

General performance, slim, compact design

This wide range of compact three phase filters offer a very economical design solution for the suppression of inverters, frequency converters and powerdrive applications.

Universal voltage and technical specifications ensure the range meets the needs of worldwide power drive systems and are ideally suited for long motor cable runs.

- Current ratings from 7A to 180A
- High attenuation performance
- High voltage 520Vac design for worldwide applications
- Space saving, lightweight construction
- Excellent saturation resistance
- Screw terminals for quick and easy installation

Mechanical specifications

Manufacture: aluminium enclosure

Connections: strip terminal block -

6mm² solid wire, 4mm² flex wire - 7A, 16A

16mm² solid wire, 10mm² flex wire - 30A, 42A

25mm² solid wire, 16mm² flex wire - 55A, 75A

safety terminal block -

50mm² solid wire plus flex wire - 100A, 130A, 150A

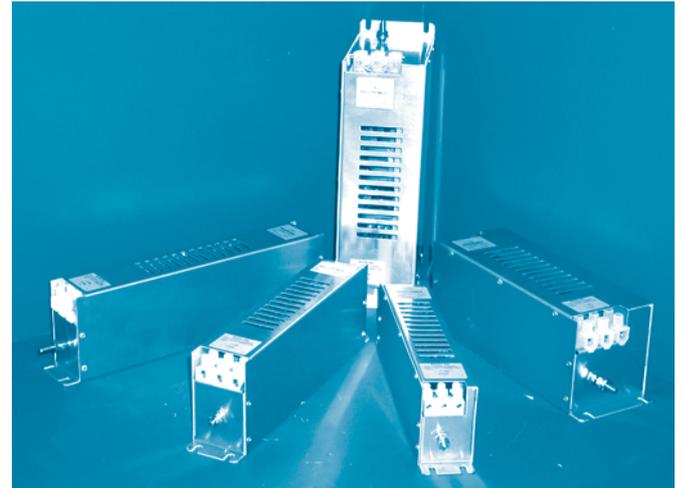
95mm² solid wire plus flex wire - 180A

Dimensions

| Code | A | B | C | D | E | F | G | H | I |
|--------------------|-----|-----|-----|-----|-----|-----|-----|---|-----|
| F.LL.D3.007A.BN.R1 | 190 | 70 | 40 | 160 | 180 | 20 | 4.5 | 2 | M5 |
| F.LL.D3.016A.BN.R1 | 250 | 70 | 45 | 220 | 235 | 25 | 5.4 | 2 | M5 |
| F.LL.D3.030A.BN.R1 | 270 | 85 | 50 | 240 | 255 | 30 | 5.4 | 2 | M5 |
| F.LL.D3.042A.BN.R1 | 310 | 85 | 50 | 280 | 295 | 30 | 5.4 | 2 | M6 |
| F.LL.D3.055A.BN.R1 | 250 | 90 | 85 | 220 | 235 | 60 | 5.4 | 2 | M6 |
| F.LL.D3.075A.BN.R1 | 270 | 135 | 80 | 240 | 255 | 60 | 6.5 | 3 | M6 |
| F.LL.D3.100A.BN.R1 | 270 | 150 | 90 | 240 | 255 | 65 | 6.5 | 3 | M10 |
| F.LL.D3.130A.BN.R1 | 270 | 150 | 90 | 240 | 255 | 65 | 6.5 | 3 | M10 |
| F.LL.D3.150A.BN.R1 | 380 | 170 | 120 | 350 | 365 | 102 | 6.5 | 3 | M10 |
| F.LL.D3.180A.BN.R1 | 380 | 170 | 120 | 350 | 365 | 102 | 6.5 | 3 | M10 |

Filter range

| Code | I _R (A) | L (mH) | C _{X1} (μF) | C _{X2} (μF) | C _Y (μF) | R (MΩ) |
|--------------------|-----------------------|-----------|-------------------------|-------------------------|------------------------|--------------|
| F.LL.D3.007A.BN.R1 | 7 (7.7) | 3x2 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.016A.BN.R1 | 16 (17.5) | 3x1.9 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.030A.BN.R1 | 30 (32.9) | 3x1.4 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.042A.BN.R1 | 42 (46) | 3x1.1 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.055A.BN.R1 | 55 (60.2) | 3x0.7 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.075A.BN.R1 | 75 (82.2) | 3x0.8 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.100A.BN.R1 | 100 (109.5) | 3x0.5 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.130A.BN.R1 | 130 (142.4) | 3x0.4 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.150A.BN.R1 | 150 (164) | 3x0.3 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |
| F.LL.D3.180A.BN.R1 | 180 (197.1) | 3x0.3 | 3x5.6 | 3x3.3 | 1x3.3 | 3x1 + 1x0.66 |



Electrical specifications

Rated voltage (V_R): 520Vac 50/60 Hz

Rated current (I_R): referred to 50°C (40°C)

Leakage current (I_L): normal condition: < 3mA

fault condition: 260mA (only one phase remaining)

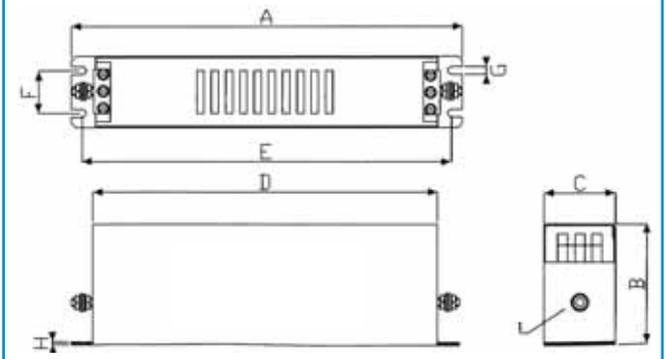
Voltage test (2s.): line to ground 3470Vdc

line to line 1700Vdc

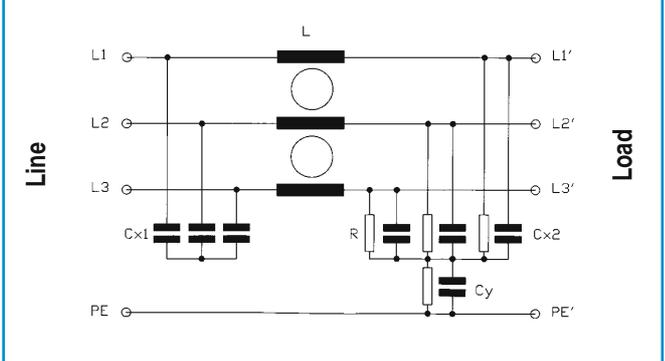
Climatic category: HMF (25/100/21):

temperature range: -25°C to +100°C

Dimensions (mm) and connections



Circuit diagram



Insertion loss (Typical)

--- Symmetrical (line to line) — Asymmetrical (line to ground)

