



## uXcel series – SCR Rectifier/Charger from 600W to 220kW

The uXcel series range of industrial rectifiers/battery chargers is available as standard from 600W to 55kW in one-phase input configuration, and up to 220kW in three-phase input configuration.

### Flexibility for customised solutions

uXcel series is fully adaptable to customers power protection needs. A full range of additional options is available enabling us to tailor solutions for diverse industrial environments:

- SCR full-bridge rectifiers
- Fast acting fuse
- Voltage-absorbing unit
- Up to IP65 external protection
- Wide adjusted voltage and current range
- Battery Management system
- Multiple protection

For long-lasting power interruptions, uXcel series is designed to operate with extended battery to provide permanently secured industrial processes.

uXcel series chargers are also available with 400VDC output. This configuration allows us to combine this range with the PV inverters range in order to design specific high ratings double conversion AC UPS systems (up to 500 kVA).

### Leading technology

uXcel series applies the latest Digital Control technology to control the 6-pulse thyristor bridge rectifier. The embedded microcomputer controller processes signals by up to 10 times faster than standard analogue methods.

The result is improved process reliability and enhanced safety for personnel, even in the harshest operating environments.

The innovative modular assembly allows us to satisfy the most demanding international project schedules.

The product design affords easy front-access to all vital modules of the system. As a result, maintenance times are significantly reduced. Memory function start machine automatically after utility power recovering. Charging method and processes switch automatically.

### Reliability

uXcel series provides lasting secure power architecture for your industrial applications through:

- Natural ventilation on most of the range
- Continuous operation at full load in permanent 40°C ambient temperature
- System lifetime of 20 years in continuous operation conditions
- Robust mechanical design (vertical and horizontal acceleration stress up to 0,5 g as standard).
- Over current, over voltage and over temperature warning.
- Phase sequence detecting and phase lost protection.

### Communication

uXcel series uses intuitive multilingual digital graphic control, meaning system status, measurements and alarms are accessible from the front panel of the equipment. The embedded 'event Log' function allows the user to trace the events. Event memory is activated from the first event appearance on.

Rs232, Rs485 allow the monitoring through network.

### Advanced battery care

uXcel series is fully compatible with lead-acid and nickel-cadmium batteries, sealed or vented. A programmable battery test evaluates the efficiency of the entire battery.

Tests on individual cells are achieved by employing our latest Battery Management system option.

Constant current constant voltage charging and constant current discharging can switch automatically. Voltage, current etc. parameters are viewed when the equipment is running.

### Monitoring

The uXcel series provides:

- Continuous real time monitoring
- Regular transmission of an operating status report
- Performance analysis
- Power quality monitoring to analyse mains disturbance trends.

## Applications

uXcel series protects DC powered electrical equipments of heavy duty applications, such as:  
 Oil and gas offshore and onshore  
 Refining, petrochemicals  
 Power generation, transmission and distribution  
 Transportation (rail, aeronautic).

## Secure Power Always

In order to reach the highest level of business continuity, POWER-plus offers a range of maintenance plans, which will:  
 Help deliver reliability to your load  
 Increase the lifetime of your power protection equipment

Optimise your capital expenditure

Provide risk management at a fixed cos

Provide a pro-active approach to disaster recovery.

For more information please contact your local POWER-plus representative.

**Delegate your power management to the experts.**

POWER-plus uXcel series rectifier/charger								
Input type	Single-phase				Three-phase			
Output DC voltage(VDC)	24	48	110	200	24	48	110	220
Available range of ratings(A)	25-250	25-250	25-250	25-250	25-2500	25-1200	16-1200	16-1000
Nominal AC voltage(VAC)	120/220/230/240				208/380/400/415			
Input voltage tolerance(%)	-15/+10							
Input frequency(Hz)	50/60							
Input frequency tolerance(%)	±5							
Nominal DC voltage(VDC)	24/48/110/120/220/240/400							
Available ratings(A)	see above							
Voltage stability	< 1%(in float mode, 0 to 100% load step, input within voltage tolerance)							
Voltage ripple	< 1%rms							
Boost mode current limitation	0.1C10(Lead Acid battery) / 0.2C5(Nickel cadmium battery)							
Operating temperature(°C)	-10 to 50(in permanent operation conditions)							
Storage temperature(°C)	-20 to 70							
Relative humidity(%)	<95							
Operating altitude(m)	3000(without derating)							
Cooling	Natural ventilation on most of the range.(Fan-assisted for ratings above 1200A)							
External protection	IP44(up to IP65 upon request)							
Internal protection	IP44							
Communication interface	RS485/Modbus							
Noise(dB)	<60							
Dimensions	Varying according to ratings and options							
Rectifier	6/12-SCR rectifier, harmonic filters, ripple filters,dropping diodes, meters, volt-free contacts, serial link							
Battery	Battery protection , Low -voltage disconnect, Battery Management System							
System	SCR full-bridge, Intelligence charging management, Fast acting fuse							

\*For other voltages, please contact us. This product may differ from the product photograph on the front cover.