



FORTRESS HARSH 3

3 – 125KW THREE PHASE UNINTERRUPTED EMERGENCY LIGHTING & POWER SYSTEM

The Fortress Harsh 3 maintains efficient AC Emergency Power to operate all emergency lighting fixtures at “full-light” output after the transfer is complete, providing superior dependability and security to commercial and industrial environments in a small footprint.

POWER RATING

- 3KW – 125KW (or 3,000W – 125,000W) three phase output unit uses the latest DSP/PWM technology to provide the most advanced performance and reliability features

INPUT

- 208Y/120, 480Y/277, 208 or 480V AC input 60Hz

OUTPUT

- 208Y/120 or 480Y/277V AC
 True “on-line” design is ≥92% efficient at 100% linear load

BATTERIES

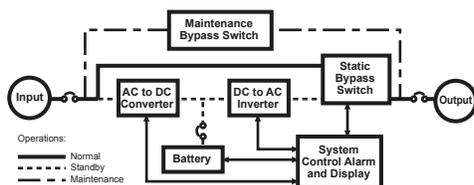
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year pro-rated warranty
- Smart Battery Monitoring System is **Temperature Compensated** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP/PWM overcharge protection standard

LAMPS & LOADS

- Emergency power provides **Full Light Output** from all lamps and fixtures for the entire runtime
- Operates fluorescent, compact fluorescent, incandescent, quartz, H.I.D., LED and other lamp types
- Standard or electronic ballasts, dimming devices or panels, sensors and most control equipment
- Standard or LED Exits and other safety equipment

CODES

- UL924, UL1778, NFPA101, NFPA70, NEC & OSHA standards
- Cities of Chicago and New York approved
- Complies with the Buy American Act



PROTECTION

- Provides overload, surge and undercurrent protection using DSP/PWM technology and Watchdog Software to protect system performance and reliability
- Surge protection against load surges as defined in ANSI/IEEE C62.45 category A and B

DIAGNOSTICS & MAINTENANCE

- DSP/PWM technology and Watchdog Software provides complete self-diagnostic capabilities and LED monitoring
- Informative advanced Display and Alarms keep you in control of your emergency lighting environment 24/7
- Automatically performs periodic self-tests ensuring a safely lighted environment *prior* to an emergency
- Single point of testing instead of multiple testing points with battery packs

NEMA 4X OR 12 CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- Systems up to 10KW are self-contained; large systems require external battery cabinet(s)

INSTALLATION

- Modular design and small footprint allow easy installation in electrical closets or other convenient locations
- Phone assisted factory start-up standard for all systems
- Extended warranty available

SPECIAL APPLICATIONS

- Offers numerous UL924 optional devices to meet unusual or difficult application parameters
- ECM - Environmental Circuit Module allows fixtures and lamps on the emergency circuit(s) to be operated by normal switching and/or dimming devices in NON-emergency conditions
- Dimming Panel Interface allows use with emergency lights controlled by common dimmer panel

WARRANTY

- 1-Year full warranty on system electronics
- Battery warranty 1-Year with 9-Years pro-rated
- System 1-Year on-site warranty labor with Mfg. phone assisted start-up
- 5-Year powertrain warranty
- Maintenance contracts available



JOB NAME: _____

TYPE: _____

PART #: _____

NOTES: _____

FORTRESS HARSH 3	POWER RATING	UPS			BATTERY			WEIGHT (COMBINED)	BRITISH THERMAL UNITS	BATTERY TYPE	VOLTAGE (VAC)		OUTPUT PROTECTION	SAFETY APPROVALS
		CABINET DIMENSIONS			CABINET DIMENSIONS						INPUT	OUTPUT		
USAFTH3	KVA/KW	W	H	D	W	H	D	(LBS)	BTUs	SEALED, MAINTENANCE FREE (AGM) LEAD CALCIUM	Select 208Y/120VAC, 480Y/277VAC, 208 or 480VAC (Consult factory for others)	INPUT & OUTPUT CIRCUIT BREAKERS STANDARD	UL924 UL1778 NFPA101 NFPA70 NEC	
	3	53"	52"	36"				1730	816					
	4.5	53"	52"	36"				1850	1224					
	6	53"	52"	36"	not required			2100	1632					
	8	53"	52"	36"				2450	2176					
	10	53"	52"	36"				3000	2720					
	12	53"	52"	36"	53"	52"	36"	3450	3264					
	16	53"	52"	36"	53"	52"	36"	3700	4352					
	20	53"	52"	36"	53"	52"	36"	4550	5440					
	24								6528					
	30								8160					
	40								10880					
	50								13600					
	60								16320					
	80								21760					
100								27200						
125								34000						
				Consult Factory										

The Fortress Harsh 3 provides the simplicity and reliability that is critical when providing an alternative source of power to any environment. Easy installation... "simplicity" ...connect the Fortress Harsh 3 to the emergency circuit(s) and everything is backed up... "reliability" ...during a power outage. All lighting connections to the Fortress Harsh 3 will simply continue to operate at "FULL LIGHT OUTPUT" once the transfer is complete. Watchdog Software keeps your environment safe while self-diagnostics help maintain equipment to a high standard. Superior surge suppression assures the highest quality of power being delivered to all loads, all the time.

ORDERING INFORMATION

- Choose the bold face catalog nomenclature that best suites your needs
- Write them on the appropriate line
- Order accessories as separate catalog number

Example:

USAFTH3-12.0-208Y/120 208Y/120-EMB OCB/120/3/20/1-240

Description of Example:

(12.0KW, 208Y/120 Voltage In, 208Y/120 Voltage Out, External Maintenance Bypass Switch, 3 Output 120 Voltage Circuit Breakers at 20amps, 2 pole, 240 minute run time)

USAFTH3 -

FAMILY	POWER RATING	VOLTAGE ¹	OPTIONS	TIME ³
	KW	INPUT/OUTPUT		Minutes
	3.0	208Y/120-208Y/120	ECM120 – 120V Environmental Control Module ² /qty	5
	4.5	208Y/120-480Y/277	ECM277 – 277V Environmental Control Module ² /qty	10
	6.0	480Y/277-208Y/120	NOF – Normally "OFF" output circuit/voltage/qty/pole	15
	8.0	480Y/277-480Y/277	NOH – Normally OFF "HOLD ON"/voltage/qty/pole	20
	10.0		OCB – Output Circuit Breakers/voltage/qty/amps/pole	25
	12.0	208-208Y/120	EPO – Emergency Power Off	30
	16.0	208-480Y/277	RSSP – Remote Indicator Panel	45
	20.0	480-208Y/120	SNMP – SNMP Card	60
	24.0	480-480Y/277	FC – Form "C" Contacts	90 (Standard)
	30.0		STU3 – Onsite Start-up	120
	40.0		IDB – Internal Dimmer Bypass	180
	50.0		EMB – External Maintenance Bypass Switch	240
	60.0		HTR – Heater	
	80.0		EW – Extended Warranty	
	100.0			
	125.0			

¹ Consult factory for other voltage requirements
Special voltages may affect the weight, size and number of cabinets
² One ECM is used per switching device or circuit
³ Consult factory for other run times