



**Applications:**

AC motor run capacitor and for general sine wave applications

**Reference Standards:**

IEC 60252-1- 2013-Ed.2 / IEC 60335-1 / GB /T 3667-1 / UL 810



**Construction**

- Dielectric Polypropylene Film
- Electrode ZnAl Metallized Film (self-healing properties)
- Can Plastic UL 94 V0
- Top Resin top or Plastic top UL 94 V0
- Filling Material Epoxy resin UL 94 V0
- Terminals Insulated copper wire
- Safety Class S0 Class – Not protected – As per IEC 60252-1
- RoHS Compatible with directive 2011/65/EU

**Electrical technical specification**

- Capacitance  $C_R$  3.0..... 42.0 $\mu$ F
- Tolerance %  $\pm$  5 (other tolerance upon request)
- Rated Voltage  $V_R (Vac)$  250VAC and 450VAC
- Frequency Hz 50/60
- Maximum voltage  $V_{ac} (max)$  1.1  $V_R$
- Maximum current  $I_{max} (A)$  1.3. $I_R$  ( $I_R$  = rated current)
- Max. rate of voltage rise  $dv/dt (max)$  10 V/ $\mu$ s
- Dissipation Factor  $Tan \delta$   $\leq$  1.0 x 10<sup>-3</sup> at 100Hz
- Insulation Resistance  $R_{ins}$  or constant  $\tau$   $\tau (s)$   $\geq$ 4000s ( $R_{ins.} = \tau/C$ ) at 20°C / RH $\leq$ 65%

**Thermal characteristics**

- Lowest operating temperature  $\theta min.$  -40°C
- Maximum operating temperature  $\theta max.$  +70°C
- Climatic category as per IEC 60068-1 40/70/21
- Damp heat test 21 days

**Routine test parameters**

- Test voltage between terminals  $UTT (Vac)$  2.0  $V_R$ , 2s
- Test voltage between terminals and case  $UTC (Vac)$  2000Vac, 2s

**Life Expectation as per IEC 60252-1**

Class C (3,000h)

**Approval and Certification**

CQC / TUV / VDE / UL (Construction only)

We reserve the right to make technical changes without prior notice to improve reliability, function or design or otherwise. The Data Sheet has only typical specifications. Please, approve the specifications before ordering and use our products.

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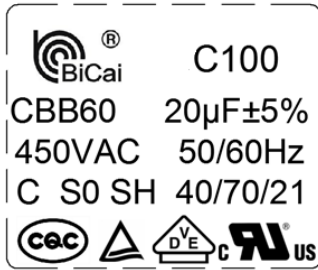
Capacitor ordering codes and dimensions:

Ordering code <sup>(1)</sup>	Capacitance (μF)	Rated Voltage (Vac)	Dimensions	Certification
			ΦD x H (mm)	
C100-A451305-JONNN	3	450	30 × 35	CQC / TUV / VDE / UL
C100-A451405-JONNN	4		25 × 45	CQC / TUV / VDE / UL
C100-A451405-J5NNN	4.5		30 × 41	CQC / TUV / VDE / UL
C100-A451505-JONNN	5		30 × 45	CQC / TUV / VDE / UL
C100-A451605-JONNN	6		30 × 45	CQC / TUV / VDE / UL
C100-A451705-JONNN	7		36 × 48	CQC / TUV / VDE / UL
C100-A451805-JONNN	8		30 × 45	CQC / TUV / VDE / UL
C100-A451905-JONNN	9		34 × 45	CQC / TUV / VDE / UL
C100-A451106-JONNN	10		34 × 45	CQC / TUV / VDE / UL
C100-A451126-JONNN	12		34 × 50	CQC / TUV / VDE / UL
C100-A451146-JONNN	14		34 × 60	CQC / TUV / VDE / UL
C100-A451166-JONNN	16		34 × 60	CQC / TUV / VDE / UL
C100-A451186-JONNN	18		40 × 60	CQC / TUV / VDE / UL
C100-A451206-JONNN	20		40 × 60	CQC / TUV / VDE / UL
C100-B451206-JONNN	20		39 × 69	CQC / TUV / VDE / UL
C100-A451226-JONNN	22		40 × 60	CQC / TUV / VDE / UL
C100-A451256-JONNN	25		45 × 80	CQC / TUV / VDE / UL
C100-A451286-JONNN	28		45 × 80	CQC / TUV / UL
C100-A451306-JONNN	30		45 × 80	CQC / TUV / UL
C100-A451356-JONNN	35		45 × 80	CQC / TUV / UL
C100-A251426-JONNN	42	250	45 x 80	UL

