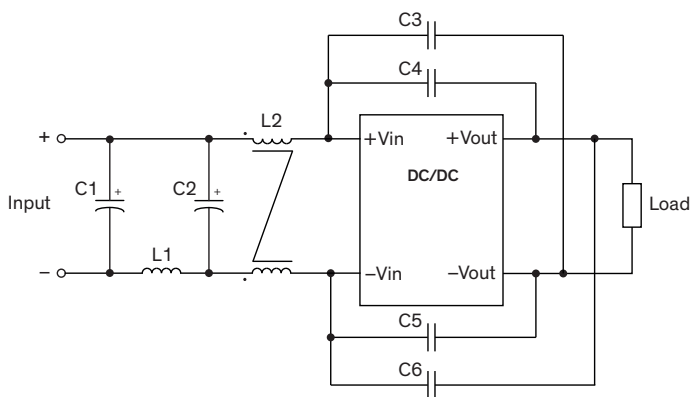


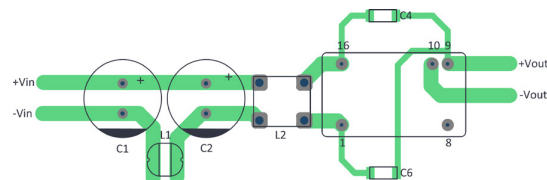
### EMI Consideration

#### Suggested filter to comply with EN 55032 Radiated Emissions Class A, EFT & Surge

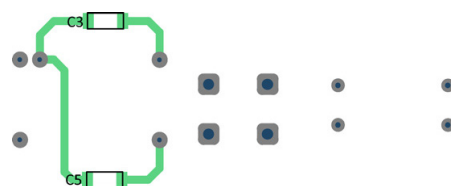
##### Single output models



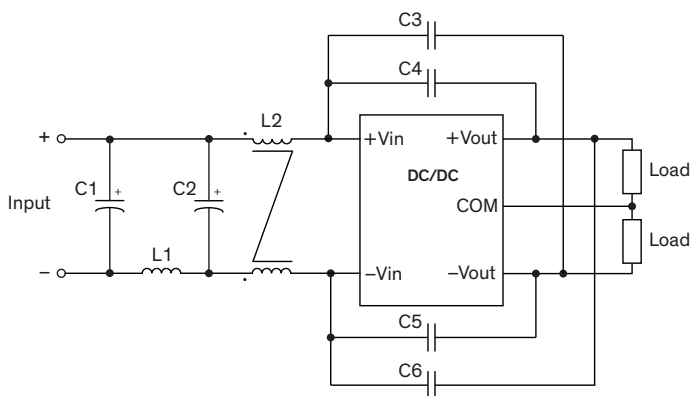
##### PCB layout suggestion (top)



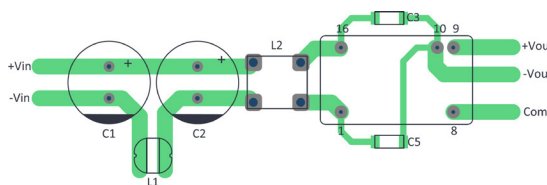
##### PCB layout suggestion (bottom)



