

*ROHS COMPLIANT



BOURNS®

Features

- Small diameter
- Wide resistance range
- Good resolution
- Linear tapers
- Cermet element

3862 - 1/2 " Diameter Single-Turn Panel Control

Initial Electrical Characteristics¹

| | |
|---|---------------------------------------|
| Standard Resistance Range..... | 1K ohms to 1 megohm |
| Total Resistance Tolerance..... | (A Taper) ±10 % (H Taper) ±5 % |
| Independent Linearity..... | ±5 % |
| Absolute Minimum Resistance..... | 2 ohms maximum |
| Effective Electrical Angle..... | 260 ° ±10 ° |
| Contact Resistance Variation..... | ±3 % or 6 ohms (whichever is greater) |
| Dielectric Withstanding Voltage (MIL-STD-202, Method 301) | |
| Sea Level..... | 750 VAC minimum |
| 70,000 Feet..... | 350 VAC minimum |
| Insulation Resistance (500 VDC)..... | 1,000 megohms minimum |
| Power Rating (Voltage Limited by Power Dissipation or 350 VAC, Whichever is Less) | |
| +70 °C..... | 1 watt |
| +125 °C..... | 0 watt |
| Theoretical Resolution..... | Essentially infinite |

Environmental Characteristics¹

| | |
|---|---------------------------------------|
| Operating Temperature Range..... | -40 °C to +125 °C |
| Storage Temperature Range..... | -65 °C to +125 °C |
| Temperature Coefficient Over Storage Temperature Range..... | ±150 ppm/°C |
| Vibration..... | 20 G |
| Total Resistance Shift..... | ±2 % maximum |
| Voltage Ratio Shift..... | ±6 % maximum |
| Shock..... | 50 G |
| Total Resistance Shift..... | ±2 % maximum |
| Voltage Ratio Shift..... | ±6 % maximum |
| Load Life..... | 1,000 hours |
| Total Resistance Shift..... | ±3 % maximum |
| Rotational Life, No Load | |
| (C & N Bushings)..... | 50,000 cycles |
| (E & T Bushings)..... | 1,000 cycles |
| Total Resistance Shift..... | ±5 % maximum |
| Contact Resistance Variation..... | ±3 % or 6 ohms (whichever is greater) |
| Moisture Resistance (MIL-STD-202, Method 106, Condition B) | |
| Total Resistance Shift..... | ±2 % maximum |
| Insulation Resistance (500 VDC)..... | 100 megohms minimum |
| Salt Spray..... | MIL-STD-202, Method 101, Condition A |
| IP Rating..... | IP 40 |

Mechanical Characteristics¹

| | |
|---|--|
| Stop Strength..... | 33 N-cm (3 lb.-in.) maximum |
| Mechanical Angle..... | 295 ° ±3 ° |
| Torque | |
| Starting and Running..... | 3.53 N-cm (5 oz.-in.) maximum |
| Mounting (Torque on Bushing)..... | 1.7-2.0 N-m (15-18 lb.-in.) maximum |
| Shaft Locking Torque with Locking Bushings..... | 14.12 N-cm (20 oz.-in.) |
| Weight (Single Section)..... | 25 grams maximum |
| Terminals..... | Printed circuit pins or J-Hooks |
| Soldering Condition..... | Recommended hand soldering using Sn85/Ag5 no clean solder, 0.025 " wire diameter Maximum temperature 399 °C (750 °F) for 3 seconds. No wash process to be used with no clean flux. Part can be wave soldered at 260 °C (500 °F) for 5 seconds, no wash process with no clean flux. |
| Marking..... | Manufacturer's trademark, wiring diagram, date code, resistance, manufacturer's part number |
| Ganging..... | 1 cup maximum |
| Hardware..... | One lockwasher and one mounting nut is shipped with each potentiometer, except where noted in the part number. |

¹ AT ROOM AMBIENT: +25 °C NOMINAL AND 50 % RELATIVE HUMIDITY NOMINAL, EXCEPT AS NOTED.

*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

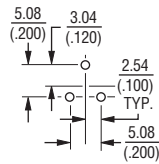
Users should verify actual device performance in their specific applications.

