

# VECTOR HP



## UPS SERIES

POWER YOU CAN RELAY-ON

**CLASSIFICATION:** VFI-SS-111 (EN 62040-3)  
**POWER RANGE:** 20—30—40 kVA  
**No. OF PHASES:** 1:1 / 3:1/ 3:3

012001—ISO9001 – VNVH 10-30

# VECTOR HP

UPS MODEL: VECTOR HP  
 CLASSIFICATION: VFI-SS-111 (EN 62040-3)  
 POWER RANGE: 10—30 kVA  
 No. OF PHASES: 1:1 / 3:1/ 3:3



**Vector HP** UPS offer a **compact and attractive** design with **top-level protection**. **Versatile and reliable**, it meets market demands with **reduced costs** (CapEx) and **low maintenance** (OpEx). **VECTOR HP**: the ideal solution for electrical continuity and protection!

**QUALITY CERTIFIED by POWERTRONIX!**

## TYPICAL APPLICATIONS:

Offices	PC's	Printers	Analysis equipment
Servers	Datacenter	Small IT Networks	Laboratories

## SPECIAL APPLICATIONS:

EN-50171 (Central Power Supply Systems (CPSS))

## SPECIFICATION

The **VECTOR HP** UPS series by Powertronix is designed for clients requiring **professional protection without compromise**. With a **power factor of 1**, multi-level technology, **internal battery**, and **on-site configurable inputs/ outputs**.

Adaptable to existing infrastructures, it ensures continuity for **medium-sized systems** in various sectors, including CPSS applications. It represents the **best value for money** for tri/mono/tri systems, offering **easy installation and high protection** thanks to On-Line Double Conversion **VFI technology**

# VECTOR HP

## TECHNICAL SPECIFICATIONS:

**UPS MODEL** VECTOR HP

REFERENCE	VNVH10-000	VNVH20-000	VNVH30-000
General data	20 kVA	20 kVA	30 kVA
Output power max.	18 KW	20 KW	30 KW
Output power factor	1		
Topology	Online double conversion		
UPS Type	Tower		
Inbuilt batteries	Yes		
<b>INPUT</b>			
Input nominal voltage	Single Phase : 220/230/240VAC Three Phase: 380/400/415VAC (3f+N)		Three Phase : 380/400/415VAC (3f+N)
Input voltage tolerance	-50% ÷ +30% @ 50%load // -30% ÷ +30% @ 100%load		
Input nominal frequency	50/60Hz		
Input frequency tolerance	40 ÷ 70 Hz		
Input power factor	≥0.99		
Input THDI	THDI < 3%		
<b>OUTPUT</b>			
Output nominal voltage	Single Phase : 220/230/240VAC Three Phase: 380/400/415VAC (3f+N)		Three Phase: 380/400/415VAC (3f+N)
Output power factor	1		
Output THDV	≤ 1,5 % W/linear loads & ≤ 3,5% w/non linear load		
Overload	Up to : 110% for 60 minutes - 125% for 10 minutes - 150% for 30 second –over 150% instantaneous		
Output nominal frequency	50/60Hz stability ±0.1%		
CREST FACTOR	3:1		
<b>BYPASS</b>			
BYPASS V&F	Single Phase : 220/230/240VAC or Three Phase : 380/400/415VAC (3f+N) 50/60Hz		
BYPASS voltage tolerance	Standard ±10%, selectable up to 20%		
BYPASS accepted overload	Available with mechanical protection		
Manual Bypass	Static Type, seamless switch wit Automatic return on Mains with no alarm		
<b>BATTERY</b>			
Std internal batteries	20	32	64
Internal battery extension	Up to 40 internal block (with optional VNVH40-Kit)		No
External battery cabinet	Yes, available		
Charging I&V *	Up to 20Amp (selectable ) – normally set to a0.1C / 13,5VDC/block		
Battery compatibility	VRLA-AGM / VRLA-GEL (others upon request)		
<b>STANDARDS</b>			
European directives	LV 2014/35/EU Low Voltage Directive EMC 2014/30/EU Electromagnetic Compatibility Directive / CE marks		
Standards	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		

# VECTOR HP

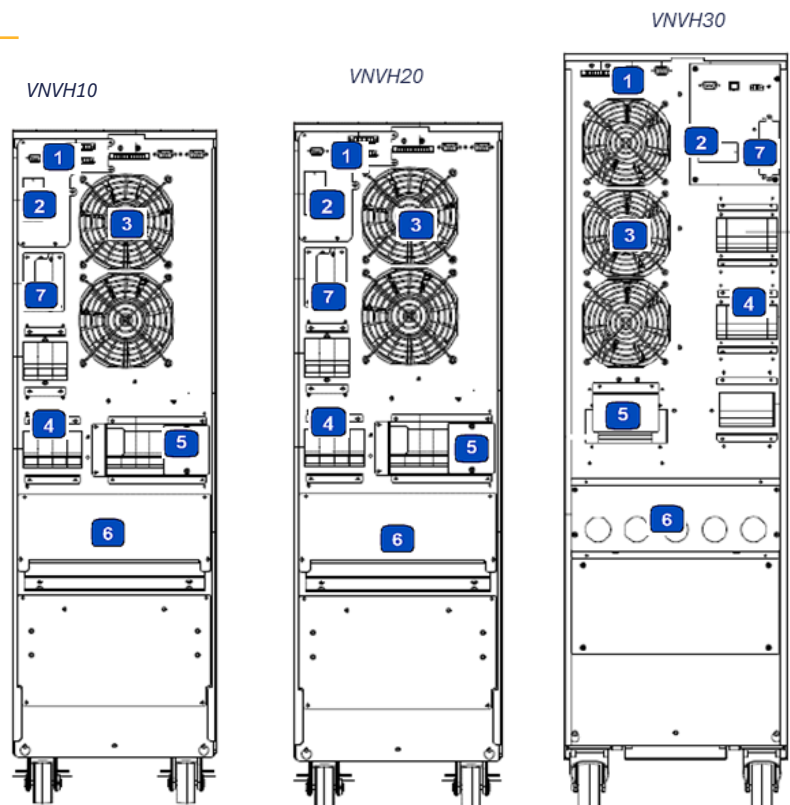
## TECHNICAL SPECIFICATIONS:

