



## CL SERIES

10~20kVA

3:1 phase PF:0.8



Control Panel

### Features

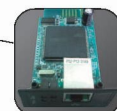
- N+X parallel redundancy
- Online double conversion with DSP control
- Input current harmonic: <5%
- Optimization battery group, the quantity of battery: 16/18/20 pieces (optional)
- factor is changed when selection different battery quantity 16pc:0.7PF; 18PCS:0.8PF 20PCS:0.9PF
- Wide input voltage range: 208~478Vac
- Wide input frequency range(50Hz: 45~55Hz / 60Hz: 54~66Hz)
- Support generator input
- Support economic(ECO) operation mode
- Self-testing when UPS startup
- Options: SNMP card/Relay card/ Parallel board
- Cold start



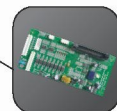
Rear Panel



Relay card



SNMP



Parallel board

## Technical Specifications:

| MODEL                      |             | 10kVA                                                                                                                                                        | 15kVA           | 20kVA     |
|----------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------|
| Capacity (VA/Watts)        |             | 10k / 8k                                                                                                                                                     | 15k / 12k       | 20k / 16k |
| INPUT                      |             |                                                                                                                                                              |                 |           |
| Nominal voltage            |             | 380/400/415Vac;(3Ph+N+PE)                                                                                                                                    |                 |           |
| Operating voltage range    |             | 208 ~ 478Vac                                                                                                                                                 |                 |           |
| Operating frequency range  |             | 50Hz:45~55Hz;60Hz:54~66Hz(auto sensing)                                                                                                                      |                 |           |
| Power factor               |             | ≥0.99                                                                                                                                                        |                 |           |
| Bypass voltage range       |             | Max.voltage: 220V: +25%(optional +10%,+15%,+20% )<br>230V: +20% (optional +10%,+15%)<br>240V: +15% (optional +10%)<br>Min.voltage: -45% (optional -20%,-30%) |                 |           |
| Bypass frequency range     |             | Frequency protection range: ± 10%                                                                                                                            |                 |           |
| ECO range                  |             | Same as the bypass                                                                                                                                           |                 |           |
| Harmonic distortion (THDi) |             | <5%(100% linear load)                                                                                                                                        |                 |           |
| Generator input            |             | Support                                                                                                                                                      |                 |           |
| OUTPUT                     |             |                                                                                                                                                              |                 |           |
| Rated voltage              |             | 220/230/240Vac                                                                                                                                               |                 |           |
| Power factor               |             | 0.8/0.9(optional)                                                                                                                                            |                 |           |
| Voltage regulation         |             | ± 1%                                                                                                                                                         |                 |           |
| Frequency                  | Line Mode   | ± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency(optional)<br>50/60( ± 0.1)Hz                                                                            |                 |           |
|                            | Bat. Mode   |                                                                                                                                                              |                 |           |
| Crest factor               |             | 3:1                                                                                                                                                          |                 |           |
| Harmonic distortion (THDv) |             | ≤2% with linear load<br>≤5% with non-linear load                                                                                                             |                 |           |
| Efficiency                 |             | >92%                                                                                                                                                         | >93.5%          |           |
| BATTERY                    |             |                                                                                                                                                              |                 |           |
| Battery voltage            |             | ± 96/108/120Vdc ( optional )                                                                                                                                 |                 |           |
| Capacity (standard unit)   |             | 12V/7Ah/9Ah                                                                                                                                                  |                 |           |
| Typical recharge time      |             | 6~8 hours (to 90% of full capacity)                                                                                                                          |                 |           |
| Charge current             |             | 1A(10kVA Standard unit) ; Max.current 10A(Long run unit)                                                                                                     |                 |           |
| SYSTEM FEATURES            |             |                                                                                                                                                              |                 |           |
| Transfer time              |             | Mains to Battery:0ms; Mains to Bypass:0ms                                                                                                                    |                 |           |
| Overload                   | Line Mode   | Load≤110%: last 60min, ≤125%: last 10min, ≤150%: last 1min, >150% turn to bypass mode immediately<br>63A(Breaker)100A(Breaker)125A(Breaker)                  |                 |           |
|                            | Bypass Mode |                                                                                                                                                              |                 |           |
| Short circuit              |             | Hold Whole System                                                                                                                                            |                 |           |
| Overheat                   |             | Line Mode: Turn to Bypass; Bat. Mode: Shut down UPS immediately                                                                                              |                 |           |
| Low battery voltage        |             | Alarm and Switch off                                                                                                                                         |                 |           |
| Self-diagnostics           |             | Upon Power On and Software Control                                                                                                                           |                 |           |
| Battery                    |             | Advanced Battery Management                                                                                                                                  |                 |           |
| Audible & Visual alarms    |             | Line Failure, Battery Low, Overload, System Fault                                                                                                            |                 |           |
| LED & LCD display          |             | Line Mode, Bat. Mode, Eco Mode, Bypass Mode, Battery Low, Overload & UPS Fault                                                                               |                 |           |
| LCD display                |             | Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Inner Temperature & Remaining Battery Backup Time        |                 |           |
| Communication interface    |             | RS232,USB,SNMP card(optional), Parallel board(optional), Relay card (optional)                                                                               |                 |           |
| ENVIRONMENTAL              |             |                                                                                                                                                              |                 |           |
| Operating temperature      |             | 0℃ ~ 40℃                                                                                                                                                     |                 |           |
| Storage temperature        |             | -25℃ ~ 55℃                                                                                                                                                   |                 |           |
| Humidity range             |             | 0 ~ 95% (non-condensing)                                                                                                                                     |                 |           |
| Altitude                   |             | <1500m                                                                                                                                                       |                 |           |
| Noise level                |             | <55dB                                                                                                                                                        | <58dB           |           |
| PHYSICAL                   |             |                                                                                                                                                              |                 |           |
| Dimension D × W × H (mm)   |             | 597 × 250 × 655(S)/502 × 250 × 616(H)                                                                                                                        | 502 × 250 × 616 |           |
| Net weight (kg)            |             | 76(S)/35 (H)                                                                                                                                                 | 45              | 46        |
| STANDARDS                  |             |                                                                                                                                                              |                 |           |
| Safety                     |             | IEC/EN62040-1,IEC/EN60950-1                                                                                                                                  |                 |           |
| EMC                        |             | IEC/EN62040-2,IEC61000-4-2,IEC61000-4-3,IEC61000-4-4, IEC61000-4-5,IEC61000-4-6,IEC61000-4-8                                                                 |                 |           |

Specifications are subject to change without prior notice.

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