



Film capacitors – AC capacitors

Motor run capacitors

400 V; class B; 85 °C / 450 V; class C; 85 °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
- **C_R** UL file E 106388

Typical applications

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



Terminals

- Double fast-on terminals: 6.3 × 0.8 mm and quadruple fast-on terminals: 6.3 × 0.8 mm

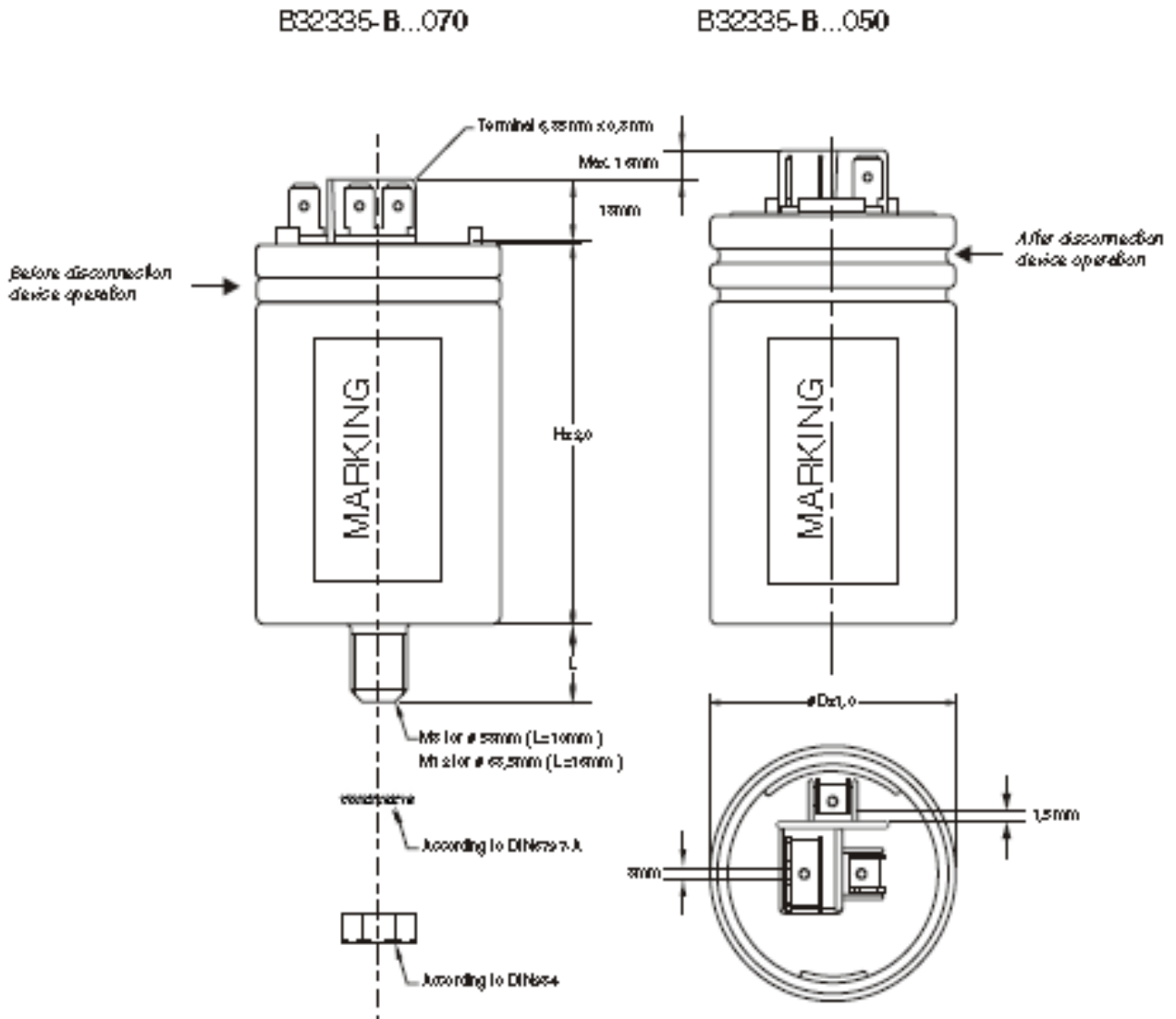
Mounting parts (optional)

