Master MPS

Transformer Based High Spec

The Aros Riello MPS Transformer Based UPS for maximum reliability and load protection, galvanic isolation of the inverter's connected load with simple module addition paralleling capability for load expansion and redundancy.

Master MPS - 3 PHASE INPUT AND 1 PHASE OUTPUT
RANGE: 10 - 120 kVA 0.9 PF RATED

MPM 10 KVA (9 KW), MPM 15KVA (13.5 KW),
MPM 20KVA (18 KW), MPM30 KVA (27 KW),
MPM40 KVA (36 KW), MPM 60KVA (54 KW),
MPM80 KVA (72 KW), MPM100 KVA (90 KW),
MPM 120KVA (108KW)

Master HP - 3 PHASE INPUT AND 3 PHASE OUTPUT
RANGE: 10 - 200 kVA 0.9 PF RATED

MPT 10 KVA (9 KW), MPT 15KVA (13.5 KW),
MPT 20KVA (18 KW), MPT30 KVA (27 KW),
MPT40 KVA (36 KW), MPT 60KVA (54 KW),
MPT80 KVA (72 KW), MPT100 KVA (90 KW),
MPT 120KVA (108KW), MPT160 KVA (144 KW) AND
MPT200 KVA (180 KW)

Total power protection for all types of single and three phase critical loads; including data centres, industrial processes, telecommunications, security, and electro-medical systems.

The Master MPS online double conversion transformer based series UPS ensures maximum protection and power quality to guarantee load protection and uptime during blackouts and outages.

The Master MPS UPS is an on-line double conversion UPS (VFI SS 111 - IEC EN 62040-3) with a transformer isolated inverter.

The Master MPS UPS is specifically designed with a large rectifier that enables it to properly charge its correctly sized, cyclic battery under a repetitive outage basis including rolling blackouts, for all types of applications.

The rugged and reliable design of the Master MPS UPS makes it the ideal choice for the harsh African grid. It ensures maximum reliability especially when it is supplying high demand loads such as medical scanners and industrial machines such as plasma cutters, while still being able to supply very clean output to the most sensitive loads such as IT all at a very competitive initial capital outlay.

The Master MPS UPS makes supplying the UPS from generator sets simple and effective, as well as offering options such as preventing the battery from charging while on generator operation. The power walk-in feature on rectifier startup prevents inrush currents and thus places less demand on the supply source. This is especially useful when supply is provided by a backup generator, resulting in a smaller generator being necessary.

Flexibility

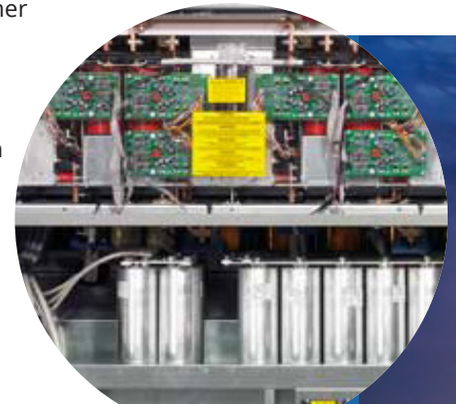
Master MPS UPS is suitable for a wide range of applications including challenging industrial environments, medical imaging equipment in hospitals, and critical IT equipment in the most demanding of data centres.

Master MPS UPS range sinewave output and flexibility ensures that it is suitable for supplying all load types whether inductive, such as blade servers (lagging power factor up to 0.8), or capacitive, such as a computer power supply (leading power factor up to 0.9), without any need for derating. Its high crest factor ability ensures it can withstand peak loads with ease even under power failure conditions.

The Master MPS UPS has a large range of options and accessories making it easily adaptable to the most complex configurations and system architecture, including efficient local and remote management. This flexibility guarantees maximum power availability, with parallel capability, to offer both redundancy and allow for load expansion without interrupting the existing installation by addition of modules of the same model and rating.

Battery care system:

The Master MPS UPS offers maximum battery care to ensure optimal battery life expectancy and performance. Due to its large rectifier, this UPS model is capable of charging all types of battery designs and technologies, including, but not limited to, the popular Valve regulated



Master MPS

lead acid (VRLA) battery using absorbed glass matt (AGM) technology as well as GEL technology; both of which are environmentally friendly and easily recycled. It is also compatible with all types of vented lead-acid technologies, NiCad, LiPhO4 and many others.

Specific solutions

The Master MPS UPS is easily adapted to meet the UPS user's most specific needs. The Standby Systems technical services and projects teams in South Africa are ready to provide assistance and advice on all types of UPS applications on a country-wide basis as well as support sub-Saharan Africa.

