

# 3B

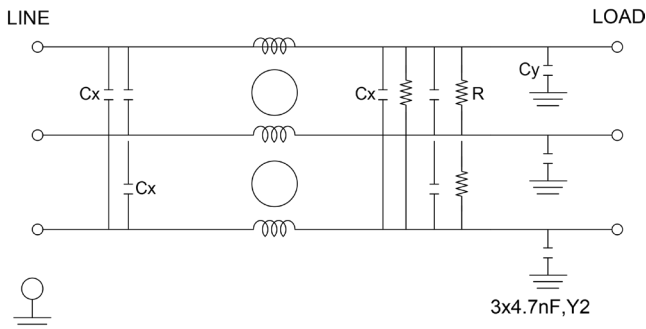
## 3-PHASE ECONOMICAL $\Pi$ SECTION FILTER

### FEATURES

- » Rated currents include **8A, 16A, 30A, 60A, 100A, 150A and 200A**
- » Single Stage Line Filter
- » Available with **QD** tabs or **S** (studs) option
- » Economical Design
- » Low Profile Case & Flange Mount Available
- » Agency Approved to UL E78081, CSA LR53652 and TUV
- » Y-cap value can be adjusted to fit specification

### ELECTRICAL SCHEMATIC

#### DELTA - SUFFIX "D"

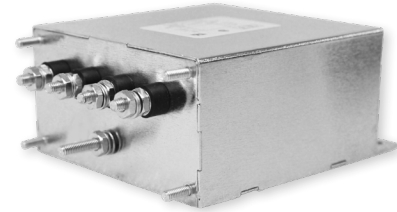


### HOW TO ORDER

3B100DB LF



**NOTE:** USE ANY COMBINATION OF -X (AMPS) WITH ANY -Y RATINGS  
E.G. **3B100DB LF** (100 AMPS, DELTA, LOW PROFILE CASE, FLANGE MOUNT)



### SPECIFICATIONS

|                        |                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------|
| OPERATING FREQUENCY    | 50/60Hz                                                                                        |
| MAX. OPERATING VOLTAGE | 250VAC +10% (DELTA)<br>440VAC +10% (WYE)                                                       |
| TERMINALS (-T)         | QD: 0.25" TABS<br>STUDS: 8-32(8-30A),<br>1/4-20 (60A),<br>5/16-18 (100A),<br>3/8-16 (150-200A) |
| TYP. WEIGHT, LBS (KG)  | 0.81 - 11 (0.36 - 4.98)                                                                        |

#### TYPICAL LEAKAGE CURRENT

|                 |                  |
|-----------------|------------------|
| @ 250 VAC 50 Hz | 0 - 2.80 mA Max. |
|-----------------|------------------|

#### HIPOT RATINGS

|                |                     |
|----------------|---------------------|
| LINE TO GROUND | 2700 VDC - 3200 VDC |
|----------------|---------------------|

### TYPICAL APPLICATIONS

- ✓ High Power Rectifiers
- ✓ Uninterrupted Power Supplies
- ✓ Processing Equipment
- ✓ Alternative Energy (EV Charging & Solar)
- ✓ Factory Machinery

