

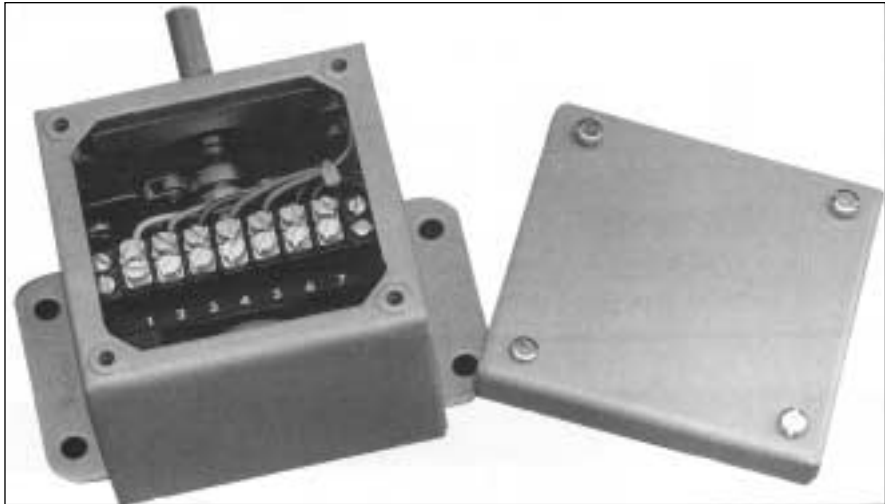
# Dancer Duty Potentiometer

## Models DDP01-KOXXX and DDP02-KOXXX

### General Description

The Carotron Model DDP01 KOXX, Dancer Duty Potentiometer without limits, and the model DDP02-KOXX, Dancer Duty Potentiometer with limits, are designed for use in harsh environments in a large variety of industrial applications.

The design begins with a potentiometer rigidly mounted within a NEMA 12 enclosure. A high quality helical coupling is used to link the potentiometer to the dancer shaft, eliminating lost motion and excessive loading to the potentiometer shaft. The dancer shaft extends through the enclosure by the use of a flange mounted bearing. The dancer shaft is faced on one side to aid in mechanical connections. Two normally closed limit switches and two adjustable cams, to set extreme travel limits, may also be accommodated within the enclosure. Wiring connections are made easy by a prewired terminal strip within the enclosure.



**Model DDP02-K010**

Quality components, precision/ and modular construction all combine to produce dependability, simplified installation and competitive pricing.

Potentiometers of 10K or 5K ohms are standard values offered in the DDP01-KOXX and the DDP02-KOXX.

### Standard Features

#### MODEL DDP01-KOXX

- Conductive plastic potentiometer for infinite resolution
- High quality helical coupling to eliminate lost motion and excessive loading to the potentiometer shaft
- NEMA 12 enclosure to provide protection against oil and dust
- Steel construction
- External mounting feet
- Internal prewired terminal strip for easy electrical connections
- 1/2-inch diameter faced dancer shaft for easy mechanical connections

#### MODEL DDP02-KOXX

- Conductive plastic potentiometer for infinite resolution
- High quality helical coupling to eliminate lost motion and excessive loading to the potentiometer shaft
- NEMA 12 enclosure to provide protection against oil and dust
- Steel construction
- External mounting feet
- Internal prewired terminal strip for easy electrical connections
- 1/2-inch diameter faced dancer shaft for easy mechanical connections
- Two normally closed limit switches which open for extreme travel limit settings
- Two adjustable cams to change counterclockwise (CCW) and (CW) limit settings

# Specifications

## POTENTIOMETER

Resistance . . . . .5K or 10K Ohms +-10%  
 Linearity . . . . .+-1%  
 Resolution . . . . .Infinite  
 Electrical rotation . . . . .340° +-3%  
 Mechanical rotation . . . . .Continuous  
 Power rating . . . . .1.5 watts @ 70°C  
 Dielectric strength . . . . .750 VAC min.  
 Operating temperature . . . . .-65°C to +125°C  
 Rotational life . . . . .10,000,000 revolutions

## LIMIT SWITCHES (MODEL DDP02-KOXX ONLY)

Ampere rating . . . . .5 Amps  
 Voltage rating . . . . .250 VAC

## BEARING

Radial load . . . . .530 lbs. @ 50 RPM  
 Average life . . . . .75,000 hours

## ENCLOSURE

Construction . . . . .16 gauge steel  
 Finish . . . . .ANSI 61 gray  
 Industry standard . . . . .NEMA 12

## DANCER SHAFT

Construction . . . . .Stainless steel  
 Diameter . . . . .1/2-inch

# Standard Models and Descriptions

Model number	Description	Approx. Shpg. Wt.	Dim.	Conn.
DDP01-K005	5,000 Ohm Dancer pot., NEMA 12 enclosure without limit switches	4 lbs.	Fig. D.3	Fig. D.4
DDP01-K010 *Note 1	10,000 Ohm Dancer pot., NEMA 12 enclosure without limit switches	4 lbs.	Fig. D.3	Fig. D.4
DDP02-K005	5,000 Ohm Dancer pot., NEMA 12 enclosure with two adjustable limit switches	4 lbs.	Fig. D.3	Fig. D.4
DDP02-K005 *Note 1	10,000 Ohm Dancer pot., NEMA 12 enclosure with two adjustable limit switches	4 lbs.	Fig. D.3	Fig. D.4

Note 1: 10,000 ohm units typically stocked, others built to order.

Note 2: Stainless steel enclosure available on special order. Consult factory for dimension changes.

