

## Rectifier UL series

Ultra reliable switched-mode rectifier



Rectifier ULB3000

### Highlights

- | Hot swap technology
- | High efficiency
- | Ultra highly reliable rectifier modules
- | Front to back air flow, no scalability limitation
- | Wide temperature range of operation
- | Fail-safe modular structure combined with fault tolerant solutions

# POWERFUL. EFFICIENT. RELIABLE.

Rectifier UL – rectifier and battery charger for stand-alone use or for working in parallel as a part of the Eneron DC power system.

### Performance

ENERON series presents a highly available modular DC power supply solution for industry applications. Ultra high reliability. The ENERON power system is developed to meet the specific requirements in many industrial sectors, such as power generation, transmission and distribution, oil and gas extraction, automation control, maritime, railway and many more.

### Scalability

The ENERON DC power system can be easily scaled. A 42U cabinet contains a distribution unit and 1 to 5 power subracks, each of which can house up to 4 UL rectifiers.

### Simplicity

Easily done. Setting up and controlling through 3 buttons beside the displays.

### Intelligence

Integrated battery testing procedures and failure detection methods.

### Maintenance

Fast and safe rectifier module exchange, without any screw-drivers. The real time-saving and cost-reducing plug & play connection system.

### Monitoring and control

Communication via RS232, SNMP, Ethernet or GSM. Remote signaling through relay outputs.

# Technical data

## Rectifier UL series

Rectifier module	ULA	ULB	ULC	ULD	ULE	ULF
<b>Input (AC)</b>						
Voltage, nominal	230 V					
Voltage, operating range	140 V ... 276 V					
Frequency	45 Hz ... 66 Hz					
Power factor	> 0.99					
<b>Output (DC)</b>						
Voltage	24 V	48 V	60 V	110 V	220 V	360 V
Power, maximum	3000 W					
Current, maximum	125 A	62.5 A	50 A	27.3 A	13.6 A	8.3 A
Current sharing between modules	± 5% from max. current					
Static voltage regulation (from 10% to 100% load)	± 0.5%					
Dynamic voltage regulation (from 10% to 90% / 90% to 10% load)	± 5%					
Response time	< 2 ms					
<b>Other specifications</b>						
Main functions and features	Recharge and maintain of all types of batteries Output voltage stabilization Battery test and asymmetry control Voltage temperature compensation Fan speed regulation (current and temperature) Digital, light and sound signalling					
Protections	Protection against over-voltage and disturbances at the input Protection against overload and short circuit at the output Protection against deep battery discharge Protection against high temperature					
Dimensions (WxHxD) mm	(112x290x450)					
Mounting	Horizontal, 4 rectifiers (7U) across a 19" or ETSI rack					
<b>Operating conditions</b>						
Ambient temperature	-30°C ... +80°C (power de-rating at 60°C)					
Humidity	Operating: 0% to 95% RH non-condensing Storage: 0% to 99% RH non-condensing					
Operating altitude	≤ 3000 m a.s.l.					