

# DSC1000

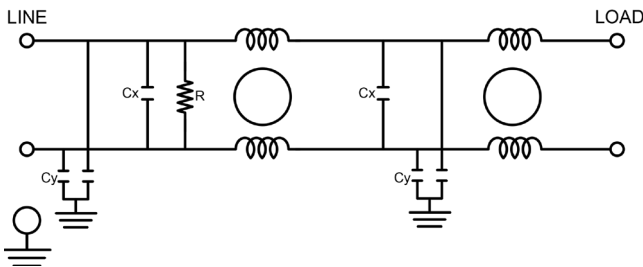
## HIGH PERFORMANCE SINGLE PHASE DUAL STAGE POWER LINE FILTER

### FEATURES

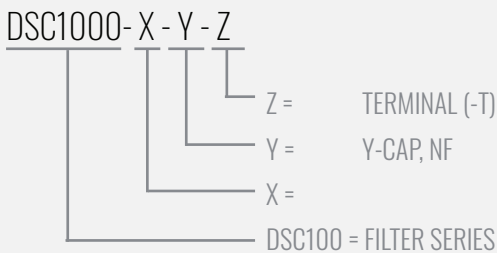
- » **Rated currents include 16A**
- » Dual Stage Line Filter
- » Available with **QD** tab and **W** (wire leads) option
- » High Performance Design
- » Agency Approved to UL1283 / 60929, CSA C22.2, EN60939
- » Y-cap value can be adjusted to fit specification



### ELECTRICAL SCHEMATIC



### HOW TO ORDER



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS  
E.G. **DSC1000-1-.47-QD** (.47 NF YCAP)

### SPECIFICATIONS

|                        |                             |
|------------------------|-----------------------------|
| OPERATING FREQUENCY    | 50/60Hz                     |
| USABLE FREQUENCY       | DC - 400 Hz                 |
| MAX. OPERATING VOLTAGE | 250V +10%                   |
| AMBIENT TEMPERATURE    | -25 TO 40°C                 |
| CLIMATIC CATEGORY      | 25/100/21                   |
| TERMINALS (-T)         | QD: 0.25 TABS<br>WIRE LEADS |
| TYP. WEIGHT, LBS (KG)  | 0.8 (0.36)                  |

### LEAKAGE CURRENT

|                 |                  |
|-----------------|------------------|
| @ 250 VAC 50 Hz | 0 - 3.50 mA Max. |
| @ 120 VAC 60 Hz | 0 - 1.80 mA Max. |

### HIPOT RATINGS

|                |          |
|----------------|----------|
| LINE TO GROUND | 2700 VDC |
|----------------|----------|

### TYPICAL APPLICATIONS

- ✓ Food Service Equipment
- ✓ Industrial and Mechanical Lighting
- ✓ Home Appliances
- ✓ Power Supplies
- ✓ Consumer Electronics

