EverExceed®
power your applications

uXcel ultra series

Industrial Battery Charger
DC Distribution

EverExceed Corporation

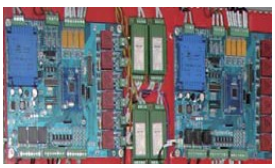
uXcel ultra series

Single and Three Phase Battery Chargers

RESEARCH & DEVELOPMENT IN UK

PRODUCT FEATURES

- Double charger modular
- Parallel / redundant work mode
- More reliability and flexibility
- 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



OVERVIEWS

uXcel Ultra redundancy charger is a new type charger for battery. This charging system is made by two independent charging loop in parallel, it can carry out the redundancy charge function.

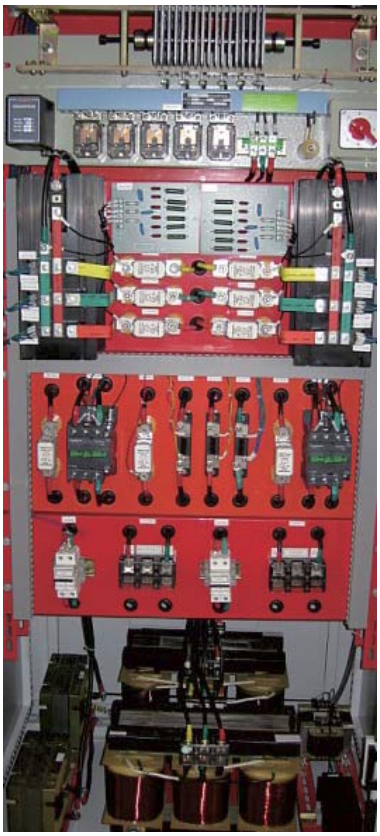
This system is controlled by digital intelligent with multi charge mode, simple operation and reliability, there is no phase sequence requirement. The transformer is made by high strength paint copper, it can achieve H grade high temperature resistance and isolation, the power units are made by aluminum profile and high-power disc type thyristor units with high performance and reliability.

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.

RELIABILITY

Redundant, independent, charger modules increase reliability - a malfunction of one does not disable the charging system; remaining modules continue to operate.

There are fewer single points of failure for the system. uXcel ultra 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). Over current, over voltage and over temperature warning. Phase sequence detecting and phase lost 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.

SERVICEABILITY

Module change-out takes only minutes, while the system continues to operate.

Technical personnel not required :
No need to remove the charger case from the boat or disconnect any wiring.
No inconvenience of power interruption to the boat.

FLEXIBILITY

uXcel ultra 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.

A charger can be easily removed from service for repair without time pressure relating to depletion of the battery;

A battery string can be taken off-line for maintenance, testing or replacement without putting the system at risk;

COMMUNICATION

uXcel ultra 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.

MONITORING

The uXcel ultra series provides:

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

DC distribution cabinet,
Customized according to customer demand

TECHNICAL SPECIFICATIONS

Nominal Voltage	12V	24V	48V	110V	220V	400V
Nominal Current	25-1500A	25-1500A	25-1500A	16-1500A	16-1500A	16-1000A
Input Supply	Single phase 120V/220V/230V/240V, three phase 208V/380V/400V/415V/480V					
Input Voltage/Frequency Tolerance	± 10% , 50/60Hz ± 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	± 1% for 0-100% load variation, ± 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	± 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℃, 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.

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Supplied Worldwide by

EverExceed Corporation