



## Film Capacitors

Power capacitors for defibrillator applications

**Series/Type:** B32365  
**Ordering code:** B32365\*  
Date: September 2020  
Version: 1

**Construction and general data**

<b>General data</b>	
Dielectric	Metallized polypropylene film
Resin filling	PU or EPOXY
Rated capacitance $C_R$ :	32 ... 200 $\mu$ F (upon request)
Rated voltage $V_R$ :	up to 5500 V DC (upon request)
Energy range	16 ... 529 joules
Mounting	Vertical or horizontal position
Cooling	Naturally air-cooled (or forced air cooling)
Degree of protection	IP00, IP20 (IP upon request)
Reference standards	RoHS compatible
Terminals	Straight faston, Flag faston, Stripped. Other terminal cables upon request.
Cable	Silicone rubber cables 22 AWG – 10 kV DC – 150 °C
<b>Test data</b>	
$V_{TT}$	$1.1 \cdot V_R$
$\tan\delta$ (120 Hz)	< 0.010
<b>Climatic category 40/93/56</b>	
$T_{stg}$	-20 °C / +70 °C
$T_{min}$	-20 °C
$T_{max}$	+55 °C
Max. permissible humidity	93% (test = 56 days)
Max. permissible altitude	2000 m above sea level
Life expectancy*)	up to 10 000 cycles

\*) Note that this life expectancy occurs for the temperature of 25 °C. For other operating temperatures, please check the lifetime curve for further details.

**Ordering number (type or series designation)**

Defibrillator capacitor series						A	B	C		D	E	F	G	H
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
B	3	2	3	6	5	A	2	1	9	7	K	5	2	1

**A:** Indicates revision status (any letter).

**B:** Indicates first number of voltage  $V_R$  value (any digit).

**C:** Indicates first and second figure of capacitance value (any two digits).

**D:** Indicates exponent used as multiplier (any digit).

**E:** Indicates capacitor tolerance

J =  $\pm 5\%$ ; K =  $\pm 10\%$

**F:** Indicates coded capacitance value.

**G:** Indicates second number of voltage  $V_R$  value (any digit).

**H:** Indicates product variations (any digit).


**Label information**
**Date code explanation**

**WW G YY**

**WW G YY:** production weeks (e.g. 45)

**WW G YY:** produced in Brazil

**WW G YY:** production year (e.g. 2019)

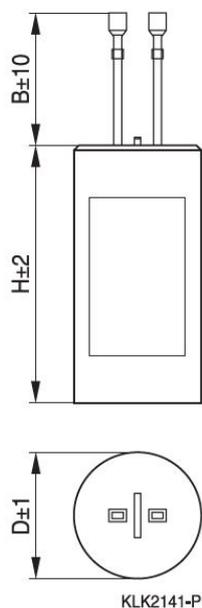
**Bar code explanation**

Bar code consists of batch number and serial number.

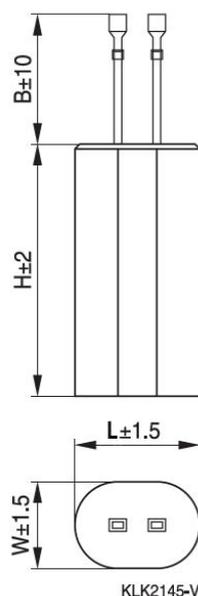
Batch number: 9 digits (e.g. 123456789)

Serial number: 3 digits (e.g. 001)

## Dimensional drawings



**Figure 1:** Cylindrical housing  
(dimension upon request)



**Figure 2:** Oval housing  
(dimension upon request)

## Symbol an terms

$C_R$	Rated capacitance
$V_R$	Rated voltage DC
$\tan \delta$	Maximum dissipation factor of the capacitor measured at specified frequency
$t_{LE}$	Life expectancy
$V_{TT}$	Test voltage for capacitor, applied between terminal and terminal
$T_{stg}$	Storage temperature
$T_{min}$	Lowest permitted ambient working temperature
$T_{max}$	Highest permitted ambient working temperature
$t_{test}$	Duration of climatic category test
<b>D</b>	Capacitor diameter
<b>H</b>	Capacitor height
<b>W</b>	Capacitor width
<b>L</b>	Capacitor length
<b>B</b>	Cable length

### Cautions and warnings

- In case of visible mechanical damage, capacitors must not be used at all.
- The energy stored in capacitors may be lethal. To prevent any chance of shock, discharge and short-circuit the capacitor before handling.

### Safety

- Observe appropriate safety precautions during operation (self-recharging phenomena and the high energy contained in capacitors).
- Handle capacitors carefully, because they may still be charged even after disconnection.
- The terminals of capacitors and equipment connected to them may also be energized.
- Follow good engineering practice.

### Storage and operating conditions

- Do not use or store capacitors in corrosive atmosphere, especially where chloride gas, sulfide gas, acid, alkali, salt or the like are present
- The maximum storage temperature is +70 °C.

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## Important notes

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