



FORTRESS 1

0.075- 21KW SINGLE PHASE UNINTERRUPTED EMERGENCY LIGHTING & POWER SYSTEM

The Fortress 1 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

- 0.075KW – 21KW (or 75W – 21,000W) single phase output unit uses the latest DSP/PWM technology to provide the most advanced performance and reliability features

INPUT

- 120, 208, 240, 277 or 480V AC input 60Hz

OUTPUT

- 120, 277, 480, 120/240, 120/277 V AC output 60Hz
 True “on-line” design is ≥92% efficient at 100% linear load

BATTERIES

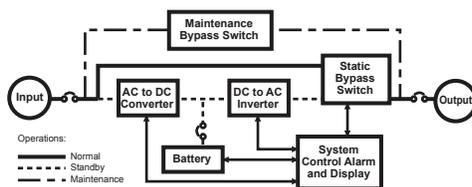
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year pro-rated warranty
- Smart Battery Monitoring System is **Temperature Compensated** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP/PWM overcharge protection standard

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 3R CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- Systems up to 12KW 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

FORTRESS OUTDOOR 1	POWER RATING	UPS			WEIGHT	BRITISH THERMAL UNITS	BATTERY TYPE	VOLTAGE (VAC)		OUTPUT PROTECTION	SAFETY APPROVALS
		CABINET DIMENSIONS						INPUT	OUTPUT		
USAFT1	KVA/KW	W	H	D	(LBS)	BTUs	SEALED, MAINTENANCE FREE (AGM) LEAD CALCIUM	(select)	(select)	INPUT & OUTPUT CIRCUIT BREAKERS STANDARD	UL924 UL1778 NFPA101 NFPA70 NEC
	0.075	20"	24"	8"	100	20.4		120	120		
	0.1	20"	24"	8"	110	27.2		208	277		
	0.125	20"	24"	8"	120	34		240	480		
	0.2	20"	24"	8"	130	54.4		277	120/240		
	0.3	20"	24"	8"	140	81.6		or 408	or 120/277		
	0.35	20"	24"	8"	150	95.2					
	0.525	45"	51"	35.5"	630	142.8					
	0.7	45"	51"	35.5"	640	190.4					
	0.875	45"	51"	35.5"	670	238					
	1.05	45"	51"	35.5"	710	285.6					
	1.4	45"	51"	35.5"	790	380.8					
	2.0	45"	51"	35.5"	870	544					
	2.4	45"	51"	35.5"	920	652.8					
	2.6	45"	51"	35.5"	930	707.2					
	3.0	45"	51"	35.5"	980	816					
	3.4	45"	51"	35.5"	1030	924.8					
	3.8	45"	51"	35.5"	1090	1033.6					
	4.2	45"	51"	35.5"	1150	1142.4					
	4.7	45"	51"	35.5"	1630	1278.4					
5.25	45"	51"	35.5"	1630	1428						
7.0	41"	72"	32"	1880	1904						
8.0	41"	72"	32"	1880	2176						
10.0	41"	72"	32"	2250	2720						
12.0	41"	72"	32"	2640	3264						
14.0	41"	72"	32"	2945	3808						
18.0	41"	72"	32"	4145	4896						
21.0	41"	72"	32"	5712	5712						

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:

USAFT1-8.0-120/277-ECM277/3 OCB/277/3/20/1-120

Description of Example:

(8.0KW, 120 Voltage In, 277 Voltage Out, 3 277V Environmental Control Modules, 3 Output 277 Voltage Circuit Breakers at 20amps, 2 pole, 120 minute run time)

USAFT1		-		-		-		-	
FAMILY	POWER RATING			VOLTAGE ¹		OPTIONS		TIME ³	
	KW			INPUT/OUTPUT	INPUT/OUTPUT			Minutes	
	0.075	1.05	4.7	120/120	240/120-240	ECM120 – 120V Environmental Control Module ² /qty		5	
	0.1	1.4	5.25	120/208	240/120-277	ECM277 – 277V Environmental Control Module ² /qty		10	
	0.125	2.0	7.0	120/277	277/120	NOF – Normally "OFF" output circuit/voltage/qty/pole		15	
	0.2	2.4	8.0	120/480	277/277	NOH – Normally OFF "HOLD ON"/voltage/qty/pole		20	
	0.3	2.6	10.0	120/120-240	277/480	OCB – Output Circuit Breakers/voltage/qty/amps/pole		25	
	0.35	3.0	12.0	120/120-277	277/120-240	EPO – Emergency Power Off		30	
	0.525	3.4	14.0	208/120	277/120-277	RSSP – Remote Indicator Panel		45	
	0.7	3.8	18.0	208/277	480/120	SNMP – SNMP Card		60	
	0.875	4.2	21.0	208/480	480/277	FC – Form "C" Contacts		90 (Standard)	
				208/120-240	480/480	STU1 – Onsite Start-up		120	
				208/120-277	480/120-240	IDB – Internal Dimmer Bypass		180	
				240/120	480/120-277	EMB – External Maintenance Bypass Switch		240	
				240/277		HTR – Heater			
				240/480		EW – Extended Warranty			

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