

## DC Power Supply Evolution ZP

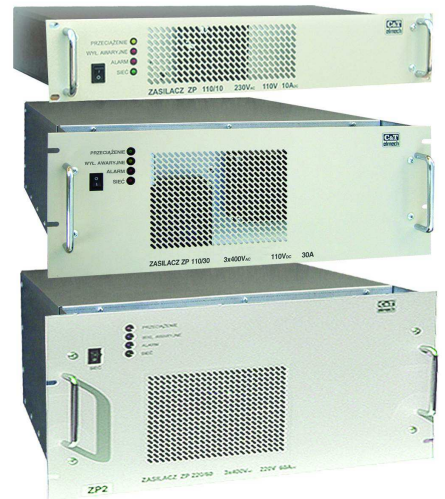
Realization in modern technology IGBT. High stability of output voltage, low level of interference and of ripples, overloading reliability. Resistance on external disturbances and changes of power supply parameters. Protection against short circuit and against reversed polarity of connected battery. Galvanic separation of DC circuits from supplying network. Automatic operation, maintenance free and high efficiency. Cooperation with every kind of battery. Made according to EN 61204 standard and CE rules.

### Destination

- Supplying of industrial automatics devices
- Supplying of power industry devices
- Supplying of emergency lights etc.
- Direct supplying of DC circuits
- Buffering operation with loads parallel connected to the battery
- Buffering operation charging current limitation

### Standard equipment

- LCD panel of control and monitoring that continuously shows output current and voltage, and in case of emergency state informs about kind of alert.
- Auto supercharging function, enables charging the battery to the 2,4V/cell after deep discharge below 1,9V/cell. (Automatic switching on)
- Battery supercharging function, enables charging to 2,7V/cell after deep discharging
- Potential free alarm relay NO/NC



### Optional equipment

- Voltage temperature compensating system – thermal correction of final voltage of charging
- Continuity battery circuit measurement
- Earthing resistance measurement\*\*
- Battery charging current limitation
- Communication via RS232 or RS485
- Controller **evoControl** with 6" graphical LCD display and tuchpanel

### Signalling of operation modes

- Electrical parameters of work
- Overload
- Auto supercharging to 2,4V/cell
- Supercharging to 2,7V/cell

### Signalling of alarm modes

- Mains failiure
- $U > U_{max}$  (2,45V/cell),  $U < U_{min}$  (1,95V/cell)
- Converter doesn't operate
- Temperature shutdown
- Alarms connected with optional equipement



MANUFACTURER OF POWER SUPPLY SYSTEMS AND EQUIPMENT

### Technical data

Input voltage	230V ±10%; 3 x 400V ±10%, 50/60Hz				
Rated output voltages	24V	48V	60V	110V	220V
Rated output currents	60 ÷ 180A	30 ÷ 120A	25 ÷ 100A	15 ÷ 100A	10 ÷ 50A
Switching on current limitation	<5A				
Stability accuracy	1%				
Ripples voltage (peak to peak)	< 0,5% U <sub>N</sub>				
Battery charging characteristic	IU according to DIN 41773				
Efficiency	> 90%				
Ambient temperature	-0 ÷ +40°C				
Kind of batteries	Pb (classic VRLA – all technologies) or NiCd				

### Casing

Steel, electrostatic covered with powder paint in RAL 7032 colour. Cables are accessible under front panel.

Protection degree of casing	IP 20	
Dimensions of casing: (height. x width. x depth.)	2U	Rack 19" 2U 88x422x307mm
	4U	Rack 19" 4U 176x438x439mm
	6U	Rack 19" 6U 265x441x442mm
Weight, depends on equipment and output power	20 ÷ 45 kg	

### Parameters and marks

Type	Input voltage (50/60Hz)	Output voltage	Output current	Type of casing	Type	Input voltage (50/60Hz)	Output voltage	Output current	Type of casing
	[V]	[V]	[A]			[V]	[V]	[A]	
ZP 24/10	230	24	10	2U	ZP 60/10	230	60	10	2U
ZP 24/15	230		15	2U	ZP 60/20	230		20	4U
ZP 24/20	230		20	2U	ZP 60/25	230		25	4U
ZP 24/25	230		25	2U	ZP 60/30	230		30	4U
ZP 24/30	230		30	2U	ZP 60/40	230		40	4U
ZP 24/40	230		40	2U	ZP 60/50	230		50	4U
ZP 24/50	230		50	2U	ZP 60/60	3 x 400		60	6U
ZP 24/60	230		60	4U	ZP 60/80	3 x 400		80	6U
ZP 24/80	230		80	4U	ZP 60/90	3 x 400		90	6U
ZP 24/100	230		100	4U	ZP 60/100	3 x 400		100	6U
ZP 24/120	3 x 400		120	6U	ZP 110/5	230	110	5	2U
ZP 24/140	3 x 400		140	6U	ZP 110/10	230		10	2U
ZP 24/160	3 x 400		160	6U	ZP 110/15	230		15	4U
ZP 24/180	3 x 400		180	6U	ZP 110/20	230		20	4U
ZP 24/200	3 x 400		200	6U	ZP 110/25	230		25	4U
ZP 48/10	230		48	10	2U	ZP 110/30		230	30
ZP 48/15	230	15		2U	ZP 110/30	3 x 400		30	6U
ZP 48/20	230	20		2U	ZP 110/40	3 x 400		40	6U
ZP 48/25	230	25		2U	ZP 110/50	3 x 400		50	6U
ZP 48/30	230	30		4U	ZP 110/60	3 x 400		60	6U
ZP 48/40	230	40		4U	ZP 110/80	3 x 400	80	6U	
ZP 48/50	230	50		4U	ZP 110/100	3 x 400	100	6U	
ZP 48/60	3 x 400	60		6U	ZP 110/120	3 x 400	120	6U	
ZP 48/80	3 x 400	80		6U	ZP 220/5	230	220	5	2U
ZP 48/90	3 x 400	90		6U	ZP 220/10	230		10	4U
ZP 48/100	3 x 400	100		6U	ZP 220/15	3 x 400		15	6U
ZP 48/120	3 x 400	120		6U	ZP 220/20	3 x 400		20	6U
ZP 48/140	3 x 400	140		6U	ZP 220/25	3 x 400		25	6U
ZP 48/160	3 x 400	160		6U	ZP 220/30	3 x 400		30	6U
ZP 48/180	3 x 400	180		6U	ZP 220/50	3 x 400		50	6U
ZP 48/200	3 x 400	200		6U	ZP 220/60	3 x 400		60	6U

- On special order C&T Elmech offers power supplies in other electrical and mechanical configurations.
- The units may undergo modification due to constant improvements and newest designs.