

# Rheostats

## (Potentiometers) Wirewound



### MODEL C

| Model Type | Watts | Ohmic range | Core     | Max. Voltage (RMS)* | Behind panel "B" (in./mm Ref.) | Diameter "D" (in./mm Ref.) | Dimension "C" (in./mm Ref.) | Shaft torque   | Rotation (±5°) |
|------------|-------|-------------|----------|---------------------|--------------------------------|----------------------------|-----------------------------|----------------|----------------|
| C RCS/RCL  | 7.5   | 10.0-5K     | enclosed | 305                 | 0.875/22.23                    | 0.515/ 13.08               | —                           | 0.25-3 oz. in. | 300°           |

\* See Catalog #203 for complete details.



### MODEL E

| Model Type | Watts | Ohmic range | Core     | Max. Voltage (RMS)* | Behind panel "B" (in./mm Ref.) | Diameter "D" (in./mm Ref.) | Dimension "C" (in./mm Ref.) | Shaft torque | Rotation (±5°) |
|------------|-------|-------------|----------|---------------------|--------------------------------|----------------------------|-----------------------------|--------------|----------------|
| E RES/REL  | 12.5  | 1.0-15K     | open     | 305                 | 0.688/17.46                    | 0.875/ 22.23               | 0.594/15.08                 | 1-6 oz. in.  | 300°           |
| E REE      | 12.5  | 1.0-15K     | enclosed | 305                 | 1.219/30.96                    | 1.047/ 26.59               | —                           | 1-6 oz. in.  | 300°           |

\* See Catalog #203 for complete details.



Dimensions for reference only; consult factory for details.

Since all rheostats/potentiometers are electro-mechanical devices, they are subject to mechanical wear and, therefore, have a finite life.

Models H, J, K, L and N are listed under UL File No. E-10946 and CSA File No. 21309 unless noted otherwise.

All rheostats are 10% tolerance.

# Rheostats

## (Potentiometers) Wirewound

### MODELS H, J, G, K, L

| Model | Type    | Watts | Ohmic range | Core | Max. Voltage (RMS)* | Behind panel "B" (in./mm Ref.) | Diameter "D" (in./mm Ref.) | Dimension "C" (in./mm Ref.) | Shaft torque     | Rotation (±5°) |
|-------|---------|-------|-------------|------|---------------------|--------------------------------|----------------------------|-----------------------------|------------------|----------------|
| H     | RHS/RHL | 25    | 1.0-25K     | open | 500                 | 1.375/34.93                    | 1.560/ 39.62               | 0.940/23.88                 | 0.25-0.5 lb. in. | 300°           |
| J     | RJS     | 50    | 0.5-50K     | open | 750                 | 1.375/34.93                    | 2.31 / 58.67               | 1.56 /39.62                 | 0.25-2 lb. in.   | 300°           |
| G     | RGS     | 75    | 0.5-50K     | open | 900                 | 1.750/44.45                    | 2.75 / 69.25               | 1.78 /45.21                 | 0.5-2 lb. in.    | 300°           |
| K     | RKS     | 100   | 0.5-50K     | open | 1000                | 1.750/44.45                    | 3.125/ 79.38               | 1.91 /48.51                 | 0.5-2 lb. in.    | 300°           |
| L     | RLS     | 150   | 0.5-50K     | open | 1200                | 2.000 / 50.8                   | 4.00 /101.60               | 2.28 /57.91                 | 0.5-3 lb. in.    | 300°           |

• Models H, J, G, and K also available in enclosed versions.

• See Catalog #203 for complete details.



**Mounting:** Panels to 0.25" (6.35mm) thick with  $\frac{3}{8}$ -32 bushing and hex nut ( $\frac{3}{32}$ " thick) (or with 10-32 x 0.75 flat-head screws for model L only).

### MODELS P, N, R, U

| Model | Type | Watts | Ohmic range | Core | Max. Voltage (RMS)* | Behind panel "B" (in./mm Ref.) | Diameter "D" (in./mm Ref.) | Dimension "C" (in./mm Ref.) | Shaft torque  | Rotation (±5°) |
|-------|------|-------|-------------|------|---------------------|--------------------------------|----------------------------|-----------------------------|---------------|----------------|
| P     | RPS  | 225   | 1.0-30K     | open | 1300                | 2.125/53.98                    | 5.00 /127.00               | 2.97 /75.44                 | 2.5-4 lb. in. | 310°           |
| N     | RNS  | 300   | 1.0-50K     | open | 1225                | 2.375/60.33                    | 6.00 /152.40               | 3.44 /87.38                 | 2.5-5 lb. in. | 320°           |
| R     | RRS  | 500   | 1.0-20K     | open | 1450                | 2.125/53.98                    | 8.00 /203.20               | 4.31/109.47                 | 4.5-7 lb. in. | 325°           |
| U     | RUS  | 1000  | 1.0-20K     | open | 1600                | 3.000 / 76.2                   | 12.00 /304.80              | 6.38/162.05                 | 3.5-7 lb. in. | 335°           |

• See Catalog #203 for complete details.



