

Film Capacitors - AC Capacitors

Motor run capacitors

Series/Type: MotorCap S3 Compact, 100 °C

Ordering code: B32355C

Date: March 2024

Version: 2

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Motor run capacitors

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Construction

- Metallized polypropylene film
- Plastic can with resin top
- Dry type resin

Features

- Self-healing properties
- Low dissipation factor
- Highest safety level S3 safety class to IEC60252-1 (ed.2) am1:
- High insulation resistance
- IEC 60335-1 compatible
- Higher operating temperature class,100 °C.

Applications

 For general sine wave applications, mainly as motor run capacitor

Terminals

■ Insulated solid copper wire, 0.5 mm²,105°C.

Mounting parts (optional)

Plain can

Technical data and specifications					
Reference standards	IEC 60252-1+A1:2013				
Life expectancy to IEC 60252-1+A1:2013	400 V: 10000 h (class B)				
Safety class to IEC 60252-1+A1:2013	S3				
Rated capacitance C _R	See table ordering codes, page 5				
Tolerance	±5%				
Permitted capacitance ΔC/C	≤3%				
Rated voltage V _R	400 V AC				
Rated frequency f _R	50/60 Hz				
Maximum ratings					
Maximum permissible voltage V _{max}	1.1 · V _R (V _R = rated voltage)				
Maximum permissible current I _{max}	1.3 · I _R (I _R = rated current)				

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Test data			
AC test voltage terminal to terminal V _{TT}	2 V _R , 2 s (routine test)		
AC test voltage terminals to can V _{TC}	2 kV AC, 2 s (routine test)		
Insulation resistance R_{ins} or time constant τ at 20 °C,	3000 s		
Rel. humidity max. value 85%, annual means ≤ 65%			
Dissipation factor tan δ at 20 °C	≤7 ·10 ⁻³ (1kHz)		
Maximum rate of voltage rise dv/dt _{max}	10 V/μs		
Climatic data			
Climatic category	25/100/21 to IEC 60068-1		
Lower category T _{min}	−25 °C		
Upper category T _{max}	+100 °C		
Damp heat test T _{test}	21 days @ 40°C, 93% RH		
Mechanical and thermal properties			
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C		
Plastic can and top disk material	Compliant to EN60252-1/ IEC60335-1		
■ Glow wire test to IEC 60695 – 2 – 1 / 1	Self-extinguish within 30 s of withdrawing glow wire without igniting wrapping tissue		
Test temp 550 $^{\rm o}$ C for $I_R \leq 0.5~A$			
Test temp 850 ° C for I _R ≥ 0.5 A			
■ Part compliant to IEC 60335-1 Glow wire test acc. to EN60335-1:2002 +A11+A1 +A12+Corr.+A2:2006, IEC60335-1 ed 4+A1+A2	Self-extinguish within 2 s with GWT 750 °C and within 30 s with GWFI 850 °C of withdrawing the glow wire & without igniting the wrapping tissue		
Tracking test to IEC 60112 solution A	>250 V		
Compatibility to RoHS			
Compliance to directive 2002/95/EC	RoHS		
Approvals			
VDE – 400 V/100 °C: 10000 h (class B)	Approved		
CE	Compliance to LV directive 2014/35/EU		
Marking	Cx uF +/-Tx% 400 VAC 10000h/Cl.B 25/100/21 MKP 'SH' 50/60Hz S3 B32355C IEC60252-1 P.O. No. WW.YYN		

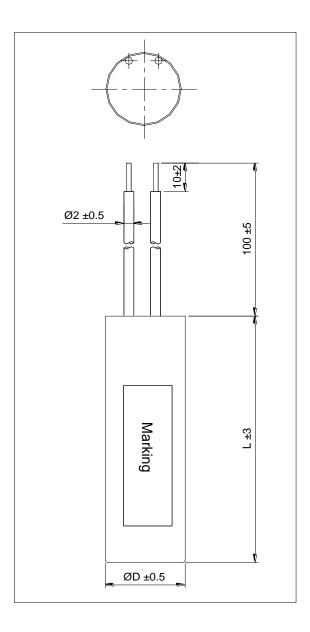
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Dimensional drawing



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Ordering codes & Packaging units

V _R	C _R	Dimensions D x L	Ordering code	Packing units
V AC	μF	mm		pcs
	1.5	25 × 51	B32355C4155J019	231
	2.0	25 × 51	B32355C4205J019	231
400	2.5	25 × 51	B32355C4255J019	231
	3	25 × 60.5	B32355C4305J015	198
	3.5	25 × 60.5	B32355C4355J015	198
	4	25 × 75	B32355C4405J015	180
	5	25 × 75	B32355C4505J015	180
	8	30 × 78	B32355C4805J015	108

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Cautions and warnings

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.tdk-electronics.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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