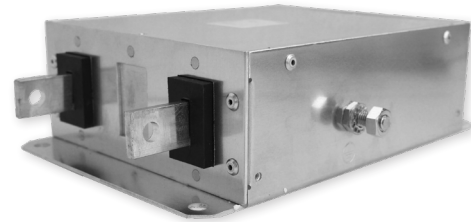


# RP680

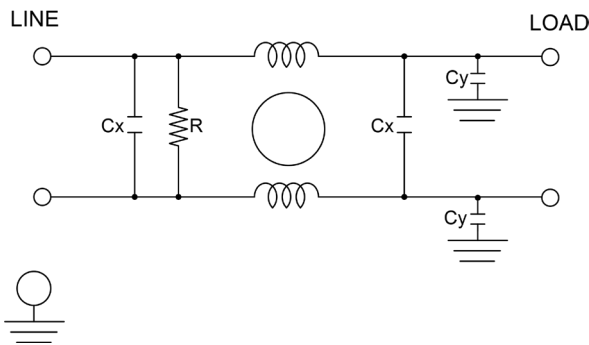
## COMPACT HIGH CURRENT **DC** EMI POWER LINE FILTER, 600V

### FEATURES

- » Rated currents include **250A, 320A, 400A, 600A, 800A and 1000A**
- » Single Stage Line Filter
- » Available with **B** (Bus Bars)
- » Compact and High Current Design
- » Agency Approved to UL1283 / 60929, CSA C22.2, EN 60939
- » Y-cap value can be adjusted to fit specification



### ELECTRICAL SCHEMATIC



### SPECIFICATIONS

|                               |  |
|-------------------------------|--|
| <b>MAX. OPERATING VOLTAGE</b> | 600VDC +10%  |
| <b>AMBIENT TEMPERATURE</b>    | -25 TO 55°C  |
| <b>CLIMATIC CATEGORY</b>      | 25/100/21  |
| <b>TERMINALS (-T)</b>         | BUS BARS 250A (3X20),<br>320-400A(6X25),<br>600A(8X25),<br>800-1000A(8X40) |
| <b>TYP. WEIGHT, LBS (KG)</b>  | 20.0-25.0 (9.07-11.3)  |

### HIPOT RATINGS

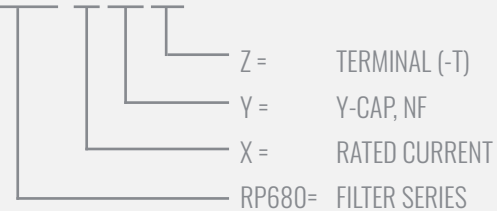
|                       |          |
|-----------------------|----------|
| <b>LINE TO GROUND</b> | 3500 VDC |
|-----------------------|----------|

### TYPICAL APPLICATIONS

- ✓ High power rectifiers
- ✓ Uninterrupted power supplies
- ✓ Inverters
- ✓ VDF & PWM
- ✓ DC fast chargers
- ✓ Induction charging
- ✓ Industrial chargers
- ✓ Solar

### HOW TO ORDER

RP680-X-Y-Z



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS  
E.G. **RP680-250-100-B** (250AMPS WITH 100 NF YCAP)

For **X, Y,** and **Z** options see product specification table.

