



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) $\pm 10\%$ (H Taper) $\pm 5\%$
Independent Linearity.....	$\pm 5\%$
Absolute Minimum Resistance.....	2 ohms maximum
Effective Electrical Angle.....	$260^\circ \pm 10^\circ$
Contact Resistance Variation.....	$\pm 3\%$ 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.....	$\pm 2\%$ maximum
Voltage Ratio Shift.....	$\pm 6\%$ maximum
Shock.....	50 G
Total Resistance Shift.....	$\pm 2\%$ maximum
Voltage Ratio Shift.....	$\pm 6\%$ maximum
Load Life.....	1,000 hours
Total Resistance Shift.....	$\pm 3\%$ maximum
Rotational Life, No Load	
(C & N Bushings).....	50,000 cycles
(E & T Bushings).....	1,000 cycles
Total Resistance Shift.....	$\pm 5\%$ maximum
Contact Resistance Variation.....	$\pm 3\%$ or 6 ohms (whichever is greater)
Moisture Resistance (MIL-STD-202, Method 106, Condition B)	
Total Resistance Shift.....	$\pm 2\%$ 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.....	$295^\circ \pm 3^\circ$
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.

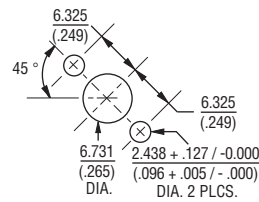
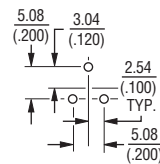
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Users should verify actual device performance in their specific applications.

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PANEL LAYOUT



3862E/T

15.88 STD. (5/8)

11.51 ± .41 (4.53 ± .016)

12.07 ± .76 (4.75 ± .030)

12.7 ± .41 (5.00 ± .016)

DIA. (5.00 ± .016)

6.25 (1/4)

32 UNEF - 2A

POSITION OF SLOTS VARIABLE

L = 9.53 (3/75) FOR "T" BUSHING, 12.7 (500) FOR "E" BUSHING

15.88 STD. (5/8)

.89 ± .25 (.035 ± .010) 2 PLCS.

3.18 ± .03 (125 ± .001) DIA.

.79 (.031)

45° ± 5° X

.79 ± .25 (.031 ± .010)

3862C/N

Technical drawing of a shaft-hub assembly. The drawing shows a shaft with a threaded section and a bushing. Dimensions are given in inches and millimeters.

Key dimensions and features:

- Shaft Diameter:** $11.51 \pm .41$ (453 $\pm .016$)
- Shaft Length:** $17 \pm .76$ (430 $\pm .030$)
- Shaft Thread:** $12.7 \pm .41$ (500 $\pm .016$)
- Shaft End Diameter:** 6.25 (1/4)
- Shaft End Thread:** $\text{32 UNEF} \cdot 2A$
- Shaft End Flat:** 6.35 (250)
- Shaft End Flat Length:** $9.53, 22.23$ (3/8, 7/8)
- Shaft End Flat Diameter:** $3.18 \pm .03$ (125 $\pm .001$)
- Shaft End Flat Angle:** $45^\circ \pm 5^\circ \times .41$ (.016)
- Shaft End Flat Radius:** $.79$ (.031)
- Shaft End Flat Length (N Bushing):** 16.88 (5/8)
- Shaft End Flat Length (C Bushing):** 9.65 (3/80)
- Shaft End Flat Length (C Bushing):** 6.35 (250)
- Shaft End Flat Length (C Bushing):** 3.3 (13)
- Shaft End Flat Length (C Bushing):** 2.38 (.094)
- Shaft End Flat Length (C Bushing):** $.89 \pm .25$ (.035 $\pm .010$)
- Shaft End Flat Length (C Bushing):** 2 PLCS.
- Shaft End Flat Length (C Bushing):** $STD.$
- Shaft End Flat Length (C Bushing):** $1.7 \pm .76$ (430 $\pm .030$)
- Shaft End Flat Length (C Bushing):** $11.51 \pm .41$ (453 $\pm .016$)
- Shaft End Flat Length (C Bushing):** $12.7 \pm .41$ (500 $\pm .016$)
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- Shaft End Flat Length (C Bushing):** 2.38 (.094)
- Shaft End Flat Length (C Bushing):** $.89$

