



Product Profile 2022

AC Film Capacitors

Product Overview

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Contents

AC Capacitors



Important Notes				03
Safety classes and Class of Operation				05
S2/S3 Safety Functions				06
AC Film capacitor part numbering guideline				07
MotorCap FAN	B32415G*	S0	Plastic Can, Plastic Top, Wire Terminals	10
MotorCap RUN	B32320E/B32320S/B32320B	S0	Plastic Can, Plastic Top, SFO	12
MotorCap RUN	B32322F/B32322R/B32322B	S0	Plastic Can, Plastic Top, DFO	15
MotorCap RUN	B32327S/B32327B/B32327E/B32327F/B32327R	S0	Plastic Can, Plastic Top, Wire Terminals	18
MotorCap RUN	B32328E/B32328F/B32328R	S0	Plastic Can, Plastic Top, Wire Terminals With Sleeve	20
MotorCap SUBMERSIBLE	B32328F*	S0	Plastic Can, Plastic Top, Wire Terminals With Sleeve	23
Dual MotorCap for washing machine	B32418	S0	Plastic Can, Plastic Top, Wire Terminal	25
MotorCap RUN	B32332*	S2	Aluminum Can, Plastic Top, DFO	27
MotorCap RUN and Aircon	B32332W	S2	Aluminum Can, Plastic Top, DFO With Wire	30
MotorCap DUAL RUN	B32335	S2	Aluminum Can, Plastic Top, SFO/DFO	32
MotorCap RUN	B3333X	S2	Aluminum Can, Metal Top, SFO/DFO	35
MotorCap RUN	B33335	S2	Aluminum Can, Metal Top, SFO/DFO	36
MotorCap RUN Compact	B32355	S3	Plastic Can, Plastic Top, Wire Termination	37
MotorCap RUN Compact	B32356	S3	Plastic Can, Plastic Top, Twin Core Cable	38
MotorCap START	B32328F*	S0	Plastic Can, Plastic Top, Wire Terminal	39
MotorCap START	B32328L*	S0	Plastic Can, Plastic Top, Wire Eye Gult Terminal	41
UPS Capacitor	B32333V	S2	Aluminum Can, Plastic Top, Stud Terminals	43
AC Filter Capacitor	B32354S*	S3	Plastic Can, Box Type, 4 Pins	46
DC link Capacitor	B32320I*	S0	Plastic Can, Round Type, 5 Pins	48
Lighting Capacitor	B32327A/B32327P/ B32327D	S0	Plastic Can, Plastic Top, Wire Terminal With Resistor	50
Cautions and Warnings				52

Important Notes

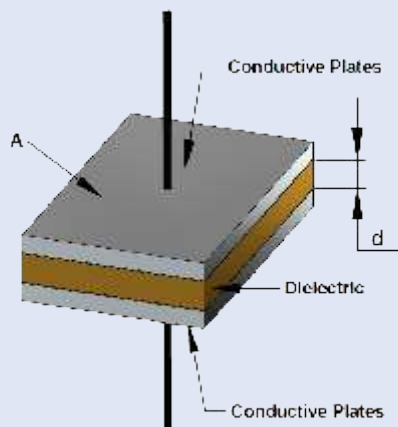
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1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application**. As a rule we are either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether a product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that in **individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified**. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life- saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
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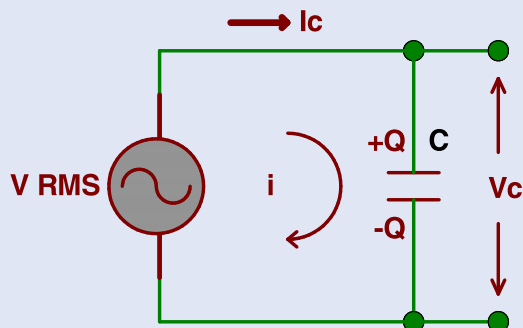
AC Capacitor Definition

A capacitor is a passive electronic component that stores electric charge in an electric field. A capacitor consists of two conductors separated by a non-conductive region. The non-conductive region can be either a vacuum or an electrical insulator material known as a dielectric.



Capacitors when connected to a sinusoidal supply produces reactance from the effects of supply frequency and capacitance value. Film capacitors are known to be Non-Polarized capacitors, hence the terminals are interchangeable.

If we apply an alternating current or AC supply, the capacitor will alternately charge and discharge at a rate determined by the frequency of the supply. Thus, the capacitance in AC circuits varies with frequency as the capacitor is being constantly charged and discharged.



Constructional details of AC capacitor

The capacitors are constructed using BOPP film wound on cylindrical core. The winding element is sprayed using metal to form end contact and ensure low ESR and lower inductive reactance. Metallized propylene film (MPP) has self healing mechanism, in the case of any breakdown occurs in MPP capacitor, arcing causes the thin metal layer around the fault area to vaporize. This vaporization process removes the conductive metal layer in the area around the flaw. Since the conductive material is removed, a short circuit cannot occur between the plates. This prevents failure of the component. The self-healing capability of a metallized film capacitor depends on many factors including the properties of the dielectric material and the thickness of the metal layer. These capacitors claim low losses, very low Dissipation Factor and low ESR allowing for relatively high current density.

Typical Applications

- a) Motor Run Application
- b) Motor Start Application
- c) Submersible Pumps
- d) Fan Application
- e) Lighting Application
- f) UPS/Solar Inverter/ frequency converter
- g) Air conditioners

Safety classes and Class of Operation

Safety classes within the scope of IEC 60252-1+A1:2013

Safety classes within the scope of IEC 60252-1+A1:2013
The IEC IEC 60252-1+A1:2013 standard applies to all P0 & P2 capacitors. This standard is considered to design all such capacitors manufactured by EPCOS on the basis of these safety classes.

Degree of safety protection identified by one of the four codes to be marked on capacitor.

1. S0 class of safety protection

Degree of safety protection indicating that the capacitor type has no specific failure protection
Formerly referred to as P0.

2. S1 class of safety protection

Degree of safety protection indicating that the capacitor type may fail in the open-circuit or short-circuit mode and is protected against fire or shock hazard.
Formerly referred to as P1.

3. S2 class of safety protection

Degree of safety protection indicating that the capacitor type has been designed to fail in the open- circuit mode only and is protected against fire or shock hazard
Formerly referred to as P2.

4. S3 class of safety protection

Degree of safety protection indicating that the capacitor is of segmented film construction. This capacitor type is required to fail with low residual capacitance (<1 % CN) and has protection against fire and shock hazard.

Safety classes within the scope of IEC 60252-1+A1:2013

Class of operation within the scope of IEC 60252-1+A1 : 2013

The minimum probable total life for which the capacitor has been designed at rated duty, voltage, temperature and frequency.

Four life classes have been foreseen

Class A – 30,000 h
Class B – 10,000 h
Class C – 3,000 h
Class D – 1,000 h

These classes of operation are intended to represent probable failure rate not exceeding 3% during the life of the product.

Failures considered are; short-circuits, interruptions, leakage of liquid, capacitance drifts exceeding 10% out of the rated tolerance limits.

A capacitor may have more than one class with corresponding voltages.

S2/S3 Safety Functions

S2/S3 definition according IEC/EN 60252-1 and UL 810

To prevent can rupture under fault conditions, a S2/S3 capacitor is designed to fail in the open-circuit mode only. It is protected against fire and electrical shock hazards.

The IEC/EN 60252-1 standard applies to all S2/S3 motor run capacitors designed by EPCOS.

Aluminum can with overpressure protection (S2)

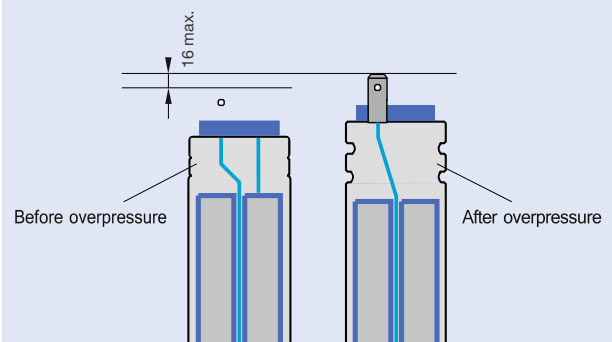
Function

Numerous electric breakdowns over time or due to thermal or electric overload can result in the formation of gas. This causes the pressure to rise inside the capacitor can up to a defined level. The resulting expansion of the can separates the internal contacts and disconnects the capacitor from the line.

Aluminum can with over pressure disconnecter



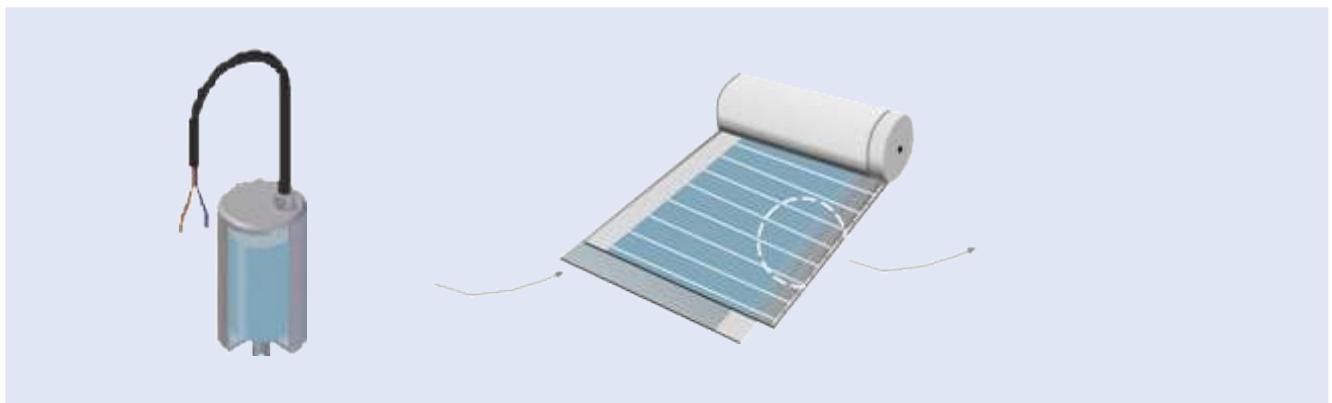
Over pressure disconnecter technology



Plastic can with segmented film protection (S3)

Function

The two metallizations forming the capacitor are subdivided into individual segments. Fuses are incorporated into the structure of each segment. In the event of an overload, these fuses open and switch off the segment. With this construction, the safety function does not cause any mechanical change of the capacitor can in case of its activation.



Film Capacitors

AC Capacitors

AC Film capacitor part numbering guideline

1.0 Scope & Purpose:

This document sets forth operating procedures for Coding Rules for AC Capacitors.

2.0 For example part numbering for B32320 A5125 J520N 1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
B	3	2	3	2	0	A	5	1	2	5	J	5	2	0	N		1

POS 1

The first letter should be B, it denotes passive electronic components

POS 2 to 3

32 – AC Film capacitor Plastic case with plastic top / AL case with plastic top

33 – AC Film capacitor Aluminum case with metal top

POS 4 to 6

Type/ general construction of capacitor

AC-Plastic Case Capacitor

Code	Type of Capacitor
320	Plastic Can Press-fit Top Single Faston
321	Plastic Can Press-fit Top Single Faston terminals - UL Mark
322	Plastic Can Press-fit Top Double Faston Terminals
323	Plastic Can Press-fit Top Double Faston Terminals - UL Mark
326	Plastic Can Press-fit Top Single Faston Terminal (Ultrasonic welding sealed)
327	Plastic Can Press-fit Top Wire Terminals
328	Plastic Can Press fit Top Cable/wire with sleeve Terminals
329	Plastic Can Press-fit Top Wire Terminals – with UL mark
350	Plastic Can Press-fit Top Single Fast-on terminals - S3 Safety class
352	Plastic Can Press-fit Top Double Fast-on terminals - S3 Safety class
354	Plastic Can Filer capacitors
355	Plastic Can S3 Press-fit Top Wire Terminals
356	Plastic Can Press-fit Top Cable terminals - S3 Safety class
415	Plastic Can Wire Terminals Local / Fan capacitor
418	Plastic Can Wire Terminals Dual capacitor

Film Capacitors

AC Capacitors

AC-Aluminum Case plastic top Capacitor

Code	Type of Capacitor
330	Aluminum Can Plastic Top, Single Fast-On Safety Device, S2
332	Aluminum Can Plastic Top, Double Fast-On Safety Device, S2
333	Aluminum Can Plastic Top, Aluminum cap with cable or wire with sleeve, Safety Device, S2
335	Aluminum Can Plastic Top Fast-On dual capacitor, Safety Device,S2

AC-Aluminum Case metal top Capacitor

Code	Type of Capacitor
331	Aluminum Can Metal Top Fast - On Terminals Safety Device, S2
333	Aluminum Can Metal Top Fast - On Terminals with Aluminum cap with cable and Receptacle, Safety Device, S2
335	Aluminum Can Metal Top Fast- On Terminals, dual capacitor Safety Device, S2

POS 7

A to Z is revision status or to denote specific series within the general series, like below

B32320/27/28E	® Plastic Can Press-fit, Economy series
B32320/22/27/28R	® Plastic Can Press-fit, R series
B32320/27/28F	® Plastic Can Press-fit, capacitors for Submersible pump (250/450V), Motor start capacitor (250 V)
B32415G	® Capacitors for Fan application
B32418S	® Capacitors for Washer application, Dual
B33331V	® Capacitors for Filter application

POS 8

Nominal Voltage

- 1 ® 250V
- 2 ® 330V
- 3 ® 350V/370V
- 4 ® 400V
- 5 ® 440V
- 6 ® 450V

Film Capacitors

AC Capacitors

POS 9 to 11: Nominal Capacitance

Pos	Code
9	First digit of the capacitance
10	Second digit of the capacitance
11	Number of zeros after the first two capacitance digits
13	Third Digit of the capacitance

For example:-

3.0 μ will be represented in our part number in the following manner
B32320A5305J020 that means $30 \times 10^{-5} - 3 \times 10^{-6} - 3\mu$

3.15 μ will be represented in our part number in the following manner
B32320A5315J520 that means $315 \times 10^{-5} - 3.15 \times 10^{-6} - 3.15\mu$

65 μ will be represented in the part number in the following manner
B32322A5656J020 that means $65 \times 10^{-6} - 65 \mu$

95.3 μ will be represented in the part number in the following manner
B32320A5956J320 that means $95.3 \times 10^{-6} - 95.3 \mu$

POS 12: Tolerance

Tolerance	Code
5%	J
10%	K
20%	M

For tolerance other than above specified A

POS 14 to 15:

Codes to denote Can/ Top/ termination and stud options

POS 16 to 18:

Internal use for manufacturing location identification/ for identification of Products for Japan

N01 ® Made in Nasik if the code is already used in other plant and the Nasik is creating the same code the code will end in N01.

