

VELA



UPS SERIES

POWER YOU CAN RELAY-ON

CLASSIFICATION: VFI-SS-111 (EN 62040-3)

POWER RANGE: 60 KVA

No. OF PHASES: 3:3

012001—ISO9001 VL60

VELA 60

- UPS MODEL: AURIGA MV
- CLASSIFICATION: VFI-SS-111 (EN 62040-3)
- POWER RANGE: 80 - 300 kVA
- No. OF PHASES: 3:3
- POWER FACTOR 0.9



VELA UPS stands out for its durability, dependability, and efficiency as a power backup solution.

Designed to safeguard critical loads, it leverages advanced SCR-IGBT technology to deliver Superior power Conversion efficiency and exceptional input protection against grid-related issues such as spikes, fluctuations, and disturbances, making it an ideal choice for demanding and sensitive environments.

100% made in Italy

TYPICAL APPLICATIONS:

Offices	IT	Medical	Hospitals
Servers	Datacenter	Telecommunications	

SPECIAL APPLICATIONS:

EN-50171 Central Power Supply Systems (CPSS)

SPECIFICATION

The **Vela UPS** series by Powertronix is a robust and reliable power backup solution tailored for critical environments. It integrates advanced SCR-IGBT technology to deliver high power conversion efficiency while providing resilience against input anomalies like spikes, voltage fluctuations, and grid disturbances.

VELA UPS is equipped with a 6-pulse rectifier (upgradable to 12) with a harmonic filter for stable input. Its transformerless IGBT inverter ensures high efficiency, and it supports three-phase setups with generator compatibility.

While every precaution has been taken to ensure accuracy and completeness herein, Powertronix assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specification subject to be changed without notice.

General Features

- ◆ Topology: VFI On-Line, double conversion with pure sine-wave output.
- ◆ Technology: SCR-based PFC, IGBT inverter, transformerless design.
- ◆ Cooling: Air-cooled with redundant centrifugal fans.
- ◆ Nominal Rating: 60 kVA (active power 54 kW).
- ◆ Compliance: CE marked, IEC EN 62040 standards, RoHS compliant.

Input

- ◆ Voltage: 340–460 VAC, ±10% tolerance.
- ◆ Frequency: 50/60 Hz, tolerance 40–70 Hz.
- ◆ Power Factor: 0.99.
- ◆ THDi: <20% (standard), <10% with +D option, <5% with +DF option.

Output

- ◆ Voltage: 3P+N, 380/400/415 VAC.
- ◆ Power Factor: 0.9.
- ◆ Frequency Stability: ±0.1%.
- ◆ THDv: <3% (linear load), <6% (non-linear load).
- ◆ Overload Capacity: 125% for 10 min, 150% for 10 sec.

Battery

- ◆ Configuration: External only, 384 VDC.
- ◆ Charging: 0.1C / 13.5 VDC per block, selectable up to 25A.
- ◆ Compatibility: VRLA-AGM, VRLA-GEL, NiCd, Lithium, others.
- ◆ Management: Auto test, equalization, smart-battery management, optional temperature compensation.

Environment

- ◆ Dimensions: 1230 × 350 × 950 mm.
- ◆ Weight: 190 kg (STD), 310 kg (+D), 345 kg (+DF).
- ◆ Operating Range: 0–40°C, up to 95% RH non-condensing.
- ◆ Altitude: Derating 1% per +100 m above 1000 m, up to 2000 m.

Communication & Options

- ◆ Interfaces: RS-232/RS485, dry contacts, LED display.
- ◆ Optional: MODBUS, SNMP, remote panel.
- ◆ SNMP/TCP-IP: Remote monitoring with alarms and email notifications.
- ◆ Relay Card (CS0118): Integration with BMS, supports 5 simultaneous connections.

