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ISO 9001 CERTIFIED ORGANIZATION



Certificate No. 13590

**True On-Line (double conversion) Uninterruptible Power Supply
Complete with integral static and manual bypass switch**

Advanced Multi-Plus

10KVA to 20KVA

**Three Phase Input / Single Phase Output
OR
Single Phase Input / Single Phase Output**



- **On-line double conversion**
- **Static and manual bypass**
- **ZERO impact on source supply**
- **Input power factor >0.99**
- **Input current THD ≤3%**
- **Parallel/redundant operation**
- **LCD screen**
- **Superior battery management**
- **50Hz or 60Hz operation**
- **Wide input voltage range**
- **Programmable output**
- **Various battery options**
- **RS-232/USB and contact interface**
- **SNMP communication options**
- **Free software**

ECONOMY MODE
Increases efficiency to 98%

Specifications

MODEL	AMP 10-31	AMP 12-31	AMP 15-31	AMP 20-31
Rated Power (VA)	10000	12000	15000	20000
Power (W)	8000	9600	12000	16000

INPUT				
Nominal Voltage	380-400-415 Vac three-phase with Neutral / 220-230-240 single-phase			
Voltage Range (@ full load)	±20%			
Frequency Range	40 - 72 Hz			
Current Distortion	THDI ≤3%			
Maximum Input Current (3-phase / 1-phase)	18A/55A	21A/64A	26A/77A	33A/99A

BYPASS	
Nominal Voltage	220-230-240 Vac
Voltage Range	from 180V to 264 V selectable
Nominal Frequency	50/60Hz
Frequency Range	±5%

OUTPUT	
Nominal Output Voltage	220-230-240 Vac (selectable)
Static Stability	± 1%
Dynamic Stability	± 3%
Waveform	Sinewave
Harmonic Distortion with linear load	±1%
Harmonic Distortion with non-linear load	±3%
Crest Factor	3:1
<i>Overload Capability:</i>	
100% < Load < 110%	10 minutes
110% < Load < 133%	1 minute
133% < Load < 150%	5 seconds

BATTERIES	
Type	Sealed lead acid, maintenance free
Recharge Time	6 hours

COMMUNICATIONS INTERFACES	
RS-232 and Opto-Isolated Contacts	YES
SNMP Solution	OPTIONAL (plug-in card)
Emergency Power Off (EPO)	YES

ENVIRONMENT				
Operating Temperature	0 - 40°C (15 - 25°C recommended for batteries)			
Relative Humidity	90% non-condensing			
Heat Dissipation (full load)	0.58kW	0.69kW	0.79kW	1.02kW

GENERAL DATA	
Colour	Light Grey
Audible Noise	<52dBA @ 1m
Enclosure Protection	IP20
Compliance	European Directives: L V 73/23/EC and 93/68/EC Low voltage directive EMC 2004/108/EC and 89/336/EC Electromagnetic compatibility directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2 Classification according to IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111

WEIGHTS AND DIMENSIONS				
Weight (kg)	180	182	190	195
Dimensions (hwd) (mm)	930 x 320 x 840			

Optional Extras

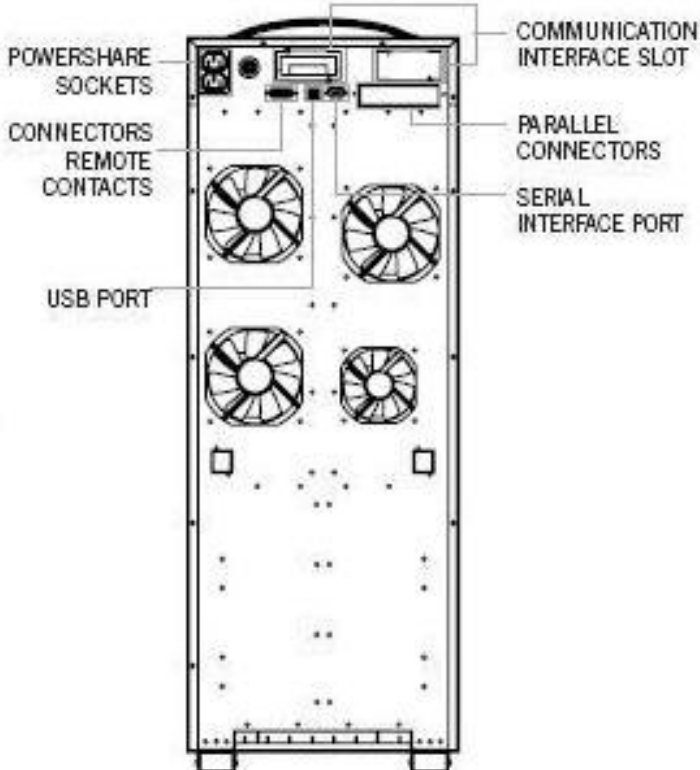
- SNMP Network Interface Card
- Relay Card (Volt-free contacts)
- Parallel Redundant Operation
- Separate Bypass Input Supply
- Galvanic Isolation Transformers
- External Manual Bypass Switch
- Extended Battery Back-Up Times
- Service and Maintenance Plans

Modes Of Operation

- **ON-LINE** The inverter is on-line at all times to ensure the load is fully protected.
- **ECONOMY** The load is powered from the bypass. If the mains deviate outside tolerance, the load is transferred to inverter. When the mains return within tolerance, the load is re-transferred to bypass.
- **SMART ACTIVE** The UPS decides whether to operate in economy or on-line mode depending upon the quality of the mains supply.
- **STANDBY-OFF** The load is not powered until a mains failure occurs, at which time the load is powered by the inverter using battery power.



AMP 10-31
AMP 12-31
AMP 15-31
AMP 20-31



Above: Remote Alarm Panel
Below: Screenshot of software.

