

#### **Capacitors**

for automotive applications



#### **About Iskra Capacitors**

Iskra capacitor plant is located in Semič, Slovenia.

With a history going back almost 75 years, ISKRA develops cutting edge products and system solutions. We have a proven global track record in designing, engineering, and manufacturing a wide range of capacitors compliant with the strictest regulations and safety standards.

With our expertise we offer full product customization and make your idea work. Iskra supports your business by producing fully customized capacitors for automotive applications based on your specific requirements while contributing to the increased safety, low energy consumption, and comfort of automobiles.

Our commitment is clear – with utmost precision and dedication to detail, we support our partners all the way.



## Long-term trust and quality that will fulfill all your needs.

#### **Certificates**



**ENEC** 

ENEC is the high quality European mark for electrical products that demonstrates compliance with European safety standards.



VDE

Standards for innovation and safety



RU

Recognized Component Mark.



RU

Recognized Component Mark for United States and Canada



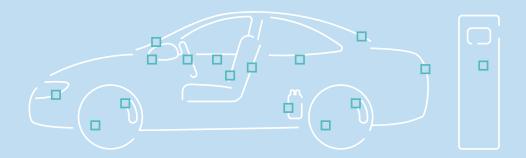
CQC

China Quality Certification Center

Innovative. Smart. Sustainable.

# Capacitors for automotive applications

Application	Electric drivers	MKP	MKT	X2, Y2	Power
Power train	Fuel pump				
	EV charging station				
	DC/DC converter, inverter				
Safety	HID lamps				
	Tire pressure monitoring		•		
	Breaking system		•		
Comfort	Electric mirrors		1		
	Keyless entry	100			
	Electric seats	1	1		
	Electric windows	100	1		
	Windscreen wipers	•			
	Power steering				



### Power capacitors

### DC link

Туре	KNG191x	KNG204x, KNG304x	HEV/EV	KNA96D6
	Siskra  Signature  Sig			Part Hill
Dielectric	Polypropylene film	Polypropylene film	Polypropylene film	Self healing metallized polypropylene
Electrodes	Metallized	Metal foil and metallized	Metallized	, ,, ,,
Rated voltage	450 - 1.300 V DC	600 - 2.200 V DC	480 - 800 V DC	600 VDC at 85 °C
Rated capacitance	0.1 - 480 μF	75 - 1.740 μF	300 - 1.100 μF	480 µF
Capacitance tolerance	± 5%, ± 10%	± 5%, ± 10%	± 5%, ± 10%	±10 % (code K)
Climatic category	40 / 85 / 56	40 / 85 / 56	40 °C 85 °C	40 / 85 / 56
Life expectancy	> 100.000 h at U <sub>NDC</sub>	> 100.000 h at U <sub>NDC</sub>	> 100.000 h at U <sub>NDC</sub>	> 100.000 h at U <sub>NDC</sub>
Terminals	Parallel tinned copper wire (2, 4 or 12 pins)	Female: M6×10 Male: M8×23	Tinned copper	Tinned copper lugs for screw fixing M8
Standards	IEC 61071  AECQ200 (on request)	IEC 61071 cURus UL 810	IEC 61071	IEC 61071

#### Snubber

Туре	KNG491x	KNO19Ax, KNO19Bx	KNO191x	
	Siskra  Birchard  Brocker  SNOW  10	Entering States	Siskra TOTAL SI SI SIN MINISTER SI SI SIN MINISTER SI SI SIN MINISTER SI SI SI SI MINISTER SI SI SI SI SI MINISTER SI	
Dielectric	Polypropylene	Polypropylene	Polypropylene	
Electrodes	film Metallized	film  Double met- allized and metallized	film  Double met- allized and metallized	
Rated voltage	250 - 875 V DC	630 - 3.000 V DC	630 - 3.000 V DC	
Rated capacitance	0.22 - 100 μF	0.047 - 8 μF	0.047 - 8 µF	
Capacitance tolerance	± 5%, ± 10%	± 5%, ± 10%	± 5%, ± 10%	
Climatic category	40 / 85 / 56	40 / 85 / 56	40 / 85 / 56	
Life expectancy	> 100.000 h at U <sub>NDC</sub>	> 100.000 h at U <sub>NDC</sub>	> 100.000 h at U <sub>NDC</sub>	
Terminals	Parallel tinned copper wire (2 or 4 pins)	Fixing lugs for M6 or M8 screws	Parallel tinned copper wire (2 or 4 pins)	
Standards	IEC 61071	IEC 61071	IEC 61071	
	AECQ200 (on request)	AECQ200 (on request)	AECQ200 (on request)	

