

CVL-33 Series 10KVA-200KVA

Product introduction

OPTI-UPS CVL-33 series three phase UPS employ advanced technology to increase performance and reliability

- Three high speed DSPs with complete digital control fully ensure high quality of power supply; high input power factor makes UPS a green, energy saving product.
- Full front access complements to the serviceability and user-friendliness of the UPS.

Applications:

- ISP (Internet Service Provider), IDC (Internet Data Center), Computing Centers, Banks, Server Centers, Aight-precision equipment, etc.

Features:

- Three phase in and out system, compatible with utility of 380/400/415V, 50/60Hz
- Online double conversion, technology
- Supports all kinds of load; holds high overload capability
- Fully digital control with three DSPs for IGBT rectifier, inverter, charger
- Digital circulating current control technology increases the reliability of UPS parallel configuration
- Wide input voltage window, compatible with different utilities
- Green power technology, high input power factor, low current THD, high efficiency
- Intelligent battery management, extending battery lifetime
- Intelligent self-diagnostics function, all kinds of fault protection, large capacity for history record storage
- Full front maintenance
- Redundant design of cooling increases the system reliability
- Modularized design of subsystems, convenient field maintenance
- High MTBF (mean time before failure) (>200,000h), low MTTR (mean time to repair) (<0.5h)
- Large LCD display, friendly human-machine interface
- Configured for top and bottom cable connection
- Options include main back feed protection, bypass back feed protection, battery leakage protection, battery start kit, and output isolation transformer lighting protection kit