# DSC1000

## HIGH PERFORMANCE SINGLE PHASE DUAL STAGE POWER LINE FILTER

| MODEL NO.            | RATED CURRENT (A) @ 40° C | Y-CAP, nF | Z-CAP | LEAKAGE CURRENT, mA<br>@ 250V AC, 50 Hz /<br>@ 120V AC, 60 Hz |      | TERMINAL OPTIONS     |                      | MAX. DIMENSIONS" (MM) |            |           |
|----------------------|---------------------------|-----------|-------|---|------|----------------------|----------------------|-----------------------|------------|-----------|
|                      |                           |           |       |   |      | (QD)INPUT/<br>OUTPUT | (W) INPUT/<br>OUTPUT | WIDTH                 | (LENGTH)   | HEIGHT    |
| DSC1000-1-0-QD       | 16                        | 0         | -     | -   | -    | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-0-W        | 16                        | 0         | -     | -   | -    |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-1-.47-QD     | 16                        | 0.47      | -     | 0.07  | 0.04 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-.47-W      | 16                        | 0.47      | -     | 0.07  | 0.04 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-1-1-QD       | 16                        | 1         | -     | 0.15  | 0.09 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-1-W        | 16                        | 1         | -     | 0.15  | 0.09 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-1-2.2-QD     | 16                        | 2.2       | -     | 0.34  | 0.19 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-2.2-W      | 16                        | 2.2       | -     | 0.34  | 0.19 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-1-4.7-QD     | 16                        | 4.7       | -     | 0.73  | 0.42 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-4.7-W      | 16                        | 4.7       | -     | 0.73  | 0.42 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-1-10-QD      | 16                        | 10        | -     | 1.57  | 0.90 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-1-10-W       | 16                        | 10        | -     | 1.57  | 0.90 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-0-0-QD     | 16                        | 0         | 0     | -   | -    | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-0-0-W      | 16                        | 0         | 0     | -   | -    |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-.47-.47-QD | 16                        | 0.47      | 0.47  | 0.07  | 0.04 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-.47-.47-W  | 16                        | 0.47      | 0.47  | 0.07  | 0.04 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-1-1-QD     | 16                        | 1         | 1     | 0.15  | 0.09 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-1-1-W      | 16                        | 1         | 1     | 0.15  | 0.09 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-2.2-2.2-QD | 16                        | 2.2       | 2.2   | 0.34  | 0.19 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-2.2-2.2-W  | 16                        | 2.2       | 2.2   | 0.34  | 0.19 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-4.7-4.7-QD | 16                        | 4.7       | 4.7   | 0.73  | 0.42 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-4.7-4.7-W  | 16                        | 4.7       | 4.7   | 0.73  | 0.42 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-3-10-10-QD   | 16                        | 10        | 10    | 1.57  | 0.90 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-3-10-10-W    | 16                        | 10        | 10    | 1.57  | 0.90 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-0-0-QD     | 16                        | 0         | 0     | -   | -    | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-0-0-W      | 16                        | 0         | 0     | -   | -    |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-.22-.22-QD | 16                        | 0.22      | 0.22  | *   | *    | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-.22-.22-W  | 16                        | 0.22      | 0.22  | *   | *    |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-.47-.47-QD | 16                        | 0.47      | 0.47  | 0.07  | 0.04 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-.47-.47-W  | 16                        | 0.47      | 0.47  | 0.07  | 0.04 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-1-1-QD     | 16                        | 1         | 1     | 0.15  | 0.09 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-1-1-W      | 16                        | 1         | 1     | 0.15  | 0.09 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-2.2-2.2-QD | 16                        | 2.2       | 2.2   | 0.34  | 0.19 | ✓                    |                      | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-2.2-2.2-W  | 16                        | 2.2       | 2.2   | 0.34  | 0.19 |                      | ✓                    | 2.24"(57)             | 4.53"(115) | 1.81"(46) |

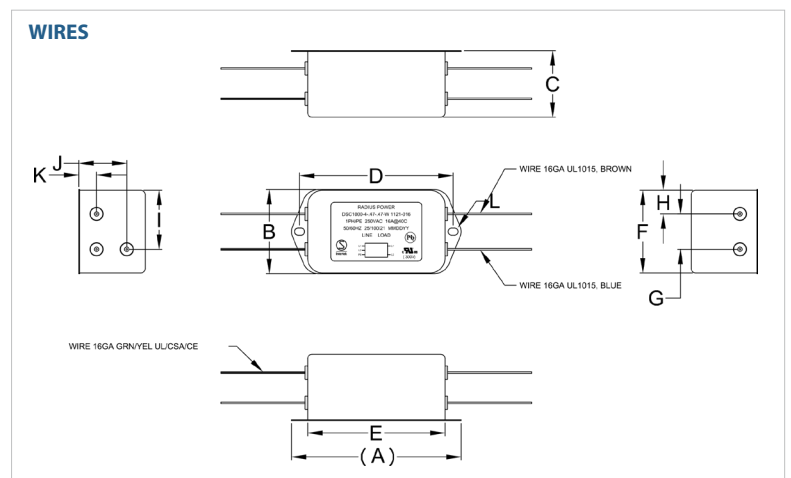
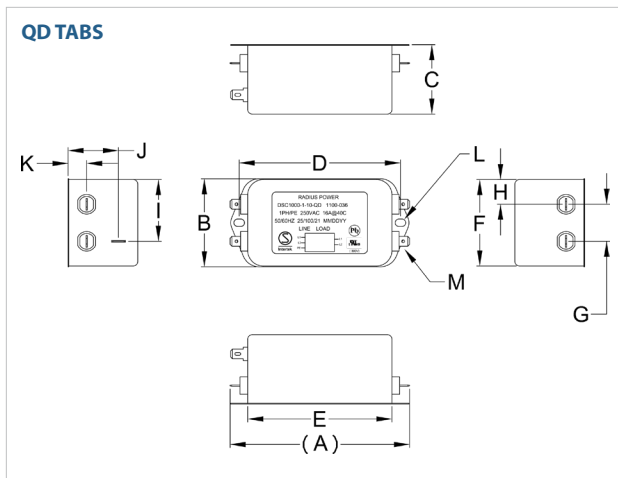
**ADDITIONAL MODEL NO. >>**