(continued)

# Rheostats

## (Potentiometers) Wirewound

### ORDERING INFORMATION

| Code | Watts | Model | Shaft    | Core     |
|------|-------|-------|----------|----------|
| CL = | 7.5   | C     | Locking  | Enclosed |
| CS = | 7.5   | C     | Standard | Enclosed |
| EE = | 12.5  | E     | Locking  | Open     |
| EL = | 12.5  | E     | Standard | Open     |
| ES = | 12.5  | E     | Standard | Open     |
| GS = | 75    | G     | Standard | Open     |
| HL = | 25    | H     | Locking  | Open     |
| HS = | 25    | H     | Standard | Open     |
| JS = | 50    | J     | Standard | Open     |
| KS = | 100   | K     | Standard | Open     |
| LS = | 150   | L     | Standard | Open     |
| NS = | 300   | N     | Standard | Open     |
| PS = | 225   | P     | Standard | Open     |
| RS = | 500   | R     | Standard | Open     |
| US = | 1000  | U     | Standard | Open     |

Series —  
Rheostats  
Wirewound  
Potentiometers

E = RoHS compliant

**RCSR50E**

\*Check table for standard resistance values and maximum current values

#### Resistance Value\*

Example:  
R50 = 0.50Ω  
1R0 = 1Ω  
7R5 = 7.5Ω  
250 = 250Ω  
1K0 = 1,000Ω  
1K75 = 1,750Ω  
4K5 = 4,500Ω  
50K = 50,000Ω

• RoHS compliant product available. Add "E" suffix to part number to specify.

• Made-to-order rheostats available: Contact nearest Ohmite sales office.

\* Voltage rating dependent on resistance value.

