



Type CBB65A

1. Scope

This specification is suitable for A.C. motor running capacitors type CBB65 supplied to territories outside mainland of China made by Anhui Tongfeng Electronics Co., LTD. The capacitors are made of metallized polypropylene film and intended to be applied to start and run AC single-phase motors working at rated voltage 250V/370V/440V(450V), frequency 50Hz/60Hz. The capacitor is complied with EIA456/IEC60252 and UL810.

2. Service conditions

The capacitor should be prevented from exposing in sunlight directly and rain or snow will cause insulating failure between terminals and terminals to case of the capacitor. Followings are detailed service conditions.

2.1 Altitude:

Not exceeding 2000 meter.

2.2 Residual voltage while loading:

Not exceeding 10% rated voltage.

2.3 Pollution:

The capacitors are suitable to operating in lightly polluted atmospheres.

3. Overloads

3.1 Maximum permissible voltage

Not exceeding 1.1 times the rated voltage.

3.2 Maximum permissible current

Not exceeding 1.3 times the current that occurs at rated sinusoidal voltage and rated frequency.

3.3 Maximum permissible reactive output

The overloads resulting from operation at voltage and current exceeding the rated values (even though within the limits indicated in 3.1 and 3.2) should be less than 1.35 times the rated output (reactive power).

4. Capacitor Certificates

The capacitor has certificates of CQC、TUV、UL/CUL、VDE.

5. The specification & dimensions

Table 1 listed properties of capacitor type CBB65A. Others referred to EIA60252, IEC60252-1: 2013 and UL810.

Table 1: Properties of Capacitor Type CBB65A

Rated voltage	200VAC;220VAC; 250VAC; 270VAC; 300VAC; 330VAC; 370VAC; 400VAC; 420VAC; 440VAC; 450VAC
Rated frequency	50/60Hz

Capacitance Tolerance	±5%
Test voltage between Terminals, (Ut-t)	2Un, 2s 2Un, 60s
Test voltage between Terminal to case (Ut-c)	3000Vac, 2s 3000Vac, 60s
Dissipation factor (tgδ)	≤0.0020 (100Hz)
Insulation resistance	R·C≥3000MΩ·μF(s)
Operating temperature range	-40℃~+70/+85℃
Hot and humid harsh degrees	21 days
Expected operating life	When operated at rated voltage and rated case temperature capacitor survival shall be not less than 94% after 60,000 hours operation. (EIA60252) Class A: 30000h: 1.25Un、70/85±2℃、6000h Class B: 10000h: 1.25Un、70/85±2℃、2000h
Class of safety protection/Anti-explosion device	The capacitor has UL certificate of 10,000 AFC . According to IEC60252, the capacitor has Class P2/S2 safety protection. That is the capacitor is designed with a pressure-sensitive interrupter (PSI) as a device of anti-explosion protection. The failure mode of the capacitor is cutting off from circuit in the case of the PSI device acting.
Cooling	Naturally air

6. Structure of Type CBB65A

6.1 Product Configuration

The capacitor is designed and manufactured in round or oval with oil filling in aluminum can, with single or dual structure leaded with two terminals or three terminals.

6.2 Winding core of the capacitor

The winding core of the capacitor takes heavy-edge metallized Al/Zn PP film as dielectric and electrode, on each of two sides of winding core is sprayed by metal Zinc for leads soldering.

6.3 Aluminum Can

The can of capacitor is made of aluminum alloy LF21, which meets the requirements of UL810 “Capacitor”.