# Dimensions

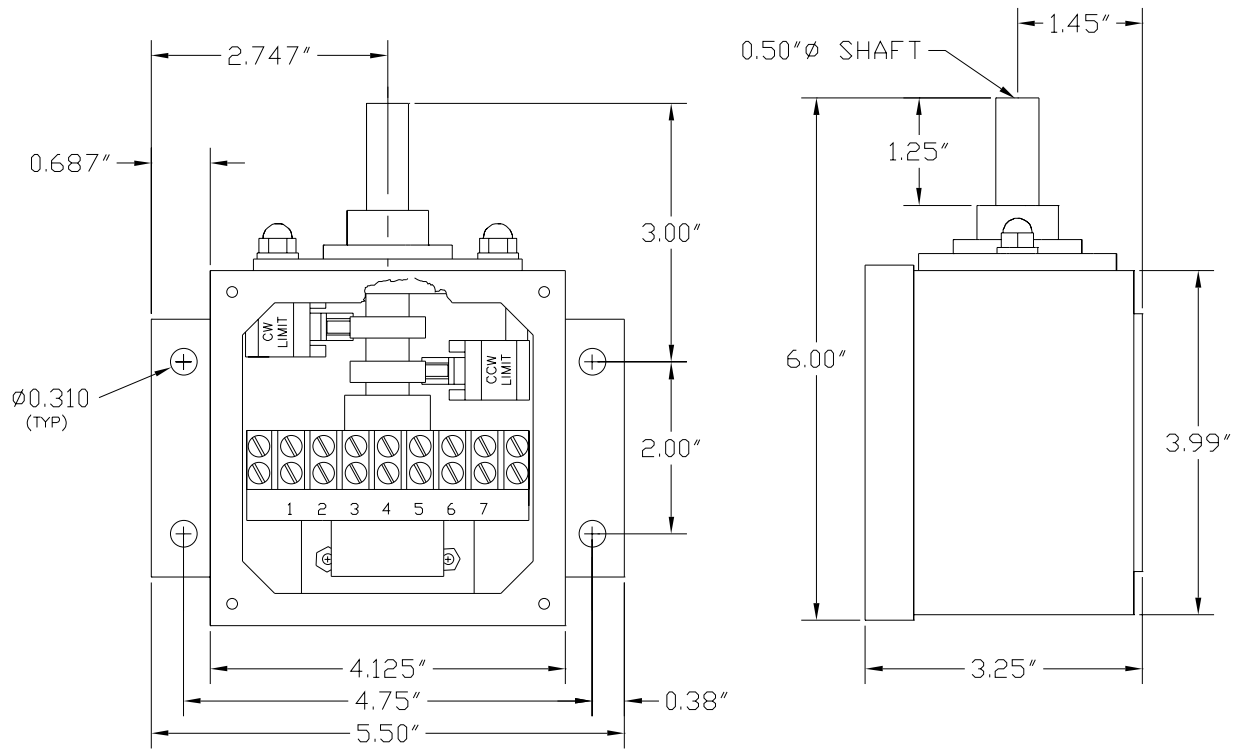


Fig. D.3

# Connections

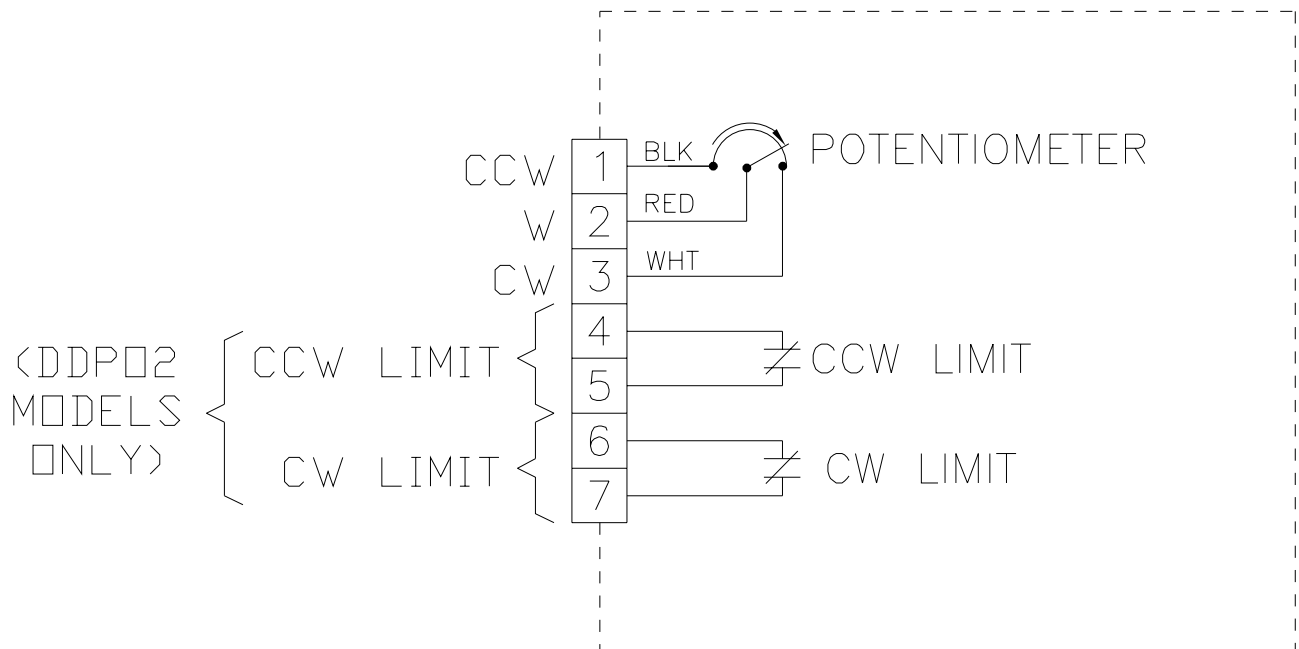


Fig. D.4