12-1079



# TRUE **FRONT ACCESS HIGH RATE MAX**

**UPS 12-355MRF** 





Valve Regulated Lead Acid (VRLA) Battery Series **Designed for UPS Standby Power Applications** 

# **FEATURES & BENEFITS**

# **APPLICATIONS**

- · Data Centers
- Network Operations Centers
- Industrial Process Control **Facilities**
- · Internet Housing Sites
- Semiconductor Manufacturing
- · Banks & Financial Markets
- · Power Generation Plants
- · Hospitals & Testing Laboratories
- Emergency 911 Response Centers

- True Front Access threaded copper alloy inserts for reduced maintenance and increased safety
- Terminal versatility ease of diagnostic readings with C&D Ohmic Ring®
- Innovative front terminal design maximizing energy density with direct connect extrusion fusion weld technology
- Reduced headspace driving higher energy density, in cabinet or rack applications
- Removable handles for ease of installation
- Thermally welded case-to-cover bond to énsure a leak-proof seal
- Flame-retardant polypropylene case and cover compliant with UL94 V-0 with an Oxygen Limiting Index of greater than 28
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of over 99%

- Optional True Front Access gas collection system
- Multicell design for ease of installation and maintenance
- UL-recognized component
- Compliant to major global specifications
  - UL1778, 924, 1989 BS 6290-4 IEC 896-2 UL94 V-0
- Not restricted for air transport -Complies with IATA/ICAO Special Provision A67
- Not restricted for surface transport - classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189
- · Not restricted for water transport
  - classified as non-hazardous material per Amendment 27
- 3 Year Full Warranty (refer to Dynasty warranty card, 41-9027)

## **SPECIFICATIONS**

	Constant Power Discharge Ratings - Watts per cell @ 77°F (25°C)															
	Model Number Voltage		20 hour Rate @		Operating time (in minutes) to 1.67 volts per cell											
	Per Ur	Per Unit	77°F (25°C) to 1.75	5	10	15	20	30	40	50	60	90				
	UPS12-355MRF	12 V	108 Ah	591.3	440.8	358.4	299.7	229.4	190.5	164.9	146.6	105.6				

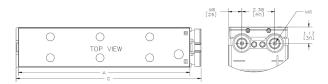
\*Nominal 20 hr rate to 1.75 VPC in Ampere-Hours

12-1079/0814/CD www.cdtechno.com

## **SPECIFICATIONS**

Model	Cells Per Unit	Battery	Weight	Maximum Terminal	Ohms Impendance 60	
Model	Cells Per Offit	lbs	kg	Discharge Current Rating (AMPS)	HZ (Ω)	
UPS12-355MRF	6	80	36	800	0.0030	

## **DIMENSIONS**







Model	-	4	E	3	(			)	E		F		F G		Н	
Model	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
UPS12-355MRF	18.5	469	19.5	496	20.1	511	18.5	470	8.5	216	9.3	235	4.3	110	4.2	107

<sup>\*</sup>All dimensions in inches and (millimeters). All dimensions are for reference only. Contact a C&D representative for complete dimensional information.

Operating Temperature Range with temperature compensation	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Nominal Operating Temperature Range	+68°F (20°C) to +80°F (27°C)
Recommeded Maximum Charging Current	C/5 amperes @ 20 Hr rate
Float Charging Voltage	13.5 to 13.8 VDC average per 12V unit
Maximum AC Ripple Charger	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.  Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C/20
Self Discharge	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures. See C&D brochure 41-7272, Self-Discharge and Inventory Control for details.
Equalize charge and cycle service voltage	14.40 to 14.80 VDC average per 12V unit @ 77°F (25°C)
Terminal: Insertered - Inter-unit connector provided	Threaded copper alloy insert terminal to accept M6 bolt
Terminal Hardware Initial Torque	110 inlbs. (12.4 N-m)

## **UPS 12-355MRF**

		C	onstant Pow	er Discharge	Ratings - W	atts Per Cell	@ 77°F (25°C	C)					
Operating Time to End Point Voltage (in minutes)													
End Point Volts/Cell	5	10	15	20	30	40	45	50	60	90			
1.75	543.9	411.8	334.9	283.3	220.6	183.8	170.6	159.6	142.2	103.1			
1.70	578.3	431.1	350.5	294.0	226.0	188.0	174.4	163.0	145.1	104.7			
1.67	591.3	440.8	358.4	299.7	229.4	190.5	176.6	164.9	146.6	105.6			
1.65	600.6	447.7	364.0	303.7	231.7	192.5	178.5	166.8	148.3	106.5			