B01 ® Made in Bawal for the codes that will be manufacture in Bawal

N09 ® Products for Japan

Film Capacitors

AC Capacitors

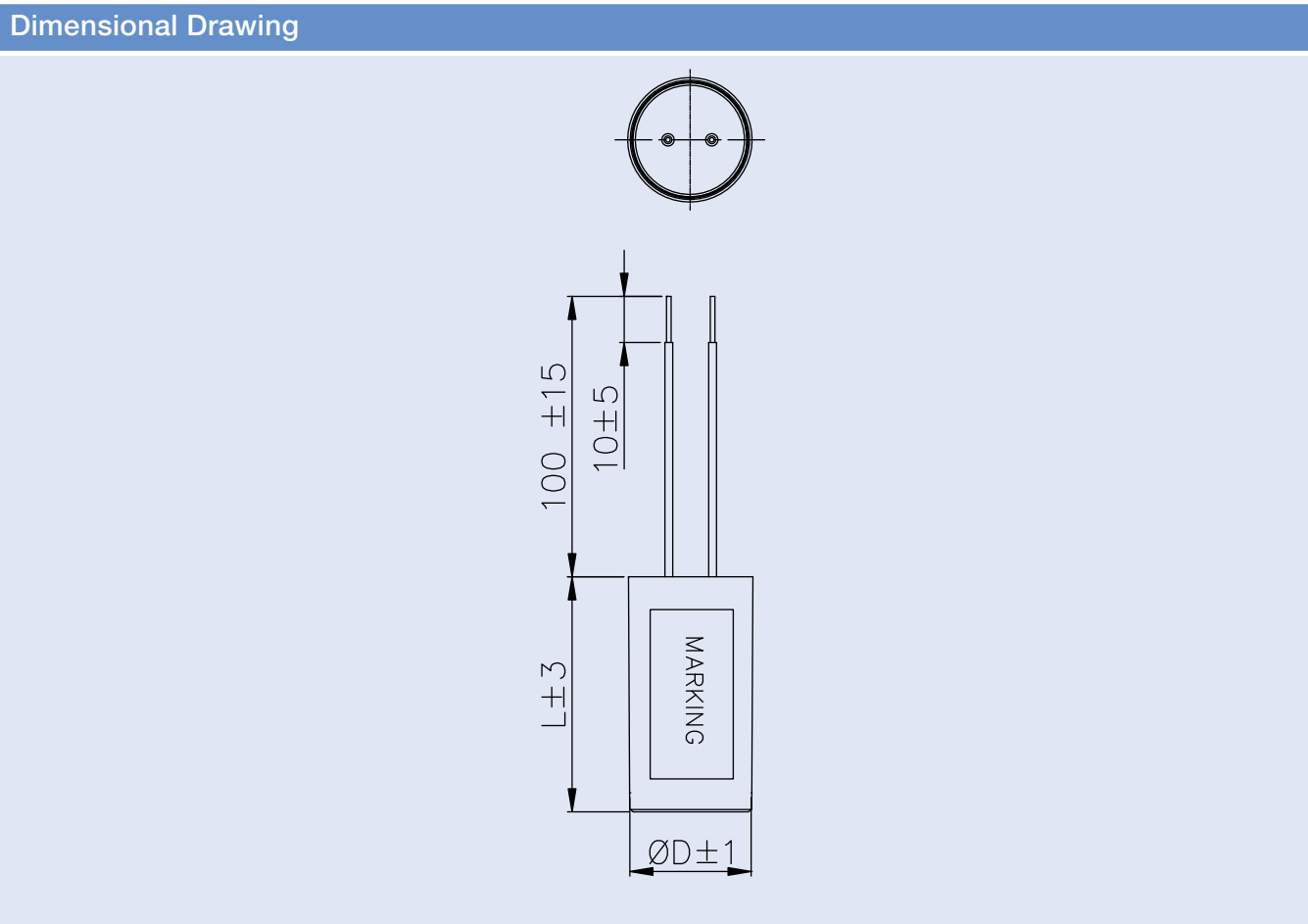
MotorCap FAN		
	Series	MotorCap FAN B32415G*
	Technical data	Type : Motor Run Capacitor Voltage range : 440 Vrms Capacitance : 1 ... 4 µF Construction : Plastic case
	Applications	For general sine wave applications, mainly as motor run capacitor for fans

MotorCap FAN	
Technical data : MotorCap FAN	
Series type	B32415G
Terminal	Flexible wire terminals
Electrical Ratings	
Rated Voltage V_R	440 (Others on request)
Rated Capacitance C_R	1 ... 4 µF (Others on request)
Rated frequency f_R	50 Hz
Capacitance tolerance	±5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1 kHz)	≤ 7 • 10 ⁻³
Application	General sine wave applications, mainly as motor run capacitor
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IS 1709 : 1984
Dimension	Refer Table (Others on request)

Film Capacitors

AC Capacitors

MotorCap FAN					
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)
B32415G	B32415G5105J 213	1 MFD/440 V 25 x 40 PL WITH WIRE 100 MM	25 x 45	1	440
B32415G	B32415G5155J 213	1.5 MFD/440 V 25 x 40 PL WITH WIRE 100 MM	25 x 45	1.5	440
B32415G	B32415G5205J 213	2 MFD/440 V 25 x 40 PL WITH WIRE 100 MM	25 x 45	2	440
B32415G	B32415G5225J 213	2.25 MFD/440 V 25 x 40 PL WIRE 100 MM	25 x 45	2.25	440
B32415G	B32415G5255J 213	2.5 MFD/440 V 25 x 40 PL WIRE 100 MM	25 x 45	2.5	440
B32415G	B32415G5315J 213	3.15 MFD/440 V 25 x 40 PL WITH WIRE 100 MM	25 x 45	3.15	440
B32415G	B32415G5405J 213	4 MFD/440 V 25 x 50 PL WITH WIRE 100 MM	25 x 53	4	440
B32415G	B32415G5155J 214	1.5 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 x 51	1.5	440
B32415G	B32415G5205J 214	2.0 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 x 51	2	440
B32415G	B32415G5225J 214	2.25 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 x 51	2.25	440
B32415G	B32415G5255J 214	2.5 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 x 51	2.5	440
B32415G	B32415G5315J 214	3.15 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 X 51	3.15	440
B32415G	B32415G5405J 214	4.0 MFD/440 V 27 x 50 PL WITH WIRE 100 MM	27 x 51	4	440



Note:
The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

MotorCap RUN



Series	MotorCap RUN B32320E/B32320S/B32320B
Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 2 ... 72 μ F Construction : Plastic case Safety Class : P0
Applications	For general sine wave applications, mainly as motor run capacitor for FHP motors

MotorCap RUN

Technical data : MotorCap RUN

Series type	B32320
Terminal	Single fast-on
Electrical Ratings	
Rated Voltage V_R	440/450/480 (Refer table) (Others on request)
Rated Capacitance C_R	2 ... 72 μ F (Others on request)
Rated frequency f_R	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20 °C, 1 kHz)	$\leq 7 \cdot 10^{-3}$
Application	For general sine wave applications, mainly as motor run capacitor

Safety

Safety class	P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC class B/C/D (1 - 120 nF) (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70... +85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IS 2993:1998
Dimension	Refer Table (Others on request)

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
UL (for construction only)	UL (On request)
VDE	400 V/85 °C : class B for 3 μ F to 50 μ F (On request) 250 V/85 °C : class B for 3 μ F to 50 μ F (On request) 480 V/85 °C: class C for 3 μ F to 35 μ F (On request)

Film Capacitors

AC Capacitors

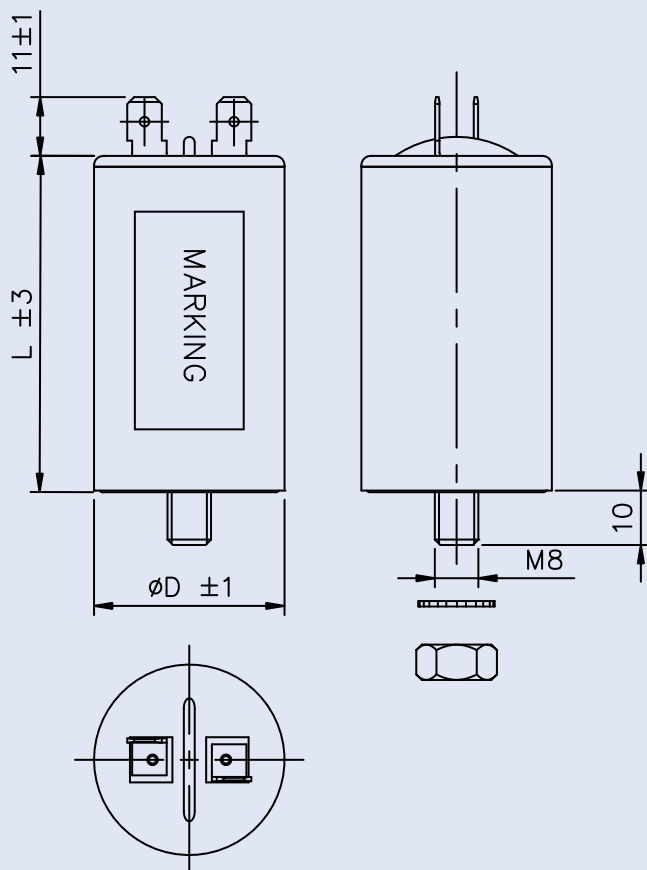
MotorCap RUN								
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32320E	B32320E6255J 10	2.5 MFD 450 V PL 25 x 48 6.3 x 0.8 IN TER	25 x 48	2.5	450	ISI	D	B
	B32320E6305J 10	3.0 MFD 450 V PL 25 x 48 6.3 x 0.8 IN TER	25 x 48	3	450	ISI	D	B
	B32320E6405J 10	4 MFD 450 V PL 25 x 48 SFO INS TER	25 x 48	4	450	ISI	D	B
	B32320E6505J 10	5 MFD 450 V PL 25 x 48 SFO INS TER	25 x 48	5	450	ISI	D	B
	B32320E6605J 10	6 MFD 450 V PL 25 x 55 SFO INS TER	25 x 55	6	450	ISI	D	B
	B32320E6805J 10	8 MFD 450 V PL 30 x 55 SFO INS TER	30 x 55	8	450	ISI	D	B
	B32320E6126J 510	12.5 MFD 450 V PL 35 x 60 SFO INS TER	35 x 60	12.5	450	ISI	D	B
	B32320E5256J 10	25 MFD 440 V PP 40 x 70 PFT SFO	40 x 70	25	440	ISI	D	A
	B32320E6205J 13	2 MFD 450 V PL 25 x 48 SFO 6.3 x 0.8 IN TER	25 x 48	2	450	ISI	B	B
	B32320E6255J 13	2.5 MFD 450 V PL 25 x 48 SFO 6.3 x 0.8 IN TER	25 x 48	2.5	450	ISI	B	B
	B32320E6305J 13	3 MFD/450 V PL 27 x 48 SFO 6.3 x 0.8	27 x 48	3	450	ISI	B	A
	B32320E6355J 13	3.5 MFD 450 V PL 27 x 48 SFO 6.3 x 0.8 IN TER	27 x 48	3.5	450	ISI	B	B
	B32320E6405J 13	4 MFD/450 V PL 27 x 48 SFO 6.3 x 0.8	27 x 48	4	450	ISI	B	B
	B32320E6505J 13	5 MFD/450 V PL 27 x 55 SFO 6.3 x 0.8	27 x 55	5	450	ISI	B	B
	B32320E6605J 13	6 MFD 450 V PL 30 x 55 SFO 6.3 x 0.8	30 x 55	6	450	ISI	B	B
	B32320E6805J 13	8 MFD 450 V PL 35 x 60 SFO 6.3 x 0.8	35 x 60	8	450	ISI	B	B
	B32320E6106J 13	10 MFD 450 V PL 35 x 60 SFO 6.3 x 0.8	35 x 60	10	450	ISI	B	B
	B32320E6505J 11	5 MFD 450 V PL 25 x 55 WITH CORE SFO INS TER	25 x 55	5	450	ISI	D	B
	B32320E6605J 12	6 MFD 450 V PL 25 x 55 WITH CORE SFO INS TER	25 x 55	6	450	ISI	D	B
B32320S	B32320S5805J 10	8 MFD 440 V PP 27 x 55 SINGLE FASTON	27 x 55	8	440	ISI	D	A
	B32320S5106J 10	10 MFD 440 V PP 30 x 55 SINGLE FASTON	30 x 55	10	440	ISI	D	A
	B32320S5156J 10	15 MFD 440 V PP 35 x 60 SINGLE FASTON	35 x 60	15	440	ISI	D	A
	B32320S5206J 10	20 MFD 440 V PP 35 x 70 SINGLE FASTON	35 x 70	20	440	ISI	D	A
B32320B	B32320B7505J 11	5 MFD 480 V PL 30 x 60 SFO WITH ISI MARKING	30 x 60	5	480	VDE, CE,ISI	C	A
	B32320B7805J 11	8 MFD 480 V PL 35 x 71 SFO WITH ISI MARKING	35 x 71	8	480	VDE, CE,ISI	C	A

