

## RD6000CPSS<sup>VEGA</sup>

UPS 10 ÷ 80 kVA



PERFORMANCES

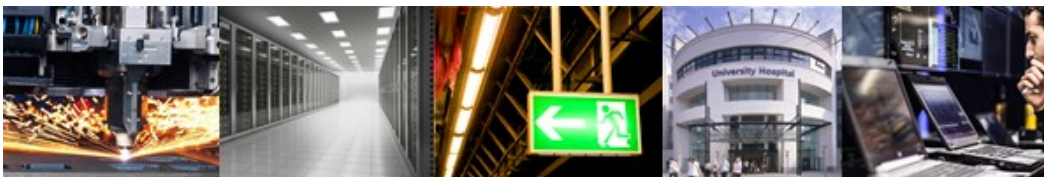
ReDeal **RD6000<sup>VEGA</sup> UPS** are market most flexible and complete power protection solutions delivering premium VFI online double conversion for IT and electrical infrastructures in corporate, medical, banking and industrial applications.

Designed and 100% MADE IN ITALY, **RD6000<sup>VEGA</sup> UPS** adopt PFC IGBT-based topology resulting in the highest levels of efficiency ( 0.99 input power factor - THDi <3%) and reliability for all mission critical loads, both for single and three-phase installations in accordance with IEC EN 50171.

Input/output real time configurable on site, possibility to pack internal runtime as galvanic isolation or voltage adjusting transformer, these UPS families represent all in one solutions in compact footprint and eye-catching design horizontal scalability in redundancy, additional capacity, power backup runtime.

Optional UPS upgrade to double independent outputs — EN 50171 directive

Featuring multilanguage LCD display, RS232 port, BMS communication interface (DRY CONTACT & MODBUS RTU PROTOCOL BOARD), intelligent slot for SNMP adapter, **RD6000<sup>VEGA</sup> UPS**



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MAIN TECHNICAL DATA	RD6000 VEGA10	RD6000 VEGA15	RD6000 VEGA20	RD6000 VEGA30	RD6000 VEGA40	RD6000 VEGA60	RD6000 VEGA80
UPS Topology	VFI On-Line Double Conversion						
Converter	Power factor correction PFC IGBT-based						
Inverter	High frequency IGBT inverter transformerless						
Static switch	Electronic static switch plus contactor						
Cooling	Forced air						
Input nominal voltage	<b>1ph</b> 220/230/240V or <b>3ph</b> 380/400/415V				<b>3ph</b> 380/400/415V		
Input nominal frequency	50Hz or 60Hz						
Input frequency tolerance	40 ÷ 70 Hz						
Maximum input current 3Ph+N@400V	35A	35A	50A	60A	97A	130A	162A
Power factor	0.99						
Soft start	0-100% in 30 sec. (settable)						
Backfeed protection	available UPS in built or external						
Input current distortion	THDi ≤2%						
Bypass nominal voltage	<b>1ph</b> 220/230/240V or <b>3ph</b> 380/400/415V				<b>3ph</b> 380/400/415V		
Bypass voltage tolerance	±20% (selectable)						
Bypass factory setting	±10%						
Bypass nominal frequency	50 or 60 Hz (selectable)						
Bypass accepted overload	10In per 100ms						
Manual bypass	available with mechanical security lock						
Output active power	9kW	13.5kW	18kW	27kW	36kW	54kW	72kW
Nominal output voltage	<b>1ph</b> 220/230/240V or <b>3ph</b> 380/400/415V				<b>3ph</b> 380/400/415V		
Nominal output current 1ph 1Ph+N@ 230V	44A	65A	87A	130A	-	-	-
Nominal output current 3ph 3Ph+N@400V	14A	22A	28A	44A	57A	86A	115A
Output power factor	0.9						
Output voltage static variation	± 1%						
Output voltage dynamic variation	± 5%						
Crest factor	3:1						
Output voltage distortion	≤ 2% with linear load & ≤ 5% with non linear load						
Output frequency	50Hz or 60Hz						
Output frequency stability	0.01%						
UPS system efficiency	up to 96%						
Overload	120% no limit / 125% for 10 minutes / 150% for 60 seconds						

