

Series REB

**Hermetically sealed time delay single break relay
for severe environmental conditions
2 Pdt 10 Amp**

General characteristics

Metal can, sealed time delay relay, with 2PDT output

| | |
|---------------|---|
| Sizes | 25,8 x 25,8 x 25,7 mm maxi |
| Mass | 60 g maxi |
| Timing range | 400 ms to 5 400 s |
| Finish | Tin plated |
| Mating socket | SRE 410, SME 410 STF 410 see page 9 |

Operating conditions

Input characteristics

| | |
|-----------------|--|
| Supply voltage | from 21 to 32 V or from 18 to 32 V (see Temperature range) |
| Supply current | ≤ 140 mA at 28 V |
| Control voltage | Trigerring is guarantee for a pulse of 21 V during 20 ms |
| Recycle time | 50 ms mini |
| Power loss | 1 ms |

Output characteristics

| | |
|--|---|
| Contact rating (28 Vdc or 115 Vac 400 Hz) | 10 or 15 A resistive load (see table) 8 or 10 A inductive load |
| Life at rated current | 100 000 cycles |

Protections

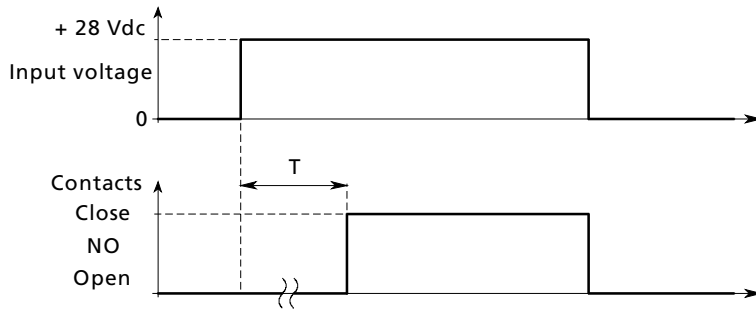
| | |
|---|---------------|
| Undamaged by polarity reversal, Voltage transient per MIL STD 704, EUROCAE DO 160, AIR 2021 D including | |
| Spikes | ± 600 V 10 μs |
| Power voltage transient | 80 V 50 ms |
| Minimum voltage | 8 V 5 ms |

Environmental conditions

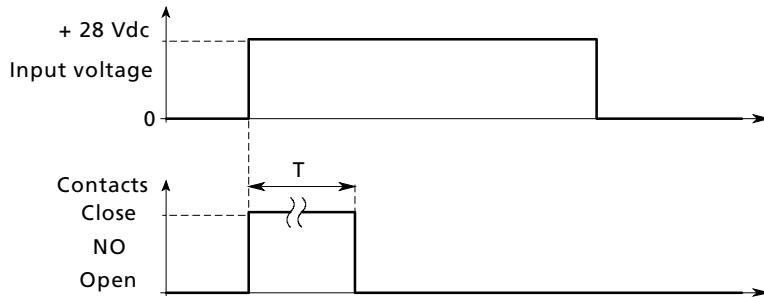
| | |
|--|---|
| Temperature range | see table |
| Dielectric strenght | |
| Between all contacts and case | 1 000 V rms |
| Insulation resistance | > 1 000 MΩ 500 Vdc |
| Vibrations 3 axis (only mounting styles 2, 3, 10,11 and 12) | 30 g 3 000 Hz |
| Shocks | 100 g 6 ms 1/2 sinus |
| Seal test | 1 .10 ⁻⁸ cm ³ atm / s |