| Ohmic value | Part No.<br>Prefix ➤<br>Suffix ▼ | 7.5W Model C |         |           | 12.5W Model E |         |          | 25W Model H |            |         | 50W Model J |            | 75W Model G |            | 100W Model K |            | 150W Model L |            | 225W Model P |                                              | 300W Model N |            | 500W Model R |            | 1000W Model U |            |           |      |
|-------------|----------------------------------|--------------|---------|-----------|---------------|---------|----------|-------------|------------|---------|-------------|------------|-------------|------------|--------------|------------|--------------|------------|--------------|----------------------------------------------|--------------|------------|--------------|------------|---------------|------------|-----------|------|
|             |                                  | Std. shaft   | Locking | Amps max. | Std. shaft    | Locking | Enclosed | Amps max.   | Std. shaft | Locking | Amps max.   | Std. shaft | Amps max.   | Std. shaft | Amps max.    | Std. shaft | Amps max.    | Std. shaft | Amps max.    | Std. shaft                                   | Amps max.    | Std. shaft | Amps max.    | Std. shaft | Amps max.     | Std. shaft | Amps max. |      |
| 0.5 —R50    |                                  |              |         |           | ✓             | ✓       | ✓        | 3.53        | ✓          | ✓       | 5.00        | ✓          | 10.0        | ✓          | 12.3         | ✓          | 14.1         | ✓          | 17.3         | ✓                                            | 15.0         | ✓          | 17.32        | ✓          | 22.3          | ✓          | 31.6      |      |
| 1 —1R0      |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 7.07        | ✓          | 8.66         | ✓          | 10           | ✓          | 12.3         |                                              |              |            | ✓            | 18.2       | ✓             | 25.8       |           |      |
| 1.5 —1R5    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              | ✓                                            | 15.0         |            | ✓            | 15.8       | ✓             | 22.4       |           |      |
| 2 —2R0      |                                  |              |         |           | ✓             | ✓       | ✓        | 2.50        | ✓          | ✓       | 3.54        | ✓          | 5.00        | ✓          | 6.12         | ✓          | 7.07         | ✓          | 8.65         | ✓                                            | 10.6         | ✓          | 12.24        | ✓          | 14.1          | ✓          | 20.0      |      |
| 2.5 —2R5    |                                  |              |         |           | ✓             | ✓       | ✓        | 2.24        |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              | ✓          | 14.1          | ✓          | 20.0      |      |
| 3 —3R0      |                                  |              |         |           | ✓             | ✓       | ✓        | 2.04        | ✓          | ✓       | 2.88        |            |             | ✓          | 5.00         | ✓          | 5.75         | ✓          | 7.07         | ✓                                            | 8.66         | ✓          | 10.00        | ✓          | 12.9          | ✓          | 18.3      |      |
| 4 —4R0      |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 3.53        |            |              |            |              |            |              | ✓                                            | 7.50         | ✓          | 8.66         | ✓          | 11.2          | ✓          | 15.8      |      |
| 5 —5R0      |                                  |              |         |           | ✓             | ✓       | ✓        | 1.58        |            |         |             |            |             | ✓          | 3.88         | ✓          | 4.47         | ✓          | 5.48         | ✓                                            | 6.71         | ✓          | 7.75         | ✓          | 10.0          | ✓          | 14.1      |      |
| 6 —6R0      |                                  |              |         |           | ✓             | ✓       | ✓        | 1.44        | ✓          | ✓       | 2.04        | ✓          | 2.88        |            |              |            |              |            |              |                                              |              |            |              | ✓          | 10.0          | ✓          | 14.1      |      |
| 7.5 —7R5    |                                  |              |         |           |               |         |          |             | ✓          | ✓       |             |            |             | ✓          | 3.16         | ✓          | 3.65         | ✓          | 4.47         | ✓                                            | 5.49         | ✓          | 6.32         |            |               |            |           |      |
| 8 —8R0      |                                  |              |         |           | ✓             | ✓       | ✓        | 1.25        | ✓          | ✓       | 1.77        | ✓          | 2.50        |            |              |            |              |            |              |                                              |              |            | ✓            | 7.90       | ✓             | 11.2       |           |      |
| 10 —10R     |                                  | ✓            | ✓       | 0.86      | ✓             | ✓       | ✓        | 1.12        | ✓          | ✓       | 1.58        |            |             | ✓          | 2.74         | ✓          | 3.16         | ✓          | 3.88         | ✓                                            | 4.74         | ✓          | 5.48         |            | ✓             | 10.0       |           |      |
| 12 —12R     |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 2.04        |            |              |            |              |            |              |                                              |              |            |              | ✓          | 6.30          | ✓          | 8.95      |      |
| 12.5 —12R5  |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 3.163        | ✓                                            | 3.87         | ✓          | 4.47         |            |               |            |           |      |
| 15 —15R     |                                  | ✓            | ✓       | 0.71      | ✓             | ✓       | ✓        | 0.91        | ✓          | ✓       | 1.29        |            |             |            |              |            |              |            |              |                                              |              |            |              | ✓          | 6.30          | ✓          | 8.95      |      |
| 16 —16R     |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 1.76        |            | ✓            | 2.17       | ✓            | 2.50       |              |                                              |              |            |              | ✓          | 5.60          | ✓          | 7.90      |      |
| 22 —22R     |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 1.50        |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 25 —25R     |                                  | ✓            | ✓       | 0.55      | ✓             | ✓       | ✓        | 0.71        | ✓          | ✓       | 1.00        |            |             | ✓          | 1.73         | ✓          | 2.0          | ✓          | 2.450        | ✓                                            | 3.00         | ✓          | 3.46         | ✓          | 4.47          | ✓          | 6.33      |      |
