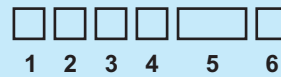
## 5.1



## 5.2



### Ordering Information

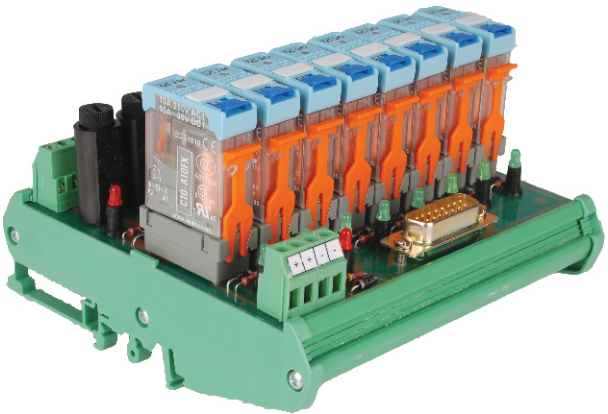


Model number legend

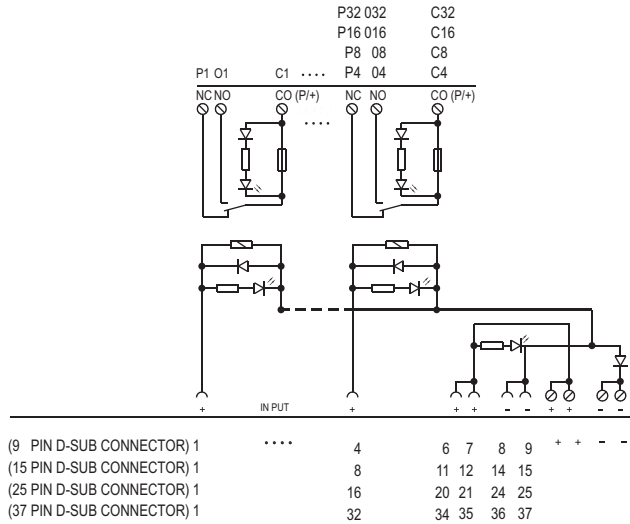
|   |   |                               |
|---|---|-------------------------------|
| 1 | : Number of Relays                          | 4 or 8 or 16 or 32            |
| 2 | : Output                                    | O                             |
| 3 | : No. of Contacts (1CO)                     | 1                             |
| 4 | : Connection type (Input : D-Sub Connector) | D                             |
| 5 | : Coil voltage                              | 24 VDC                        |
| 6 | : Common Input                              | + for Positive - for Negative |

| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input - D-Sub Connector</b>                       |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1D24DC+       | 5.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1D24DC-       | 5.1                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1D24DC+       | 5.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1D24DC-       | 5.1                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1D24DC+      | 5.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1D24DC-      | 5.1                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1D24DC+      | 5.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1D24DC-      | 5.1                   | 500                |

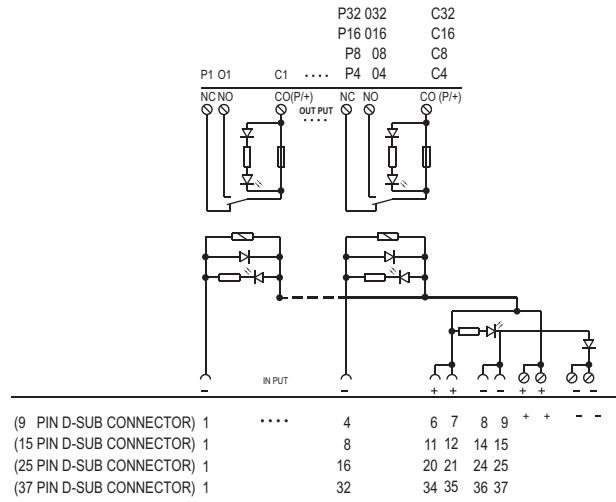
|   |   |  |
|---|---|--|
| Standard 35 mm DIN Rail mounting  | <b>Output Module with 1 C/O Contact with Fuse - 4, 8, 16, 32 Relays</b> |  |
| Input : D-Sub Connector   |   |  |
| Output : Screw Connector  |   |  |
| Relays are Socket (S10P) Mounted  |   |  |
| Relay : C10 A10 - VAC / VDC.  |   |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |   |  |
| Other Coil Voltages are available on request.                                 |   |  |
| Customised Modules available on request.                                      |   |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |   |  |
| Relays Module with Fuse in series with Change Over Contact of Relay           |   |  |
| Fuse Blow Indication (Red LED)  |   |  |
|   |   |  |
|   |   |  |
|   |   |  |
| <b>Input Data</b>   |   |  |
| Board Power ON LED  | Red   |  |
| Status Indication LED Per relay   | Green   |  |
| <b>Output Data</b>  |   |  |
| Contact Type  | SPDT  |  |
| Maximum Switching Voltage   | 240 VAC / 24 VDC  |  |
| Maximum Switching Current   | 10 Amps   |  |
| Fuse Blow Indication Status LED   | Red   |  |
| Protection Fuse   | 5 Amps  |  |
| <b>General Data</b>   |   |  |
| Conductor Cross Section   | Solid : 0.2 - 4 mm <sup>2</sup> AWG 24 – 12 (Output Side )              |  |
| Insulation Stripping Length   | 8 mm  |  |
| Module Length   | 126 mm  |  |
| Module Height on DIN Rail   | 80 mm Max.  |  |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module                         |  |
| Operating Temperature Range   | - 20°C to +60° C  |  |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,                          |  |
|   | Lockable Test Button & Marking Label                                    |  |
|   |   |  |



