

## 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

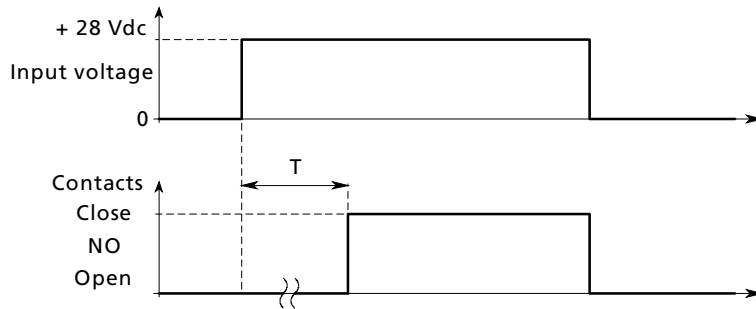
Undamaged by polarity reversal, Voltage transient per MIL STD 704, EUROCAE DO 160, AIR 2021 D including	
Spikes	± 600 V 10 μs
Power voltage transient	80 V 50 ms
Minimum voltage	8 V 5 ms

### Environmental conditions

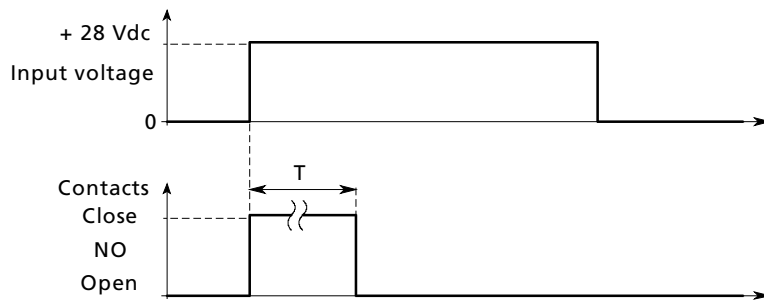
Temperature range	see table
Dielectric strenght	
Between all contacts and case	1 000 V rms
Insulation resistance	> 1 000 MΩ 500 Vdc
Vibrations 3 axis ( only mounting styles 2, 3, 10,11 and 12 )	30 g 3 000 Hz
Shocks	100 g 6 ms 1/2 sinus
Seal test	1 .10 <sup>-8</sup> cm <sup>3</sup> atm / s

## **Timing diagrams**

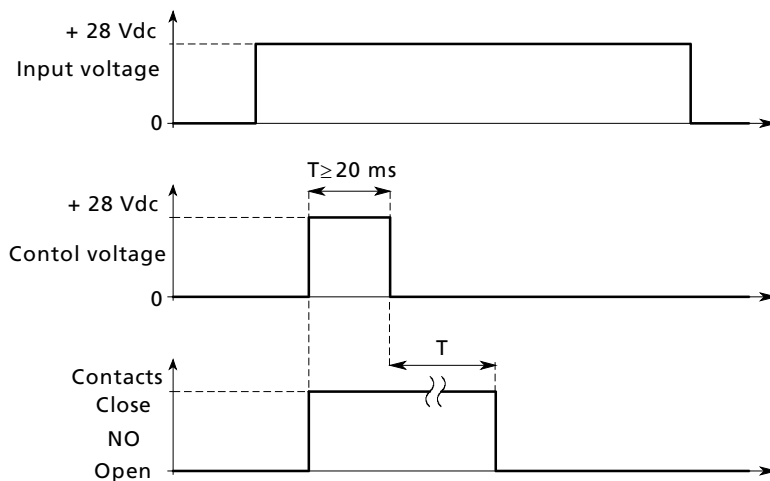
Time delay on operate ( code A and B )



