



## | P195 MINIFACTOR™



### Features

- Hermetically sealed contactor
- 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

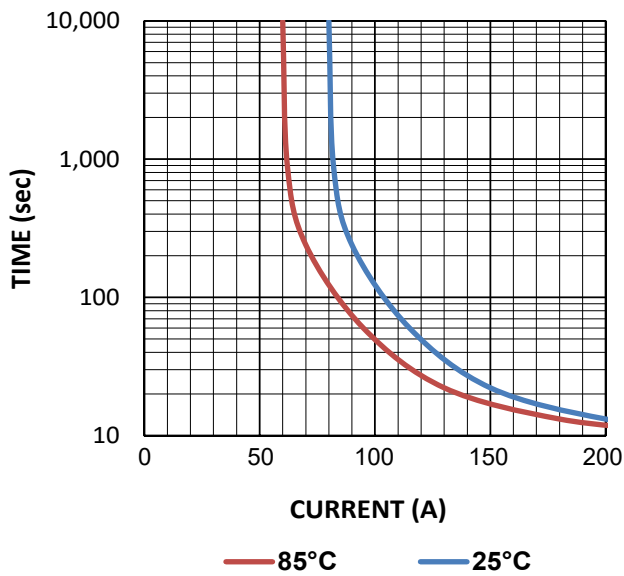
Specifications	Units	Data
<b>Contact Arrangement</b>	Form X	SPST-NO
<b>Dielectric at Sea Level</b>	Vrms	4300
<b>Contact Voltage, Operating Max</b>	Vdc	1500
<b>Continuous Current Carry, Max (6 AWG)</b>	A	80
<b>Electrical Life (Resistive Load) Make and Break, 60A @ 600Vdc</b>	Cycles	6000
<b>Mechanical 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	40
<b>Shock, Operating, 1/2 Sine, 11ms</b>	G	45
<b>Temperature, Operating Range <sup>1</sup></b>	°C	-40° to +65°
<b>Humidity, No Freezing or Condensing at Low Temperature</b>	RH	5% to 85%
<b>Weight</b>	grams	135

## 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>Pickup Voltage</b>	8 Vdc	19 Vdc	35 Vdc
<b>Drop Out Voltage, 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



## CURRENT CARRY RATINGS





## DIMENSIONS

Dimensions are in [inches] millimeters  
Tolerance is +/- 0.5mm for all dimensions, unless stated otherwise.

### Mounting

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

### Case Material

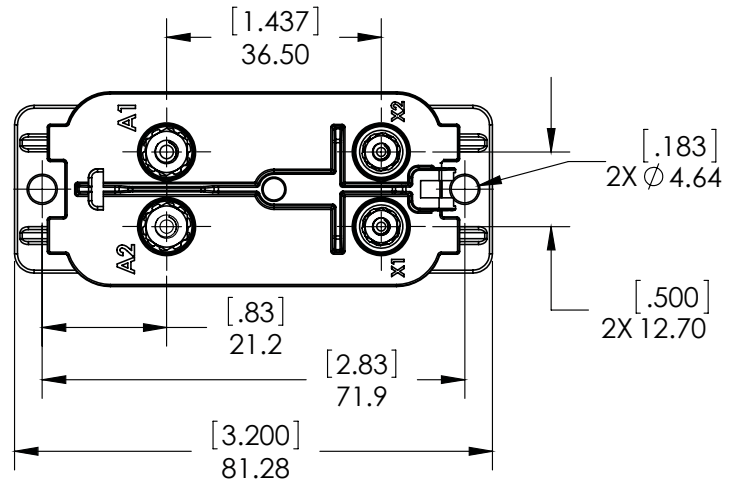
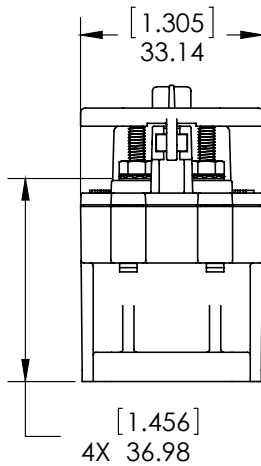
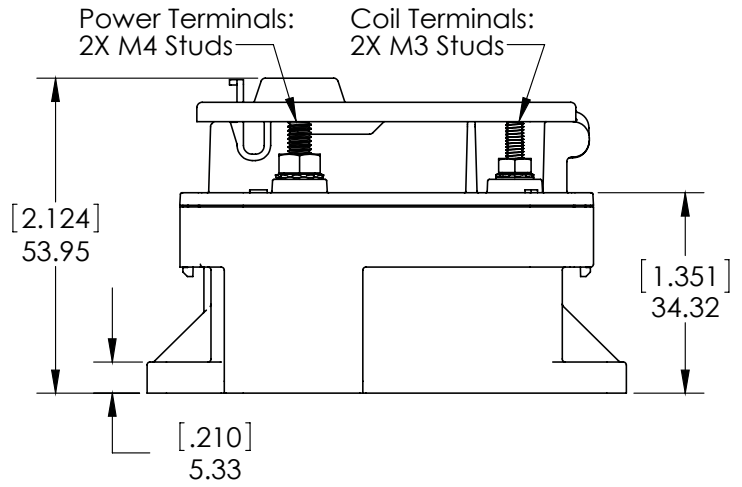
Thermoplastic Polyester Resin

### Power Connection

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

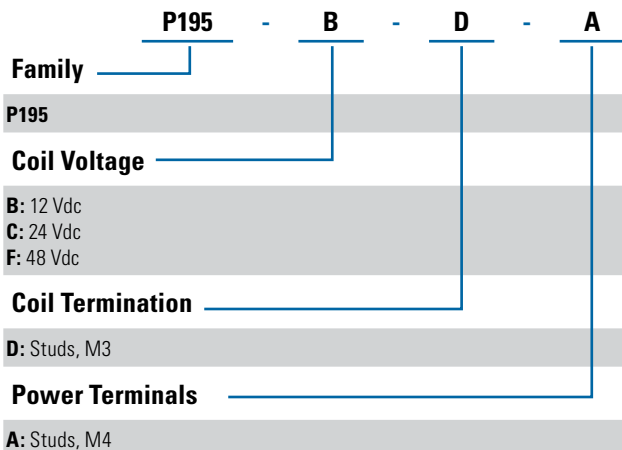
### Coil Termination

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



## ORDERING OPTIONS

Example Part Number: P195BDA



## GENERAL NOTES

1. Temperature range refers to ambient conditions. The contactor terminals may exceed these temperature values during normal operation.
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 may become hot during operation. 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 product
- Verify all connections are secure and reinstall all safety covers before turning on power.

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

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