

**ELS-33  
SERIES  
(80 - 200kVA)**



- ✓ High-Frequency Online Double Conversion Technology
- ✓ Advanced Dual-Core DSP Control
- ✓ Input Power Factor up to 0.99 (Active PFC)
- ✓ Dual Input Design with Independent Bypass
- ✓ Smart Fan System for Extended Lifetime
- ✓ Cold Start (Battery Start-Up Capability)
- ✓ Compact Design with 5" Color LCD Display
- ✓ Optional SNMP, Wi-Fi, GPRS Card & SMS Alerts
- ✓ EMC – LVD CE Certified
- ✓ Standard RS232, USB, RS485, EPO, Dry Contacts, Parallel Port



Buildings



Server Systems



Medical Facilities



Industrial Factories



Transportation Systems



Emergency Systems

## TECHNICAL SPECIFICATIONS

| MODEL                                   | ELS-3380                                                                                                                          | ELS-33100        | ELS-33120        | ELS-33200        |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|
| Capacity (kVA/kW)                       | 80kVA / 80kW                                                                                                                      | 100kVA / 100kW   | 120kVA / 120kW   | 200kVA / 200kW   |
| INPUT                                   |                                                                                                                                   |                  |                  |                  |
| Voltage                                 | 380 / 400 / 415 VAC                                                                                                               |                  |                  |                  |
| Voltage Range                           | 304 ~ 478 VAC (100% Load) / 228 ~ 304 VAC (Derates linearly with load)                                                            |                  |                  |                  |
| Frequency                               | 50 / 60 Hz (Auto-Sensing)                                                                                                         |                  |                  |                  |
| Frequency Range                         | 40-70 Hz ±0.5%                                                                                                                    |                  |                  |                  |
| Input Power Factor                      | ≥ 0.99                                                                                                                            |                  |                  |                  |
| Total Harmonic Distortion (THDi)        | ≤ 5%                                                                                                                              |                  |                  |                  |
| Bypass Voltage Range                    | Factory Setting: -20% ~ +15% VAC; Upper Limit: +10, +15, +20, +25; Lower Limit: -10, -15, -20, -25, -30, -40 (Selectable via LCD) |                  |                  |                  |
| Bypass Frequency Range                  | ±1 Hz, ±3 Hz, ±5 Hz (Selectable via LCD)                                                                                          |                  |                  |                  |
| Bypass Overload Range                   | 125% Load: Long term; 125-130% Load: 10 min; 130-150% Load: 1 min; 150-400% Load: 1 sec; ≥400% Load: 200 ms                       |                  |                  |                  |
| OUTPUT                                  |                                                                                                                                   |                  |                  |                  |
| Voltage                                 | 380 / 400 / 415 VAC (Selectable via LCD)                                                                                          |                  |                  |                  |
| Voltage Regulation                      | ± 1% (Linear Load)                                                                                                                |                  |                  |                  |
| Frequency                               | Synchronized with the grid; 50 / 60 Hz ± 0.1 Hz in Battery Mode                                                                   |                  |                  |                  |
| Waveform / Output Power Factor          | Pure Sine Wave / 1                                                                                                                |                  |                  |                  |
| Crest Factor                            | 3:1                                                                                                                               |                  |                  |                  |
| Total Harmonic Distortion (THDv)        | Linear Load ≤ 1%; Non-Linear Load ≤ 3%                                                                                            |                  |                  |                  |
| Transfer Time                           | 0 ms                                                                                                                              |                  |                  |                  |
| Inverter Overload Capacity              | 110% Load 60 min; 110-125% Load 10 min; 125-150% Load 1 min; >150% Load 200 ms                                                    |                  |                  |                  |
| BATTERY                                 |                                                                                                                                   |                  |                  |                  |
| Battery Voltage                         | Standard Models: 240 VDC / 32-40 units (Adjustable)                                                                               |                  |                  |                  |
| Battery Charge Current                  | 30A                                                                                                                               | 40A              | 40A              | 60A              |
| Charging Voltage Accuracy               | ≤ 1%                                                                                                                              |                  |                  |                  |
| SYSTEM                                  |                                                                                                                                   |                  |                  |                  |
| Efficiency                              | 96%                                                                                                                               |                  |                  |                  |
| Display                                 | 5" or 7" Touchscreen (Optional)                                                                                                   |                  |                  |                  |
| Parallel Operation                      | Up to 6 units (Optional)                                                                                                          |                  |                  |                  |
| ENVIRONMENT / COMMUNICATION / STANDARDS |                                                                                                                                   |                  |                  |                  |
| Operating Temperature / Humidity        | 0 °C ~ 40 °C / 0% ~ 95% (Non-condensing)                                                                                          |                  |                  |                  |
| Storage Temperature                     | -40 °C ~ 70 °C                                                                                                                    |                  |                  |                  |
| Audible Noise                           | ≤ 70 dB (at 1 meter)                                                                                                              |                  |                  |                  |
| Operating Altitude                      | ≤1000 m; 1000-2000 m: 1% power derating per 100 m                                                                                 |                  |                  |                  |
| Communication                           | Standard: RS 232, RS 485, USB; Optional: Dry Contact, SNMP, Parallel Kit                                                          |                  |                  |                  |
| DIMENSIONS                              |                                                                                                                                   |                  |                  |                  |
| Net Dimensions (WxDxH)                  | 360 x 800 x 1200                                                                                                                  | 360 x 850 x 1200 | 360 x 850 x 1200 | 440 x 850 x 1250 |
| Packed Dimensions (WxDxH)               | 450 x 870 x 1370                                                                                                                  | 450 x 940 x 1350 | 450 x 940 x 1350 | 530 x 940 x 1410 |
| Net Weight (kg)                         | 152                                                                                                                               | 156              | 160              | 194 / 200        |
| Packed Weight (kg)                      | 172                                                                                                                               | 180              | 180              | 214 / 220        |



COMPUTERS



NETWORK  
EQUIPMENT



SECURITY  
SYSTEMS



SERVER & IT  
EQUIPMENT



POS  
SYSTEMS



MEDICAL  
DEVICES