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

### 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**

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

### MOUNTING STYLE AND HEADER TYPE

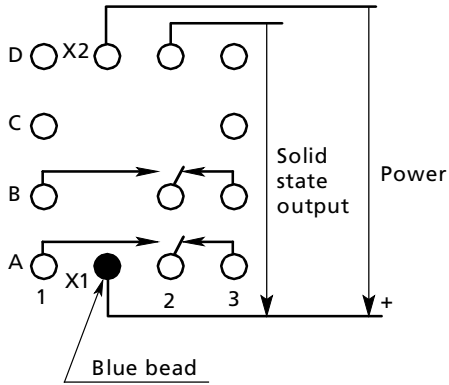
CODE	MOUNTING	HEADER
A	1	E
B	2	B
F	2	A
G	3	A
K	10	B
P	12	B
Q	13	B
R	19	E
T	18	B
W	11	A

see pages 5, 6, 7 and 8

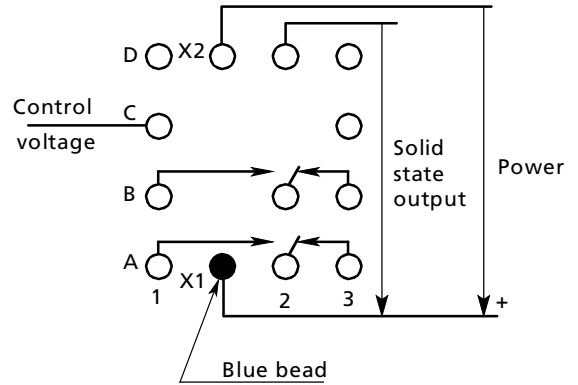
### Accuracy and temperature range

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

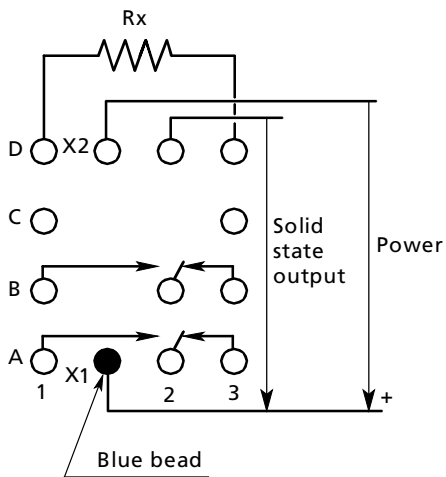
**Circuit diagram**



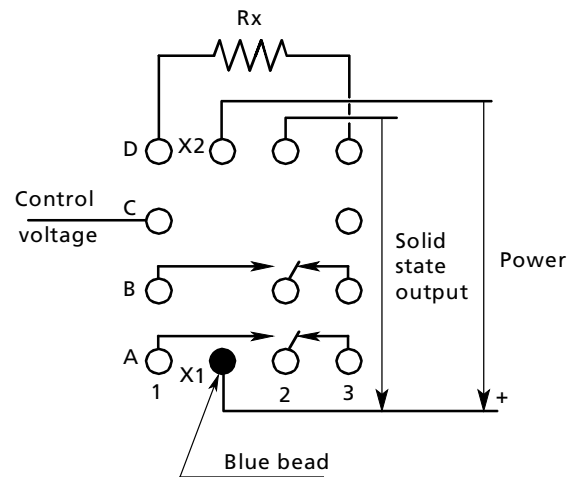
**Fixed time**  
( code A or D )



**Fixed time with control voltage**  
( code J )



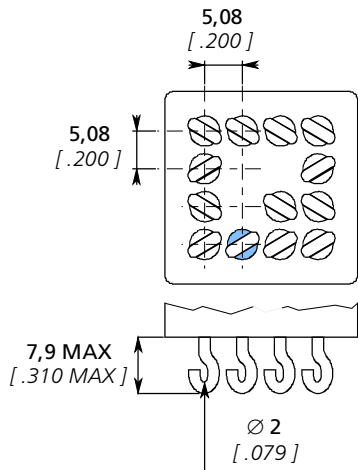
**Adjustable with external resistor**  
( code B or D )



