Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type:	**Dual MotorCap - 450 V**
Ordering code:	**B32335**
Date:	July 2016
Version:	6

EPCOS AG is a TDK Group Company.

Construction

- Metallized polypropylene film
- Aluminum can with plastic top
- Filling material: soft polyurethane resin

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection safety device
- S2 safety class as per IEC-60252-1(ed-2) am1
- High insulation resistance
- EN 60335-1 compliance on request

Applications

- For general sine wave application, mainly as motor run

Terminals

- Single fast-on 6.3 x 0.8 mm for FAN (F)
- Double fast-on 6.3 x 0.8 mm for HERM (H)
- Quadruple fast-on 6.3 x 0.8 mm for COMMON (C)
- Other terminations on request

Mounting parts (optional)

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

Technical data and specifications	
Reference standards	EN60252-1: 2011/A1: 2013 , IEC 60252-1 (ed 2) am1 UL 810,
Safety class to IEC 60252-1 2013	S2
Life expectancy to IEC 60252-1 2013	450 V : 10000 h (Class B)
UL 810 file E106388	Approved Component, 10000 AFC protected up to 450 V
Rated capacitance C_R	10+1uF to 60+10uF
Tolerance Tx	+/- 5%
Rated voltage V_{rms}	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)

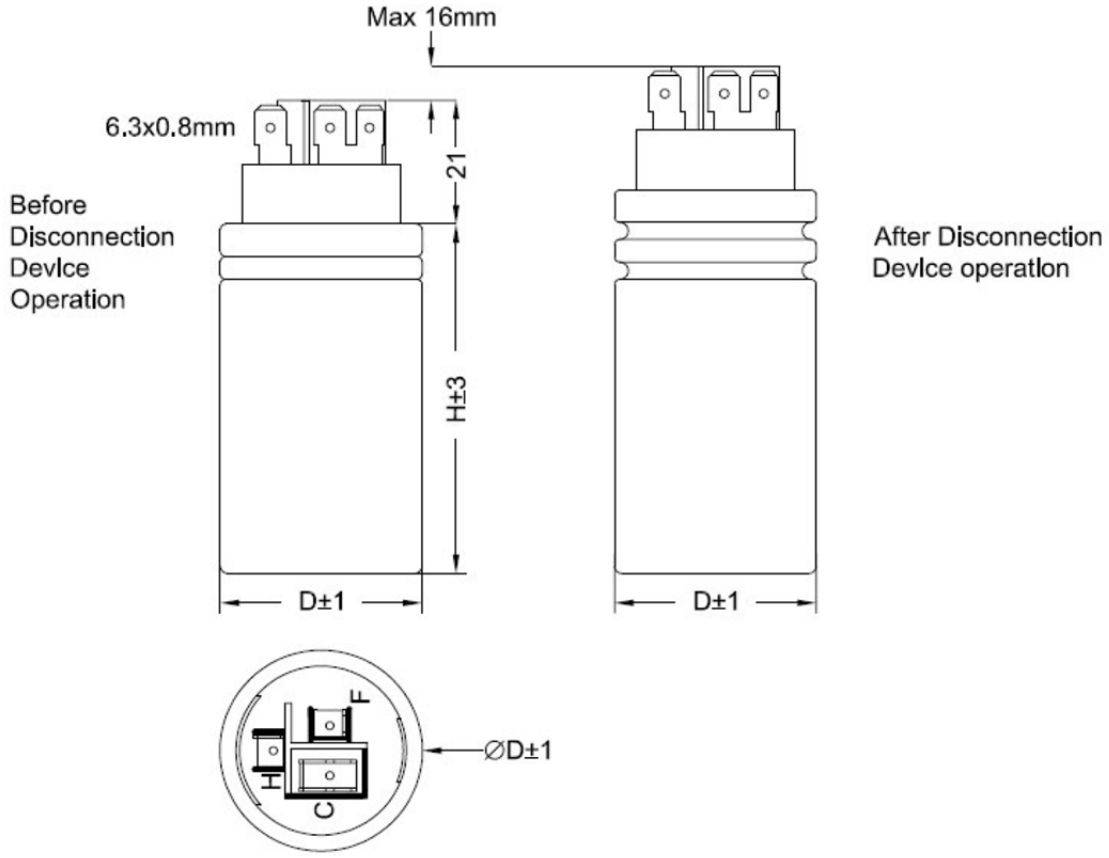
Test data	
AC test voltage terminal to terminal V_{TT}	2 • V_R, 2 s (routine test) 2 • V_R, 60 s (type test)
AC test voltage terminal to can V_{TC}	2 kVAC , 2 s (routine test) 2 kVAC , 60 s (type test)
Insulation resistance R_{ins} or time constant at +20 ℃, rel. Humidity≤65% (minimum as-delivered values)	3000 s
Dissipation factor tan δ at +20 ℃	≤ 7 • 10^{-3} (1 kHz)
Maximum rate of voltage rise dV/dt_{max}	10 V/µs
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 insulator material	
Ball pressure test to IEC 60309-1 sec. 27.3	At +125 °C
Plastic can and top disk material	UL 94 V2 minimum
Option A: ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-10/11 Test temperature +550 °C for I_R ≤ 0.5A Test temperature +850 °C for I_R > 0.5A	Self-extinguish within 30 seconds of withdrawing glow wire without igniting wrapping tissue of GWT
Option B: ■ UL 94 V2/V0 compatible ■ Glow wire test to IEC60335-1 Test temperature +750 °C ■ Part is compatible to EN 60335-1	Self-extinguish within 2 seconds of withdrawing glow wire without igniting wrapping tissue of GWT
Tracking test to IEC 60112 solution A	> 250 V
Compatibility to RoHS	
Compliance to directive 2011/65/EU	RoHS compatible

