Film Capacitors – AC Capacitors

Motor Run Capacitors

Series/Type:	**CBB65A-1**
Ordering code:	**B33331I6***
Date:	April 2025
Version:	01

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 Tx	± 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 · 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 ≤ 65% (minimum as-delivered values)	10000 s
Dissipation factor tan δ at 20 ℃	≤ 7 x 10^{-3} (1 kHz)
Maximum rate of voltage rise dV/dt_{max}	10 V/ µs
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 94 (Ed6, 2013) compatible
- Compliance to Glow wire test as per IEC60335-1 (Ed6, 2020)

Compatibility to RoHS	
Compliance to directive 2011/65/EU	RoHS compatible
Approvals: See table for approved ratings	
UL File : E238746	Approved component 10,000 AFC
Certificate no: 40052996	Approved from 1 µF to 20 µF, 450 V AC, 85 ºC: 10000 h (Class B)
CE	Compliance to LV directive 2014/35/EU

Dimensional drawings

Figure 1

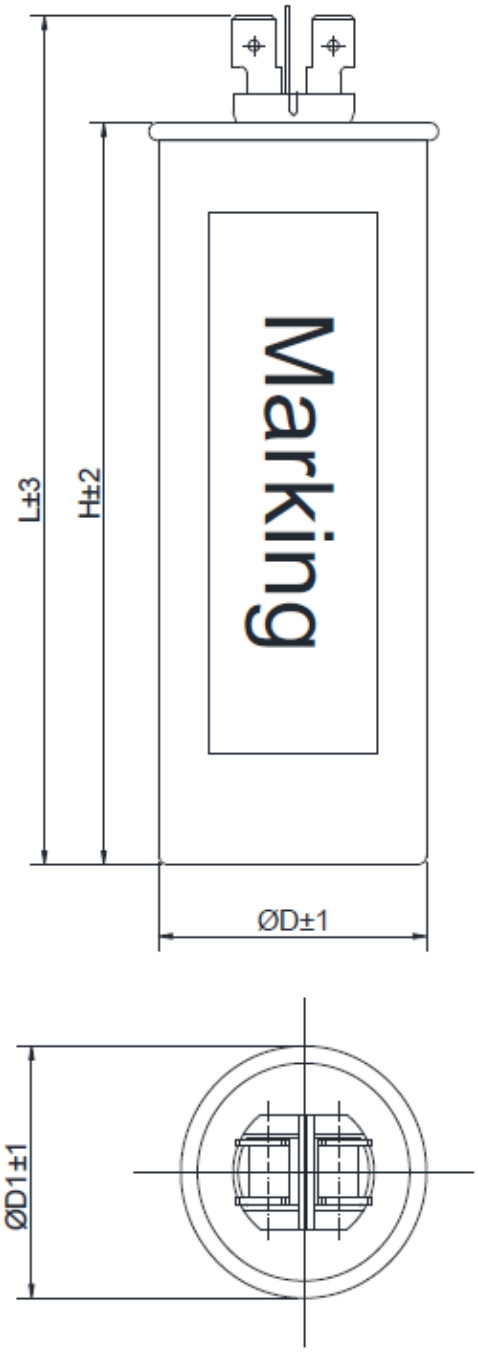
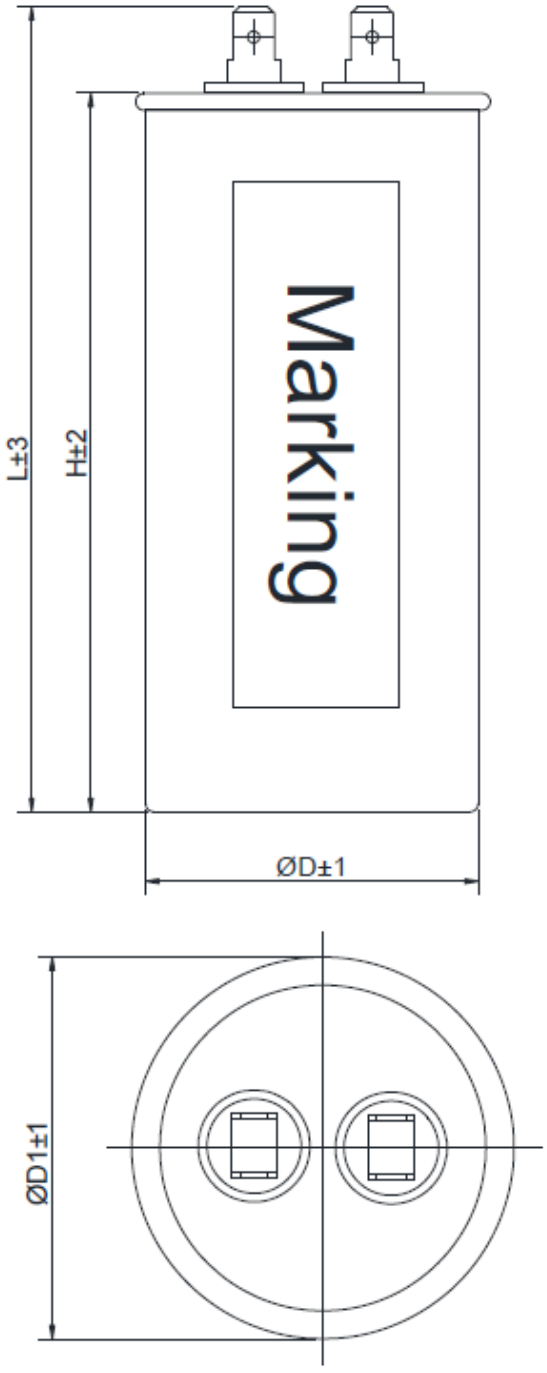
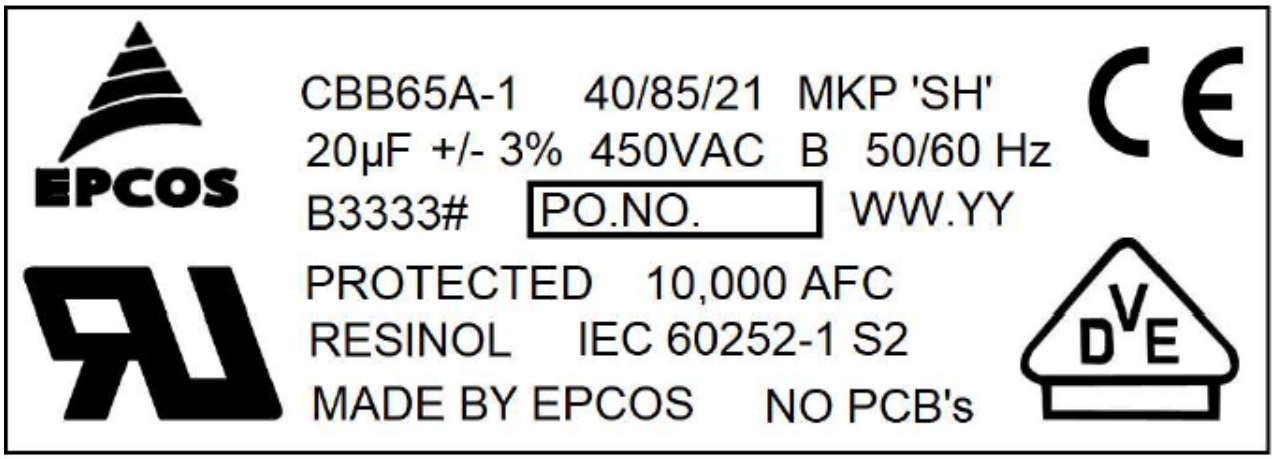


