Kilovac PD90X – 90 Amps ("Spud") *Make & Break Load Switching*
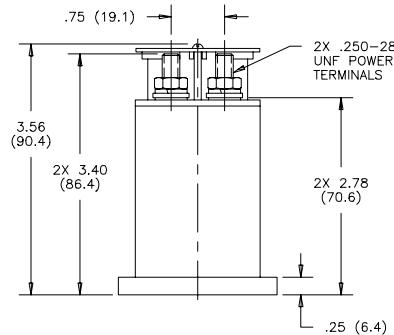

Features:
- Vacuum dielectric for power switching
- 90 A carry, 350 A overload @ 320 Vdc
- Versatile power, voltage, and current operating range
- Ideal for circuit protection and control
- Bi-directional switching
- Fast operate and release time
- Low power consumption
- Vacuum-sealed contacts; can operate in harsh environments
- Meets many requirements of SAE ARD50031
- Optimized for power switching

CONTACT RATINGS*

Switching Current (A)
** Consult Factory for Carry Time vs. Current Graph
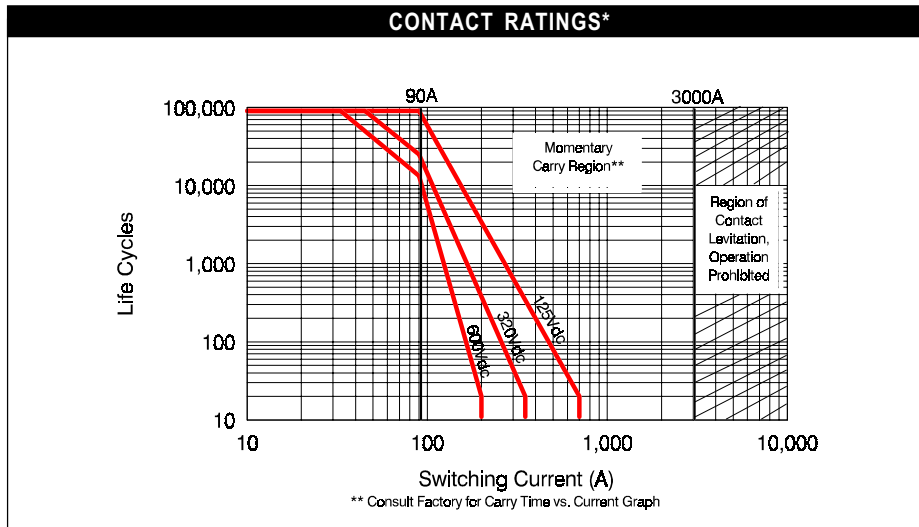
* Ratings for load power make, carry, & break based on data extrapolated from 270Vdc and 540Vdc testing with resistive load. Since each application is unique, user is encouraged to verify rating in actual application.
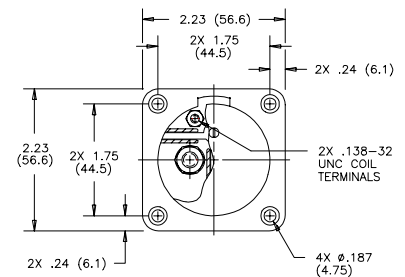
Contact Rating Notes:
1. Maximum continuous current carry = 90A @ T_A, = 85°C.
2. Maximum interrupt power = 110kW @ 25µH, across voltage range -0 to 600 Vdc.

PRODUCT SPECIFICATIONS

Part Number	UNIT	PD90X
Contact Arrangement		SPST-NO
Contact Form		X
Rated Resistive Load @ 320 Vdc	A	90
Continuous Current Carry, Max., 85°C	A	90
Overload (make & break) @ 320 Vdc	A	350
Load Life, @ 270 Vdc, Min.	cycles	25,000
Contact Resistance, Max.	ohms	0.002
Dielectric at Sea Level		
Power Terminals to Coil & all Other Points	Vrms	1,800
Shock, 11ms 1/2 Sine (peak)	G's Peak	25
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	35
Release Time, Max.	ms	10
Bounce Time, Max.	ms	8
Insulation Resistance @ 500 Vdc, Min., ...		
Initial/End of Life	Mohm	100/50
Weight, Nominal	gram (oz)	454 (16)

COIL DATA

Volts, Nominal	12	24	125	Unit
Pickup, Max. @ 85°C	9.9	19.5	102	Vdc
Hold, Min. @ 85°C	4.3	8.7	45	
Dropout, Min. @ -40°C	0.6	1.4	6.0	
Coil Resistance (±10%)	19	76	1890	Ohms
Energy, Magnetic, Max.	.05	.05	.05	J

Coil resistance rated at 25°C

PART NUMBER SELECTION

Sample Part No. **PD90** | X | B | 5 | 7 |

Contact Form
  X = SPST-NO Double Make
Coil Voltage
  A = 12 Vdc, Stud Terminals
  B = 24 Vdc, Stud Terminals
  C = 125Vdc, Stud Terminals
Power Terminals
  5 = Stud Terminals
Mounting
  7 = Panel Mount