Note: Specifications subject to change without notification. Above ratings do not include interunit connector voltage drops

# TECHNOLOGIES, INC.

1400 Union Meeting Road P.O. Box 3053 • Blue Bell, PA 19422-0858 (215) 619-2700 • Fax (215) 619-7899 • (800) 543-8630 customersvc@cdtechno.com www.cdtechno.com Any data, descriptions or specifications presented herein are subject to revision by C&D Technologies, Inc. without notice. While such information is believed to be accurate as indicated herein, C&D Technologies, Inc. makes no warranty and hereby disclaims all warranties, express or implied, with regard to the accuracy or completeness of such information. Further, because the product(s) featured herein may be used under conditions beyond its control, C&D Technologies, Inc. hereby disclaims all warranties, either express or implied, concerning the fitness or suitability of such product(s) for any particular use or in any specific application or arising from any course of dealing or usage of trade. The user is solely responsible for determining the suitability of the product(s) featured herein for user's intended purpose and in user's specific application.

Power Solutions

12-1037



# TRUE FRONT ACCESS HIGH RATE MAX UPS 12-615MRF UPS 12-700MRF



# Valve Regulated Lead Acid (VRLA) Battery Series Designed for UPS Standby Power Applications

#### **FEATURES & BENEFITS**

### **APPLICATIONS**

- · Data Centers
- · Network Operations Centers
- Industrial Process Control Facilities
- Internet Hosting Sites
- Semiconductor Manufacturing
- · Banks & Financial Markets
- · Power Generation Plants
- Hospitals & Testing Laboratories
- Emergency 911 Response Centers

- 10 Year Design Life @ 25°C
- True Front Access threaded copper alloy inserts for reduced maintenance and increased safety.
- Patented Long Life Alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life.
- Terminal versatility ease of diagnostic readings with C&D Ohmic Ring®
- Innovative front terminal design maximizing energy density with direct connect extrusion fusion weld technology.
- Reduced headspace requirements resulting in higher energy density for cabinet or rack applications
- Removable handles for ease of installation
- Thermally welded case-to-cover bond to ensure a leak-proof seal.

- Flame-retardant polypropylene case and cover compliant with UL94 V-0 with an Oxygen Limiting Index of greater than 28.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of over 99%.
- Flame-arresting, one-way pressure-relief vent for safety and long life.
- Complies with UL1778, 924, 1989 and 94 V-0. BS6290-4, IEC-896-2.
- · UL-recognized component.
- Multicell design for ease of installation and maintenance.
- Not restricted for air transport -Complies with IATA/ICAO Special Provision A67.
- Not restricted for surface transport classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Not restricted for water transport classified as non-hazardous material per Amendment 27.

### **SPECIFICATIONS**

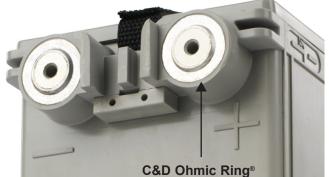
				Constant Power Discharge Ratings - Watts per Cell @ 77°F (25°F)										
Model	Voltage	AH	AH Operating Time (in minutes) to 1.67 Volts per Cell											
Wodei	voitage	20 hr*	5	10	15	20	30	40	50	60	90			
UPS12-615MRF	12	176	939	750	614	516	390	313	262	228	166			
UPS12-700MRF	12	206	1059	854	697	575	433	349	294	255	183			

