



X₃ MPp Series

5-100kVA / 220 Vdc

THREE-PHASE IN / SINGLE-PHASE OUT

DOUBLE CONVERSION ON-LINE INDUSTRIAL UPS

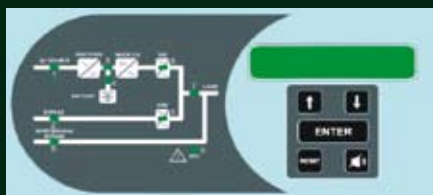


The MPp Series is a ruggedised version. Its an on-line double conversion UPS, designed to protect AC loads from any disturbances from the AC Mains power supply.

The power conversion to AC stabilized voltage is monitored by means of IGBT modules, assuring high performance in terms of efficiency, harmonics distortion and voltage stability.

The modular and flexible design allows easy configuration of the system according to the customer technical requirements.

The system is provided with a digital mimic control panel, displaying the operational status of the UPS (signals, alarms, meters, history events). Serial interfaces are available for remote control of the UPS. Upon request supervision application software is available for monitoring via PC.



MAIN FEATURES

- Industrial layout
- Easy maintenance/front access
- LCD multifunctional mimic control panel
- IGBT Technology (PWM)
- Microprocessor control & supervision
- Large size (up to 100kVA) in reduced space
- Input galvanic isolation
- Reduced output THD with non linear load
- Remote monitoring via SPDT contacts
- EPO (Emergency Power Off)

MAIN OPTIONS

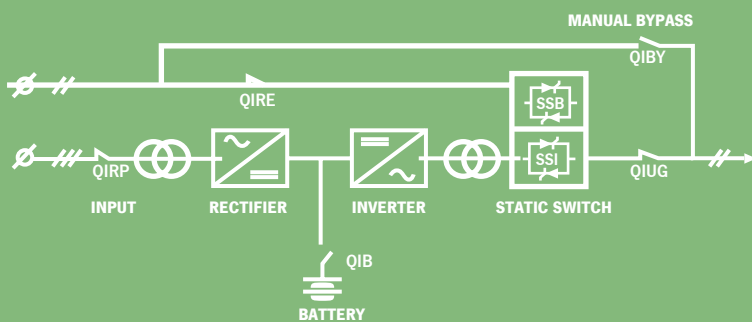
- Bypass line isolation transformer & AC/AC voltage regulator
- Additional input THD filters
- Redundant ventilation
- 12 pulse rectifier
- Active parallel redundant and parallel hot-standby configuration (n+1 units)
- AC & DC distribution panels
- External EEXD battery protection box
- AC & DC earth fault alarm
- Internal lighting
- Internal heater
- Temperature compensation of battery voltage
- Remote monitoring via PC/RS232/RS485
- IBM AS400 interface card (CP-NET)
- MODBUS protocol
- SNMP protocol



Technical Specifications:

MODEL	MPp-5	MPp-10	MPp-15	MPp-20	MPp-30	MPp-40	MPp-50	MPp-60	MPp-80	MPp-100
Size(kVA) Cosphi=0.8	5	10	15	20	30	40	50	60	80	100
Input Voltage Vac	3Phase 400Vac ± 10% 50/60Hz ±5%									
Bypass Line Input Voltage	230Vac 1 Phase ± 10% 50/60Hz ±6% (According to Inverter Output Voltage)									
Battery Voltage	220Vdc (Range 176-325)									
Output Voltage	1 Phase 220-230-240 Vac									
Harmonics Distortion	<1.5% with linear load <5% with non-linear load as per standard									
Crest Factor	3:1 without derating									
Frequency	50-60Hz (selectable) with variation range ±2Hz									
Overload	125% for 10min, -150% for 1min. Pn (load on inverter) 150% Pn continuous (load bypass line)									
Static Stability	±1% (load on inverter)									
Dynamic Stability	±5% with recovery to 2% in 40ms									
Efficiency AC-AC (%)	81	83	85	85	86	86	86	86	86	86
Noise Level 1 m (dBA)	<72									
Dimensions(mm) W	690	690	690	690	690	815	815	915	915	915
H	1345	1345	1345	1345	1345	1670	1670	2100	2100	2100
D	865	865	865	865	865	820	820	950	950	950
Weight (Kg)	360	390	450	490	560	680	770	855	920	1050
Static Load (Kg/m ²)	600	650	750	817	933	1015	1150	983	1057	1207
Protection Degree	IP20 (others as options)									
Color	RAL 7035 (other RAL, BS Standard, Munsell as option)									
Operating Temperature	0-40 deg C									
Operating Altitude	1000 meter without derating									

One Line Diagram



STANDARDS

Low Voltage Assemblies	IEC 439-1, 439-2, 439-3
Semiconductor Convertors	IEC 146-1-1, 146-1-3, 146-2
Power Transformers	IEC 76
Degree of Protection	IEC 529
Safety (CE marking)	IEC EN 62040-1
Electromagnetic Compatibility (CE marking)	EN 50091-2
Test and Performance	IEC EN 62040-3