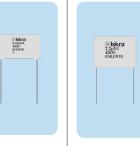
Innovative. Smart. Sustainable. iskra.eu

### **MKP** capacitors

KLI1910 KNI1910 KNU1910 Type







Dielectric	Polypropylene	Polypropylene	Polypropylene
	film	film	film
Electrodes	Metal foil and metallized	Metal foil and metallized	Metallized
Rated DC voltage	100 - 2.000 V	2500 - 2.000 V	250 - 1.600 V
Capacitance range	1.000 pF	680 pF	1.000 pF
	- 0.22 μF	- 2.2 μF	- 6.8 μF
Capacitance tolerance	± 5%, ± 10%,	± 5%, ± 10%,	± 5%, ± 10%,
	± 20%	± 20%	± 20%
Pulse loading	2.200 - 20.500	300 - 7.000 V	45 - 4.500 V
	V / μs	/ μs	/ μs
Climatic category	55 / 100 / 56	55 / 100 / 56	55 / 100 / 56
Pitch	10 - 27.5 mm	10 - 27.5 mm	10 - 27.5 mm
Standards /	EN 60384-13,	EN 60384-16,	EN 60384-16
Approvals	EN 60384-16	EN 60384-17	

### **MKT** capacitors

Type **KEU1910** KEA1xxx





Dielectric	Polyester film	Polyester film
Electrodes	Metallized	Metallized
Rated DC voltage	63 - 2.000 V	100 V
Capacitance range	1.000 pF - 22 µF	0.47 pF – 2.2 μF
Capacitance tolerance	± 5%, ± 10%, ± 20%	± 20%
Pulse loading	2.5 - 90 V / µs	5 V / µs
Climatic category	55 / 100 / 56	-40 °C 100 °C
Pitch	10 - 27.5 mm	
Standards /	IEC 60384-2	

AEC-Q200 (on request)

**Approvals** 

### Y2 capacitors

Type KNB252x

Dielectric	Polypropylene film
Rated AC voltage	250 V, 300 V
Capacitance range	1.000 pF - 0.15 μF
Capacitance tolerance	± 10%, ± 20%
Climatic category	40 / 100 / 56
Standards / Approvals	ENEC 10 VDE IEC/UL 60384-14 CQC cURus AEC-Q200 (on request)

### X2 capacitors

Type KNB156x KNB153x KNR153x KNB158x **RC-units** Polypropylene Dielectric Polypropylene Polypropylene Polypropylene film Rated AC voltage 275 V, 300 V 275 V, 300 V 275 V 305 V, 310 V 0.01 - 6.8 μF 0.01 - 10 μF 0.01 - 0.47 μF 0.01 - 15 μF Capacitance  $R = 2.2 - 470 \Omega$ range ± 10%, ± 20% ± 10%, ± 20% ± 10%, ± 20% ± 10%, ± 20% Capacitance tolerance 40 / 100 / 56 40 / 100 / 56 40 / 100 / 56 40 / 110 / 56 Climatic category 40 / 125 / 56 ENEC-10-VDE ENEC-10-VDE ENEC-10-VDE ENEC-10-VDE Standards / IEC/UL 60384-14 IEC/UL 60384-14 IEC/UL 60384-14 IEC/UL 60384-14 **Approvals** CQC CQC CQC cURus AEC-Q200 (on cURus cURus request) AEC-Q200 (on AEC-Q200 (on AEC-Q200 (on request) request) request)

Innovative. Smart. Sustainable. iskra.eu