Timing diagrams

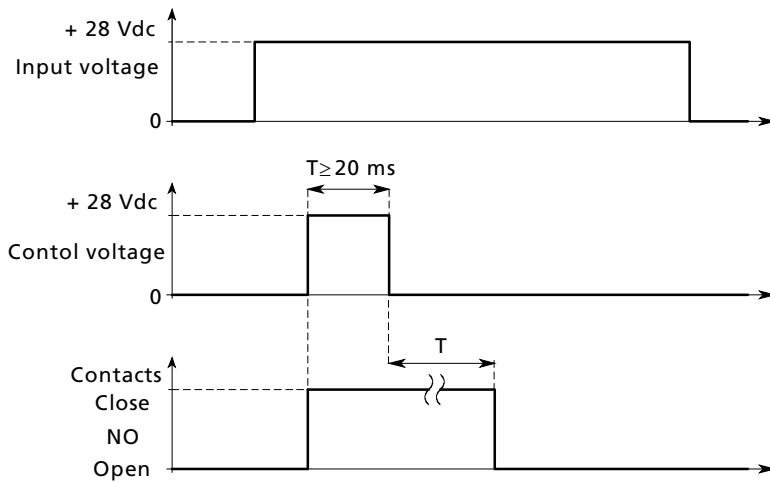
Time delay on operate (code A and B)



Time delay on release (code D and E)



Time delay on release with positive control (code J and L)



Part numbering system

REB 07 A 3000 B A ***

TIME DELAY RELAY

SERIE LETTER

OUTPUT CONTACT NUMBER

| CONTACT P/N | Nbr of PDT | Contct rating resistive load |
|-------------|------------|------------------------------|
| 07 | 2 | 10 A |
| 09 | 2 | 15 A |

Key 1 Key 2 Key 3
only for codes Q and T
see pages 7 and 8

TYPE OF OPERATION

- A** Fixed time on operate
- B** Ajustable with external resistor on operate ratio 10
- D** Fixed time on release
- E** Ajustable with external resistor on release ratio 10
- J** Fixed time on release with positive control
- L** Ajustable with external resistor on release with + control

External resistor determination

$$R_x = 10 K \left(\frac{\text{required time}}{\text{minimum time}} - 1 \right)$$

$$\text{Minimum time} = \frac{\text{maximum time defined in the time code}}{10}$$

TIME CODE

Four coded digits with the following meaning
- first three digits, base time in milliseconds
- last digits, number of zero to add base time
ex: 300 ms : code **3000**

MOUNTING STYLE AND HEADER TYPE

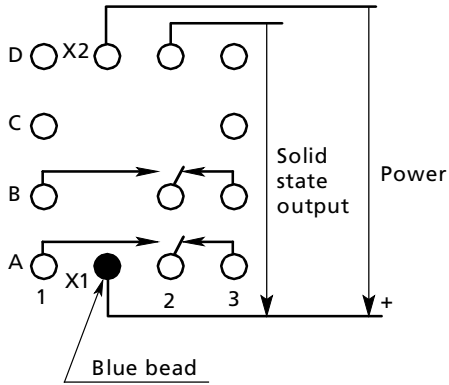
| CODE | MOUNTING | HEADER |
|------|----------|--------|
| A | 1 | E |
| B | 2 | B |
| F | 2 | A |
| G | 3 | A |
| K | 10 | B |
| P | 12 | B |
| Q | 13 | B |
| R | 19 | E |
| T | 18 | B |
| W | 11 | A |

see pages 5, 6, 7 and 8

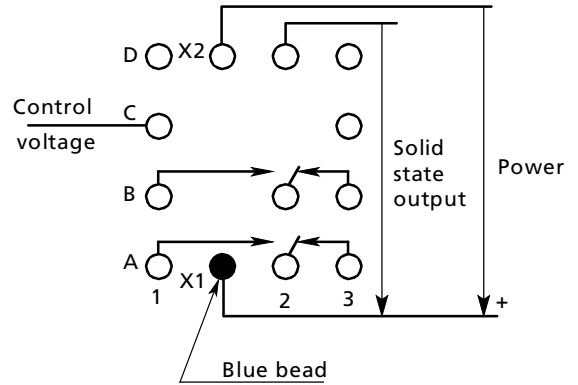
Accuracy and temperature range

| SUPPLY VOLTAGE | CODE NUMBER | ACCURACY | TEMPERATURE RANGE |
|-----------------|-------------|----------|-------------------|
| from 21 to 32 V | B | ± 10 % | -40°C to +85°C |
| from 21 to 32 V | C | ± 10 % | -55°C to +125°C |
| from 21 to 32 V | E | ± 5 % | -40°C to +85°C |
| from 21 to 32 V | F | ± 5 % | -55°C to +125°C |
| from 21 to 32 V | H | ± 3 % | -55°C to +85°C |
| from 18 to 32 V | L | ± 10 % | -55°C to +85°C |
| from 18 to 32 V | R | ± 10 % | -55°C to +100°C |
| from 18 to 32 V | S | ± 5 % | -55°C to +85°C |
| from 18 to 32 V | T | ± 5 % | -55°C to +100°C |
| from 18 to 32 V | U | ± 3 % | -55°C to +100°C |

