

# OPUS C DC Power Systems

## 19" 7U Rack or Wall mounting

OPUS C 24-3.3 R7U  
OPUS C 48-4.8 R7U  
OPUS C 60-4.8 R7U  
OPUS C 110-4.8 R7U  
OPUS C 220-4.8 R7U



POWER  
GENERATION &  
DISTRIBUTION



PROCESS  
INDUSTRY



DEFENCE &  
SECURITY



TELECOM

## Product Description

OPUS C DC power systems are robust, free convection cooled, N+1 redundant backup power solutions for critical infrastructure applications such as transmission and distribution substations, process industries and telecommunications.

OPUS C DC power systems consist of MRC-rectifiers, VID1+ controllers, Connections for mains, battery and load.

## Features

- Convection cooling
- Models for 24, 48, 60, 110, 220 VDC
- Max 4.8 kW output power
- N+1 redundancy
- Battery connection:
- 1 string with full current, MCB protection
- Options: Battery LVD, Temperature sensor, Wall mounting+ IP21 kit



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# Technical Specifications

General construction	
Cooling	Natural convection
Protection	IP 20 Option IP21
Controller user interface	Display and local control in front panel
Distribution and Connections	Behind front panel
Colour	Frame RAL 7024
Dimensions, rack mounting	Height 7U (311 mm) Width 19" (482 mm) Depth 451 mm
Dimensions, Wall mounting + IP21	Height 350 mm Width 482 mm Depth 503 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 C 24-, OPUS C 48-, OPUS C 60-, OPUS C 110-, OPUS C 220-					
AC-connection	3W + N + PE				
Nominal voltage	230 / 400 VAC				
Range, full	180 – 275 VAC				
Range, reduced	140 – 180 VAC				
Frequency	45 to 65 Hz				
Internal protection	16 A MCB / rectifier module				
Mains terminal	Terminal blocks 10 mm <sup>2</sup>				
	OPUS C 24- 3.3	OPUS C 48- 4.8	OPUS C 60- 4.8	OPUS C 110- 4.8	OPUS C 220- 4.8
Nominal current	5.3 A			7.7 A	
Maximum current	6.9 A			9.7 A	
Inrush current per rectifier	< 20 A				
Main switch	40 A				
Recommended mains fuse	3 x 25 A				