Advanced user friendly communications

- Advanced multi-platform communications for all operating systems and network environments: the standard freely downloadable (for most operating systems) Power Shield 3 remote monitoring and shutdown software included for Windows operating systems 10, 8, 7, Hyper-V, 2016, 2012, and previous versions, Mac OS X, Linux, VMWare ESXi, Citrix XenServer and other Unix operating systems.
- There are many network interfaces that support popular operating systems such as programmable potential free contacts, Netman 204 for SNMP and Modbus over IP, JJBUS, ProfiBus, Modbus/JBUS interface over RS485 and many others.
- 2 slots for the installation of selective communications accessories; e.g. network adapters, potential free contacts, and such.
- Input for the connection of the auxiliary contacts for an external manual bypass
- Input for synchronisation to an external source
- A graphic display panel for remote connection.

Service and support

The Riello Master MPS is fully supported all over South Africa and in Sub Saharan Africa. Its optional advanced interface modules allow for remote access and interrogation by Standby Systems or even the OEM in Italy.

The advanced service software ensures that Standby Systems can interrogate and advise clients on any problematic conditions by way of its multi-level and detailed monitoring, as well as perform post-fault analysis to help prevent any re-occurrence, and improve MTTR.

Models	MPM 10BAT	MPM 15BAT	MPM 20BAT	MPM 30	MPM 40

Input

Nominal Voltage (Vac)	380 / 400 / 415 Vac Three Phase
Voltage Tolerance (V)	400V ± 20% / - 20%
Frequency	45 - 65Hz
Soft Start	0 - 100% in 120 seconds (selectable)
Permitted Frequency Tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)
Standard Equipment Provided	Back feed protection ; separate bypass line link std

Bypass

Nominal Voltage	220 - 230 - 240 Vac single phase + N, 50 or 60Hz (selectable)

Output

Nominal Power	10kVa / 9kW	15kVA / 13,5kW	20kVA / 18kW	30kVA / 27kW	40kVA / 36kW
Number of Phases	MPM 1				
Nominal Voltage	220 - 230 - 240 Vac single phase + N (selectable), 50 or 60Hz				
Static Stability	± 1%				
Dynamic Stability	± 5% in 10 ms				
Voltage Distortion	< 3% with non-linear load / < 1% with linear load				
Crest Factor	3 : 1 Ipeak/Irms				
Frequency Stability on Battery	0.05%				
Overload	110% for 60 min; 125% for 10 min; 150% for 1 min				

Models	MPM 10BAT	MPM 15BAT	MPM 20BAT	MPM 30	MPM 40

Batteries

Type	Elite VRLA AGM / GEL / NiCd / Li-ion / Supercaps, 3 to 5 + 10 year design life
Recharging Method	One level, two level, cyclic recharge (selectable)

Overall Specifications

Weight (kg)	200	220	230	270	302
Dimensions (W x D x H)	555 x 740 x 1400mm				
Communication	Double RS232 + dry contacts + 2 slots for communications interface				
Colour	RAL 7016 dark grey				
Noise level at 1m	60 dBA		62 dBA		
IP Rating	IP20				
SmartActive Efficiency	Up to 98%				
Standards	Directive LV 2014/35/EU - 2014/30/EU; Safety IEC EN 62040-1; EMC IEC EN 62040-2; Performance IEC EN 62040-3				
Classification in Accord with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111				
Mobility	Pallet Jack				

Standby Systems

Models	MPM 60	MPM 80	MPM 100	MPM 120

Input

Nominal Voltage (Vac)	380 / 400 / 415 Vac Three Phase
Voltage Tolerance (V)	400V ± 20% / - 20%
Frequency	45 - 65Hz
Soft Start	0 - 100% in 120 seconds (selectable)
Permitted Frequency Tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)
Standard Equipment Provided	Back feed protection ; separate bypass line link std

Bypass

Nominal Voltage	220 - 230 - 240 Vac single phase + N, 50 or 60Hz (selectable)

Output

Nominal Power	60kVa / 54kW	80kVA / 72kW	100kVA / 90kW	120kVA / 108kW
Number of Phases	MPM 1			
Nominal Voltage	220 - 230 - 240 Vac single phase + N (selectable), 50 or 60Hz			
Static Stability	± 1%			
Dynamic Stability	± 5% in 10 ms			
Voltage Distortion	< 3% with non-linear load / < 1% with linear load			
Crest Factor	3 : 1 Ipeak/Irms			
Frequency Stability on Battery	0.05%			
Overload	110% for 60 min; 125% for 10 min; 150% for 1 min			

Models	MPM 60	MPM 80	MPM 100	MPM 120

Batteries

Type	Elite VRLA AGM / GEL / NiCd / Li-ion / Supercaps, 3 to 5 + 10 year design life
Recharging Method	One level, two level, cyclic recharge (selectable)