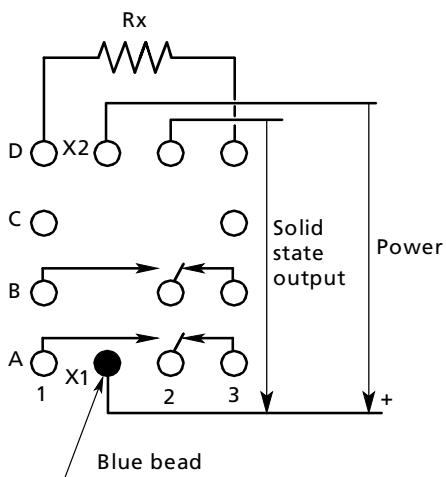
Circuit diagram



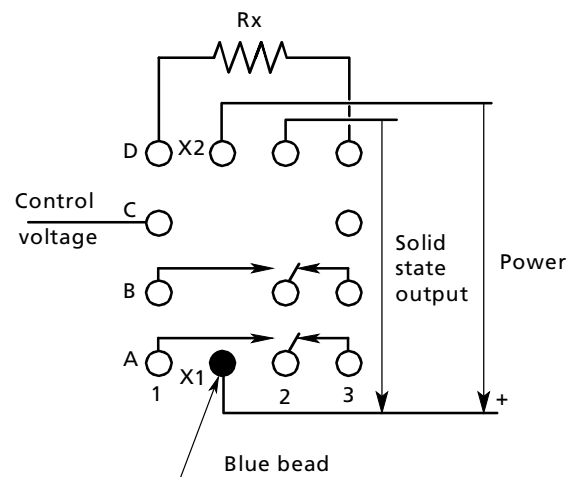
Fixed time
(code A or D)



Fixed time with control voltage
(code J)



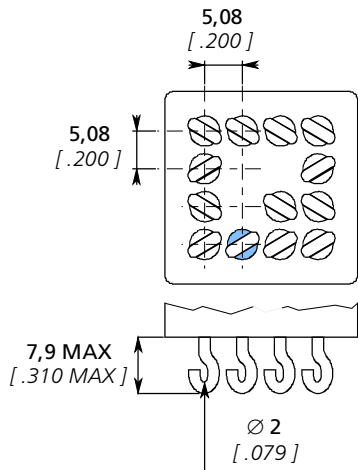
Adjustable with external resistor
(code B or D)



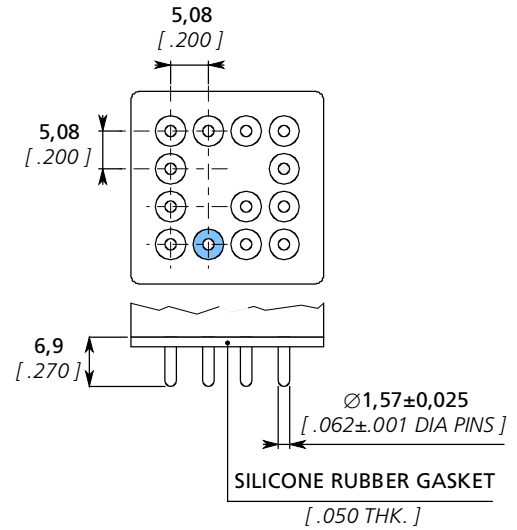
Adjustable with external resistor with control voltage
(code L)