Film Capacitors

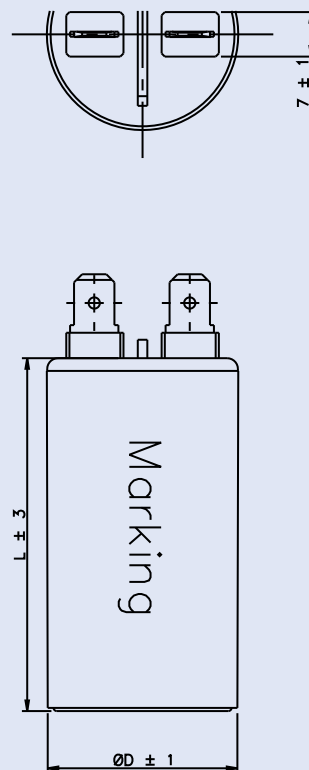
AC Capacitors

Dimensional Drawing

Terminal type A



Terminal type B

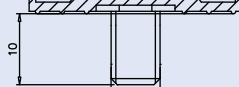


Mounting Options

= 1 : Can without mounting



= 3 : Can with M8 bolt

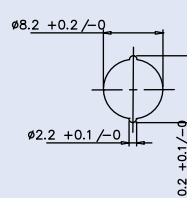


Star washer 8 mm
Nut M8 x 1.25

= 5 : Locking clip



M8 Sized fast fixation



Film Capacitors

AC Capacitors

MotorCap RUN



Series	MotorCap RUN B32322F/B32322R/B32322B
Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 2 ... 72 μ F Construction : Plastic case Safety Class : P0
Applications	For general sine wave applications, mainly as motor run capacitor

MotorCap RUN

Technical data : MotorCap RUN

Series type	B32322
Terminal	Double fast-on
Electrical Ratings	
Rated Voltage V_R	440/450/480 (Refer table) (Others on request)
Rated Capacitance C_R	2...72 μ F (Others on request)
Rated frequency f_R	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1kHz)	$\leq 7 \cdot 10^{-3}$
Application	For general sine wave applications, mainly as motor run capacitor

Safety

Safety class	P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC class B/C/D (1 - 120 μ F) (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70... +85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IS 2993:1998
Dimension	Refer Table (Others on request)

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
UL (for construction only)	UL (On request)
VDE	400 V/85 °C : class B for 3 μ F to 50 μ F (On request) 250 V/85 °C : class B for 3 μ F to 50 μ F (On request) 480 V/85 °C: class C for 3 μ F to 35 μ F (On request)

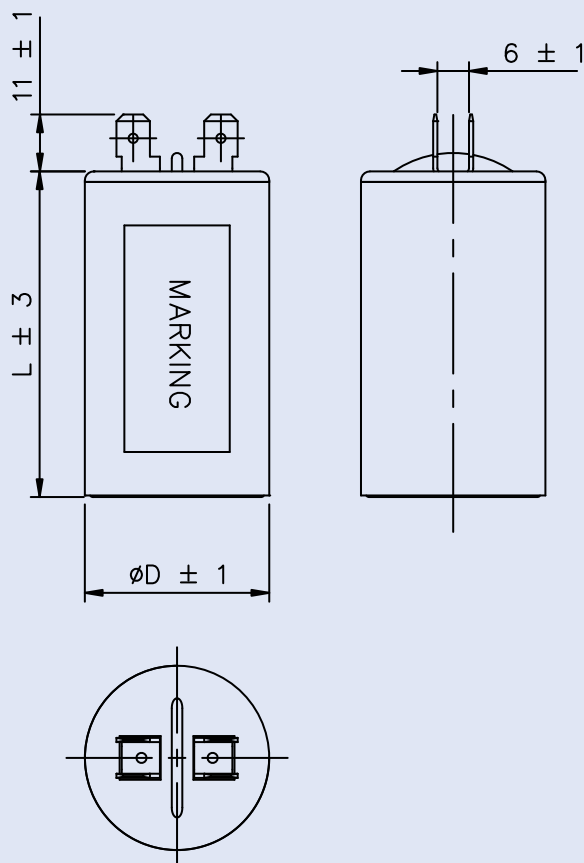
Film Capacitors

AC Capacitors

MotorCap RUN								
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32322F	B32322F5256J 10	25 MFD 440 V PL 35 x 95 (P) DFO	35 x 95	25	440	ISI	D	A
	B32322F5306J 10	30 MFD 440 V PL 35 x 95 (P) DFO	35 x 95	30	440	ISI	D	A
	B32322F5366J 10	36 MFD 440 V PL 35 x 95 (P) DFO	35 x 95	36	440	ISI	D	A
	B32322F1366J20	36 MFD 250/450 V PL 35 x 95 PFT DFO (XM81735)	35 x 95	36	450	ISI	D	A
	B32322F5406J 10	40 MFD 440 V PL 40 x 95 (P) DFO	40 x 95	40	440	ISI	D	A
	B32322F5456J 10	45 MFD 440 V PL 40 x 95(P) DFO	40 x 95	45	440	ISI	D	A
	B32322F1456J20	45 MFD 250/450 V PL 45 x 95 PFT DFO	45 x 95	45	450	ISI	D	A
	B32322F5506J 10	50 MFD 440 V PL 45 x 95 (P) DFO	45 x 95	50	440	ISI	D	A
	B32322F1506J 10	50 MFD 250/450 V PP 45 x 95 PFT DFO (XM81705)	45 x 95	50	450	ISI	D	A
	B32322F5726J 10	72 MFD 440 V PL 50 x 95(P) DFO	50 x 95	72	440	ISI	D	A
B32322R	B32322R5256J 20	25 MFD 440 V PP 45 x 70 PF DOUBLE FASTON	45 x 70	25	440	ISI	B	A
	B32322R5366J 20	36 MFD 440 V PP 45 x 96 PF DOUBLE FASTON	45 x 96	36	440	ISI	B	A
	B32322R5406J 20	40 MFD 440 V PL 45 x 98 PF DOUBLE FASTON	45 x 98	40	440	ISI	B	A
	B32322R5456J 20	45 MFD 440 V PP 50 x 96 PF DOUBLE FASTON	50 x 96	45	440	ISI	B	A
	B32322R5506J 20	50 MFD 440 V PP 50 x 96 PF DOUBLE FASTON	50 x 96	50	440	ISI	B	A
B32322B	B32322B5606J 20	60 MFD /440 V PL 50 x 95 DFO	50 x 95	60	440	ISI	B	A

Dimensional Drawing

Terminal Type A



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Film Capacitors

AC Capacitors

MotorCap RUN



Series	MotorCap RUN B32327S/B32327B/B32327E/B32327F/B3227R
Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 2 ... 72 μ F Construction : Plastic case Safety Class : P0(S0)
Applications	For general sine wave applications, mainly as motor run capacitor for FHP motors

MotorCap RUN

Technical data : MotorCap RUN

Series type	B32327
Terminal	Insulated wires Flexible or solid
Electrical Ratings	
Rated Voltage V_R	440/450/480 (Refer table) (Others on request)
Rated Capacitance C_R	2.5 ... 30 μ F (Others on request)
Rated frequency f_R	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1kHz)	$\leq 7 \cdot 10^{-3}$
Application	For general sine wave applications, mainly as motor run capacitor

Safety

Safety class	S0 to IEC 60252-1 / P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC class B/C/D (1 - 120 μ F) (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70... +85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IEC 60252-1+A1:2013 IS 2993:1998
Dimension	Refer Table (Others on request)

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
UL (for construction only)	UL (On request)
VDE	400 V/85 °C : class B for 3 μ F to 50 μ F (On request)
	250 V/85 °C : class B for 3 μ F to 50 μ F (On request)
	480 V/85 °C: class C for 3 μ F to 35 μ F (On request)

Film Capacitors

AC Capacitors

MotorCap RUN							
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)	Approval	Class of operation
B32327S	B32327S5255J 15	2.5 MFD 450 V PL 25 x 55 PFT 150 MM WIRE	25 x 55	2.5	450	ISI	D
	B32327S5805J 10	8 MFD 440 V PP 27 x 51 WW 150 MM	27 x 51	8	440	ISI	D
	B32327S5106J 10	10 MFD 440 V PP 30 x 60 WW 150 MM	30 x 60	10	440	ISI	D
	B32327S5126J 518	12.5 MFD 440 V PL 35 x 60 WW 150 MM	35 x 60	12.5	440	ISI	D
	B32327S5156J 10	15 MFD 440 V PP 35 x 60 WW 150 MM	35 x 60	15	440	ISI	D
	B32327S5206J 10	20 MFD 440 V PL 35 x 70 WW 150 MM	35 x 70	20	440	ISI	D
	B32327S5256J 10	25 MFD 440 V PP 40 x 71 WW 150 MM	40 x 71	25	440	ISI	D
	B32327S5306J 10	30 MFD 440 V PL 40 x 95 WW 150 MM	40 x 95	30	440	ISI	D
B32327R	B32327R6605J 13	6 MFD 450 V PL 30 x 55 WW 200 MM	30 x 55	6	450	ISI	B
	B32327R5106J 23	10 MFD 440 V PP 35 x 60 PF WW 100 MM 15 STR	35 x 60	10	440	ISI	B
B32327E	B32327E5855J 11	8.5 MFD/440 V PL 30 x 55 PF WW 300 MM (15)	30 x 55	8.5	440	ISI	C
B32327F	B32327F1726J 27	72 MFD 450 V PP 50 x 93 PF WW 200 MM 15 STR	50X93	72	450	ISI	D

Dimensional Drawing

Terminal Type

The diagram illustrates the physical dimensions of the capacitor terminals. The side view shows a rectangular body with two vertical terminals. The total height of the assembly is labeled as $b \pm 10$. The height of the terminals is specified as 15 ± 3 . The length of the body is labeled as $L \pm 3$. The word "Marking" is printed on the side of the body. The top view shows a circular body with a diameter of $\varnothing D \pm 1$ and two small circular mounting holes.

Film Capacitors

AC Capacitors

MotorCap RUN		
	Series	MotorCap RUN B32328E/B32328F/B32328R
	Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 2 ... 72 µF Construction : Plastic case Safety Class : P0(S0)
	Applications	For general sine wave applications, mainly as motor run capacitor for FHP motors

MotorCap RUN	
Technical data : MotorCap RUN	
Series type	B32328
Terminal	Wire with sleeve (Others on request)
Electrical Ratings	
Rated Voltage V_R	440/450/480 (Refer table) (Others on request)
Rated Capacitance C_R	2 ... 72 µF (Others on request)
Rated frequency f_R	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1kHz)	$\leq 7 \cdot 10^{-3}$
Application	General sine wave applications, mainly as motor run capacitor
Safety	
Safety class	S0 to IEC 60252-1 / P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC class B/C/D (1 - 120 nF) (Refer table) (Others on request)
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70... +85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 60252-1+A1:2013 IS 2993:1998
Dimension	Refer Table (Others on request)
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
UL (for construction only)	UL (On request)
VDE	400 V/85 °C : class B for 3 µF to 50 µF (On request) 250 V/85 °C : class B for 3 µF to 50 µF (On request) 480 V/85 °C : class C for 3 µF to 35 µF (On request)

