



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type:	MotorCap S3 Compact, 100 °C
Ordering code:	B32355C
Date:	May 2024
Version:	3

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 $\Delta C/C$	≤3%
Rated voltage V_R	400 V AC
Rated frequency f_R	50/60 Hz

Maximum ratings

Maximum permissible voltage V_{max}	$1.1 \cdot V_R$ (V_R = rated voltage)
Maximum permissible current I_{max}	$1.3 \cdot I_R$ (I_R = rated current)

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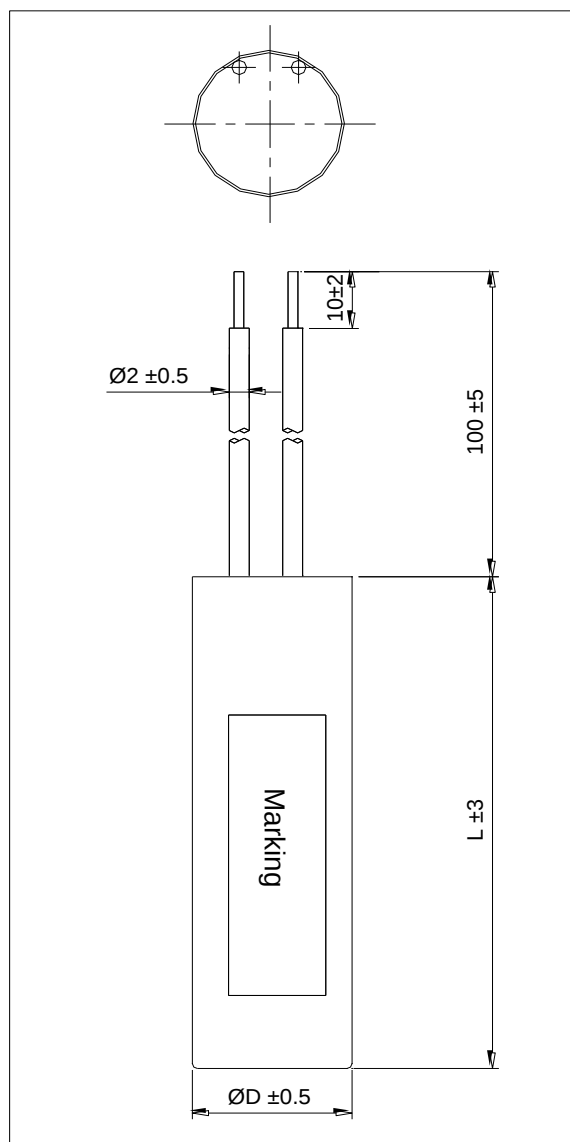
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Test data	
AC test voltage terminal to terminal V_{TT}	2 V_R , 2 s (routine test)
AC test voltage terminals to can V_{TC}	2 kV AC, 2 s (routine test)
Insulation resistance R_{ins} or time constant τ at 20 °C, Rel. humidity max. value 85%, annual means $\leq 65\%$	3000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 7 \cdot 10^{-3}$ (1kHz)
Maximum rate of voltage rise dv/dt_{max}	10 V/ μ s
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 Test temp 550 °C for $I_R \leq 0.5$ A Test temp 850 °C for $I_R \geq 0.5$ 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 30 s of withdrawing glow wire without igniting wrapping tissue
Tracking test to IEC 60112 solution A	>250 V
Compatibility to RoHS	
Compliance to directive 2002/95/EC	
Approvals	
VDE – 400 V/100 °C: 10000 h (class B)	Approved
	Compliance to LV directive 2014/35/EU
Marking	 Cx μF +/-Tx% 400 VAC 10000h/Cl.B 25/100/21 MKP 'SH' 50/60Hz S3 B32355C IEC60252-1 P.O. No. WW.YYN  

Dimensional drawing



Ordering codes & Packaging units

V _R V AC	C _R μF	Dimensions D × L mm	Ordering code	Packing units pcs
400	1.5	25 × 51	B32355C4155J019	231
	2.0	25 × 51	B32355C4205J019	231
	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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