



CPSS ZEN 1/1
4000-10000 VA

CPSS ZEN 3/3
10-40 kVA



CPSS ZEN

Fully compliant with the EN 50171 standard, designed to guarantee the highest degree of protection in critical environments and in the installation of safety and emergency systems.

For everyone's peace of mind: end customers, users and installers

CPSS ZEN single-phase
4000-10000 VA

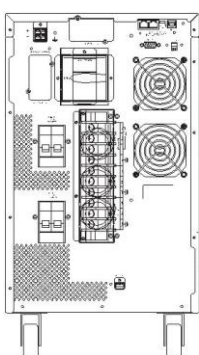
CPSS ZEN three-phase
10-40 kVA



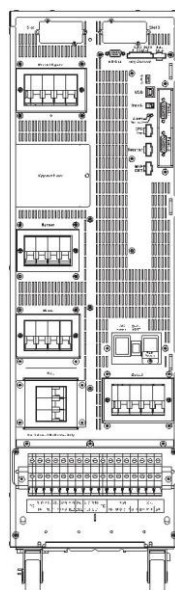
Applications

- Emergency lighting
- Fire alarm systems
- Automatic fire extinguishing systems
- Gas and Smoke detection systems
- Smoke extraction systems
- Security equipment
- Voice alarm systems

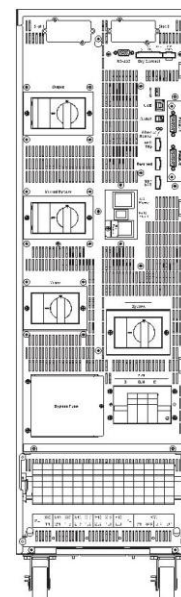
Single-phase
CPSS ZEN 4-6 VA
CPSS ZEN 8-10 VA



Three-phase
CPSS ZEN 10-20 kVA



Three-phase
CPSS ZEN 30-40 kVA



CPSS ZEN

Highlights

- **Certified as fully compliant with EN 50171**, it's a true Centralized Power Supply System that meets all legal requirements for the protection of emergency and safety systems
- Wide range of audible and visual alarms, including battery polarity reversal, short circuit or fault in the inverter and battery charger, power failure, low battery, bypass transfer
- Starting without mains power (*cold start*)
- Its 4 operating modes guarantee maximum flexibility and efficiency (up to 98%)
- The single-phase version includes online, eco, emergency and mixed modes with separate outputs, the three-phase version requires optional accessories for the mix mode
- Protection against short-circuits at the output and reverse polarity of the battery, preventing the risk of fuses blowing during installation
- Double inlet and internal manual bypass for simple and totally safe maintenance
- High overload capacity, supplies up to 120% of rated power indefinitely
- Charger with high charging current and temperature compensation for shorter charging time and longer battery life
- Hot-swappable batteries
- Batteries with an average life expectancy of 10 years
- IP20 heat and fire resistant enclosure in accordance with EN 60598-1
- Upgradeable firmware for new features
- Built-in RS232, USB and EPO ports and input for optional communication cards
- ON/OFF remote control option available on single-phase version



Full compatibility with EN 50171

Main options

- SNMP, RS485 ModBus and dry contact relay boards
- Battery cabinet in accordance with EN 50272-2
- Isolation transformer

For the three-phase version

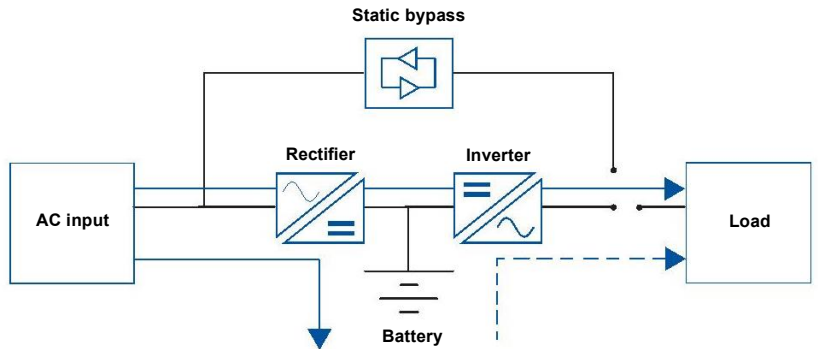
- Environmental monitoring sensor on SNMP board with temperature and humidity monitoring
- Parallel kit
- Mixed model kit (for separate outputs when in VFI or emergency mode)

