



**| P115**  
MINIFACTOR™



**Features**

- UL508 Recognized and load break rated for 1000Vdc systems
- Hermetically sealed contactor: ensures make/break switching up to 1200Vdc
- 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



**SPECIFICATIONS**

Specifications	Units	Data
<b>Contact Arrangement</b>	Form X	SPST-NO
<b>Dielectric at Sea Level</b>	Vrms	4300
<b>Contact Voltage, Operating Max</b>	Vdc	1500
<b>Continuous Current Carry, Max (8 AWG)@ 25°C</b>	A	50
<b>Continuous Current Carry, Max (8 AWG)@ 65°C</b>	A	25
<b>Mechanical Life</b>	Cycles	1,000,000
<b>Contact Voltage Drop, Max @ 50A</b>	mV	100
<b>Contact Resistance, Max @ 50A (after 30 sec)</b>	mOhms	3.25
<b>Operate Time, Max</b>	ms	25
<b>Release Time, Max</b>	ms	8
<b>Vibration, Sinusoidal (50-200Hz Peak)</b>	G	5
<b>Shock, Operating, 1/2 Sine, 11ms</b>	G	20
<b>Temperature, Operating Range 1/</b>	°C	-40° to +65°
<b>Humidity, No Freezing or Condensing at Low Temperature</b>	RH	5% to 85%
<b>Weight</b>	grams	135
<b>Short Circuit Current Withstanding (5ms)</b>	A	400
<b>Impulse Withstand Voltage: IEC61000-4-4 (500 ohm)</b>	kV	6

