EA890i

160 kVA ~ 500 kVA PF 0.9 IGBT Rectifier



EA890i series is an on-line dual-conversion industrial UPS based on EA890 platform, which is designed based on our years of experience in the application of power electronic products in highways, tunneling, manufacturing and electric power etc. This series of products adopts IGBT rectifier + built-in isolation transformer scheme, which has superior electrical safety performance and high system availability, and can provide stable and reliable power supply guarantee for the industries of finance, transportation, telecommunication, and manufacturing.

Features

- Online Double Conversion Topology, accept Dual-Mains Input
- DSP Technology Guarantees High Reliability
- Input and output are completely isolated for great security
- True Inbuilt Galvanic Isolation Transformer Design, DZn0 winding transformer compatible with unbalanced load
- Strong mixed load capacity and high overload capacity
- Redundant Fan Design and Independent Ventilation Enhances Durable Operation Under Harsh Environment
- Intelligent self-diagnosing function, superior failure protection, large capability of history records storage
- High efficiency even at light loads
- Adjustable Battery Numbers
- Intelligent Battery Management to Prolong Battery Life Cycle
- N+X Redundancy Parallel Operation with up to 6 Units (Option)
- Variety of Communication Options Available
- EPO & ECO Mode Operation
- Generator compatible
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)



7" Touch Screen

Specifications

MODEL	EA89160i	EA89200i	EA89250i	EA89300i	EA89400i	EA89500i
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
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 (3 Φ + 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, 125% ~ 150% for 1 min, 150% ~ 200% for 200r					
BATTERIES	10370 1107010	7 00 111111, 1 1 0 70	12370101 10111111,	, 12370 1307010	7 1 111111, 130 70 2	.00 /0 101 2001
DC voltage	L	ead acid battery:	600 Vdc Lithium	iron phosphate l	pattery: 614.4 Vd	
Number of batteries	Lead acid battery: 12 V x 50 pcs (48–52 pcs settable) Lead acid battery: 2 V x 300 pcs (288–312 pcs settable) Lithium iron phosphate battery: 3.2 V x 192 pcs (192/208 pcs settable)					
Charging current	Charging rate (settable) × battery capacity (settable) × number of battery groups (settable)					
SYSTEM	2		,			1 ()
	Line mode ≥ 94%,					
Efficiency	ECO mode ≥ 98%					
Max. number of parallel connections						
Protections	Short-circuit, overload, overtemperature, overvoltage, undervoltage, battery low voltage and fan failu					
Communications	Standard configuration: RS232, RS485, dry contacts					
	Optional configuration: SNMP card, temperature compensation, SMS alarms					
Display			7 inches LCD	touch screen		
OTHERS	0 ~ 40℃					
Operating temperature						
			0 ~ 4 - 25°C ~ 55°C (v			
Operating temperature				without battery)		
Operating temperature Storage temperature Relative humidity		≤ 1000 m. Abov	- 25°C ~ 55°C (v	without battery)	additional 100 m	
Operating temperature Storage temperature Relative humidity Altitude			- 25°C ~ 55°C (v 0% ~ 95% (nor ve 1000 m, derati	without battery) n-condensing) ng 1% for each a	additional 100 m	
Operating temperature Storage temperature Relative humidity Altitude IP rating		≤ 1000 m. Abov	- 25°C ~ 55°C (v 0% ~ 95% (nor ve 1000 m, derati	without battery) n-condensing) ng 1% for each a	idditional 100 m	dB
Operating temperature Storage temperature Relative humidity Altitude IP rating Noise level at 1 m	800 × 860 × 1700	< 65	- 25°C ~ 55°C (v 0% ~ 95% (nor ve 1000 m, derati	without battery) n-condensing) ng 1% for each a		
Operating temperature Storage temperature Relative humidity Altitude IP rating Noise level at 1 m		< 65 1	- 25°C ~ 55°C (v 0% ~ 95% (nor ve 1000 m, derati IP	without battery) n-condensing) ng 1% for each a	< 70	50 × 1950
Storage temperature Relative humidity Altitude IP rating Noise level at 1 m Dimensions (W×D×H) (mm)	× 1700 900 × 1000	< 65 1	- 25°C ~ 55°C (v 0% ~ 95% (nor ve 1000 m, derati IP dB 210 × 860 × 198	without battery) n-condensing) ng 1% for each a	< 70 2380 × 86	50 × 1950

- 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.