\*Nominal 20 hr rate to 1.75 VPC in Ampere-Hours @ 25°C

12-1037/1014/CD www.cdtechno.com

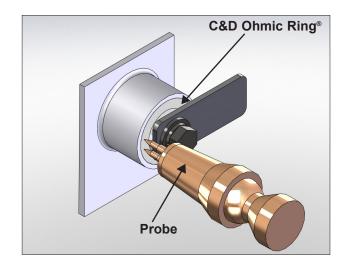
# INTRODUCING A UPS FRONT ACCESS BATTERY WITH TRUE FRONT ACCESS TERMINALS

- Direct welded front facing terminals
  - Uses proven Dynasty Extrusion Fusion welding process for high reliability
  - Provides most efficient current path for excellent high rate performance
  - No bolted on "L" brackets which try to make a top terminals battery into a front terminal battery
  - One less bolted connection that requires maintenance, minimizes resistance, that can lead to poor string performance
- Designed as a UPS battery from the ground up to efficiently handle high rate discharges
  - Not a converted telecom front access battery
- Raised Terminals for ease of maintenance and access to C&D Ohmic Ring®



# C&D Ohmic Ring®

- Large surface area for direct access to terminals for accurate ohmic measurements
  - No more taking readings from bus bars or hardware which can lead to substantial errors
- Provides consistent and accurate measuring location
  - No guessing of the location used for the base line reading
- Ideally sized for use with standard monitor probes on fully installed systems
- The Ohmic Ring design is the only terminal configuration in which micro-ohm connection resistances can be taken as required by standard maintenance programs.



# The Dynasty True Front Access UPS Battery - The Better UPS Battery Solution

- · Eliminate hard to service top terminal batteries with a full front access solution
- Higher watts per cell allows a reduction of a parallel string for most common UPS configurations, providing a reduced footprint solution
- Maintenance is significantly easier and safer with all required service points front accessible reducing both time and cost of periodic servicing
- As a 12V battery design, the UPS12-615MRF and UPS12-700MRF models easily integrate with existing battery monitoring equipment.

## **SPECIFICATIONS**

Operating Temperature Range with temperature compensation	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Nominal Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit	C <sub>20</sub> /5 amperes (35.2, 41.2)
Float Charging Voltage	13.5 to 13.8 VDC average per 12V unit @ 77°F (25°C)
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.  Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C <sub>20</sub> /20
Self Discharge	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures. See C&D brochure 41-7272, Self-Discharge and Inventory Control for details.
Equalize charge and cycle service voltage	14.40 to 14.80 VDC average per 12V unit @ 77°F (25°C)
Terminal: Inserted - Inter-unit connector provided	Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt
Terminal Hardware Torque	110 inlbs. (12.4 N-m)

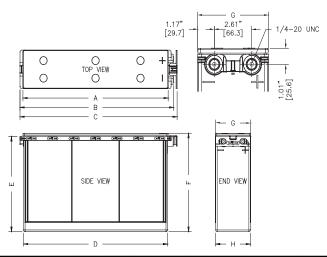
## **SPECIFICATIONS**

Model	Cells per		tery ight	Maximum Terminal Discharge Current	Short Circuit Current	Ohms 60 Hz (Ω)
	Unit	lbs	kg	Rating (Amps)	(Amps @ 0.1 sec)	
UPS12-615MRF	6	115	53	800	4500	0.0020
UPS12-700MRF	6	131	60	800	4600	0.0021

# **OHMIC VALUES**

	Typical Ohmic	Measurement Val	ues*								
HP Alber Midtronics AVO Biddle											
Model	milli-Ohms @ 60Hz	micro-Ohms	Mhos	milli-Ohms							
UPS12-615MRF	2.0	Limited Data	2400	2.3							
UPS12-700MRF	2.1	3480	2500	2.4							

<sup>\*</sup> Per IEEE 1188-2005, Internal ohmic values are useful as a trending tool. To use these readings effectively, accurate baseline readings should be taken after about six months of battery operation. Internal ohmic readings taken without the benefit of baseline data may be difficult to interpret and of limited value. Values provided are for reference only.



	Α		E	3	0	;		)	ı	E	ı	F	0	Ü	ŀ	1
Model	in	mm	in	mm	in	mm										
UPS12-615MRF	20.35	516.9	21.51	546.3	22.01	559.1	20.16	512.2	10.73	272.5	11.14	283.0	4.95	125.7	4.86	123.4
UPS12-700MRF	20.35	516.9	21.51	546.3	22.01	559.1	20.16	512.2	12.19	309.6	12.60	320.0	4.95	125.7	4.86	123.4

<sup>\*</sup> All dimensions in inches and [millimeters]. All dimensions are for reference only. Contact a C&D Representative for complete dimensional information.

