

DRN3.1



Pulse, Analog & Floating Point Input to Proportional Resistance Output

SPECIFICATIONS

Supply Voltage	24 VAC +/- 10%, 24VDC +25%/-8%
Supply Current	250mA maximum
Input	Source: Relay Contact Closure/Transistor/Triac Trigger Level: 4.5-30VDC/10-26.4VAC
Pulse Ranges (Off time 80 milliseconds min)	Standard: 0.02 to 5 sec / 0.02 sec increments, 0.1 to 25.5 sec / 0.1 sec increments, or 0.59 to 2.93 sec / 0.01 sec increments Version #2: 0.1 to 10 sec or 0.023 to 6 sec Version #4: 0-10 sec Duty Cycle Pulse (Sampled in a 10 sec window)
Pulse Impedance	750Ω nominal
Floating Point Rates of change	Version #1: 30, 60, and 90 sec Version #2: 45, 120, and 240 sec
Floating Point Impedance	750Ω nominal
Analog Ranges (V#1 & V#2)	0-5, 1-5, 0-10, 2-10, 0-15, or 3-15VDC / 0-20 or 4-20mA
Analog Input Impedances	Voltage: 10,000Ω Current: 250Ω
Output Resolution	256 Steps (No wrap around)
Relay Contacts	Type: Form C, Gold-clad silver Rating: 2 amp max resistive @ 24 volts Electrical Life: 100,000 operations @ 1 amp Mechanical Life: 10 million operations
Operating Temperature	32 to 120°F (0 to 48.9°C)
Operating Humidity	10% to 95% non-condensing
Approval	RoHS

ORDERING

BUILD YOUR PART#

DRN3 - RN (0-500) - Version 2

DRN3

step 1

a resistance network*

b pulse ranges

Select resistance network & pulse range.

Standard Resistor Networks

RN (0-500) 1/4 watt (+/- 5%)

RN (0-1000) 1/4 watt (+/- 5%)

RN (0-1500) 1/4 watt (+/5%)

RN (0-2K) 1/4 watt (+/- 5%)

RN (0-3K) 1/4 watt (+/- 5%)

RN (0-4K) 1/4 watt (+/- 5%)

RN (0-5K) 1/4 watt (+/- 5%)

RN (0-10K) 1/4 watt (+/- 5%)

RN (0-20K) 1/4 watt (+/- 5%)

RN (0-40K) 1/4 watt (+/- 5%)

RN (Specify)

(Standard) 0.02 to 5 seconds, 0.1 to 25.5 seconds, 0.59 to 2.93 seconds

(Version 2) 0.01 to 10 seconds, 0.023 to 6 seconds

(Version 4) 0 to 10 seconds duty cycle in 10 seconds window

*Note: Resistance Network will be listed separately on the packing slip & invoice.

drn3.1

The DRN3.1 is an interface that allows microprocessor control of a variable resistance. The DRN3.1's isolated resistor network can be controlled by several different DDC signal types. It directly replaces a variable resistance controller and simulates the action of a slide wire or rotary potentiometer. All connections of the simulated potentiometer, the wiper, and both ends of the resistance range are available on the terminal strip. The DRN3.1 accepts an Analog, Pulse, or Floating Point input signal (including triac) and converts it into a proportional resistive output. The output resistance does not wrap around if the input signal exceeds the highest or lowest selected input value. The DRN3.1 has on-board fail-back relays that lock out the original resistive signal during operation. However, if the supply power is lost, control of the circuit will revert back to the original controller signal. An easy local override can be made by placing a fixed (or variable) resistor between W and R Fail-safe terminals.