# 3B

## 3-PHASE ECONOMICAL $\Pi$ SECTION FILTER

| MODEL NO.  | RATED CURRENT (A) @ 40° C | Y-CAP, nF                     | LEAKAGE CURRENT, mA @ 250V AC, 50 Hz / | TERMINAL OPTIONS   |                   | MAX. DIMENSIONS" (MM) |             |             |
|------------|---------------------------|-------------------------------|----------------------------------------|--------------------|-------------------|-----------------------|-------------|-------------|
|            |                           |                               |                                        | (QD) INPUT/ OUTPUT | (S) INPUT/ OUTPUT | WIDTH                 | (LENGTH)    | HEIGHT      |
| 3B8        | 8                         | 4x.0047 $\mu$ F               | .80                                    | ✓                  |                   | 2.12"(54)             | 4.11"(105)  | 1.79"(46)"  |
| 3B8D       | 8                         | 3x.0047 $\mu$ F               | .80                                    | ✓                  |                   | 2.12"(54)             | 4.11"(105)  | 1.79"(46)"  |
| 3B8D S     | 8                         | 3x.0047 $\mu$ F               | .80                                    |                    | ✓                 | 2.12"(54)             | 4.11"(105)  | 1.79"(46)"  |
| 3B16       | 16                        | 4x.01 $\mu$ F                 | 1.4                                    | ✓                  |                   | 2.88"(73)             | 4.33"(110)  | 2.04"(52)"  |
| 3B16D      | 16                        | 3x.01 $\mu$ F                 | 1.4                                    | ✓                  |                   | 2.88"(73)             | 4.33"(110)  | 2.04"(52)"  |
| 3B16D S    | 16                        | 3x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 2.88"(73)             | 4.33"(110)  | 2.04"(52)"  |
| 3B30       | 30                        | 4x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 4.12"(105)            | 5.24"(133)  | 1.79"(45.5) |
| 3B30 L     | 30                        | *                             | 1.4                                    | *                  | *                 | 4.12"(105)            | 5.24"(133)  | 1.79"(45.5) |
| 3B30 LF    | 30                        | 4x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 4.12"(105)            | 5.24"(133)  | 1.79"(45.5) |
| 3B30D      | 30                        | 3x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 4.12"(105)            | 5.24"(133)  | 1.79"(45.5) |
| 3B30DB     | 30                        | 3x.022 $\mu$ F                | 2.8                                    |                    | ✓                 | 4.12"(105)            | 5.24"(133)  | 1.79"(45.5) |
| 3B60 L     | 60                        | *                             | 1.4                                    | *                  | *                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B60 LF    | 60                        | 4x.01 $\mu$ F/4x.01 $\mu$ F   | 1.4                                    |                    | ✓                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B60B LF   | 60                        | 4x.001 $\mu$ F/4x.022 $\mu$ F | 1.4                                    |                    | ✓                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B60D L    | 60                        | *                             | 1.4                                    | *                  | *                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B60D LF   | 60                        | 3x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B60D LH   | 60                        | 3x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 4.25"(108)            | 8.14"(207)  | 2.25"(57)   |
| 3B100 L    | 100                       | *                             | 1.4                                    | *                  | *                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B100 LF   | 100                       | 4x.01 $\mu$ F                 | 1.4                                    |                    | ✓                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B100B LF  | 100                       | 4x.022 $\mu$ F                | 1.4                                    |                    | ✓                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B100D L   | 100                       | *                             | 2.1                                    | *                  | *                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B100D LF  | 100                       | 3x.015 $\mu$ F                | 2.1                                    |                    | ✓                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B100DB LF | 100                       | 4x.022 $\mu$ F                | 3.1                                    |                    | ✓                 | 5.50"(140)            | 8.87"(225)  | 3.00"(76)   |
| 3B150      | 150                       | *                             | 2.1                                    | *                  | *                 | 5.00"(127)            | 10.00"(254) | 4.75"(121)  |
| 3B150D     | 150                       | *                             | 2.1                                    | *                  | *                 | 5.00"(127)            | 10.00"(254) | 4.75"(121)  |
| 3B150D H   | 150                       | 3x.015 $\mu$ F                | 2.1                                    |                    | ✓                 | 5.00"(127)            | 10.00"(254) | 4.75"(121)  |
| 3B150DB F  | 150                       | 3x.022 $\mu$ F                | 2.1                                    |                    | ✓                 | 5.00"(127)            | 10.00"(254) | 4.75"(121)  |
| 3B200      | 200                       | *                             | 2.1                                    | *                  | *                 | *                     | *           | *           |

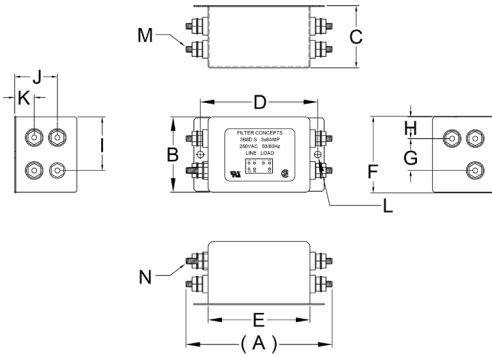
\*Contact factory for dimensions.

# 3B

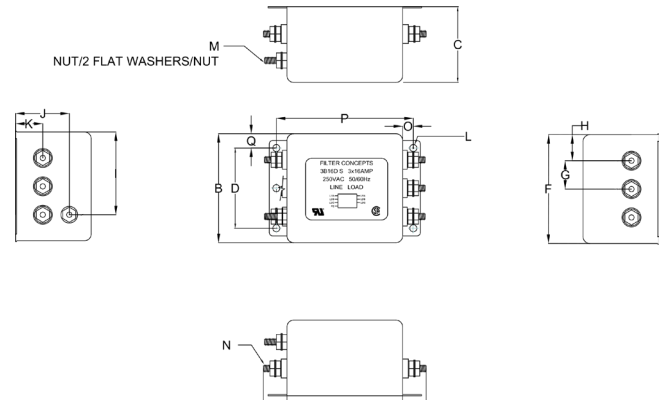
## 3-PHASE ECONOMICAL $\Pi$ SECTION FILTER

