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202 PML-ST Aluminum Electrolytic Capacitors

# Compact Screw Terminal Series for Demanding Power Electronics Where a Long Lifetime is Required



## ADVANTAGE

Miniaturized screw terminal aluminum capacitors in smaller case sizes than previous-generation devices, allowing designers to pack more energy storage into less space.

## KEY PRODUCT FEATURES

- ✓ Useful life - long lifetime at applied  $U_r$  and  $I_r$  of 10 000 h @ 85 °C
- ✓ Change / decrease of capacitance after useful life  $\Delta C/C$  of only -15 %
- ✓ Capacitance / voltage per volume - smaller case sizes compared to previous-generation products



## RESOURCES



## MARKETS AND APPLICATIONS



### MOBILITY

- Railway equipment (metro and light rail, trams, etc.)



### ENERGY SECTOR

- Power plants, wind turbines, solar power, harvesting
- HVDC, energy transportation
- Electrolytic and electrostatic storage



### INDUSTRIAL

- Motor drives, welding, cutting and melting inverters, converters
- HVAC, heating, cooling, ventilation, UPS
- Pulsed power supplies



### MEDICAL

- X-ray, MRI, professional medical equipment

## ADDITIONAL BENEFITS

- Lower ESR and higher ripple current for same CV per volume compared to previous-generation products
- Long life compact screw terminal aluminum capacitors series for demanding power electronics segment where a lifetime of 10-15 years is required with an average ambient temperature of 60 °C

## QUICK REFERENCE DATA

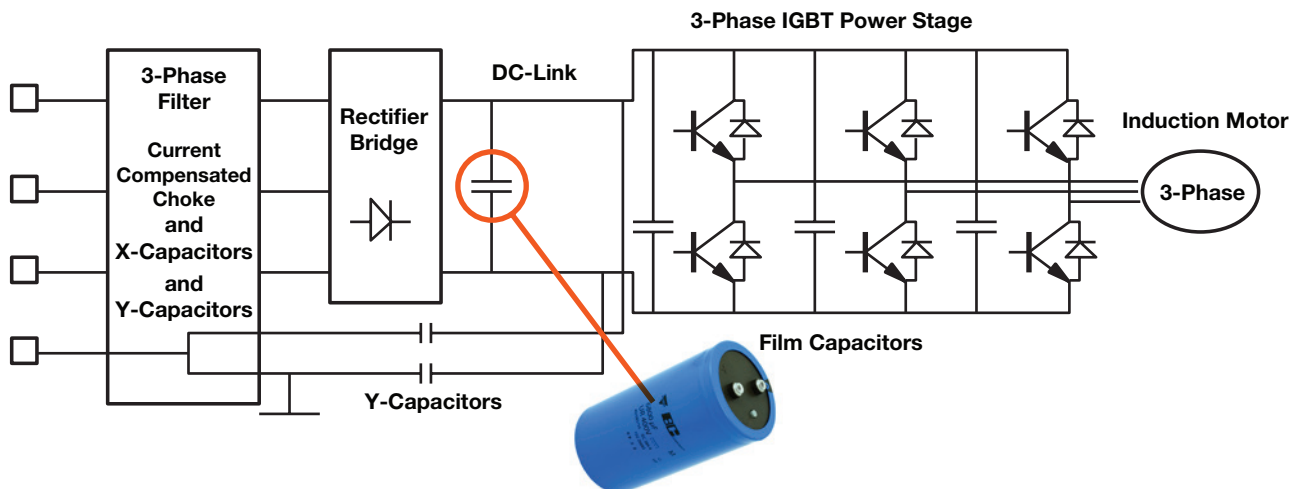
DESCRIPTION	VALUE	DESCRIPTION	VALUE
Nominal case size (Ø D x L in mm)	35 x 60 to 90 x 220	Endurance test at 85 °C	2000 h
Rated capacitance range, C <sub>R</sub>	330 µF to 56 000 µF	Useful life at 85 °C	10 000 h
Tolerance on C <sub>R</sub>	± 20 %	Shelf life at 0 V, 85 °C	1000 h
Rated voltage range, U <sub>R</sub>	200 V to 450 V	Based on sectional specification	IEC 60384-4 / EN 130300
Category temperature range	-40 °C to +85 °C	Climatic category IEC 60068	40 / 085 / 56

## ELECTROLYTIC CAPACITORS IN LARGE MOTOR DRIVE APPLICATIONS

Aluminum capacitors are often used as DC-Link capacitors in motor drives, both in 1-phase and 3-phase designs. The aluminum capacitor is used as an energy buffer to ensure stable operation of the switch mode inverter driving the motor.

The aluminum capacitor also functions as a filter to prevent high frequency components caused by the switch mode inverter from polluting the mains voltage.

### A TYPICAL BLOCK DIAGRAM OF THE MOTOR DRIVE



The 202 PML-ST capacitors are ideally suited for applications that demand high energy storage in a small form factor.

Please [contact us](#) if you would like to purchase or order samples.