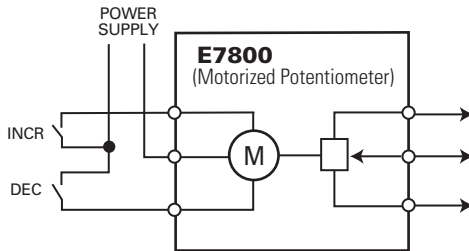


# E7800 SERIES

## Motorized Potentiometer



### Simplified Circuit Diagram



### Features & Benefits

| FEATURES                                   | BENEFITS  |
|--|---|
| <b>Wire-wound potentiometer</b>            | Longer life expectation than carbon potentiometers                                  |
| <b>Friction clutch</b>                     | Motor can turn potentiometer against end position continuously, without damaging it |
| <b>Resistance from 100 Ω to 10 kΩ</b>      | Wide range of potentiometers suitable for any governor or AVR                       |
| <b>24 V DC version with Adjustable RPM</b> | Simple fine tuning possibility in regulation applications                           |
| <b>Built-in dust seal</b>                  | Long life expectation   |

### Description

The E7800 Motorized Potentiometer is typically used as an interface between increase/decrease contacts and a device requiring control/adjustments by an external potentiometer.

In generator control applications, the E7800 can be used as speed trim of an electronic speed governor, interfacing the synchronizer or the load sharer. It can also be used alone for manual speed adjustment or speed trim of electronic governors, or for remote control of generator voltage, power factor and reactive load (E7800 connected to Automatic Voltage Regulator (AVR)).

### Ordering Information

| ORDERING NUMBER | SUPPLY VOLTAGE |       | OUTPUT OPTIONS | SPECIAL FUNCTION |
|-----------------|----------------|-------|----------------|------------------|
|                 | (VAC)          | (VDC) |                |                  |
| E7800.0030      | 230 V          |       | 200Ω, 1 turn   | 1 RPM            |
| E7800.0040      | 230 V          |       | 500Ω, 1 turn   | 1 RPM            |
| E7800.0050      | 230 V          |       | 1kΩ, 1 turn    | 1 RPM            |
| E7800.0060      | 230 V          |       | 2kΩ, 1 turn    | 1 RPM            |
| E7800.0070      | 230 V          |       | 10kΩ, 1 turn   | 1 RPM            |
| E7800.0080      | 230 V          |       | 5kΩ, 10 turn   | 2 RPM            |
| E7800.0090      | 230 V          |       | 100Ω, 10 turn  | 2 RPM            |
| E7800.0100      | 230 V          |       | 200Ω, 10 turn  | 2 RPM            |
| E7800.0200      | 110/100 V      |       | 2kΩ, 1 turn    | 1 RPM            |
| E7800.0210      | 110/100 V      |       | 10kΩ, 1turn    | 1 RPM            |
| E7800.0220      | 24 V           |       | 5kΩ, 10 turn   | 2 RPM            |
| E7800.0230      | 24 V           |       | 100Ω, 10 turn  | 2 RPM            |
| E7800.0240      | 24 V           |       | 200Ω, 10 turn  | 2 RPM            |
| E7800.0250      | 24 V           |       | 500Ω, 10 turn  | 2 RPM            |
| E7800.0260      | 24 V           |       | 1kΩ, 10 turn   | 2 RPM            |
| E7800.0270      | 24 V           |       | 2kΩ, 10 turn   | 2 RPM            |
| E7800.0280      | 24 V           |       | 10kΩ, 10 turn  | 2 RPM            |
| E7800.0290      | 110/100 V      |       | 5kΩ, 10 turn   | 2 RPM            |
| E7800.0300      | 110/100 V      |       | 100Ω, 10 turn  | 2 RPM            |
| E7800.0310      | 110/100 V      |       | 200Ω, 10 turn  | 2 RPM            |
| E7800.0320      | 110/100 V      |       | 500Ω, 10 turn  | 2 RPM            |
| E7800.0330      | 110/100 V      |       | 1kΩ, 10 turn   | 2 RPM            |
| E7800.0340      | 110/100 V      |       | 2kΩ, 10 turn   | 2 RPM            |
| E7800.0350      | 110/100 V      |       | 10kΩ, 10 turn  | 2 RPM            |
| E7800.0360      | 230 V          |       | 5kΩ, 1 turn    | 2 RPM            |
| E7800.0370      | 230 V          |       | 100Ω, 1 turn   | 2 RPM            |
| E7800.0380      | 230 V          |       | 200Ω, 1turn    | 2 RPM            |
| E7800.0390      | 230 V          |       | 500Ω, 1 turn   | 2 RPM            |