Viewed from terminals side

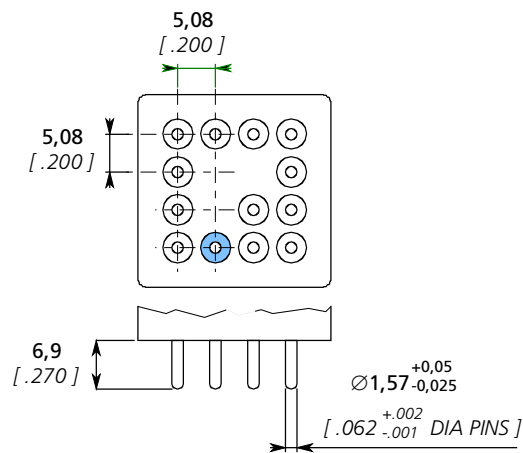
Termination styles



Type **A**
Solder hooks

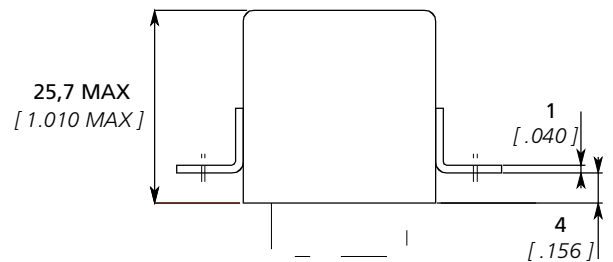
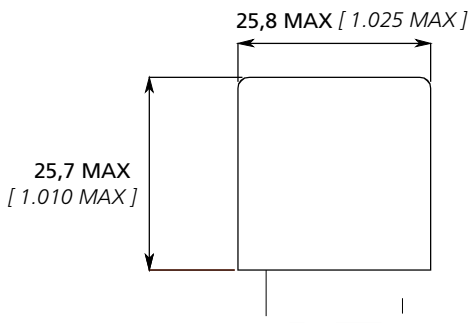
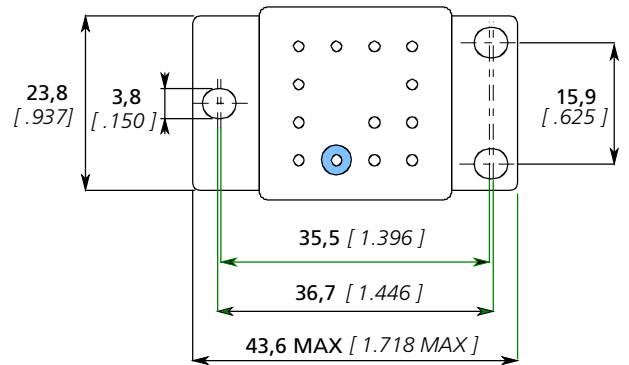
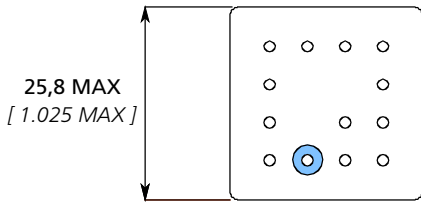


Type **B**
Gold plated pins, plugs-in socket



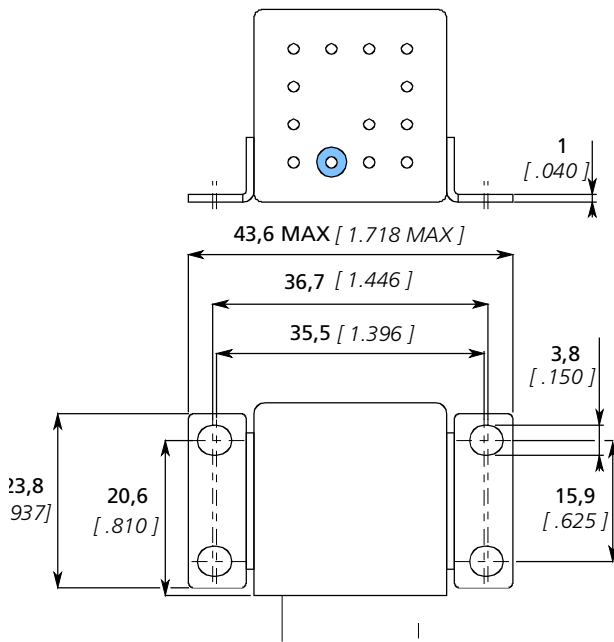
Type **E**
Tinned terminal, PCB mounting

