

### Application notes:

**Applicable sockets:**  
SO-1021-7127/7126

- **AC voltage sensor**  
*Relais électronique de détection de tension*
- **Contact arrangement**  
*Combinaison des contacts* **2 PDT or 4 PDT**  
*2 RT ou 4 RT*
- **Coil supply**  
*Alimentation bobine* **Alternating current**  
*Courant alternatif*
- **Qualified or in accordance with**  
*Qualifié selon ou en accord avec*

## PRINCIPAL TECHNICAL CHARACTERISTICS CARACTERISTIQUES TECHNIQUES PRINCIPALES

- **Contacts rated at**  
*Prévu pour commuter* **10 Amps / 28 Vdc**  
*10 A / 28 Vcc*
- **Weight**  
*Masse* **284 g max**
- **Dimensions of case**  
*Dimensions du boîtier* **39 x 39 x 60 mm max**
- **Balanced-force design, all welded construction**  
*Armature à forces équilibrées*
- **Hermetically sealed, corrosion protected metal can**  
*Boîtier métallique hermétique protégé anti-corrosion*
- **No make before break**  
*Non chevauchement des contacts*
- **Special models available upon request**  
*Modèles spécifiques sur demande*

## GENERAL CHARACTERISTICS CARACTERISTIQUES GENERALES

<b>Input voltage / Tension d'entrée</b>	90 to 150 Vrms, line to neutral 3 phase WYE
<b>Input frequency / Fréquence d'entrée</b>	44 to 450 Hz
<b>Pick-up time / Temps de collage</b>	50ms to 10 sec ±10%
<b>Drop-out time / Temps de décollage</b>	50ms to 10 sec ±10%
<b>Sensing accuracy / Précision</b>	Voltage ±2% to ±10% Frequency: ±2% based on a true sinusoidal input wave form
<b>Phase sequence sensing / Phase de detection des sequences</b>	ABC
<b>Configuration and contact rating / Type de contact</b>	2 PDT, 2 Amp or 10 Amp, 4 PDT, 10 Amp
<b>Temperature range / Gamme de température</b>	-55° C to + 125° C
<b>Maximum operating current / Consommation maximum</b>	75 mA
<b>Voltage transients / Tensions transitoires</b>	PER MIL-STD-704A, CAT.B
<b>Operating cycles at rated resistive load / Nombre d'opérations à la charge nominale</b>	100,000 cycles min.
<b>Vibration / Vibrations</b>	0.06" D.A., 5 to 80 Hz, 20 g, 80 to 2000 Hz
<b>Shock / Chocs</b>	50 g, 11 ± 1 ms, 1/2 sine, 3 axes
<b>Acceleration / Accélération</b>	20 g in any axis
<b>Finish / Finition</b>	Tin Plate PER MIL-T-10727

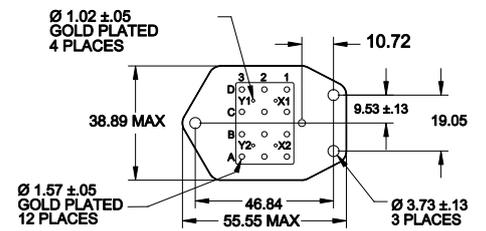
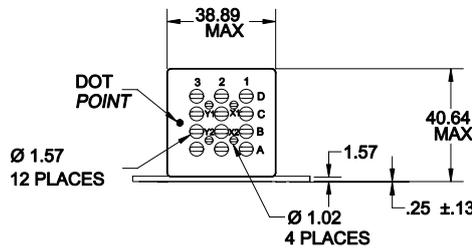
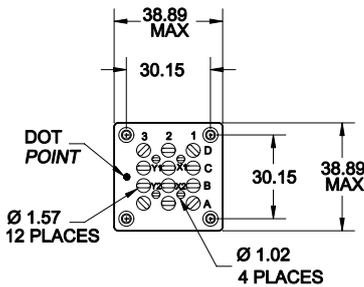
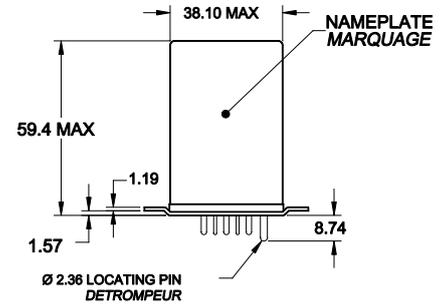
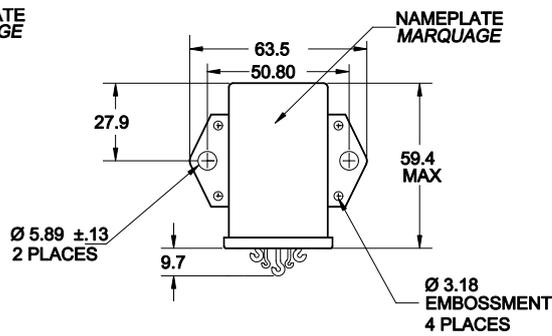
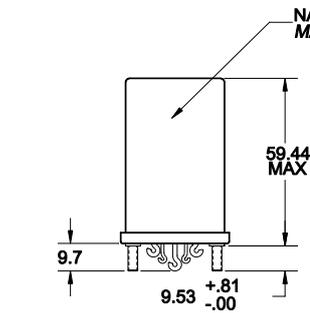
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The technical information provided by Leach International Europe is to be used as a guide only, and is not meant for publication or as documentation for altering any existing specification. Dimensions are in millimeters unless otherwise specified. Rev. 06/2019.