Specifications

| Model Name | CVL10KILB33 | CVL15KILB33 | CVL20KILB33 | CVL30KILB33 | CVL40KILB33 | CVL60KILB33 | CVL80KILB33 | CVL100KILB33 | CVL120KILB33 | CVL160KILB33 | CVL200KILB33 | | | | | | | | | |
|---|---|---------------------------------|-------------|-------------|-----------------------|------------------------------------|-------------|--------------|--------------|--------------|--------------|-----------|-----|---|-----|--|-----|--|---|---|
| Topology | True On-Line, Double Conversion | | | | | | | | | | | | | | | | | | | |
| On-battery Output Waveform | Sine Wave | | | | | | | | | | | | | | | | | | | |
| Maximum Capacity | KVA / KW | 10 / 8 | 15 / 12 | 20 / 16 | 30 / 24 | 40 / 32 | 60 / 48 | 80 / 64 | 100 / 80 | 120 / 96 | 160 / 128 | 200 / 160 | | | | | | | | |
| INPUT | | | | | | | | | | | | | | | | | | | | |
| Voltage | 380/400/415 3P4W+G | | | | | | | | | | | | | | | | | | | |
| Power factor | >0.99 | | | | | | | | | | | | | | | | | | | |
| THDI | <3% | | | | | | | | | | | | | | | | | | | |
| Voltage range | 3P4W+G +25% ~ -20% full load; -20% ~ +40% power derating between 100% to 70% | | | | | | | | | | | | | | | | | | | |
| Frequency range | 40 ~ 70Hz | | | | | | | | | | | | | | | | | | | |
| OUTPUT | | | | | | | | | | | | | | | | | | | | |
| Voltage precision | 1% (balanced load), 1.5% (unbalanced load) | | | | | | | | | | | | | | | | | | | |
| Voltage transient | 5% (0-100% load step) | | | | | | | | | | | | | | | | | | | |
| THDV | THD<1% (linear load), THD<5% (nonlinear load) | | | | | | | | | | | | | | | | | | | |
| Power factor | 0.8 | | | | | | | | | | | | | | | | | | | |
| Frequency tracking range | 50/60Hz±3Hz, adjustable | | | | | | | | | | | | | | | | | | | |
| Frequency precision (free running) | ±0.02% | | | | | | | | | | | | | | | | | | | |
| Phase tolerance | 120°±0.5° (balanced and unbalanced load) | | | | | | | | | | | | | | | | | | | |
| Voltage unbalance degree (100% unbalanced load) | 380-415V ±1% | | | | | | | | | | | | | | | | | | | |
| Frequency tracking speed | 0.5Hz/s to 5Hz/s, adjustable | | | | | | | | | | | | | | | | | | | |
| Crest factor | 3:1 | | | | | | | | | | | | | | | | | | | |
| BYPASS | | | | | | | | | | | | | | | | | | | | |
| Bypass overload capability | 125%, long time operation | | | | | | | | | | | | | | | | | | | |
| | 125%<load<130%, lasts for more than 1 hour | | | | | | | | | | | | | | | | | | | |
| | 130%<load<150%, last for more than 6 minutes | | | | | | | | | | | | | | | | | | | |
| BATTERY | | | | | | | | | | | | | | | | | | | | |
| Battery mode efficiency | 95% | | | | | | | | | | | | | | | | | | | |
| Battery configuration | 12V, 40pcs (36-44pcs acceptable) | | | | | | | | | | | | | | | | | | | |
| Battery voltage | ±240Vdc | | | | | | | | | | | | | | | | | | | |
| Charger power | 20%*Power | | | | | | | | | | | | | | | | | | | |
| Charger voltage precision | 1% | | | | | | | | | | | | | | | | | | | |
| ADVANCED WARNINGS / DIAGNOSTICS | | | | | | | | | | | | | | | | | | | | |
| Display | LCD+LED, Keyboard | | | | | LCD+LED, Touch screen and keyboard | | | | | | | | | | | | | | |
| Interface (Communication Ports) | RS232, RS485, Dry contacts, SNMP card, EPO, Generator interface | | | | | | | | | | | | | | | | | | | |
| PROTECTION | | | | | | | | | | | | | | | | | | | | |
| Overload capability | 102% long time operation | | | | | | | | | | | | | | | | | | | |
| | 110%, transfer to bypass after 1 hour | | | | | | | | | | | | | | | | | | | |
| | 125%, transfer to bypass after 10 minutes | | | | | | | | | | | | | | | | | | | |
| | 150%, transfer to bypass after 1 minute | | | | | | | | | | | | | | | | | | | |
| Over-current protection | >150%, transfer to bypass after 200ms | | | | | | | | | | | | | | | | | | | |
| | UPS output cut-off immediately | | | | | | | | | | | | | | | | | | | |
| ENVIRONMENTAL | | | | | | | | | | | | | | | | | | | | |
| Dielectric strength | (Input, Output to PE) 2820Vdc, leakage current lower than 3.5mA, no flashover in 1 minute | | | | | | | | | | | | | | | | | | | |
| Surge protection | Complies with IEC60664-1 class IV, endures surge of 1.2 / 50µs + 8/20µs higher than 6KV / 3KA | | | | | | | | | | | | | | | | | | | |
| IP class | IP20 | | | | | | | | | | | | | | | | | | | |
| Operation temperature | 0-40°C | | | | | | | | | | | | | | | | | | | |
| Relative humidity | 0-90% (non-condensing) | | | | | | | | | | | | | | | | | | | |
| Noise | <55dB | | | | | | | | | | | | | | | | | | | |
| PHYSICAL 220V/380V 3P4W+G | | | | | | | | | | | | | | | | | | | | |
| Dimensions | mm | 280×730×668 | | | 320×781×788 | | | 600×855×1350 | | | 600×855×1600 | | - | - | | | | | | |
| | | 540×690×1100 (Internal battery) | | | 60 | | | | | | | | - | - | | | | | | |
| Weight | kg | 46 | | | 80 (Internal battery) | | | 182 | | | 204 | | 226 | | 270 | | 292 | | - | - |
| | | 68 (Internal battery) | | | | | | | | | | | | | | | | | - | - |
| CONFORMANCE | | | | | | | | | | | | | | | | | | | | |
| Approvals | CE | | | | | | | | | | | | | | | | | | | |

Specifications are subject to change without notice.