



## ULTRA-CAP-VOLTAGE-STABILIZER (UCVS)



**J. Schneider**  
Elektrotechnik

## J. SCHNEIDER ELEKTROTECHNIK AT A GLANCE

# INTERNATIONALLY SUCCESSFUL, BUT ROOTED IN THE FAMILY

HIGH-PRECISION HANDLING OF CURRENTS, VOLTAGES AND DRIVE TECHNOLOGY THESE ARE THINGS THAT J. SCHNEIDER ELEKTROTECHNIK HAS LONG BEEN KNOWN FOR. EVOLVED FROM FAMILY VALUES – AND EQUALLY SUCCESSFUL TODAY ON A REGIONAL AND INTERNATIONAL LEVEL.

Family values have been taken seriously at J. Schneider Elektrotechnik from the very outset. And this has not changed from 1939 to this day. Because they are the basis for trusting and fair dealings with all of our employees. This is the only way that they can realise their talents and capabilities in the best possible way together deliver outstandingly innovative services for even the most demanding of customers.

## ACTIVE IN MANY WAYS

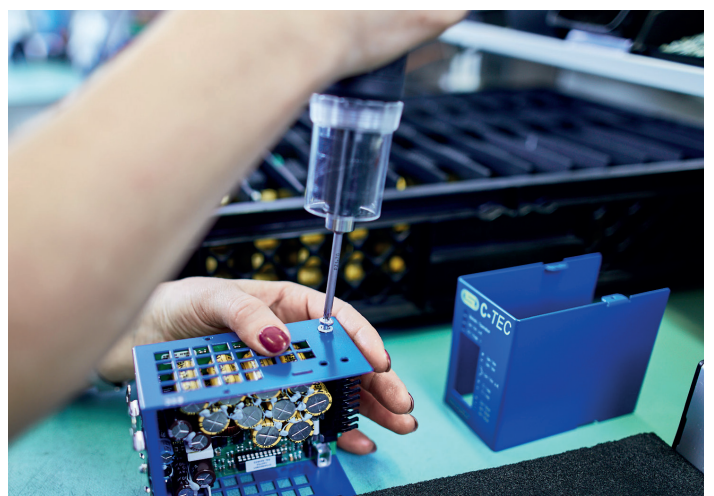
We develop bespoke solutions for a wide variety of problems in close cooperation with our customers:

- from individually manufactured, special transformers for tunnel drilling machines,
- via VdS-tested uninterruptible power supplies (UPS) for safety-relevant industrial applications,
- UCVS for Power Quality and short term interruptions,
- high-precision high-voltage and plasma power supplies for more and more new high-tech processes
- right through to reliable services for the most up-to-date electrical drives in public transport, theme parks and paper factories.

With mutual respect and a high social responsibility we develop sustainable solutions at the cutting edge of technology with and for our customers. And word of this has now spread from the Upper Rhine to many parts of the world. Making us what we are today: internationally successful – on the sound footing of a traditional, family-owned company.



OUR UPS SYSTEMS  
GUARANTEE GREATER  
SAFETY IN MANY IMPORTANT  
FIELDS OF INDUSTRY.  
SOMETHING WE ARE HAPPY  
TO CHAMPION!





## ULTRA CAP VOLTAGE STABILIZER (UCVS)

### ALWAYS IN OPERATION: FOR SURE

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WHEREVER A SAFE, EVEN AND CONSTANT POWER SUPPLY IS EXISTENTIAL, THAT'S WHERE UPS SYSTEMS FROM J. SCHNEIDER ARE IN GREAT DEMAND. ACROSS THE ENTIRE GLOBE.

Whether variations in local power grids, the reduction of peak loads, a safe supply for critical technologies in industrial plants, data networks and telecommunications or the efficient storage of braking energy: Ultra Cap Voltage Stabilizer from J. Schneider take care of sophisticated tasks and are in great demand internationally.

### THE LATEST TECHNOLOGY FOR SAFE POWER SUPPLIES

As a "Global Player" for UCVS systems, we continue to advance this very responsible technology. We rely on ultracaps for short-term buffering. Our specialists are constantly coming up with better systems with ultracaps for short bridging operations. All of this so that we can cope with the challenge of a safe power supply in future too – even in local grids. This is how we secure the lifelines of an increasingly networked world

WE KNOW HOW IMPORTANT  
OUR UPS SYSTEMS  
ARE FOR YOUR WORK.  
WHICH IS WHY CARE  
IS AT THE TOP OF  
OUR LIST OF PRIORITIES.



# BE PREPARED FOR THE NEXT BLACKOUT / KEEP YOUR PROCESS RUNNING

## ULTRA-CAP-VOLTAGE-STABILIZER (UCVS)

The ideal solution when voltage drops or short-term power outages are a problem in your process.

