



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type:	CBB65A-1
Ordering code:	B33331I6*
Date:	Sept. 2021
Version:	1.0

Constructions

- Metallized polypropylene film
- Aluminum can and top
- Filling material: Resinol

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection safety device
- S2 safety class as per IEC 60252-1:2010/AMD1:2013
- High insulation resistance
- EN 60335-1 (Ed 6, 2020) compliance

Application

- For general sine wave application, mainly as motor run

Terminals

- 2+2 fast-on terminals 6.3 x 0.8mm # 250 style, other on request





Mounting parts (optional)

- Threaded stud at bottom of can (M8) as option



Technical data and specifications

Reference standards	DIN EN 60252-1:2014-07; EN 60252-1:2011 + A1:2013; IEC 60252-1:2010/AMD1:2013 UL 810 (Ed6, 2019)
Safety class to IEC 60252-1:2010/AMD1:2013	S2
Life expectancy to IEC 60252-1:2010/AMD1:2013	450 V : 10000 h (Class B)
UL 810 (Ed6, 2019)	Approved component
Rated capacitance C_R	See table ordering code, page 5
Tolerance T_x	± 5%, other tolerance on request
Rated voltage V_{rms}	450 V AC, others on request
Rated frequency f_R	50/60 Hz

Test data	
AC test voltage terminal to terminal V_{TT}	$2.0 \cdot V_R$, 2 s (routine test)
AC test voltage terminal to can V_{TC}	3000 V AC, 2 s (routine test)
Insulation resistance R_{ins} or time constant at 20 °C, rel. Humidity $\leq 65\%$ (minimum as-delivered values)	10000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 7 \times 10^{-3}$ (1 kHz)
Maximum rate of voltage rise dV/dt_{max}	10 V/ μ s
Climatic data	
Climatic category	40/85/21 to IEC 60068-1 (2013)
Lower category T_{min}	-40° C
Upper category T_{max}	+85° C
Damp heat test t_{test}	21 days
Mechanical and thermal properties of terminal insulator material	
Terminal insulation plastic material <ul style="list-style-type: none"> ■ UL 94 (Ed6, 2013) compatible ■ Compliance to Glow wire test as per IEC60335-1 (Ed6, 2020) 	
Compatibility to RoHS	
Compliance to directive 2011/65/EU	
Approvals: See table for approved ratings	
UL File : E238746 	Approved component 10,000 AFC
Certificate no: 40052996 	Approved from 1 μ F to 20 μ F, 450 V AC, 85 °C: 10000 h (Class B)
	Compliance to LV directive 2014/35/EU