Film Capacitors

AC Capacitors

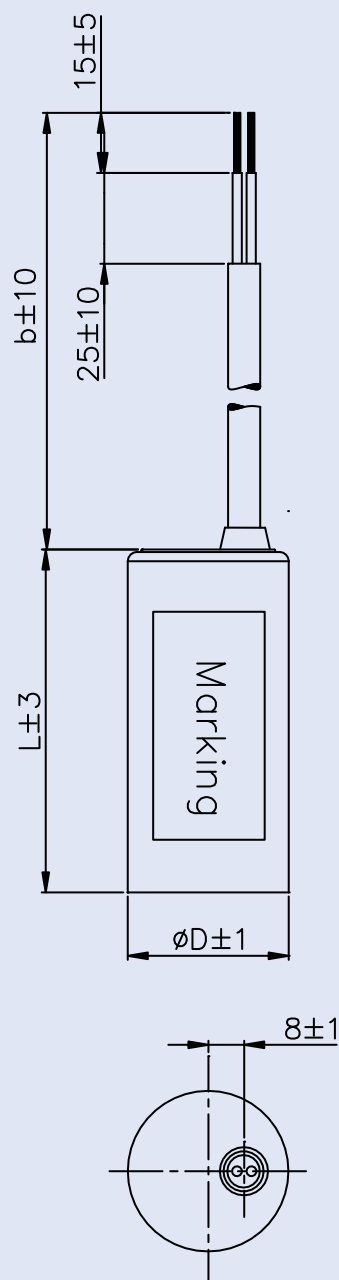
MotorCap RUN								
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32328E	B32328E6505J 18	5 MFD 450 V PL 25 x 48 WIRE & SLV 250 MM	25 x 48	5	450	ISI	D	A
	B32328E6605J 18	6 MFD 450 V PL 25 x 55 WIRE & SLV 250 MM	25 x 55	6	450	ISI	D	A
	B32328E5106J 18	10 MFD 440 V PL 30 x 60 WW 250 (200 SLV+35+15)	30 x 60	10	440	ISI	D	A
	B32328E6126J 518	12.5 MFD 450 V PL 35 x 60 WW 200 SLV+35+15	35 x 60	12.5	450	ISI	D	A
	B32328E5206J 10	20 MFD 440 V PP 35 x 70 PF WIRE 180+30+15 SLV	35 x 70	20	440	ISI	D	A
	B32328E5256J 10	25 MFD 440 V PP 40 x 71 PF WIRE 180+30+15 SLV	40 x 71	25	440	ISI	D	A
	B32328E6805J 18	8 MFD 450 V PL 30 x 60 WW 200 SLV+35+15	30 x 60	8	450	ISI	D	A
	B32328E6126J 528	12.5 MFD 450 V PL BLACK 35 x 60 WW 200 SLV+35+15	35 x 60	12.5	450	ISI	D	A
	B32328E6156J 18	15 MFD 450 V PL 35 x 60 WW 200 SLV+35+15	35 x 60	15	450	ISI	D	A
	B32328E5226J 512	22.5 MFD 440 V PL 40 x 70 WW 80 SLV+20+10	40 x 70	22.5	440	ISI	D	A
	B32328E5226J 512	22.5 MFD 440 V PL 40 X70 WW 80 SLV+20+10	40 x 70	22.5	440	ISI	D	A
	B32328E6306J 18	30 MFD 450 V PL 35 x 95 WW 200 SLV+35+15	35 x 95	30	450	ISI	D	A
	B32328E6306J 18	30 MFD 450 V PL 35 x 95 WW 200 SLV+35+15	35 X 95	30	450	ISI	D	A
	B32328E6366J 18	36 MFD 450 V PL 35 x 95 WW 200 SLV+35+15	35 x 95	36	450	ISI	D	A
	B32328E6366J 18	36 MFD 450 V PL35 x 95 WW 200 SLV+35+15	35 x 95	36	450	ISI	D	A
	B32328E6406J 18	40 MFD 450 V PL 40 x 95 WW 200 SLV+35+15	40 x 95	40	450	ISI	D	A
	B32328E6456J 18	45 MFD 450 V PL 40 x 95 WW 200 SLV+35+15	40 x 95	45	450	ISI	D	A
	B32328E6506J 18	50 MFD 450 V PL 45 x 95 WW 200 SLV+35+15	45 x 95	50	450	ISI	D	A
	B32328E6726J 10	72 MFD450 V PL 50 x 105 PFT 150+35+15 WIRE SLV	50 x 105	72	450	ISI	D	A
	B32328E6106J 15	10 MFD450 V PL 30 x 60 PF WW 100 SLV+30+20	30 x 60	10	450	ISI	D	A
B32328F	B32328F5556J 23	55 MFD 440 V PP 45 x 95 (P) WIRE 250+25+15 SLV	45 x 95	55	440	ISI	D	A
B32328R	B32328R5156J123	15 MFD 440 V PL 40 x 71PFT 250+25+15 WIRE SLV	40 x 71	15	440	ISI	D	A
	B32328R5206J 23	20 MFD440 V PL 40 x 70 PFT 250+25+15 WIRE SLV	40 x 70	20	440	ISI	B	A
	B32328R5256J 23	25 MFD440 V PP 45 x 70 PFT 250+25+15 WIRE SLV	45 x 70	25	440	ISI	B	A
	B32328R5306J 23	30 MFD440 V PL 40 x 95 PFT 250+25+15 WIRE SLV	40 x 95	30	440	ISI	B	A
	B32328R5366J 23	36 MFD440 V PP 45 x 95 PFT 250+25+15 WIRE SLV	45 x 95	36	440	ISI	B	A
	B32328R5406J 23	40 MFD 440 V PP 45 x 95 PF WIRE 250+25+15SLV	45 x 95	40	440	ISI	B	A
	B32328R5456J 23	45 MFD 440 V PP 50 x 95 PFT 250+25+15 WIRE SLV	50 x 95	45	440	ISI	B	A
	B32328R5506J 23	50 MFD 440 V PL 50 x 95 PFT 250+25+15 WIRE SLV	50 x 95	50	440	ISI	B	A
	B32328R5156A 20	15 MFD 440 V PL 45 x 71WW 255 (170 SLV) EYEGILT	45 x 71	15	440	ISI	B	B
	B32328R5256A 20	25 MFD 440 V PL 45 x 95 WW 255 (170 SLV) EYEGILT	45 x 95	25	440	ISI	B	B

Film Capacitors

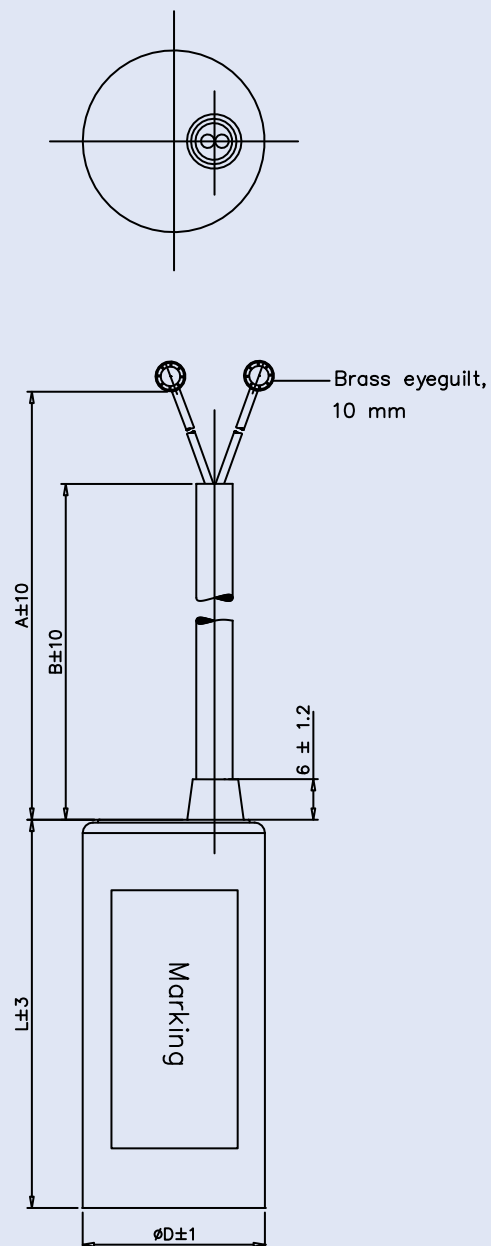
AC Capacitors

Dimensional Drawing

Terminal type A



Terminal type B



Notes:

Termination type A

Dimension B = Sleeve length

Dimension C = Wire length without sleeve

Dimension D = Strip out length

Termination type B

Dimension B = Sleeve length

Dimension A = Total wire length

Film Capacitors

AC Capacitors

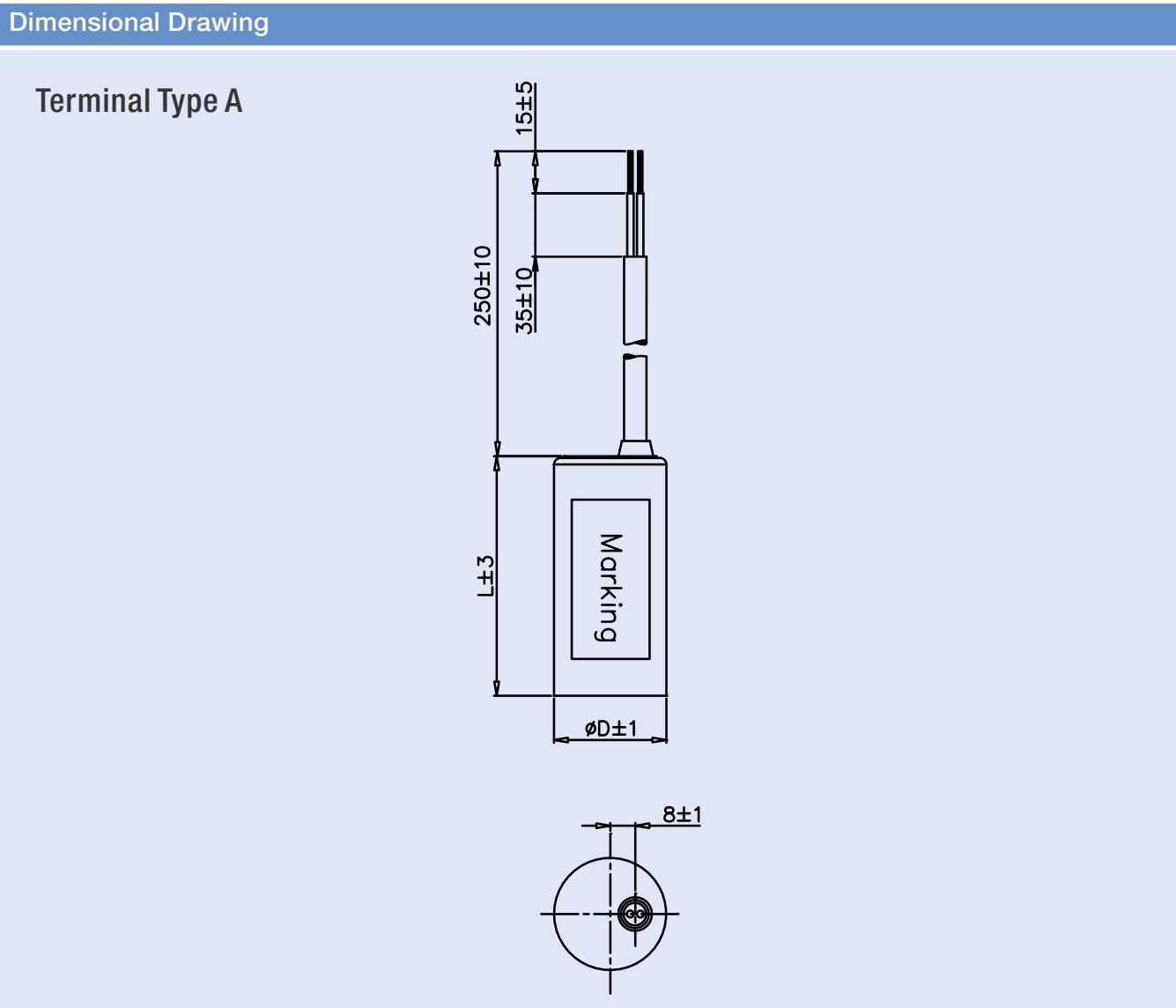
MotorCap SUBMERSIBLE		
	Series	MotorCap SUBMERSIBLE B32328F*
	Technical data	Type : Motor Run Capacitor Voltage range : 250/450 Vrms Capacitance : 25 ... 72 μ F Construction : Plastic case Safety Class : P0(S0)
	Applications	For general sine wave applications, mainly for submersible pump application

MotorCap SUBMERSIBLE	
Technical data : MotorCap SUBMERSIBLE	
Series type	B32328F
Terminal	Wire with sleeve
Electrical Ratings	
Rated Voltage V_n	450 (Refer table) (Others on request)
Rated Capacitance	25...72 μ F (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1kHz)	$\leq 1.0 \cdot 10^{-2}$
Application	For general sine wave applications, mainly for motor start application
Safety	
Safety class	S0 to IEC 60252-1/ P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC, Class D (Refer table) (Others on request) 250 V AC, Class C
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70...+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 60252-1+A1:2013, IS 2993 :1998
Case	Plastic case
Dimension in mm	Refer Table (Others on request)
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC: Class B/C/D, 85 °C 250 V AC, Class C/D, 85 °C

Film Capacitors

AC Capacitors

MotorCap SUBMERSIBLE							
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32328F	B32328F1256J 23	35 x 95	25	450	ISI	D	A
	B32328F1306J 23	35 x 95	30	450	ISI	D	A
	B32328F1366J 23	35 x 95	36	450	ISI	D	A
	B32328F1406J 23	40 x 95	40	450	ISI	D	A
	B32328F1456J 23	40 x 95	45	450	ISI	D	A
	B32328F1506J 75	45 x 95	50	450	ISI	D	A
	B32328F1606J 23	45 x 95	60	450	ISI	D	A
	B32328F1726J 23	50 x 95	72	450	ISI	D	A



Note:
The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

Dual MotorCap for washing machine

	Series	B32418	
	Technical data	Type	: MotorCap S0 Compact
		Terminal Type	: Flexible lead wires
		Voltage range	: 440 Vrms (Others on request)
		Capacitance	: 5.3+2.1...15+4 (Others on request)
		Construction	: Plastic case
		Safety Class	: S0 to IEC 60252-1 / P0 to IS 2993:1998
Applications		For general sine wave applications, mainly as motor run capacitor for washer	

Dual MotorCap for washing machine

Technical data : Dual Motor Cap™ for washing machine	
Series type	B32418
Terminal	Flexible lead wires & Receptacles on request: crimped to the end of flexible wires
Rated frequency	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Dissipation factor $\tan \delta$ (20°C, 1kHz)	$\leq 7.0 \cdot 10^{-3}$
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Application	For general sine wave application, mainly as motor run application
Safety	
Safety class	S0 to IEC 60252-1 / P0 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	440 V, Class C/D (Others on request)
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 60252-1+A1:2013, IS 2993 :1998
Dimensions	Ø:30...55; H:60...120mm
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC, Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
TÜV	440 V AC: Class C (5.3+2.1 to 12+6)

Note:

The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

Dual MotorCap for washing machine							
Series	Part Code	Material Description	Dimensions	MFD (nF)	Voltage (V)	Approval	Class of operation
B32418S	B32418S6146A19	10+4 MFD/450 V PL 35 x 40 x 60 PFT WIRE 420 (15)	35 x 40 x 60	10+4	440	ISI	C
B32418S	B32418S5156J20	10+5 MFD/440 V PL 35 x 40 x 60 WW GREY 500 (15)	35 x 40 x 60	10+5	440	ISI	C
B32418G	B32418G6176A16	12+5 MFD/450 V-5to+10% PL 40x 80 PFT WW 420(12)	40 x 80	12+5	440	ISI	C
B32418S	B32418S5136J527	8.5+5 MFD 440 V PP 40 x 35 x 60 PFT WW 385 MM (15)	40 x 35 x 60	8.5+5	440	ISI	C
B32418S	B32418S5126J21	8+4 MFD 440 V PL 35 x 40 x 60 WW GREY 500 (15) S0	35 x 40 x 60	8+4	440	ISI	C
B32418S	B32418S5146J523	9.5+4 MFD 440 V PP 40 x 35 x 60 PFT WW 325 MM (15)	40 x 35 x 60	9.5+4	440	ISI	C
B32418S	B32418S6146A26	9+5 MFD 450 V -5+10% PL 35 x 40 x 60 PFT WW 420 (13)	35 x 40 x 60	9+5	440	ISI	C

