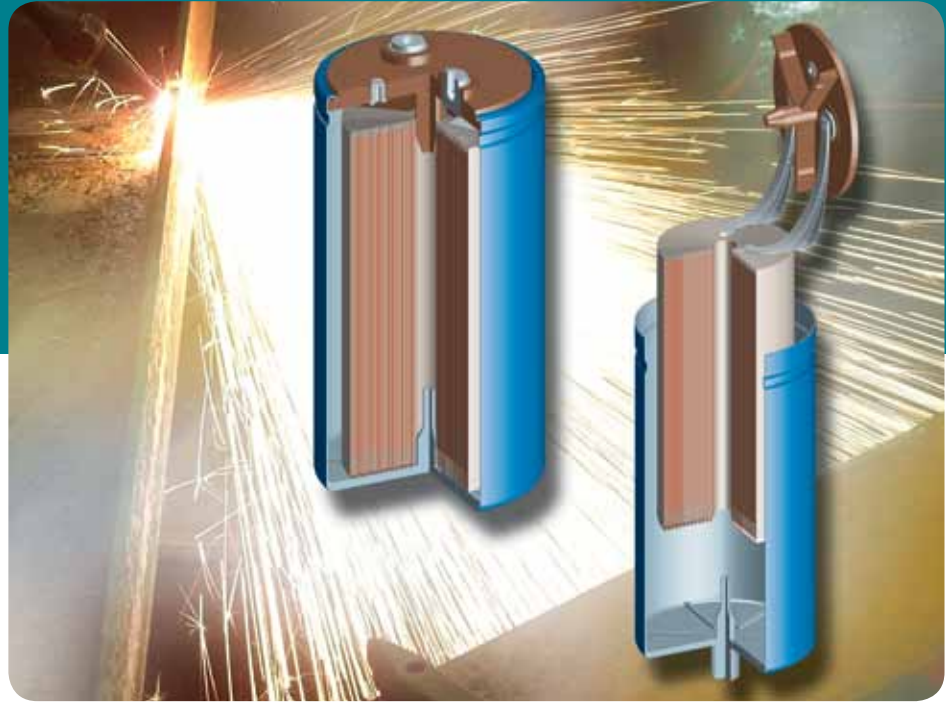




ALUMINUM CAPACITORS

101/102 PHR-ST



Power High Ripple Current Screw Terminals

KEY BENEFITS

- Long useful life: > 10 kh
- High reliability
- High ripple current
- Available with high capacitance/voltage combinations (1 F, 25 V to 10 mF, 450 V; both in 90 mm x 220 mm)
- Usable up to 85 °C
- Available with 8 mm and 13 mm terminals

APPLICATIONS

- Buffering and filtering
- Motor drives, inverters, UPS and traction systems
- Pulsed power supplies

Aluminum Capacitors

Power High Ripple Current Screw Terminals

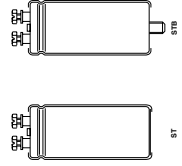


Fig. 1 Component outline

- FEATURES**
- Polarized aluminum electrolytic capacitors, non-solid electrolyte
 - Large types, cylindrical aluminum case, insulated with a blue sleeve
 - Pressure relief in the sealing
 - Long useful life
 - Compliant to RoHS directive 2002/95/EC



DESCRIPTION	VALUE
101	102
Nominal case size (Ø D x L in mm)	35 x 60 to 90 x 220
Rated capacitance range (E6 series), C _R	220 µF to 1 F
Tolerance on C _R	± 20 %
Rated voltage range, U _R	25 V to 100 V 200 V to 450 V
Category temperature range	- 40 °C to + 85 °C
Endurance test at 85 °C	2000 h
Useful life at 85 °C	10 000 h (D ≤ 50 mm) 15 000 h (D ≤ 65 mm)
Useful life at 40 °C, 1.4 x IR applied	400 000 h (D ≤ 50 mm) 600 000 h (D ≥ 65 mm)
Shelf life at D.V. 85 °C	500 h
Based on sectional specification	IEC 60384-4/EN130300
Climatic category IEC 60068	40/085/56