FRONT VIEW



- A FRONT ACCESS DOOR***
- B FRONT DISPLAY***
- C EPO BUTTON***
- 1 CABLE ENTRY**
- 2 BATTERY CONNECTION**
- 3 INPUT SWITCH**
- 4 INPUT RESERVE SWITCH**
- 5 MANUAL BYPASS**
- 6 OUTPUT SWITCH**
- 7 MAINTENANCE AND CONTROL ACCESS PANEL**
- 8 RS-232***
- 9 SMART SLOT***

* Accessible from the front
 ** Accessible from the Back

The VELA 60 UPS is a high-efficiency, transformerless, three-phase UPS designed for critical environments. It offers robust input protection, flexible battery options, advanced communication interfaces, and compliance with international standards. Its modular battery cabinets and optional filters make it adaptable for diverse applications, from hospitals to datacenters.

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VELA 60

TECHNICAL SPECIFICATIONS:

UPS MODEL

VELA 60

PART NUMBER	VL60-000
CABINET NOMINAL RATING	60kVA
CABINET ACTIVE POWER	54kW
UPS TOPOLOGY	VFI On-Line, double conversion, with pure sine-wave output
CONVERTER/INVERTER	SCR based PFC ,IGBT-based INV, high frequency, TRAFOLESS
STATIC SWITCH	Electronic + Contactors
COOLING SYSTEM	Air Cooled with sturdy redundant centrifugal fans
INPUT	
INPUT NOMINAL VOLTAGE	3P+N 380/400/415VAC
INPUT VOLTAGE TOLERANCE	340÷460VAC 100% load - Factory setting ±10% nominal voltage
INPUT NOMINAL FREQUENCY	50 / 60 Hz
INPUT FREQUENCY TOLERANCE	40 ÷ 70 Hz
INPUT POWER FACTOR	0.99
MAX ABSORBED CURRENT	3PH+N @ 400V 108A
INPUT THDI	For VL xxx-000 < 20% // w/+D option <10% //w/+DF option <5%
OUTPUT	
OUTPUT NOMINAL VOLTAGE	3P+N 380/400/415VAC
OUTPUT POWER FACTOR	0.9
OUTPUT THDV	< 3% with linear load & < 6% with non linear load
OVERLOAD	125% for 10 minutes - 150% for 10 seconds
OUTPUT NOMINAL FREQUENCY	50/60Hz ±0.1% stability
SOFT START	Available , 30 Seconds (factory selectable)
BYPASS	
BYPASS V&F	3P+N 380/400/415VAC 50/60Hz
BYPASS VOLTAGE TOLERANCE	±20% - Factory setting ±10%
BYPASS OVERLOAD	150% 30 min - 1000% 100ms
MANUAL BYPASS	Available, with mechanical security
BATTERY	
BATTERY CONFIGURATION	384VDC -EXTERNAL ONLY
BATTERY CHARGING I&V*	Factory setting 0.1C / 13,5VDC/block charging current selectable up to 25A
BATTERY COMPATIBILITY	VRLA-AGM / VRLA-GEL / NiCd / Lithium / Others
BATTERY MANAGEMENT	Auto Test/ Equalization / Smart-battery management/ Optional: temperature compensation w/ external sensor
STANDARDS	
SAFETY	IEC / EN 62040-1
ELECTROMAGNETIC COMPATIBILITY (EMC)	IEC / EN 62040-2
PERFORMANCE	IEC / EN 62040-3
PRODUCT CERTIFICATION	CE
PROTECTION RATING	IP 20
MANUFACTURING	ISO 9001:2015, ISO 14001:2015, OHSAS18001

VELA 60

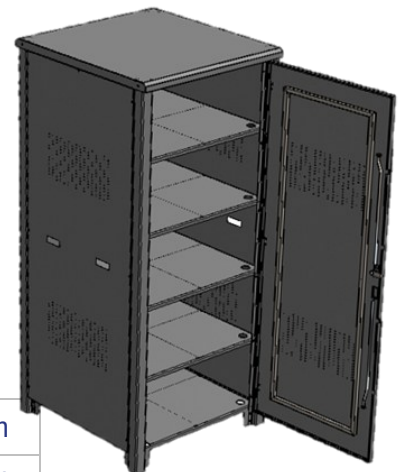
TECHNICAL SPECIFICATIONS:

