



Film capacitors – AC capacitors

Motor run capacitors

420 V; class B; 70 °C / 450 V; class C; 70 °C

Series/Type: **B32335 – Dual MotorCap™**

Date: January 2008
Version: 2.0

Construction

- Dielectric: polypropylene film
- Aluminum can
- Soft polyurethane resin

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection device
- Highest safety level P2 to IEC 60252-1 2001-02
- High insulation resistance
- Capacitor **C**  UL files E106388

Typical applications

- For general sine wave applications, mainly as motor run capacitor

Terminals

- Single fast-on terminals: 6.3 × 0.8 mm, double fast-on terminals: 6.3 × 0.8 mm and quadruple fast-on terminals: 6.3 × 0.8 mm

Mounting parts

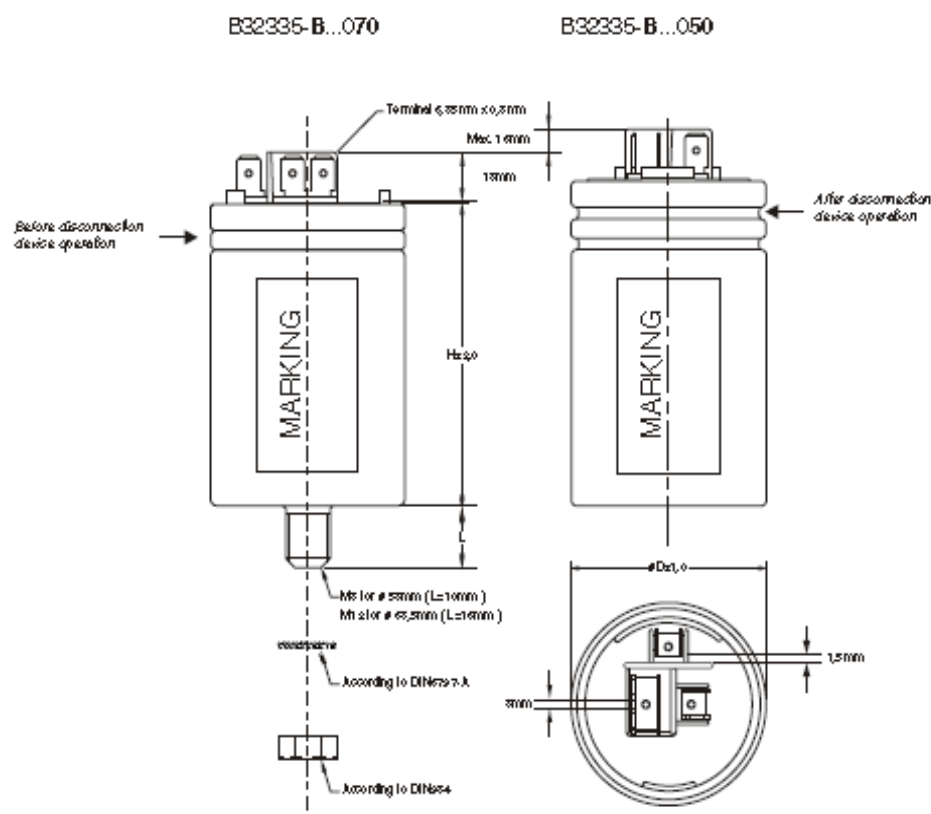
- Threaded stud at bottom of can (max. torque = 5 Nm of M8) as an option.



Technical data and specifications	
Reference standards	IEC 60252-1 2001-02, EN 60252 2001, UL 810
Safety class to IEC 60252-1 2001-02	P2
Life expectancy to IEC 60252 2001	420 V: 10000 h (class B) 450 V: 3000 h (class C)
UL 810 file E 106388 for Nashik and Gravatai plant	Approved Component 10000 AFC protected
Rated capacitance C_R	15+2 ... 50+8
Tolerance	±5%
Rated voltage V_R	420 V AC, 450 V AC
Rated frequency f_R	50 / 60 Hz

Maximum ratings	
Maximum permissible voltage $V_{\max}$	$1.1 \cdot V_R$ (V_R = Rated voltage)
Maximum permissible current $I_{\max}$	$1.3 \cdot I_R$ (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	$2 \cdot V_R$, 60 s (type test) $2 \cdot V_R$, 2 s (routine test)
Insulation voltage terminals to case	2000 V AC, 60 s (type test) 2000 V AC, 2 s (routine test)
Insulation resistance R_{ins} or time constant τ at 20 °C; rel. humidity $\leq 65\%$ (minimum as-delivered values)	3000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 1.0 \cdot 10^{-3}$ (120 Hz)
Maximum rate of voltage rise $dV/dt_{\max}$	10 V/ μs
Climatic data	
Climatic category	25/070/21 to IEC 60068-1
Lower category $T_{\min}$	-25 °C
Upper category $T_{\max}$	+70 °C
Damp heat test t_{test}	21 days
Mechanical and thermal properties of terminal top disk material	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-11 Test temp 550 °C for $I_R \leq 0.5$ A Test temp 850 °C for $I_R > 0.5$ A	Self-extinguishing within 30 seconds of withdrawing glow wire
Tracking test to IEC 60112 solution A	> 250 V
Compatibility to RoHS	
Compliance to directive 2002/95/EC	