## COIL RATINGS @ 25°C <sup>2</sup>

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

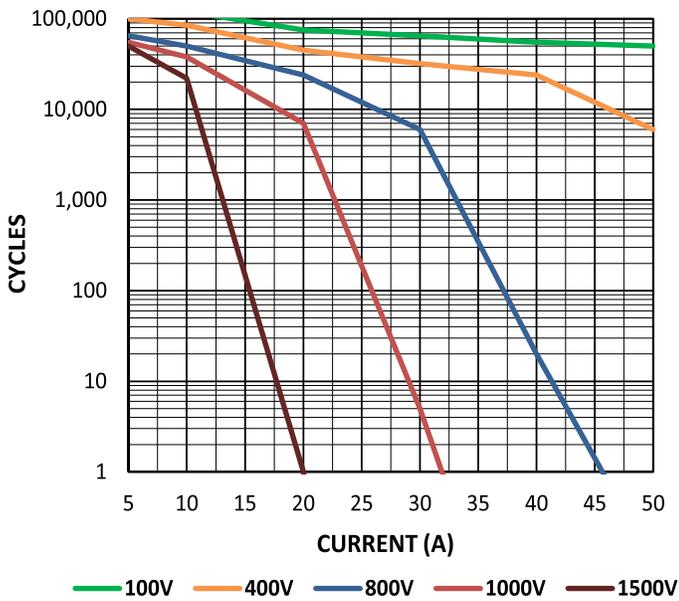


### POWER SWITCHING

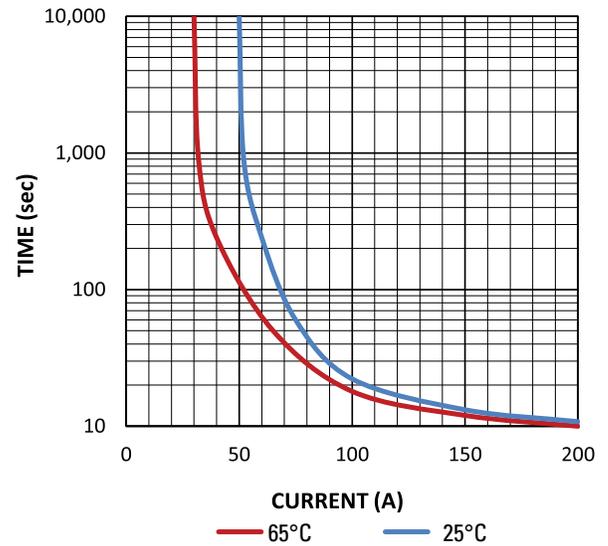


### CURRENT CARRY RATINGS

#### DC RESISTIVE CLOSING CYCLE ESTIMATES



#### CURRENT CARRY vs TIME





## DIMENSIONS

All dimensions are +/- 0.5mm

### Mounting

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

### Case Material

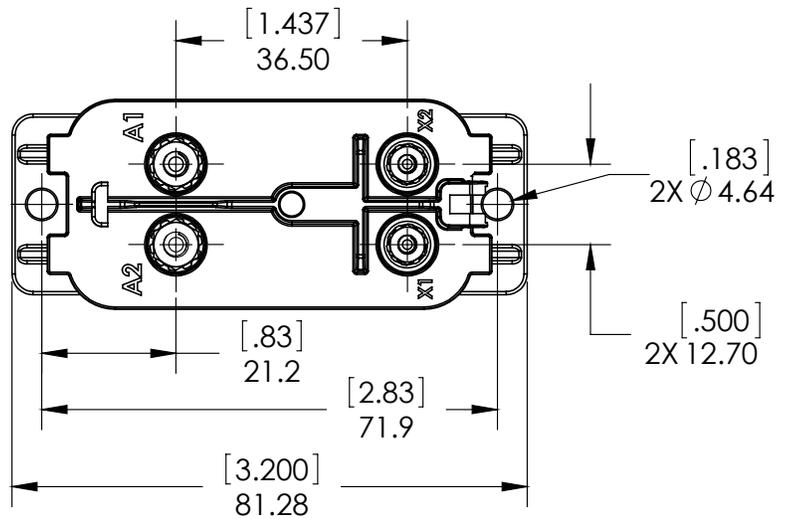
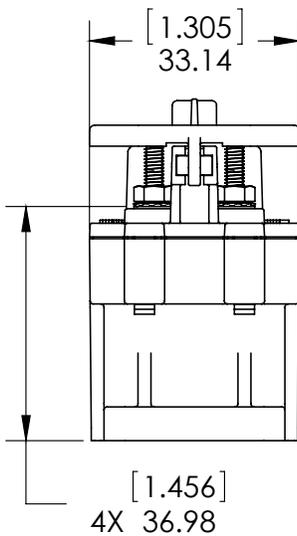
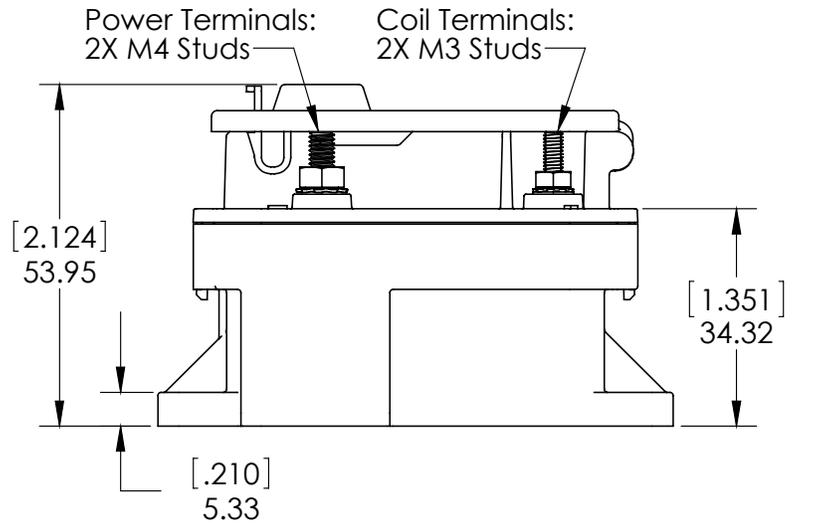
Thermoplastic Polyester Resin

### Power Connection

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

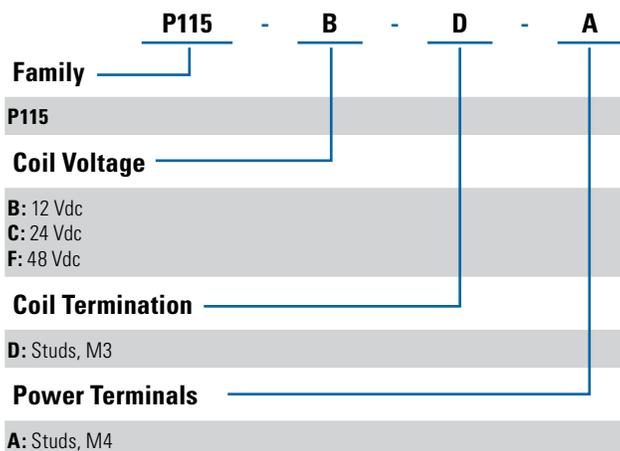
### Coil Termination

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



## ORDERING OPTIONS

Example : P115BDA





## GENERAL NOTES

1. Temperature range refers to ambient conditions. Terminal temperature can exceed listed values.
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°C and higher than indicated at temperatures below 25°C. Similarly, pick-up and drop-out voltages will be higher than indicated at temperatures above 25°C and lower than indicated at temperatures below 25°C.



## APPLICATION NOTES

- Electrical life rating is based on resistive load with 27µH 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.



## WARNINGS



### RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

**Failure to follow these instructions can result in serious injury, or equipment damage.**



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury.**

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