



CRITICAL POWER SUPPLIES

Riello Multi Sentry Series



SINGLE/THREE PHASE | 10 - 20KVA | DATA CENTER | ONLINE | UPS

Riello Multi Sentry Online UPS 10 - 20kVA

Overview

The Multi Sentry series is ideal for protecting data centres and telecommunications systems, IT networks and critical systems in general, where the risks connected with poor energy supply can compromise the continuity of activities and services. The Multi Sentry series is available in 10-12-15-20 kVA models with three-phase/single-phase input and single-phase output, and 10-12-15-20 kVA models with three-phase input and output and on-line double conversion technology in accordance with VFI-SS-111 classification (as set out in standard IEC EN 62040-3). Multi Sentry is designed and built using state-of-the-art technology and components. It is controlled by a DSP (Digital Signal Processor) microprocessor, to provide maximum protection to the powered loads with no impact on downstream systems, and optimised energy savings.

Features

Maximum reliability and availability

Distributed parallel configuration of up to 8 units per redundant (N+1) or power parallel system. The UPS continue to operate in parallel even if the connection cable is interrupted (Closed Loop).

Installation flexibility

MSM /MST 10,12,15,20 is available in two different cabinet frames:

- 1320mm high housing: batteries to for back up time up to thirty minutes on 20 kVA or Isolation transformer;
- 930 mm high compact version which secure the UPS range features in an extremely reduced size; The single phase output (MCM/MSM 10, 12, 15, 20 kVA) thanks to Its highly flexible design allows full compatibility with both three-phase and single-phase power supplies, thus eliminating problems in connecting the UPS to the system.

Operation flexibility

The compact version of the Multi Sentry (MCM/MCT 10, 12, 15, 20 kVA) features embedded auxiliary outlets for intelligent utilities supply. The "energy share" outlet is driven by relays which are customizable depending on the installation or customer needs, making it more suitable for protecting different critical load. On the MSM/MST Multi Sentry version the same functionality is available as optionally.

Advanced communications

Multi Sentry is equipped with a back-lit graphic display (240x128 pixels) providing UPS information, measurements, operating states and alarms in different languages. It can also display wave forms and voltage/current forms. A wide range of communications options are available to ensure global and comprehensive UPS monitoring. Please refer to option table for details.



Riello Multi Sentry MCM - Pictured above

Features

- One-level voltage recharge, typically used for widely available VRLA AGM batteries
- Two-level voltage recharge according to IU specification
- Charge blocking system to reduce electrolyte consumption and lengthen the life of VRLA batteries.
- 1320mm high housing: batteries to for back up time up to thirty minutes on 20 kVA or Isolation transformer;
- 930 mm high compact version which secure the UPS range features in an extremely reduced size;
- Input current distortion < 3%
- Input power factor 0.99

Riello Multi Sentry Online UPS

10 - 20kVA

MODELS	MCM/MSM 10 ^{BAT}	MCM/MSM 12 ^{BAT}	MCM/MSM 15 ^{BAT}	MCM/MSM 20 ^{BAT}	MCT/MST 10 ^{BAT}	MCT/MST 12 ^{BAT}	MCT/MST 15 ^{BAT}	MCT/MST 20 ^{BAT}
INPUT								
Nominal voltage	380-400-415 Vac three-phase + N / 220-230-240 Vac single-phase + N				380-400-415 Vac three-phase + N			
Nominal frequency	50/60 Hz							
Frequency tolerance	40 - 72 Hz							
Power factor at full load	0,99							
Current distortion	THDI ≤ 3%							
BYPASS								
Nominal voltage	220-230-240 Vac single-phase + N				380-400-415 Vac three phase + N			
Number of phases	13				+ N			
Voltage tolerance (Ph-N)	180 - 264 V (selectable)							
Nominal frequency	50 or 60 Hz (selectable)							
Frequency tolerance	±5 (selectable)							
Bypass overload	125% for 60 minutes, 150% for 10 minute							
OUTPUT								
Nominal power (kVA)	10	12	15	20	10	12	15	20
Active power (kW)	9	10,8	13,51	89		10,8	13,51	8
Power factor	0,9							
Number of phases	13				+ N			
Nominal voltage (V)	220-230-240 Vac single-phase + N (selectable)				380-400-415 Vac three-phase + N (selectable)			
Static variation	± 1%							
Dynamic variation	± 3%							
Crest factor	3 : 1 I _{peak} /I _{rms}							
Voltage distortion	≤ 1% with linear load / ≤ 3% with non-linear load							
Frequency	50/60 Hz							
Frequency stability during battery operation	0,01%							
BATTERIES								
Type	VRLA AGM/GEL/NiCd/Li-ion/Supercaps							
Recharge time ⁶	hours							
INFO FOR INSTALLATION								
Weight without batteries (kg) (MCM/MSM)	80/105	82/110	90/115	95/120	80/105	82/110	90/115	95/120
Dimensions (WxDxH) (mm)	320 x 840 x 930 (MCM/MCT version) / 440 x 850 x 1320 (MSM/MST version)							
Communications	3 slots for communications interface / USB / RS232							
Operating temperature ⁰	°C / +40 °C							
Relative humidity	90% non-condensing							
Colour	Dark grey RAL 7016							
Noise level at 1 m [dBA ±2] Smart Active	< 40 dBA							
IP rating	IP20							
Smart Active efficiency	up to 98%				up to 99%			
Standards	European Directives: L V 2006/95/CE low voltage Directive EMC 2004/108/CE electromagnetic compatibility Directive Standards: Safety IEC EN 62040-1; EMC IEC EN 62040-2 C2 Classification in accordance with IEC 62040-3 (Voltage Frequency Independent) VFI - SS - 111							
Moving the UPS	castors / transpallet (10 - 20 kVA)							

^{BAT} Also available with internal batteries