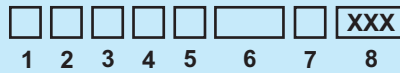
### 5.3



### 5.4



#### Ordering Information



Model Number Legend

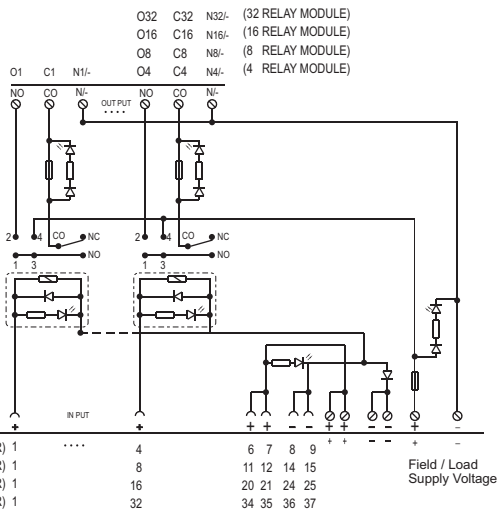
- 1** : Number of Relays 4 or 8 or 16 or 32
- 2** : Output Module O
- 3** : No. of Contacts (1CO) 1
- 4** : Connection type (Input : D-Sub Connector) D
- 5** : Fuse + Fuse Blow Indication B
- 6** : Coil Voltage 24 VDC
- 7** : Common Input + for Positive - for Negative
- 8** : Load Voltage 24VDC or 115VAC or 230VAC



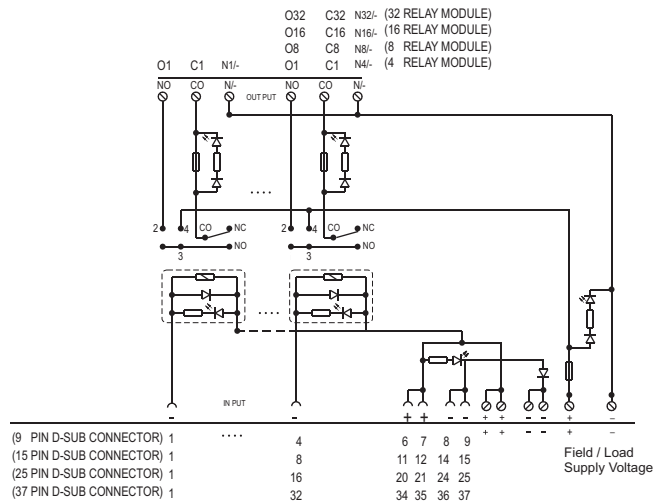
| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input - D-Sub Connector</b>                       |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1DB24DC+ XXX  | 5.4                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1DB24DC- XXX  | 5.3                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1DB24DC+ XXX  | 5.4                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1DB24DC- XXX  | 5.3                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1DB24DC+ XXX | 5.4                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1DB24DC- XXX | 5.3                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1DB24DC+ XXX | 5.4                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1DB24DC- XXX | 5.3                   | 500                |

|   |  |
|---|--|
| Standard 35 mm DIN Rail mounting  | <b>Output Module 1 C/O Contact with Fuse &amp; Jumper - 4, 8, 16, 32 Relays</b>        |
| Input : D-Sub Connector   |  |
| Output : Screw Connector  |  |
| All Relays are Socket (S10P) Mounted  |  |
| Relay : C10 A10X... VAC<br>C10 A10 FX...VDC                                   |  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |
| Other Coil Voltages are available on request.                                 |  |
| Customised Modules available on request.                                      |  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |
| Relay Module with Fuse in series with Change Over Contact of Relay            |  |
| Fuse Blow Indication (Red LED)  |  |
| Jumper (Gold Plated) on Contact Side for Wet and Dry Contact Selection        |  |
| <b>Input Data</b>   |  |
| Board Power ON LED  | Red  |
| Status Indication LED Per relay   | Orange   |
| Status Indication LED for Field Supply  | Green  |
| <b>Output Data</b>  |  |
| Contact Type  | SPDT   |
| Maximum Switching Voltage   | 240 VAC / 24 VDC   |
| Maximum Switching Current   | 10 Amps  |
| Fuse Blow Indication Status LED   | Red  |
| Protection Fuse   | 5 Amps   |
| <b>General Data</b>   |  |
| Conductor Cross Section   | Solid : 0.2 - 4 mm <sup>2</sup> AWG 24 – 12 ( Output Side )                            |
| Insulation Stripping Length   | 8 mm   |
| Module Length   | 126 mm   |
| Module Height on DIN Rail   | 80 mm Max.   |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |
| Operating Temperature Range   | - 20°C to +60° C   |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |

### 5.5



### 5.6



### Ordering Information

|                                 |                               |
|---------------------------------|-------------------------------|
| □ □ □ □ □ □ □ <b>XXX</b>        | Model Number Legend           |
| 1 2 3 4 5 6 7 8 9               |                               |
| 1 : Number of Relays            | 4 or 8 or 16 or 32            |
| 2 : Output Module               | O                             |
| 3 : No. of Contacts (1 CO )     | 1                             |
| 4 : Connection type             | D                             |
| 5 : Fuse + Fuse Blow Indication | B                             |
| 6 : Jumper                      | J                             |
| 7 : Coil voltage                | 24 VDC                        |
| 8 : Common Input                | + for Positive - for Negative |
| 9 : Field / Load Voltage        | XXX 24VDC                     |

Note: Field / Load Voltage for wet contact only

|             | Jumper Position | Output Terminals           |
|-------------|-----------------|----------------------------|
| Wet Contact | 4-3             | C1 (P/+),....., N1/ -..... |
| Dry Contact | 1-2             | O1....., C1.....           |

Relay Type : C10 A10X...VAC & C10 A10FX...VDC

Note- All the relays have Electronics built inside.

(X : LED, F : Free Wheeling & Polarity Diode)

| <b>Standard Part Nos.</b>   |                  |                       |                    |
|---|------------------|-----------------------|--------------------|
| <b>Connection : Input- D-Sub Connector</b>                        |                  |                       |                    |
| <b>Description</b>  | <b>Part No.</b>  | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1DBJ24DC+ XXX  | 5.6                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1DBJ24DC- XXX  | 5.5                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1DBJ24DC+ XXX  | 5.6                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1DBJ24DC- XXX  | 5.5                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1DBJ24DC+ XXX | 5.6                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1DBJ24DC- XXX | 5.5                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1DBJ24DC+ XXX | 5.6                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1DBJ24DC- XXX | 5.5                   | 500                |

**Output Module with 2 C/O Contact - 4, 8, 16, 32 Relays**

Standard 35 mm DIN Rail mounting

Input : D-Sub Connector

Output : Screw Connector

Relays are Socket (S12P) Mounted

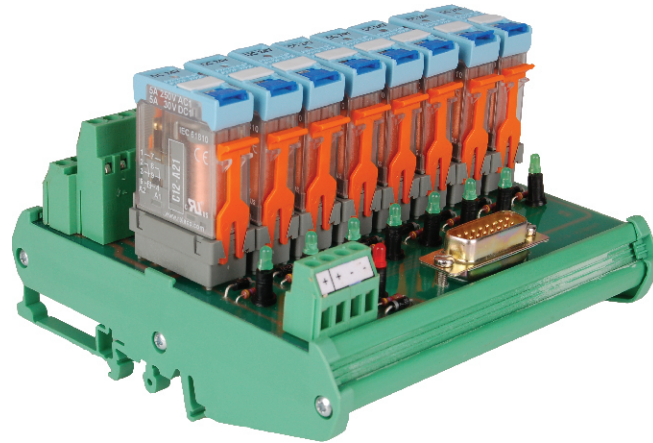
Relay : C12 A21...VAC / VDC

Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.



**Input Data**

Board Power ON LED

Red

Status Indication LED Per relay

Green

**Output Data**

Contact Type

DPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

5 Amps

**General Data**

Conductor Cross Connection

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12 ( Output Side )

Insulation Stripping Length

8 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm Max.

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

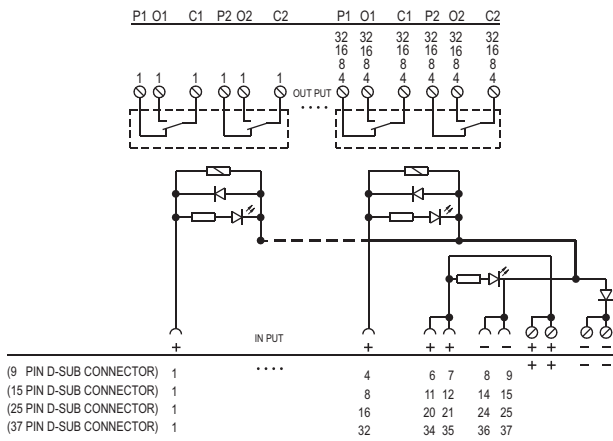
- 20°C to +60°C

Relay Standard Features

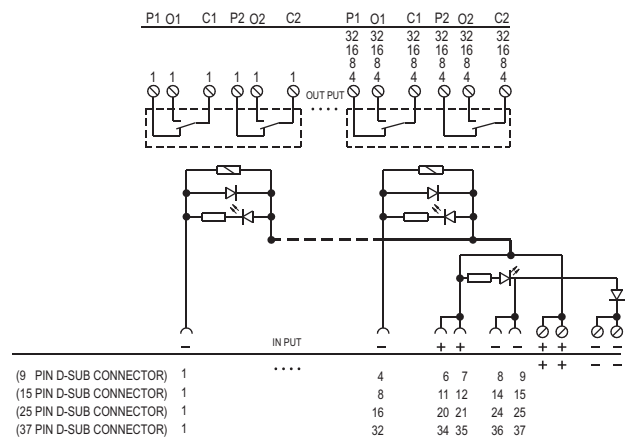
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