6.4 Terminals and cover

The cover of capacitor is made of PBT plastic that meets requirements of REACH and RoHS. Terminals are

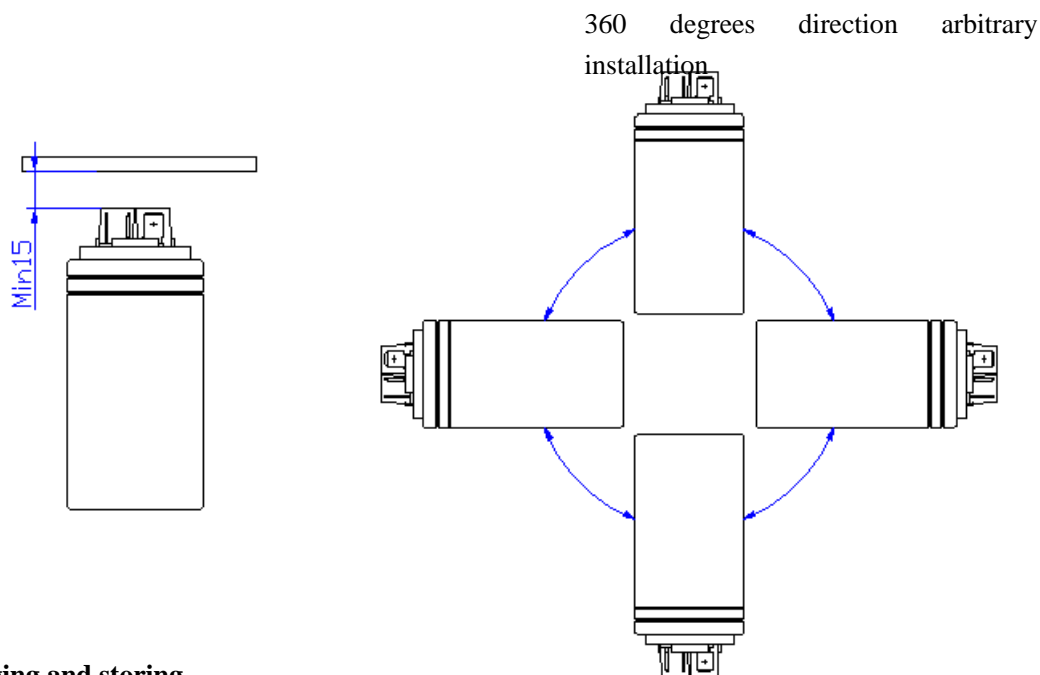
made of 250# Tinned Steel and in the form of quick-connect terminals.

6.5 Marking

The capacitor is labelled of adhesive aluminized label or laser printing.

7. Mounting requirements

The capacitor needs not less than 15 mm space up from terminals for extension of the folded neck of capacitor can in the case of PSI device action while the capacitor is mounted.



8. Packaging and storing

The capacitor is packaged in single separated segment box organized in double corrugated paperboard carton which prevents the properties of capacitor from damage during transferring and storing in not lower than -40°C . The capacitors should be damp-proofed, put down gently and right in side during transferring and storing. The stacked limitation of capacitor cartons is eight layers. Please open the box as the direction indicating on carton.

The Capacitor must be stored under the temperature between $10\sim 38^{\circ}\text{C}$ and relative humidity less than 70% for less than 12 months.

9. Others

Please refer to EIA456, IEC60252 and UL810 for matters not covered above or contact with our sales office or representatives in your location for special requests.

10. Capacitor size

Table 2: Data of dimension

Voltage (VAC)	Cn (μF)	ΦD		H	
		in	mm	in	mm



250	35+6	1.77	45	3.07	78
250	60+6	1.77	45	4.53	115
250	60+8	1.77	45	4.53	115
380	20+2.5	1.77	45	3.23	82
400	15+2.5	1.77	45	2.48	63
400	30+2.5	1.77	45	3.82	97
440	15+3.0	1.57	40	3.46	88
440	20+2.5	1.57	40	4.65	118
440	25+2.5	1.57	40	4.84	123
440	30+2.5	1.57	40	5.63	143
440	35+3.5	1.57	40	5.83	148
450	1	1.18	30	2.28	58
450	1.5	1.18	30	2.28	58
450	2	1.18	30	2.28	58
450	2.5	1.18	30	2.28	58
450	3	1.18	30	2.28	58
450	3.5	1.18	30	2.28	58
450	4	1.18	30	2.28	58
450	4.5	1.18	30	2.48	63
450	5	1.18	30	2.68	68
700	2.2	1.18	30	2.28	58
1200	0.22	1.18	30	2.28	58
1200	0.47	1.18	30	2.28	58