# FLLD3 ... PV High-current 3-phase EMC Filter

## Overview

The three phase filter series is intended to be used in energy conversion inverter systems (e.g. photo voltaic and wind power), between the inverter and the line or in motor drive systems. The filters are optimized for geometry and power loss.

As the Capacitance Company, KEMET is only using high quality capacitors in its filter series.

## Technical specifications

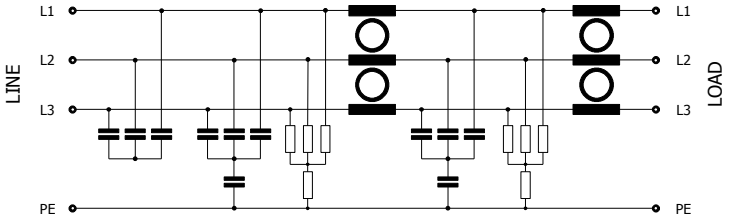
| | |
|---|---|
| Rated voltage | 520 VAC |
| Rated current | 150 – 2500 A |
| Leakage current | < 5 mA *) |
| Rated temperature | 50°C |
| Temperature range | -40°C to +100°C |
| Climate category | 40/100/21 |
| Voltage test | P -> P 2250 VDC |
| | P -> E 3000 VDC |

The FLLE2…PV-series is designed according to IEC/EN 60939 and UL 1283.

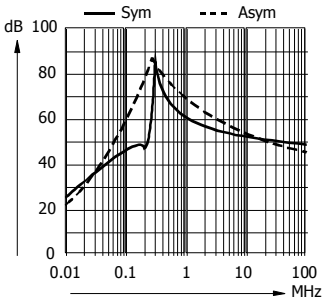
*) Maximum leakage current under normal operating conditions.
If two phases are interrupted, leakage current can be much higher.

| Filter | Rated current @ 50°C (A) | Power loss @ 25°C/DC (W) | Weight (kg) |
|---|---|---|---|
| FLLD3150APVI2 | 150 | 25 | 6 |
| FLLD3180APVI2 | 180 | 35 | 6 |
| FLLD3250APVI2 | 250 | 45 | 7 |
| FLLD3320APVI1 | 320 | 15 | 10 |
| FLLD3400APVI1 | 400 | 25 | 10 |
| FLLD3600APVI1 | 600 | 40 | 11 |
| FLLD3800APVI1 | 800 | 50 | 17 |
| FLLD31K0APV1 | 1000 | 75 | 17 |
| FLLD31K6APVI1 | 1600 | 130 | 26 |
| FLLD32K5APVI1 | 2500 | 250 | 55 |

