

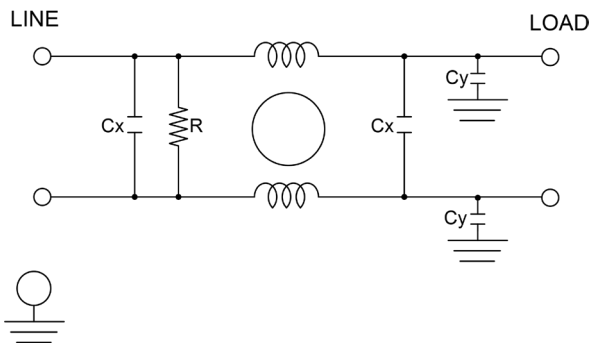
# RP690

## HIGH VOLTAGE/HIGH CURRENT DC POWER LINE FILTER, 1200VDC

### FEATURES

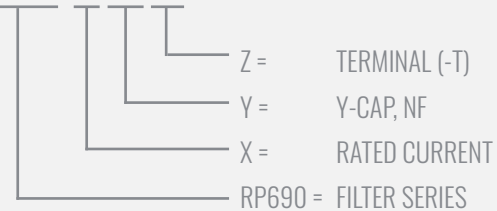
- » Rated currents include **50A, 100A, 200A, 300A, and 500A**
- » Single Stage Line Filter
- » Available with **W** (wires), **S** (studs) and **C** (connectors) option
- » High Voltage/High Current Design
- » Agency Approved to UL1283 / 60929, CSA C22.2, EN 60939
- » Y-cap value can be adjusted to fit specification

### ELECTRICAL SCHEMATIC



### HOW TO ORDER

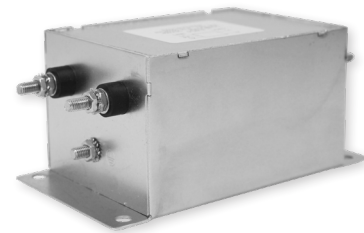
RP690-X-Y-Z



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS

E.G. **RP690-50-100-S** (50AMPS WITH 100 NF YCAP)

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



### SPECIFICATIONS

|                               |                           |
|-------------------------------|---------------------------|
| <b>MAX. OPERATING VOLTAGE</b> | 1200VDC +10%              |
| <b>AMBIENT TEMPERATURE</b>    | -25 TO 55°C               |
| <b>CLIMATIC CATEGORY</b>      | 25/100/21                 |
| <b>TERMINALS (-T)</b>         | WIRE LEADS                |
|                               | STUDS 50A (M6),           |
|                               | 100-200A (M10),           |
|                               | 200-300A (M12),           |
|                               | 500A(DUAL M12)            |
| <b>TYP. WEIGHT, LBS (KG)</b>  | 7.0 - 27.0 (3.17 - 12.25) |

### HIPOT RATINGS

|                       |          |
|-----------------------|----------|
| <b>LINE TO GROUND</b> | 4700 VDC |
|-----------------------|----------|

