

EA890

80 kVA ~ 500 kVA (3:3)
PF 0.9



EA890 series UPS 80 ~ 500 kVA provide maximum protection and power quality for mission critical loads, including data centers, industrial processes, telecommunications, security and electro-medical systems. It is an on-line double conversion UPS with IGBT based 3-level PWM rectifier technology, featured with high input power factor (> 0.99), low THDi, high efficiency and built-in output isolation transformer.

Features

- Online double-conversion with DSP control
- Latest IGBT rectifier technology, high input power factor (> 0.99) and low THDi (≤ 3%)
- High efficiency even at light loads
- Strong mixed load capacity and high overload capacity
- Compact and small footprint
- Unique ventilation design
- Batteries are connected directly to the bus, improving the impact resistance of UPS output
- Output isolation transformer using DZn0 winding makes strong capability with unbalanced loads
- Input and output are completely isolated for great security
- Simulated modular design makes maintenance easy and quick
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)
- Front accessible maintenance and installation against wall allowed
- Bottom and sides cable entry compatible
- Generator compatible
- Intelligent self-diagnosing function, superior failure protection, large capability of history records storage
- Optional N+X redundancy parallel up to 6 units

Specifications

| MODEL | EA8980 | EA89100 | EA89120 | EA89160 | EA89200 | EA89250 | EA89300 | EA89400 | EA89500 |
|-------------------------------------|--|-----------------|------------------|------------------------------------|--------------------|------------------|------------------|--------------------------|------------------|
| Capacity | 80 kVA / 72 kW | 100 kVA / 90 kW | 120 kVA / 108 kW | 160 kVA / 144 kW | 200 kVA / 180 kW | 250 kVA / 225 kW | 300 kVA / 270 kW | 400 kVA / 360 kW | 500 kVA / 450 kW |
| INPUT | | | | | | | | | |
| Input wiring | Three-phase five-wire (3Φ + N + PE) | | | | | | | | |
| Rated voltage | 380 / 400 / 415 Vac | | | | | | | | |
| Voltage range | 304 ~ 346 V (derating 10%),346 ~ 456 V (full load) | | | | | | | | |
| Rated frequency | 50 / 60 Hz | | | | | | | | |
| Frequency range | (50 / 60) ± 5 Hz | | | | | | | | |
| Power factor | ≥ 0.99 | | | | | | | | |
| Total harmonic distortion (THDi) | ≤ 3% | | | | | | | | |
| Delayed start of rectifier | 10 s (1 ~ 300 settable) | | | | | | | | |
| Bypass voltage range | ± 20% (settable) | | | | | | | | |
| OUTPUT | | | | | | | | | |
| Output wiring | Three-phase five-wire (3Φ + N + PE) | | | | | | | | |
| Rated voltage | 380 / 400 / 415 Vac | | | | | | | | |
| Output voltage regulation | ± 1% | | | | | | | | |
| Output frequency regulation | 50 / 60 Hz ± 0.1% in battery mode | | | | | | | | |
| Waveform | Sinusoidal | | | | | | | | |
| Power factor | 0.9 | | | | | | | | |
| Voltage distortion (THDv) | ≤ 2% (linear load), ≤ 5% (non-linear load) | | | | | | | | |
| Crest factor | 3:1 | | | | | | | | |
| Overload | 105% ~ 110% for 60 min, 110% ~ 125% for 10 min | | | | | | | | |
| BATTERIES | | | | | | | | | |
| DC voltage | Lead acid battery: 600 Vdc Lithium iron phosphate battery: 614.4 Vdc | | | | | | | | |
| Number of batteries | Lead acid battery: 12 V x 50 pcs (support 48~52 pcs) Lead acid battery: 2 V x 300 pcs (support 288~312 pcs) Lithium iron phosphate battery: 3.2 V x 192 pcs (support 192/208 pcs) | | | | | | | | |
| Charging current | Charging rate (settable) × battery capacity (settable) × number of battery groups (settable) | | | | | | | | |
| SYSTEM | | | | | | | | | |
| Efficiency | Line mode ≥ 92%, ECO mode ≥ 97% | | | Line mode ≥ 94%, ECO mode ≥ 98% | | | | | |
| Max. number of parallel connections | 6 | | | | | | | | |
| Protections | Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failure | | | | | | | | |
| Communications | Standard configuration: RS232, RS485, dry contacts Optional configuration: SNMP card, temperature compensation, SMS alarms | | | | | | | | |
| Display | 5.7 inches LCD touch screen | | | | | | | | |
| OTHERS | | | | | | | | | |
| Operating temperature | 0 ~ 40℃ | | | | | | | | |
| Storage temperature | – 25℃ ~ 55℃ (without battery) | | | | | | | | |
| Relative humidity | 0% ~ 95% (non-condensing) | | | | | | | | |
| Altitude | ≤ 1000 m. Above 1000 m, derating 1% for each additional 100 m | | | | | | | | |
| IP rating | IP 20 | | | | | | | | |
| Noise level at 1 m | < 65 dB | | | | | | | < 70 dB | |
| Dimensions (W×D×H) (mm) | 800 × 800 × 1800 | | | 800 × 860 × 1700 | 1210 × 860 × 1950 | | | 2380 × 860 × 1950 | |
| Packaged dimensions (W×D×H) (mm) | 900 × 900 × 2050 | | | 900 × 1000 × 1950 | 1300 × 1000 × 2200 | | | 1300 × 1000 × 2200 (× 2) | |
| Net weight (kg) | 580 | 630 | 680 | 790 | 1135 | 1275 | 1355 | 2090 | 2300 |
| Gross weight (kg) | 630 | 680 | 730 | 840 | 1200 | 1340 | 1420 | 2200 | 2410 |

- All specifications are subject to change without notice.
- Custom-made specifications are acceptable.
- This product is applicable to industrial, commercial, financial, rail transit and other industries applications, but not available for life support systems.
- For critical systems related to public safety or significant economic benefits, dual power system is required to power the load.