Film Capacitors

AC Capacitors

MotorCap RUN



Series

MotorCap RUN - Plastic TOP
B32332*

Technical data

Type : Motor Run Capacitor
Voltage range : 450 Vrms
Capacitance : 2 ... 60 μ F
Construction : Aluminum can with plastic top
Safety Class : P2(S2)

Applications

- For general sine wave applications, mainly as motor run

MotorCap RUN

Technical data : MotorCap RUN

Series type	B32332
Terminal	Single fast-on / Double fast-on

Electrical Ratings

Rated Voltage V_n	450,500 (Refer table) (Others on request)
Rated Capacitance	2...60 μ F (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Dissipation factor δ' (20°C, 1kHz)	$\leq 7.0 \cdot 10^{-3}$
Application	For general sine wave applications, mainly UPS AC output filter
Safety class	S2 to IEC 60252-1 / P2 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC Class B/C/D (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IEC 60252-1+A1:2013, UL 810, IS2993:2998, IS 1569
Aluminum can	With overpressure disconnection device
Terminal top	UL 94 compatible, optional compatible to IEC 60335-1, optional Glow wire test to IEC 60695-2-11
Dimensions	Refer Table (Others on request) Refer Table (Others on request)

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC, Class B/C/D (Refer Table)(Others on Request)
CE	Compliance to LV directive 2014/35/EU (On request)
CQC	Approval on request
UL	Approved component 10000 AFC, protected up to 450 V
TÜV	1-50 μ F, 450 V AC: Class B, 85 °C (Others on request)
VDE	0.75-60 μ F, 450 V AC: Class B, 85 °C

Film Capacitors

AC Capacitors

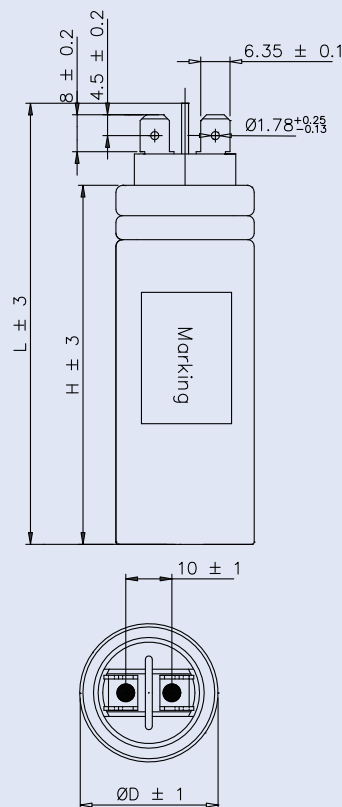
MotorCap RUN							
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32332B	B32332B6305J52	30 x 68	3	450	UL,ISI,VDE,CQC	B	B
B32332I	B32332I5205J 72	30 x 52	2	450	ISI,TUV,CE	B	B
	B32332I5255J 60	30 x 52	2.5	450	ISI,TUV,CE	B	A
	B32332I5405J 60	30 x 52	4	450	ISI,TUV,CE	B	A
	B32332I5505J 60	30 x 52	5	450	ISI,TUV,CE	B	A
	B32332I5605J 60	30 x 52	6	450	ISI,TUV,CE	B	A
	B32332I5805J 61	30 x 68	8	450	UL,ISI,TUV,CE	B	A
	B32332I5106J 50	30 x 68	10	440	UL,TUV	B	A
	B32332I5156J 61	30 x 78	15	420/450	ISI,UL,TUV,CE	B	A
	B32332I5206J 61	35 x 78	20	420/450	ISI,UL,TUV,CE	B	A
	B32332I5256J 50	40 x 78	25	440	ISI	B	B
	B32332I5506J 56	45 x 93	50	450	UL	B	A
	B32332I6556J 50	45 x 103	55	450	UL	B	A
	B32332I5606J 50	45 x 103	60	440	ISI,UL,TUV,CE	B	A
	B32332I5606J 76	45 x 103(S)	60	440	ISI	B	B
	B32332I6126J 50	30 x 78	12	450	ISI,UL,VDE,CE	B	A
	B32332I6306J 52	35 x 93	30	450	UL	B	A
	B32332I6356J 53	35 x 103	35	450	UL,ISI,TUV,CE	B	A
	B32332I5366J50	40 x 103	36	440	ISI	B	B
	B32332I6406J 53	40 x 103	40	450	UL,ISI,TUV,CE	B	A
	B32332I6456J 53	40 x 103	45	450	UL,ISI,TUV,CE	B	A
B32332I	B32332I5356J 60	45 x 78	35	440	ISI	B	B
	B32332I5406J 60	45 x 93	40	440	ISI	B	B
	B32332I5456J 60	45 x 93	45	440	ISI	B	B
	B32332I5506J 60	45 x 93	50	440	ISI	B	B
	B32332I5556J 60	45 x 103	50	440	ISI	B	B
	B32332I5606J 60	45 x 103	60	440	ISI	B	B
B32332V	B32332V1256J 80	40 x 78	25	250	CE	B	A
B32332V	B32332V1506J 80	53 x 80	50	250	CE	B	A

Film Capacitors

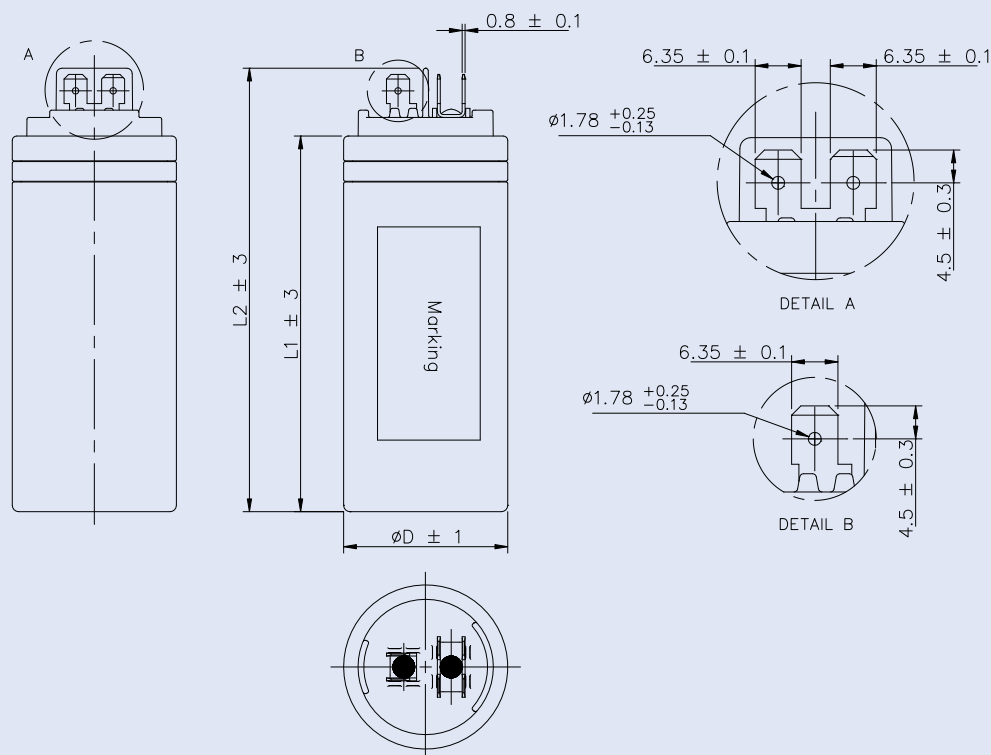
AC Capacitors

Dimensional Drawing

Terminal Type A



Terminal Type B



Film Capacitors

AC Capacitors

MotorCap RUN and Aircon



Series	MotorCap RUN and Aircon B32332W
Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 35 ... 50 μ F Construction : Aluminum can with plastic top Product with wire connector Safety Class : P2(S2)
Applications	For general sine wave applications, mainly as motor run, UPS and inverter

MotorCap RUN and Aircon

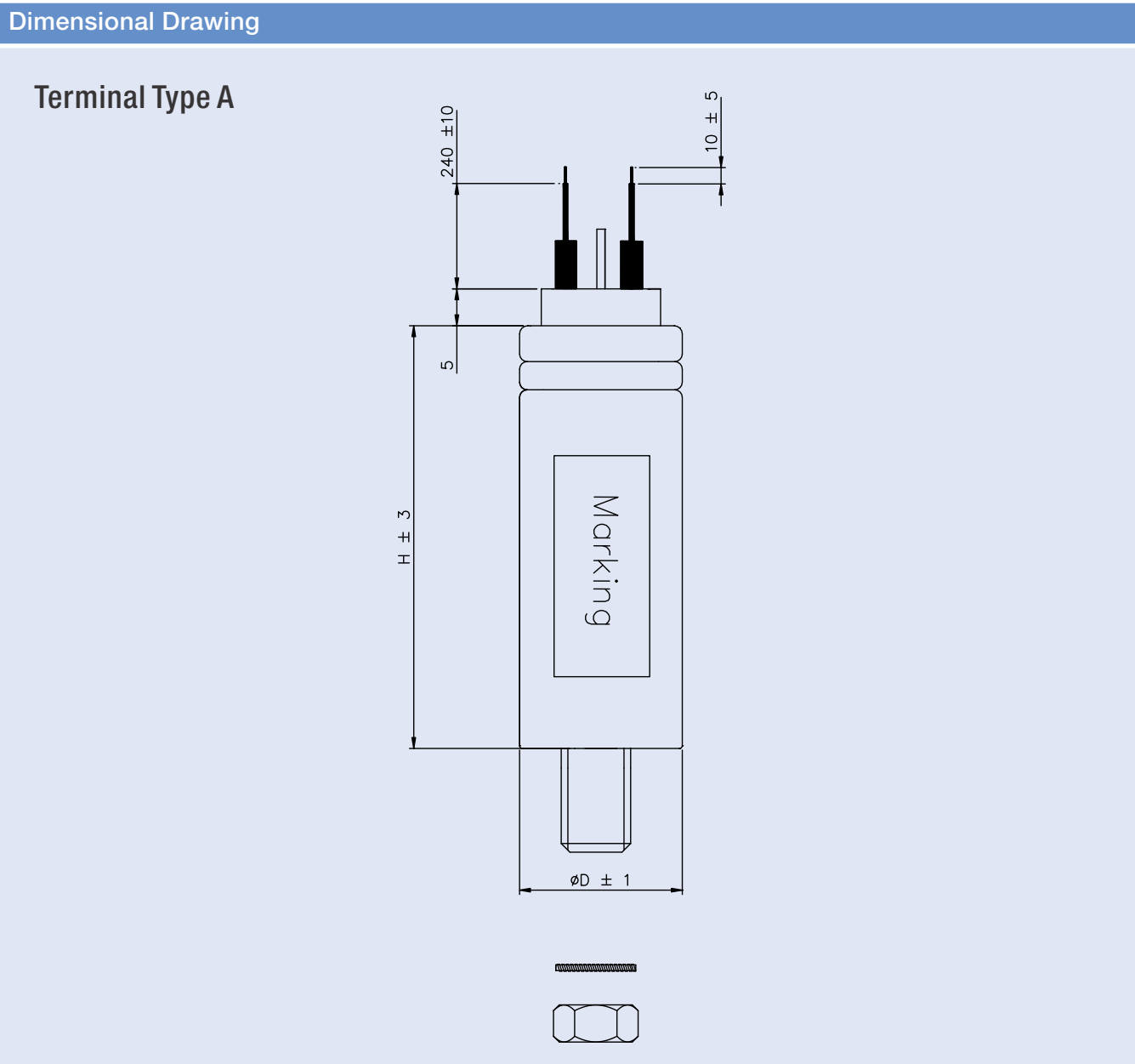
Technical data : MotorCap RUN and Aircon

Series type	B32332W
Terminal	Wire connector
Electrical Ratings	
Rated Voltage V_n	600(Refer table) (Others on request)
Rated Capacitance	35...50 μ F (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Dissipation factor δ' (20°C, 1kHz)	$\leq 1.2 \cdot 10^{-3}$
Application	For general sine wave applications, mainly UPS AC output filter
Safety	
Safety class	S2 to IEC 60252-1 /P2 to IS 2993:1998
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 61071, IEC 60252-1+A1:2013, IS 2993:1998 (Refer Table)
Case	Aluminum can, plastic top
Dimension in mm	Refer Table (Others on request)
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC, Class B/C/D (Refer Table)(Others on Request)
CE	Compliance to LV directive 2014/35/EU (On request)

Film Capacitors

AC Capacitors

MotorCap RUN and Aircon								
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type	Reference Standard
B32332W	B32332W8366J 70	50 x 132	36	600	CE	-	A	IEC61071
B32332W	B32332W8486J 70	63.5 x 105	48	600	CE	-	A	IEC61071
B32332W	B32332W5366J 50	45 x 105	36	440	ISI	B	A	-
B32332W	B32332W5506J 50	50 x 105	50	440	ISI	B	A	-



Film Capacitors

AC Capacitors

MotorCap DUAL RUN



Series	MotorCap DUAL RUN - Plastic TOP B32335
Technical data	Type : Motor Run Capacitor Voltage range : 450 Vrms Capacitance : 10+1...60+10 µF Construction : Aluminum can with plastic top Safety Class : P2(S2)
Applications	For general sine wave applications, mainly as motor run capacitor

MotorCap DUAL RUN

Technical data : MotorCap DUAL RUN

Series type	B32335
Terminal	Single/ double fast-on Quadruple fast-on (4 lugs)
Electrical Ratings	
Rated Voltage V_n	250,450 (Refer table) (Others on request)
Rated Capacitance	10 +1...60 +10 µF (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Dissipation factor δ' (20°C, 1kHz)	≤ 7.0 • 10 ⁻³
Application	For general sine wave applications, mainly for motor start application