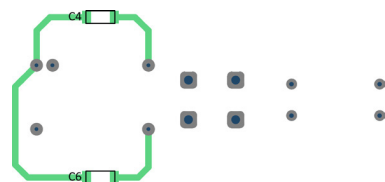
##### Dual output models



##### PCB layout suggestion (top)



##### PCB layout suggestion (bottom)

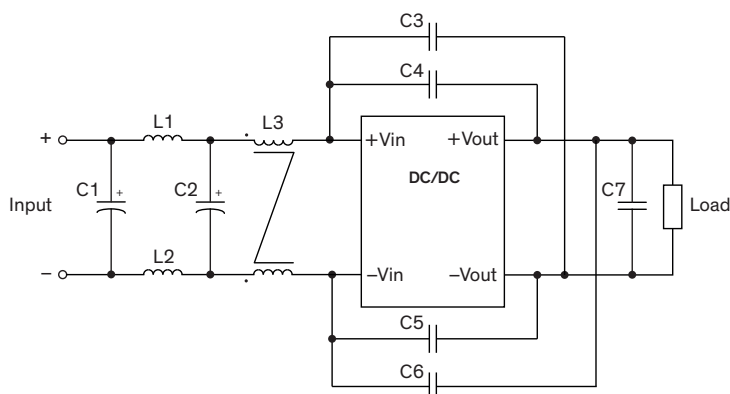


#### Suggested components to comply with EN 55032 Radiated Emissions Class A, EFT & Surge

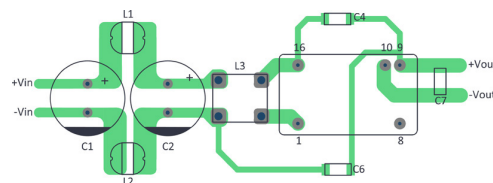
| Model         | C1, C2                              | L1   | L2   | C3                          | C4                          | C5                          | C6                         |
|---------------|-------------------------------------|--|--|-----------------------------|-----------------------------|-----------------------------|----------------------------|
| TEL 12-24xxWI | 470 $\mu$ F / 50 V<br>chemi-con KY  | 10 $\mu$ H / 2.2 A<br>100 $\Omega$<br>74477410   | -  | -                           | 1000 pF<br>2 kV<br>1808 X7R | 1000 pF<br>2 kV<br>1808 X7R | -                          |
| TEL 12-24xxWI | 150 $\mu$ F / 100 V<br>chemi-con KY | 56 $\mu$ H / 0.77 A<br>420 $\Omega$<br>744774156 | 30 $\mu$ H / 1.4 A<br>40 m $\Omega$<br>744273222 | 1000 pF<br>2 kV<br>1808 X7R | 680 pF<br>2 kV<br>1808 X7R  | 1000 pF<br>2 kV<br>1808 X7R | 680 pF<br>2 kV<br>1808 X7R |

### Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class B, EFT & Surge

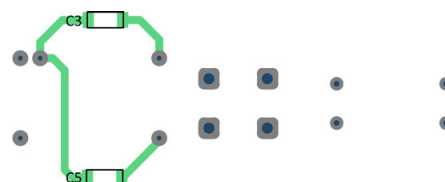
#### Single output models



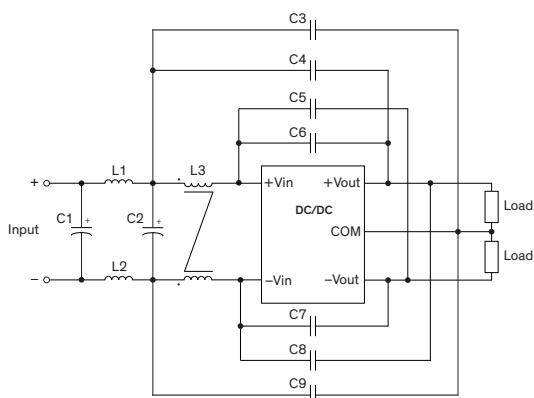
#### PCB layout suggestion (top)



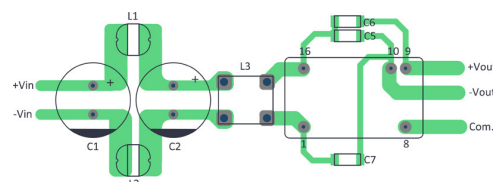
#### PCB layout suggestion (bottom)



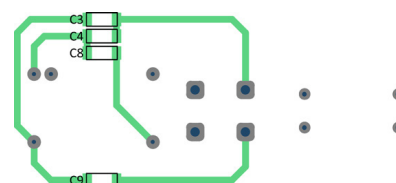
#### Dual output models



#### PCB layout suggestion (top)



#### PCB layout suggestion (bottom)



### Suggested components to comply with EN 55032 Conducted and Radiated Emissions Class , EFT & Surge

| Model       | C1, C2                             | L1, L2  | L3  | C3, C8, C9 | C4, C5                    | C6, C7                    |
|-------------|------------------------------------|---|---|------------|---------------------------|---------------------------|
| TEL 12-241x | 470 $\mu$ F / 50 V<br>chemi-con KY | 10 $\mu$ H / 2.2 A / 100 $\Omega$<br>74477410 | 7.5 $\mu$ H / 3 A / 26 m $\Omega$<br>SH-302 | -          | 680 pF / 2 kV<br>1808 X7R | -                         |
| TEL 12-242x | 470 $\mu$ F / 50 V<br>chemi-con KY | 10 $\mu$ H / 2.2 A / 100 $\Omega$<br>74477410 | 7.5 $\mu$ H / 3 A / 26 m $\Omega$<br>SH-302 | -          | -                         | 680 pF / 2 kV<br>1808 X7R |

| Model       | C1, C2                              | L1, L2   | L3   | C3                         | C4, C5, C7                | C6                         | C8, C9 |
|-------------|-------------------------------------|--|--|----------------------------|---------------------------|----------------------------|--------|
| TEL 12-481x | 220 $\mu$ F / 100 V<br>chemi-con KY | 56 $\mu$ H / 0.77 A<br>420 m $\Omega$<br>744774156 | 14 $\mu$ H / 4 A<br>15 m $\Omega$<br>744841414 | 1200 pF / 3 kV<br>1808 X7R | 330 pF / 3 kV<br>1808 X7R | 3300 pF / 3 kV<br>1808 X7R | -      |

| Model       | C1, C2                              | L1, L2   | L3   | C3, C4, C9                | C5, C8                     | C6 | C7                        |
|-------------|-------------------------------------|--|--|---------------------------|----------------------------|----|---------------------------|
| TEL 12-482x | 220 $\mu$ F / 100 V<br>chemi-con KY | 56 $\mu$ H / 0.77 A<br>420 m $\Omega$<br>744774156 | 14 $\mu$ H / 4 A<br>15 m $\Omega$<br>744841414 | 330 pF / 3 kV<br>1808 X7R | 3300 pF / 3 kV<br>1808 X7R | -  | 470 pF / 2 kV<br>1808 X7R |