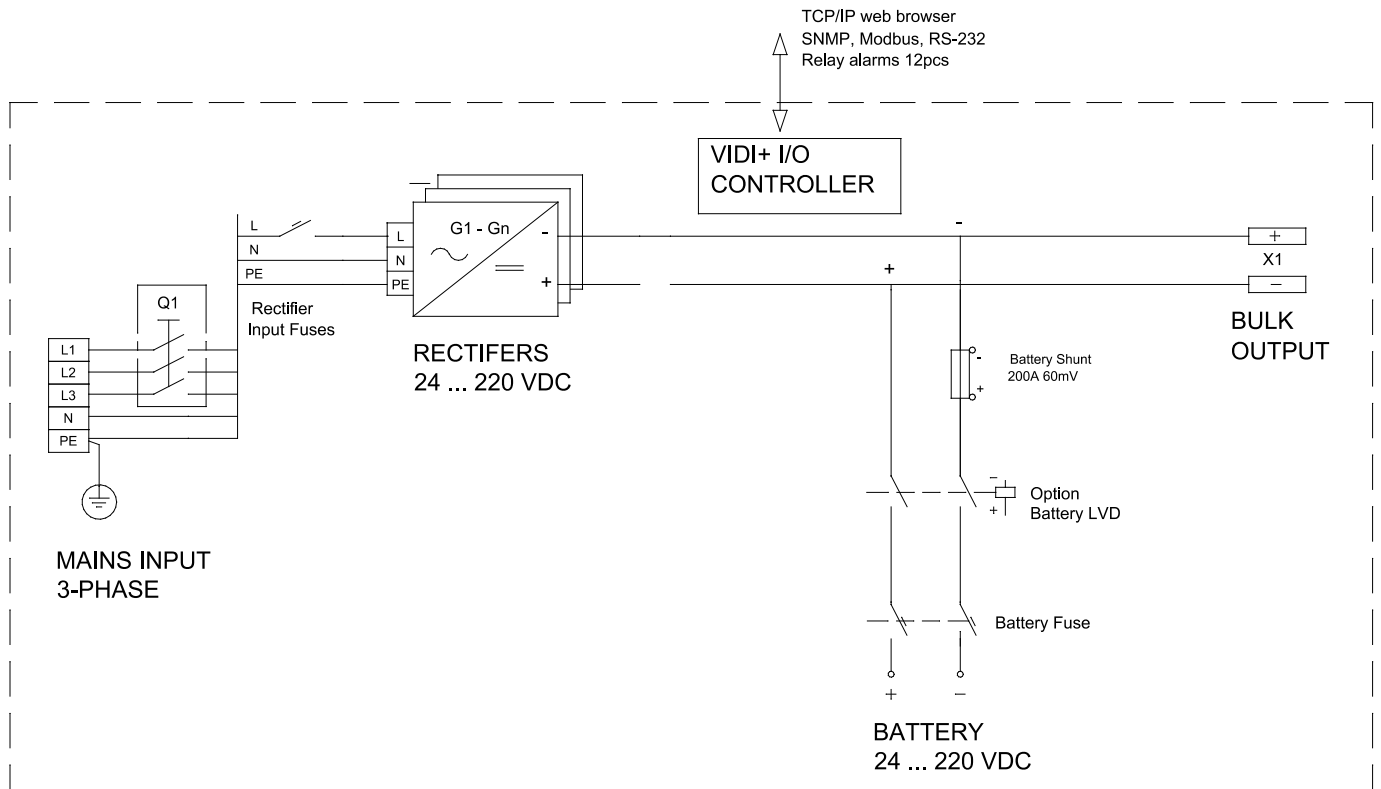
Output					
	OPUS C 24- 3.3	OPUS C 48- 4.8	OPUS C 60- 4.8	OPUS C 110- 4.8	OPUS C 220- 4.8
Grounding	floating	floating	floating	floating	floating
Nominal voltage	24 VDC	48 VDC	60 VDC	110 VDC	220 VDC
Voltage range	21 -31 VDC	42 – 58 VDC	51 – 72 VDC	97 – 132 VDC	189 – 265 VDC
Ripple noise	< 100 mVp-p	< 100 mVp-p	< 100 mVp-p	< 100 mVp-p	< 100 mVp-p
Rectifiers	Max 3	Max 3	Max 3	Max 3	Max 3
Maximum current	137A @ 24V	100A @ 48V	80A @ 60V	44A @ 110V	22A @ 220V
Power max.	3.3 kW	4.8 kW	4.8 kW	4.8 kW	4.8 kW
Redundant power	2.2 kW	3.2 kW	3.2 kW	3.2 kW	3.2 kW
Output terminals	Bulk output, screw terminal X1 35 mm <sup>2</sup>				

Connections	
Mains	Mains switch, 16A MCB and connection terminals
Battery	2-pole MCB