| 35 —35R     |                                  | ✓            | ✓       | 0.46      | ✓             | ✓       | ✓        | 0.60        | ✓          | ✓       | 0.845       | ✓          | 1.19        |            |              |            |              |            | ✓            | 2.070                                        |              |            |              |            | ✓             | 3.54       |           |      |
| 40 —40R     |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              | ✓          | 3.54          |            |           |      |
| 50 —50R     |                                  | ✓            | ✓       | 0.39      | ✓             | ✓       | ✓        | 0.50        | ✓          | ✓       | 0.707       | ✓          | 1.00        | ✓          | 1.23         | ✓          | 1.41         | ✓          | 1.735        | ✓                                            | 2.12         | ✓          | 2.45         | ✓          | 3.16          | ✓          | 4.47      |      |
| 75 —75R     |                                  | ✓            | ✓       | 0.32      | ✓             | ✓       | ✓        | 0.40        | ✓          | ✓       | 0.575       | ✓          | 1.00        | ✓          | 1.00         | ✓          | 1.15         | ✓          | 1.415        | ✓                                            | 1.73         | ✓          | 2.00         | ✓          | 3.16          | ✓          | 3.65      |      |
| 80 —80R     |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.790       |            |              |            |              |            |              |                                              |              |            |              | ✓          | 2.52          |            |           |      |
| 100 —100    |                                  | ✓            | ✓       | 0.27      | ✓             | ✓       | ✓        | 0.36        | ✓          | ✓       | 0.500       |            |             | ✓          | 0.866        | ✓          | 1.00         | ✓          | 1.225        | ✓                                            | 1.50         | ✓          | 1.73         |            | ✓             | 3.16       |           |      |
| 125 —125    |                                  |              |         |           | ✓             | ✓       | ✓        | 0.32        | ✓          | ✓       | 0.445       | ✓          | 0.630       |            |              |            |              |            |              |                                              |              |            |              | ✓          | 2.00          |            |           |      |
| 150 —150    |                                  | ✓            | ✓       | 0.22      | ✓             | ✓       | ✓        | 0.29        |            |         |             | ✓          | 0.575       |            |              |            |              | ✓          | 1.000        | ✓                                            | 1.22         | ✓          | 1.41         |            |               |            |           |      |
| 160 —160    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 175 —175    |                                  |              |         |           | ✓             | ✓       | ✓        | 0.27        | ✓          | ✓       | 0.375       |            |             |            |              |            |              |            |              |                                              |              |            |              | ✓          | 1.69          | ✓          | 2.39      |      |
| 200 —200    |                                  | ✓            | ✓       | 0.19      | ✓             | ✓       | ✓        | 0.25        |            |         |             |            |             | ✓          | 0.612        | ✓          | 0.707        | ✓          | 0.865        | ✓                                            | 1.06         | ✓          | 1.22         |            |               | ✓          | 2.39      |      |
| 225 —225    |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.470       |            |              |            |              |            |              |                                              |              |            |              |            | ✓             | 2.11       |           |      |
| 250 —250    |                                  | ✓            | ✓       | 0.17      | ✓             | ✓       | ✓        | 0.22        | ✓          | ✓       | 0.316       |            |             | ✓          | 0.500        | ✓          | 0.575        | ✓          | 0.775        |                                              |              |            |              | ✓          | 1.41          | ✓          | 1.83      |      |
| 300 —300    |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.408       |            |              |            |              |            |              | ✓                                            | 0.866        | ✓          | 1.00         |            | ✓             | 1.83       |           |      |
| 325 —325    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              | ✓          | 1.24          |            |           |      |
| 350 —350    |                                  | ✓            | ✓       | 0.15      | ✓             | ✓       | ✓        | 0.19        | ✓          | ✓       | 0.267       |            |             |            |              |            |              | ✓          | 0.655        |                                              |              |            |              |            |               |            |           |      |
| 400 —400    |                                  |              |         |           |               |         |          |             |            |         |             |            |             | ✓          | 0.433        | ✓          | 0.500        |            |              | ✓                                            | 0.750        | ✓          | 0.866        |            |               | ✓          | 1.48      |      |
| 500 —500    |                                  | ✓            | ✓       | 0.12      | ✓             | ✓       | ✓        | 0.16        | ✓          | ✓       | 0.222       | ✓          | 0.316       | ✓          | 0.388        | ✓          | 0.447        | ✓          | 0.548        |                                              |              |            |              | ✓          | 1.00          | ✓          | 1.41      |      |
| 600 —600    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 700 —700    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              | ✓                                            | 0.567        | ✓          | 0.655        |            | ✓             | 0.817      | ✓         | 1.15 |
| 750 —750    |                                  | ✓            | ✓       | 0.10      | ✓             | ✓       | ✓        | 0.13        | ✓          | ✓       | 0.182       |            |             | ✓          | 0.316        | ✓          | 0.365        | ✓          | 0.447        |                                              |              |            |              | ✓          | 0.817         | ✓          | 1.15      |      |
| 800 —800    |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.250       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 900 —900    |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 1000 —1K0   |                                  | ✓            | ✓       | 0.086     | ✓             | ✓       | ✓        | 0.10        | ✓          | ✓       | 0.155       | ✓          | 0.224       | ✓          | 0.274        | ✓          | 0.316        |            |              | ✓                                            | 0.500        | ✓          | 0.578        | ✓          | 0.707         | ✓          | 1.00      |      |