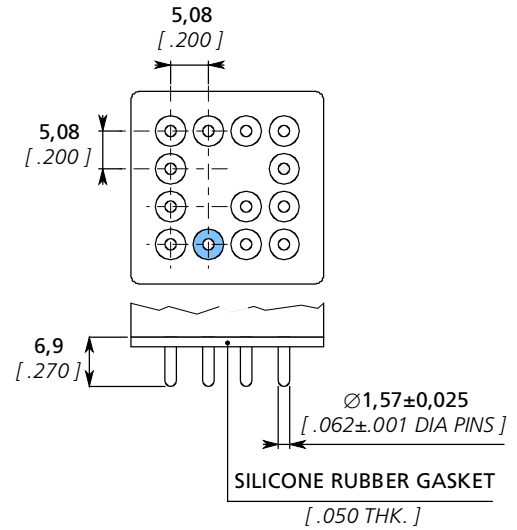
**Adjustable with external resistor with control voltage**  
( code L )

**Viewed from terminals side**

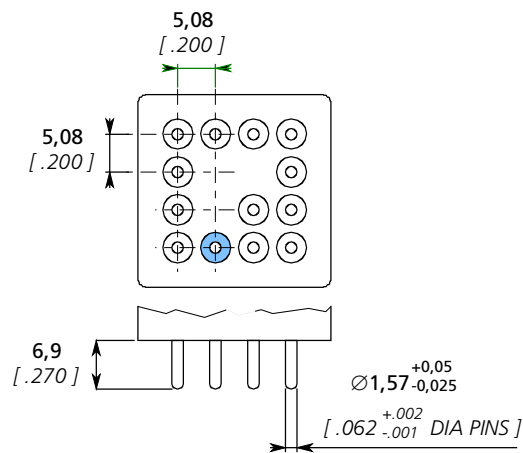
**Termination styles**



Type **A**  
Solder hooks

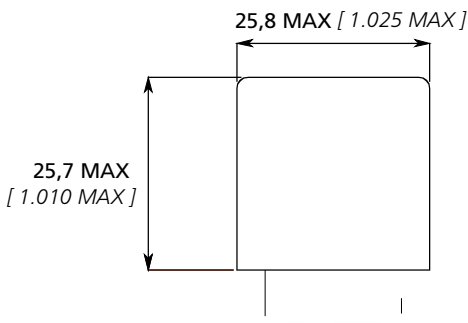
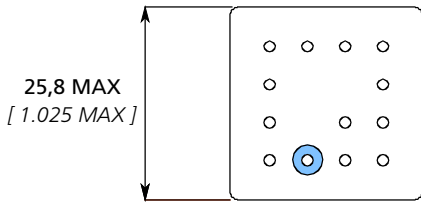


Type **B**  
Gold plated pins, plugs-in socket

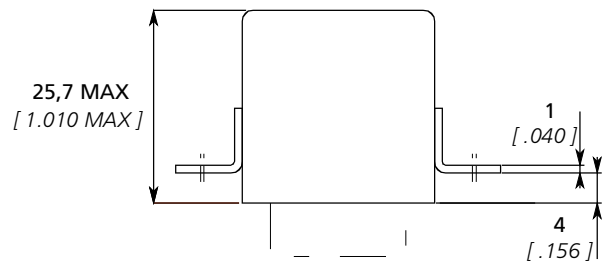
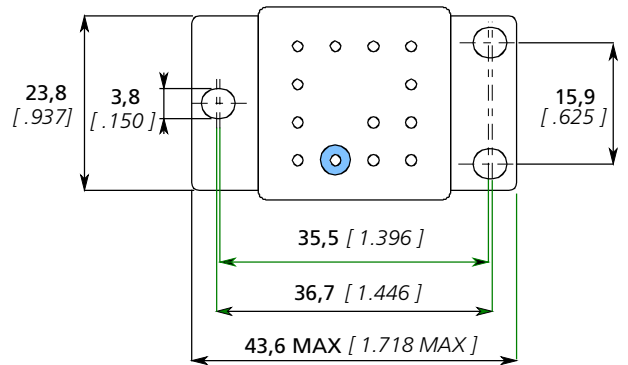