UPS MODEL VELA 60

PART NUMBER	VL60-000
CABINET NOMINAL RATING	60kVA
CABINET ACTIVE POWER	54kW
ENVIRONMENT	
DIMENSION	1230x350x950(h)mm - metal case - IP20 - complete with castors
WEIGHT(W/O BATTERY)	STD version 190Kg
	+D version 310Kg
	+DF version 345Kg
TEMPERATURE & RH%	0÷40°C – RH% up to 95% non-condensing - 1.000m asl 1% derating every +100Mt up to 2000 asl
EXT INTERFACE	Standard: RS-232/RS485 + dry contacts +LED Status Display Optional: MODBUS / SNMP via external card; Remote panel
STANDARDS	
EUROPEAN DIRECTIVES	LV 2014/35/EU Low Voltage Directive EMC 2014/30/EU Electromagnetic Compatibility Directive / CE marks
STANDARDS	Safety IEC EN 62040-1;IEC EN 62040-2 EMC; RoHS Compliance; IEC EN 62040-3 (Voltage and Frequency Independent)VFI-SS-111
SAFETY	IEC / EN 62040-1
ELECTROMAGNETIC COMPATIBILITY (EMC)	IEC / EN 62040-2
PERFORMANCE	IEC / EN 62040-3
PRODUCT CERTIFICATION	CE
PROTECTION RATING	IP 20
MANUFACTURING	ISO 9001:2015, ISO 14001:2015, OHSAS18001

+ **BATTERY CABINET**

The EN32-XXX or EN40-XXX battery cabinets by Powertronix are expertly designed to accommodate up to 40 battery blocks in a highly efficient and functional structure, maximizing space optimization while ensuring ease of access and superior functionality. The aesthetics of the EN32/40 -XXX battery cabinets are delivering a **practical, solid** and **visually appealing solution**.



MODEL	DIMENSIONS	WEIGHT	CAPACITY
ENV6168140	610x680xh1400	160Kg	Up to 32x60Ah or 40x40Ah
ENV8198140	810x880xh1400	200Kg	Up to 32x120Ah or 40x80Ah
ENV8189190	810x980xh1900	280Kg	Up to 32x150Ah or 40x140Ah

Customization is a core value of Powertronix's customer-focused approach. Alternative layouts and battery cabinet configurations can be tailored to meet specific space requirements and autonomy demands, ensuring maximum flexibility in both design and size

VELA 60

+ SNMP/TCP-IP



The VELA series offers the possibility to integrate the UPS into your **Local Area Network**, enabling remote monitoring and control of the UPS status. The **OX-MGTBX506/4 SNMP** card provides full control over thresholds, allowing **alarms to be triggered and notifications to be sent via email** to the entire team or selected personnel. The freeware ViewPowerPro gives customers free access to a simple yet comprehensive monitoring tool

+ RELAY CARD



The VELA series **comes standard with CS0118** cards. Powertronix's exclusive CS0118 card design **ensures full integration** of the VELA series into your **Building Management System (BMS)** via RS232 com-protocols. **It supports five simultaneous active connections:**

- Potential-free contacts (NO/NC)
- RS232 port with DB9 connector
- rEPO (Remote Emergency Power Off)

+ VELA ADDITIONAL OPTIONS

- | | |
|--|--|
| <p>VL-XX-D 12 Pulse Input Option VELA 60 for (reduced input THDi value <10%)</p> | <p>OSDE1127 VELA parallel capability - Optical fiber connection for Ups's parallel connection (one per unit)</p> |
| <p>OSDE1168 Additional Input Filter for VELA (reduced input THDi value <5%) applicable only to 12 pulse input systems</p> | <p>OSDE1184 60KVA built in backfeed protection</p> |

POWERTRONIX Secure Power Innovation That Saves

For quick access to manuals, firmware, and software updates, please visit the official website or contact your local distributor.