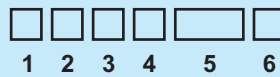
## 5.7



## 5.8



### Ordering Information



Model Number Legend

|                                 |                               |
|---------------------------------|-------------------------------|
| <b>1</b> : Number of Relays     | 4 or 8 or 16 or 32            |
| <b>2</b> : Output Module        | O                             |
| <b>3</b> : No. of Contacts (CO) | 2                             |
| <b>4</b> : Connection type      | D                             |
| <b>5</b> : Coil voltage         | 24 VDC                        |
| <b>6</b> : Common Input         | + for Positive - for Negative |

| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input- D-Sub Connector</b>                        |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 4O2D24DC+       | 5.8                   | 65                 |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 4O2D24DC-       | 5.7                   | 65                 |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 8O2D24DC+       | 5.8                   | 130                |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 8O2D24DC-       | 5.7                   | 130                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input | 16O2D24DC+      | 5.8                   | 250                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input | 16O2D24DC-      | 5.7                   | 250                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input | 32O2D24DC+      | 5.8                   | 500                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input | 32O2D24DC-      | 5.7                   | 500                |

Standard 35 mm DIN Rail Mounting

Input : Flat Ribbon Cable Connector

Output : Screw Type Connector

Relays are Socket (S10P) Mounted

Relay : C10 A10...VAC / VDC.

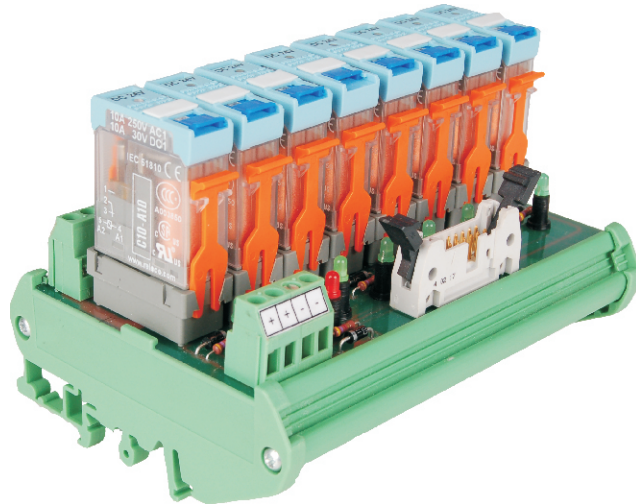
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

