



# ROSS ENGINEERING CORPORATION

## WORKSHEET H.V. RELAYS / SWITCHES

Name: \_\_\_\_\_ Company: \_\_\_\_\_ Date: \_\_\_\_\_

Please fill in as much as possible so Ross Engineering Corp. can recommend the best device for the application!

### ----- HIGH VOLTAGE CAPABILITY -----

Ross HV devices are rated with 60Hz PK test voltage, 1min. hold without breakdown, at sea level in air at standard temperature & pressure.

What is the actual continuous working high voltage? \_\_\_\_\_ kV DC. \_\_\_\_\_ kV AC RMS. \_\_\_\_\_ kV PK. \_\_\_\_\_ kV PK pulse.  
Pulse width \_\_\_\_\_  $\mu$ SEC. Pulse Duty Cycle \_\_\_\_\_ % \_\_\_\_\_ PPS. \_\_\_\_\_ Rise time.

To be used in \_\_\_\_\_.  Air atmosphere  In Oil  In PSI SF6 At what temperature? \_\_\_\_\_.

What is the frequency of HV? \_\_\_\_\_ Hz. Used at \_\_\_\_\_ Ft. \_\_\_\_\_ Meters max. altitude.

Is there a test voltage (one minute hold) required? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ kV DC. \_\_\_\_\_ kV RMS 50/60Hz. \_\_\_\_\_ kV PK.

Is there a basic impulse level required (BIL, 1.2  $\mu$ SEC X 50  $\mu$ SEC wave)? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ kV PK.

Contact configuration required:  NC  NO  DT  Latched Number of poles: \_\_\_\_\_.

How many continuous amps must it carry? \_\_\_\_\_ Amps RMS. \_\_\_\_\_ Amps PK.

How long must it carry current? \_\_\_\_\_.

Does it have to close on current? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ Amps.

Does it have to carry maximum current after making or breaking current & reclosing? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ Amps.  
 Continuous or \_\_\_\_\_ seconds momentary.

Capacitor Discharge: \_\_\_\_\_ Joules (Watt Seconds). \_\_\_\_\_  $\mu$ FD. \_\_\_\_\_ Amps PK. \_\_\_\_\_ Time to reach 5RC in  $\mu$ SEC.

Does it have to break load current? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ Amps. \_\_\_\_\_ DC. \_\_\_\_\_ AC.

Does it have to interrupt a short circuit? (Y/N) \_\_\_\_\_. If Yes: \_\_\_\_\_ Amps RMS.

Required speed: To open \_\_\_\_\_ millisecond. To close \_\_\_\_\_ millisecond. Delay required: \_\_\_\_\_ sec. to close. \_\_\_\_\_ sec. to open.

### ----- ACTUATOR -----

What is the solenoid, motor or air valve actuator voltage? \_\_\_\_\_ V, and frequency? \_\_\_\_\_ Hz.

50Hz, 60Hz, 400Hz, DC & special available. Or \_\_\_\_\_ PSI air pressure. Do you require 4-way air valve included? \_\_\_\_\_.

(Momentary actuator pull-in current for 10-100 Millisecond may be 5 to 20 times continuous holding current:)

Are enough amps available from power supply to maintain at least 90% voltage during pull-in? \_\_\_\_\_ Amps.

How many sets of SPDT auxiliary contacts needed? \_\_\_\_\_. \_\_\_\_\_ Amps. \_\_\_\_\_ Volts AC. \_\_\_\_\_ Volts DC.

For 60kV PK and under units Standard is SPDT 11A 250V AC, 5A 30V DC. Over 60kV units have 15 amp 450V AC. Higher voltage and/or current available.

Ambient temperature range during operation: \_\_\_\_\_  $^{\circ}$ C to \_\_\_\_\_  $^{\circ}$ C.

Operational life required: \_\_\_\_\_ No. of operations per week for \_\_\_\_\_ years.

Other requirements: \_\_\_\_\_



**ROSS ENGINEERING CORP.**

540 Westchester Dr., Campbell, CA 95008  
PHONE:(408)377-4621 FAX:(408)377-5182  
www.rossengineeringcorp.com  
e-mail: info@rossengineeringcorp.com