



VEGA Pro (CPSS) Central Power Supply System

VEGA Pro is Powertronix's **Central Power Supply System (CPSS)**, specifically engineered for safety systems and emergency lighting applications in full compliance with EN 50171. It is designed to integrate with **ENERCLEVER** smart architectures, enabling advanced and intelligent power management within modern electrical infrastructures.



QUALITÀ 100% POWERTRONIX!

VEGA Pro represents the **evolution** of the traditional **centralized emergency system** into an **intelligent energy platform**. Designed for mission-critical applications, it combines **emergency power continuity with advanced ENERCLEVER energy management**, enabling seamless integration with photovoltaic and energy storage systems — without compromising regulatory compliance or operational reliability.

TECHNICAL INFO:

- EN 50171 compliant
- VFI-SS-111 architecture
- Continuous overload capability up to 120%
- Fast battery recharge
- Advanced monitoring system
- Photovoltaic integration capability

VFI-SS-111

EN 50171

10kVA-100kVA

VEGA Pro

CPSS	VEGA PRO				
NOMINAL POWER	10kVA	15kVA	20kVA	30kVA	40kVA
ACTIVE POWER	9,000W	13,500W	20,000W	27,000W	36,000W
ACTIVE POWER (According to EN 50171)	7 kW	10 kW	16 kW	21 kW	28kW
PART NUMBER	VG43310-000	VG43315-000	VG43320-000	VG43330-000	VG43340-000

INPUT:

NOMINAL VOLTAGE	3F+N 380/400/415VAC or 1F+N 220/230/240VAC
INPUT VOLTAGE RANGE	±20% a ± 40%Vnom based on load level
NOMINAL FREQUENCY	50/60Hz
INPUT FREQUENCY RANGE	40 ÷ 70 Hz
INPUT POWER FACTOR	≥0.99
INPUT CURRENT DISTORTION (THDI)	THDI ≤3% @100%

BYPASS:

BYPASS V&F	3P+N 380/400/415VAC or 1P+N 220/230/240VAC - 50/60Hz
BYPASS RANGE	Factory Setting ±10% (selectable)
AUTOMATIC BYPASS	Available (Eco mode included)
MANUAL BYPASS	Available

OUTPUT:

NOMINAL VOLTAGE	3P+N 380/400/415VAC o 1P+N 220/230/240VAC - 50/60Hz
VOLTAGE VARIATION	± 1%
FREQUENCY	50/60Hz selectable , ±0.1%
OUTPUT POWER FACTOR	PF 0.9 up to 40°C
VOLTAGE DISTORTION	≤ 2% linear load & ≤ 3,5 % non linear load
OVERLOAD	110% for 10 minutes - 125% for 1 minute - 130% for 5 seconds
OVERLOAD (EN50171)	120% continuous

BATTERY:

TYPE :	VRLA/ Litio
CHARGING	≥ 80% in 12 h / 100% in 24 h
CHARGING CURRENT	Up to 20A

GENERAL:

WEIGHT AND DIMENSION: w/o Blocks

390x930x910(h)mm – metallic canopy - IP20 – with wheels

75kg 75kg 90kg 90kg 94kg

WEIGHT AND DIMENSION: w/Blocks for 60 Min autonomy

390x930x910+ 390x930x910+ 390x930x910+ 390x930x910+ 390x930x910+
1x BC 390x930x910 1 x BC 390x930x910 1 x BC 810x880x1400 1 x 810x980x1900 1x BC810x980x1900

495kg 678kg 950kg 1300kg 1620kg

POWER TERMINAL:

Terminals

OPERATING CONDITIONS 0÷40°C – UR% up to 95% non condensing, up to 2.000m slm w/o derating (ups only)

NOISE (dBa@1Mt)

< 58

< 62

HMI/ INTERFACES

Display LCD- USB port- remote EPO – Serial port RS232/ RS485 – dry contact , Smart slot for optionals card

ADD-ON OPTIONAL

SNMP, Lcd Touch, remote panel

STANDARDS

CE Marking , compliance for use according to : EN50171
Safety : EN62040-1; EMC EN62040-2
Performance: EN 62040-3 UE Directive: LV2014/35/UE



VEGA Pro

CPSS	VEGA TRI		
NOMINAL POWER	60kVA	80kVA	100kVA
ACTIVE POWER	54kW	72kW	90kW
ACTIVE POWER (According to EN 50171)	42 kW	56 kW	72 kW
PART NUMBER	VG433060-000	VG33080-000	VG33100-000

INGRESSO:

NOMINAL VOLTAGE	3F+N 380/400/415VAC
INPUT VOLTAGE RANGE	304÷498VAC 100% Load – Factory setting $\pm 20\%$ V max
NOMINAL FREQUENCY	50/60Hz
INPUT FREQUENCY RANGE	40 ÷ 70 Hz
INPUT POWER FACTOR	≥ 0.99
INPUT CURRENT DISTORTION (THDI)	THDI $\leq 3\%$