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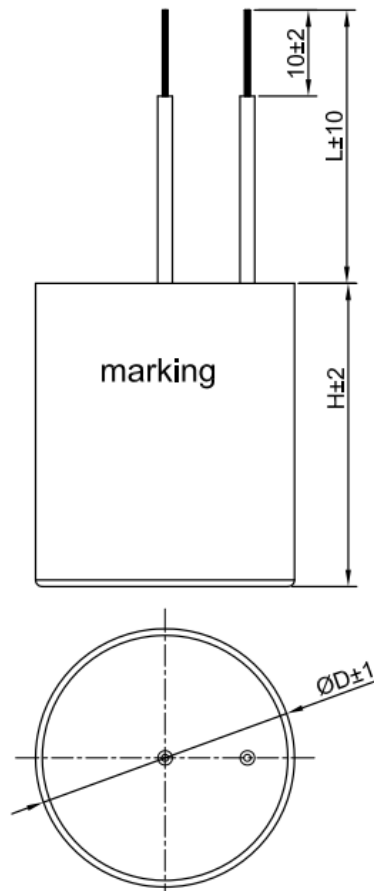


**Capacitor Marking**



C100	Capacitor series		Approvals /Certification
20µF	Capacitance value	C	Class as per IEC 60252-1
± 5%	Capacitance tolerance	S0	Safety Class as per IEC 60252-1
SH	Self-healing	CBB60	Construction type
450Vac	Rated Voltage		
50/60Hz	Frequency		
40/70/21	Climatic category		

**Capacitor dimensions:**



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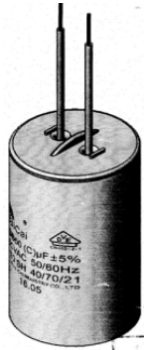

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Capacitor Insulated Wire Length (L) <sup>(1)</sup>

Wire Length (L)	CODE <sup>(1)</sup>
110mm	-J01NN
150mm	-J02NN
180mm	-J03NN
200mm	-J04NN
450mm	-J05NN

Capacitor constructions

CODE: J0N10	Code: J0N20	Code: J0N30
		
Epoxy top	Plastic top 2 holes	Plastic top 1 hole

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### Environments of application:

Capacitors may not be stored or operated in corrosive atmospheres, particularly not when chlorides, sulfides, acids, alkalis, salts, organic solvents or similar substances are present. In dust and dirt-prone environments, regular checks and maintenance (particularly of the terminals and insulators) are absolutely necessary to prevent creation of creepage distances between live parts and /or to the protective conductor / ground.

The storage of capacitor for long period may cause oxidation of terminals, resulting in an increase in the contact resistance in the connection area. Unless otherwise agree, the maximum storage period shall not exceed 1 year.

All materials used in this product comply RoHS directive 2011/65/EU and (EU)2015/863. However, in certain jurisdictions may classify some substances as hazardous. Therefore, we recommend to check our Material Data Sheet on the Internet ([www.bicai.com.cn](http://www.bicai.com.cn)) or contact our Sales-offices [bicai@bicai.com.cn](mailto:bicai@bicai.com.cn).

### End of use and disposal

The materials used in Metallized Polypropylene Film AC Motor Run Capacitors from Bicai do not exceed the limits of chemical substances specified in national waste disposal regulations and it can be treated as industrial waste. In any case it is advisable to consult a local regulation in force.

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