### **UPS12-615MRF**

	Constant Power Discharge Ratings - Watts Per Cell @ 77°F (25°C)													
Operating Time to End Point Voltage (in minutes)														
End Point Volts/Cell	5	10	15	20	30	40	45	50	60					
1.75	787.2	677.4	573.0	486.2	369.4	299.8	274.8	254.0	221.2					
1.70	863.3	713.1	594.1	504.1	383.7	309.2	281.9	259.1	223.1					
1.67	938.5	750.9	613.9	515.9	389.8	313.4	285.5	262.3	225.7					
1.65	958.5	771.8	628.4	525.0	393.7	315.5	287.3	263.8	227.0					
1.60	977.7	785.4	638.1	532.1	397.9	318.4	289.7	265.9	228.6					

	Constant Current Discharge Ratings - Amperes @ 77°F (25°F)												
Operating Time to End Point Voltage (in hours)													
End Point Volts/Cell	1	2	3	5	8	10	12	20	24				
1.85	102	62.0	44.2	28.6	19.0	15.6	13.2	8.24	6.95				
1.80	109	64.8	46.5	30.2	20.0	16.4	13.9	8.63	7.26				
1.75	114	66.8	47.9	31.0	20.5	16.8	14.2	8.79	7.39				

Note: Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification. Above ratings do not include inter-unit connector voltage drops. Additional ratings and application information are available in the Battery Selection Program found at www.cdstandbypower.net

### **UPS12-700MRF**

	Constant Power Discharge Ratings - Watts Per Cell @ 77°F (25°C)												
	Operating Time to End Point Voltage (in minutes)												
End Point Volts/Cell													
1.75	821.1	700.8	596.0	512.5	398.3	326.9	300.6	278.5	243.2	177.7			
1.70	961.5	804.0	665.6	559.0	422.4	341.9	312.9	288.7	250.8	181.5			
1.67	1058.8	853.6	697.0	575.3	432.5	349.0	319.0	294.0	254.6	182.9			
1.65	1075.6	866.0	699.2	581.1	436.1	351.8	321.5	296.3	256.7	184.5			
1.60	1097.4	881.5	712.2	592.2	444.1	357.5	326.4	300.5	259.8	186.0			

		Con	stant Curre	nt Dischar	ge Ratings	- Amperes	@ 77°F (2	5°F)		Constant Current Discharge Ratings - Amperes @ 77°F (25°F)											
	Operating Time to End Point Voltage (in hours)																				
End Point Volts/Cell																					
1.85	105	66.1	48.8	32.5	21.9	18.1	15.4	9.67	8.16	2.60											
1.80	116	70.4	51.7	34.4	23.1	19.0	16.2	10.1	8.54	2.70											
1.75																					

Note: Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.

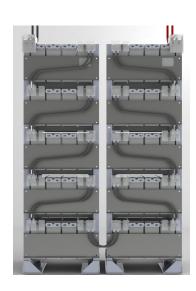
Above ratings do not include inter-unit connector voltage drops. Additional ratings and application information are available in the Battery Selection Program found at www.cdstandbypower.net

#### **BATTERY RACKS:**

- IBC 300% certified racks available up to 5 tiers high
- · Each 5 tier rack holds 20 TFA batteries
- Accessory kits with cables and terminal plates developed for ease of system configuration and installation

### **BATTERY CABINETS:**

- All popular DC links available 120V-480V
- · Supplied with a breaker or fuse per string
- Available in stand-alone or multiple cabinet configurations
- · Online configurator: www.cdtechno.intrapack.com





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12-1115



# TRUE FRONT ACCESS HIGH RATE MAX

**UPS12-410MRXF UPS12-1000MRXF** 





# Valve Regulated Lead Acid (VRLA) Battery Series Designed for UPS Standby Power Applications

### **FEATURES & BENEFITS**

#### **APPLICATIONS**

- · Data Centers
- · Network Operations Centers
- Industrial Process Control Facilities
- · Internet Housing Sites
- · Semiconductor Manufacturing
- · Banks & Financial Markets
- · Power Generation Plants
- Hospitals & Testing Laboratories
- Emergency 911 Response Centers