## Output Module with 1 C/O Contact - 4, 8, 16, 32 Relays



### Input Data

Board Power ON LED

Red

Status Indication LED Per relay

Green

### Output Data

Contact Type

SPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

10 Amps

### General Data

Conductor Cross Section

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12

Insulation Stripping Length

8 mm

Module Length

90 mm

Module Height on DIN Rail

80 mm

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

- 20°C to +60° C

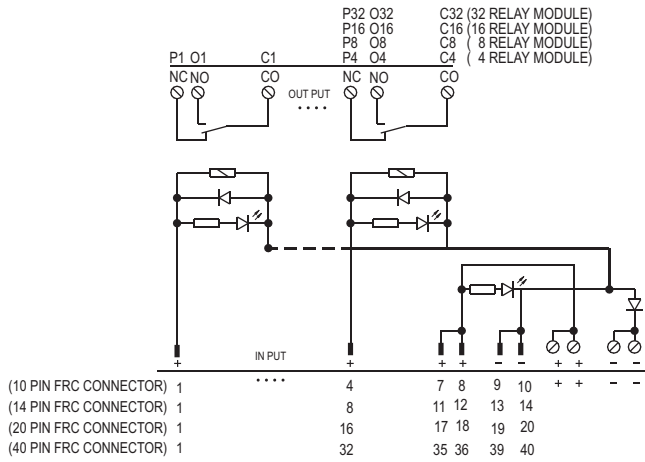
Really Standard Features

Mechanical Flag Indicator, Manual Push Button,

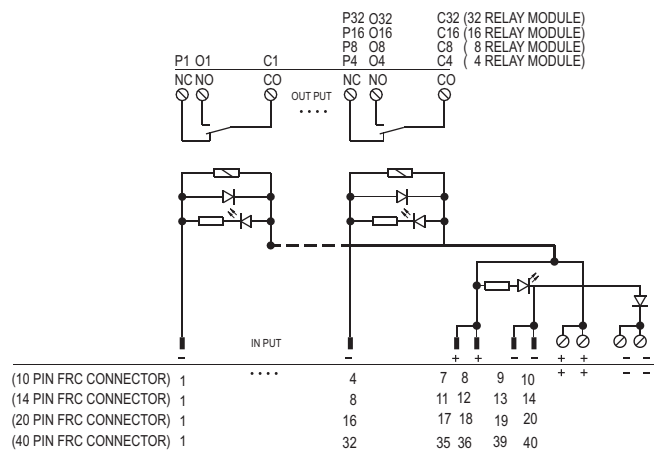
Lockable Test Button & Marking Label



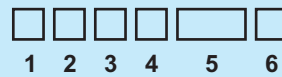
## 6.1



## 6.2



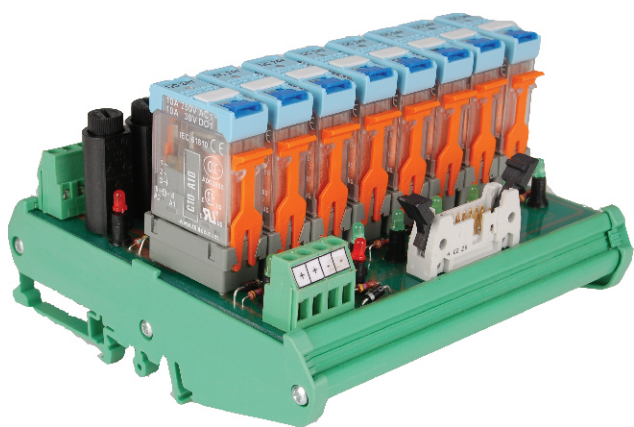
### Ordering Information



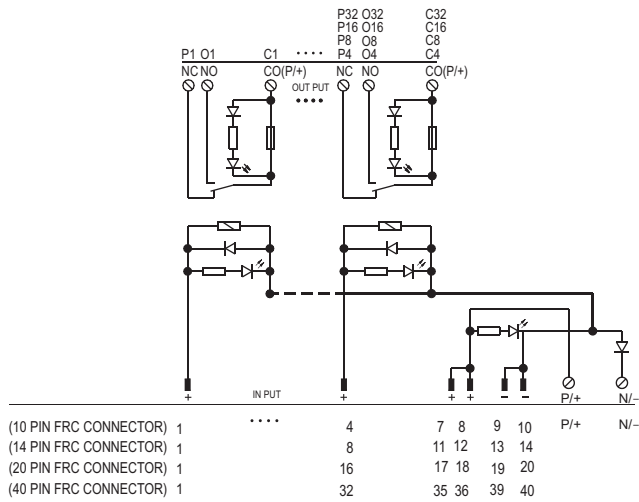
Model Number Legend

|                                  |                               |
|----------------------------------|-------------------------------|
| <b>1</b> : Number of Relays      | 4 or 8 or 16 or 32            |
| <b>2</b> : Output                | O                             |
| <b>3</b> : No. of Contacts (CO)  | 1                             |
| <b>4</b> : Connection type (FRC) | F                             |
| <b>5</b> : Coil voltage          | 24 VDC                        |
| <b>6</b> : Common Input          | + for Positive - for Negative |

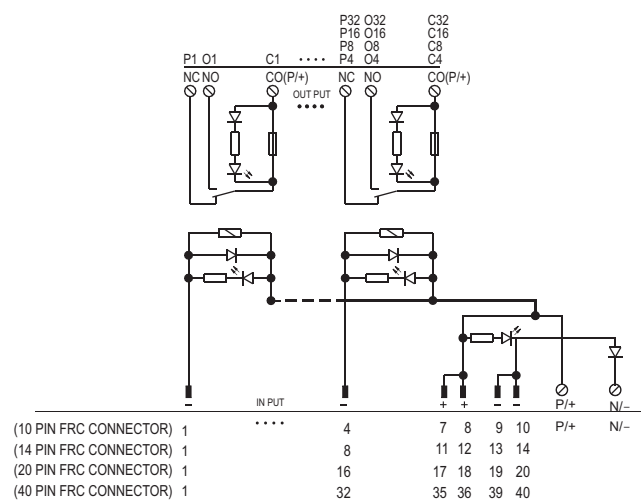
| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input - FRC Connector</b>                         |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1F24DC+       | 6.2                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1F24DC-       | 6.1                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1F24DC+       | 6.2                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1F24DC-       | 6.1                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1F24DC+      | 6.2                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1F24DC-      | 6.1                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1F24DC+      | 6.2                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1F24DC-      | 6.1                   | 500                |