Type **E**  
Tinned terminal, PCB mounting

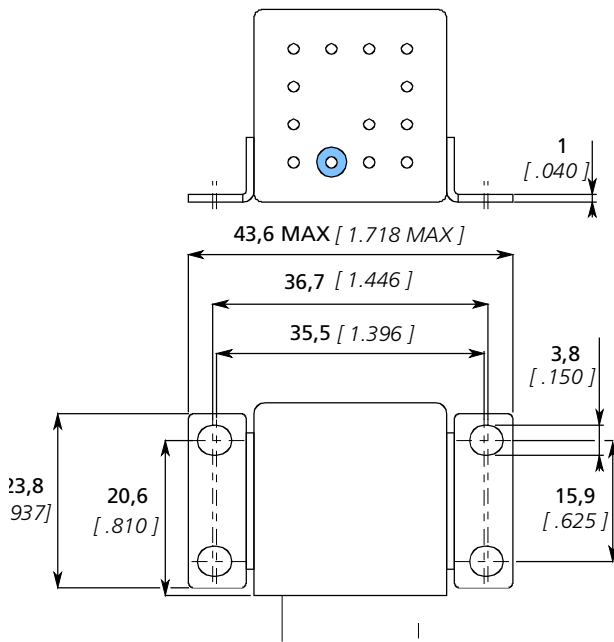
**Mounting styles**



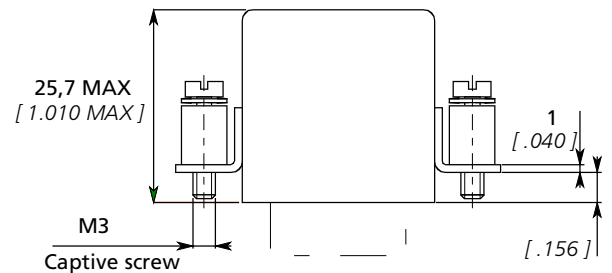
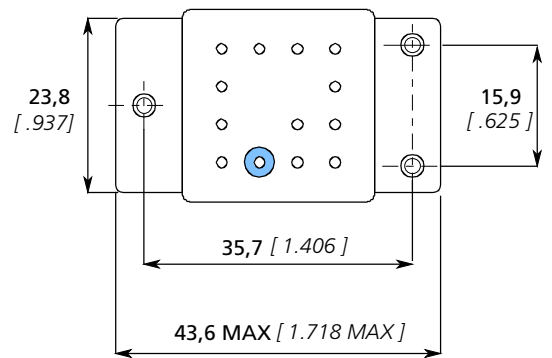
Housing **1**