- · 10 Year Design Life @ 25°C
- True Front Access threaded copper alloy inserts for reduced maintenance and increased safety
- Terminal versatility ease of diagnostic readings with C&D Ohmic Ring®
- Innovative front terminal design maximizing energy density with direct connect extrusion fusion weld technology
- Reduced headspace driving higher energy density, in cabinet or rack applications
- Removable handles for ease of installation
- Thermally welded case-to-cover bond to ensure a leak-proof seal
- Patented Long Life Alloy having the lowest calcium levels in the industry minimizing grid growth, reducing gassing, and extending battery life
- Flame-retardant polypropylene case and cover compliant with

- UL94 V-0 with a Limiting Oxygen Index (LOI) of greater than 28
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of over 99%
- Flame-arresting, one-way pressure-relief vent for safety and long life
- Complies with UL1778, 924, 1989 and 94 V-0. BS6290-4, IEC-896-2
- · UL-recognized component
- Multicell design for ease of installation and maintenance
- Not restricted for air transport Complies with IATA/ICAO Special Provision A67
- Not restricted for surface transport classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189
- Not restricted for water transport classified as non-hazardous material per Amendment 27

## **SPECIFICATIONS**

			Constant Power Discharge Ratings - Watts Per Cell @ 77°F (25°C)										
Model	odel Voltage AH			Operating Time (in minutes) to 1.67 Volts per Cell									
Model	vollage	20 hr*	5	10	15	20	30	40	50	60	90		
UPS12-410MRXF	12	109	701.1	514.6	410.0	339.5	256.0	203.1	169.8	146.6	105.1		
UPS12-1000MRXF	12	254	1520.0	1210.0	1000.	823.7	616.2	491.2	412.0	356.9	256.7		

<sup>\*</sup>True 20 hr rate to 1.75 VPC in Ampere-Hours

12-1115/0614/CD www.cdtechno.com

### **SPECIFICATIONS**

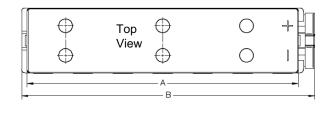
Operating Temperature Range with temperature compensation	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Nominal Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit	C <sub>20</sub> /5 amperes
Float Charging Voltage	13.5 to 13.8 VDC average per 12V unit @ 77°F (25°C)
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.  Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = C/20 @ 20 Hr rate
Self Discharge	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures. See C&D brochure 41-7272, Self-Discharge and Inventory Control for details.
Equalize charge and cycle service voltage	14.40 to 14.80 VDC average per 12V unit @ 77°F (25°C)
Terminal: Inserted - Inter-unit connector provided	Threaded copper alloy insert terminal to accept:M6 bolt (UPS12-410MRXF) M8 bolt (UPS12-1000MRXF)
Terminal Hardware Initial Torque	110 inlbs (12.4 N-m) for UPS12-410MRXF 160 inlbs. (18 N-m) for UPS12-1000MRXF

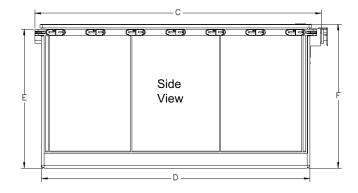
### **SPECIFICATIONS**

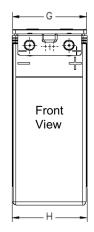
Battery Model	Nominal Voltage Per Unit  Ampere Hour Capacity 20 He Rate @ 77°F (29 to 1.75 Voltz/C		Ampere Hours Capacity 20 Hour Rate @ 68°F (20°C) to 1.80 Voltz/Cell	IEC Short Circuit Current (A)	IEC Resostance (m Ohms)*	Weight Lbs. (kg)
UPS12-410MRXF	12V	109	100	2860	4.4	81.8 (37.1)
UPS12-1000MRXF	12V	254	234	5540	2.3	188 (85.2)

Battery Model	Impendance (mOhms)*	Midtronics Cond. (M hos)*	Short Circuit Currect (AMPS @0.1 sec)	Maximum Terminal Discharge Currect Rating (AMPS)
UPS12-410MRXF	2.37	2000	4900	800
UPS12-1000MRXF	1.47	3700	10100	1000

<sup>\*</sup> Per IEEE 1188-2005, Internal ohmic values are useful as a trending tool. To these reading effectively, accurate baseline readings should be taken after six months of battery operation. Internal ohmic readings taken without the benefit of baseline date may be difficult to interpret and of limited value. Values are provided for reference only.