### 3B MECHANICAL OUTLINES (MM)

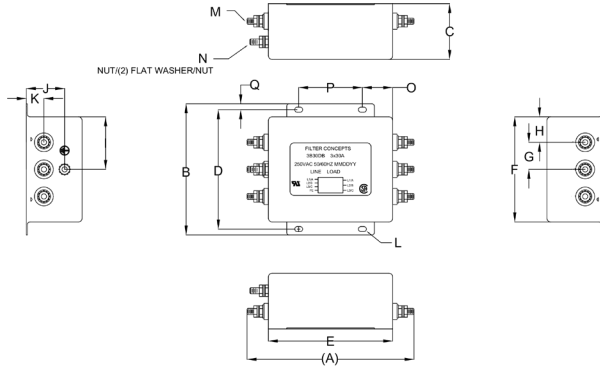
#### QD TABS (8AMPS)



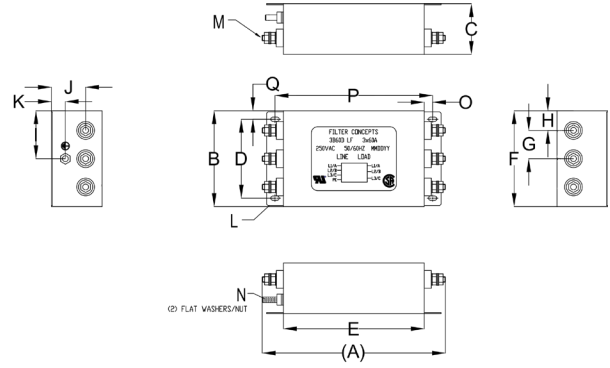
#### STUDS (16 AMPS)



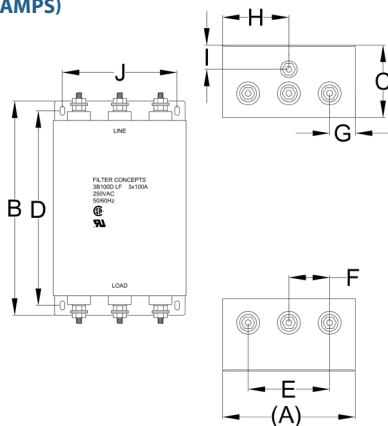
#### STUDS (30 AMPS)



#### STUDS (60 AMPS)



#### STUDS (100-150 AMPS)



# 3B

## 3-PHASE ECONOMICAL $\Pi$ SECTION FILTER

| SERIES          | (A)         | B            | C            | D           | E           | F           | G          | H          | I          | J           | K          | L                                  | M                | N                 | O          | P           | Q          |
|-----------------|-------------|--------------|--------------|-------------|-------------|-------------|------------|------------|------------|-------------|------------|------------------------------------|------------------|-------------------|------------|-------------|------------|
| <b>8 amps</b>   | 4.11" (105) | 2.12" (54)   | 1.79" (46)   | 3.31" (84)  | 2.87" (73)  | 2.18" (55)  | 0.90" (23) | 0.61" (16) | 1.55" (39) | 1.20" (31)  | 0.55" (14) | 0.18", 2x<br>Ø4.75, 2x             | STUD, 8-32, 6x   | STUD, GND, 8-32   | N/A        | N/A         | N/A        |
| <b>16 amps</b>  | 4.33" (110) | 2.88" (73)   | 2.04" (52)   | 2.12" (54)  | 3.06" (78)  | 2.87" (73)  | 0.75" (19) | 0.69" (18) | 2.19" (56) | 1.42" (36)  | 0.72" (18) | 0.18", 6x<br>Ø4.7, 6x              | STUD, 8-32, 6x   | STUD, GND, 8-32   | 0.28" (7)  | 3.62" (92)  | 0.38" (10) |
| <b>30 amps</b>  | 5.24" (133) | 4.12" (105)  | 1.79" (45.5) | 3.75" (95)  | 3.90" (99)  | 3.30" (84)  | 0.85" (22) | 0.80" (20) | 1.65" (42) | 1.20" (30)  | 0.55" (14) | 0.15"x0.25", 4x<br>Ø, 4.0x6.35, 4x | STUD, 8-32, 6x   | STUD, GND, 8-32   | 0.95" (24) | 2.00" (51)  | 0.19" (5)  |
| <b>60 amps</b>  | 8.14" (207) | 4.25" (108)  | 2.25" (57)   | 3.50" (89)  | 6.25" (159) | 4.25" (108) | 1.26" (32) | 0.87" (22) | 2.13" (54) | 1.52" (39)  | 0.62" (16) | 0.37"x0.18", 4x<br>Ø 9.5x4.8, 4x   | STUD, 1/4-20, 6x | STUD, GND, 1/4-20 | 0.37" (10) | 7.00" (178) | 0.37" (9)  |
| <b>100 amps</b> | 5.50" (140) | 8.87" (225)  | 3.00" (76)   | 8.06" (205) | 3.38" (86)  | 1.70" (43)  | 1.06" (27) | 2.75" (70) | 1.00" (25) | 4.74" (120) | N/A        | N/A                                | N/A              | N/A               | N/A        | N/A         | N/A        |
| <b>150 amps</b> | 5.00" (127) | 10.00" (254) | 4.75" (121)  | 8.89" (226) | 3.00" (76)  | 1.50" (38)  | 1.00" (25) | 2.50" (64) | 1.30" (33) | 4.00" (102) | N/A        | N/A                                | N/A              | N/A               | N/A        | N/A         | N/A        |