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

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	400 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	400 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/ μ s
Climatic data	
Climatic category	25/085/21 to IEC 60068-1
Lower category T_{min}	-25 °C
Upper category T_{max}	+85 °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
Top disk material	Self-extinguishing within 30 seconds of withdrawing glow wire
<ul style="list-style-type: none"> ■ 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 	
Tracking test to IEC 60112 solution A	> 250 V
Compatibility to RoHS	
Compliance to directive 2002/95/EC	

Dimensional drawings



Ordering codes and packing units

V_R	C_R	Max. dimensions $d \times l$	Ordering code	Packing units
V AC	μF	mm		pcs.
400 / 450	15+2	53 × 70	B32335B4020J0*0	on request
	15+2.5	53 × 70	B32335B4076J0*0	on request
	15+3	53 × 70	B32335B4021J0*0	on request
	15+4	53 × 70	B32335B4022J0*0	on request
	15+5	53 × 70	B32335B4023J0*0	on request
	17.5+2.5	53 × 70	B32335B4077J0*0	on request
	17.5+4	53 × 70	B32335B4024J0*0	on request
	17.5+5	53 × 70	B32335B4025J0*0	on request
	20+2	53 × 70	B32335B4027J0*0	on request
	20+2.5	53 × 70	B32335B4057J0*0	on request
	20+3	53 × 70	B32335B4028J0*0	on request
	20+4	53 × 70	B32335B4050J0*0	on request
	20+5	53 × 70	B32335B4029J0*0	on request
	22+5	53 × 80	B32335B4030J0*0	on request
	25+2	63.5 × 70	B32335B4031J0*0	on request
	25+3	53 × 80	B32335B4032J0*0	on request
	25+4	53 × 80	B32335B4033J0*0	on request
	25+5	53 × 80	B32335B4034J0*0	on request
	25+7.5	53 × 80	B32335B4019J0*0	on request
	25+8	53 × 80	B32335B4051J0*0	on request
	25+9.5	53 × 80	B32335B4053J0*0	on request
	25+10	53 × 80	B32335B4056J0*0	on request
	25+15	53 × 105	B32335B4098J0*0	on request
	30+2	53 × 80	B32335B4035J0*0	on request
	30+3	53 × 80	B32335B4073J0*0	on request
	30+4	53 × 80	B32335B4036J0*0	on request
	30+5	53 × 80	B32335B4037J0*0	on request
	30+7.5	53 × 80	B32335B4066J0*0	on request
	30+10	53 × 105	B32335B4038J0*0	on request

V_R V AC	C_R μF	Max. dimensions d x l mm	Ordering code	Packing units pcs.
400 / 450	30+12	53 × 105	B32335B4072J0*0	on request
	30+15	53 × 105	B32335B4067J0*0	on request
	35+2	63.5 × 70	B32335B4081J0*0	on request
	35+3	53 × 80	B32335B4059J0*0	on request
	35+5	53 × 105	B32335B4040J0*0	on request
	35+6	53 × 105	B32335B4085J0*0	on request
	35+8	53 × 105	B32335B4058J0*0	on request
	35+9.5	53 × 105	B32335B4052J0*0	on request
	35+10	53 × 105	B32335B4041J0*0	on request
	35+12	53 × 105	B32335B4079J0*0	on request
	35+15	53 × 105	B32335B4074J0*0	on request
	40+4	53 × 105	B32335B4090J0*0	on request
	40+5	53 × 105	B32335B4042J0*0	on request
	40+7.5	53 × 105	B32335B4086J0*0	on request
	40+8	53 × 105	B32335B4047J0*0	on request
	40+10	53 × 105	B32335B4043J0*0	on request
	40+12	53 × 105	B32335B4075J0*0	on request
	40+15	53 × 105	B32335B4078J0*0	on request
	45+4	53 × 105	B32335B4106J0*0	on request
	45+5	53 × 105	B32335B4044J0*0	on request
	45+8	53 × 105	B32335B4071J0*0	on request
	45+10	53 × 105	B32335B4045J0*0	on request
	50+4	63.5 × 80	B32335B4046J0*0	on request
50+5	53 × 105	B32335B4048J0*0	on request	
50+8	53 × 105	B32335B4049J0*0	on request	

Composition of ordering code:

*: Construction of can and plastic top

5 – Aluminum can, UL 94 V2 top

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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