



FORTRESS 3 HARSH

3 KW - 125 KW Three Phase Uninterrupted Emergency Lighting and Power Systems

SPECIFICATIONS

The Fortress Harsh 3 maintains efficient AC Emergency Power to operate all emergency lighting fixtures at "full-light" output, providing superior dependability and security to commercial/industrial environments in an outdoor environment.

POWER RATING

- 3 KW - 125 KW (or 3,000 Watts - 125,000 Watts) 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 480VAC input 60Hz

OUTPUT

- 208Y/120 or 480Y/277VAC True "on-line" design is ≥92% efficient at 100% linear load

BATTERIES

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

NEMA 4 or 12 CABINET

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

PROTECTION

- Provides overload, surge and undercurrent protection using DSP/PWM technology and DSPM *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 AND MAINTENANCE

- DSP/PWM technology and DSPM *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

ORDERING INFORMATION:

FTH3				
FAMILY	POWER RATING	VOLTAGE ¹	OPTIONS	TIME ³
	<u>KW</u>	<u>Input/Output</u>	<u>ECM120</u> - 120V Environmental control module ² qty	<u>Minutes</u>
	3.0	208Y/120 - 208Y/120	<u>ECM277</u> - 277V Environmental control module ² qty	5
	4.5	208Y/120 - 480Y/277	<u>NOF</u> - Normally OFF output circuit/voltage / qty/pole	10
	6.0	480Y/277 - 208Y/120	<u>NOH</u> - Normally OFF "Hold ON"/voltage/qty/pole	15
	8.0	480Y/277 - 480Y/277	<u>OCB</u> - Output circuit breakers / voltage / quantity/amps/pole	20
	10.0	208 - 208Y/120	<u>EPO</u> - Emergency power off	25
	12.0	208 - 480Y/277	<u>RSSP</u> - Remote Indicator Panel	30
	16.0	480 - 208Y/120	<u>SNMP</u> - SNMP Card	45
	20.0	480 - 480Y/277	<u>FC</u> - Form C Contacts	60
	24.0		<u>STU3</u> - Onsite start-up	90 (Standard)
	30.0		<u>IDB</u> - Internal dimmer bypass	120
	40.0		<u>EMB</u> - External maintenance bypass switch	180
	60.0		<u>HTR</u> - Heater	240
	80.0		<u>EW</u> - Extended warranty	
	100.0			
	125.0			

Fortress Harsh 3	Power Rating	UPS			Battery			Weight (combined)	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
FTH3 (Consult factory for other capabilities)	KVA/KW	W	H	D	W	H	D	(lbs)	BTU's	Sealed, Maintenance free (AGM) lead calcium	208Y/120VAC, 480Y/277VAC, 208 or 480VAC (Consult factory for others)	Input and output circuit breakers standard	UL924 UL1778 NFPA 101 NFPA 70 NEC	
	3	41"	72"	32"	not required			1730	816					
	4.5	41"	72"	32"	not required			1850	1224					
	6	41"	72"	32"	not required			2100	1632					
	8	41"	72"	32"	not required			2450	2176					
	10	41"	72"	32"	not required			3000	2720					
	12	41"	72"	32"	41"	72"	32"	3450	3264					
	16	41"	72"	32"	41"	72"	32"	3700	4352					
	20	41"	72"	32"	41"	72"	32"	4550	5440					
	24	Consult Factory							6528					
	30	Consult Factory							8160					
	40	Consult Factory							10880					
	60	Consult Factory							16320					
	80	Consult Factory							21760					
	100	Consult Factory							27200					
125	Consult Factory							34000						

LAMPS AND 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

- Built to UL 924 and UL 1778 standards, meets NFPA 101, NFPA 70, NEC and OSHA standards
- Cities of Chicago and New York approved
- Complies with the Buy American Act

INSTALLATION

- Modular design and small footprint allow easy installation in an outdoor environment
- Phone assisted factory start-up standard for all systems
- Extended warranty available

SPECIAL APPLICATIONS

- DSPM 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 DSPM phone assisted start-up
- 5-Year powertrain warranty
- Maintenance contracts available