## MOUNTING STYLES AND TERMINAL TYPES COMBINAISON FIXATION / RACCORDEMENT

Dimensions in mm  
 Tolerances, unless otherwise specified,  $\pm 0.25\text{mm}$



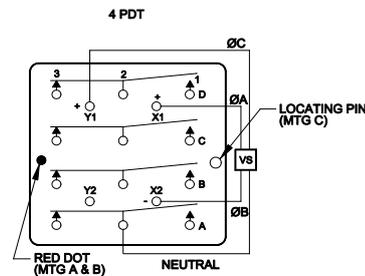
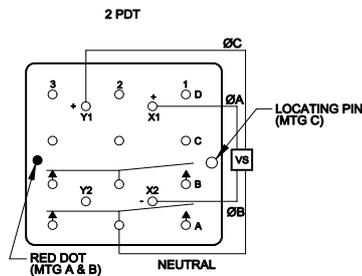
**MOUNTING STYLE A  
 FIXATION A**

**MOUNTING STYLE B  
 FIXATION B**

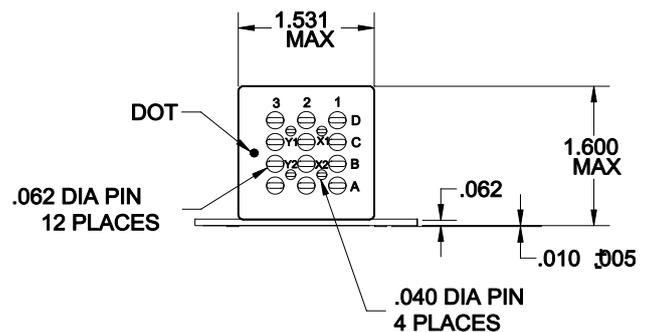
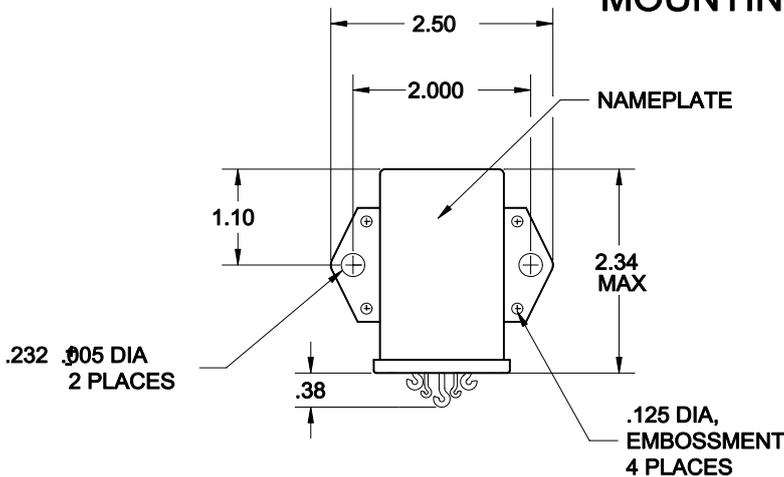
**MOUNTING STYLE C  
 FIXATION C**