Technical drawing of a cross-section of a lug. The drawing shows a circular cross-section with a central hole and a larger outer hole. The dimensions and tolerances are as follows:

- Top outer diameter: 45 ± 15
- Top outer diameter tolerance: $\frac{2.31}{(.091)} 2 \text{ PLCS.}$
- Bottom outer diameter: $\frac{25}{(.010)} 2 \text{ PLCS.}$
- Bottom outer diameter tolerance: $\frac{6.22}{(.245)} 2 \text{ PLCS.}$
- Bottom outer diameter tolerance: $32-1/2 \pm 10^\circ$
- Bottom outer diameter tolerance: $\text{FLAT ORIENTATION @ CCW END SLOTS ARE NOT ORIENTED}$
- Center of lug: C OF LUG

4.953
(.195) REF ONLY

2.286
(.09) TYP.

762
(.03) TYP.

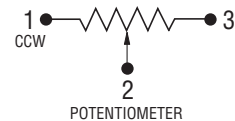
8.89
(.35)

5.08
(0.20)

2.54
(0.10)

6.53
(.250) MAX.

1 2 3

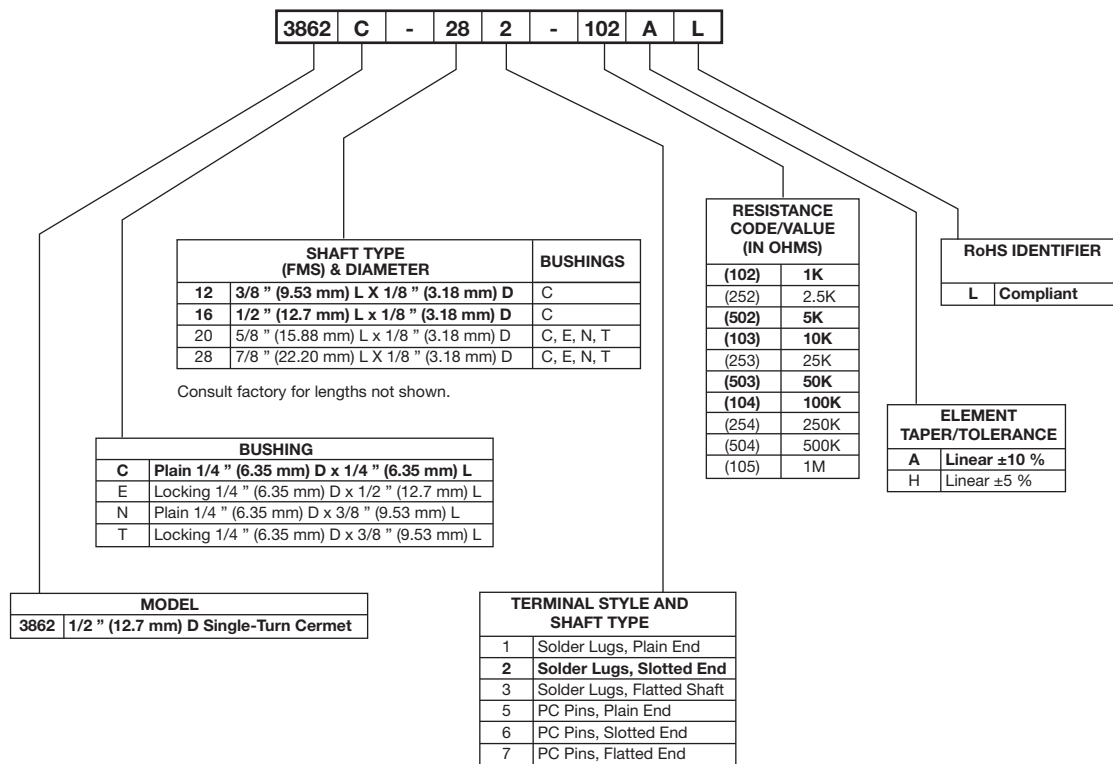


DIMENSIONS: $\frac{\text{MM}}{(\text{INCHES})}$

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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.

REV. 06/15

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Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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