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Battery type	VRLA AGM (Ni-Cd on request)						
Number of elements	360						
Battery nominal voltage	720 Vdc						
Battery voltage range	600 ÷ 830 Vdc						
Battery maximum charging current	12A	20A	20A	25A	25A	30A	30A
Battery charging profile	DIN 41733 Charging voltage: 810Vdc Temperature compensated battery charging profile						
Battery low threshold (factory setting)	640 Vdc						
Battery management & test	Supervised battery management & settable regular test						
Remote signals	Dry contact board - remote EPO						
Standard interfaces and protocol	RS232 port & MODBUS RTU + slot for communication options						
Monitoring software	UPSMAN & UPSMON						
Communication options	web adapter SNMP (Generex CS121 / Megatec NetAgent)						
Parallel capability	up to 8 units (closed loop via optical fiber)						
<b>MECHANICAL DATA</b>							
Case protection rating	metal case - RAL 7016 - IP20 (upgrade IP42 or IP54 on request)						
Dimensions (WxDxH mm)	390x900x900 mm			8410x840x1510 mm			
Weight kg (UPS configuration 3ph @ 400V)	72kg	78kg	85kg	94kg	100kg	230kg	260kg
Noise level at 1m	≤52dB	≤54dB	≤54dB	≤58dB	≤60dB	≤60dB	≤64dB
Storing temperature	-20°C ÷ +70°C (UPS) +20°C ÷ +30°C (Battery)						
Operating temperature	+20°C ÷ +40°C						
Relative humidity	90% non condensing						
Altitude	1000m above MSL without derating (1% derating any 100m up to 2.000m)						
Ventilation	multilevel fan						
UPS moving	castors						
UPS packaging	overseas shipment suitable cartoon box on fumigated wooden pallet						
UPS packaging dimensions (WxDxH mm)	540x1080x1100 mm			700x1000x1700 mm			
UPS packaging weight (package only)	12 kg			16kg			
<b>STANDARDS</b>	European Directives: LC 2014/35/EU low voltage Directive EMC 2014/30/EU electromagnetic compatibility Directive Standards: Safety IEC EN 62040-1:2008+A1:2013; EMC IEC EN 62040-2 C2 Classification in accordance with IEC 62040-3 VFI - SS - 111 IEC EN 50171 Directive						

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## Main electrical features

- \* Dual input mains: separated or common
- \* Genset compatibility without any additional equipment
- \* Integrated maintenance bypass
- \* Detection circuit for backfeed protection (additional backfeed device UPS built in or in external panel)
- \* Parallel capability for redundant or add capacity system configuration (up to 8 units)
- \* Distributed or shared battery for optimized energy storage and uninterrupted power during strings maintenance
- \* Battery temperature sensor and supervised battery management dual charging method profile
- \* UPS *eco-mode* functional profile for 99% efficiency
- \* Frequency converter profile with or without backup time 60Hz to 50Hz or vice versa

## Main electrical optional features

- \* UPS built in battery installation (Vega 10-30 up to 60pcs\*12V/9Ah)
- \* Extended runtime in external cabinet matching UPS design (Vega 10-30 2\*60pcs 12V/9Ah)
- \* Extended runtime in external cabinet IP20 or open rack, complete of DC breaker
- \* UPS built in or external cabinet galvanic isolation transformer (full system isolation)
- \* UPS I/O phase configuration settable via LCD (3/3 - 3/1 - 1/1 - 1/3) (Coral 10-30kW)
- \* UPS upgrade to double independent outputs — EN 50171 standard
- \* Battery bank disconnection in case of UPS shutdown or according to BMS design
- \* BACS battery advanced care system for constant monitoring and harmonization of individual charging voltages

## UPS connectivity available features for immediate system status info

### Real time information, real time solution!

- \* User friendly Multilanguage LCD (Russian available)
- \* Event log access via LCD for on-site checking & event log download via open software
- \* Dry contact interface complete of 4 change-over contact outputs
- \* Serial connection interface via RS232/RS485 Modbus RTU for BMS full compatibility
- \* At-a-glance user view for simultaneous monitoring of all UPS systems connected in the same network
- \* Intelligent free slot for additional SNMP interface and ambient sensors (temperature, humidity, smoke etc...)
- \* UPS MAN & MON software for UPS managing and monitoring (opt)
- \* Remote LED panel for UPS status (opt)
- \* Remote EPO
- \* Remote UPS monitoring service 24/7 - 365 (opt)
- \* Server, PC and/or virtual machine configured shutdown
- \* e.mail/SMS/pop up UPS status information

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## UPS Communication interfaces

### ReDeal Relay Interface Card CS0191

CS0191 is standard feature in ReDeal Vega UPS -Mizar UPS – Alcor UPS – Auriga UPS – Auriga HP UPS series and provides an ideal and complete way to link the UPS to a Building Management System or remote alarm system.

CS0191 card enables 5 simultaneous active connections:

Potential free contacts

RS232 port DB9 connector

RS485 Modbus RTU

rEPO Remote Emergency Power OFF

Ext.Bypass AUX contact

**RS232** port works to allow communication between UPS and PC for user interfacing or technician servicing purposes. Dedicated software is available for managing and monitoring the UPS, while UCT software is reserved to trained personnel. The only hardware Set Up required is connecting the serial cable to the serial port on the PC and the serial port on the UPS.

**RS485 Modbus RTU protocol** provides continuous, reliable and accurate remote monitoring of a UPS system through a Building Management System (BMS) or Industrial Automation System (IAS).

**Auxiliary contact for External Maintenance Bypass** allows to switch the UPS on bypass line automatically when user closes any external maintenance bypass breaker, wired to this contact.

**rEPO** - Remote EPO contact allows user to remotely turn off the output power from a UPS.

The card also controls **4 potential free contacts** depending on the operating status of the UPS. Each relay contact is configurable as normal open (NO) or normal close (NC).

Optional accessory like ReDeal UPS Remote Panel for remote UPS status monitoring via LED and audible alarms, may be connected to dry contacts.