# RP680

## COMPACT HIGH CURENT **DC** EMI POWER LINE FILTER, 600V

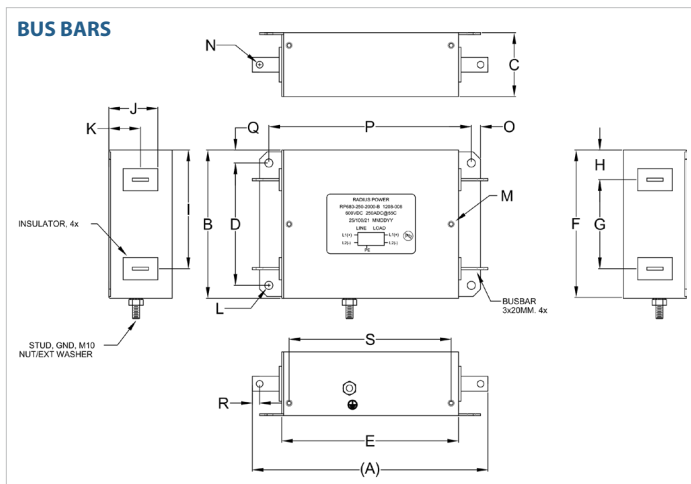
| MODEL NO.         | RATED CURRENT, A @ 40° C | Y-CAP, nF | TERMINAL OPTIONS       |                        |                        |                        | MAX. DIMENSIONS" (MM) |             |           |
|-------------------|--------------------------|-----------|------------------------|------------------------|------------------------|------------------------|-----------------------|-------------|-----------|
|                   |                          |           | (B) INPUT/ OUTPUT 3X20 | (B) INPUT/ OUTPUT 6X25 | (B) INPUT/ OUTPUT 8X25 | (B) INPUT/ OUTPUT 8X40 | WIDTH                 | (LENGTH)    | HEIGHT    |
| RP680-250-100-B   | 250                      | 100       | ✓                      |                        |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-250-1000-B  | 250                      | 1000      | ✓                      |                        |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-250-2000-B  | 250                      | 2000      | ✓                      |                        |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-320-100-B   | 320                      | 100       |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-320-1000-B  | 320                      | 1000      |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-320-2000-B  | 320                      | 2000      |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-400-100-B   | 400                      | 100       |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-400-1000-B  | 400                      | 1000      |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-400-2000-B  | 400                      | 2000      |                        | ✓                      |                        |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-600-100-B   | 600                      | 100       |                        |                        | ✓                      |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-600-1000-B  | 600                      | 1000      |                        |                        | ✓                      |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-600-2000-B  | 600                      | 2000      |                        |                        | ✓                      |                        | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-800-100-B   | 800                      | 100       |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-800-1000-B  | 800                      | 1000      |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-800-2000-B  | 800                      | 2000      |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-1000-100-B  | 1000                     | 100       |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-1000-1000-B | 1000                     | 1000      |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |
| RP680-1000-2000-B | 1000                     | 2000      |                        |                        |                        | ✓                      | 7.87"(200)            | 12.60"(320) | 3.39"(86) |

\*Contact factory for dimensions.

# RP680

## COMPACT HIGH CURRENT **DC** EMI POWER LINE FILTER, 600V

### RP680 MECHANICAL OUTLINES (MM)



| SERIES          | (A)             | B              | C             | D              | E              | F              | G              | H             | I              | J             | K             | L                             | M               | N                 | O             | P               | Q             | R             | S              |
|-----------------|-----------------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|---------------|---------------|-------------------------------|-----------------|-------------------|---------------|-----------------|---------------|---------------|----------------|
| <b>BUS BARS</b> | 12.60"<br>(320) | 7.87"<br>(200) | 3.39"<br>(86) | 6.50"<br>(165) | 9.45"<br>(240) | 7.82"<br>(199) | 4.72"<br>(120) | 1.57"<br>(40) | 6.30"<br>(160) | 2.62"<br>(67) | 1.69"<br>(43) | Ø0.43",<br>4x<br>(Ø11.00, 4x) | Ø0.35"<br>Ø9.00 | INSERT,<br>M4, 6x | 0.49"<br>(13) | 10.83"<br>(275) | 0.69"<br>(18) | 0.39"<br>(10) | 8.66"<br>(220) |

TYPICAL TOLERANCE: +/-0.02" (0.50MM)

### TYPICAL INSERTION LOSS, dB (50/50 Ohm)

| Amps        | Freq (MHz) | 0.15 |  |  |  |  | 0.5 |  |  |  |  | 1.0 |  |  |  |  | 10 |  |  |  |  | 30 |  |  |  |  |
|-------------|------------|------|--|--|--|--|-----|--|--|--|--|-----|--|--|--|--|----|--|--|--|--|----|--|--|--|--|
|             |            |      |  |  |  |  |     |  |  |  |  |     |  |  |  |  |    |  |  |  |  |    |  |  |  |  |
| <b>250</b>  | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |
| <b>320</b>  | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |
| <b>400</b>  | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |
| <b>600</b>  | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |
| <b>800</b>  | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |
| <b>1000</b> | CM (dB)    | 66   |  |  |  |  | 66  |  |  |  |  | 66  |  |  |  |  | 40 |  |  |  |  | 24 |  |  |  |  |
|             | DM (dB)    | 40   |  |  |  |  | 60  |  |  |  |  | 45  |  |  |  |  | 30 |  |  |  |  | 28 |  |  |  |  |