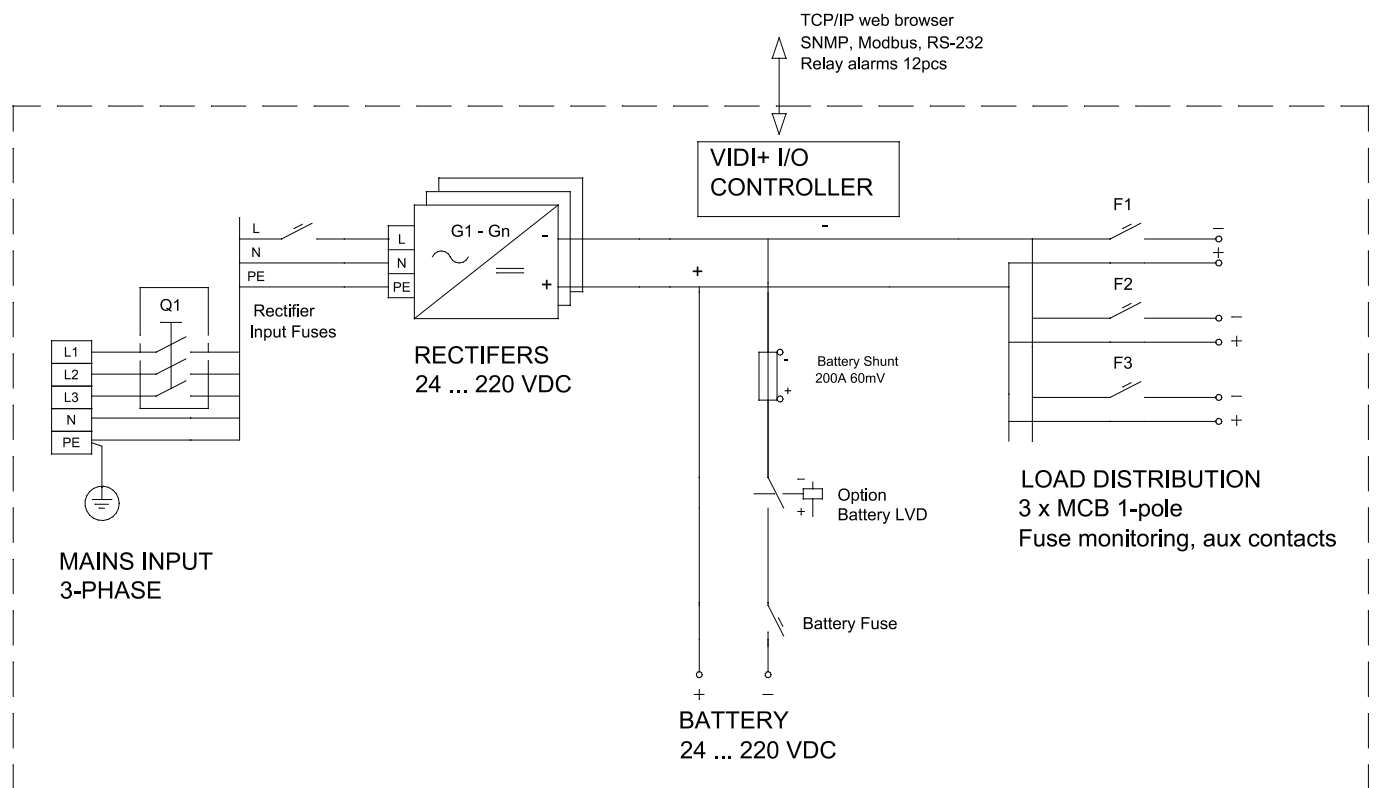


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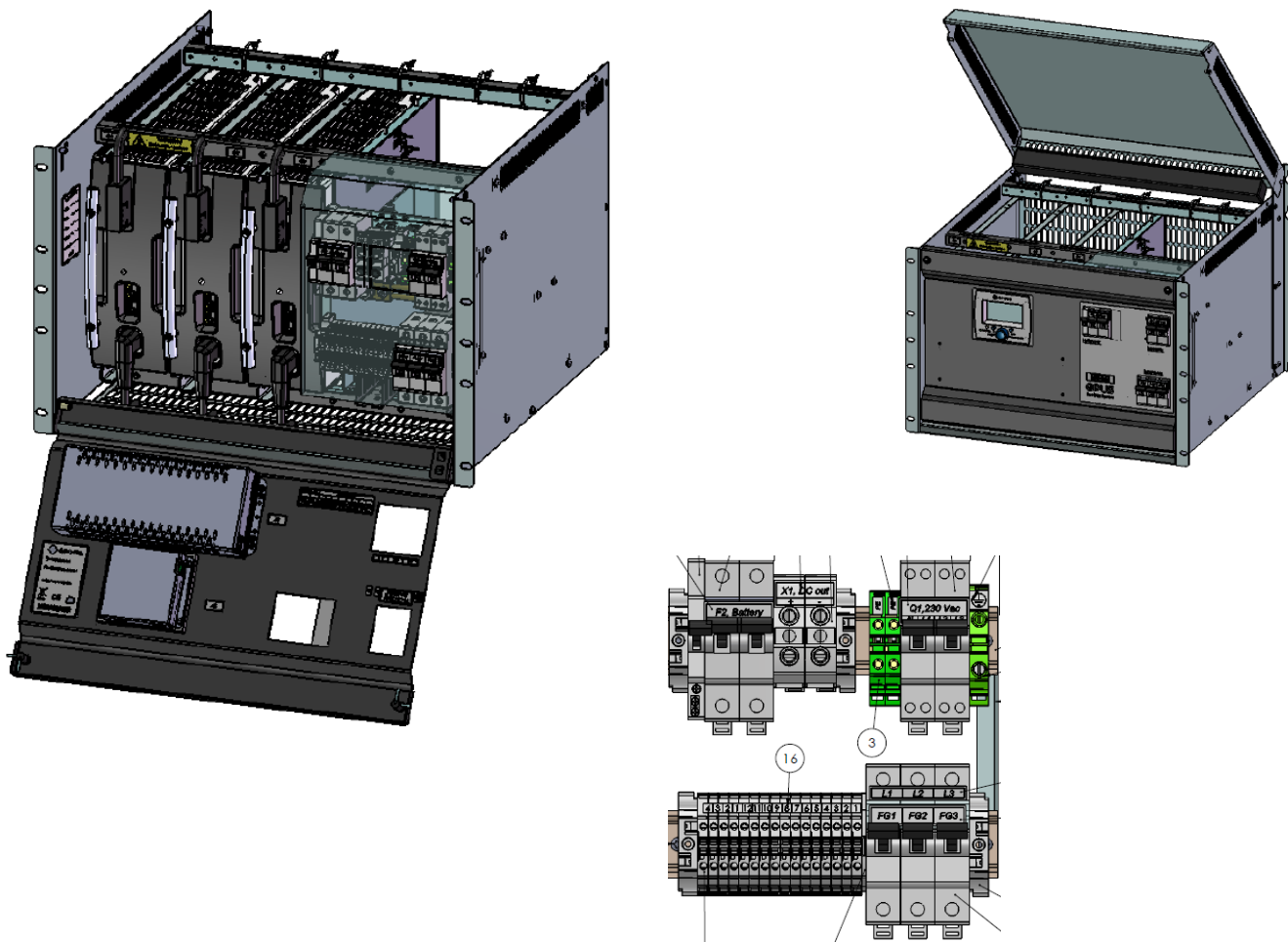
## Block Diagram, 2-pole systems



## Block Diagram, 1-pole systems, positive or negative pole grounded



## Layout drawings



### Other options

Wall mounting kit including IP21 drip water cover

NTC Temperature sensor

Battery LVD contactors

Controllers: VIDI+ or VIDI+ I/O

## Order Information

Name	Order number	Description
OPUS C 24 3.3 R 7U F	9220X0005001	24VDC, 3.3 kW, 7U rack, floating
OPUS C 48 4.8 R 7U F	9220X0005007	48VDC, 4.8 kW, 7U rack, floating
OPUS C 48 4,8 R 7U F MCB	9220X0005616	48VDC, 4.8 kW, 7U rack, plus grounded
OPUS C 60 4.8 R 7U F	9220X0005009	60VDC, 4.8 kW, 7U rack, floating
OPUS C 110 4.8 R 7U F	9220X0004953	110VDC, 4.8 kW, 7U rack, floating
OPUS C 220 4.8 R 7U F	9220X0005011	220VDC, 4.8 kW, 7U rack, floating



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