

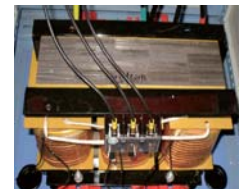
uXcel series

Single and Three Phase Battery Chargers

EverExceed[®]
power your applications

PRODUCT FEATURES

- Rugged phase-controlled thyristor technology
- Versatile constant voltage and constant current charging modes
- Large LCD Display
- Wide adjusted voltage and current range
- Battery management system
- Programmable charge voltage/current limit
- Precise adjustable temperature compensation
- Isolated RS232 or RS485, Ethernet
- Robust mechanical design
- Up to Ip65 external protection
- Access facility software
- Full data logging
- Multiple protection



uXcel series is a new kind of special charger for battery. This charger adopts the digital IC, the control trigger has good integration, powerful function and reliability.

The charger has functions such as constant-current, constant-voltage etc, it is not only used as charger for battery, but also used as the power sources with constant-current and/or constant-voltage, as the power for formation and maintenance for battery. The charger can be operated automatically if it is used with a micro-PC.

Available in single and three phase up to 220kW, and using ultra rugged phase controlled technologies, this series is ideal for all industrial applications including substation battery systems and DC UPS.

Flexibility for customized 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

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 product design affords easy front-access to all vital modules of the system. 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 design (vertical 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 and horizontal acceleration stress up to 0,5 g as standard).

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 equipment 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

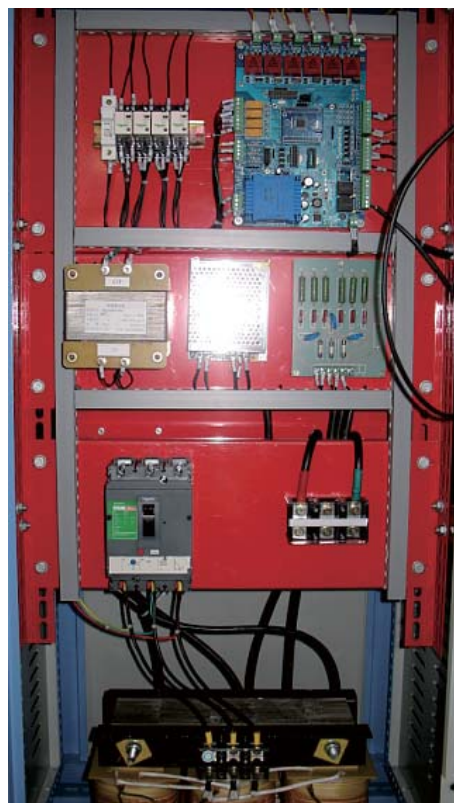
uXcel series protects DC powered electrical equipments of heavy duty applications, such as:

Oil and gas offshore and onshore

Refining, petrochemicals

Power generation, transmission and distribution

Transportation (rail, aeronautic)



TECHNICAL SPECIFICATIONS

Nominal Voltage	12V	24V	48V	110V	220V	400V
Nominal Current	25-1200A	25-1200A	25-1200A	16-1200A	16-1000A	16-500A
Input Supply	Single phase 120V/220V/230V/240V, three phase 208V/380V/400V/415V/480V					
Input Voltage/Frequency Tolerance	$\pm 10\%$, 50/60Hz $\pm 5\%$					
Output Voltage	1.8-18V	3.6-36V	7.2-72V	16.5-165V	33-330V	60-600V
Voltage Ripple	<2% specified full load and without battery connected.					
Static Voltage Regulation	$\pm 1\%$ for 0-100% load variation, $\pm 10\%$ AC input voltage variation and 5% AC input frequency variation					
Dynamic Voltage	5% for load variation of 10% to 100% or 100% to 10%					
Current Regulation	$\pm 1\%$					
Protection	Input Circuit Breaker, Charger Output Fuse/Circuit Breaker*, Charger Current Limit, Dual Battery Current Limit, AC Surge Suppression*, Short Circuit Protection, Reverse Battery Polarity Protection, Phase lost protection*					
Alarms	Charger Fail, DC High, Under/Over Voltage Trip, Earth Fault*, Low Electrolyte, Battery Disconnected*, Battery Over Temperature*, Blown Fuse*, Common Alarm Relay, Common Alarm Buzzer (All alarms are user programmable)					
Metering	Charger Voltage, Charger Current, Load Voltage, Load Current, Battery Charge/Discharge Current, Battery Temperature*, Battery Capacity Ratio (Meter accuracy 1%)					
Options	DC Voltage Regulator, TCP/IP adaptor, Triphase control and shot , Cabinet lamp, Temperature and humidity controller, DC distribution board					
Physical	Wall mount or free standing powder coated metal cabinet (Dimensions depend on charger output rating and associated battery requirements)					
Environmental	-10 to 50°C, up to 95% humidity					
Operating altitude (m)	3000 (with out derating)					
Communication Interface.	RS232/RS485 Modbus, TCP/IP Ethernet (optional)					
DC Meter Display (Optional)	For display the voltage and current of charger on the panel					
MTBF / MTTR	100,000 Hours / 4 Hours					
Efficiency	80 to 93% depending on nominal voltage and power rating					
Temperature Compensation*	Programmable 3 - 6 mV / Cell / °C					
Audible Noise	<60 dB					
Limp Home Feature	Continuous operation in the event of control failure					
Revert to Factory Settings	Reinstates all original factory settings					
System	SCR full-bridge, Intelligence charging management, Fast acting fuse					

The function marked "" need additional accessories to achieve.*

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