



OPUS C DC POWER SYSTEMS IN 19" 12U RACKS

OPUS C 24-8.0 R12U, OPUS C 48-8.0 R12U, OPUS C 60-8.0 R12U,
OPUS C 110-8.0 R12U, OPUS C 220-8.0 R12U

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, VIDI+ controllers, Connections for mains and battery and wide variety of load distribution.

2014_10_13_OPUS C 12U racks vC.0 draft.pdf



FEATURES

- Convection cooling
- Models for 24, 48, 60, 110, 220 VDC
- Max 8.0 kW output power
- N+1 redundancy
- Plus or Minus Grounded or Floating
- Battery connection: 1 string with full current, MCB protection
- Load Distribution Modules as options: 2-pole or 1-pole MCB
- Options: Battery LVD, Load LVD, extra battery connections, Temperature sensors, IP21

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 7037 Door RAL 7035
Dimensions	Height 533 mm Width 438 mm Depth 370 mm



TECHNICAL SPECIFICATIONS

ENVIRONMENT AND STANDARDS					
Operating temperature	-5°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 ²				
	OPUS C 24-5.5	OPUS C 48-8.0	OPUS C 60-8.0	OPUS C 110-8.0	OPUS C 220-8.0
Nominal current	10.2 A	15.4 A			
Maximum current	13.8 A	19.4 A			
Inrush current per rectifier	14.7 A	18 A			
Main switch	40 A				
Recommended mains fuse	3 x 25 A				
OUTPUT	OPUS C 24-5.5	OPUS C 48-8.0	OPUS C 60-8.0	OPUS C 110-8.0	OPUS C 220-8.0
Grounding	floating	+ or floating	+ grounded	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 5	Max 5	Max 5	Max 5	Max 5
Maximum current	229A @ 24V	164A @ 48V	134A @ 60V	72A @ 110V	36A @ 220V
Output current	200A @ 27.5V	147A @ 54.5V	117A @ 68.1V	65A @ 123.6V	33A @ 220V
Power max.	5.5 kW	8.0 kW	8.0 kW	8.0 kW	8.0 kW
Redundant power	4.4 kW	6.4 kW	6.4 kW	6.4 kW	6.4 kW
Output terminals	Terminal blocks 25 mm ²				



TECHNICAL SPECIFICATIONS	LOAD DISTRIBUTION OPTIONS	OPUS C 24-6.6	OPUS C 48-9.6	OPUS C 60-9.6	OPUS C 110-9.6	OPUS C 220-9.6
	1-pole MCB, 2...63A	Max 20 loads	Max 20 loads	Max 20 loads	N/A	N/A
	2-pole MCB, 2...63A	Max 10 loads	Max 10 loads	N/A	Max 10 loads	Max 10 loads
	OTHER OPTIONS					
	Wall mounting kit including IP21 drip water cover					
	NTC Temperature sensor					
	Battery LVD contactors					
Controllers: VID1+ or VID1+ I/O						

ORDER INFORMATION	NAME	ORDER NUMBER	DESCRIPTION
	OPUS C 24 5.5 R 12U F	95MS012	24VDC, 5.5 kW, 12U rack, floating
	OPUS C 48 8 R 12U F	9220X0000098	48VDC, 8.0 kW, 12U rack, floating
	OPUS C 48 8 R 12U P	95MS010	48VDC, 8.0 kW, 12U rack, plus grounded
	OPUS C 60 8 R 12U P	95MS014	48VDC, 8.0 kW, 12U rack, plus grounded
	OPUS C 220 4.8 R 7U F	9220X0005011	9220X0005011
	OPUS C 220 8 R 12U F	95MS013	220VDC, 8.0 kW, 12U rack, floating