

# Armor

10KVA ~ 120KVA  
PF 0.9 (3 : 3)



## 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
- 7 inches LCD touch screen, friendly human & machine interface
- Front access makes maintenance and replacement simplified (60 ~ 120 kVA)
- Intelligent self-diagnosing function, all kinds of failure protection, large capability of history records storage
- High MTBF (> 200,000 h)
- Low MTTR (< 0.5 h)
- 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

## Technical specifications

MODEL	ARM 10	ARM 15	ARM 20	ARM 30	ARM 40	ARM 60	ARM 80	ARM 100	ARM 120
Capacity	10 kVA 9 kW	15k VA 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
<b>INPUT</b>									
Input wiring	Three-phase five-wire (3Φ + N + PE)								
Rated voltage	380 V / 400 V / 415 Vac								
Voltage range	285 ~ 475V								
Rated frequency	50 / 60 Hz								
Frequency range	(50 / 60) ± 5 Hz								
Power factor	≥ 0.95 (with filter)								
Bypass voltage range	± 20% (settable)								
Delayed start of rectifier	10 s (1 ~ 300 settable)								
<b>OUTPUT</b>									
Output wiring	Three-phase five-wire (3Φ + N + PE)								
Rated voltage	380 V / 400 V / 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)	≤ 1% (linear load), ≤ 5% (non-linear load)								
Crest factor	3:1								
Overload	105% ~ 110% for 1h, 110% ~ 125% for 10 min								
<b>BATTERIES</b>									
DC Voltage	Lead acid battery: 360Vdc Lithium iron phosphate battery: 384 Vdc								
Number of batteries	Lead acid battery: 12 V x 30 pcs ( support 28~32 pcs) Lead acid battery: 2 V x 180 pcs ( support 168~192 pcs) Lithium iron phosphate battery: 3.2 V x 120 pcs ( support 112/120 pcs)								
Charging current	Charging rate (settable) × battery capacity (settable) × number of battery groups (settable)								
<b>SYSTEM</b>									
Efficiency	In line mode: Max. 93%; ECO mode: ≥ 98%								
Max. number of parallel connections	6								
Protections	Short-circuit, overload, overvoltage, undervoltage, low battery, overtemperature, fan failure								
Communications	RS232 / RS485 / dry contacts (standard), SNMP (optional)								
EMI	EN62040-2								
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (surge)								
<b>OTHERS</b>									
Operating temperature	0 ~ 40°C								
Storage temperature	-25°C ~ 55°C (without batteries)								
Relative humidity	0 ~ 95% (non-condensing)								
Altitude	≤ 1000 m (derating 1% for each additional 100 m)								
IP rating	IP 20								
Noise level at 1 m	65 dB								
Dimensions (W×D×H) (mm)	400×800×1100			600×700×1500			700×800×1700		
Packaged dimensions (WxDxH) (mm)	490×920×1300			700×800×1650			800×900×1850		
Net weight (kg)	158	165	175	210	260	460	590	630	690
Gross weight (kg)	200	207	217	252	302	480	620	660	720

- 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.