|   |  |                  |
|---|--|------------------|
| Standard 35 mm DIN Rail Mounting  | <b>Output Module with 1 C/O Contact with Fuse - 4, 8, 16, 32 Relays</b>                |                  |
| Input : Flat Ribbon Cable Connector   |  |                  |
| Output : Screw Type Connector   |  |                  |
| Relays are Socket (S10P) Mounted  |  |                  |
| Relay : C10 A10 ...VAC / VDC.   |  |                  |
| Input provided with Reverse Polarity Protection for Relays with DC Coils.     |  |                  |
| Other Coil Voltages are available on request.                                 |  |                  |
| Customised Modules available on request.                                      |  |                  |
| Relays with Gold Plated (3 microns) Bifurcated Contacts available on request. |  |                  |
| Relay Module with Fuse in series with Change Over Contact of Relay            |  |                  |
| Fuse Blow Indication (Red LED)  |      |                  |
| <b>Input Data</b>   |  |                  |
| Board Power ON LED  |  | Red              |
| Status Indication LED Per relay   |  | Green            |
| <b>Output Data</b>  |  |                  |
| Contact Type  |  | SPDT             |
| Maximum Switching Voltage   |  | 240 VAC / 24 VDC |
| Maximum Switching Current   |  | 10 Amps          |
| Fuse Blow Indication Status LED   |  | Red              |
| Protection Fuse   |  | 5 Amps           |
| <b>General Data</b>   |  |                  |
| Conductor Cross Section   | Solid : 0.2 - 4 mm <sup>2</sup> AWG 24 – 12 Output Side                                |                  |
| Insulation Stripping Length   | 8 mm   |                  |
| Module Length   | 126 mm   |                  |
| Module Height on DIN Rail   | 80 mm  |                  |
| Dielectric Strength   | 2.5 KV between Input and Output of Relay Module  |                  |
| Operating Temperature Range   | - 20°C to +60° C   |                  |
| Relay Standard Features   | Mechanical Flag Indicator, Manual Push Button,<br>Lockable Test Button & Marking Label |                  |

### 6.3



### 6.4



#### Ordering Information

| 1 | 2 | 3                           | 4   | 5 | 6 | 7 | 8 | Model Number Legend           |
|---|---|-----------------------------|-----|---|---|---|---|-------------------------------|
| 1 | : | Number of Relays            |     |   |   |   |   | 4 or 8 or 16 or 32            |
| 2 | : | Output Module               |     |   |   |   |   | O                             |
| 3 | : | No. of Contacts (CO)        |     |   |   |   |   | 1                             |
| 4 | : | Connection type (FRC)       |     |   |   |   |   | F                             |
| 5 | : | Fuse + Fuse Blow Indication |     |   |   |   |   | B                             |
| 6 | : | Coil voltage                |     |   |   |   |   | 24 VDC                        |
| 7 | : | Common Input                |     |   |   |   |   | + for Positive - for Negative |
| 8 | : | Load Voltage                | XXX |   |   |   |   | 24VDC or 115VAC or 230VAC     |

| <b>Standard Part Nos.</b>   |                 |     |                       |                    |
|---|-----------------|-----|-----------------------|--------------------|
| <b>Connection : Input : FRC Connector</b>                         |                 |     |                       |                    |
| <b>Description</b>  | <b>Part No.</b> |     | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1FB24DC+      | XXX | 6.4                   | 65                 |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1FB24DC-      | XXX | 6.3                   | 65                 |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1FB24DC+      | XXX | 6.4                   | 130                |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1FB24DC-      | XXX | 6.3                   | 130                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1FB24DC+     | XXX | 6.4                   | 250                |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1FB24DC-     | XXX | 6.3                   | 250                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1FB24DC+     | XXX | 6.4                   | 500                |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1FB24DC-     | XXX | 6.3                   | 500                |

Standard 35 mm DIN Rail Mounting

Input : Flat Ribbon Cable Connection

Output : Screw Type Connector

Relays are Socket (S10P) Mounted

Relay : C10 A10 X....VAC  
C10 A10 FX...VDC

Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

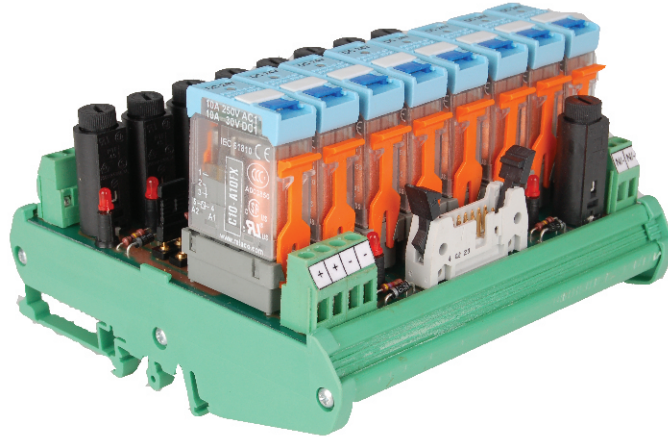
Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

Relay Module with Fuse in series with Change Over Contact of Relay

Fuse Blow Indication (Red LED)

