

Power Systems & Controls

Series MC -- Hybrid Rotary UPS 25--300kVA



The Series MC is designed to provide the same uncompromising reliability as PS&C's large rotary UPS systems, but in a package suitable for the computer

room or the plant floor. The Series MC UPS includes the best features of rotary power systems as well as the ultimate in power protection. The Series MC provides for 25 to 300kVA of clean, conditioned, uninterruptible power for critical loads such as data centers, emergency facilities and industrial processes.

The standard system is complete and includes:

- 100% on-line operation
- Digital metering and controls
- 100% load isolation
- Automatic system bypass
- PLC control and internal fault monitors
- Input voltage tolerance of +10%, -20% without use of battery
- Electrically operated input and output circuit breakers
- Input frequency tolerance from 45 Hz to 66 Hz (without battery)
- Battery systems from 5 minutes to 4 hours
- Series EMP Flywheel ready

Standard Equipment Features

- AC induction motor
- Brushless synchronous generator
- +10% output voltage adjustment
- Over/under output voltage protection
- Sound and vibration isolated enclosure
- Vertical motor-generator configuration for minimum footprint (some models)
- Battery float voltage automatically adjusts for low AC input voltages
- Superior motor starting capability
- Adjustable battery current limit
- Input THD filter -- meets IEEE 519
- Air conditioning not required
- Overload protection
- Touch screen interface
- Manually activated, timed battery equalize function

Optional Features

- Remote monitor (Status & Control)
- Remote touch screen (Standard & Fiber optic)
- Modem, serial port & profibus
- Single phase output
- Maintenance bypass
- Paralleling capability
- Remote Communications
- "Turn Key" Installation



System Specifications

*Note: System performance shown is typical and is dependent upon M-G sizing, options desired, and loading of the system.

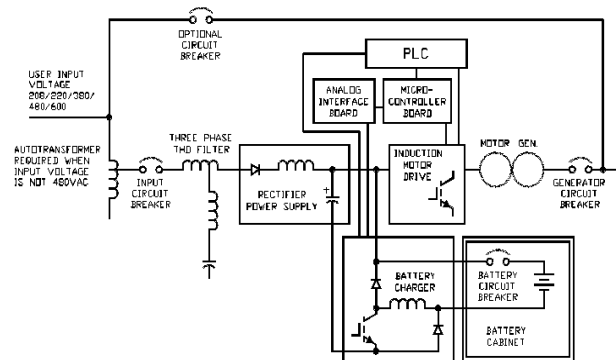
INPUT		OUTPUT	
Nominal Voltage Available		Nominal Voltage Available	
➤ @ 60 Hz	208, 240, 480, 600	➤ @ 60 Hz	208, 240, 480, 600
➤ @ 50 Hz	380, 415	➤ @ 50 Hz	380, 415
➤ Phase	3 Phase 4 Wire+ Ground	➤ @ 400 Hz	208, 480
➤ Frequency Tolerance	57 to 63 or 47 to 53	➤ Phase	3 Phase 4 Wire + Ground
➤ Magnitude Tolerance		➤ Frequency Regulation	Input Dependent
➤ Continuous	+10%, -20%	➤ Adjustment	± 10%
➤ Transient	1500v for 10 ms	➤ Regulation	
Power Factor		➤ Transients	50% Block Load +/-8%
➤ Power Factor	0.95 lagging @ full load	➤ Recovery Time	0.5 within 0.5 Seconds
➤ Starting Inrush	3 x input kVa	➤ Steady State	+/-0.5% Δ 90° F
Battery		THD (Total Harmonic Distortion)	
➤ Type	Sealed, low maintenance, Others optional	➤ Single	2% Max
➤ Number of Cells	252 nominally=567 VDC	➤ Total	3% Max
➤ Float Voltage	2.25 Volts/Cell ± 0.05 Volts/Cell	Phase Separation	
➤ Equalize	1.06 x Float Voltage	➤ Balanced Load	120° +/- 1°
		➤ 25% Unbalance	120° +/- 3°

SERIES MC RATINGS, DIMENSIONS & WEIGHTS					
60HZ	KVA /KW	L (CM)	W (CM)	H (CM)	W (KGS)
UNDER 30		CONSULT FACTORY			
30 / 24		36 (91.5)	34.5 (87.6)	76 (193)	1950 (884)
50 / 40		51 (130)	34.5 (87.6)	76 (193)	3000 (1361)
75 / 60		51 (130)	34.5 (87.6)	76 (193)	3950 (1791)
100 / 80		114 (289.6)	34.5 (87.6)	76 (193)	4800 (2177)
125 / 100		114 (289.6)	34.5 (87.6)	76 (193)	5200 (2359)
150 / 120		114 (289.6)	34.5 (87.6)	76 (193)	5500 (2495)
200 / 160		114 (289.6)	34.5 (87.6)	76 (193)	6100 (2767)
250 / 200		114 (289.6)	34.5 (87.6)	76 (193)	6410 (2907)
300 / 240		120 (304.8)	34.5 (87.6)	79.5 (201.9)	7073 (3215)
50HZ	KVA /KW	W (CM)	L (CM)	H (CM)	W (KGS)
25 / 20		39 (91.5)	34.5 (87.6)	76 (193)	1950 (884)
41.5 / 33		51 (130)	34.5 (87.6)	76 (193)	3000 (1361)
62.5 / 50		51 (130)	34.5 (87.6)	76 (193)	3950 (1791)
83 / 66.5		114 (289.6)	34.5 (87.6)	76 (193)	4800 (2177)
104 / 83		114 (289.6)	34.5 (87.6)	76 (193)	5200 (2359)
125 / 100		114 (289.6)	34.5 (87.6)	76 (193)	5500 (2495)
166.5 / 133		114 (289.6)	34.5 (87.6)	76 (193)	6100 (2767)
208 / 166.5		114 (289.6)	34.5 (87.6)	76 (193)	6410 (2907)
250 / 200		120 (304.8)	34.5 (87.6)	79.5 (201.9)	7073 (3215)

* Battery Cabinet dimensions depends upon runtime required

Overload Capacity	
➤ 100% Rating	Continuous
➤ 110%	2 Hours
➤ 125%	10 Minutes
➤ 150%	1 Minutes
➤ Power Factor	0.8

ENVIRONMENT	
➤ Temperature	0° -104° F (0° -40° C)
➤ MG	0° -120° F
➤ Console	32° -104° F
➤ Altitude	0 to 3000 meters (0 to 5000 ft)
➤ Humidity	0 to 95% non-condensing
➤ Noise Level	65 dBa at 1.5 meters (5 ft)



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& CONTROLS
THE POWER IS ON!