Safety

Safety class	S2 to IEC 60252-1 / P2 to IS 2993: 1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC: Class B/C/D, 85 °C

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IEC 60252-1+A1:2013, IS 2993:1998
Aluminum can	Aluminum case
Terminal top	UL 94 compatible minimum V2, compliance to IEC 60335-1 on request and optional Glow wire test to IEC 60695-2-11
Dimension in mm	Refer Table (Others on request)

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC: Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
CQC	Approval on request
UL	Approved component 10000 AFC, protected up to 450 V
TÜV	10+1...60+10 µF, 450 V AC: Class B, 85 °C

Film Capacitors

AC Capacitors

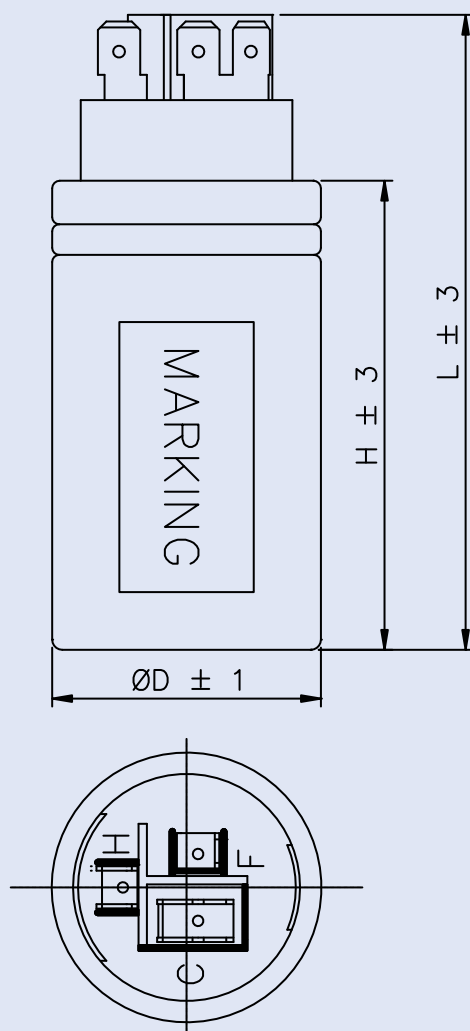
MotorCap DUAL RUN							
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Class of operation	Terminal Type
B32335I	B32335I6346J 60	45 x 80	30+4	450	UL,ISI,TUV,CE	B	A
	B32335I5366J 50	45 x 80	30+6	440	UL,ISI,TUV,CE	B	A
	B32335I6376J 61	45 x 80	35+2.0	450	UL,ISI,TUV,CE	B	A
	B32335I5376J 550	45 x 80	35+2.5	440	UL,ISI,TUV,CE	B	A
	B32335I5396J 50	45 x 80	35+4	440	UL,ISI,TUV,CE	B	A
	B32335I5416J 51	45 x 80	35+6	440	UL,ISI,TUV,CE	B	A
	B32335I4426J 50	45 x 80	36+6	440	UL,ISI,TUV,CE	B	A
	B32335I6426J 60	45 x 93	40+2.0	450	UL,ISI,TUV,CE	B	A
	B32335I5446J 51	45 x 103	40+4	440	UL,ISI,TUV,CE	B	A
	B32335I5466J 50	45 x 93	40+6	440	UL,ISI,TUV,CE	B	A
	B32335I4476J 51	45 x 92	45+2	440	UL,ISI,TUV,CE	B	A
	B32335I5496J 50	45 x 103	45+4	440	UL,ISI,TUV,CE	B	A
	B32335I5516J 51	45 x 93	45+6	440	UL,ISI,TUV,CE	B	A
	B32335I5526J 50	45 x 103	50+2	440	UL,ISI,TUV,CE	B	A
	B32335I5526J 550	45 x 103	50+2.5	440	UL,ISI,TUV,CE	B	A
	B32335I5546J 52	45 x 103	50+4	440	UL,ISI,TUV,CE	B	A
	B32335I5556J 51	45 x 103	50+5	440	UL,ISI,TUV,CE	B	A
	B32335I4596J 51	45 x 103	55+4	440	UL,ISI,TUV,CE	B	A
	B32335I4616J 50	45 x 103	55+6	440	UL,ISI,TUV,CE	B	A
	B32335I5656J 50	53 x 105	55+10	440	UL,ISI,TUV,CE	B	A
	B32335I6626J 60	53 x 95	60+2.0	450	UL,ISI,TUV,CE	B	A
	B32335I6646J 60	53 x 95	60+4.0	450	UL,ISI,TUV,CE	B	A
	B32335I6276J61	45 x 80	25+2	450	UL,ISI,TUV,CE	B	A
	B32335I4296J50	45 x 80	25+4	440	UL,ISI,TUV,CE	B	A
	B32335I6326J63	45 x 80	30+2	450	UL,ISI,TUV,CE	B	A
	B32335I5456J50	45 x 103	35+10	440	UL,ISI,TUV,CE	B	A
	B32335I5386J50	45 x 80	35+3	440	UL,ISI,TUV,CE	B	A
	B32335I6436J60	45 x 103	40+3	450	UL,ISI,TUV,CE	B	A
	B32335I5456J55	53 x 80	40+5	440	UL,ISI,TUV,CE	B	A
	B32335I5486J50	45 x 105	45+3	440	UL,ISI,TUV,CE	B	A
	B32335I5506J52	53 x 80	45+5	440	UL,ISI,TUV,CE	B	A
	B32335I5536J50	45 x 105	50+3	440	UL,ISI,TUV,CE	B	A
	B32335I6566J50	45 x 105	50+6	440	UL,ISI,TUV,CE	B	A
	B32335I5586J50	45 x 105	55+3	440	UL,ISI,TUV,CE	B	A
	B32335I5586J560	53 x 107	55+3.5	440	UL,ISI,TUV,CE	B	A
	B32335I5636J561	53 x 107	60+3.5	440	UL,ISI,TUV,CE	B	A
	B32335I6666J50	53 x 107	60+6	440	UL,ISI,TUV,CE	B	A
	B32335I5686J61	53 x 107	65+3	440	UL,ISI,TUV,CE	B	A
	B32335I5696J60	53 x 107	65+4	440	UL,ISI,TUV,CE	B	A

Film Capacitors

AC Capacitors

Dimensional Drawing

Terminal Type A



Film Capacitors

AC Capacitors

MotorCap RUN



Series	B3333X
Technical data	Type : MKP AC Capacitor Terminal Type : Single fast-on / Double fast-on Voltage range : 450 Vrms (Others on request) Capacitance : 2.....60 µF (Others on request) Construction : Aluminum Can with over pressure disconnection device Safety Class : S2 to IEC 60252-1 / P2 to IS 2993:1998
Applications	For general sine wave application, mainly as motor run application

MotorCap RUN

Technical data : MotorCap RUN

Series type	B3333X
Terminal	Single fast-on / Double fast-on

Electrical Ratings

Rated Voltage V_n	450 (Others on request)
Rated Capacitance	1...65 (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Dissipation factor $\tan \delta$ (20°C, 1kHz)	≤ 7.0 • 10 ⁻³
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Application	For general sine wave application, mainly as motor run application

Safety

Safety class	S2 to IEC 60252-1 / P2 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC Class B/C/D (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IEC 60252-1+A1:2013, UL 810, IS2993:2998
Aluminum can	With overpressure disconnection device
Terminal top	UL 94 compatible, compatible to IEC 60335-1 (optional) Glow wire test to IEC 60695-2-11 (optional)
Dimensions	q: 30...63.5 mm H: 55...127 mm

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC, Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
CQC	Approval on request
UL	Approved component 10000 AFC, protected up to 450 V
VDE	1-65 µF, 450 V AC: Class B, 85 °C

Film Capacitors

AC Capacitors

MotorCap RUN



Series	B33335
Technical data	Type : MKP AC Capacitor Terminal Type : Type of fast-on Termination on Request Voltage range : 450 Vrms Capacitance : 10 +1 ...60 +10 (Others on request) Construction : Aluminum Can with over pressure disconnection device Safety Class : S2 to IEC 60252-1 / P2 to IS 2993:1998
Applications	For general sine wave application, mainly as motor run application

MotorCap RUN

Technical data : MotorCap RUN

Series type	B33335
Terminal	Type of fast-on Termination on Request

Electrical Ratings

Rated Voltage V_n	450 (Others on request)
Rated Capacitance	10 +1 ...60 +10 (Other on request)
Rated frequency	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Dissipation factor $\tan \delta$ (20°C, 1kHz)	≤ 7.0 • 10 ⁻³
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Application	For general sine wave application, mainly as motor run application

Safety

Safety class	S2 to IEC 60252-1 / P2 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC Class B/C/D (Refer table) (Others on request)

Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IEC 60252-1+A1:2013, UL 810, IS2993:2998
Aluminum can	With overpressure disconnection device
Terminal top	UL 94 compatible, optional compatible to IEC 60335-1, optional Glow wire test to IEC 60695-2-11
Dimensions	Diameter 30 mm to 63.5 mm Height 55 mm to 127 mm

Approvals (Can be Offered on Specific Requirement)

ISI	450 V AC, Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
CQC	Approval on request
UL	Approved component 10000 AFC, protected up to 450 V
VDE	1+1-65+15 µF, 450 V AC: Class B, 85 °C

Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Terminal Type
B33335B	B33335B6706J50	60X127	60+10	450	UL ISI TUV CE	B

Film Capacitors

AC Capacitors

MotorCap RUN Compact

	Series	B32355	
	Technical data	Type	: MotorCap S3 Compact
		Terminal Type	: Wire Termination
		Voltage range	: 450 Vrms
		Capacitance	: 2.....20 µF (Others on request)
		Construction	: Plastic case
		Safety Class	: S3 to IEC 60252-1/ P2 to IS 2993:1998
	Applications	For general sine wave applications, mainly for motor run application	

MotorCap RUN Compact

Technical data : MotorCap RUN Compact	
Series type	B32355
Terminal	Wire Termination
Rated frequency	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Dissipation factor $\tan \delta$ (20°C, 1kHz)	$\leq 1.0 \cdot 10^{-2}$
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Application	For general sine wave application, mainly as motor run application
Safety	
Safety class	S3 to IEC 60252-1 / P2 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC Class B
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70 °C...+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 60252-1+A1:2013, IS 2993 :1998
Dimensions	30 x 62 mm (D x H) to 50 x 95 mm (D x H)
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC, Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
VDE	2-20 µF, 450 V AC: Class B, 85 °C

Note:

The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

MotorCap RUN Compact

	Series	B32356	
	Technical data	Type	: MotorCap S3 Compact
		Terminal Type	: Twin Core Cable
		Voltage range	: 450 Vrms
		Capacitance	: 2.....20 µF (Others on request)
		Construction	: Plastic case
		Safety Class	: S3 to IEC 60252-1/ P2 to IS 2993:1998
	Applications	For general sine wave applications, mainly for motor run application	

MotorCap RUN Compact

Technical data : MotorCap RUN Compact	
Series type	B32356
Terminal	Twin Core Cable
Rated frequency	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Dissipation factor $\tan \delta$ (20°C, 1kHz)	$\leq 1.0 \cdot 10^{-2}$
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Application	For general sine wave application, mainly as motor run application
Safety	
Safety class	S3 to IEC 60252-1 / P2 to IS 2993:1998
Life expectancy to IEC 60252-1 / IS 2993:1998	450 V AC Class B
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70 °C...+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 60252-1+A1:2013, IS 2993 :1998
Dimensions	30 x 62 mm (D x H) to 50 x 96 mm (D x H)
Approvals (Can be Offered on Specific Requirement)	
ISI	450 V AC, Class B/C/D, 85 °C
CE	Compliance to LV directive 2014/35/EU (On request)
VDE	2-20 µF, 450 V AC: Class B, 85 °C

Note:

The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

MotorCap START

	Series	MotorCap START B32328F*
	Technical data	Type : Motor Start Capacitor Voltage range : 250 Vrms Capacitance : 30 ... 120 µF Construction : Plastic case Safety Class : P0
	Applications	For general sine wave applications, mainly for motor start application