Jumper (Gold Plated) on Contact Side for Wet and Dry Contact Selection

## Output Module 1 C/O Contact with Fuse & Jumper - 4, 8, 16, 32 Relays



### Input Data

Board Power ON LED

Red

Status Indication LED Per relay

Orange

Status Indication LED for Field Supply

Green

### Output Data

Contact Type

SPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

10 Amps

Fuse Blow Indication Status LED

Red

Protection Fuse

5 Amps

### General Data

Conductor Cross Section

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12 Output Side

Insulation Stripping Length

8 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

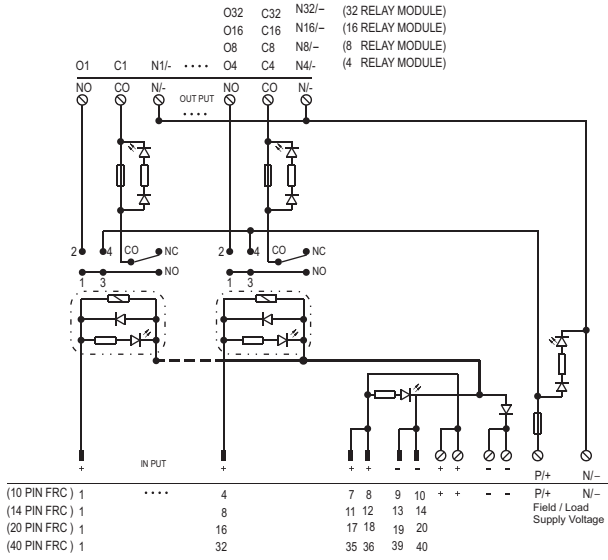
-20°C to +60°C

Relay Standard Features

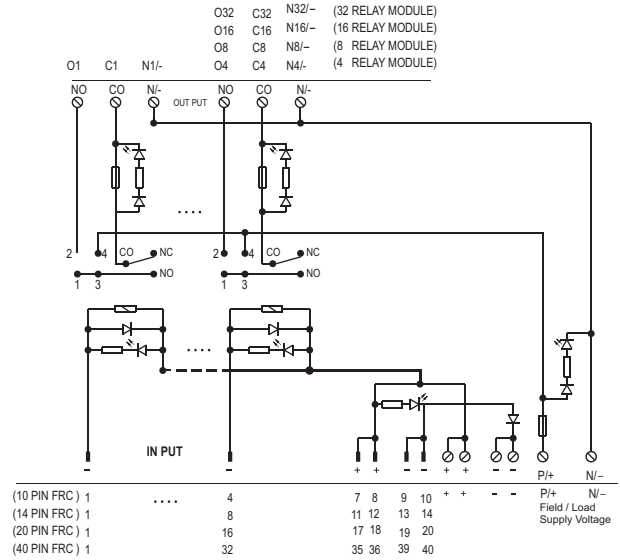
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

## 6.5



## 6.6



### Ordering Information

XXX Model Number Legend

1 : Number of Relays 4 or 8 or 16 or 32

2 : Output Module O

3 : No. of Contacts (CO) 1

4 : Connection Type (FRC) F

5 : Fuse + Fuse Blow Indication B

6 : Jumper J

7 : Coil voltage 24 VDC

8 : Common Input + for Positive - for Negative

9 : Field / Load Voltage XXX 24VDC or 115 or 230VAC

Note: Field / Load Voltage for wet contact only

Jumper Position Output Terminals

Wet Contact 4-3 C1 (P/+)..., N1/ -....

Dry Contact 1-2 01..., C1....

Relay Type : C10 A10X...VAC & C10 A10FX...VDC

Note- All the relays have Electronics built inside.

(X : LED, F : Free Wheeling & Polarity Diode)

| <b>Standard Part Nos.</b>   |                  |                       |                    |  |
|---|------------------|-----------------------|--------------------|--|
| <b>Connection : Input: FRC Connector</b>                          |                  |                       |                    |  |
| <b>Description</b>  | <b>Part No.</b>  | <b>Wiring Diagram</b> | <b>Width in mm</b> |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 4O1FBJ24DC+ XXX  | 6.6                   | 65                 |  |
| 4 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 4O1FBJ24DC- XXX  | 6.5                   | 65                 |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input  | 8O1FBJ24DC+ XXX  | 6.6                   | 130                |  |
| 8 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input  | 8O1FBJ24DC- XXX  | 6.5                   | 130                |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 16O1FBJ24DC+ XXX | 6.6                   | 250                |  |
| 16 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 16O1FBJ24DC- XXX | 6.5                   | 250                |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Positive Input | 32O1FBJ24DC+ XXX | 6.6                   | 500                |  |
| 32 Relay, Output Module, 1C/O, 24V DC Coil, Common Negative Input | 32O1FBJ24DC- XXX | 6.5                   | 500                |  |



Standard 35 mm DIN Rail Mounting

Input : Flat Ribbon Cable Connection

Output : Screw Type Connector

Relays are Socket (S12P) Mounted

Relay : C12 A21...VAC / VDC

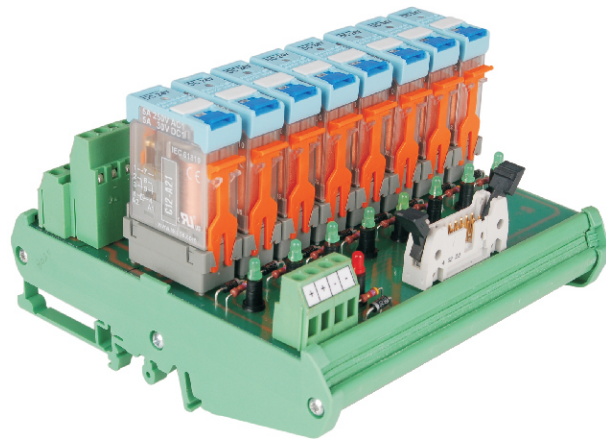
Input provided with Reverse Polarity Protection for Relays with DC Coils.