BYPASS:

BYPASS V&F	3F+N 380/400/415VAC or 1F+N 220/230/240VAC* - 50/60Hz
BYPASS RANGE	Factory setting $\pm 20\%$ (ampliabile)
AUTOMATIC BYPASS	Disponibile (funzionalità eco selezionabile)
MANUAL BYPASS	Disponibile, con interlock, ingresso indipendente

USCITA:

NOMINAL VOLTAGE	3F+N 380/400/415VAC or 1F+N 220/230/240VAC*
VOLTAGE VARIATION	$\pm 1\%$
FREQUENCY	50/60Hz Selectable, $\pm 0.1\%$
OUTPUT POWER FACTOR	PF 0,9 up to a 40°C
VOLTAGE DISTORTION	$\leq 2\%$ with linear Load & $\leq 3,5\%$ non linear load
OVERLOAD	125% for 10 minutes 150% for 10 seconds
OVERLOAD (EN50171)	120% continuous

BATTERIA:

TYPE	VRLA/ Litio
CHARGING	$\geq 80\%$ in 12 h / 100% in 24 h
CHARGING CURRENT	Factory setting 0.1C / 13,5VDC/blocco up to : 20A 30A 40A
WEIGHT AND DIMENSION:	w/o Blocks

GENERALE:



	410x830x1510(h)mm – metallic canopy - IP20 – with wheels		
	245	265	285
WEIGHT AND DIMENSION:	w/Blocks for 60 Min autonomy		
	410x830x1500 + BC: 1210x980x1900	410x830x1500 + BC: 1210x980x1900	410x830x1500 + 2 xBC: 810x980x1900
	2170Kg	2985Kg	4135Kg
POWER TERMINAL	Terminals		
OPERATING CONDITIONS	0÷40°C – UR% fino al 95% senza condensa- fino 2.000m slm senza derating (escluse batterie)		
NOISE (dBa@1Mt)	<60 dB		< 62dB
HMI / INTERFACES	Display LCD- USB port- remote EPO – Serial port RS232/ RS485 – dry contact , Smart slot for optionals card		
OPZIONI	MODBUS TC-IP / SNMP with optional Board; LCD Touch Display ; Remote Panel		
STANDARDS	CE Marking , compliance for use according to : EN50171 Safety : EN62040-1; EMC EN62040-2 Performance: EN 62040-3 UE Directive: LV2014/35/UE		

Smart CPSS with integrated ENERCLEVER architecture

VEGA Pro is the intelligent CPSS that combines EN 50171-compliant emergency power safety with advanced ENERCLEVER energy management. It evolves the traditional centralized system into an active energy platform, enabling direct integration with photovoltaic and energy storage solutions. This allows the deployment of energy self-sufficient emergency lighting systems or installations with significantly reduced net energy consumption, while maintaining full regulatory compliance and operational reliability



Solar Energy Serving Safety

Key Benefits

- Significant reduction of grid energy consumption;
- Possibility of near net-zero energy systems;
- Direct integration with renewable energy sources;
- EN 50171 compliant ;
- power continuity;
- Ideal solution for sustainable buildings and smart infrastructures;

Within the **VEGA Pro intelligent CPSS system**, integration with photovoltaic installations is managed through a dedicated **Solar Battery Charger (SBC)**, an integral part of the **ENERCLEVER architecture**. The Solar Battery Charger converts and regulates the energy generated by photovoltaic panels, ensuring controlled charging of the energy storage system **without interfering with the CPSS safety functions**. Lithium batteries, installed in dedicated external cabinets, provide high energy density, superior charge/discharge efficiency, and extended operational lifespan compared to traditional technologies. **The stored energy is used both to meet the emergency autonomy requirements defined by EN 50171 and to support the nighttime operation of emergency lighting systems powered by solar energy**. The coordinated management between the Solar Battery Charger, lithium batteries, and the CPSS ensures that all energy flows remain under the control of VEGA Pro, **preserving continuity of supply to emergency circuits while maintaining full regulatory compliance**.

OPTIONS :

«Design Flexibility as an Engineering»

0SDE1173	VEGAPro 10-40 internal Backfeed	0SDE0116	VEGA 60-100 2nd independent output AS+OE (only emergency)
0SDE1233	VEGAPro 60-100 internal Backfeed	VLI389-xx	Li-Ion Battery Pack (to be defined according to project specs)
0SDE1342	LCD Touch-screen Display for VEGA PRO	EC-SBC	Solar battery Charger-Wall mount
0SDE0113	VEGA 10-40 2nd independent output AS+OE (only emergency)	EC-SBC/R	Solar battery Charger-19" rack mount

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Innovation That Saves