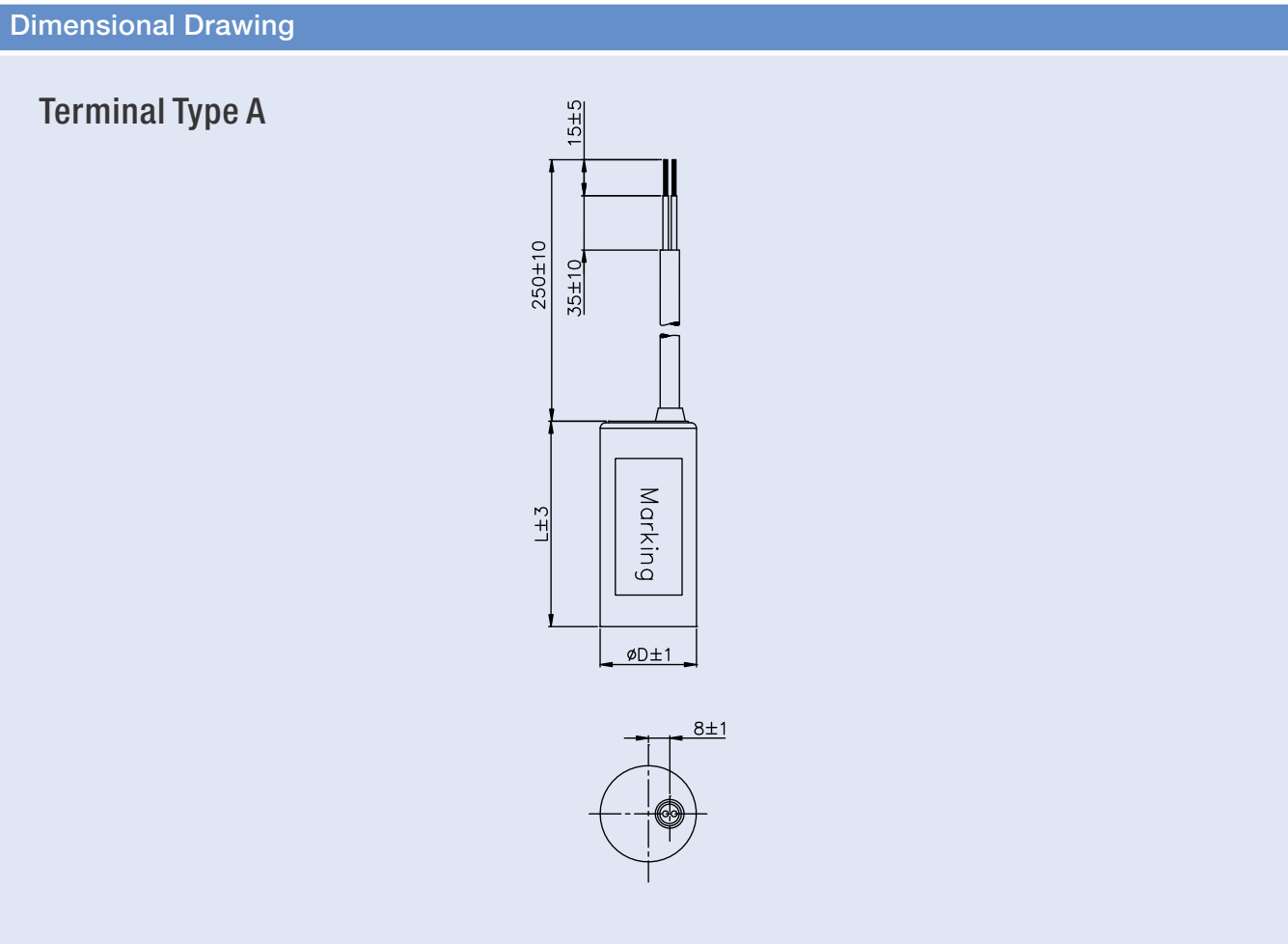
MotorCap START

Technical data : MotorCap START	
Series type	B32328F
Terminal	Wire with sleeve (Others on request)
Electrical Ratings	
Rated Voltage V_n	250 V AC (Refer table) (Others on request)
Rated Capacitance	30...120 µF (Others on request)
Rated frequency	50 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Dissipation factor δ' (20°C, 1kHz)	$\leq 1.0 \cdot 10^{-2}$
Application	For general sine wave applications, mainly for motor start application
Safety	
Safety class	P0 to IS 2993:1998
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70...+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IS 2993 :1998
Case	Plastic case
Dimension in mm	Refer Table (Others on request)
Approvals (Can be Offered on Specific Requirement)	
ISI	250 V, P0 safety class, rated duty cycle 1min 2.2% Vrms

Film Capacitors

AC Capacitors

MotorCap START						
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Terminal Type
B32328F	B32328F1306J 18	35 x 70	30	250	ISI	A
	B32328F1456J 18	35 x 96	45	250	ISI	A
	B32328F1606J 18	40 x 96	60	250	ISI	A
	B32328F1726J 18	40 x 96	72	250	ISI	A
	B32328F1756J 18	40 x 96	75	250	ISI	A
	B32328F1826J 18	45 x 96	82	250	ISI	A
	B32328F1906J 18	45 x 96	90	250	ISI	A
	B32328F1107J 18	45 x 96	100	250	ISI	A
	B32328F1107J 518	50 x 95	105	250	ISI	A
	B32328F1127J 18	50 x 95	120	250	ISI	A



Note:
The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

MotorCap START



Series	MotorCap START B32328L*
Technical data	Type : Motor Start Capacitor Voltage range : 250 Vrms Capacitance : 75 ... 120 μ F Construction : Plastic case Safety Class : P0
Applications	For general sine wave applications, mainly for motor start application

MotorCap START

Technical data : MotorCap START

Series type	B32328L
Terminal	Wire with Eye-guilt
Electrical Ratings	
Rated Voltage V_n	250 (Refer table) (Others on request)
Rated Capacitance	75...120 μ F (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor $\tan \delta'$ (20°C, 1kHz)	$\leq 1.0 \cdot 10^{-2}$
Application	For general sine wave applications, mainly for motor start application

Safety

Safety class	P0 to IS 2993:1998
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Climatic parameter to IEC 60068 - 1

Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+70...+85 °C
Damp heat test t_{test}	21 days

Construction

Reference Standards	IS 2993 :1998
Case	Plastic case
Dimension in mm	Refer Table (Others on request)

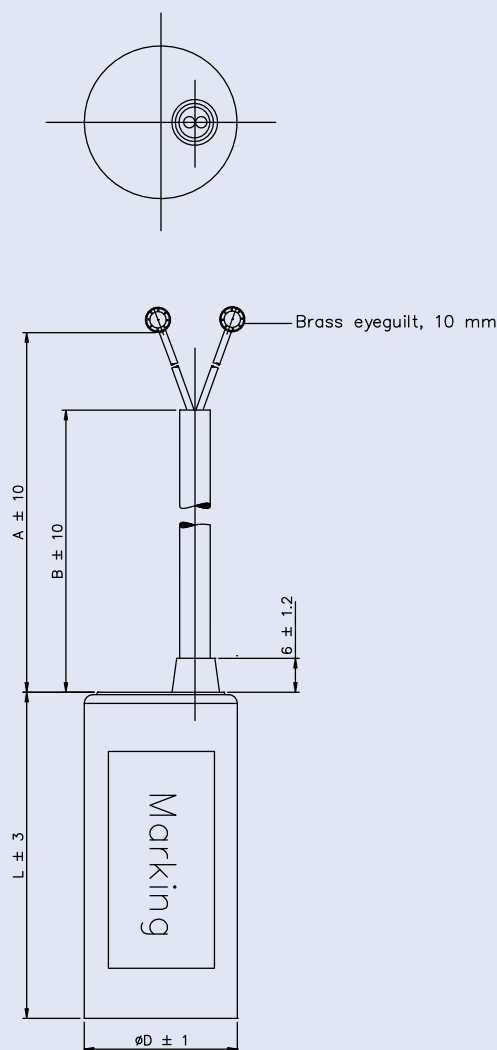
Film Capacitors

AC Capacitors

MotorCap START						
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Approval	Terminal Type
B32328L	B32328L1756J 18	40 x 96	75	250	ISI	A
	B32328L1906J 18	45 x 95	90	250	ISI	A
	B32328L1107J 518	50 x 95	105	250	ISI	A
	B32328L1127J 18	50 x 95	120	250	ISI	A

Dimensional Drawing

Terminal Type A



Note:
The connection wires are made of annealed copper. Exposed part of these wires can undergo surface oxidation, due to humid atmospheric conditions while transport or storage. It is recommended to cut the exposed end, if seen with surface oxidation, for ensuring better electrical connectivity.

Film Capacitors

AC Capacitors

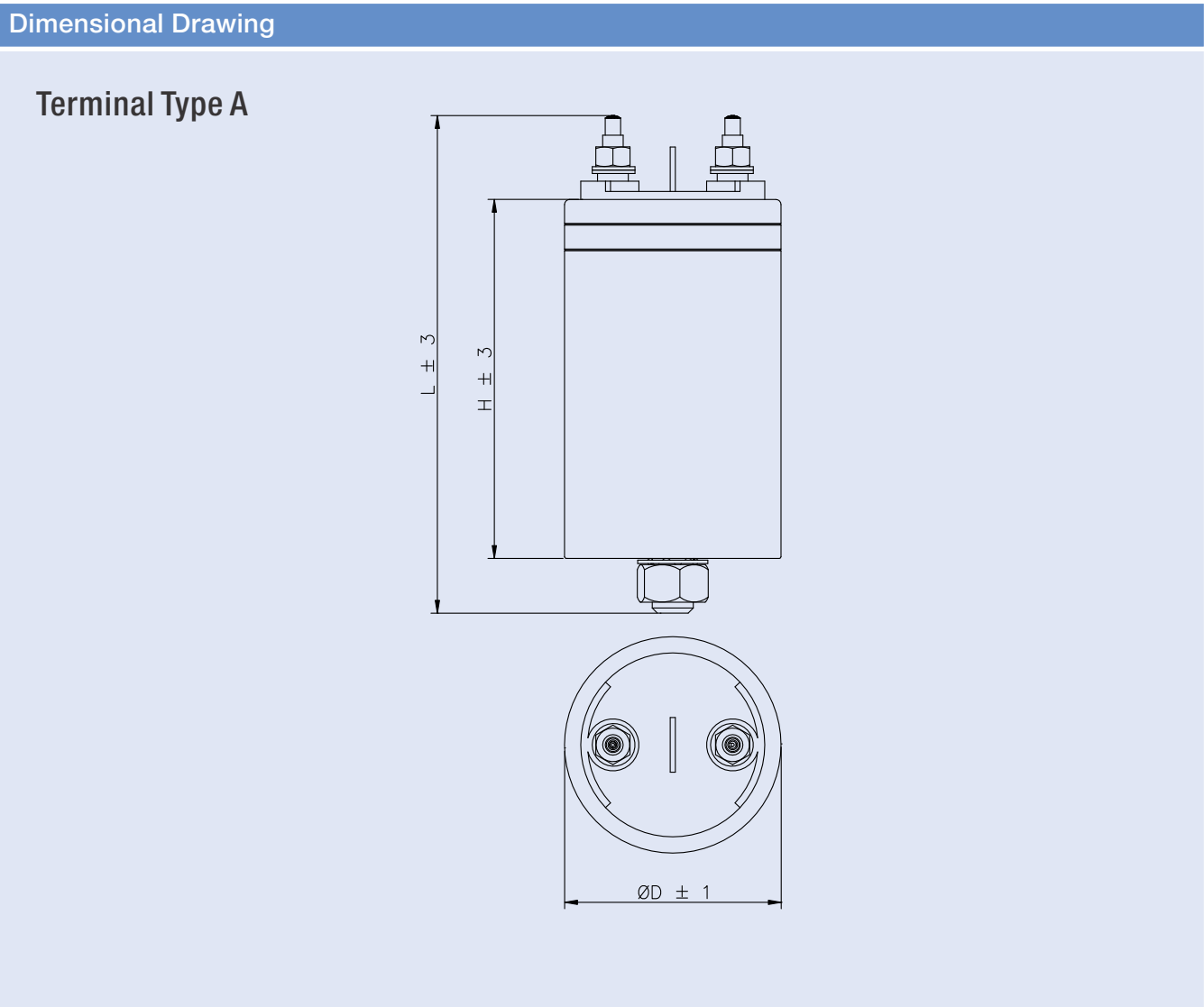
UPS Capacitor		
	Series	UPS capacitor B32333V
	Technical data	Type : UPS capacitor Terminal Type : M8/M12 stud Voltage range : 250/300 Vrms Capacitance : 10200 µF Construction : Plastic case Safety Class : P2(S2)
	Applications	• For general sine wave application, UPS, INVERTER, CVT

UPS Capacitor	
Technical data : UPS Capacitor	
Series type	B32333V
Terminal	B32333V: Stud termination
Electrical Ratings	
Rated Voltage V_n	250, 500 (Refer table) (Others on request))
Rated Capacitance	10...200 µF (Others on request)
Rated frequency	50/60 Hz
Capacitance tolerance	± 5
Maximum permissible voltage (V_{Max})	1.1 (V_n)
Maximum permissible current (I_{Max})	1.3 (I_n)
Dissipation factor δ' (20°C, 1kHz)	1.0×10^{-2}
Application	For general sine wave applications, mainly UPS AC output filter
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	21 days
Construction	
Reference Standards	IEC 61071
Case	Aluminum can, Stud Terminal
Dimension in mm	Refer Table (Others on request)

Film Capacitors

AC Capacitors

UPS Capacitor						
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)	Ref. Standard	Terminal Type
B32333V	B32333V8506J 80	63.5 x 105	50	500	IEC61071	A
B32333V	B32333V2107J 80	63.5 x 105	100	250	IEC61071	A
B32333V	B32333V2107J 81	63.5 x 95	100	300	IEC61071	A
B32333V	B32333V2207J 80	63.5 x 142	200	250	IEC61071	A



AC Capacitors

Superior Solutions for Motor Run and Motor Start & Filter Application



World-class EPCOS brand AC capacitors with , BIS, UL, VDE certifications*, manufactured in State-of-the-art automated production facilities



Range

- 250 to 600 VAC
- 1 to 200 μF
- Plastic and Aluminum Can
- S0, S2 and S3 safety class

Approvals

- ISI, UL, VDE for various ratings
- RoHS Compatible

Applications

- Motor run and motor start for aircon, washer, refrigerator & compressor
- Submersible pumps and fans
- UPS, CVTs and inverters
- Lighting fixtures

Benefits

- Self-healing property
- Very low losses
- Safety class products
- Various terminal arrangements
- Maintenance-free

* Certifications depending on type

Film Capacitors

AC Capacitors

AC Filter Capacitor		
	Series	B32354S*
	Technical data	Type : Output filter Capacitor Voltage range : 350 Vrms Capacitance : 10 µF...40 µF Construction : Plastic case
	Applications	• Output AC filtering for power converters, UPS, motor drives

AC Filter Capacitor	
Technical data : AC Filter Capacitor	
Series type	B32354S**
Terminal	4 Pins Parallel wire lead
Electrical Ratings	
Rated Voltage V_n	350 Vrms
Rated Capacitance	10 µF...40 µF
Capacitance tolerance	± 10%
Dissipation factor δ' (20°C, 1kHz)	$\leq 1.2 \times 10^{-3}$
Application	Output AC filtering for power converters, UPS, motor drives
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-40 °C
Upper category temperature T_{max}	+85 °C
Damp heat test	21 days
Construction	
Reference Standards	IEC61071 : 2007
Dimension	Refer Table