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

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

| Amps           | Freq (MHz) | 0.01 | 0.15 | 0.5 | 1.0 | 10 | 30 |
|----------------|------------|------|------|-----|-----|----|----|
| <b>3B8D</b>    | CM (dB)    | 6    | 6    | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B8D S</b>  | CM (dB)    | 6    | 6    | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B8</b>     | CM (dB)    | 17   | 17   | 35  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B16D</b>   | CM (dB)    | 20   | 20   | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B16D S</b> | CM (dB)    | 20   | 20   | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B16</b>    | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B30D</b>   | CM (dB)    | 20   | 20   | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| <b>3B30DB</b>  | CM (dB)    | 20   | 20   | 50  | 39  | 56 | 63 |
|                | DM (dB)    | 21   | 21   | 42  | 35  | 53 | 62 |
| <b>3B30</b>    | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|                | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |

# 3B

## 3-PHASE ECONOMICAL $\pi$ SECTION FILTER

| Amps       | Freq (MHz) | 0.01 | 0.15 | 0.5 | 1.0 | 10 | 30 |
|------------|------------|------|------|-----|-----|----|----|
| 3B30 LF    | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B30B LF   | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B30 L     | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B60D LF   | CM (dB)    | 30   | 30   | 60  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 35  | 35  | 53 | 62 |
| 3B60B LF   | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B60 LF    | CM (dB)    | 20   | 20   | 60  | 39  | 56 | 63 |
|            | DM (dB)    | 22   | 22   | 40  | 35  | 53 | 62 |
| 3B60 L     | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B60D L    | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B100D LF  | CM (dB)    | 30   | 30   | 50  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 34  | 35  | 53 | 62 |
| 3B100 LF   | CM (dB)    | 30   | 30   | 60  | 39  | 56 | 63 |
|            | DM (dB)    | 17   | 17   | 40  | 35  | 53 | 62 |
| 3B100B LF  | CM (dB)    | 30   | 30   | 60  | 39  | 56 | 63 |
|            | DM (dB)    | 20   | 20   | 43  | 35  | 53 | 62 |
| 3B100DB LF | CM (dB)    | 30   | 30   | 50  | 39  | 56 | 63 |
|            | DM (dB)    | 21   | 21   | 37  | 35  | 53 | 62 |
| 3B100 L    | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B100D L   | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B150D H   | CM (dB)    | 48   | 48   | 65  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B150DB F  | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B150      | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|            | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |



# 3B

## 3-PHASE ECONOMICAL $\Pi$ SECTION FILTER

| Amps   | Freq (MHz) | 0.01 | 0.15 | 0.5 | 1.0 | 10 | 30 |
|--------|------------|------|------|-----|-----|----|----|
| 3B150D | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|        | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |
| 3B200  | CM (dB)    | 20   | 20   | 40  | 39  | 56 | 63 |
|        | DM (dB)    | 18   | 18   | 38  | 35  | 53 | 62 |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Astrodyne TDI:

[3B30 LFS01](#) [3B30](#) [3B100 LF](#) [3B60D LH](#) [3B100B LF](#) [3B150D H](#) [3B30D](#) [3B30DB](#) [3B100DB LF](#) [3B16D](#) [3B60 LF](#)  
[3B60D LF](#) [3BH100D F](#)