FLLE2 - Q, Single Phase General Purpose Chassis Mount Filters



Overview

The FLLE2-Q is a general purpose, single phase filter series with medium/high attenuation. They have a chassis mount for fast mounting and a metal case filled with self-extinguishing resin. Fast-on or screw terminals, and options with flexible wire connections are available. In addition, medical versions are available without Y-capacitors for no leakage current.

Applications

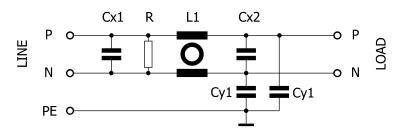
Typical applications include industrial power supplies, office and business equipment, tele- and datacom equipment, household and consumer goods, and medical equipment.



Technical Specifications

| Item | Parameters/ Characteristics | | |
|-------------------|--|--|--|
| Rated Voltage | 300 VAC/VDC | | |
| Rated Frequency | 50 - 60 Hz | | |
| Rated Current | 1 – 32 A | | |
| Rated Temperature | 40°C | | |
| Temperature Range | -25°C to 100°C | | |
| Climate Category | 25/100/21 | | |
| Voltage Test | $P \rightarrow N 1,300 VDC$ $P/N \rightarrow E 2,250 VDC$ | | |

Typical Electrical Schematic





Technical Specifications cont.

| Part Number | Rated Current at 40°C (A) | Leakage Current* (mA) | C _χ 1 (μF) | R (MΩ) | L1 (mH) | C _Y 1 (nF) | C _χ 2 (μF) |
|------------------|------------------------------|--------------------------|--------------------------|-----------|------------|--------------------------|--------------------------|
| FLLE2001AQ(1)(2) | 1 | 0.37 | 0.15 | 1 | 12 | 4.7 | 0.15 |
| FLLE2003AQ(1)(2) | 3 | 0.37 | 0.15 | 1 | 2.5 | 4.7 | 0.15 |
| FLLE2006AQ(1)(2) | 6 | 0.37 | 0.15 | 1 | 1 | 4.7 | 0.15 |
| FLLE2010AQ(1)(2) | 10 | 0.37 | 0.15 | 1 | 1 | 4.7 | 0.15 |
| FLLE2013AQ(1)(2) | 13 | 0.37 | 0.15 | 1 | 0.8 | 4.7 | 0.15 |
| FLLE2016AQ(1)(2) | 16 | 0.37 | 0.15 | 1 | 0.8 | 4.7 | 0.15 |
| FLLE2020AQ(1)(2) | 20 | 0.37 | 0.15 | 1 | 0.8 | 4.7 | 0.15 |
| FLLE2025AQ(1)(2) | 25 | 0.37 | 0.15 | 1 | 0.8 | 4.7 | 0.15 |
| FLLE2032AQ(1)(2) | 32 | 0.79 | 0.68 | 0.22 | 0.8 | 10 | 0.68 |

⁽¹⁾ D = Standard, M = Medical

Approvals

| Standard | Certification Body | File Number | | |
|------------------------|--------------------|-------------|--|--|
| IEC/EN 60939-3 | UL-Demko | E490803 | | |
| ANSI/UL 60939-3-2017 | UL | E490803 | | |
| CAN/CSA C22.2 No. 8-13 | UL | E490803 | | |

Environmental Compliance

KEMET EMI filters are RoHS Compliant.

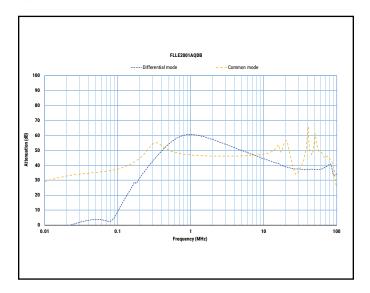


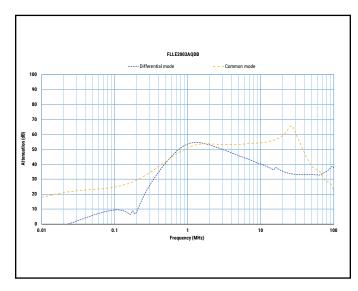
⁽²⁾ B = Fast-on (1-16A), I = Threaded (20-32A), D = Wire (1-32A)

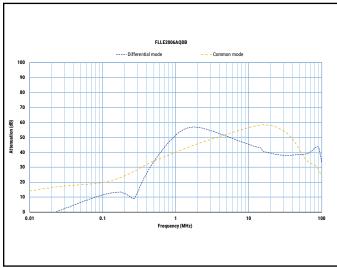
^{*} Leakage current at 250 VAC/50 Hz according to IEC60939-3. Medical version without C_v -capacitors, no leakage current.