Figure 2



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 V AC	Capacitance µF	Can Ø D mm	Can Height H mm	Can Lenght L mm	Drawing no.	Ordering code	Packing unit	Approvals
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	90	108	1	B33331I6156J0*X	100	VDE/UL
	20	35	75	88	2	B3333wI6206J0*X	64	VDE/UL

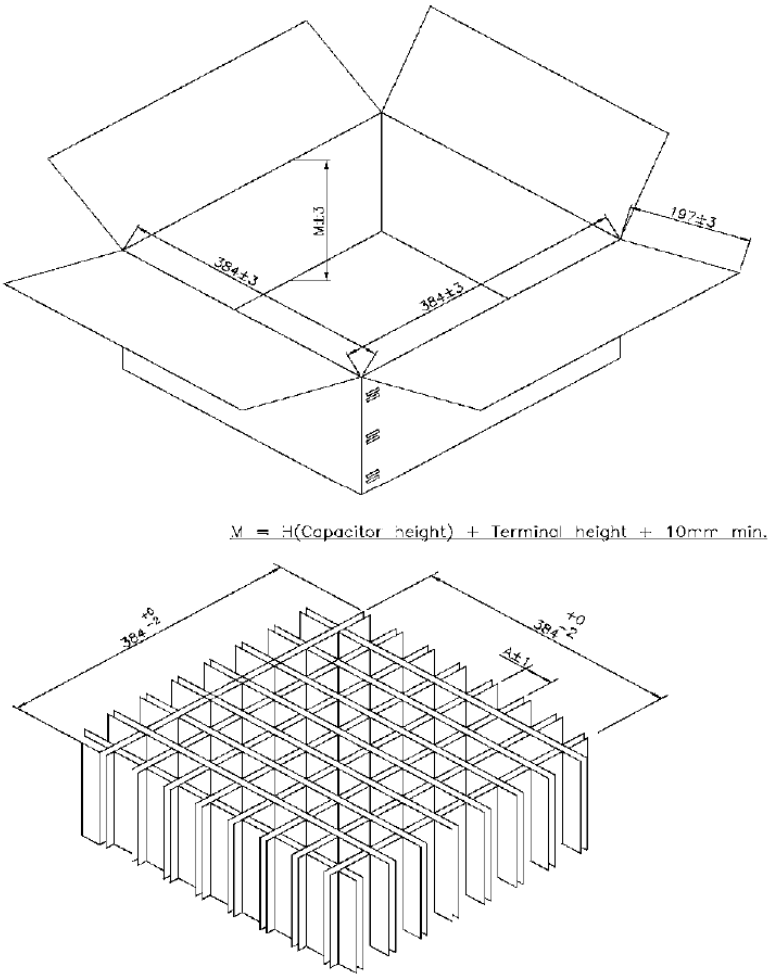
D1 = ØD + 3mm

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



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