Dimensional drawings

Figure 1

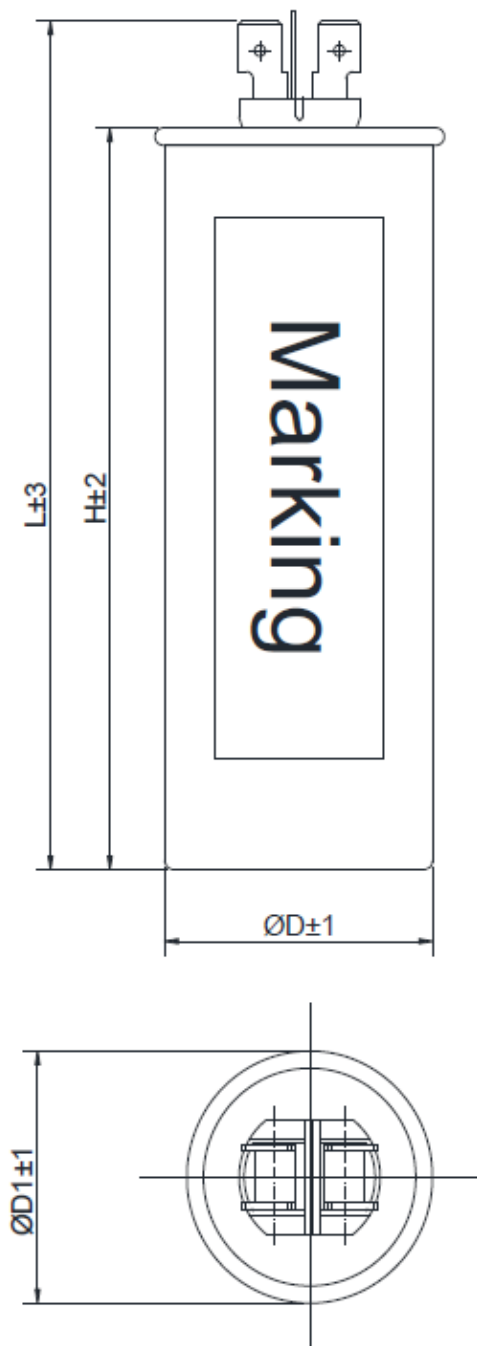
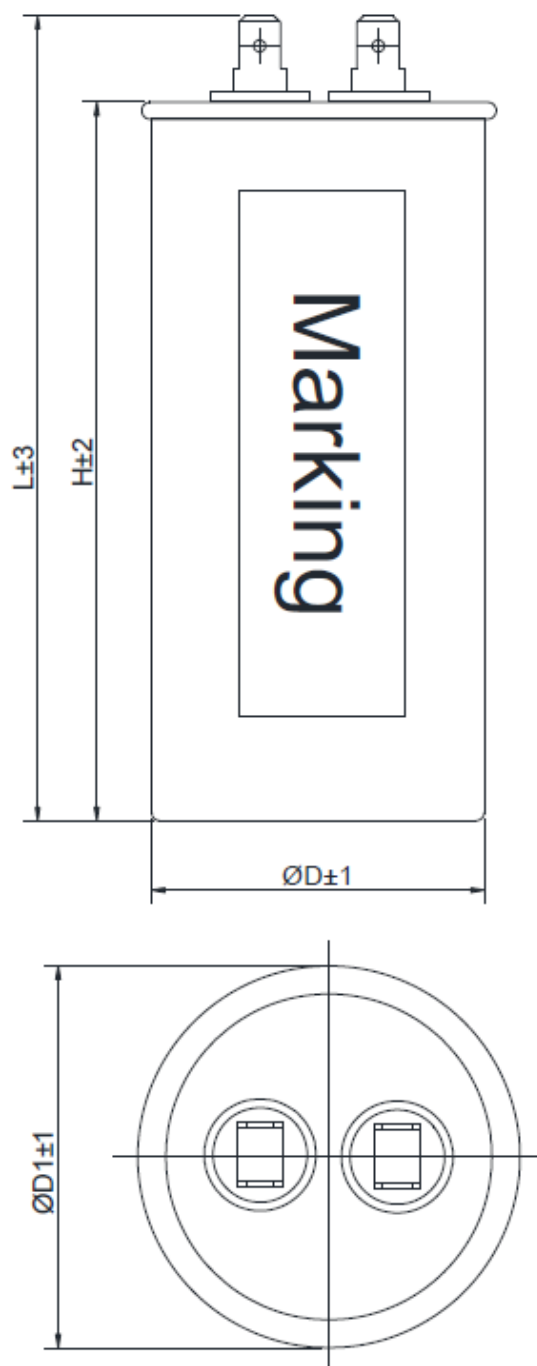
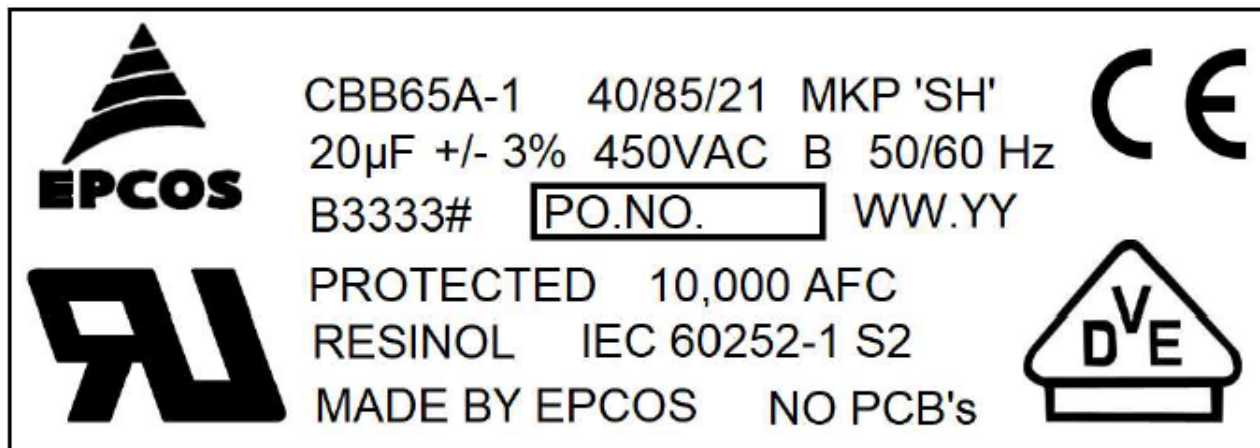


