

## CDT33-T Series UPS



### Features

- 10, 15, 20, 30 and 40 kVA UPS capacity
- Transformer based UPS
- 3-Phase input, 3-Phase output
- Double Conversion with capability for switching to Multi-Mode (Automatically switches between Double Conversion and Line Interactive modes according to mains status if Multi-Mode is activated)
- Intelligent controls with Digital Signal Processing (DSP)
- Unlimited parallel expansion capability
- 3-Level intelligent charging mode
- Wide ranges of input voltage and input frequency
- Excellent generator compatibility
- Shared or separated batteries in parallel configuration (selectable)
- Adjustable charging current
- Advanced battery management
- Intelligent monitoring function
- Easy maintenance by providing optional MBB (Make Before Break) manual bypass
- Optional Emergency Power Off function (EPO)

## Technical Specifications

| General                                                |                                                              |                            |            |            |            |
|--------------------------------------------------------|--------------------------------------------------------------|----------------------------|------------|------------|------------|
| UPS model                                              | CDT33-T10                                                    | CDT33-T15                  | CDT33-T20  | CDT33-T30  | CDT33-T40  |
| Rated power                                            | 10kVA/9kW                                                    | 15kVA/13.5kW               | 20kVA/18kW | 30kVA/27kW | 40kVA/36kW |
| Applicable standard                                    | IEC62040-3                                                   |                            |            |            |            |
| UPS classification                                     | VFI SS CCC*<br>*C: 1 or 2 or 3 by order refer to IEC 62040-3 |                            |            |            |            |
| UPS topology                                           | Double Conversion / Multi-Mode<br>(selectable by user)       |                            |            |            |            |
| Efficiency                                             | 91%                                                          | 92%                        |            |            | 93%        |
| Parallel expansion capability                          | Up to 48 units                                               |                            |            |            |            |
| N+1 redundancy capability                              | Yes                                                          |                            |            |            |            |
| Dimensions (H×W×D)                                     | 870 × 250 × 830 mm                                           |                            |            |            |            |
| Weight                                                 | 96kg                                                         | 123kg                      | 146kg      | 214kg      | 253kg      |
| Acoustic noise at 1m                                   | ≤58dBA                                                       |                            |            |            |            |
| Degree of protection against hazards and water ingress | IP20                                                         |                            |            |            |            |
| Mean Time Between Failures (MTBF)                      | 100,000h                                                     |                            |            |            |            |
| Environmental                                          |                                                              |                            |            |            |            |
| Operating temperature                                  | 0°C to +40°C                                                 |                            |            |            |            |
| Storage temperature                                    | -25°C to +55°C                                               |                            |            |            |            |
| Humidity                                               | 0 to 95% non-condensing                                      |                            |            |            |            |
| Altitude                                               | at rated power                                               | ≤1500m                     |            |            |            |
|                                                        | 0.974 × rated power                                          | ≤2000m                     |            |            |            |
|                                                        | 0.920 × rated power                                          | ≤3000m                     |            |            |            |
|                                                        | 0.872 × rated power                                          | ≤4000m                     |            |            |            |
|                                                        | 0.820 × rated power                                          | ≤5000m                     |            |            |            |
| Input                                                  |                                                              |                            |            |            |            |
| Phases required                                        | 3Ph+N+PE                                                     |                            |            |            |            |
| Rated voltage                                          | 400Vac                                                       |                            |            |            |            |
| Voltage tolerance                                      | 100% load                                                    | ±20%                       |            |            |            |
|                                                        | 70% load                                                     | -30% to +20%               |            |            |            |
|                                                        | 50% load                                                     | -48% to +20%               |            |            |            |
| Frequency range                                        | 35Hz to 70Hz                                                 |                            |            |            |            |
| Power factor                                           | ≥0.99                                                        |                            |            |            |            |
| THDi                                                   | ≤3%                                                          |                            |            |            |            |
| Bypass voltage range                                   | max. voltage                                                 | 400Vac +10%                |            |            |            |
|                                                        | min. voltage                                                 | 400Vac -20% (optional-10%) |            |            |            |
| Output                                                 |                                                              |                            |            |            |            |
| Output phases available                                | 3Ph+N+PE                                                     |                            |            |            |            |

