



DYNASTY®

**HIGH
RATE
MAX**

UPS 12-745MRF



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

FEATURES & BENEFITS

C&D Technologies' addition to the High Rate Max front access line provides a 12V 4D battery that meets the needs of today's higher power UPS systems as an ideal fit for new system installs and 4D battery retrofits.

APPLICATIONS

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

- Ten Year Design Life in Float Service
- UL-recognized component
- Absorbent Glass Mat (AGM) technology for efficient gas recombination over 99%
- Patented Long Life Alloy having the lowest calcium levels in the industry-minimizing grid growth, reducing gassing, and extending battery life.
- Multicell design for ease of installation and maintenance
- Operates at low internal pressure
- Thermally welded case-to-cover bond to ensure a leak-proof seal
- Flame-retardant polypropylene case and cover compliant with UL94-V2
- Shock absorbent thick wall construction
- Measured high vacuum acid fill reduces electrical variability between cells
- Oversized through-the-partition inter-cell welds for minimal power loss
- Advanced lead-tin calcium alloy reduces grid corrosion and promotes long battery life
- Cold forged, nonporous terminal bushings eliminate post leakage
- Flame arresting, low pressure safety release venting system for individual cells, recognized per UL924
- 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 MDG Amendment 27
- 3 Year Full Warranty (refer to Dynasty warranty card, 41-9027)
- Cabinets and racks available. See brochure 12-1100.

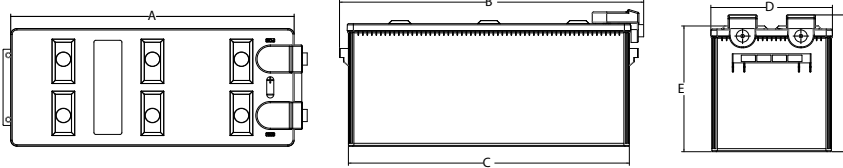
SPECIFICATIONS

Constant Power Discharge Ratings - Watts per Cell @ 77°F (25°C)									
Model Number	Voltage Per Unit	8 Hour Rate @ 77°F (25°C) to 1.75	Operating Time (in minutes) to 1.67 volts per cell						
			5	10	15	20	30	60	90
UPS12-745MRF	12	170 Ah	1306	951	734	601	487	261	186

SPECIFICATIONS

Model	Cells Per Unit	Battery Weight		Maximum Terminal Discharge Current (Amps)	Impedance at 60 Hz (Ω)
		lbs	kg		
UPS12-745MRF	6	160.3	72.7	1086	0.00173

DIMENSIONS



MODEL	A		B		C		D		E		F	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
UPS 12-745MRF	19.7	500	21.1	536	20.7	527	8.4	214	9.0	229	9.4	239

*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 compensated charging	Discharge -40°F (-40°C) to +140°F (60°C) Charge -40°F (-40°C) to +122°F (+50°C)
Nominal Operating Temperature Range	+68°F (20°C) to +77°F (25°C)
Recommended Maximum Charging Current Limit	$C_8/5$ (34.1) amperes
Recommended Float Voltage	13.56 to 13.80 volts per cell
Maximum AC Ripple (Charger) voltage or current	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 = $C_{12}/5$
Self Discharge/ Storage time from a fully charged condition	6 months at 77°F (25°C). For each 15°F (9°C) rise, reduce the storage time by half. See C&D brochure 41-7272, Self Discharge and Inventory Control for details.
Terminal Post	Threaded copper insert to accept 5/16" bolt
Terminal Hardware Torque	160 in-lbs (18 N-m)

UPS 12-745MRF

Constant Power Discharge Ratings, Watts per cell @ 77°F (25°C)							
Minutes	5	10	15	20	30	60	90
Final VPC							
1.60	1388	989	749	608	450	263	188
1.67	1306	951	734	601	447	261	186
1.70	1259	923	719	592	443	260	186
1.75	1180	878	695	578	437	258	184

Constant Current Discharge Ratings - Amperes										
Hours	1	2	3	4	5	6	8	10	12	24
Volts per Cell										
1.75	131.6	68.1	48.8	38.4	31.8	27.2	21.3	17.4	14.8	7.6
1.80	128.5	67.0	47.9	37.3	30.8	26.3	20.5	16.7	14.2	7.5
1.85	109.6	64.0	45.7	35.8	29.6	25.4	19.7	16.1	13.7	7.3
1.90	98.2	58.3	41.7	32.8	27.2	23.2	18.1	14.9	12.6	6.8

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

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