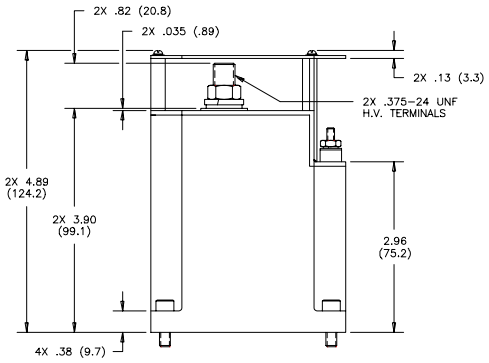
Kilovac PD350X - 500 Amps ("Bubba")

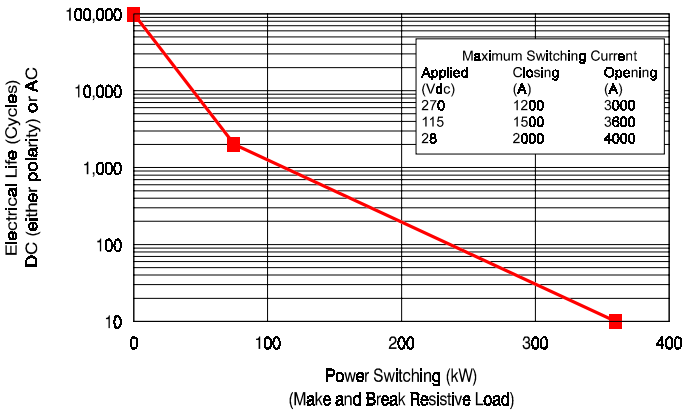
Make & Break Load Switching



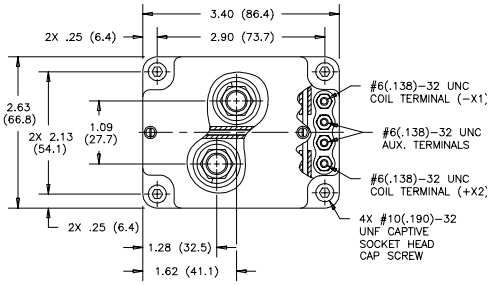
Features:

- 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
- Ideal 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
- Meets requirements of SAE ARD 50031

ELECTRICAL LIFE CYCLES vs POWER SWITCHING



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



Contact Rating Notes:

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

PRODUCT SPECIFICATIONS

Part Number	UNIT	PD350X
Contact Arrangement	Form X	SPST-NO
Auxiliary Contact (28 Vdc, 0.1 A)		SPST-NO
Rated Resistive Load @ 320 Vdc	A	TBA*
Continuous Current Carry, Max. @ 50°C	A	500
Overload @ 320 Vdc (make/break)	A	1,300/3,000
Load Life, @ 320 Vdc, Min.	cycles	see chart above
Contact Resistance, Max., end of life	ohms	O.0002
Dielectric at Sea Level		
Power Terminals to Coil & all other points	Vrms	1,800
Shock, 11ms 1/2 Sine (peak)	G's Peak	30
Vibration, Sinusoidal (55-2000 Hz, peak)	G's	5
Operating Ambient Temperature Range	°C	-40 to +85
Operate Time, including Bounce, Max.,25°C	ms	40
Release Time, Max.	ms	20
Bounce Time, Max.	ms	5
Insulation Resistance @ 500 Vdc, Min.		
Initial/ End of Life	Mohm	100/50
Weight, Nominal	Kg (lb)	1.52 (3.4)

COIL DATA

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

PART NUMBER SELECTION

Sample Part No. **PD350** X B 5 7

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