

PD350X - 500 Amps "BUBBA" Contactor, Make & Break Load Switching

Product Facts

- 500 A carry, 1300 A make overload, 3000 A break overload, @ 320 Vdc
- Hydrogen dielectric for power switching high current loads
- Auxiliary contacts
- Coil power economizing — 8 W holding
- Versatile power, voltage, and current operating range
- Excellent for safety disconnect and transfer switch applications
- Suited for circuit protection and control
- Bi-directional power switching
- Hermetically-sealed contacts; can operate in harsh environments
- Fast operate and release time
- Low power consumption

Product Specifications

Contact Arrangement —

Form X — SPST-NO

Auxiliary Contact (28 Vdc, 0.1 A) —
SPST-NO

Rated Resistive Load @ 320 Vdc —
300 Amps @85°C

Continuous Current Carry, Max. @
50°C — 500 A

Overload Current @ 320 Vdc —
Make — 1,300 A
Break — 3,300 A

Load Life, @ 320 Vdc, Min. —
See chart at right

Contact Resistance, Max. —
End of Life — 0.0002 ohm

Dielectric at Sea Level —
Power Terminals to Coil and All Other
Points — 1,800 Vrms

Shock, 11ms, 1/2 Sine (Peak) —
30 g

Vibration, Sinusoidal
(55-2000 Hz, Peak) — 5 g

Operating Ambient Temperature
Range — -40°C to +85°C

Operate Time, Including Bounce,
Max., 25°C — 40 ms

Release Time, Max. — 20 ms

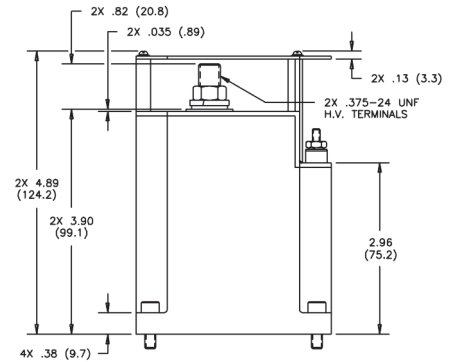
Bounce Time, Max. — 5 ms

Insulation Resistance @ 500 Vdc,
Min. —

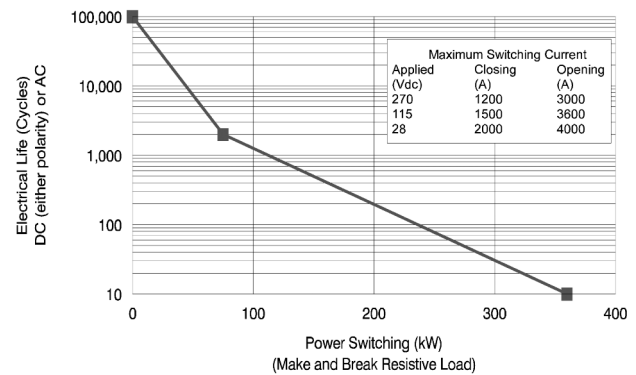
Initial — 100 mohm

End of Life — 50 mohm

Weight, Nominal —
3.4 lb (1.52 kg)



Electrical Life Cycles vs Power Switching



*Failure Mode: Dielectric withstand voltage test @ 2000 Vdc, power terminal to terminal, leakage exceeds 1.0 mA. Current carry: 500 A @ 25°C. Derate 2.5 A/°C to 350 A @ 85°C for still air, no heat sink, AWG# 00 conductor.

For factory-direct application assistance,
dial 800-253-4560, ext. 2055, or
805-220-2055.

Contact Rating Notes:

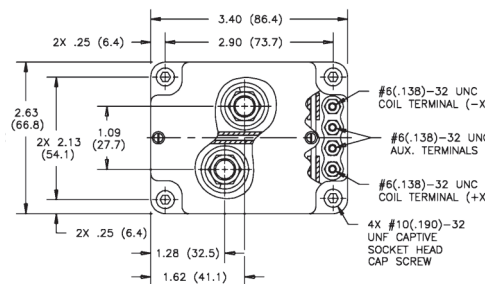
- Maximum continuous current carry = 500A @ 25°C = T_A, derate 5A/°C for higher temp.
- Maximum interrupt power (break only) = 1 MW @ 200mH inductance.

Coil Data

Volts, Nominal	12 V	24 V
Pickup, Max. @ 65°C	9.9 Vdc	19.7 Vdc
Hold, Max. @ 65°C	8.5 Vdc	17 Vdc
Dropout, Min. @ -35°C	1.2 Vdc	2.4 Vdc
Coil Power** 25°C		
During Pickup (300 ms)	43 W	43 W
While Holding	8 W	8 W
Energy, Magnetic, Max.***	.26 J	.26 J

**Two coils are employed for power economizing subsequent to pickup. During pickup both coils operate in parallel drawing 43 Watts momentarily. After pickup, the electronic economizing system leaves only the holding coil on, drawing 8 Watts @ 25°C. Economizing system includes transient voltage suppression.

***Coil energy absorbed internally -4x nominal voltage.



Ordering Information

Sample Part Number ▶

PD350 X B 5 7

Series:

Contact Form:
X = SPST-NO, Double Make

Coil Voltage:
A = 12 Vdc, Stud Terminals
B = 24 Vdc, Stud Terminals

Power Terminals:
5 = Stud Terminals

Mounting:
7 = Panel Mount, Captive Bolts