Dimensional drawings



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Ordering codes and packing units

V _R V AC	C _R μF	Max. dimensions d × l mm	Ordering code	Packing units pcs.
420 / 450	15+2	53 × 70	B32335I5020J0*0	50
	15+2.5	53 × 70	B32335I5076J0*0	50
	15+3	53 × 70	B32335I5021J0*0	50
	15+4	53 × 70	B32335I5022J0*0	50
	15+5	53 × 70	B32335I5023J0*0	50
	17.5+2.5	53 × 70	B32335I5077J0*0	50
	17.5+4	53 × 70	B32335I5024J0*0	50
	17.5+5	53 × 70	B32335I5025J0*0	50
	20+2	53 × 70	B32335I5027J0*0	50
	20+2.5	53 × 70	B32335I5057J0*0	50
	20+3	53 × 70	B32335I5028J0*0	50
	20+4	53 × 70	B32335I5050J0*0	50
	20+5	53 × 70	B32335I5029J0*0	50
	22+5	53 × 80	B32335I5030J0*0	50
	25+2	63.5 × 70	B32335I5031J0*0	50
	25+2.5	53 × 80	B32335I5054J0*0	50
	25+3	53 × 80	B32335I5032J0*0	50
	25+4	53 × 80	B32335I5033J0*0	50
	25+5	53 × 80	B32335I5034J0*0	50
	25+7.5	53 × 80	B32335I5019J0*0	50
	25+8	53 × 80	B32335I5051J0*0	50
	25+9.5	53 × 80	B32335I5053J0*0	50
	25+10	53 × 80	B32335I5056J0*0	50
	25+15	53 × 105	B32335I5098J0*0	50
	30+2	53 × 80	B32335I5035J0*0	50
	30+3	53 × 80	B32335I5073J0*0	50
	30+4	53 × 80	B32335I5036J0*0	50
	30+5	53 × 80	B32335I5037J0*0	50
	30+7.5	53 × 80	B32335I5066J0*0	50
	30+10	53 × 105	B32335I5038J0*0	50

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420 / 450	30+12	53 × 105	B32335I5072J0*0	50
	30+15	53 × 105	B32335I5067J0*0	50
	35+2	63.5 × 70	B32335I5081J0*0	28
	35+3	53 × 80	B32335I5059J0*0	50
	35+5	53 × 105	B32335I5040J0*0	50
	35+6	53 × 105	B32335I5085J0*0	50
	35+8	53 × 105	B32335I5058J0*0	50
	35+9.5	53 × 105	B32335I5052J0*0	50
	35+10	53 × 105	B32335I5041J0*0	50
	35+12	53 × 105	B32335I5079J0*0	50
	35+15	53 × 105	B32335I5074J0*0	50
	40+4	53 × 105	B32335I5090J0*0	50
	40+5	53 × 105	B32335I5042J0*0	50
	40+7.5	53 × 105	B32335I5086J0*0	50
	40+8	53 × 105	B32335I5047J0*0	50
	40+10	53 × 105	B32335I5043J0*0	50
	40+12	53 × 105	B32335I5075J0*0	50
	40+15	53 × 105	B32335I5078J0*0	50
	45+4	63.5 × 82	B32335I5106J0*0	28
	45+5	53 × 105	B32335I5044J0*0	50
	45+8	53 × 105	B32335I5071J0*0	50
	45+10	53 × 105	B32335I5045J0*0	50
	50+4	63.5 × 82	B32335I5046J0*0	28
	50+5	53 × 105	B32335I5048J0*0	50
	50+8	53 × 105	B32335I5049J0*0	50

Composition of ordering code:

*: Construction of can and plastic top

5 – Aluminum can

7 – Aluminum can with M8 / M12 bolt:

M8 fixing threaded bolt for diameter = 53 mm, M12 bolt for diameter = 63.5 mm

 Please read "Applications warning, installation and maintenance instructions" and the "General Safety Data Sheet for Power Capacitors" issued by ZVEI, which are available on the internet at www.epcos.com/ac_capacitors, to ensure optimum performance and to prevent products from failing, and in worst case, bursting and fire. Information given in the data sheet reflects typical specifications. You are kindly requested to approve our product specifications or request our approval for your specification before ordering.

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