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Operating modes

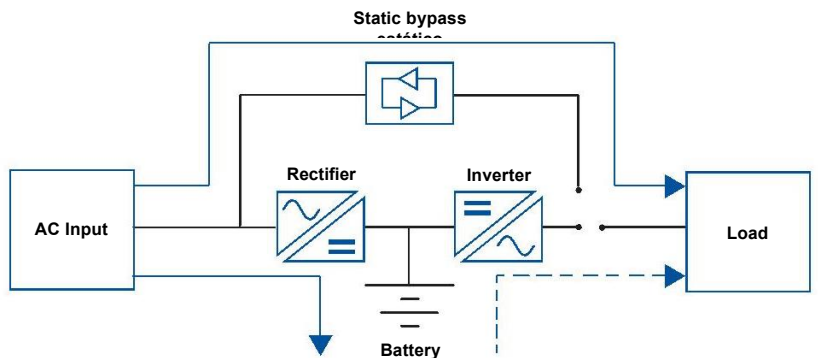
Online mode

The load is always supplied by the inverter (VFI)



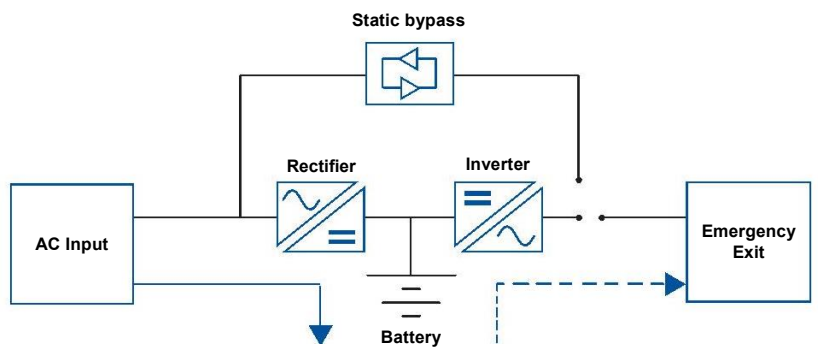
ECO mode

The load is supplied by the bypass during normal operation and by the inverter when mains fails or is out of tolerance



Emergency mode

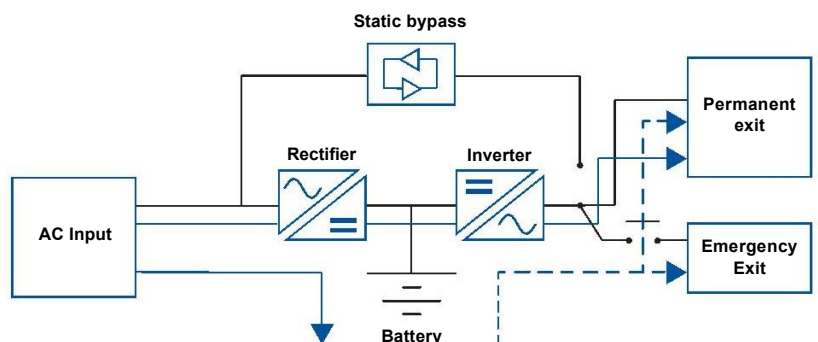
The load is only supplied by the inverter when there is a grid failure or the grid is out of tolerance (OS)



Mixed mode

One of the loads is always powered by the inverter, the other is only powered when mains fail or is out of tolerance (separate Permanent Output and Emergency Output)

The three-phase version requires the optional mixed-mode kit



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CPSS ZEN SINGLE-PHASE TECHNICAL DATA SHEET

MODEL		CPSS ZEN 4000	CPSS ZEN 6000	CPSS ZEN 8000	CPSS ZEN 10000	
POWER	VA	4000	6000	8000	10000	
	W	3500	5250	7000	8500	
INPUT	Rated voltage *	110 – 280 Vac				
	Frequency	45 – 70 Hz				
	Power factor	>0.99				
	Current distortion (THDi)	<5%				
EXIT	Rated voltage	200 / 208 / 220 / 230 / 240 Vac				
	Voltage distortion	<2% with linear load / <7% with distorting load				
	Voltage stability	±1%				
	Frequency	50 / 60 Hz (selectable)				
	Frequency regulation	±1Hz or ±3Hz (selectable)				
	Frequency stability	≤0.2%				
	Power factor	0.875			0.85	
	Crest factor	3:1				
	Waveform	Pure sine wave				
	Output connection	Terminal blocks				
	Capacity at 100% load	4000 VA / 3500 W	6000 VA / 5250 W	8000 VA / 7000 W	10000 VA / 8500 W	
	Permanent overload at 120% load	4200 VA / 4200 W	6300 VA / 6300 W	8400 VA / 8400 W	10200 VA / 10200 W	
	EFFICIENCY	VFI mode	Up to 93%			
		ECO mode	Up to 97%			
In stand-alone mode (batteries only)		Up to 94%				
GENERAL	Dimensions (WxDxH) mm	288x700x513				
	Weight (kg)	41		42		
	Alarms	Battery polarity reversal, short circuit, power failure, weak batteries, transfer to bypass, UPS failure, etc.				
	Protection	Battery polarity, short-circuiting, overcharging, overheating, deep discharge and overcharging of batteries				
	Operating modes	VFI, ECO, Emergency (SE), Mixed mode (SP and SE with separate outputs)				
	Cold start from battery without mains power	Included				
	Protection class	IP20				
	BATTERY CHARGER	Battery type	12V VRLA, AGM (solid gel, maintenance-free)			
Number of batteries		20 units (120 cells)				
Recharging time (80%)		Up to 12 hours				
Internal battery charger		4A Standard (additional 4A with optional kit)				
Ext. battery cabinet connections		Plug-in & Play				
ENVIRONMENTAL PARAMETERS	Operating temperature **	0 – 40°C				
	Relative humidity	0% – 90% (no condensation)				
	Altitude	<1000 m no power reduction, >1000 m with a power reduction of 1% per 100 m				
	Audible Sound at 1 m	≤60 dB				
CONNECTIVITY	Communication ports included	USB, RS232, EPO, Remote contact ON/OFF and additional slots for option cards				
	User interface	LCD display and function keys (parameters: voltage, frequency, charge percentage, battery voltage, output voltage, estimated uptime, UPS temperature)				
	Optional accessories	SNMP cards, RS485 ModBus, Dry relay contacts				
	Compatible software platforms	Microsoft Windows, Linux, Mac OS, VMware				
REGULATIONS	Standards	EN 50171, IEC EN 62040-1, IEC EN 62040-2, IEC EN 62040-3				
	Marking	CE, UKA				

