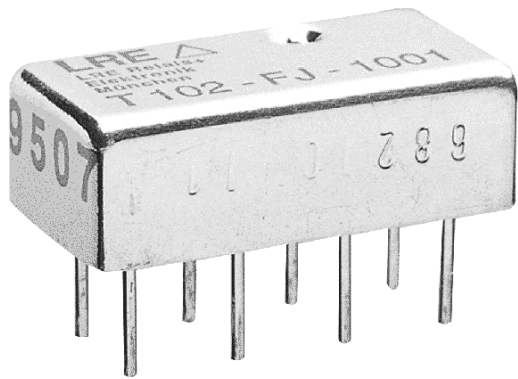


ENGINEERING DATA SHEET

T102

TIME DELAY RELAY 1 PNO (SSO)



Time delay relay on operate or on release

Fixed or adjustable timing delay

Contact arrangement

1 PNO

Power supply

Direct current

PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at

400 mAmps / 28 Vdc

Weight

< 0.015lb

Dimensions of case

.81in x .41in x .28in max

Tin plated hermetically sealed metal can.

CONTACT ELECTRICAL CHARACTERISTICS

| | |
|-----------------|--------------|
| Nominal voltage | 28Vdc |
| Contact rating | 0.4 A |

NUMBERING SYSTEM

| | Options | | | |
|--|---------|-----|---|--------|
| | T102 | - A | E | - 1001 |
| Basic series designation_____ | | | | |
| 1-Types Of Operation (A,B,D,F,U,W)_____ | | | | |
| 2-Temperature Range And Timing Accuracy (J,K,P)_____ | | | | |
| 3-Timing Range (4 digits) _____ | | | | |

LEACH® INTERNATIONAL

Solutions for Power Switching and Control

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North America
6900 Orangethorpe Ave.
P.O. Box 5032
Buena Park, CA 90622 USA

Tel: (01) 714-736-7599
Fax: (01) 714-670-1145

Europe, SA
2 Rue Goethe
57430 Sarralbe
France

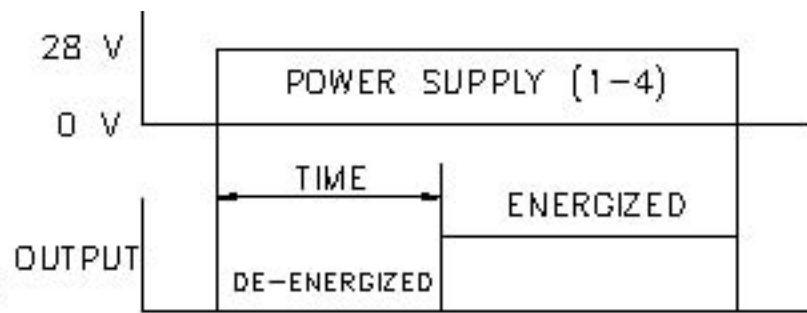
Tel: (33) 3 87 97 98 97
Fax: (33) 3 87 97 84 04

Asia-Pacific Ltd.
20/F Shing Hing Commercial Bldg.
21-27 Wing Kut Street
Central, Hong Kong