Housing **2**

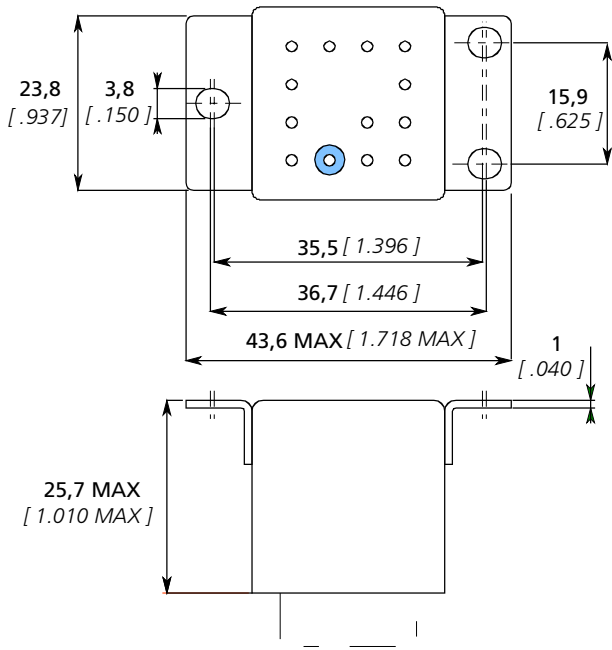


Housing **3**

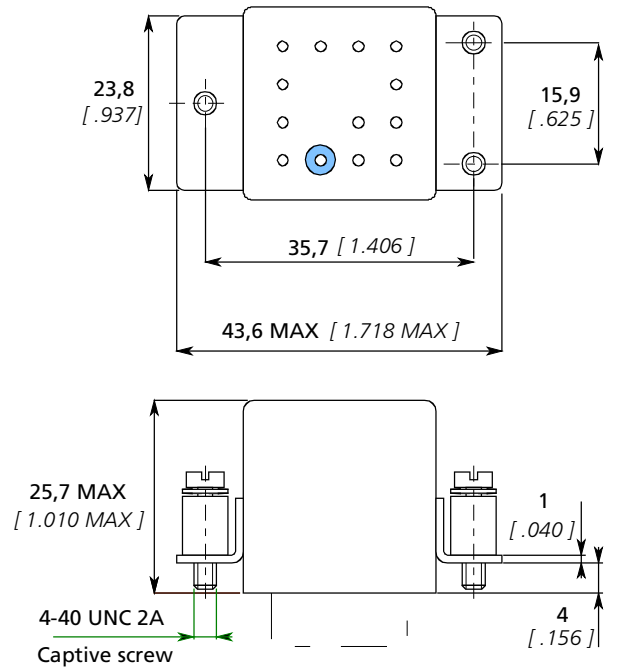


Housing **10**

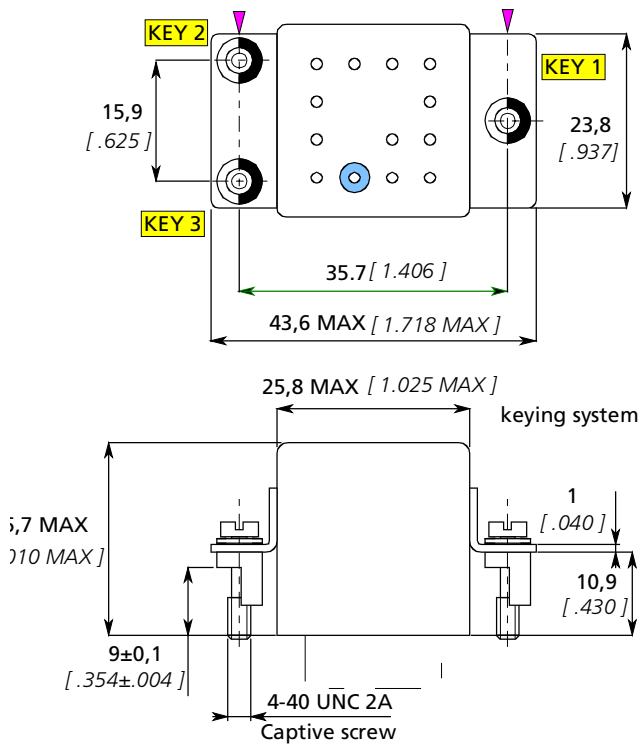
Coupling torque 0,45 m.N



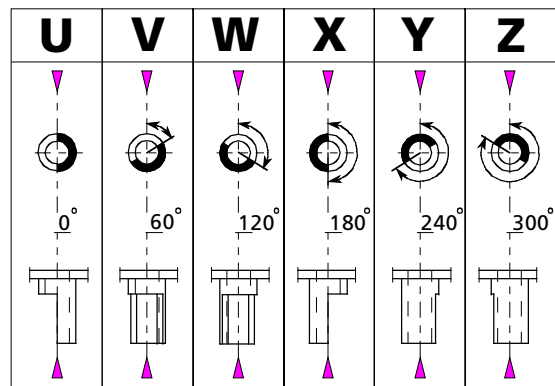