Figure 2



Marking information

Nomenclature in the above marking information:

CBB65A-1 : Product family
 PO Number : Production order number
 B3333# : Series
 40/85/21 : Lower temperature limit: -40° C
 : Upper temperature limit: 85° C
 : Damp heat test: 21 days
 S2: Safety class as per IEC60252-1
 B: Life expectancy as per IEC60252-1
 SH : Self Healing type MPP capacitor
 WW : Week code
 YY : Year code

Ordering code

V _R	Capacitance	Can Ø D mm	Can Height H mm	Can Length L mm	Drawing no.	Ordering code	Packing unit	Approvals
V AC	µF							
450	1	30	55	73	1	B33331I6105J0*X	100	VDE/UL
	2	30	55	73	1	B33331I6205J0*X	100	VDE/UL
	2.5	30	55	73	1	B33331I6255J0*X	100	VDE/UL
	3	30	55	73	1	B33331I6305J0*X	100	VDE/UL
	3.5	30	55	73	1	B33331I6355J0*X	100	VDE/UL
	4	30	55	73	1	B33331I6405J0*X	100	VDE/UL
	5	30	55	73	1	B33331I6505J0*X	100	VDE/UL
	7	30	55	73	1	B33331I6705J0*X	100	VDE/UL
	8.5	30	65	83	1	B33331I6855J0*X	100	VDE/UL
	10	30	65	83	1	B33331I6106J0*X	100	VDE/UL
	12	30	75	93	1	B33331I6126J0*X	100	VDE/UL
	15	30	85	103	1	B33331I6156J0*X	100	VDE/UL
	20	35	75	88	2	B33331I6206J0*X	64	VDE/UL

$$D1 = \text{Ø}D + 3\text{mm}$$

Composition of ordering code

B33331: 2+2 fast-on terminals

B3333x: Other terminal configuration on request.

* construction:

6 Aluminium Can Flat type

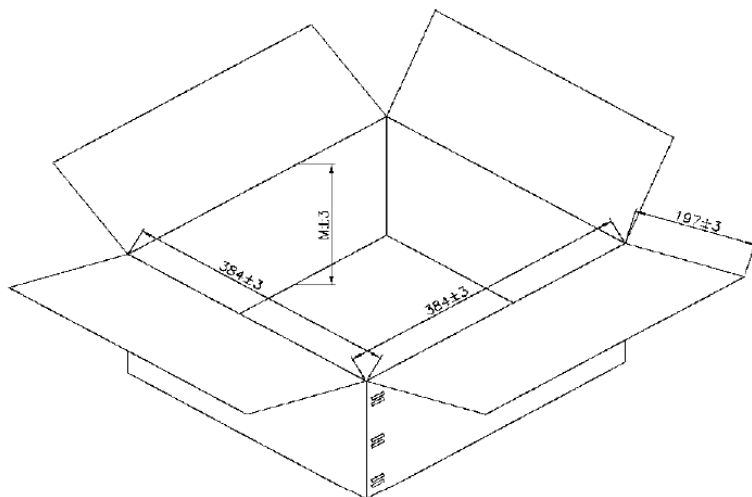
8 Aluminium Can with M8 bolt

X:

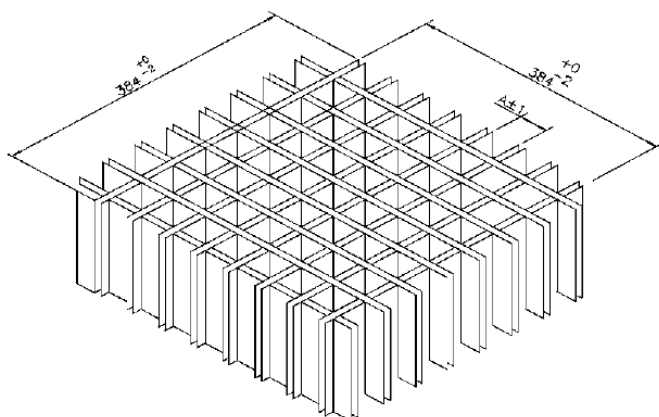
0 as per this dimension and properties

1-9 special dimension and properties

Packing box



$$M = H(\text{Capacitor height}) + \text{Terminal height} + 10\text{mm min.}$$



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⚠ 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.tdkelectronics.tdk.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 our specification before ordering.

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