Tel: (852) 2 191 2886
Fax: (852) 2 389 5803

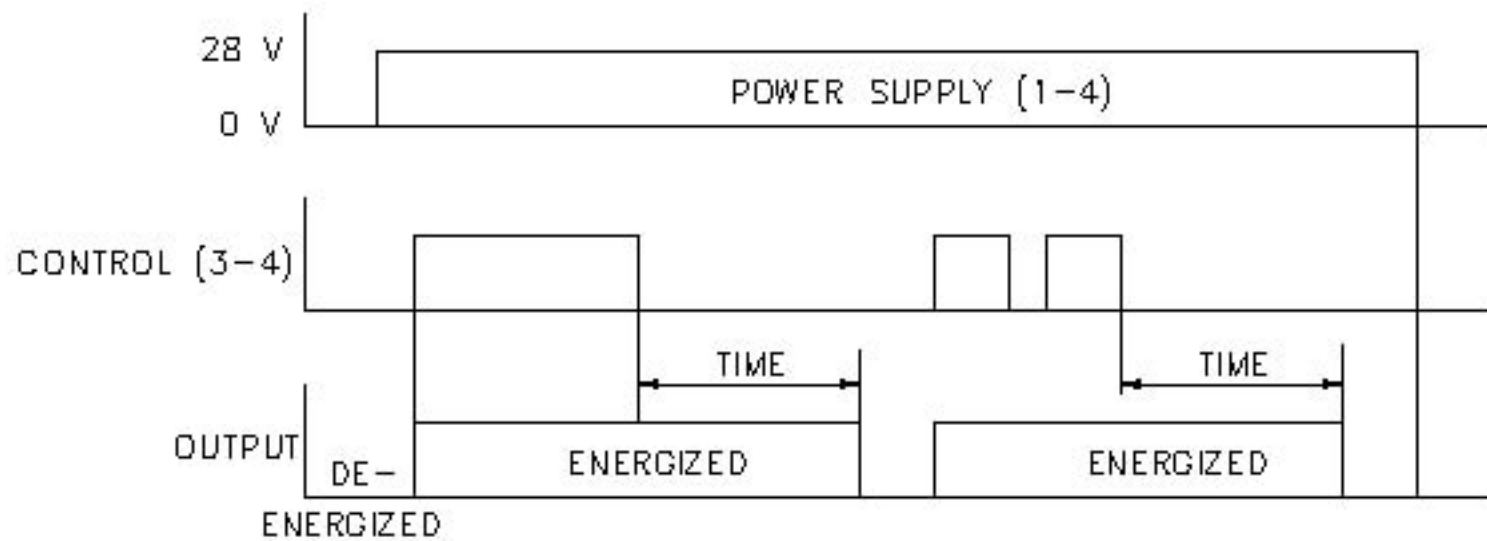
CODE A : TIME DELAY ON OPERATE,
FIXED TIME

CODE B : TIME DELAY ON OPERATE,
ADJUSTABLE WITH EXTERNAL RESISTOR



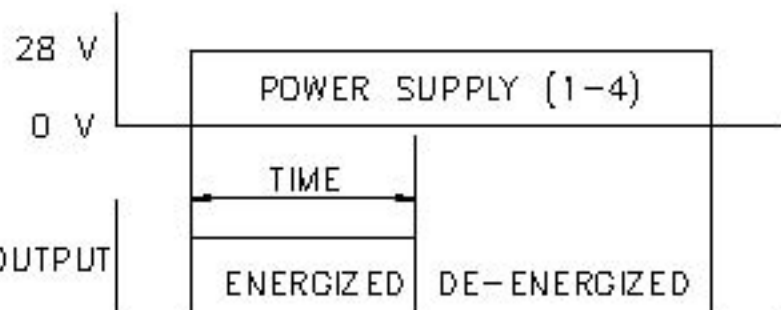
CODE D : TIME DELAY ON RELEASE,
POSITIVE CONTROL, FIXED TIME

CODE F : TIME DELAY ON RELEASE,
POSITIVE CONTROL, ADJUSTABLE WITH
EXTERNAL RESISTOR



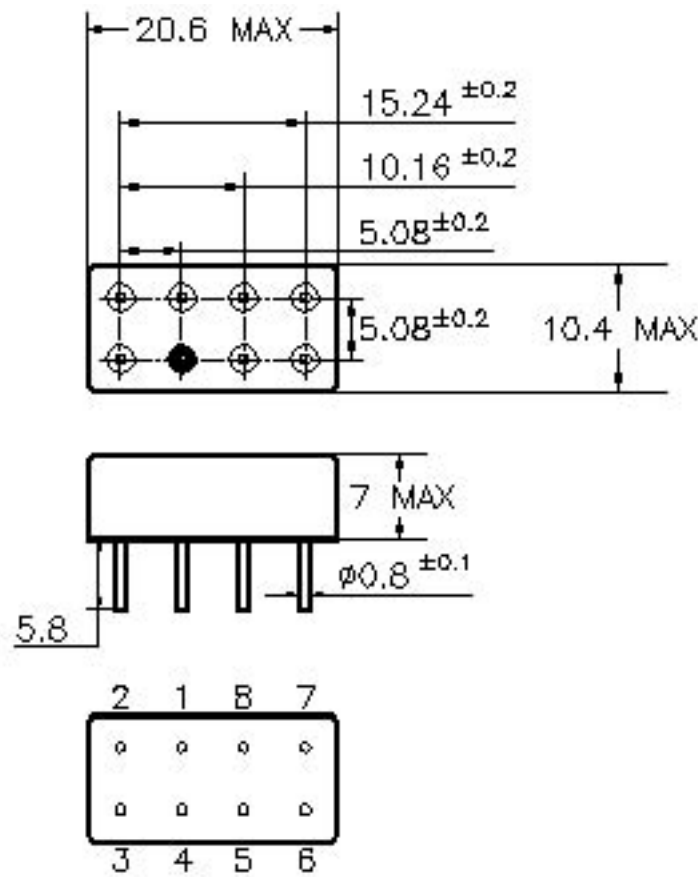
CODE U : TIME DELAY ON RELEASE,
FIXED TIME

CODE W : TIME DELAY ON RELEASE,
ADJUSTABLE WITH EXTERNAL RESISTOR



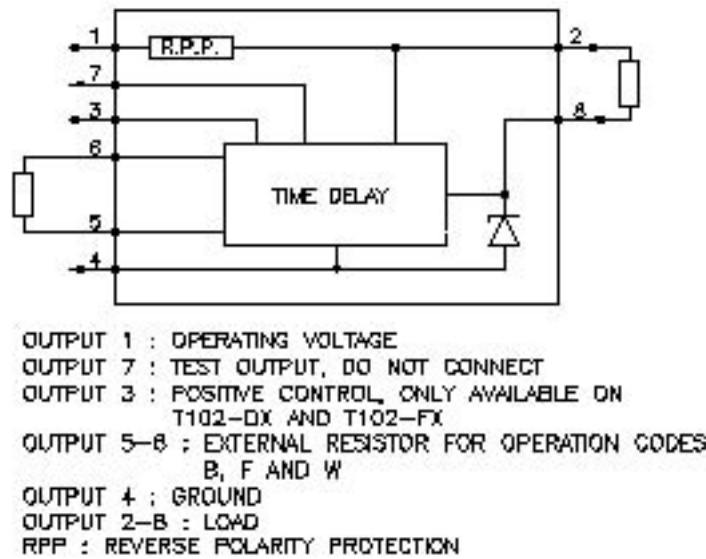
TEMPERATURE RANGE AND TIMING ACCURACY

| Code | Temperature | Accuracy |
|------|-------------------|----------|
| J | -55° C to +100° C | ±10% |
| K | -55° C to +100° C | ±5% |
| P | -55° C to +125° C | ±10% |



Dimensions in mm
Tolerances unless otherwise specified ±0.25mm

SCHEMATIC DIAGRAM/TERMINAL LAYOUT



TIMING RANGE

ADJUSTABLE (For operation code B, F and W)
 Code 1001: 0.1 to 1 second $R_x = (T / t_0 - 1) \times 100\text{kohm}$
 Code 1002: 1 to 10 seconds
 Code 1003: 10 to 100 seconds
 Code 1004: 100 to 1000 seconds where R_x in kohms T : desired time in seconds,
 t_0 : time measured with $R_x = 0$.

