Back-up power supply ZDC - C

ZDC series C are back-up power supply for DC appliance. Power for back-up is covered from batteries, maintenance and charged with rectifier's modules. Power source design ensures high reliability, operation safety; enable fast and easy service for various applications. For higher flexibility and for simply handling has power source ZDC, series C available different communications channels. ZDC power source has modular conception to enable the additional power extension even to operated power source already. There is not needed to find solutions and resources for new investment.

Components

- Central controller CXCR
- Power module DC
- Distribution and I/O protection
- Cabinet
- VRLA batteries (AGM,GEL)

Applications

- Industrial technology
- Controlling systems
- Telecommunication
- Protection and safety technology

Description

- modular conception *(also batteries on request)*
- feeding 230VAC/400VAC
- input voltage range 90 - 312 VAC
- adjustable output voltage
- batteries are parts of power source *(possibility to use existing batteries on request)*
- battery capacity is projected according to system power and accord. to requested autonomy
- batteries installed directly in system cabinet
- two form of current measuring – extra for battery and extra for load
- rectifier controller is feeding from output voltage and from battery voltage – operate even blackout the power
- *hot swap* conception – easy service and maintenance, even *without* turn off the equipment
- possibility to operate even phase fail
- high efficiency, power factor 0,99
- high performance beside small dimensions
- communication possibilities GSM, Ethernet, internet, SNMP,Modbus,RS232,RS485,Canbus
- LVDB system protect battery against deep discharge
- disconnecting of less important section LVDL
- battery test during operation
- energy save via "sleep" mode
- independent low-voltage and over-voltage protection for batteries and for appliance
- DC distribution with position sensing of distribution breakers
- possibility to choose from wide range of rectifier controller's alarm
- any system events can activate to send email to set up address

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Technical data

ZDC - C	24V DC		48V DC				110V DC		220V DC	
INPUT										
Voltage	1NPE 230V, 50Hz TN-S/ 3NPE 400V, 50Hz TN-S									
Nominal	208 – 277V AC									
Operation	176 – 320V AC									
extended	90 - 176V AC (reduce power)									
Frequency	45 – 70 Hz									
Efficiency	> 93%									
THDI	< 5%									
Power factor	> 0,99 (50-100% load)									
Safety	CSA C22.2 No 60950-1-03 ; UL 60950-1 1.edition; CE mark ; IEC/EN 60950-1									
EMC	ETSI 300 386 ; CGR47(FCC) part 15,class A ; ICES-03 class A ; EN 55022 (CISPR 22) class ; C section; EN 61000-3-2 ; EN 61000-3-3									
Resistance	EN 61000-4-2 ; EN 61000-4-3 ; EN 61000-4-4 ; EN 61000-4-5 ; EN 61000-4-6 ; EN 61000-4-11 ; ANSI/IEEE C62.42 Cat B3									
OUTPUT										
Nominal voltage	24V DC		48V DC				110V DC		220V DC	
Voltage range (adjustable)	21 – 29V DC		42 – 58V DC				90 – 160V DC		180 – 320V DC	
Module power kW	0,4	3,1	0,65	1,2	2	4	1,1	4,4	1,1	4,4
Module quantity / 1 shelf	5	5	5	4	4	5	6	5	6	5
Max. current/1shelf*	645 A		416 A				200 A		100 A	
Nominal current	570 A		367 A				180 A		90 A	
Power source protection	Current limiting / short circuit ; I/O fuses ; overload protection on input ; Power limiting; temperature protection / shutdown;									
Power source adjustment	Floating voltage; max. battery current; equalizing current									
OTHERS										
Standard temperature	- 40 up to 50 °C (- 40 up to 122 °F)									
Extensive temperature	- 40 up to 75 °C (- 40 up to 167 °F)									
Storage temperature	- 50 up to 85 °C (- 58 up to 185 °F)									
Humidity	0 do 95% RH without condensed water									
Altitude	- 500 do 2800 a.s.l.									
Noisiness	< 60 dB within 1m									
Cooling	Natural / artificial (fans)									
Lifetime	15 years (exclude the fans) / (fans *10 years*)									
Protection level	IP 20									
MTBF	400 000 hours									

* max current is possible increase with another shelf

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