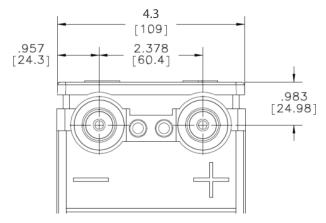




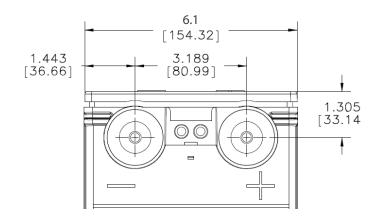
	,	4	E	3	(	3	ı	)	E	Ε	I	F	(	3	I	4
Model	in	mm	in	mm	in	mm										
UPS12-410MRXF	18.6	473.1	20.1	510.5	19.6	498.3	18.5	469.5	8.5	215.2	9.1	231.4	4.3	109.0	4.3	108.0
UPS12-1000MRXF	20.3	516.9	22.0	558.5	21.5	546.5	20.2	512.2	12.2	310.8	12.7	322.1	6.1	154.3	6.0	152.7

\*All dimensions in inches and [millimeters]. All dimensions are for reference only. Contact a C&D Representative for complete dimensions information.

## **DETAIL OF TERMINAL**



UPS12-410MRXF



**UPS12-1000MRXF** 

# **UPS12-410MRXF**

	Constant Power Discharge Ratings - Watts Per Cell @ 77°F (25°C)											
	Operating Time to End Point Voltage (in minutes)											
End Point Volts/Cell         5         10         15         20         30         40         45         50         60         90												
1.75	660.1	484.4	386.0	321.2	244.0	195.3	178.3	164.3	142.7	102.4		
1.70	690.8	507.0	404.0	334.4	252.0	200.5	182.6	167.9	145.3	104.2		
1.67	701.1	514.6	410.0	339.5	256.0	203.1	184.6	169.8	146.6	105.1		
1.65	709.7	520.8	415.0	344.1	260.0	205.7	186.9	171.6	147.9	106.0		

	Constant Power Discharge Ratings - Amperes @ 77°F (25°C)											
	Operating Time to End Point Voltage (in minutes)											
End Point Volts/Cell												
1.85	67	38.4	27.7	18.5	12.0	9.7	8.2	5.07	4.28	1.50		
1.80	71	40.5	29.2	19.4	12.6	10.2	8.6	5.34	4.50	1.58		
1.75	73	41.5	29.8	19.8	12.8	10.4	8.8	5.46	4.61	1.61		

Additional ratings and application information are available in the Battery Selection Program found at www.cdstandbypower.net

## **UPS12-1000MRXF**

			Constant Pov	ver Discharge	Ratings - W	atts Per Cell	@ 77°F (25°C	)					
	Operating Time to End Point Voltage (in minutes)												
End Point Volts/Cell													
1.75	1379.8	1098.4	907.8	763.7	589.7	472.2	431.2	397.5	345.3	250.1			
1.70	1469.0	1169.4	966.4	801.7	606.1	484.4	442.0	407.1	353.2	254.7			
1.67	1520.0	1210.0	1000.0	823.7	616.2	491.2	447.7	412.0	356.9	256.7			
1.65	1541.9	1227.5	1014.4	834.1	622.3	495.5	451.4	415.2	359.4	257.9			

	Constant Power Discharge Ratings - Amperes @ 77°F (25°C)											
	Operating Time to End Point Voltage (in minutes)											
End Point Volts/Cell												
1.85	168	96.1	67.9	43.2	28.1	22.9	19.4	12.05	10.18	3.56		
1.80	181	102.0	71.3	45.0	29.3	23.9	20.2	12.50	10.60	3.71		
1.75	188	104.1	72.1	45.4	29.7	24.3	20.6	12.70	10.70	3.75		

Note: Batteries to be mounted with 0.5 in. (1.25 cm) spacing minimum and free air ventilation. Specifications subjects to change without notification. Above ratings do not include inter-unit connector voltage drops.

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