



EA890 & 3 Phase 80-500KVA IGBT rectifier technology

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 ($\leq 3\%$)
- 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 DZnO 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

Contact us

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Technical specifications

MODEL	EA8980	EA89100	EA89120	EA89160	EA89200	EA89250	EA89300	EA89400	EA89500
Capacity	80kVA	100kVA	120kVA	160kVA	200kVA	250kVA	300kVA	400kVA	500kVA
Output rated power	72kW	90kW	108kW	144kW	180kW	225kW	270kW	360kW	450kW

INPUT	
Input wiring	Three-phase five-wire (3 Φ + N + PE)
Rated voltage	380 / 400 / 415 Vac
Voltage range	346 ~ 456 V (full load), 304 ~ 346 V (derating 10%)
Rated frequency	50 / 60 Hz
Frequency rang	50 / 60 Hz \pm 5 Hz
power factor	\geq 0.99
Total harmonic distortion (THDi)	\leq 3%
Delayed start of rectifier	10 s (1 ~ 300 settable)
Bypass voltage range	\pm 20% (settable)

OUTPUT	
Output wiring	Three-phase five-wire (3 Φ + N + PE)
Rated voltage	380 / 400 / 415 Vac
Output voltage regulation	\pm 1%
Output frequency regulation	50 / 60 Hz \pm 0.1% in battery mode
Waveform	Sinusoidal
Power factor	0.9
Voltage distortion (THDv)	\leq 2% (linear load), \leq 5% (non-linear load)
Crest factor	3:1
Overload	105% ~ 110% for 60 min, 110% ~ 125% for 10 min

BATTERIES	
DC Voltage	600 Vdc (support 576 / 588 / 612 / 624 Vdc) battery: 12V x 50 pcs (support 48~52 pcs)
Number of batteries	Lead acid battery: 2V x 300 pcs (support 288~312 pcs) Lithium iron phosphate battery : 3.2V x 192 pcs (support 192/208 pcs)
Charging current	Charging rate (settable) \times battery capacity (settable) \times number of battery groups (settable)

SYSTEM	
Efficiency	Line mode \geq 91%, ECO mode \geq 97% Line mode \geq 94%, ECO mode \geq 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	7 inches LCD touch screen

OTHERS	
Operating temperature	0 ~ 40C
Storage temperature	-25C ~ 55 C (without batteries)
Relative humidity	0 ~ 95% (non-condensing)
Altitude	\leq 1000 m. Above 1000 m, derating 1% for each additional 100 m
IP rating	IP 20
Noise level at 1 m	< 65dB < 70dB

STANDARDS	
EMI	EN62040-2
EMS	IEC61000-4-2(ESD) / IEC61000-4-3(RS) / IEC61000-4-4(EFT) / IEC61000-4-5(surge)
Manufacturing	ISO 9001:2008, ISO 14001:2004
TIS	TIS.1291 Type 1-2553, TIS1291 Type 2-2553, TIS.1291 Type 3-2555

WEIGHT, DIMENSIONS	
Dimensions (WxDxH) (mm)	800 \times 800 \times 1800 800 \times 860 \times 1700 1210 \times 860 \times 1950 2380 \times 860 \times 1950
Net weight (kg)	580 630 680 790 1135 1275 1355 2090 2300