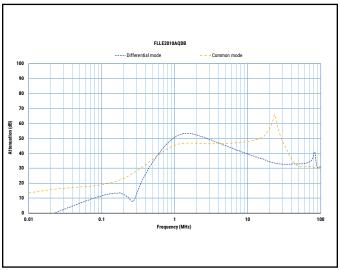


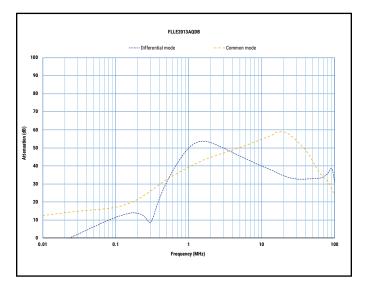
Typical Insertion Loss





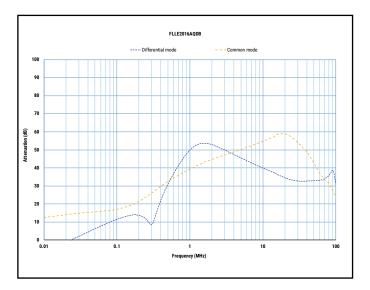


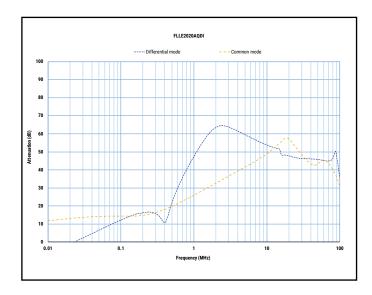


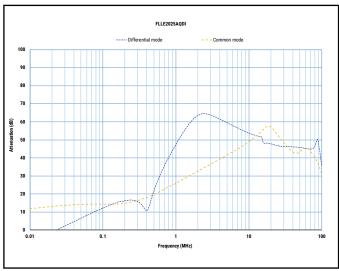


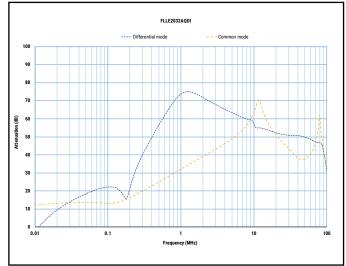


Typical Insertion Loss cont.





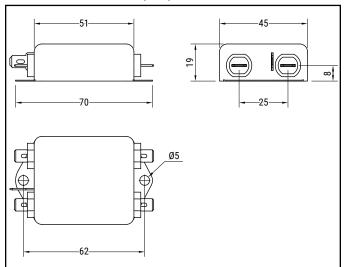




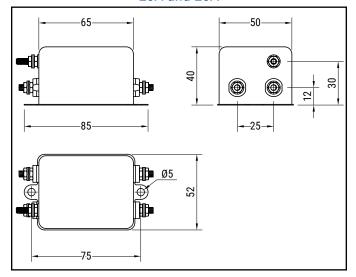


Mechanical Dimensions - Millimeters

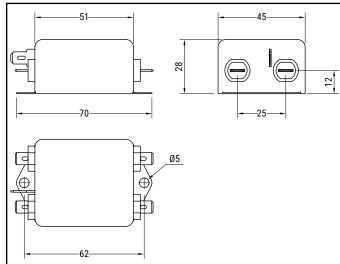
1A, 3A, and 6A



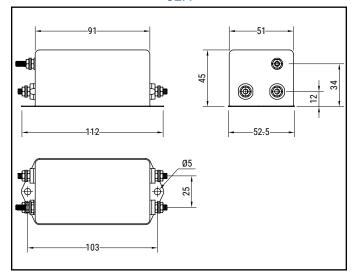
20A and 25A



10A, 13A, and 16A



32A



| Part Number | L (mm) | W (mm) | H (mm) | Weight (g) | Fast-on Terminal | Threaded Terminal | Flexible Wire (mm²) |
|------------------|-----------|-----------|-----------|------------|---------------------|----------------------|------------------------|
| FLLE2001AQ(1)(2) | 51 | 45 | 19 | 95 | 6.3 x 0.8 | | 0.75 |
| FLLE2003AQ(1)(2) | 51 | 45 | 19 | 95 | 6.3 x 0.8 | | 0.75 |
| FLLE2006AQ(1)(2) | 51 | 45 | 19 | 95 | 6.3 x 0.8 | | 1.5 |
| FLLE2010AQ(1)(2) | 51 | 45 | 28 | 130 | 6.3 x 0.8 | | 1.5 |
| FLLE2013AQ(1)(2) | 51 | 45 | 28 | 140 | 6.3 x 0.8 | | 1.5 |
| FLLE2016AQ(1)(2) | 51 | 45 | 28 | 140 | 6.3 x 0.8 | | 2.5 |
| FLLE2020AQ(1)(2) | 65 | 50 | 40 | 290 | | M4 x 0.7 | 2.5 |
| FLLE2025AQ(1)(2) | 65 | 50 | 40 | 290 | | M4 x 0.7 | 2.5 |
| FLLE2032AQ(1)(2) | 91 | 51 | 45 | 415 | | M4 x 0.7 | 4 |

⁽¹⁾ D = Standard, M = Medical

⁽²⁾ B = Fast-on (1-16A), I = Threaded (20-32A), D = Wire (1-32A)



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