



## Type DCPS-W



- Flexible 19" systems with "Hot Plug-in" Ability
- Compact design with switch mode modules
- Extensive microprocessor controlled monitoring facilities
- Wide range of modules to fit in most applications

A combination of modern switching power conversion technology and a flexible 19" compatible mechanic in the DCPS systems gives many advantages and is suitable for a wide range of applications.

These power supplies are designed for the following applications:

- Power supply for all small to high power DC loads
- Rectifiers in DC systems with battery backup
- Telecommunication
- Railroad signalling systems
- Industrial control systems
- Low- and high voltage switchgear back-up supplies
- Charging and buffering of stationary batteries in electrical power plants

The combination of an active power factor correction unit and a soft-switching DC / DC - converter provides a wide input voltage range, high efficiency, small dimensions, and low weight.

The parallel operation mode as integrated standard of each single module results in high grade flexibility of the power supply solutions in the n+1 configuration even for higher power demands.

Customized power solutions with different voltage levels can be realized in a compact designed system configuration.

A CAN-bus interface allows monitoring, control and signalling of all connected modules by the central supervisory unit (MU1000C).

TYPE LIST					
Type	DCPS-M 24-x	DCPS-M 48-x	DCPS-M 110-x	DCPS-M 125-x	DCPS-M 220-x
Nominal voltage	24V DC	48V DC	110V DC	125V DC	220V DC
Category	DC Power supplies				

AC INPUT GENERAL DATA					
Nominal voltage	230/400 V AC +15/-20% (other voltages are possible)				
Input frequency	47-63 Hz				
Power factor $\lambda$	> 0.95 at $P_{nom} < 25\%$ ; > 0.97 at 50% > $P_{nom} > 25\%$ ; > 0.99 at 100% > $P_{nom} > 50\%$				
Efficiency	$\geq 90\%$	$\geq 91\%$	$\geq 91\%$	$\geq 91\%$	$\geq 91\%$
Internal Fusing	For each module				

AC INPUT GENERAL DATA / MAX MODULES					
Nominal voltage	24 V DC	48 V DC	110 V DC	125V DC	220 V DC
Rectifiers modules	20A; 40A Max: 80A	10A; 30A Max: 60A	4,5A; 13,4A Max: 26,8A	10A; 20A Max: 20A	6,7A Max: 13,4A
DC/DC Converters	-	240W	480; 1400W	480; 1400W	480; 1400W
Inverter modules	-	1,2 VA	1,2 VA	1,2kVA	-
Distribution panels	5,0kVA				
Monitoring units	MU500 MU1000C MU2000C				
Voltage ripple	$\leq 20 \text{ mV}_{pp}$				
Psophometric ripple acc. to CCITT	$\leq 1.0 \text{ mV}_{eff}$	$\leq 1.0 \text{ mV}_{eff}$	N/A	N/A	N/A
Dynamic behaviour	< 3% $U_{nom}$ for load jumps between 10% - 90% - 10% $I_{nom}$ Reaction time $t \leq 1 \text{ ms}$				
Short circuit protection	Continuous short circuit proof, $1x I_{nom}$				
Parallel operation	Option				
Options	Change over switch, Temperature compensation, Battery test socket , Main switch, IPXX Alarm panel 16 channels, Cell voltage equalizers, separate batteries Open vented/NiCd, Counter cell function with NiCd batteries, Distribution modules Diazed, MCB, MCCB, Remote signalling with modem or TCP/IP, SNMP				

STANDARD FEATURES	
LED indications	Operation and alarms
Digital displays	Output voltage, output current
Relay contacts	A-alarm; B-alarm
Monitoring	Output voltage high / low, mains fault, module fault, earth fault; fuse tripped; battery fault

ENVIROMENT	
Ambient temperature	Operation: -10°C to +40°C Storage: -30°C to +50°C
Climatic conditions	IEC 721-3-3 class 3K3 / 3Z1 / 3B1 / 3C2 / 3S2 / 3M2
Humidity class	F
Dust	< 1 mg / m <sup>3</sup>
Altitude	$\leq 1000 \text{ m a.s.l.}$ ; extension possible
Audible noise	< 30 dB (A) in 1 m distance

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MECHANICAL CONSTRUCTION	
Construction	Stål skåp med 19" montage
Dimensions [mm] DCPS-W	W / H / D 700 / 760 or 895 / 400
Cooling	Natural convection
Protection class	IP20 (mech.); 1 (electr.) acc. To EN 60950
Surface	Powder coating RAL 7032 or RAL 7035, constructive parts: anodised

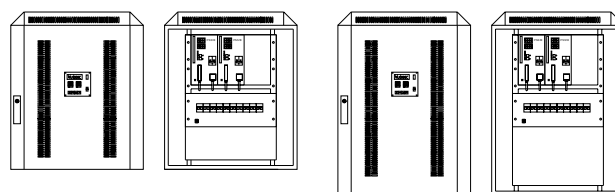
COMPLIANCES	
Conducted and radiated emissions EN 50081-1	EN 55011 / EN 55022 class B
Safety	EN 60950 ; VDE 0100 part 410; VDE 0110, EN 50178, EN 60146
Interference Immunity EN 50082-2	Case: Electrostatic discharge: EN 61000-4-2 (6 kV contact, 8 kV air discharge) Radiated radio frequency: EN 61000-4-3 (10V/m, 30 MHz - 1 GHz)
	Power line: EN 61000-4-4 ( 2 kV, other 2 kV) EN 61000-4-5 (4 kV unsymmetrical, 2 kV symmetrical, others: 2 kV unsymmetrical)
	Control line EN 61000-4-4 ( 2 kV ) EN 61000-4-5 (2 kV unsymmetrical)



For higher power demands cabinets type DCPS-S, DCPS-M and DCPS-L are available. (see separate brochure).  
The systems can also be extended with additional cabinets  
CP Kontakt AB also construct and builds customer specified systems. Please contact CP Kontakt for consultation.

## GENERAL MECHANICAL DIMENSIONS

### DCPS-W



W/H/D

700/760/600mm

700/895/600mm

#### Additional Information

Full information, drawings, manuals and application notes and advice to any of the wide range of CP Kontakt AB's products are available on request.

CP Kontakt AB reserve the right to change the specification, product design and parameters at any time, without notice.

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