- APPLICATIONS**
- Buffering and filtering
 - Motor drives, inverters, UPS and traction systems
 - Pulsed power supplies
- MARKING**
- The capacitors are marked with the following information:
- Rated capacitance (in µF)
 - Tolerance on rated capacitance, code letter in accordance with IEC 60062 (M for ± 20 %)
 - Rated voltage (in V)
 - Date code (YYMM)
 - Name of manufacturer
 - Code for factory of origin
 - 's' sign to identify the negative terminal, visible from the top and side of the capacitor
 - Code number
 - Climatic category in accordance with IEC 60068

DIMENSIONS in millimeters AND AVAILABLE FORMS

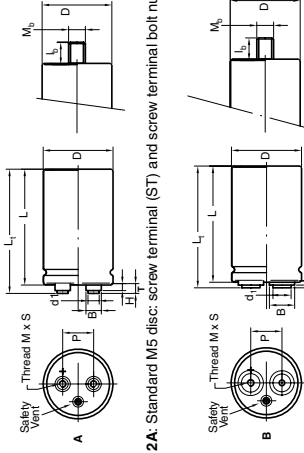


Fig. 2A: Standard M5 disc: screw terminal (ST) and screw terminal bolt nut (STB)

Fig. 2B: High current M6 disc: screw terminal (ST) and screw terminal bolt nut (STB)

Maximum permissible torque which may be applied to the termination screws: 2 Nm for M5; 2.5 Nm for M6
For accessories refer to datasheet "Mounting Accessories".
The capacitors are delivered with screws and washers.

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For technical questions, contact aluminumcaps2@vishay.com

C _R (µF)	U _R (V)									
	25	40	63	100	200	250	350	385	400	450
220	-	-	-	-	-	-	-	35 x 60	35 x 60	35 x 60
330	-	-	-	-	-	-	35 x 60	-	35 x 60	-
470	-	-	-	-	-	35 x 60	-	35 x 80	35 x 80	-
680	-	-	-	-	35 x 60	35 x 80	-	-	35 x 105	-
1000	-	-	-	-	35 x 80	35 x 80	-	-	50 x 80	50 x 80
1500	-	-	-	-	35 x 105	35 x 105	-	-	50 x 105	50 x 105
2200	-	-	-	-	50 x 80	50 x 80	50 x 105	50 x 105	50 x 105	50 x 105
3300	-	-	-	35 x 60	50 x 80	50 x 105	65 x 105	65 x 105	65 x 105	65 x 105
4700	-	-	35 x 60	35 x 80	50 x 105	65 x 105	65 x 105	76 x 105	76 x 105	76 x 146
5600	-	-	-	35 x 105	65 x 105	76 x 105	76 x 146	76 x 146	76 x 146	76 x 146
6800	-	-	35 x 60	35 x 105	65 x 105	76 x 105	-	-	76 x 146	76 x 220
10 000	-	35 x 60	35 x 80	50 x 80	76 x 105	76 x 105	76 x 105	76 x 146	76 x 146	90 x 146
15 000	35 x 60	35 x 60	35 x 105	50 x 105	76 x 146	76 x 146	-	-	90 x 146	90 x 220
22 000	35 x 60	35 x 80	50 x 80	65 x 105	76 x 220	76 x 220	-	-	90 x 220	-
33 000	50 x 80	50 x 80	65 x 105	76 x 105	90 x 146	90 x 146	-	-	-	-
47 000	35 x 105	50 x 80	65 x 105	76 x 146	90 x 220	90 x 220	-	-	-	-
68 000	50 x 80	50 x 105	76 x 105	76 x 146	76 x 146	76 x 146	-	-	-	-
100 000	50 x 105	65 x 105	76 x 146	76 x 220	76 x 220	76 x 220	-	-	-	-
150 000	65 x 105	76 x 105	76 x 146	90 x 146	90 x 146	90 x 146	-	-	-	-
220 000	76 x 105	76 x 146	90 x 220	90 x 220	90 x 220	90 x 220	-	-	-	-
330 000	76 x 146	76 x 220	90 x 146	90 x 220	90 x 220	90 x 220	-	-	-	-
470 000	76 x 220	90 x 146	90 x 220	90 x 220	90 x 220	90 x 220	-	-	-	-
680 000	90 x 146	90 x 220	90 x 220	90 x 220	90 x 220	90 x 220	-	-	-	-
1 000 000	90 x 220	90 x 220	90 x 220	90 x 220	90 x 220	90 x 220	-	-	-	-

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