OPUS C DC Power Systems

Wall mounted Charging Rectifier

OPUS WRS 24-1100 F
OPUS WRS 48-1600 F
OPUS WRS 60-1600 F
OPUS WRS 110-1600 F
OPUS WRS 220-1600 F

POWER GENERATION & DISTRIBUTION
PROCESS INDUSTRY
DEFENCE & SECURITY
TELECOM

Product Description

OPUS WRS is wall mounted charging rectifier for industrial market applications. Together with batteries it provides uninterrupted DC power for critical loads. With compact design, comprehensive monitoring features and alarm functions OPUS WRS provides a cost-effective solution to wide range of applications where high reliability and availability are requested.

OPUS WRS product line consists of MRC-rectifier, VIDI+ I/O controller, MCB protections for mains, load and battery packaged in wall mounted IP21 enclosure.

Features

- Compact design and low weight
- Convection cooling with low noise
- Easy installation
- Models for 24, 48, 60, 110, 220 VDC
- Max 1600 W output power
- Battery connection:
- 1 string with full current, MCB protection and shunt resistor

Enedo Finland Oy
Martinkyläntie 43, 01720 Vantaa, Finland
Tel +358 9 478 466
www.enedopower.com

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Technical Specifications

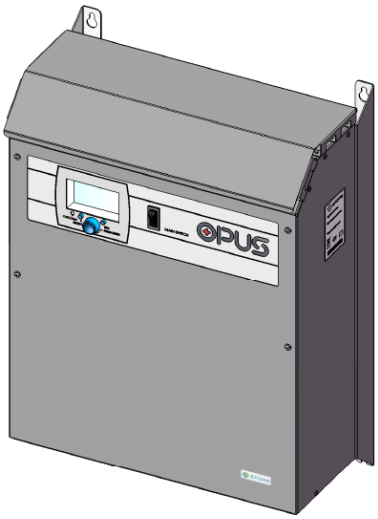
General construction	
Cooling	Natural convection
Protection	IP 21
Controller user interface	Display and local control in front panel
Distribution and Connections	Behind front panel
Colour	Frame RAL 7024
Dimensions	Height 520 mm Width 385 mm Depth 198 mm

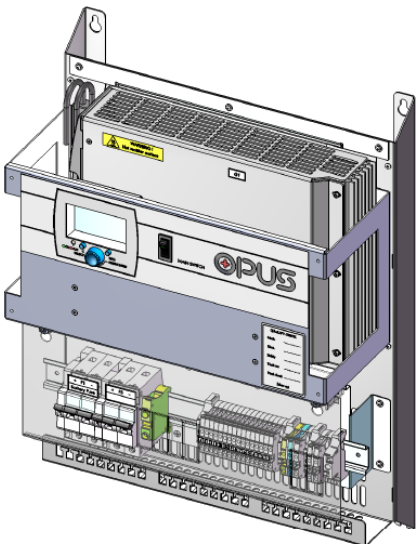
Environment and standards	
Operating temperature	-20°C … +45°C
Humidity max	95% relative humidity, non-condensing
Altitude max	2000 m above sea level
Safety	IEC/EN 60950-1
EMC	Emissions: IEC/EN 61000-6-4 Immunity: IEC/EN 61000-6-2 Harmonic currents IEC/EN 61000-3-2 Voltage fluctuation & flicker: IEC/EN 61000-3-3

Input	OPUS WRS 24-, OPUS WRS 48-, OPUS WRS 60-, OPUS WRS 110-, OPUS WRS 220-	
AC-connection	L + N + PE	
Nominal voltage	230 VAC	
Range, full	180 – 275 VAC	
Range, reduced	140 – 180 VAC	
Frequency	45 to 65 Hz	
Mains terminal	Terminal blocks 2.5 mm2	
Nominal current	5.3 A	7.7 A
Maximum current	6.9 A	9.7 A
Inrush current	< 20 A	

Output	OPUS WRS 24-1100	OPUS WRS 48-1600	OPUS WRS 60-1600	OPUS WRS 110-1600	OPUS WRS 220-1600
Grounding	floating	floating	floating	floating	floating
Nominal voltage	24 VDC	48 VDC	60 VDC	110 VDC	220 VDC
Voltage range	21 -31 VDC	42 – 58 VDC	51 – 72 VDC	97 – 132 VDC	189 – 265 VDC
Maximum current	45.8A @ 24V	33.3A @ 48V	26.6A @ 60V	14.5A @ 110V	7.2A @ 220V
Power max.	1.1 kW	1.6 kW	1.6 kW	1.6 kW	1.6 kW
Battery fuse, MCB	D63A, 2-pole	D63A, 2-pole	D63A, 2-pole	D32A, 2-pole	D16A, 2-pole
Load fuse, MCB	C50A, 2-pole	C32A, 2-pole	C32A, 2-pole	C16A, 2-pole	C10A, 2-pole