### TYPICAL APPLICATIONS

- ✓ DC fast charger
- ✓ Induction charging
- ✓ Industrial chargers
- ✓ Solar

# RP690

## HIGH VOLTAGE/HIGH CURRENT DC POWER LINE FILTER, 1200VDC

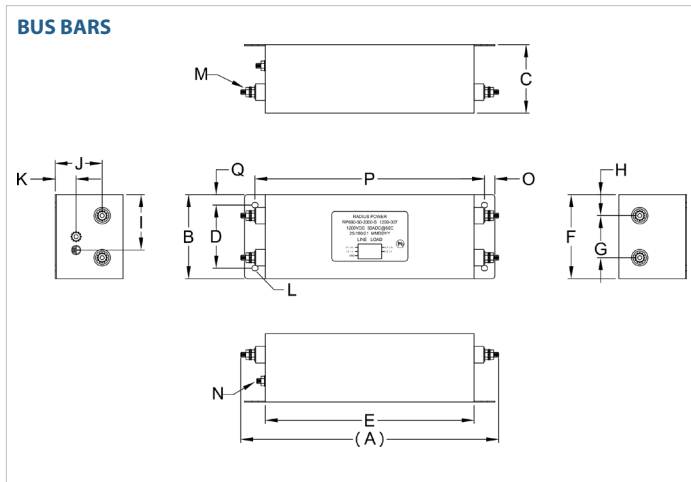
| MODEL NO.        | RATED CURRENT, A @ 40° C | Y-CAP, nF | TERMINAL OPTIONS |                  |                  | MAX. DIMENSIONS" (MM) |             |            |
|------------------|--------------------------|-----------|------------------|------------------|------------------|-----------------------|-------------|------------|
|                  |                          |           | (W) INPUT/OUTPUT | (S) INPUT/OUTPUT | (C) INPUT/OUTPUT | WIDTH                 | (LENGTH)    | HEIGHT     |
| RP690-50-100-C   | 50                       | 100       |                  |                  | ✓                | *                     | *           | *          |
| RP690-50-100-S   | 50                       | 100       |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-50-100-W   | 50                       | 100       | ✓                |                  |                  | *                     | *           | *          |
| RP690-50-1000-C  | 50                       | 1000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-50-1000-S  | 50                       | 1000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-50-1000-W  | 50                       | 1000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-50-2000-C  | 50                       | 2000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-50-2000-S  | 50                       | 2000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-50-2000-W  | 50                       | 2000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-100-100-C  | 100                      | 100       |                  |                  | ✓                | *                     | *           | *          |
| RP690-100-100-S  | 100                      | 100       |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-100-100-W  | 100                      | 100       | ✓                |                  |                  | *                     | *           | *          |
| RP690-100-1000-C | 100                      | 1000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-100-1000-S | 100                      | 1000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-100-1000-W | 100                      | 1000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-100-2000-C | 100                      | 2000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-100-2000-S | 100                      | 2000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-100-2000-W | 100                      | 2000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-200-100-C  | 200                      | 100       |                  |                  | ✓                | *                     | *           | *          |
| RP690-200-100-S  | 200                      | 100       |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-200-100-W  | 200                      | 100       | ✓                |                  |                  | *                     | *           | *          |
| RP690-200-1000-C | 200                      | 1000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-200-1000-S | 200                      | 1000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-200-1000-W | 200                      | 1000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-200-2000-C | 200                      | 2000      |                  |                  | ✓                | *                     | *           | *          |
| RP690-200-2000-S | 200                      | 2000      |                  | ✓                |                  | 4.00"(102)            | 12.36"(314) | 3.25"(83)  |
| RP690-200-2000-W | 200                      | 2000      | ✓                |                  |                  | *                     | *           | *          |
| RP690-300-100-S  | 300                      | 100       |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |
| RP690-300-1000-S | 300                      | 1000      |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |
| RP690-300-2000-S | 300                      | 2000      |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |
| RP690-500-100-S  | 500                      | 100       |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |
| RP690-500-1000-S | 500                      | 1000      |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |
| RP690-500-2000-S | 500                      | 2000      |                  | ✓                |                  | 6.40"(163)            | 16.57"(421) | 4.50"(114) |

\*Contact factory for dimensions.

# RP690

## HIGH VOLTAGE/HIGH CURRENT **DC** POWER LINE FILTER, 1200VDC

### RP690 MECHANICAL OUTLINES (MM)



| SERIES                         | (A)             | B              | C              | D              | E               | F              | G             | H             | I             | J             | K             | L                                    | M               | N                | O             | P               | Q             |
|--------------------------------|-----------------|----------------|----------------|----------------|-----------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------------------------------|-----------------|------------------|---------------|-----------------|---------------|
| <b>STUDS<br/>(50/100/200A)</b> | 12.36"<br>(314) | 4.00"<br>(102) | 3.25"<br>(83)  | 3.00"<br>(76)  | 10.00"<br>(254) | 4.00"<br>(102) | 2.00"<br>(51) | 1.00"<br>(25) | 2.64"<br>(67) | 2.25"<br>(57) | 1.00"<br>(25) | Ø0.30"x0.24",4x<br>(Ø 7.7x6.3, 4x)   | STUD.<br>M6, 6x | STUD,<br>GND, M6 | 0.50"<br>(13) | 11.00"<br>(279) | 0.50"<br>(13) |
| <b>STUDS<br/>(300/500A)</b>    | 16.57"<br>(421) | 6.40"<br>(163) | 4.50"<br>(114) | 6.40"<br>(163) | 13.00"<br>(330) | 6.40"<br>(163) | 3.30"<br>(84) | 1.65"<br>(42) | 3.30"<br>(84) | 3.50"<br>(89) | 1.00"<br>(25) | Ø 0.59"x0.25",4x<br>(Ø 15.2x6.5, 4x) | STUD<br>M12, 4x | STUD<br>GND, M10 | 0.53"<br>(14) | 14.69"<br>(373) | 0.64"<br>(16) |

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

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

| Amps | Freq (MHz) | Insertion Loss (dB) |     |     |    |    |
|------|------------|---------------------|-----|-----|----|----|
|      |            | 0.15                | 0.5 | 1.0 | 10 | 30 |
| 50   | CM (dB)    | 16                  | 28  | 36  | 45 | 50 |
|      | DM (dB)    | 32                  | 60  | 60  | 50 | 50 |
| 100  | CM (dB)    | 16                  | 28  | 36  | 45 | 50 |
|      | DM (dB)    | 32                  | 60  | 60  | 50 | 50 |
| 200  | CM (dB)    | 16                  | 28  | 36  | 45 | 50 |
|      | DM (dB)    | 32                  | 60  | 60  | 50 | 50 |
| 300  | CM (dB)    | 16                  | 28  | 36  | 45 | 50 |
|      | DM (dB)    | 32                  | 60  | 60  | 50 | 50 |
| 500  | CM (dB)    | 16                  | 28  | 36  | 45 | 50 |
|      | DM (dB)    | 32                  | 60  | 60  | 50 | 50 |