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## HIGH PERFORMANCE SINGLE PHASE DUAL STAGE POWER LINE FILTER

| MODEL NO.            | RATED CURRENT (A) @ 40° C | Y-CAP, nF | Z-CAP | LEAKAGE CURRENT, mA<br>@ 250V AC, 50 Hz /<br>@ 120V AC, 60 Hz |      | TERMINAL OPTIONS |                  | MAX. DIMENSIONS" (MM) |            |           |
|----------------------|---------------------------|-----------|-------|---|------|------------------|------------------|-----------------------|------------|-----------|
|                      |                           |           |       |   |      | (QD)INPUT/OUTPUT | (W) INPUT/OUTPUT | WIDTH                 | (LENGTH)   | HEIGHT    |
| DSC1000-4-4.7-4.7-QD | 16                        | 4.7       | 4.7   | 0.73  | 0.42 | ✓                |                  | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-4.7-4.7-W  | 16                        | 4.7       | 4.7   | 0.73  | 0.42 |                  | ✓                | 2.24"(57)             | 4.53"(115) | 1.81"(46) |
| DSC1000-4-10-10-QD   | 16                        | 10        | 10    | 1.57  | 0.90 | ✓                |                  | 2.24"(57)             | 4.56"(116) | 1.81"(46) |
| DSC1000-4-10-10-W    | 16                        | 10        | 10    | 1.57  | 0.90 |                  | ✓                | 2.24"(57)             | 4.53"(115) | 1.81"(46) |

### DSC1000 MECHANICAL OUTLINES" (MM)



| SERIES         | (A)            | B             | C             | D              | E             | F             | G             | H             | I             | J             | K             | L                                  | M                  |
|----------------|----------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------------------------|--------------------|
| <b>QD TABS</b> | 4.56"<br>(116) | 2.24"<br>(57) | 1.81"<br>(46) | 4.09"<br>(104) | 3.66"<br>(93) | 2.24"<br>(57) | 0.94"<br>(24) | 0.63"<br>(16) | 1.57"<br>(40) | 1.28"<br>(33) | 0.47"<br>(12) | Ø 0.25"x0.20",2x<br>Ø, 6.4x5.3, 2x | QD, MALE, 6.35, 5x |
| <b>WIRES</b>   | 4.53"<br>(115) | 2.24"<br>(57) | 1.81"<br>(46) | 4.09"<br>(104) | 3.70"<br>(94) | 2.24"<br>(57) | 0.94"<br>(24) | 0.63"<br>(16) | 1.57"<br>(40) | 1.28"<br>(33) | 0.47"<br>(12) | Ø 0.25"x0.20",2x<br>Ø, 6.4x5.3, 2x | N/A                |

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

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## HIGH PERFORMANCE SINGLE PHASE DUAL STAGE POWER LINE FILTER

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

| Amps      | Freq (MHz) | 0.15 | 0.5 | 1.0 | 10 | 30 |
|-----------|------------|------|-----|-----|----|----|
| DSC1000-1 | CM (dB)    | 42   | 65  | 70  | 55 | 50 |
|           | DM (dB)    | 36   | 60  | 65  | 70 | 70 |
| DSC1000-3 | CM (dB)    | 46   | 64  | 70  | 70 | 60 |
|           | DM (dB)    | 36   | 60  | 65  | 70 | 70 |
| DSC1000-4 | CM (dB)    | 50   | 70  | 70  | 70 | 66 |
|           | DM (dB)    | 36   | 60  | 65  | 70 | 70 |