# E7800 SERIES

## Ordering Information (cont.)

| ORDERING NUMBER | SUPPLY VOLTAGE) |       | OUTPUT OPTIONS | SPECIAL FUNCTION |
|-----------------|-----------------|-------|----------------|------------------|
|                 | (VAC)           | (VDC) |                |                  |
| E7800.0400      | 230 V           |       | 1kΩ, 1 turn    | 2 RPM            |
| E7800.0410      | 230 V           |       | 2kΩ, 1 turn    | 2 RPM            |
| E7800.0420      | 230 V           |       | 10kΩ, 1 turn   | 2 RPM            |
| E7800.0430      | 24 V            |       | 5kΩ, 1 turn    | 1 RPM            |
| E7800.0440      | 24 V            |       | 100Ω, 1 turn   | 1 RPM            |
| E7800.0450      | 24 V            |       | 200Ω, 1 turn   | 1 RPM            |
| E7800.0460      | 24 V            |       | 500Ω, 1 turn   | 1 RPM            |
| E7800.0470      | 24 V            |       | 1kΩ, 1 turn    | 1 RPM            |
| E7800.0480      | 24 V            |       | 2kΩ, 1 turn    | 1 RPM            |
| E7800.0490      | 24 V            |       | 10kΩ, 1 turn   | 1 RPM            |
| E7800.0640      |                 | 24 V  | 5kΩ, 1 turn    | 0.8 - 6 RPM      |
| E7800.0650      |                 | 24 V  | 100Ω, 1 turn   | 0.8 - 6 RPM      |
| E7800.0660      |                 | 24 V  | 200Ω, 1 turn   | 0.8 - 6 RPM      |
| E7800.0670      |                 | 24 V  | 500Ω, 1 turn   | 0.8 - 6 RPM      |
| E7800.0680      |                 | 24 V  | 1kΩ, 1 turn    | 0.8 - 6 RPM      |
| E7800.0690      |                 | 24 V  | 2kΩ, 1 turn    | 0.8 - 6 RPM      |
| E7800.0700      |                 | 24 V  | 10kΩ, 1 turn   | 0.8 - 6 RPM      |
| E7800.0710      |                 | 24 V  | 5kΩ, 10 turn   | 0.8 - 6 RPM      |
| E7800.0720      |                 | 24 V  | 100Ω, 10 turn  | 0.8 - 6 RPM      |
| E7800.0730      |                 | 24 V  | 200Ω, 10 turn  | 0.8 - 6 RPM      |
| E7800.0740      |                 | 24 V  | 500Ω, 10 turn  | 0.8 - 6 RPM      |
| E7800.0750      |                 | 24 V  | 1kΩ, 10 turn   | 0.8 - 6 RPM      |
| E7800.0760      |                 | 24 V  | 2kΩ, 10 turn   | 0.8 - 6 RPM      |
| E7800.0770      |                 | 24 V  | 10kΩ, 10 turn  | 0.8 - 6 RPM      |

*The E7800 cannot be used for both AC and DC. The unit must be specified to order. Other voltages and combinations are available on request.*

## Specifications

|                              |   |
|------------------------------|---|
| <b>Voltage range</b>         | AC: 90-120%<br>DC: 75-125%  |
| <b>Consumption</b>           | AC: 2.5 VA<br>DC: 2 W   |
| <b>Operating Temperature</b> | -15° C to +70° C  |
| <b>EMC</b>                   | CE according to<br>EN50081-1<br>EN50082-1<br>EN50081-2<br>EN50082-2 |
| <b>Approvals</b>             | CE, RRR   |
| <b>Burn-in</b>               | 50 hours before final test  |
| <b>Weight</b>                | 0.35 kg   |
| <b>Dimensions</b>            | <b>H</b> 96 mm (3.8"); <b>W</b> 96 mm (3.8"); <b>D</b> 80 mm (3.1") |
| <b>Panel cut out</b>         | <b>H</b> 92 mm (3.6"); <b>W</b> 92 mm (3.6")                        |