| 1200 —1K2   |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 1250 —1K25  |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 0.346        |                                              |              |            |              | ✓          | 0.500         |            |           |      |
| 1500 —1K5   |                                  | ✓            | ✓       | 0.071     | ✓             | ✓       | ✓        | 0.090       | ✓          | ✓       | 0.129       |            |             | ✓          | 0.224        | ✓          | 0.258        |            |              | ✓                                            | 0.387        | ✓          | 0.447        | ✓          | 0.577         | ✓          | 0.816     |      |
| 1600 —1K6   |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.176       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 1750 —1K75  |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 1800 —1K8   |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 0.288        |                                              |              |            |              |            |               |            |           |      |
| 2000 —2K0   |                                  |              |         |           |               |         |          |             |            |         |             |            |             | ✓          | 0.194        | ✓          | 0.224        | ✓          | 0.288        |                                              |              |            |              | ✓          | 0.500         |            |           |      |
| 2250 —2K25  |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 0.259        |                                              |              |            |              |            |               |            |           |      |
| 2500 —2K5   |                                  | ✓            | ✓       | 0.055     | ✓             | ✓       | ✓        | 0.070       | ✓          | ✓       | 0.100       | ✓          | 0.141       | ✓          | 0.173        | ✓          | 0.200        |            |              | ✓                                            | 0.300        | ✓          | 0.346        | ✓          | 0.447         | ✓          | 0.633     |      |
| 3000 —3K0   |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 0.224        |                                              |              |            |              |            |               |            |           |      |
| 3500 —3K5   |                                  | ✓            | ✓       | 0.046     | ✓             | ✓       | ✓        | 0.060       | ✓          | ✓       | 0.084       | ✓          | 0.119       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 4500 —4K5   |                                  |              |         |           |               |         |          |             |            |         |             |            |             |            |              |            |              | ✓          | 0.182        |                                              |              |            |              |            |               |            |           |      |
| 5000 —5K0   |                                  | ✓            | ✓       | 0.039     | ✓             | ✓       | ✓        | 0.050       | ✓          | ✓       | 0.070       | ✓          | 0.100       | ✓          | 0.123        | ✓          | 0.141        |            |              | ✓ = Standard values; check availability      |              |            |              |            |               |            |           |      |
| 7500 —7K5   |                                  |              |         |           | ✓             | ✓       | ✓        | 0.041       | ✓          | ✓       | 0.058       |            |             | ✓          | 0.100        | ✓          | 0.115        | ✓          | 0.141        | Rheostats are silicone-ceramic coated at and |              |            |              |            |               |            |           |      |
| 8000 —8K0   |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.079       |            |              |            |              |            |              | above the following ohmic values:            |              |            |              |            |               |            |           |      |
| 10000 —10K  |                                  |              |         |           | ✓             | ✓       | ✓        | 0.035       | ✓          | ✓       | 0.050       |            |             | ✓          | 0.087        | ✓          | 0.100        | ✓          | 0.122        | Model C: all                                 |              |            |              |            |               |            |           |      |
| 12500 —12K5 |                                  |              |         |           | ✓             | ✓       | ✓        | 0.031       |            |         |             |            |             |            |              |            |              |            |              | Model G: 5000Ω                               |              |            |              |            |               |            |           |      |
| 15000 —15K  |                                  |              |         |           | ✓             | ✓       | ✓        | 0.029       |            |         |             |            |             |            |              |            |              |            |              | Model E: 750Ω                                |              |            |              |            |               |            |           |      |
| 20000 —20K  |                                  |              |         |           |               |         |          |             | ✓          | ✓       | 0.035       | ✓          | 0.050       |            |              |            |              |            |              | Model H: 2000Ω                               |              |            |              |            |               |            |           |      |
| 25000 —25K  |                                  |              |         |           |               |         |          |             | ✓          | ✓       | 0.032       | ✓          | 0.045       |            |              |            |              |            |              | Model J: 5000Ω                               |              |            |              |            |               |            |           |      |
| 30000 —30K  |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.041       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 40000 —40K  |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.035       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |
| 50000 —50K  |                                  |              |         |           |               |         |          |             |            |         |             | ✓          | 0.032       |            |              |            |              |            |              |                                              |              |            |              |            |               |            |           |      |

✓ = Standard values; check availability  
Rheostats are silicone-ceramic coated at and above the following ohmic values:

Model C: all  
Model E: 750Ω  
Model H: 2000Ω  
Model J: 5000Ω  
Model G: 5000Ω  
Model K: 5000Ω  
Model L: 7500Ω