* Subject to conditions ** To be checked according to battery parameters

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CPSS ZEN THREE-PHASE TECHNICAL DATA SHEET

MODEL		CPSS ZEN 3/3 10 KVA	CPSS ZEN 3/3 20 KVA	CPSS ZEN 3/3 30 KVA	CPSS ZEN 3/3 40 KVA
POWER	kVA	10	20	30	40
	kW	9	17	27	33
INPUT	Nominal voltage	400 Vac three-phase + neutral			
	Voltage tolerance	±20%			
	Nominal frequency	40 – 70 Hz			
	Power factor	≥0.99			
	Current distortion (THDi)	≤4% at full load	≤3% at full load		
OUTPUT	Nominal voltage	380 / 400 / 415 Vac Three-phase + neutral			
	Voltage stability	±1%			
	Frequency	50 / 60 Hz			
	Frequency stability	±0.01%			
	Power factor	0.9	0.85	0.9	0.825
	Crest factor	3:1			
	Voltage distortion	≤2% with linear load / ≤5% with distorting load			
	Permissible overload	120% permanent / 125% for 10 minutes / 150% for 1 minutes			
EFFICIENCY	VFI mode	Up to 95%			
	ECO mode	Up to 98%			
	On drums	Up to 94%			
GENERAL	Parallel connection	Up to 6 units			
	Dimensions (WxDxH) mm	260x850x890 (including wheels)			
	Weight (kg)	74	76	85	88
	Alarms	Reversal of battery polarity, short circuit, power failure, low battery, transfer to bypass, UPS failure			
	Protection	Reverse polarity and deep battery discharge, overcharge, overheat, short circuit			
	Operating mode	VFI, ECO, Emergency (SE), Mixed mode (SP and SE with separate outlets)			
	Cold start from battery without mains power	Included			
	Protection class	IP 20			
BATTERY	Qty of batteries per bank (12V)	40			
	Common battery bank in parallel configurations	Supported			
	Maximum number of internal batteries (optional)	40 batteries 12 V 7-9 Ah		N.A.	
	Maximum load current *	12.9 A	14.5 A	24.7 A	28 A
	Batteries average life expectancy	10 years			
BYPASS	Nominal voltage	380 / 400 / 415 Vac three-phase + neutral			
	Voltage tolerance	Standard ±10% (programmable from ±5% to ±15%)			
		Critical ±25% (programmable from ±16% to ±30%)			
	Frequency	50 / 60 Hz			
	Frequency tolerance	±1 Hz / ±3 Hz (selectable)			
Type of protection	Fuses				
ENVIRONMENTAL PARAMETERS	Operating temperature **	0 – 40°C			
	Altitude	<1000 m no power reduction, >1000 m with 1% power reduction every 100 m			
	Relative humidity	0% – 95% (no condensation)			
	Audible noise at 1 m	<52 dB		<55 dB	
CONNECTIVITY	User interface	4,3' color LCD touchscreen with removable SD card			
	Communication ports included	USB, RS232, EPO, Dry relay contacts (3 outputs) and two additional slots for option cards			
	Optional accessories	SNMP cards, RS485 ModBus, Dry relay contacts (6 inputs / 6 outputs), Mobile touch panel, Mxed mode kit			
REGULATIONS	Standards	EN50171, IEC EN 62040-1, IEC EN 62040-2, IEC EN62040-3			
	Marking	CE, UKCA			

* Subject to conditions ** To be checked according to battery parameters



**Centralized power
supply system**

**Certified in full
compliance with the
safety standard EN 50171**



Rev.2025/03 - Our commitment to continuous innovation means that catalogue data may be subject to change without notice

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