

# EA890

160KVA ~ 600KVA (3:3)  
PF 0.9



EA890 series UPS 160KVA ~ 600KVA use double conversion technology with a very advanced design criteria improves the performance of components, minimizes the quantity of raw material used on the magnetic and reduces the number of semiconductors thus reducing servicing time and ownership costs. This UPS has high efficiency (>93%) and input power factor (>0.99) built-in output isolation transformer. The inverter transformer prevents the direct feed-through of the battery potential into the critical load and allows a very high rejection ratio of the power supply disturbances (spikes, surges etc).

## Features

- Online double-conversion with DSP control
- IGBT rectifier and high input power factor (>0.99)
- High efficiency 93%
- Output power factor 0.9
- Low input distortion: THD<5%
- Generator compatible
- Output isolation transformer
- Inverter IGBT technology with high frequency communication
- High immunity to external disturbances
- Independent control on the three inverter phases
- High instantaneous overload capacity
- High MTBF (>200,000h)
- Capability of supplying distorted loads, containing output voltage distortion with crest factors
- Front access makes maintenance and replacement easy, save space
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- Low MTTR (<0.5h)
- Standard emergency power off (EPO)
- Standard RS232 / RS485 / dry contacts communication port
- Optional SNMP communication port
- Optional N+X redundancy parallel up to 6 units

## Specifications

MODEL	EA89160	EA89200	EA89250	EA89300	EA89400	EA89500	EA89600
Capacity	160 KVA 144 KW	200 KVA 180 KW	250 KVA 225 KW	300 KVA 270 KW	400 KVA 360 KW	500 KVA 450 KW	600 KVA 540 KW
<b>INPUT</b>							
Rated voltage	380 V / 400 V / 415 Vac						
Voltage range	346 V ~ 456 V (full load) 304 V ~ 346 V (power derating 10%)						
Rated frequency	50 / 60 Hz						
Frequency range	50 / 60 Hz ± 5 Hz						
Power factor	≥ 0.99						
Total harmonic distortion (THDI)	≤ 3%						
Bypass voltage range	± 20%						
ECO voltage range	± 10%						
<b>OUTPUT</b>							
Rated voltage	380 V / 400 V / 415 Vac						
Voltage regulation	± 1%						
Frequency	Synchronized with utility in mains mode; 50 / 60 Hz ± 0.1% in battery mode						
Waveform	Sinusoidal						
Crest factor	3:1						
Total harmonic distortion (THDV)	≤ 1% (linear load); ≤ 5% (non-linear load)						
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 0 ms Inverter mode to ECO mode: 5 ~ 10 ms						
Inverter overload capability	102% ~ 110%: transfer to bypass in 5 mins; 110% ~ 125%: transfer to bypass in 1 min; 125% ~ 150%: transfer to bypass in 30 s; 150% ~ 200%: transfer to bypass in 200 ms; >200%: shut down in 100 ms						
Bypass overload capability	≤ 150%: long time running 150% < load < 200%: shut down in 1 min > 200%: shut down in 100 ms						
<b>BATTERIES</b>							
DC voltage	600 V (12 V × 50 pcs)						
Charging current	16 A	20 A	25 A	30 A	40 A	50 A	60 A
<b>SYSTEM</b>							
Efficiency	Working mode ≥ 93%, ECO mode ≥ 98%						
Alarm	Battery mode, low battery, fans fault etc.						
Surge protection	IEC60664-1						
Insulation resistance	> 2 MΩ (500 Vdc)						
Dielectric strength	2820 Vdc, no arc in 1 min						
IP rating	IP 20						
EMI	EN62040-2						
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)						
<b>COMMUNICAITONS</b>							
RS232 /RS485 / dry contacts	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10						
SNMP (optional)	Power management from SNMP manager and web browser						
<b>OTHERS</b>							
Humidity	0~95% RH @ 0~40°C (non-condensing)						
Noise level	60 dB	65 dB			70 dB	75 dB	
Dimensions (W × D × H) (mm)	800 × 860 × 1700	1210 × 860 × 1950			2380 × 860 × 1950		
Packaged dimensions (W × D × H) (mm)	900 × 950 × 1950	1300 × 950 × 2200			1300 × 950 × 2200 (×2)		
Net/Gross weight (kg)	790 / 820	1135 / 1260	1355 / 1480		2090 / 2200	2300 / 2500	2690 / 2800

● All specifications subject to change without notice.  
● Custom-made specifications are acceptable.