Mounting styles

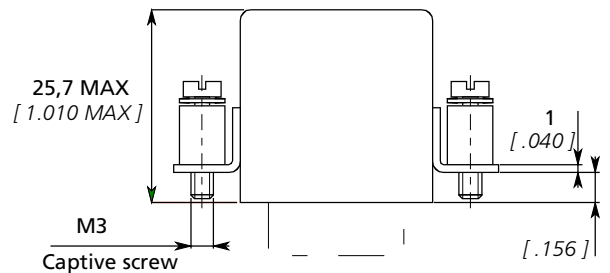
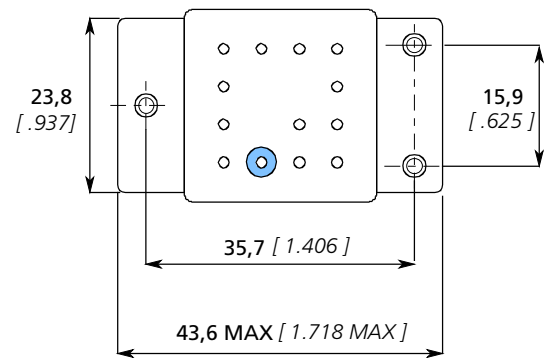


Housing **1**

Housing **2**

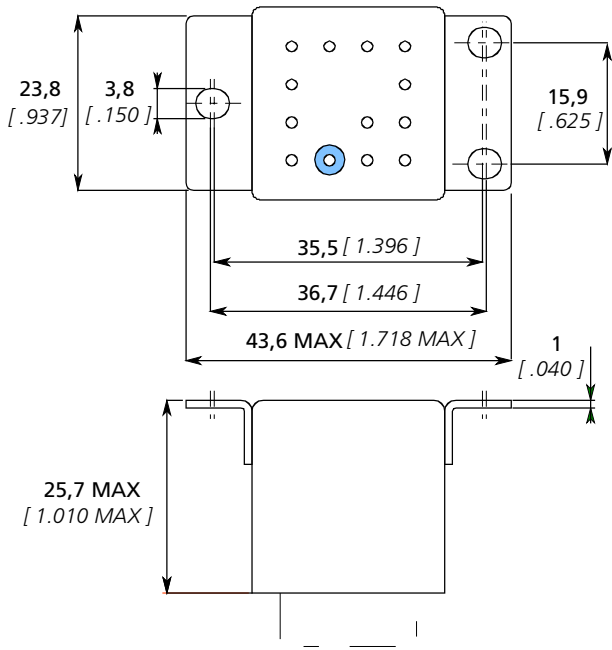


Housing **3**

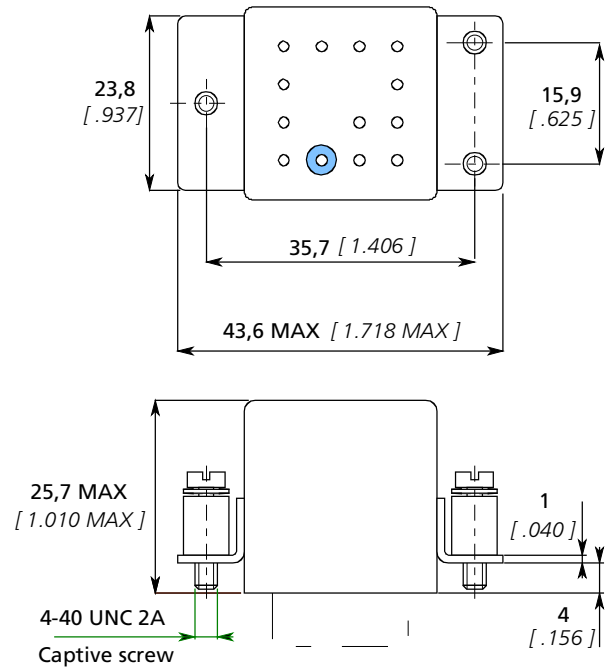


Housing **10**

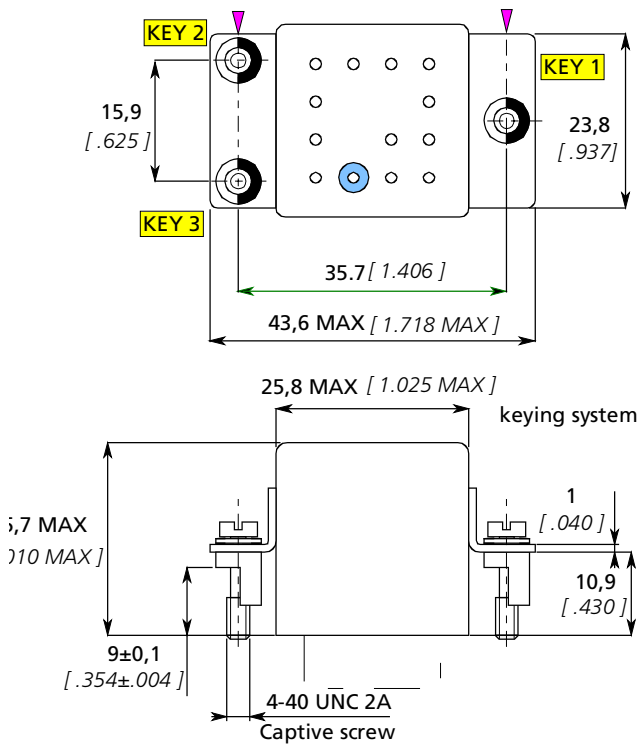
Coupling torque 0,45 m.N



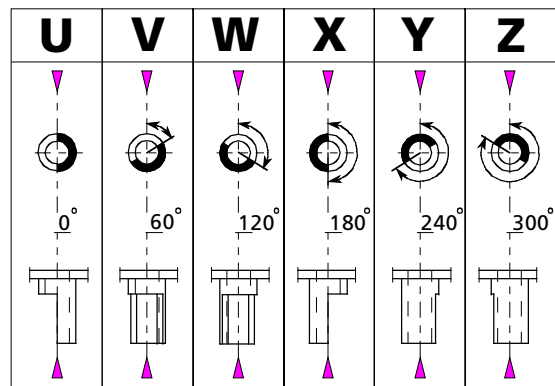
Housing **11**



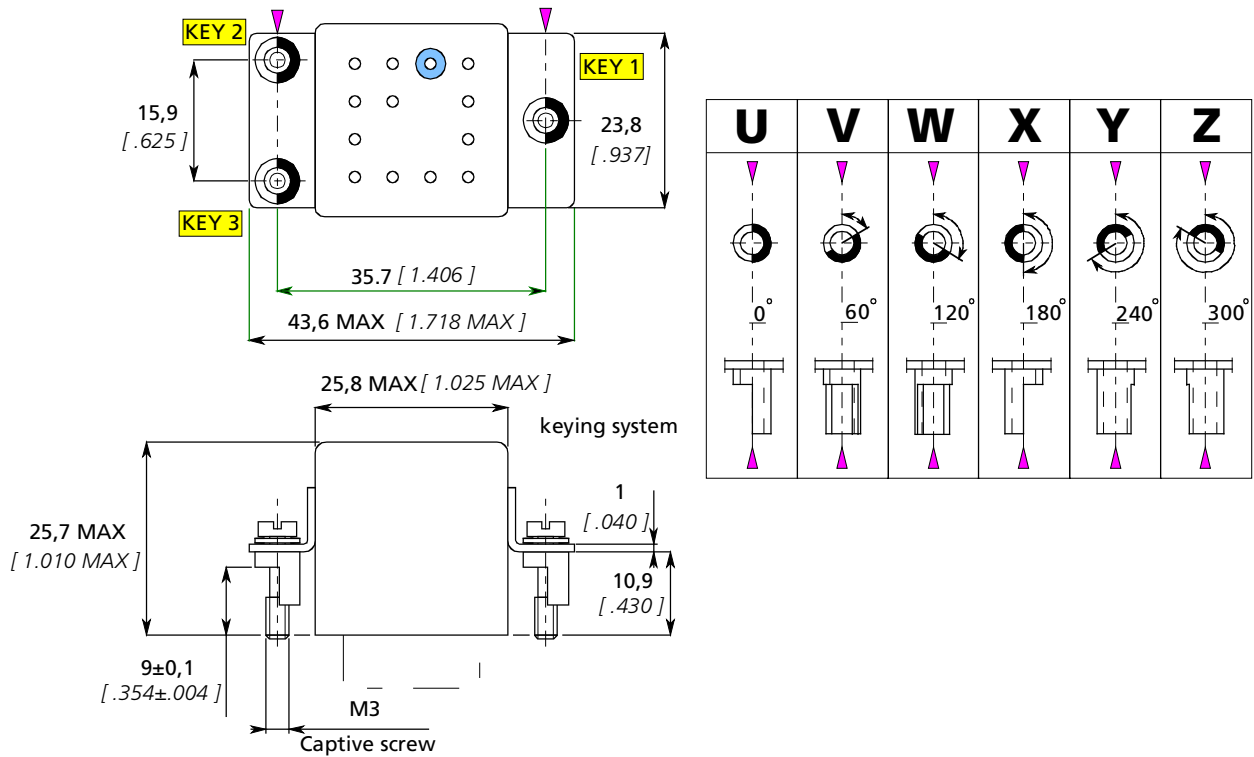
