

# ALCOR



## 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 / 1:3/ 3:1/ 3:3

012001—ISO9001 ALCOR-1

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**ALCOR** product family is a **top-tier UPS** designed to set the reference in the future UPS market.  
 5<sup>th</sup> generation UPS for **highest efficiency**, with **Solar Energy Integration** and “**EnerClever**” feature.

**100% made in Italy**

## TYPICAL APPLICATIONS:

Offices	IT	Telecommunications	Analysis equipment
Servers	Datacenter	Medical	Hospitals

## SPECIAL APPLICATIONS:

Hybrid UPS	Energy Manager
EN-50171 (Central Power Supply Systems (CPSS))	

## SPECIFICATION

The **Alcor** series by **Powertronix**, with 15+ years of market presence, showcases **exceptional performance** and **reliability**, embodying the company's vision for **emergency power supply solutions**. These products are specifically designed for demanding, mission-critical environments, proving their **efficiency and stability**. The ALCOR family has consistently met the needs of critical sectors, delivering durable and reliable performance. **Powertronix's** ongoing commitment to **innovation** and **quality** is evident in this product line, which has earned longstanding **trust from its customers**.

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## TECHNICAL SPECIFICATIONS:

**UPS MODEL**                      **ALCOR**

REFERENCE	ALCOR20	ALCOR30	ALCOR40
General data	20 kVA	30 kVA	40 kVA
Output power max.	18 KW	27 KW	36 KW
Output power factor	0.9		
UPS EFFICIENCY (VFI -111-SS)	96.2 %	96.6 %	96.8 %
Topology	Online double conversion		
UPS Type	Tower		
Inbuilt batteries	Yes		
<b>INPUT</b>			
Input nominal voltage	3P+N 380/400/415VAC or 1P+N 220/230/240VAC		
Input voltage tolerance	300÷500VAC 100% load - Factory setting ±20% nominal voltage		
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	Three phase 380/400/415VAC or Single phase 220/230/240VAC		
Output power factor	0.9		
Output THDV	< 2% with linear load & < 4% with non linear load		
Overload	125% for 10 minutes - 150% for 60 seconds		
Output nominal frequency	50/60Hz ±0.1% stability		
<b>BYPASS</b>			
BYPASS V&F	3P+N 380/400/415VAC or 1P+N 220/230/240VAC - 50/60Hz		
BYPASS voltage tolerance	±20% - Factory setting ±10%		
BYPASS accepted overload	10In per 100ms		
Manual Bypass	Available with mechanical security		
<b>BATTERY</b>			
Battery configuration	720VDC x string / up to 60 Blocks INTERNALLY INSTALLED		
Battery charging, I&V*	20A (adjustable) - Factory setting 0.1C / 13,5VDC/block		
Battery compatibility	VRLA-AGM / VRLA-GEL / NiCd / Lithium / Others		
Battery management	Auto Test/ Equalization / Smart-battery management		
<b>STANDARDS</b>			
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		

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.

# ALCOR

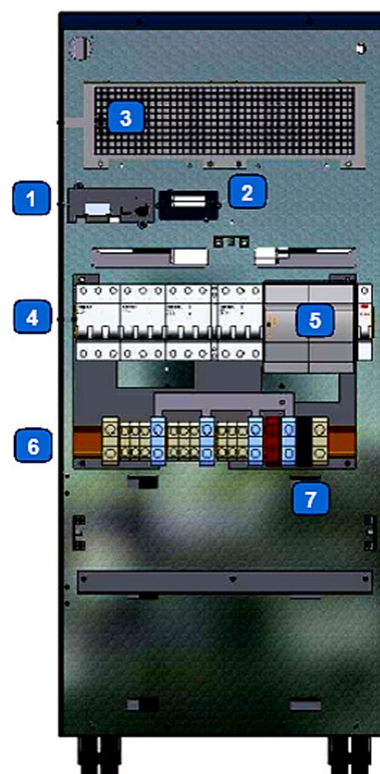
## TECHNICAL SPECIFICATIONS:

**UPS MODEL**                      **ALCOR**

	ALCOR20	ALCOR30	ALCOR40
<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>OTHER</b>			
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		
<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

