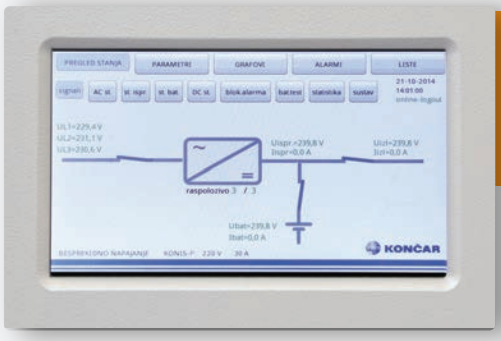
inem KONČAR

Končar - Electronics and Informatics Inc.

DC Power Supply System type KONIS-P



Control unit KONLOG

The power supply system with DC output voltage type KONIS-P is intended for the uninterruptible supply of important facilities such as hydro power plants, thermal power plants and high voltage substations.

DC power supply system KONIS-P 220 V, 40 A

THE MAIN FEATURES OF THE SYSTEM ARE:

- Highest power supply reliability
- Redundant parallel rectifier operation
- Modular design - easy maintenance
- Selective disconnection of faulty rectifiers
- Easy access to measurements, alarms and chronological events list
- Option: detection and location of ground faults
- Wide adaptation possibilities to every facility
- Selective coordination of all DC distribution circuit breakers in all cases
- System with hinged doors or with direct access to all circuit breakers

The system simultaneously supplies the load while charging and maintaining installed stationary batteries.

The rectifier modules operate in redundant parallel mode with equal distribution of the load current. In case of possible rectifier failure the faulty rectifier is selectively disconnected while the other continues to supply the load and the battery. The principle of redundant output power gives the maximum reliability of supplying. By adding a parallel rectifier modules it is possible to increase the output power.
The modularity of the construction enables simple replacement and installation of rectifiers, which is the prerequisite for fast and effective maintenance.
Small size of modules allow efficient utilization of the volume of rectifier cabinet.

The rechargeable battery is a crucial component of reliability and availability of the power supply system. The system KONIS-P provides the battery charged all the time or its recharging with precision DC voltage without ripple.

The microprocessor control unit KONLOG supervises the operation of rectifier, battery and distribution panel. It enables system control, measuring and signalling. Possibility of real time remote control contributes to reducing maintenance costs and additional increase reliability and availability of the power supply system.

DC power supply system KONIS-P 220 V, 40 A

control and signalisation

motor drive

protection

monitoring and emergency lighting

Supplying of critical loads from the uninterruptible power supply system

TECHNICAL DATA

	KONIS-P 24	KONIS-P 48	KONIS-P 110	KONIS-P 220
Input				
Voltage	400 VAC ± 20 %			
Frequency range	50/60 Hz ± 6 %			
Power factor at nominal load	≥ 0.99			
Output				
Nominal voltage	24 V	48 V	110 V	220 V
Static tolerance	± 1 %	± 1 %	± 1 %	± 1 %
Dynamic accuracy	< 3 %	< 3 %	< 3 %	< 3 %
Adjustable output voltage range	20,4 - 30 V	42 - 62 V	87 - 150 V	170 - 295 V
Voltage ripple	< 20 mVpp	< 20 mVpp	< 100 mVpp	< 200 mVpp
Charging characteristic	IU			
Voltage compensation	according to battery temperature			
Nominal current (according to number of rectifires)	n x 50 A	n x 56 A	n x 25 A(1)	n x 12,5 A(2)
Adjustable current limit	50 - 100 %	50 - 100 %	50 - 100 %	50 - 100 %
Power (according to number of rectifires)	n x 1200 W	n x 2700 W	n x 2700 W	n x 2700 W
Efficiency	≥ 0.88	≥ 0.91	≥ 0.91	≥ 0.91
Battery				
Type	VRLA, maintenance free (also possible: open vent or NiCd batteries)			
Nominal block voltage (for lead acid batteries)	2, 4, 6 or 12 V			
Charging and float voltage at 20 °C	2,28 V/cell. (respectively, according to the requirements of the applied batteries)			
Design life	≥ 12 years			
Battery protection from	short circuits, deep discharging and high charging voltage			
General data				
Remote communication	MODBUS protocol via RS485 or optical interface option: protocol IEC 60870-5-104 via ethernet interface			
Cooling	forced – temperature regulated			
Ambient temperature	0 to + 40 °C			
Storage temperature	- 20 to + 70 °C			
Relative humidity, non condensing	to 90 %			
Compliance with standards	IEC 60950, IEC 60529, IEC 60478, IEC 60439-1, IEC 60146, EN 55022			
Protection (mechanical)	IP 22			
Color	grey, RAL 7035			
Dimensions: ▪ Width	depending on system configuration			
▪ Depth	600 mm			
▪ Height	2100 mm			

(1) @ 108 V, (2) @ 216 V

KONČAR

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CE

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BUREAU VERITAS
Certification

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