Overall Specifications

Weight (kg)	440	500	580	1000
Dimensions (W x D x H)	800 x 740 x 1400		800 x 800 x 1900	1200 x 800 x 1900
Communication	Double RS232 + dry contacts + 2 slots for communications interface			
Colour	RAL 7016 dark grey			
Noise level at 1m	62 dBA			
IP Rating	IP20			
SmartActive Efficiency	Up to 98%			
Standards	Directive LV 2014/35/EU - 2014/30/EU; Safety IEC EN 62040-1; EMC IEC EN 62040-2; Performance IEC EN 62040-3			
Classification in Accord with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111			
Mobility	Pallet Jack			

Standby Systems

Models	MPT 10BAT	MPT 15BAT	MPT 20BAT	MPT 30	MPT 40

Input

Nominal Voltage (Vac)	380 / 400 / 415 Vac Three Phase
Voltage Tolerance (V)	400V ± 20% / - 20%
Frequency	45 - 65Hz
Soft Start	0 - 100% in 120 seconds (selectable)
Permitted Frequency Tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)
Standard Equipment Provided	Back feed protection ; separate bypass line link std

Bypass

Nominal Voltage	380 - 400 - 415 Vac three phase + N, 50 or 60Hz (selectable)

Output

Nominal Power	10kVa / 9kW	15kVA / 13,5kW	20kVA / 18kW	30kVA / 27kW	40kVA / 36kW
Number of Phases	MPT 3				
Nominal Voltage	380 - 400 - 415 Vac three phase + N (selectable), 50 or 60Hz				
Static Stability	± 1%				
Dynamic Stability	± 5% in 10 ms				
Voltage Distortion	< 3% with non-linear load / < 1% with linear load				
Crest Factor	3 : 1 Ipeak/Irms				
Frequency Stability on Battery	0.05%				
Overload	110% for 60 min; 125% for 10 min; 150% for 1 min				

Models	MPT 10BAT	MPT 15BAT	MPT 20BAT	MPT 30	MPT 40

Batteries

Type	Elite VRLA AGM / GEL / NiCd / Li-ion / Supercaps, 3 to 5 + 10 year design life
Recharging Method	One level, two level, cyclic recharge (selectable)

Overall Specifications

Weight (kg)	228	241	256	315	335
Dimensions (W x D x H)	555 x 740 x 1400mm				
Communication	Double RS232 + dry contacts + 2 slots for communications interface				
Colour	RAL 7016 dark grey				
Noise level at 1m	60 dBA				
IP Rating	IP20				
SmartActive Efficiency	Up to 98%				
Standards	Directive LV 2014/35/EU - 2014/30/EU; Safety IEC EN 62040-1; EMC IEC EN 62040-2; Performance IEC EN 62040-3				
Classification in Accord with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111				
Mobility	Pallet Jack				

Standby Systems

Models	MPT 60	MPT 80	MPT 100	MPT 120	MPT 160	MPT 200

Input

Nominal Voltage (Vac)	380 / 400 / 415 Vac Three Phase
Voltage Tolerance (V)	400V ± 20% / - 20%
Frequency	45 - 65Hz
Soft Start	0 - 100% in 120 seconds (selectable)
Permitted Frequency Tolerance	± 2% (selectable from ± 1% to ± 5% from front panel)
Standard Equipment Provided	Back feed protection ; separate bypass line link std

Bypass

Nominal Voltage	380 - 400 - 415 Vac three phase + N, 50 or 60Hz (selectable)

Output

Nominal Power	60kVa / 54kW	80kVA / 72kW	100kVA / 90kW	120kVA / 108kW	160kVA / 144kW	200kVA / 180kW
Number of Phases	MPT 3					
Nominal Voltage	380 - 400 - 415 Vac three phase + N (selectable), 50 or 60Hz					
Static Stability	± 1%					
Dynamic Stability	± 5% in 10 ms					
Voltage Distortion	< 3% with non-linear load / < 1% with linear load					
Crest Factor	3 : 1 Ipeak/Irms					
Frequency Stability on Battery	0.05%					
Overload	110% for 60 min; 125% for 10 min; 150% for 1 min					

Models	MPT 60	MPT 80	MPT 100	MPT 120	MPT 160	MPT 200

Batteries

Type	Elite VRLA AGM / GEL / NiCd / Li-ion / Supercaps, 3 to 5 + 10 year design life
Recharging Method	One level, two level, cyclic recharge (selectable)

Overall Specifications

Weight (kg)	460	540	600	610	690	790
Dimensions (W x D x H)	800 x 740 x 1400		800 x 800 x 1900			
Communication	Double RS232 + dry contacts + 2 slots for communications interface					
Colour	RAL 7016 dark grey					
Noise level at 1m	62 dBA		65 dBA	68 dBA		
IP Rating	IP20					
SmartActive Efficiency	Up to 98%					
Standards	Directive LV 2014/35/EU - 2014/30/EU; Safety IEC EN 62040-1; EMC IEC EN 62040-2; Performance IEC EN 62040-3					
Classification in Accord with IEC 62040-3	(Voltage Frequency Independent) VFI - SS - 111					
Mobility	Pallet Jack					

Standby Systems