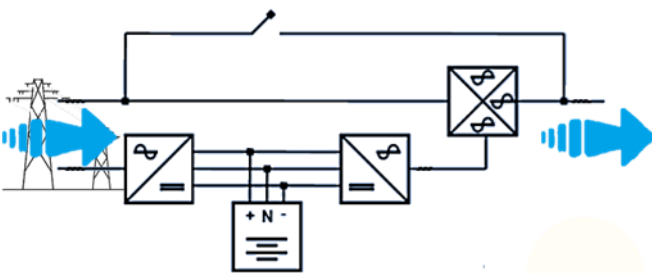
- 1**      **RS 232 -RS 485**
- 2**      **Smart Slot**
- 3**      **Exhaust Air Outlet**
- 4**      **In / Out / Reserve Switch**
- 5**      **Bypass Switch**
- 6**      **Dry contacts / Remote Epo**
- 7**      **Ext Battery Terminals**



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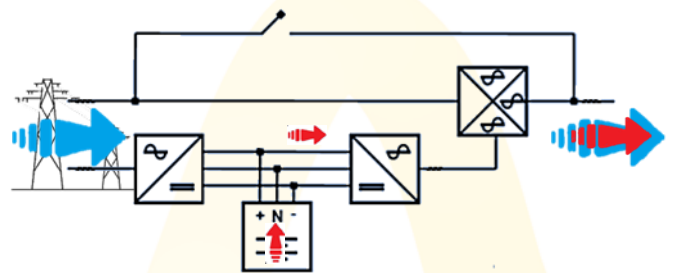
## + UPS

ALCOR operates as a standard UPS in Online Double Conversion or ECO mode. In **Online Double Conversion**, the UPS constantly converts AC to DC and back to AC, providing your load with **clean, stable power, free from spikes and fluctuations**—ideal for critical applications. In **ECO mode**, the UPS powers the load directly from the mains when input power is stable, switching to battery only if an issue is detected.



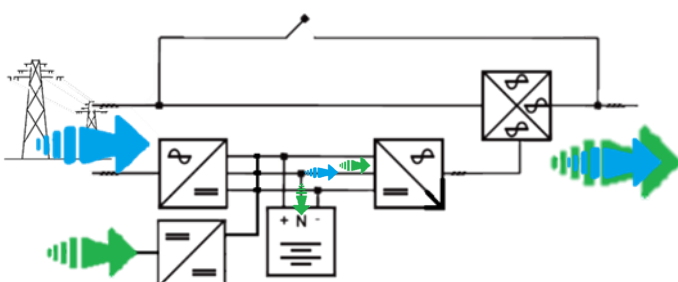
## + PEAK SHAVING

In addition to the standard mode, the ALCOR will use the batteries as an **“energy boost”**, meeting the **instantaneous energy demand** by drawing it from the battery instead of from the grid. This also allows the system to **output more energy than is being drawn from the grid**, thanks to the intrinsic intelligence in the control logic, special design considerations, and advanced firmware functionalities.



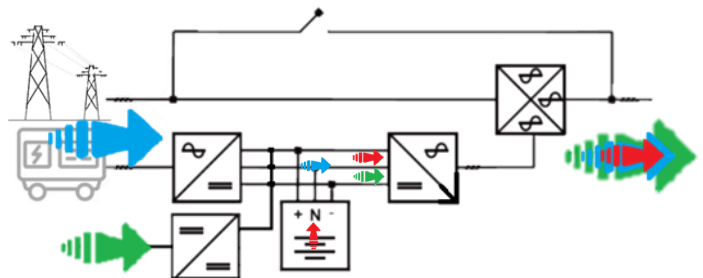
## + HYBRID UPS

In addition to the standard mode, the ALCOR can be **directly connected to PV panels** via Powertronix's SBC to **maximize energy efficiency**. Solar energy **will integrate with and reduce the grid power demand** based on the availability of PV energy. If properly sized, the system can potentially eliminate grid power consumption altogether, ensuring **maximum power supply efficiency and load protection**. Extra PV energy may also be used to charge the batteries.