Other Coil Voltages are available on request.

Customised Modules available on request.

Relays with Gold Plated (3 microns) Bifurcated Contacts available on request.

## Output Module with 2 C/O Contacts - 4, 8, 16, 32 Relays



### Input Data

Board Power ON LED

Red

Status Indication LED Per relay

Green

### Output Data

Contact Type

DPDT

Maximum Switching Voltage

240 VAC / 24 VDC

Maximum Switching Current

5 Amps

### General Data

Conductor Cross Section

Solid : 0.2 - 4 mm<sup>2</sup> AWG 24 – 12 ( Output side )

Insulation Stripping Length

8 mm

Module Length

126 mm

Module Height on DIN Rail

80 mm

Dielectric Strength

2.5 KV between Input and Output of Relay Module

Operating Temperature Range

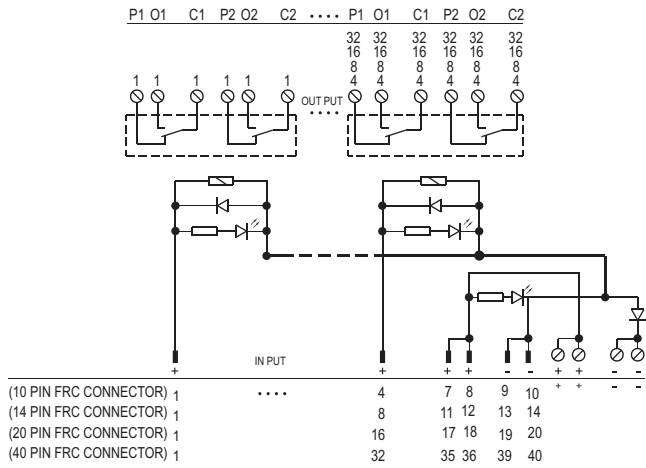
-20°C to + 60° C

Relay Standard Features

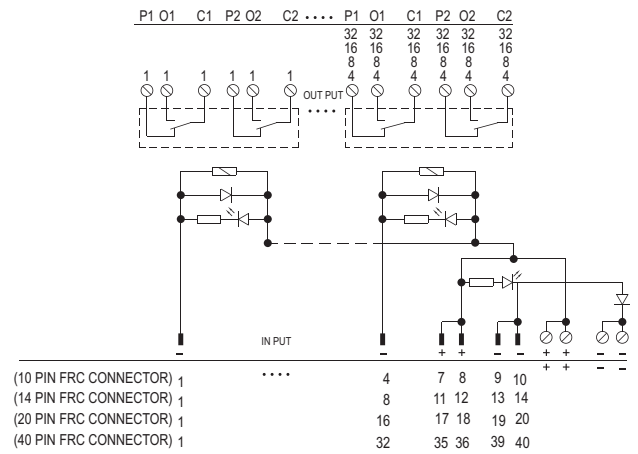
Mechanical Flag Indicator, Manual Push Button,

Lockable Test Button & Marking Label

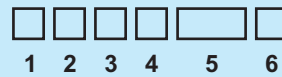
## 6.7



## 6.8



### Ordering Information



Model Number Legend

|   |                         |                               |
|---|-------------------------|-------------------------------|
| 1 | : Number of Relays      | 4 or 8 or 16 or 32            |
| 2 | : Output Module         | O                             |
| 3 | : No. of Contacts (CO)  | 2                             |
| 4 | : Connection type (FRC) | F                             |
| 5 | : Coil voltage          | 24 VDC                        |
| 6 | : Common Input          | + for Positive - for Negative |

| <b>Standard Part Nos.</b>   |                 |                       |                    |
|---|-----------------|-----------------------|--------------------|
| <b>Connection : Input: FRC Connector</b>                          |                 |                       |                    |
| <b>Description</b>  | <b>Part No.</b> | <b>Wiring Diagram</b> | <b>Width in mm</b> |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 4O2F24DC+       | 6.8                   | 65                 |
| 4 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 4O2F24DC-       | 6.7                   | 65                 |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input  | 8O2F24DC+       | 6.8                   | 130                |
| 8 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input  | 8O2F24DC-       | 6.7                   | 130                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input | 16O2F24DC+      | 6.8                   | 250                |
| 16 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input | 16O2F24DC-      | 6.7                   | 250                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Positive Input | 32O2F24DC+      | 6.8                   | 500                |
| 32 Relay, Output Module, 2C/O, 24V DC Coil, Common Negative Input | 32O2F24DC-      | 6.7                   | 500                |



Screw connector



Screwless spring connector



FRC



D SUB



Diode



LED



Register



Coil



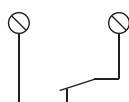
Fuse



Varistor



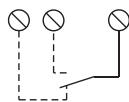
Connection



NC - Normally Closed Contact



NO - Normally Open Contact



CO - Change Over / Movable Contact

N

Neutral

P

Phase

+

Positive of power supply

-

Negative of power supply

# RELECO

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