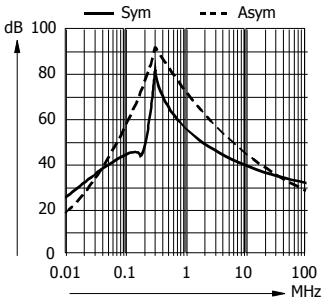


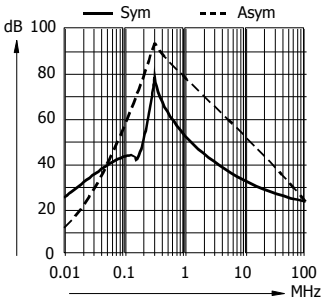

## Typical insertion loss




150 to 250 A



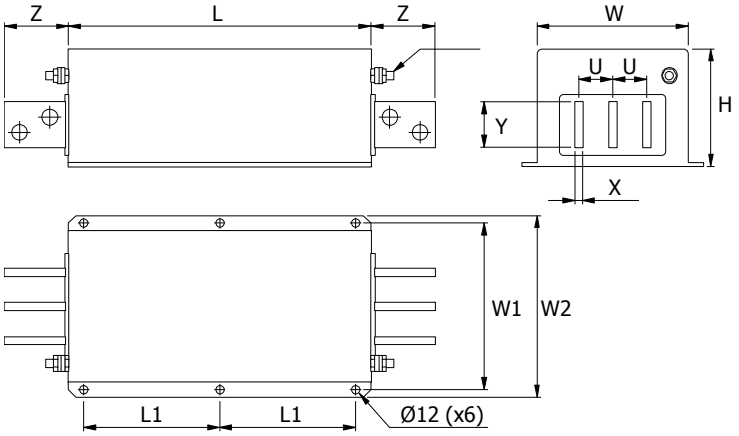

320 to 1000 A



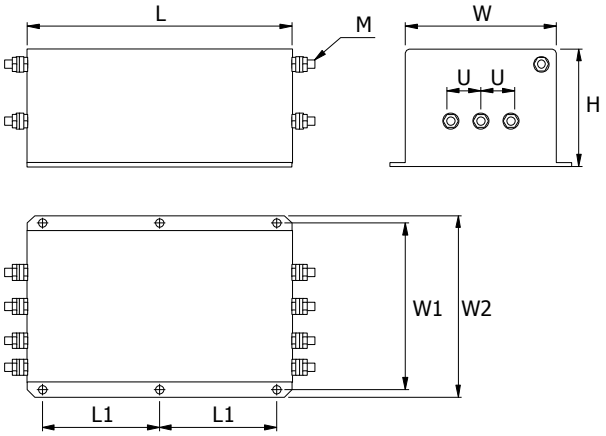

1600 and 2500 A

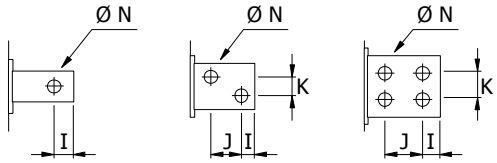
## Mechanical dimensions

FLLD3 ... PVI1 Busbar connections




FLLD3 ... PVI2 Threaded terminals




320 to 1000A 1600 A 2500 A

| Filter | Dimensions in mm | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | W | H | L1 | W1 | W2 | U | X | Y | Z | I | J | K | N | M |
| FLLD3150APVI2 | 300 | 160 | 120 | 120 | 185 | 210 | 50 | | | | | | | | M10 |
| FLLD3180APVI2 | 300 | 160 | 120 | 120 | 185 | 210 | 50 | | | | | | | | M10 |
| FLLD3250APVI2 | 300 | 180 | 125 | 120 | 205 | 230 | 55 | | | | | | | | M12 |
| FLLD3320APVI1 | 300 | 210 | 115 | 120 | 235 | 260 | 60 | 6 | 25 | 45 | 15 | | | 10.5 | M12 |
| FLLD3400APVI1 | 300 | 210 | 115 | 120 | 235 | 206 | 60 | 6 | 25 | 45 | 15 | | | 10.5 | M12 |
| FLLD3600APVI1 | 300 | 210 | 135 | 120 | 235 | 260 | 60 | 8 | 25 | 45 | 15 | | | 10.5 | M12 |
| FLLD3800APVI1 | 350 | 230 | 170 | 145 | 255 | 280 | 60 | 8 | 40 | 55 | 20 | | | 14 | M12 |
| FLLD31K0APVI1 | 350 | 230 | 170 | 145 | 255 | 280 | 60 | 8 | 40 | 55 | 20 | | | 14 | M12 |
| FLLD31K6APVI1 | 400 | 250 | 170 | 170 | 275 | 300 | 60 | 10 | 60 | 95 | 17 | 26 | 26 | 14 | M12 |
| FLLD32K5APVI1 | 600 | 300 | 200 | 250 | 330 | 370 | 100 | 15 | 100 | 100 | 20 | 35 | 35 | 14 | M16 |

## Legal disclaimer notice

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Although we design and manufacture our products to the most stringent quality and safety standards, given the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies) in order to ensure that failure of an electrical component does not result in a risk of personal injury or property damage.

Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated or that other measures may not be required