## **A**RES

AR890 10 ~ 120KVA (3/3 Phase) PF 0.9



AR890 series UPS is a intelligent 3 phase in 3 phase out uninterruptible power supply, it adopts double transform high frequency PWM and high performance digital control technique (DSP), with perfect protection, super network management function, reasonable man-machine interface and a series of precision design, meets all high reliability requirements of uninterruptible power supply and integrates reliable, safety, maintainability characteristics of a new generation low frequency UPS.

## **Features**

- Online double-conversion with full DSP control
- IGBT inverter with output isolation transformer
- 100% unbalance load capability
- Output power factor 0.9
- Generator compatible
- Support battery cold start and auto-restart when mains power is restored
- ECO mode operation for energy saving
- Superior protection
- 5.7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement easy (60 ~ 120KVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (>200,000h)
- 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
- Optional input filter to improve input power factor

## Specifications

MODEL	AR8910	AR8915	AR8920	AR8930	AR8940	AR8960	AR8980	AR89100	
Capacity	10 KVA 9 KW	15 KVA 13.5 KW	20 KVA 18 KW	30 KVA 27 KW	40 KVA 36 KW	60 KVA 54 KW	80 KVA 72 KW	100 KVA 90 KW	120 KVA 108 KW
INPUT									
Rated voltage	380 V / 400 V / 415 Vac								
Voltage range	± 25%								
Rated frequency	50 / 60 Hz								
Frequency range	50 / 60 Hz ± 5 Hz								
Power factor	≥ 0.95 (with filter)								
Bypass voltage range	±20% (settable)								
Delayed start of rectifier	1 ~ 300 s (settable via display panel)								
ECO voltage range	± 10% (settable)								
OUTPUT									
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								
Power factor	0.9								
Crest factor	3:1								
Total harmonic distortion (THDV)	≤ 2% (linear load); ≤ 5% (non-linear load)								
		AC mode to battery mode: 0 ms							
Transfer time	Inverter mode to bypass mode: 0 ms								
	Inverter mode to ECO mode: 5 ~ 10 ms								
Inverter overload capability	105%: long time running;								
	105% ~ 110%: transfer to bypass in 1 h								
	110% ~ 125%: transfer to bypass in 10 mins								
	125% ~ 150%: transfer to bypass in 1 min								
	150% ~ 200%: transfer to bypass in 200 ms								
	> 200%: transfer to bypass in 100 ms								
Slight adjustment of inverter output voltage									
BATTERIES									
DC Voltage	12 V × configured battery number (settable via display panel)								
Number of battery	28 ~ 32 pcs (settable)								
Charging current	10 A default / Settable								
Charging	Three-stage charging, auto switch floating / equalizing charge								
Battery state display	Display battery backup time, battery remaining capacity								
Battery self-test	Settable periodic self-test; manually configurable test time and voltage								
SYSTEM									
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%								
Max. Parallel numbers	6								
Protections	Short-circuit - overload - overvoltage - undervoltage - low battery - overtemperature - fan faul								
IP rating	IP20								
EMI	EN62040-2								
EMS	IEC61000-4-2 (ESD)								
	IEC61000-4-3 (RS)								
	IEC61000-4-4 (EFT)								
	IEC61000-4-5 (surge)								
COMMUNICATIONS	1								
RS232 / RS485 / dry contacts (standard)	Supports Windows® 98 / 2000 / 2003 / XP / Vista / 2008 / Windows® 7 / 8 / 10								
SNMP (optional)	Power management from SNMP manager and web browser								
OTHERS									
Humidity	0~95% RH @ 0~40℃ (non-condensing)								
Noise level	55 dB 60 dB 65 dB								
Dimensions (W $\times$ D $\times$ H) (mm)		400	× 800 × 1	I 100		600 × 700 × 1500	700	× 800× 170	10
Packaged dimensions (W × D × H) (mm)			× 890 × 1			690 × 790 × 1570		< 890 × 177	
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All specifications subject to change without notice.Custom-made specifications are acceptable.