Example to determine R_x value for a T time of 5 seconds: Choose code 1002; measure time with $R_x = 0$ (for example : $t_0 = 1$ s); calculate $R_x = (5/1 - 1) \times 100000$
 Theoretical resistance: $R_x = 400$ kohms

FIXED
 The timing code consists of 4 digits. To determine this code, convert the value to milliseconds value. Use the first 3 digits of this value and add a fourth digit to indicate the number of zeros which must follow the three digits to show complete milliseconds value.

Examples: 250 ms --> Code 2500 300 s --> Code 3003

GENERAL CHARACTERISTICS**T102**

| | |
|--|--|
| Operating Voltage | 18 to 32 Vdc (AIR norm 2021 E) |
| Recycle Time | less than or equal to 10 ms |
| Dielectric strength at sea level between all pins connected together and can | 1000 V / 50 Hz |
| Dielectric strength at altitude 80,000 ft, all points | 350 V / 50 Hz |
| Initial insulation resistance at 500 Vdc | greater than or equal to 1000 M Ω |
| Sinusoidal vibration | 30G / 10 to 2000 Hz |
| Shock | 100G / 6 ms |
| Power loss protection | 1 ms max |
| Undamaged against positive transients | + 80 Vdc |
| Spike susceptibility | \pm 600 Vdc |
| Self generated spikes | none |

NOTES

1. Isolation spacer pads for PCB mounting available on request.
2. For other mounting styles or terminal types, please contact the factory.