| Output (continue)                                                                               |  |                                                                                                                                     |             |             |                                  |
|-------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------------------------|
| Rated voltage                                                                                   |  | 400Vac                                                                                                                              |             |             |                                  |
| Voltage regulation                                                                              |  |                                                                                                                                     |             |             |                                  |
| double conversion mode                                                                          |  | ±1%                                                                                                                                 |             |             |                                  |
| stored energy mode                                                                              |  | ±1%                                                                                                                                 |             |             |                                  |
| Power factor                                                                                    |  | 0.9                                                                                                                                 |             |             |                                  |
| Frequency                                                                                       |  |                                                                                                                                     |             |             |                                  |
| double conversion mode                                                                          |  | 50/60Hz ±10% (adj.)                                                                                                                 |             |             |                                  |
| stored energy mode                                                                              |  | 50/60Hz ±0.1%                                                                                                                       |             |             |                                  |
| Crest factor                                                                                    |  | 3:1                                                                                                                                 |             |             |                                  |
| THD                                                                                             |  |                                                                                                                                     |             |             |                                  |
| linear load                                                                                     |  | ≤2%                                                                                                                                 |             |             |                                  |
| nonlinear load                                                                                  |  | ≤3%                                                                                                                                 |             |             |                                  |
| Transfer time                                                                                   |  |                                                                                                                                     |             |             |                                  |
| double conversion mode to stored energy mode                                                    |  | 0.00Sec                                                                                                                             |             |             |                                  |
| double conversion mode to bypass                                                                |  | 0.00Sec                                                                                                                             |             |             |                                  |
| Overload                                                                                        |  |                                                                                                                                     |             |             |                                  |
| double conversion mode up to110%                                                                |  | 60min                                                                                                                               |             |             |                                  |
| >110% up to 125%                                                                                |  | 10min                                                                                                                               |             |             |                                  |
| >125% up to 150%                                                                                |  | 1min                                                                                                                                |             |             |                                  |
| >150%                                                                                           |  | transfer to bypass                                                                                                                  |             |             |                                  |
| energy saving mode (according to Breaker curve)                                                 |  | 20A breaker                                                                                                                         | 32A breaker | 40A breaker | 63A breaker 80A breaker          |
| Isolation                                                                                       |  | Galvanic isolation from AC mains and DC link to AC output                                                                           |             |             |                                  |
| Battery                                                                                         |  |                                                                                                                                     |             |             |                                  |
| Battery type                                                                                    |  | All types of lead acid and gel, sealed or non-sealed                                                                                |             |             |                                  |
| Normal voltage                                                                                  |  | 192Vdc up to 240Vdc (selectable)                                                                                                    |             |             | 384Vdc up to 480Vdc (selectable) |
| Max. charge current                                                                             |  | 10A                                                                                                                                 |             |             |                                  |
| Protections                                                                                     |  |                                                                                                                                     |             |             |                                  |
| Short circuit                                                                                   |  |                                                                                                                                     |             |             |                                  |
| Overload                                                                                        |  |                                                                                                                                     |             |             |                                  |
| Output overvoltage                                                                              |  |                                                                                                                                     |             |             |                                  |
| Overheat                                                                                        |  |                                                                                                                                     |             |             |                                  |
| Battery low                                                                                     |  |                                                                                                                                     |             |             |                                  |
| Battery reverse (optional)                                                                      |  |                                                                                                                                     |             |             |                                  |
| Self-diagnostics                                                                                |  |                                                                                                                                     |             |             |                                  |
| EPO (optional)                                                                                  |  |                                                                                                                                     |             |             |                                  |
| Display                                                                                         |  |                                                                                                                                     |             |             |                                  |
| Audible & visual                                                                                |  | Mains Failure, Low Battery, Overload, System Fault                                                                                  |             |             |                                  |
| Status LED & LCD                                                                                |  | Double Conversion Mode, Energy Saving Mode, Low Battery, Battery Test Failure, Overload, UPS Fault                                  |             |             |                                  |
| LCD information                                                                                 |  | Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Parameters Set., History Record |             |             |                                  |
| Communication Interface                                                                         |  |                                                                                                                                     |             |             |                                  |
| USB, RS485, Dry contacts (optional), SNMP card (optional), Relay card (optional), Parallel port |  |                                                                                                                                     |             |             |                                  |

In the interest of continual product improvement all specifications are subject to change without notice.