Approvals see table for approved ratings	
UL 810 E106388 c UL us	Approved component 10000 AFC, protected up to 450V
TÜV 450 V / +85°C : 10000 h (Class B) TÜV	Approved, 450 V / +85°C : 10000 h (Class B)
CE	Compliance to LV directive 2014/35/EU
Logistics	
Delivery mode	■ EU palette as standard ■ Cardboard tape on palette ■ Pack unit, see dimension table

Display of ordering codes for EPCOS products

The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products**. Detailed information can be found on the Internet under www.epcos.com/orderingcodes

Dimensional drawing



Ordering codes

Rated voltage V_R	Rated capacitance C_R	Dimensions D x H	Ordering code	Packing unit
V AC	µF	mm		
450	10+1	40 x 70	B32335I6116J0#0	36
	10+1.5	40 x 70	B32335I6116J5#0	36
	10+2	40 x 70	B32335I6126J0#0	36
	12+1.5	40 x 70	B32335I6136J5#0	36
	12+2	40 x 70	B32335I6146J0#0	36
	12+5	40 x 70	B32335I6176J0#0	36
	13+1.5	40 x 70	B32335I6146J5#0	36
	13+1.8	40 x 70	B32335I6146J8#0	36
	13+2	40 x 70	B32335I6156J0#0	36
	13+5	40 x 70	B32335I6186J0#0	36
	15+1.5	40 x 70	B32335I6166J5#0	36
	15+2	40 x 70	B32335I6176J0#1	36
	15+2.5	40 x 70	B32335I6176J5#0	36
	15+3	40 x 70	B32335I6186J0#1	36
	15+4	40 x 70	B32335I6196J0#0	36
	15+5	40 x 70	B32335I6206J0#0	36
	17+1.8	40 x 80	B32335I6186J8#0	36
	20+ 1.5	40 x 80	B32335I6216J5#0	36
	20+2	40 x 80	B32335I6226J0#0	36
	20+4	40 x 80	B32335I6246J0#0	36
	20+5	40 x 80	B32335I6256J0#0	36
	25+1.5	40 x 80	B32335I6266J5#0	36
	25+2	40 x 80	B32335I6276J0#0	36
	25+2.5	40 x 80	B32335I6276J5#0	36
	25+3	40 x 80	B32335I6286J0#0	36
	25+4	40 x 80	B32335I6296J0#0	36
	25+5	40 x 80	B32335I6306J0#0	36
	25+7.5	40 x 94	B32335I6326J5#0	36
	25+8	40 x 94	B32335I6336J0#0	36
	25+10	40 x 94	B32335I6356J0#0	36
	30+1.5	40 x 103	B32335I6316J5#0	36
	30+1.8	40 x 103	B32335I6316J8#0	36
	30+2	40 x 103	B32335I6326J0#1	36
	35+1.5	40 x 103	B32335I6366J5#0	36
	35+2	40 x 103	B32335I6376J0#1	36