Housing **12**



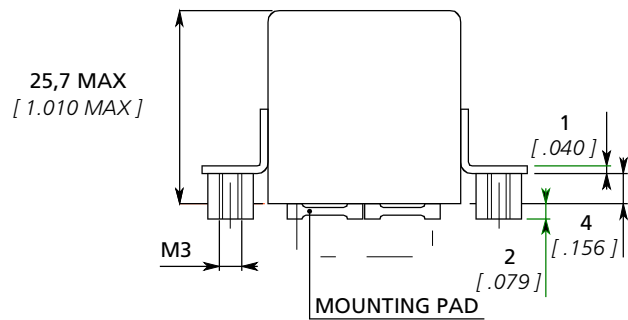
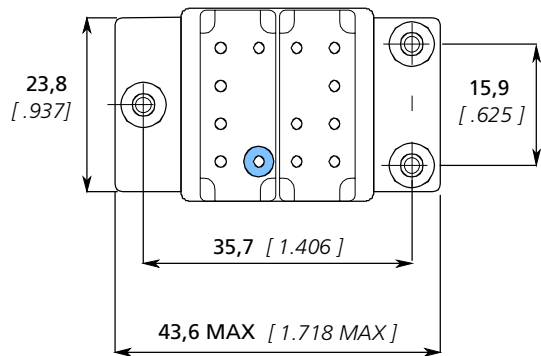
Housing **13**



Coupling torque, 45 m.N



Housing **18**



Housing **19**

Coupling torque 0,45 m.N

Relay sockets proposal

SOCKETS WITH NON REMOVABLE CONTACTS

| REB | SOKETS |
|-----------------|-----------------|
| REB **** *B | SFE 410 B 2 * * |
| REB **** *K | SFE 410 B 2 * * |
| REB **** *T *** | SFE 410 B 5 * * |

SOCKETS WITH REMOVABLE CONTACTS

| REB | SOCKETS |
|-----------------|-----------------|
| REB **** *B | SRE 410 B * V * |
| REB **** *B | SME 410 B 2 B * |
| REB **** *B | SFI 410 B 1 B * |
| REB **** *K | SRE 410 B * V * |
| REB **** *K | SME 410 B 3 K * |
| REB **** *K | SFI 410 B 1 B * |
| REB **** *T *** | SME 410 B 2 G * |
| REB **** *T *** | SFI 410 B 1 A * |
| REB **** *Q *** | SFI 410 T 2 A * |