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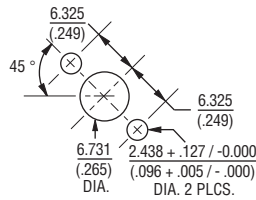
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Product Dimensions

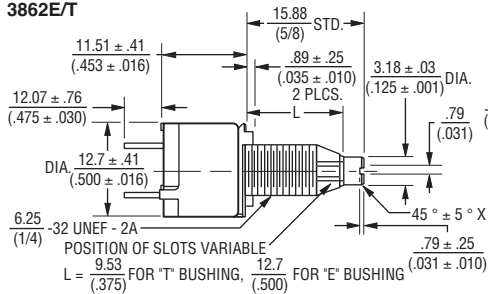
PCB LAYOUT



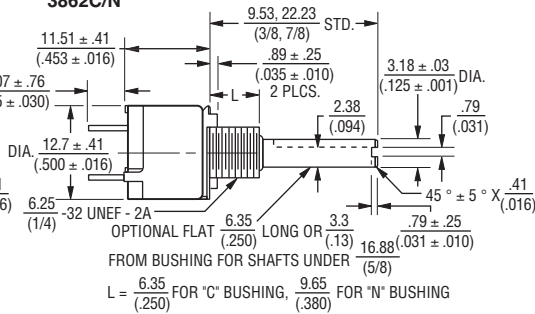
PANEL LAYOUT



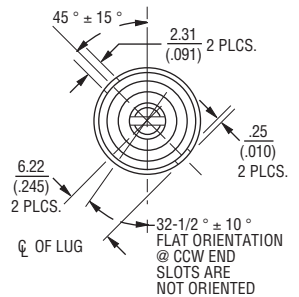
3862E/T



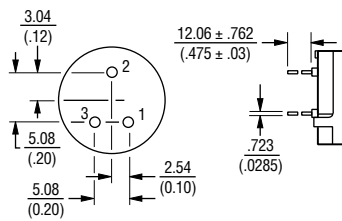
3862C/N



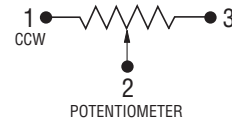
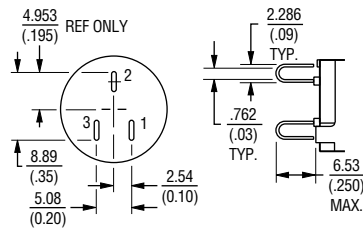
Shaft End Detail 3862



PC PIN TERMINAL



J-HOOK TERMINAL



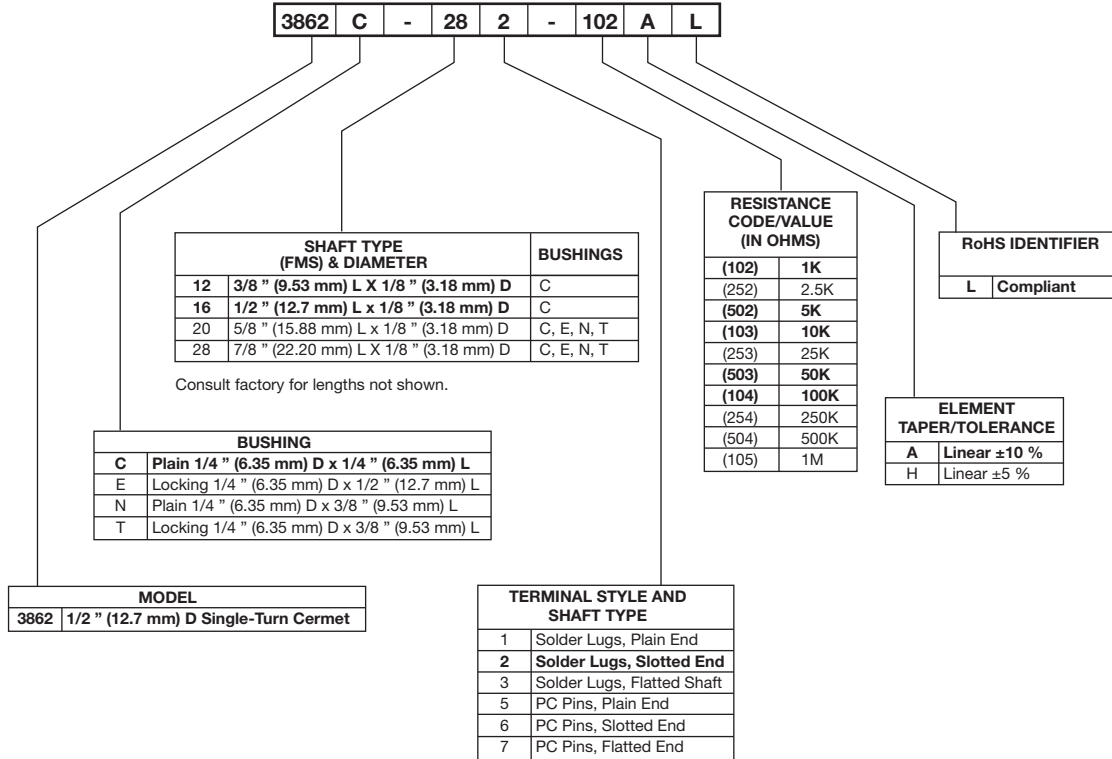
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

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How to Order 3862 Series Panel Controls

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Boldface features are Bourns standard options. All others are available with higher minimum order quantities.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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