

OPUS C 48-9.6 C

OPUS C series DC Power System in Cabinet



General description

OPUS C 48-9.6 C delivers uninterrupted DC power to demanding industrial, automation, telecom and datacom applications. Maximum output power is 9.6 kW at 48 VDC.

OPUS C 48-9.6 C is a compactly integrated DC power system using MRC 48-1600 convection cooled rectifiers and a comprehensive VIDDI controller. Connections are preinstalled for mains, batteries and DC distribution. The system can be equipped with a wide range of options.

Features

- Fully integrated 48VDC power system
- Convection cooled with low noise, highly reliable MRC 48-1600 rectifiers
- Maximum output 9,6 kW
- Shelves for batteries in cabinet
- All-inclusive distribution with load fuse monitoring
- Options: temperature compensated charging, load LVD, battery LVD, comprehensive battery management, relay inputs and outputs, remote control, overvoltage protection and earth fault detection
- Available as positive grounded, negative grounded or floating
- Can be supplemented with inverters
- Floor-mounted cabinet in several sizes
- Also available in 24VDC, 60VDC, 110VDC and 220VDC versions

Technical specifications

General construction	
Cooling	Natural convection
Protection	IP 20
Controller user interface	Display and local control in front door
Distribution and Connections	Inside cabinet, cabling from top (from bottom on request)
Rectifiers	Max. 6 pcs
Material	1-1.5 mm zinc plated steel cabinet and door
Color	Cabinet RAL 7037, door RAL 7035
Assembly	Standalone floor-mounted cabinet

Input	
AC-connection	3W+N+PE
Nominal voltage	230/400 VAC
Range, full power	180-275 VAC
Range, reduced power	140-180 VAC
Frequency	45 to 65 Hz
Nominal current / phase	15.4 A
Maximum current / phase	< 20 A
Inrush current	24 A / rectifier
Internal protection	16 A MCB / rectifier module
Mains terminal	Terminal blocks 10 mm ²
Recommended mains fuse	3x25 A
Mains switch	40 A

Output	
Nominal voltage	48 VDC
Voltage range	42-58 VDC
Oversvoltage shut-down	60 VDC
Ripple noise	<100 mV _{p-p}
Nominal current	197A@48 V
Output current	177A@54.5 V
Nominal power max.	9600 W
Redundant power	8000 W
Output terminals	max. 25 mm ²

Battery connection	
MCCB	(1-3)x200 A
Battery shelves *	0-3 pcs

Load distribution options (monitored)	
MCB *	1-60 pcs
NH 00 fuse link *	1-30 pcs
Rating of load fuses	MCB 2...63 A/NH 00 6...125 A

Controller	
VIDI	Basic controller
VIDI+	Advanced controller
Features	See VIDI datasheet

Options	
Battery LVD	200 A
Load LVD	200 A
Temperature sensor	Enables temperature compensated charging
Transient OVP	Available for input protection
Inverters	Supplementary OPUS inverters

Dimensions	
Height mm *	2000
Width mm	600
Depth mm	600
Weight without rectifiers kg	

Environment and standards	
Operating temperature	-5°C - +45°C
Humidity max.	95% relative humidity, non-condensed
Altitude max.	2000 m above sea level
Safety	IEC/EN 60950-1
EMC	Emissions: EN/ IEC 61000-6-4 Immunity: EN/ IEC 61000-6-2 Harmonic currents: EN/ IEC 61000-3-2 Voltage fluctuations& flicker: EN/ IEC 61000-3-3

* According to cabinet type

* Other sizes on request