## + ENERCLEVER UPS - ALCOR

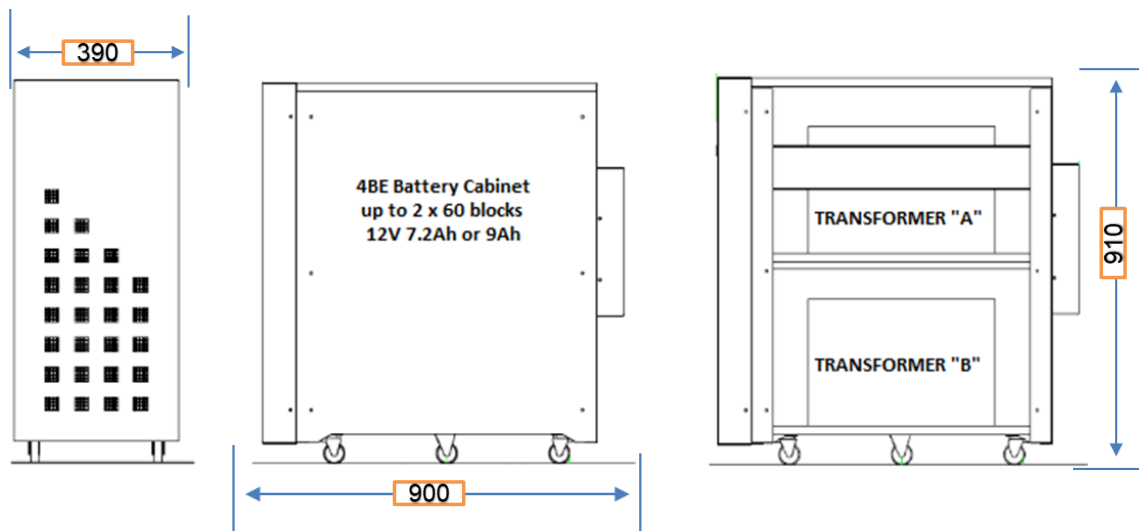
**Energclever** functionality for ALCOR -from 30Kw- . The system will act as a **“SYSTEM ENERGY MANAGER,”** always giving the opportunity to switch seamlessly and use, among the available sources, the **most convenient energy**, while maintaining solid **continuity , stability and quality power provision** demands. it is also possible to combine EC UPS with Powertronix's specifically designed **Li-Ion based battery energy storage (BESS)**



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## + BATTERY CABINET

The **4BE cabinet** is specifically designed to optimize space and functionality, ensuring superior efficiency. With the capacity to **house up to 120 blocks of 7Ah or 9Ah**, the 4BE is entirely made of metal to provide maximum protection and functionality. Engineered to offer scalability in autonomy, the cabinet's design seamlessly integrates with the aesthetics of the ALCOR series, delivering a **practical, solid and visually appealing solution**.



Given that flexibility has been the key focus in the development of the product over the years, Alcor offer multiple communication options and external interfaces;

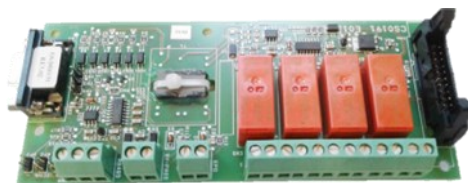
## +SNMP/TCP-IP



The ALCOR series offers the possibility to integrate the UPS into your **Local Area Network**, enabling remote monitoring and control of the UPS status. The **OS-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

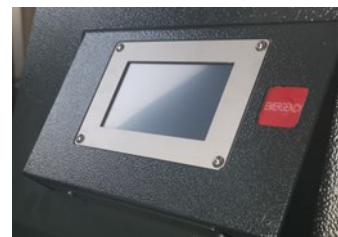


The ALCOR series **comes standard with CS0191** cards. Powertronix's exclusive CS0191 card design **ensures full integration** of the Alcor series into your **Building Management System (BMS)** via RS232-RS485 com-protocols.

**It supports five simultaneous active connections:**

- Potential-free contacts (NO/NC)
- RS232 port with DB9 connector
- RS485 Modbus RTU
- rEPO (Remote Emergency Power Off)
- External Bypass AUX contact

## + HMI



The ALCOR series can be equipped as optional with a modern, functional, and user-friendly 5" **LCD touch screen display (OSDE1341)**. Additionally, with the **OSDE0124 remote panel**, control and monitoring of the UPS status can be **extended up to 100 meters**.

# 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.



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