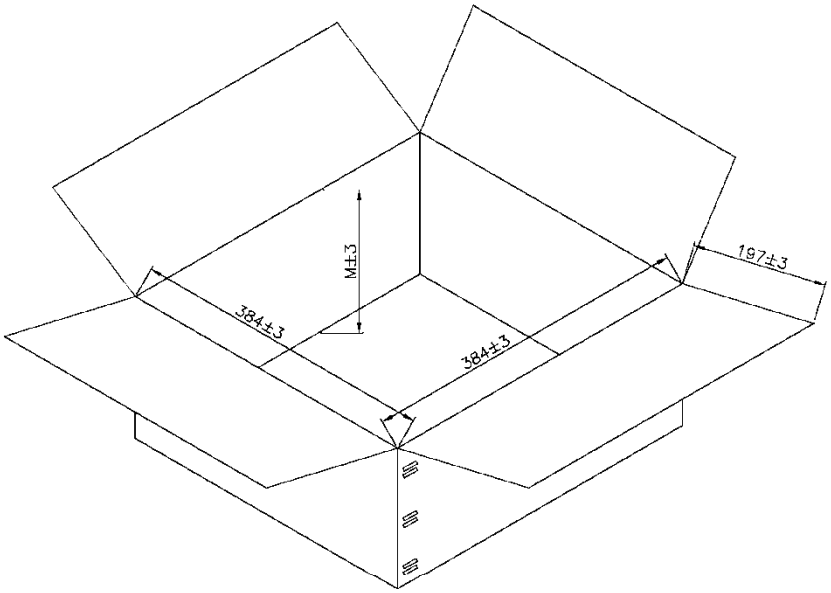
Rated voltage V_R V AC	Rated capacitance C_R µF	Dimensions D x H mm	Ordering code	Packing unit pcs
450	35+3	40 x 103	B32335I6386J0#0	36
	35+5	40 x 103	B32335I6406J0#0	36
	35+6	40 x 103	B32335I6416J0#0	36
	35+8	40 x 103	B32335I6436J0#0	36
	35+10	40 x 103	B32335I6456J0#0	36
	40+5	45 x 103	B32335I6456J0#1	36
	45+4	45 x 103	B32335I6496J0#0	25
	45+5	45 x 103	B32335I6506J0#0	25
	46+6	45 x 103	B32335I6526J0#0	25
	45+10	45 x 103	B32335I6556J0#0	25
	50+4	45 x 103	B32335I6546J0#0	25
	50+5	45 x 103	B32335I6556J0#1	25
	50+10	53 x 80	B32335I6606J0#0	25
	55+5	53 x 105	B32335I6606J0#1	25
	60+10	53 x 105	B32335I6706J0#0	25

Composition of ordering code

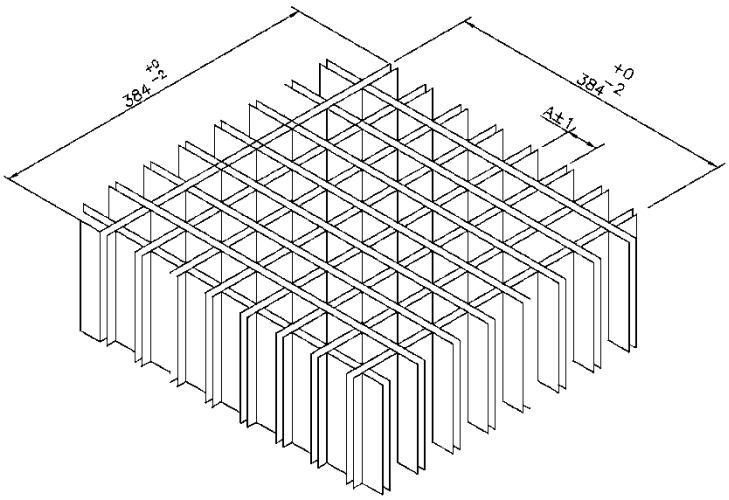
#: Construction of can and plastic top

5 Aluminum can, option A: UL94V2 Top disc
6 Aluminum can, option B: UL94V2/V0 Top disc / IEC60335-1
7 Aluminum can, with M 8 bolt, option A: UL 94 V2 top disc
8 Aluminum can, with M 8 bolt, option B: UL 94 V2/V0 top disc / IEC 60335-1

Packing box



M = H(Capacitor height) + Terminal height + 10mm min.



⚠ Please read “Applications warning, installation and maintenance instructions” and the “ZVEI - General safety recommendations for power capacitors”, 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.

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