Film Capacitors

AC Capacitors

AC Filter Capacitor					
Series	Part Code	W x H x L	MFD (nF)	Voltage (V)	P 1
B32354S*	B32354S3106K 010	28.0 x 35.0 x 57.5	10	350	10.2
	B32354S3156K 010	35.0 x 45.0 x 57.5	15	350	20.3
	B32354S3206K 010	35.0 x 45.0 x 57.5	20	350	20.3
	B32354S3256K 010	40.0 x 50.0 x 57.5	25	350	20.3
	B32354S3306K 010	45.0 x 50.0 x 57.5	30	350	20.3
	B32354S3356K 010	50.0 x 55.0 x 57.5	35	350	20.3
	B32354S3406K 010	50.0 x 55.0 x 57.5	40	350	20.3

Dimensional Drawing

4 pin version

Dimensions (mm)

Version	Lead space (e±0.4)	Lead diameter† d1±0.05	Type
4 pins	52.5	1.2	B32354S

† B32354S3106K010 Lead diameter = 1.0

Film Capacitors

AC Capacitors

DC link Capacitor		
	Series	DC link B32320I*
	Technical data	Type : DC link Capacitor Voltage range : 450/800/1100/1300 Vdc Capacitance : 6.5 μF...260 μF Construction : Plastic case
	Applications	• Frequency converters • Inverter based home appliances • Solar inverters • Variable speed motor drives

DC link Capacitor	
Technical data : DC link Capacitor	
Series type	B32320I*
Terminal	5 Pins Parallel wire lead
Electrical Ratings	
Rated Voltage V_n	450/800/1100/1300 Vdc
Rated Capacitance	6.5...260 μF
Capacitance tolerance	± 10%
Dissipation factor δ' (20°C, 1kHz)	$\leq 8 \times 10^{-3}$
Application	• Frequency converters • Inverter based home appliances • Solar inverters • Variable speed motor drives
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-40 °C
Upper category temperature T_{max}	+85 °C
Damp heat test t_{test}	56 days
Construction	
Reference Standards	IEC61071 : 2007
Dimension	Refer Table

Film Capacitors

AC Capacitors

DC link Capacitor				
Series	Part Code	Ø D x H	MFD (nF)	Voltage (V)
B32320I	B32320I4206K 000	35 x 53	20	450
	B32320I4276K 000	35 x 53	27	450
	B32320I4886K 000	50 x 57	88	450
	B32320I4207K 000	50 x 95	200	450
	B32320I4267K 000	50 x 120	260	450
	B32320I8156K 000	35 x 53	15	800
	B32320I8506K 000	50 x 57	50	800
	B32320I8117K 000	50 x 95	110	800
	B32320I8157K 000	50 x 120	150	800
	B32320I8207K 000	60 x 120	200	800
	B32320I0955K 000	35 x 53	9.5	1100
	B32320I0306K 000	50 x 57	30	1100
	B32320I0706K 000	50 x 95	70	1100
	B32320I0107K 000	50 x 120	100	1100
	B32320I0157K 000	60 x 120	150	1100
	B32320I1655K 000	35 x 53	6.5	1300
	B32320I1216K 000	50 x 57	21	1300
	B32320I1506K 000	50 x 95	50	1300
	B32320I1666K 000	50 x 120	66	1300
	B32320I1107K 000	60 x 120	100	1300

Dimensional Drawing

The drawing shows a cylindrical capacitor with five leads. The side view indicates an outer diameter of ØD and a height of H. The top view shows the lead arrangement with diameters Ød1 and Ød2, and lead spacings P1 and P2. A 1.2 mm dimension is shown for the lead thickness, and a 5 mm dimension is shown for the lead length.

Number of wires	Lead spacing (P1) mm	Lead pacing (P2) mm	Lead diameter (d1) mm	Lead diameter (d2) mm
5-pin	12.7 ±0.4	22.5 ±0.4	1.2 ±0.05	2.0 ±0.05
5-pin	16 ±0.4	37.5 ±0.4	1.2 ±0.05	2.0 ±0.05
5-pin	20.3 ±0.4	42.5 ±0.4	1.2 ±0.05	2.0 ±0.05

Film Capacitors

AC Capacitors

Lighting Capacitor

	Series	Lighting Series B32327A/B32327P (with Resin) / B32327D	
	Technical data	Type	: Lighting capacitor
		Voltage range	: 250 Vrms
		Capacitance	: 4.....43 µF
		Construction	: Plastic case
	Applications	For general sine wave application, mainly as lighting	

Lighting Capacitor

Technical data : Lighting Capacitor	
Series type	B32327A/D
Terminal	Flexible wire terminals
Electrical Ratings	
Rated Voltage V_R	250
Rated Capacitance C_R	4...43 µF (Others on request)
Rated frequency f_R	50/60 Hz
Capacitance tolerance	±5 (Others on request)
Maximum permissible voltage (V_{Max})	1.1 (V_R)
Maximum permissible current (I_{Max})	1.3 (I_R)
Dissipation factor δ' (20°C, 1kHz)	$\leq 7 \cdot 10^{-3}$
Application	For general sine wave applications, mainly as lighting capacitor
Climatic parameter to IEC 60068 - 1	
Lower category temperature T_{min}	-25 °C
Upper category temperature T_{max}	+85... +85 °C
Damp heat test t_{test}	21 days (Applicable for D series only)
Construction	
Reference Standards	IS 1569: 1976
Dimension	Refer Table (Others on request)

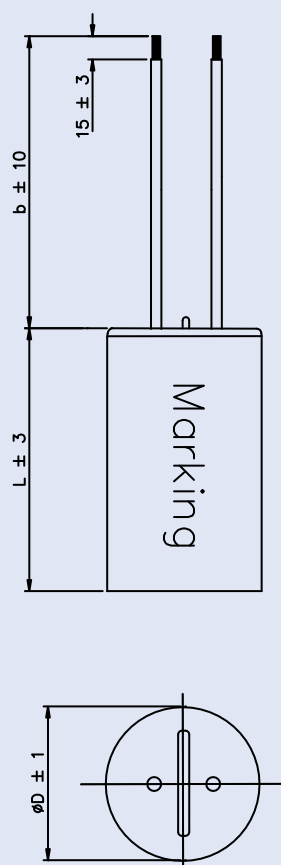
Series	Part Code	Material Description	Dimensions D x L (mm)	MFD (nF)	Voltage (V)	Terminal Type
B32327A	B32327A1405J 29	4 MFD250 V PL 25 x 60 PFT WIRE 250 MM RES	25 x 60	4	250	A
	B32327A1106J 29	10 MFD 250 V PL 35 x 60 PFT WIRE 250 MM RES	35 x 60	10	250	A
	B32327A1166J 29	16 MFD 250 V PL 35 x 73 PFT WIRE 250 MM RES	35 x 73	16	250	A
	B32327A1206J 29	20 MFD 250 V PL 40 x 71 PFT WIRE 250 RES	40 x 71	20	250	A
	B32327A1336J 69	33 MFD 250 V PP 40 x 95(S) PFT WW B&R 250 STR10	40 x 95	33	250	A
	B32327A1336J 29	33 MFD 250 V PL 40 x 95 PFT WIRE 250 RES	40 x 95	33	250	A
	B32327A1426J 20	42 MFD 250 V PP 45 x 95 WW 250 MM WITH RESI	45 x 95	42	250	A
	B32327A1436J 69	43 MFD 250 V PP 45 x 95(S) PFT WW B&R 250 STR10	45 x 95	43	250	A

Film Capacitors

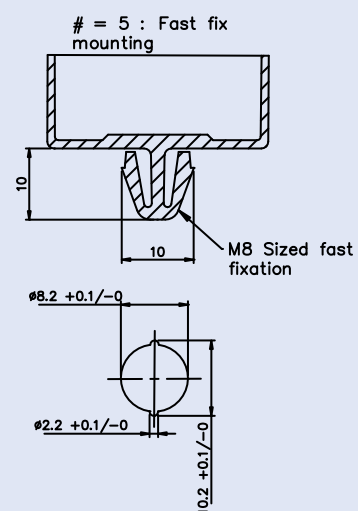
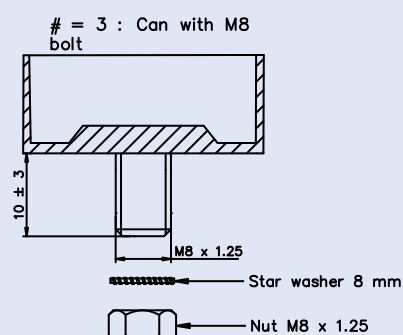
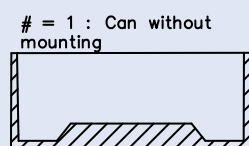
AC Capacitors

Dimensional Drawing

Terminal Type A



Mounting Options



Cautions and Warnings:

- The capacitor should be operated in line with its typical approved usage.
- Handle the capacitor units carefully, as they may be charged even after disconnection.
- Observe the appropriate engineering practice.
- The capacitor terminals, connected busbars and cables as well as any other devices connected to them must be regarded as live. The device is electrically charged.

Storage and operating conditions :

Do not use or store capacitors in a corrosive atmosphere, especially where chloride gas, sulfide gas, acids, alkalis, salts or similar substances are present. In a dusty environment, regular maintenance and cleaning, especially of the terminals, is required to avoid formation of a conductive path between phases and/or phases and ground.

Ambient temperature :

The capacitor must not be exposed to direct heat or fire. The permissible range of minimum and maximum temperatures is specified on the capacitor, i.e.

25/70/21 = minimum permissible temperature: -25 °C, max. permissible temperature: 70°C.

25/85/21 = minimum permissible temperature: -25 °C, max. permissible temperature: 85 °C.

Temperature is one of the main stress factors for polypropylene type capacitors. It has a major influence on their useful operating life. It should be noted that this useful life is considerably shorter in the case of higher temperature requirements. If the maximum permissible temperature is exceeded, the safety device may become inoperative.

Installation :

Mounting orientation: The AC Capacitors may be mounted in any orientation.

Fixing :

The AC Capacitors must be installed in a cool and well ventilated place and should not be placed close to objects that radiate heat.

Connectors :

In case of fast-on terminals, the female connectors must be of suitable design to ensure a good contact. Do not solder cables directly onto the fast-on terminals, as the terminal may overheat, causing the capacitor safety device to malfunction.

Connecting cable :

The cable used for connecting capacitors must be capable of carrying at least 1.5 times the rated current of the capacitor. It must exert no mechanical force on the capacitor terminal. Any mechanical force applied to these terminals may result in damage.

Harmonics :

Harmonics are sinusoidal voltages and currents whose frequencies are multiples of a 50 Hz or 60 Hz power supply frequency. They result from the operation of

electrical loads with nonlinear voltage-current characteristics. These loads are largely associated with modern electronic devices such as converters, electrical drives, welding machines and uninterruptible power supplies (UPS). Harmonics may cause a higher than rated current to flow through the capacitors, which may overheat and get damaged. This may cause operational failures, bursting and fire. The maximum permissible current (including fundamental and harmonic currents) specified in the technical data of the relevant series must not be exceeded under any circumstances.

Operating voltage Vop :

These capacitors have been designed for continuous operation at the rated voltage stated on the label. This voltage may be exceeded only within the limits permitted by the applicable standards at room temperature.

Vop

1.1 VR
1.15 VR
1.2 VR
1.3 VR

Operating duration

24 h/day
6 h/day
5 min/day
1 min/day

Maintenance :

There are no serviceable or repairable parts inside the Capacitor, so please refrain from opening it.

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 [HYPERLINK http://www.tdk-electronics.tdk.com/ac_capacitors](http://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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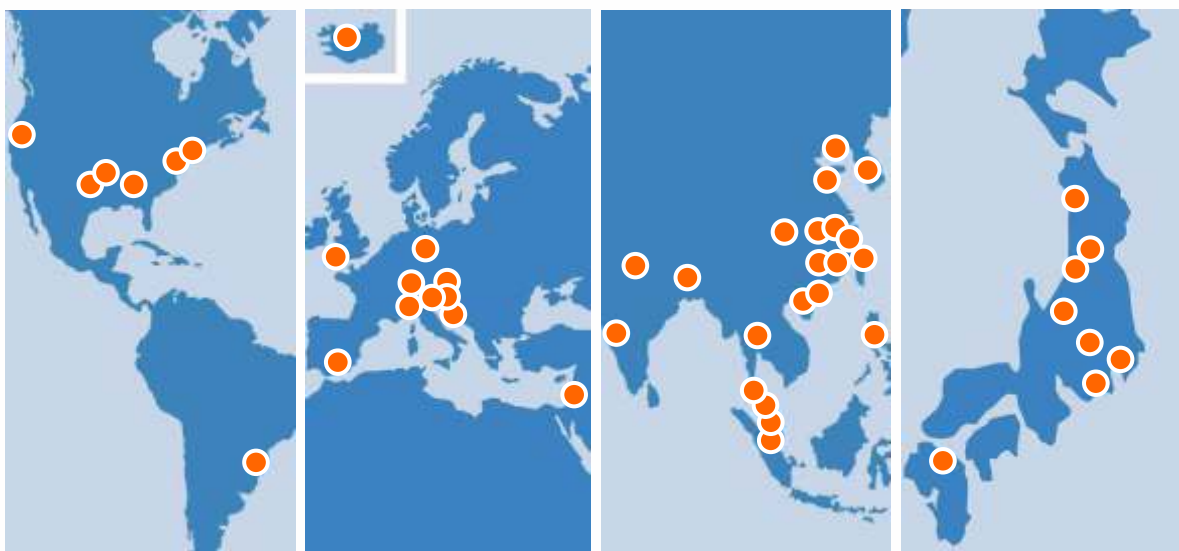
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