UCVS is a high performance and high efficiency system that ensures continuous power supply in modern industrial processes. It offers optimal protection against problems with the quality of the supply voltage.

To ensure a continuous power supply in the event of power problems, the UCVS uses a modular energy storage and inverter system. As energy storage ultra capacitors are used. Ultra capacitors can buffer for several seconds during power quality issues. Ultra capacitors have an extremely high power density and they are designed for a long life operation in a very compact and low maintenance solution.

In today's industry, harsh electrical conditions prevail. The UCVS need to be installed parallel to the load and supplies the load directly with energy in case of voltage dips. The so-called **ONLINE SYSTEM** supplies the consumer continuously. Even in case of a power failure, the energy is available and the consumer has no interruption. Unlike conventional voltage stabilizers, the UCVS offers an uninterrupted and over seconds long solution. Even with voltage dips of 0 volt, the consumer remains powered.

## APPLICATIONS

**Higher productivity, reduced downtime and higher manufacturing quality with minimized total cost of ownership**

### Semiconductor manufacturing, test benches and assembly lines:

Production lines for the production of electrical components have to run 24/7 to meet today's demand. We have installed numerous systems worldwide at well-known companies, which together have a capacity of several MVA.

### Data centres:

The UCVS protects data centres and servers against voltage drops and surges. The system supports, for example, one of the data centres of the Czech Armed Forces.

### High-speed packaging lines:

Voltage fluctuations cause serious disturbances on high-speed packaging lines. The UCVS protects many high-speed packaging lines worldwide.

### Medicine:

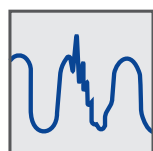
To ensure that the production will not be interrupted by power outages, voltage dips and other electrical noise, power protection is required. The UCSV protects leading medical manufacturers against such events.

### Paper industry:

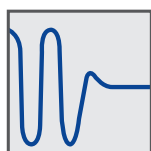
Due to the continuous process of producing paper, a short-term submission is very costly. A Swedish company relies on the UCVS to avoid voltage dips and to keep the process going. A voltage dip of less than 1 second causes the frequency converter to fail. The ROI already takes place after two short voltage dips.

## CAUSES OF DISRUPTIONS AND POOR POWER QUALITY IN YOUR GRID

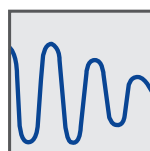
Besides simple power outages, the range of possible electrical problems that can occur in industry is very wide and affects all types of industrial processes: Continuous manufacturing systems, automatic control and guidance systems, instrumentation and measurement, monitoring and control of the Processes or security systems.



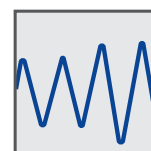
Transients



Power Cuts and  
micro-cuts



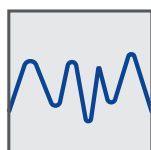
Undervoltages  
and voltages gaps



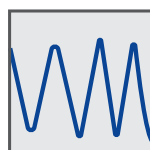
Transients  
and permanent  
overvoltages



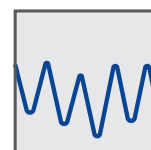
Harmonics



Transient voltage  
Variations



Voltage spikes



Frequency  
Fluctuations

PRODUCT RANGE

Models		1000 C	3000 C
INPUT	Nominal voltage	220 - 230 - 240 Vac 1ph	
	Nominal frequency	50 / 60 Hz	
	Power factor	> 0,99	
	Current distortion	≤ 7%	
OUTPUT	Nominal power (VA)	1000	3000
	Power (W)	800	2700
	Nominal voltage	220 - 230 - 240 Vac 1ph	
BACKUP	Autonomy @100% load	3 s	4 s
	Recharge time (min)	< 10 min	
DATA	Net weight (kg)	13	19
	Dimensions (H x W x D)	235 x 158 x 422	333 x 190 x 446

Models		SM 10 L - 014/030	SM 15 L - 008/030	SM 20 L - 014/030
INPUT	Nominal voltage	3ph Vac		
	Nominal frequency	50 / 60 Hz		
	Power factor	> 1,0		
	Current distortion	≤ 3%		
OUTPUT	Nominal power (VA)	10000	15000	20000
	Power (W)	10000	15000	20000
	Nominal voltage	1ph Vac		
BACKUP	Autonomy @100% load	14 s / 30 s	8 s / 30 s	14 s / 30 s
	Autonomy @70% load	20 s / 43 s	11 s / 43 s	20 s / 43
	Autonomy @50% load	28 s / 60 s	16 s / 60 s	28 s / 60 s
	Recharge time (min)	2 / 4	2 / 5	4 / 7
DATA	Net weight (kg)	130 / 151	132 / 180	155 / 202
	Dimensions (H x W x D) (mm)	1320 x 440 x 840		



