

MODULAR ELECTROLYTIC CAPACITORS **K1M and K2M type**



After two years of product industrialization and performances improvements respect to the preliminary concept, now Kendeil is proud to announce that is available the **Modular Electrolytic Capacitors** with incredible features in compare with standard electrolytic and film capacitors. The series name are K1M and K2M. The new technology has been developed for demanding industrial applications such as high ripple current motor drives, power supplies and special converters.

The main features of these innovative electrolytic capacitors are:

- Working voltage extension respect to standard electrolytic capacitors (from 500V to 1200V).
- Useful life of 15.000h at 85°C (K1M) and 5.000h at 105°C (K2M)
- Achieve a max ripple current of 250 Arms in order to obtain capacitors suitable for the typical filtering scope.
- Full insulated chassis (UL approved).
- Designed to maximize heat dissipation by heat sink or fluid cooler
- Low capacitance value versus ground
- Achieve an high level of capacitance density in compare to the volume.
- Offer a mechanical design suitable for the application of our end customers.

The series K1M and K2M have been designed with an electrical / mechanical / thermal CAD software able to perform the same simulations carry out for standard Kendeil's electrolytic.

The **Modular Electrolytic Capacitors**, in compare with standard assembled electrolytic solutions (screw terminal and snap in), is able to achieve higher ripple current (+40%) and smaller volume (-50%).

The modular capacitors K1M - K2M represent the apex of the electrolytic capacitors to maximize the performance to unprecedented levels in term of working voltage, miniaturization and control of parasitic parameters such as resistance and series inductance.

The **Modular Electrolytic Capacitors** have an electrical design optimized for three level IGBT, high ripple current applications, +50% of ripple current / volume, longer life on application conditions.

Kendeil offers these solutions with Surge-proof capacitor by high thermal conductive polymeric box, mechanical design optimized for low profile modular machines

Type	Temperature range	Useful Life (hours)	Voltage (Vdc)	Capacitance	Dimensions in mm L x D x H
K1M	-40°C +85°C	15,000 h at 85°C	500 to 1200 Vdc	2500 to 15000µF	293.0 x 123.5 x 113.5
K2M	-40°C +105°C	5,000 h at 105°C	500 to 1000 Vdc	3300 to 14000µF	293.0 x 123.5 x 113.5