**UPS MODEL** VECTOR HP

	VNVH10-000	VNVH20-000	VNVH30-000
<b>ENVIRONMENT</b>			
Dimension (dxwxh)	390x930x910(h)mm - metal case - IP20 - complete with castors		
Weight (W/O Battery)	90 kg	90 kg	94 kg
Temperature & RH%	0÷40°C – RH% up to 95% non-condensing - 2.000m slm		
Ext-interfaces	RS-232/RS485 + dry contacts as standard on board MODBUS-SNMP via external optional card; LED Status Display LCD Touch Display ; Remote panel		
<b>OPTIONS:</b>			
0SDE1017	Mizar cold start capability		
0SDE1173	Mizar built in backfeed protection		
0SDE1166	Mizar parallel capability - Optical fiber connection for up to 8 Ups's parallel connection		
0SDE1341	LCD Touch-screen Display		
0SDE0112	Mizar 2nd independent output AS+EO (emergency only)		

## Rear view

- 1 RS 232 -RS 485**
- 2 Smart Slot**
- 3 Exhaust Air Outlet**
- 4 In / Out / Reserve**
- 5 Man Bypass Breaker**
- 6 I/O terminals**
- 7 Ext Battery Termi-**



# VECTOR HP

## + BATTERY CABINET

VNVH-BB cabinets are specifically designed to extend the autonomy of your Vector HP UPS, offering superior autonomy with reduced space. Designed to house up to 40 or 64 blocks, the cabinet's design fits perfectly with the Vector HP series aesthetics, providing a practical, solid, and visually appealing solution. Another option is the VNVHBB4E cabinet, capable of housing up to 120 blocks.

All cabinets come with breakers or fuses and wiring for UPS connection.



VNVHBB063040

VNVHBB063064

	VNVHBB063040	VNVHBB063064	VNBB0610-000
<b>BC/UPS COMPATIBILITY</b>	VNVH10-000 VNVH20-000	VNVH10-000/ VNVH20-00 VNVH30-000	VNVH10-000/ VNVH20-00 VNVH30-000
<b>MAX CAPACITY FOR BC 12V 7.2/9Ah</b>	up to 40 blocks	up to 64 blocks	up to 120 blocks
<b>WEIGHT KG (no block)</b> <b>WEIGHT KG (max nr Block)</b>	22 122	45 235	60 360
<b>DIMENNSION (LxPxH/mm)</b> <b>W/CASTORS</b>	250*592*576h	250*815*826h	390*900*910h

The Vector HP UPS series is a high-capacity, online double-conversion solution (10–30 kVA) designed for medium to large infrastructures. With a unity power factor, flexible input/output configurations, and robust overload handling, it's ideal for datacenters, labs, studios, and CPSS applications. Expandable battery cabinets and advanced communication options (SNMP, Modbus, AS400) make it highly adaptable for professional environments requiring maximum reliability.

# VECTOR HP

## Communication Options:

### + SNMP/TCP-IP



The **VECTOR HP** series, with the **VN-SNMP** card, allows remote monitoring and management of UPS systems via your **Local Area Network (LAN)**.

Using SNMP protocols, it provides the following key features:

**-Remote Monitoring and Control:** Enables setting custom thresholds to trigger alarms and remotely monitor the UPS status.

**-Event Notifications:** Sends email notifications to the team or selected personnel in case of critical power events.

**-Network-Wide Power Management:** Provides information on power events, facilitates automatic shutdowns, and monitors all UPS units connected to the network.

**-Information Accessibility:** Periodically collects and makes UPS data available to connected applications.

### + MODBUS RTU



The **VN-MODBUS** card is a communication accessory designed to enhance the **management and control** of VECTOR HP series. Equipped with two RS485 over RJ45 connector, this card enables remote monitoring and control of UPS units, **facilitating integration** with existing RS485/MODBUS network infrastructures.

The card implements the **Modbus RTU protocol**, a widely used communication standard, allowing interfacing via RS485 with a PC or any **Building Management System (BMS)**. This means that the Modbus card not only provides a reliable channel for real-time monitoring of UPS parameters but also allows the collected data to be **integrated into a centralized management system**, improving operational efficiency and responsiveness.

### + DRY CONTACT



The **AS400** card is a communication accessory that provides **potential-free contacts for remote UPS monitoring**, making it easy to interface with Programmable Logic Controllers (PLC) or signal control panels.

It delivers **critical information** such as UPS failure, alarms, main power failure, bypass activation, low battery warnings, and UPS status (on/off).

These potential-free contacts ensure **isolated signals**, preventing electrical interference between systems. The AS400 card enhances the reliability of the power management system by offering real-time alerts, allowing for quick responses to issues and ensuring the continuous operation of critical systems. This makes it a valuable tool for integrating **UPS monitoring into broader control networks**.

### + DRY+SNMP

The **S806AS400** Card enables the integration of AS400 functionality with SNMP capabilities in a single solution.

### + ENVIRONMENT MONITORING

The **VN-EMD** helps to control the ambient condition for proper battery and ups functionality

# 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.