PRODUCT RANGE

Models		ST 10 L 014 / 030	ST 15 L 008 / 030	ST 20 L 014 / 030	ST 30 L 010 / 020	ST 40 L 007 / 015
INPUT	Nominal voltage	3ph Vac				
	Nominal frequency	50 / 60 Hz				
	Power factor	> 1,0				
	Current distortion	≤ 3%				
OUTPUT	Nominal power (VA)	10000	15000	20000	30000	40000
	Power (W)	10000	15000	20000	30000	40000
	Nominal voltage	3ph Vac				
BACKUP	Autonomy @100% load	14 s / 30 s	8 s / 30 s	14 s / 30 s	10 s / 20 s	7 s / 15 s
	Autonomy @70% load	20 s / 43 s	11 s / 43 s	20 s / 43 s	14 s / 29 s	10 s / 21 s
	Autonomy @50% load	28 s / 60 s	16 s / 60 s	28 s / 60 s	20 s / 40 s	14 s / 30 s
	Recharge time (min)	2 / 4	2 / 5	4 / 7	4 / 7	3 / 5
DATA	Net weight (kg)	130 / 151	132 / 180	155 / 202	160 / 207	164 / 211
	Dimensions (H x W x D) (mm)	1320 x 440 x 840				

Models		MLT C 60	MLT C 80	MLT C 100	MLT C 125	MLT C 160	MLT C 200*
INPUT	Nominal voltage	3ph Vac					
	Nominal frequency	50 / 60 Hz					
	Power factor	> 0,99					
	Current distortion	≤ 3%					
OUTPUT	Nominal power (VA)	60000	80000	100000	125000	160000	200000
	Power (W)	54000	72000	90000	108000	160000	200000
	Nominal voltage	3ph Vac					
BACKUP	Autonomy @100% load	4 s	10 s	8 s	5 s	5 s	4 s
	Recharge time (min)	15 - 30 min					
DATA	Net weight (kg)	190 + 190	220 + 410	220 + 410	300 + 410	450 + 410	460+410+410
	Dimensions (H x W x D) (mm)	1 x 1600 x 500 x 850 / 1 x 1900 x 860 x 800				1 x 1600 x 500 x 850/ 1 x (*x2) 1900 x 860 x 800	



PRODUCT RANGE

Models		MP C 100	MP C 120	MP C 160	MP C 200
INPUT	Nominal voltage	3ph Vac			
	Nominal frequency	50 / 60 Hz			
	Power factor	> 0,99			
	Current distortion	≤ 3%			
OUTPUT	Nominal power (VA)	100000	120000	160000	200000
	Power (W)	90000	108000	144000	180000
	Nominal voltage	3ph Vac			
BACKUP	Autonomy @100% load	10 s	8 s	69 s	4 s
	Recharge time (min)	15 - 30 min			
DATA	Net weight (kg)	640 + 400	650 + 400	770 + 400	810 + 410
	Dimensions (H x W x D) (mm)	1 x 1900 x 800 x 800 / 1 x 1900 x 860 x 800			

Models		MP HIP C 200	MP HIP C 250	MP HIP C 300	MP HIP C 400	MP HIP C 500	MP HIP C 600
INPUT	Nominal voltage	3ph Vac					
	Nominal frequency	50 / 60 Hz					
	Power factor	> 0,99					
	Current distortion	≤ 3%					
OUTPUT	Nominal power (VA)	200000	250000	300000	400000	500000	600000
	Power (W)	180000	225000	270000	360000	450000	540000
	Nominal voltage	3ph Vac					
BACKUP	Autonomy @100% load	4 s	3 s	4 s	2 s	5 s	4 s
	Recharge time (min)	15 - 30 min					
DATA	Net weight (kg)	190 + 190	220 + 410	220 + 410	300 + 410	450 + 410	460+410+410
	Dimensions (H x W x D) (mm)	1900 x 1000 x 850 + 1900 x 860 x 800		1900 x 1500 x 850 + 1900 x 860 x 800		1900 x 2100 x 850 + 1900 x 860 x 800	

HIGHLIGHTS

CLEAN ENERGY

An eco-friendly, battery-free uninterruptible power system.

TEMPERATURE

-30 to +45 degrees

LOW FOOTPRINT & WEIGHT

LOW MAINTENANCE COSTS

Easy to install and maintain.

LONG OPERATING LIFE

5 to 10 times standard lead batteries.

HIGH NUMBER OF CYCLES

Million vs. ca 300 of lead batteries.

HIGH WORKING TEMPERATURE

No need of cooling or heating systems.

HIGH EFFICIENCY  
INNOVATIVE TECHNOLOGY

Modular expansion options for more power and runtime system.



## Contact

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**If you have any further questions please don't hesitate to contact us:**

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