

OPUS C 110-9.6 C

OPUS C series DC Power System in Cabinet



General description

OPUS C 110-9.6 C delivers uninterrupted DC power to demanding industrial, automation, telecom and datacom applications. Maximum output power is 9.6 kW at 110 VDC.

OPUS C 110-9.6 C is a compactly integrated DC power system using MRC 110-1600 convection cooled rectifiers and a comprehensive VID controller. Connections are preinstalled for mains, batteries and DC distribution. The system can be equipped with a wide range of options.

Features

- Fully integrated 110 VDC power system
- Maximum output 9,6 kW
- Three 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
- Can be supplemented with inverters
- Floor-mounted cabinet in several sizes
- Also available in 24 VDC, 48 VDC, 60 VDC and 110 VDC 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	19.4 A
Inrush current	18 A / rectifier
Rectifier input protection	16 A MCB / rectifier module
Mains terminal	Terminal blocks 10 mm ²
Recommended external mains fuse	3x25 A
Mains switch	40 A

Output	
Nominal voltage	110 VDC
Voltage range	97-132 VDC
Overvoltage shut-down	135 VDC
Ripple noise	<100 mV _{p-p}
Nominal current	87 A@110 V
Output current	78 A@123.6 V
Nominal power max.	9600 W
Redundant power	8000 W
Output terminals	max. 25 mm ²

Battery connection	
MCCB	1 pcs 2-pole MCB 100 A
Battery shelves	3 pcs

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

Load distribution options (monitored)	
MCB 2-pole	1-18 pcs
NH 00 fuse link 2-pole	1-9 pcs
Rating of load fuses	MCB 2...63 A/NH 00 6...125 A

Options	
Second battery MCB	1 pcs 2-pole MCB 100 A
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