## SCHEMATIC DIAGRAM SCHEMAS

### SCHEMATIC DIAGRAMS



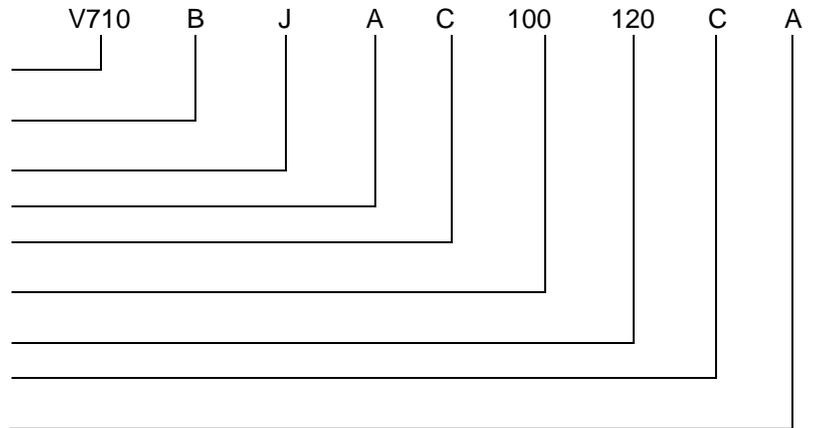
### MOUNTING STYLE B



## NUMBERING SYSTEM SYSTEME DE REFERENCES

### Basic series designation | Référence de base

1. **Frequency trip points** |  
 Fréquence des phases (380, 420 Hz)
2. **Output configuration** |  
 Combinaison des contacts (2PDT/10A@28Vdc)
3. **Time delay on pickup** | Délais d'enclenchement
4. **Time delay on dropout** | Délais de déclenchement
5. **Under voltage trip point** |  
 Phase de sous tension (90 to 150 Vrms)
6. **Over voltage trip point** |  
 Phase de surtension (90 to 150 Vrms)
7. **Temperature and accury** | Temperature et précision
8. **Mounting style and terminal types** |  
 Combinaison sortie et fixation (A, B, C)



Exemple : V710-BJAC-100/120-CA

## FREQUENCY TRIP POINTS FRÉQUENCE DES PHASES

Code Letter	Under frequency	Over frequency
A	390	410
B	380	420
C	370	430
D	360	440
E	350	450
F	58	62
G	56	64
H	54	66
I	52	68
J	48	52
K	46	54
L	44	56

## TIME DELAY DELAIS

Code Letter	Time delay on pickup	Time delay on dropout
A	0.05	0.05
B	0.50	0.50
C	1	1
D	2	2
E	5	5
F	10	10

## TEMPERATURE RANGE

### GAMME DE TEMPERATURE

Code Letter	Temp, Range	Trip Point Accuracy
A	-55° To +85°C	±2%
B	-55° To +85°C	±5%
C	-55° To +85°C	±10%
D	-55° To +125°C	±5%
E	-55° To +125°C	±10%
F	-55° To +71° C	±5%
G	-55° To +71° C	±10%

## NOTES

### REMARQUES

#### 1. Operating Mode

**A:** The output relay will energize when all of the following conditions exist:

1. Each of the three phase voltages is within the under and over trip point limits
2. The frequency is within the selected under and over trip point limits
3. The phase rotation is ABC
4. The pickup time delay period is completed

**B:** The output relay will change to or remain in the de-energized state when any or all of the above conditions are not met (Including an open circuit phase)

**C:** The output relay will change state (energize or de-energize) after the selected time delay ±10%

**D:** The time delays for pickup and dropout are independent and an internal signal from the sensing circuit to change the state of the relay always initiates a full time delay period

*Mode de fonctionnement :*

*A: Le relais sera activé lorsque toutes les conditions suivantes sont réunies:*

1. Chacune des trois tensions de phase est comprise entre la surtension et la sous tension.
2. La fréquence est comprise entre la surtension et la sous tension sélectionnée.
3. La phase de rotation est ABC
4. Le délai du temps d'enclenchement est complété.

*B: Le relais retournera dans l'état non alimenté lorsque l'une ou toutes les conditions ci-dessus ne sont pas remplies (y compris la phase de circuit ouvert)*

*C: Le relais change d'état (alimenté ou non-alimenté) après la sélection du délai ±10%*

*D: Le délai pour l'enclenchement et le déclenchement est indépendant et un signal interne au circuit de détection initie toujours la modification d'une période de retard au relais.*

#### 2. Dielectric Strength:

**Input to case: 1 000 Vrms**

**10A contacts: contacts to case: 1 250 Vrms**

**Across open contacts: 1 250 Vrms .**

*Rigidité diélectrique:*

*Entrées, boîtier: 1 000 Vrms*

*Contacts 10A : Contacts, boîtier: 1 250 Vrms*

*Aux bornes des contacts: 1 250 Vrms .*

#### 3. For other mounting styles or terminal types, please contact the factory

*Autres fixations ou sorties sont disponibles : nous consulter.*

#### 4. Qualification and quality levels : Contact the factory

*Niveaux de qualification et de qualité : Nous consulter.*