Layout drawings





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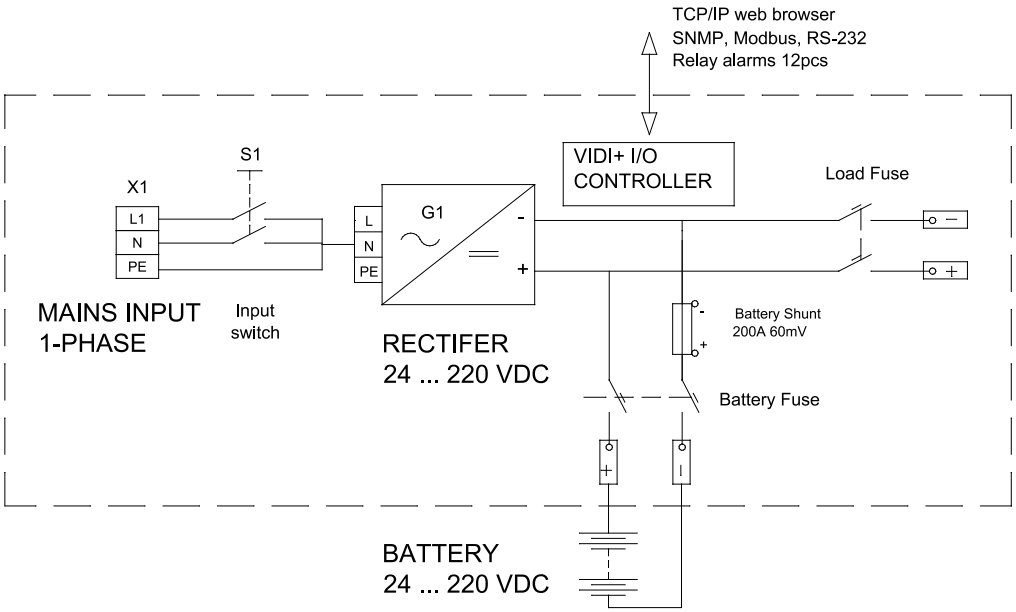
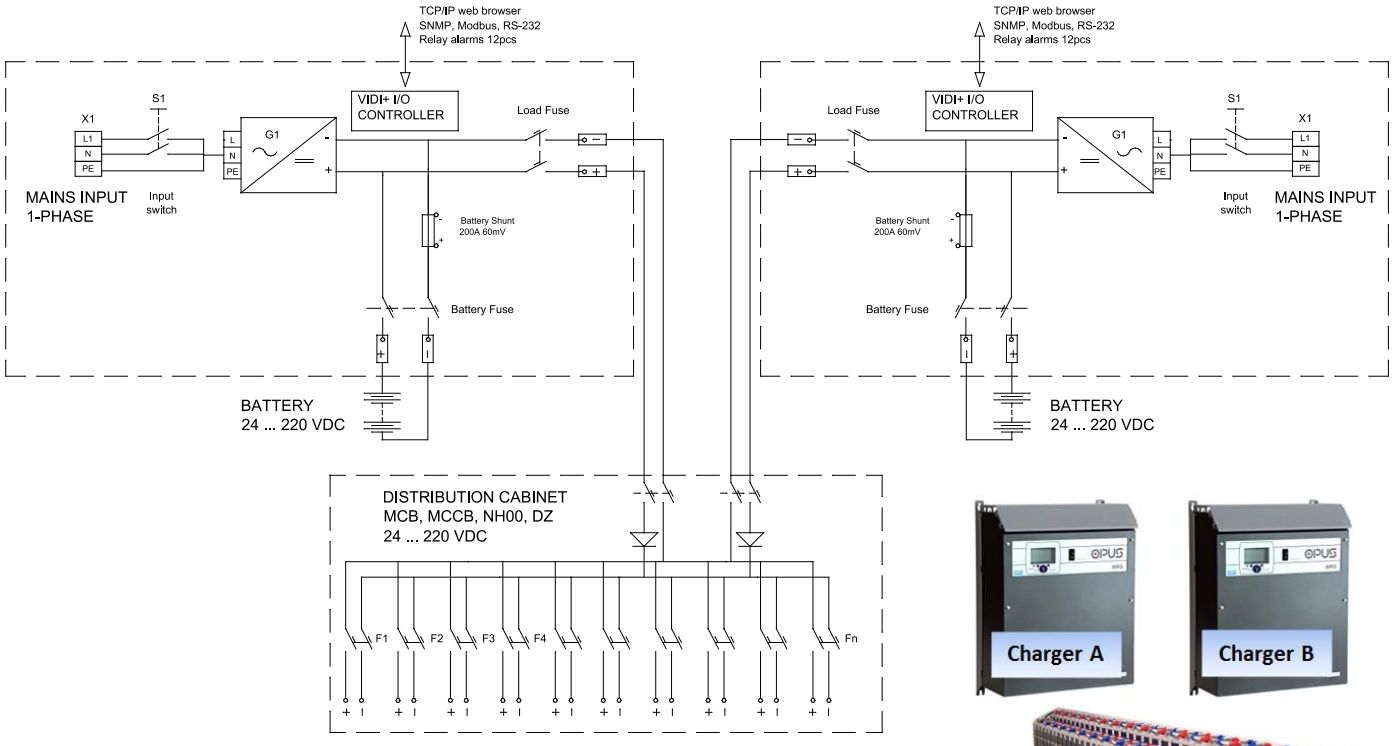
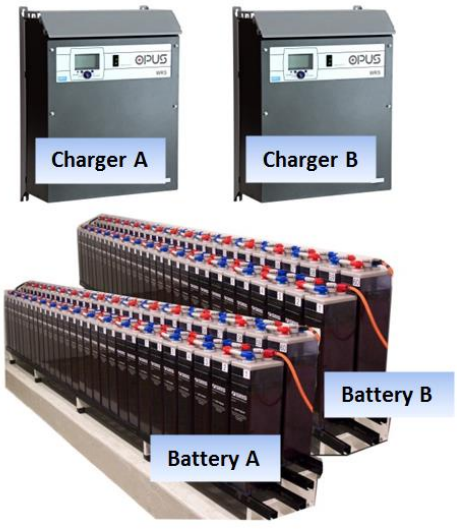
Block Diagram



Application Note: A + B double systems & external distribution panel





Order Information

Name	Order number
OPUS WRS 24-1100 F	95H660
OPUS WRS 48-1600 F	95H670
OPUS WRS 60-1600 F	95H680
OPUS WRS 110-1600 F	95H690
OPUS WRS 220-1600 F	95H700

Enedo
RESHAPING ELECTRICITY

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