## GIGAVAC



## FEATURES

## UL508 Recognized and load break rated for 1000 vdc systems

$>$ Hermetically sealed contactor: ensures make/break switching up to 1200 Vdc
$>$ Best option for: NEC 690.11 and 690.12 DC arc fault interrupting and rapid shutdown requirements

Small, lightweight and cost effective patented design
Perfect choice for 600Vdc and 1000Vdc photovoltaic/battery systems

## PRODUCT SPECIFICATIONS

| Specifications | Units | Data |
| :---: | :---: | :---: |
| Contact Arrangement | Form X | SPST-NO |
| Dielectric at Sea Level | Vrms | 4300 |
| Contact Voltage, Operating Max | Vdc | 1500 |
| Continuous Current Carry, Max (8 AWG) @ $25^{\circ} \mathrm{C}$ | A | 50 |
| Continuous Current Carry, Max (8 AWG) @ $85^{\circ} \mathrm{C}$ | A | 25 |
| Mechanical Life | Cycles | 1,000,000 |
| Contact Voltage Drop, Max @ 50A | mV | 100 |
| Contact Resistance, Max @ 50A (after 30 sec ) | mOhms | 3.25 |
| Operate Time, Max | ms | 25 |
| Release Time, Max | ms | 8 |
| Vibration, Sinusoidal (50-200Hz Peak) | G | 5 |
| Shock, Operating, $1 / 2$ Sine, 11 ms | G | 20 |
| Temperature, Operating Range ${ }^{1 /}$ | ${ }^{\circ} \mathrm{C}$ | $-40^{\circ}$ to $+85^{\circ}$ |
| Humidity, No Freezing or Condensing at Low Temperature | RH | 5\% to 85\% |
| Weight | grams | 135 |
| Short Circuit Current Withstanding (5ms) | A | 400 |
| Impulse Withstand Voltage: IEC61000-4-4 (500 ohm) | kV | 6 |

COIL RATINGS @ $\mathbf{2 5}^{\circ}{ }^{\circ}{ }^{2 /}$

| Coil P/N Designation | B | C | F |
| :--- | :--- | :--- | :--- |
| Coil Voltage, Nominal | 12 Vdc | 24 Vdc | 48 Vdc |
| Coil VoItage, Max | 16 Vdc | 32 Vdc | 64 Vdc |
| Pick-up Voltage, Max | 7.5 Vdc | 15 Vdc | 30 Vdc |
| Drop Out Voltage, Max | 5 Vdc | 9 Vdc | 18 Vdc |
| Drop Out Voltage, Min | 0.20 Vdc | 0.40 Vdc | 0.80 Vdc |
| Coil Resistance, +/-10\% | 70 Ohms | 280 Ohms | 1092 Ohms |
| Coil Current at Nominal <br> Voltage | 0.170 A | 0.085 A | 0.045 A |
| Recommended External <br> Roil Suppression <br> (not included) | SMAJ40CA <br> or | SMAJ40CA <br> or | SMAJ100CA <br> or |
|  | P6KE47CA-E3/54 | P6KE47CA-E3/54 | P6KE120CA |

## POWER SWITCHING AND CURRENT CARRY RATINGS

CURRENT CARRY vs TIME


## Mounting

M4 or 8-32 Screws
Torque 1.3-1.7Nm [12-15in-lb]

## Case Material

Thermoplastic Polyester Resin

## Power Connection

M4 Studs
Torque 1.3-1.7Nm [12-15in-Ib] max

## Coil Termination

M3 Studs
Torque 0.5 Nm [5in-lb] max


## MiniTACTOR"'

## P115

PART NUMBER SYSTEM

| P115 | B | D | A |
| :--- | :--- | :--- | :--- |
| Coil Voltage | $\mathbf{B}=12 \mathrm{Vdc}$ |  |  |
|  | $\mathbf{C}=24 \mathrm{Vdc}$ |  |  |
|  | $\mathbf{F}=48 \mathrm{Vdc}$ |  |  |
| Coil Terminals |  | D=Studs, M3 |  |
| Power Terminals |  |  | A=Studs, M4 |

2/ Contactor is operated by a coil that changes resistance with temperature. Since pick-up current, coil current and coil power are specified at nominal voltage, they will be lower than indicated at temperatures above $25^{\circ} \mathrm{C}$ and higher than indicated at temperatures below $25^{\circ} \mathrm{C}$. Similarly, pick-up and drop-out voltages will be higher than indicated at temperatures above $25^{\circ} \mathrm{C}$ and lower than indicated at temperatures below $25^{\circ} \mathrm{C}$.

## Notes \& Definitions:

1 / Temperature range refers to ambient conditions. Terminal temperature can exceed listed values.

## APPLICATION NOTES

Electrical life rating is based on resistive load with $27 \mu \mathrm{H}$ maximum inductance in circuit. Because your application may be different, we suggest you test the contactor in your circuit to verify life is as required.

Contactor is bi-directional and therefore can carry, make, and break current in both directions.

Contactor is not sensitive to direction of installation and can be mounted in any position or axis.