Housing **11**



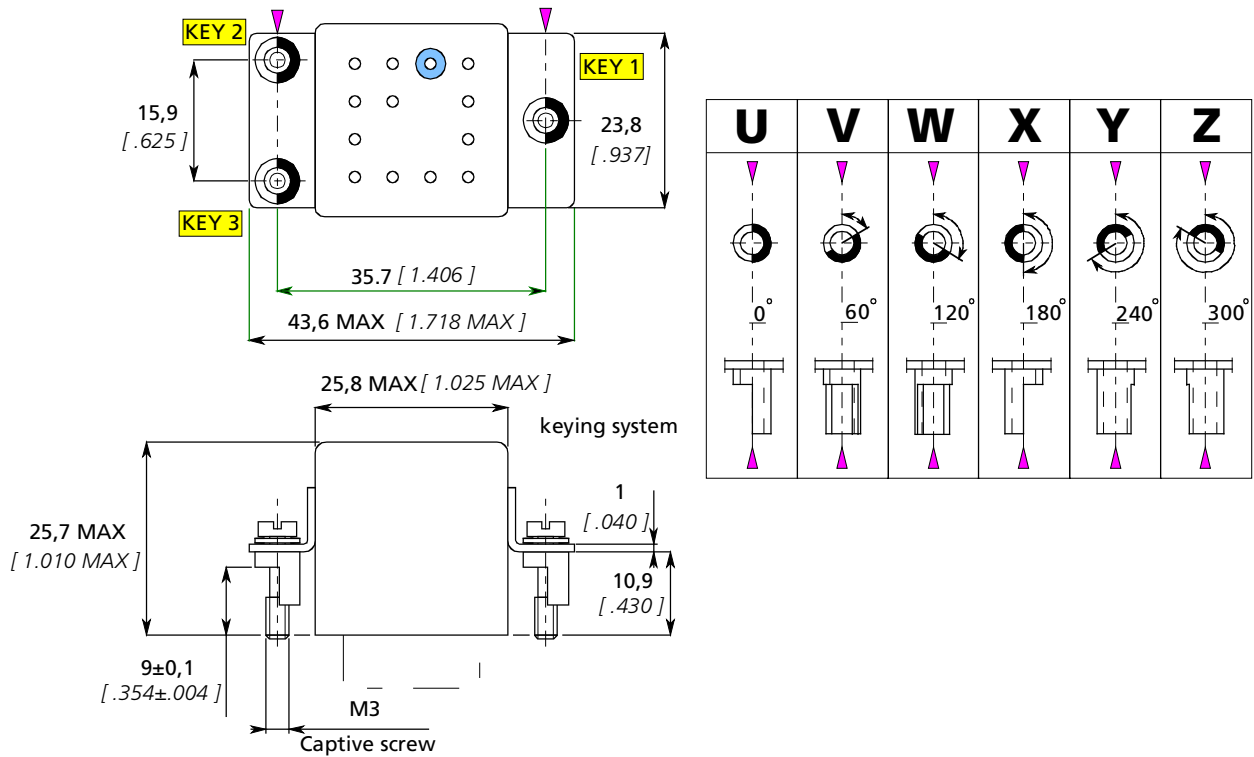
Housing **12**



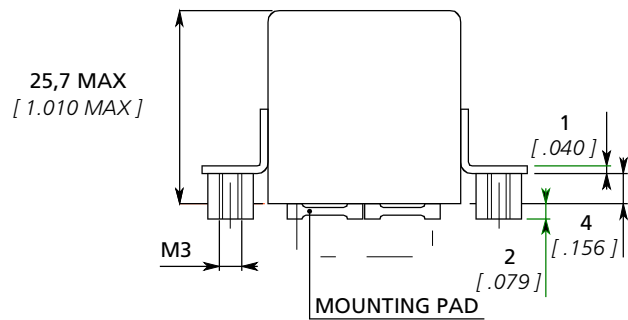
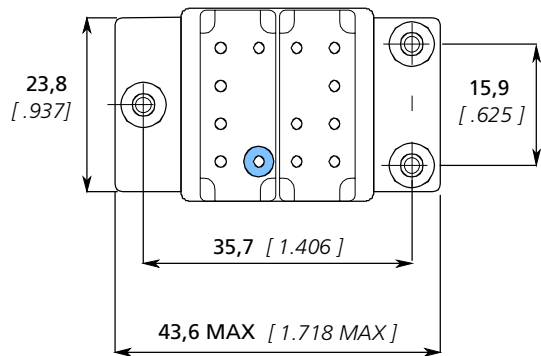
Housing **13**



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 *