






Types of capacitors and their use

Types

KNO, KNP	Snubber, switching capacitors
KNG	DC link capacitors
KLV	Power capacitors, Surge protection capacitors
KNK	Low voltage power capacitors
KLT	Capacitors for audio-frequency remote control
KLS	Induction heating capacitors
KNI	Capacitors for power electronics
KNM	Motor starting and motor running capacitors
KEU, KNI, KNU	Capacitors for use in electronics
KEA, KPA	Capacitors for use in motor-driven applications
MKP	Capacitors for use in automotive electronics
MKP, X2 Y2	Capacitors for use in EV charging stations
KPB, KNB, KNR, KPR, KPL, KNL	Filters for radio interference suppression
Power Factor Correction	

Type	Designation	Use
SNUBBER, SWITCHING CAPACITORS		



KNO	KNP		
		DC/AC inverters for: - Wind, solar power plants - Welding equipment - UPS systems	- Hybrid vehicles - IGBT modules - Frequency inverters etc.




SNUBBER capacitors are used in applications where high pulse loadings and high frequencies are presented. Their purpose is to eliminate voltage spikes, which are caused by semiconductors or other devices.

<https://www.iskra.eu/en/capacitor/snubber-capacitors>

DC LINK CAPACITORS		
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KNG			
		DC/AC inverters for: - Wind, solar power plants - Welding equipment - UPS systems	- Hybrid vehicles - IGBT modules - Frequency inverters etc.




DC-Link capacitors is suitable for Automotive (HEV/EV/EV charging stations), industrial inverter/converters, wind and solar power plants.

<https://www.iskra.eu/en/capacitor/dc-link-capacitors>

POWER CAPACITORS, SURGE PROTECTION CAPACITORS		
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KLV			
		- High voltage AC Power capacitors - High voltage surge protection capacitors	



Reactive power compensation in electrical networks, industrial plants and filter circuit installations.

Surge protection for large motors and generators, MV switchgear and motor control centers, large transformers

LOW VOLTAGE POWER CAPACITORS		
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KNK			
		Low voltage AC Power capacitors for: - Transformers - Electric motors - Rectifiers	

Used for power factor correction in industrial networks for voltages up to 690 V. Low voltage power factor correction capacitors can achieve savings by lowering power factor.

Type	Designation	Use
CAPACITORS FOR AUDIO-FREQUENCY REMOTE CONTROL		

KLT



- Electrical power stations
- Different control centres etc.



Audio frequency data transfer through power lines.

INDUCTION HEATING CAPACITORS

KLS



- Smelting
- Forging
- Tempering ovens etc.



Inductive heating.

CAPACITORS FOR POWER ELECTRONICS

KNI



- AC single and three phase filtering for:
- Commutators
 - Lasers etc.



Used as impulsive, filtering, and smoothing capacitors in power electronic devices (usually in commutators and lasers) and as dumping capacitors in AC applications.

<https://www.iskra.eu/en/capacitor/power-electronic-capacitors>

MOTOR STARTING AND MOTOR RUNNING CAPACITORS

KNM



- Household appliances such as:
- Window blinds
 - Sawing machines
 - Mixers etc.



Used for obtaining an auxiliary phase in single-phase motors and in three-phase motors connected to a single-phase. They can be used also for other purposes, such as in industrial electronics in electronics circuits where capacitors are lower pulse loaded (Class P0).

<https://www.iskra.eu/en/capacitor/moto-capacitors>

Type	Designation	Use
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CAPACITORS FOR USE IN ELECTRONICS

KEU, KNI, KNU



- Audio, video and measurement devices
- Medical and electrical equipment and devices in industrial electronics etc.



Used in electronic devices as audio, video and measurement devices, medical and electrical equipment and devices in industrial electronics.

<https://www.iskra.eu/en/capacitor/capacitors-in-electronics>

CAPACITORS FOR USE IN MOTOR-DRIVEN APPLICATIONS

KEA, KPA



- Devices for start-up of:
- Electromotors
 - Fuel pumps
 - Sirens
 - Control instruments
 - Lawn mowers
 - Motorbikes
 - Sawing machines
 - Chainsaws etc.

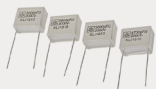


Capacitors KEA are used for radio-interference suppression in motor vehicles, which are caused by the following electrical devices: devices for startup, electromotors, pumps for fuel, siren, control instruments, etc.

<https://www.iskra.eu/en/capacitor/capacitors-in-automotive-applications>

CAPACITORS FOR USE IN AUTOMOTIVE ELECTRONICS

MKP



- Automotive electronics:
- Fuel pump
 - Electric windows
 - Electric seats
 - Windscreen wipers
 - Power steering
 - Braking system
 - Keyless entry
 - Tire pressure monitoring



Radio interference suppression, elimination of voltage spikes.

CAPACITORS FOR USE IN EV CHARGING STATIONS

MKP X2 Y2



- Charging station electronics:
- Energy conversion



Y1 capacitors are used in special applications with higher peak voltage requirements and also power supplies / SMPS, industrial applications, household equipment with a fixed mains connection (EN 60065-1). The main area of application for the newly defined Y1 class is as a radio interference suppression capacitor between the primary and secondary ground of SMPS.

Type	Designation	Use
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FILTERS FOR RADIO INTERFERENCE SUPPRESSION

KPB, KNB, KNR, KPR, KPL, KNL



- Household appliances,
- Electrical hand tools
- DC electromotors in electronic, audio and video devices
- Chargers
- Measurement instruments etc.



EMI RFI Capacitors and Filters for radio-interference suppression clas X1, X2, X1Y2, Y1 are used in home appliances, electrical hand tools and DC electromotors.

<https://www.iskra.eu/en/capacitor/radio-interference-suppression-filter>
<https://www.iskra.eu/en/components-for-radio-interference-suppression>

POWER FACTOR CORRECTION



Widely used in many industries such as oil and chemical industry, metallurgy, coal mine, power grid, hospitals, sewage plant, railway, subway, airport, seaport, telecommunication, solar and wind power plants, etc.



Power factor correction (PFC) aims to improve power factor, and therefore power quality. It reduces the load on the electrical distribution system, increases energy efficiency and reduces electricity costs. It also decreases the likelihood of instability and failure of equipment.

<https://www.iskra.eu/en/Power-factor-correction/power-factor-corrections>