



DEFENDER 3

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

The Defender 3 maintains efficient AC Emergency Power to operate all emergency lighting fixtures at “full-light” output, 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 $\geq 92\%$ efficient at 100% linear load

BATTERIES

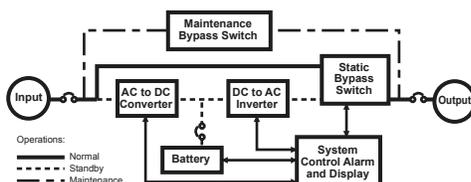
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year pro-rated warranty
- Smart Battery Monitoring System is **Temperature Compensated** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP/PWM overcharge protection standard

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

CABINET

- Modular design enables flexible installation
- Forced air cooling for maximum reliability
- All systems are self-contained and 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: _____

DEFENDER3 SERIES	POWER RATING	UPS			BATTERY			WEIGHT (COMBINED)	BRITISH THERMAL UNITS	BATTERY TYPE	VOLTAGE (VAC)		OUTPUT PROTECTION	SAFETY APPROVALS
		CABINET DIMENSIONS			CABINET DIMENSIONS						INPUT	OUTPUT		
USADE3	KVA/KW	W	H	D	No.	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	42"	71"	22.5"					980	816				
	4.5	42"	71"	22.5"		not required			1100	1224				
	6	42"	71"	22.5"					1350	1632				
	8	42"	71"	22.5"	1	42"	71"	22.5"	1700	2176				
	10	42"	71"	22.5"	1	42"	71"	22.5"	2250	2720				
	12	42"	71"	22.5"	1	42"	71"	22.5"	2700	3264				
	16	42"	71"	22.5"	1	42"	71"	22.5"	2950	4352				
	20	42"	71"	22.5"	2	42"	71"	22.5"	3800	5440				
	24	42"	71"	22.5"	2	42"	71"	22.5"	4350	6528				
	30	42"	71"	22.5"	2	42"	71"	22.5"	5150	8160				
	40	42"	71"	22.5"	3	42"	71"	22.5"	6790	10880				
	50	42"	71"	22.5"	3	42"	71"	22.5"	8384	13600				
	60	50"	71"	32"						16320				
	80	50"	71"	32"						21760				
	100	50"	71"	32"						27200				
	125	50"	71"	32"						34000				
					Consult Factory									

The Defender 3 provides the simplicity and reliability that is critical when providing an alternative source of power to any environment. Easy installation... "simplicity" ...connect the Defender 3 to the emergency circuit(s) and everything is backed up... "reliability" ...during a power outage. All lighting connections to the Defender 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:

USADE3-12.0-208Y/120 208Y/120-EMB OCB/120/3/20/1

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)

USADE3	POWER RATING	VOLTAGE ¹	OPTIONS	TIME ³
FAMILY	KW	INPUT/OUTPUT	ECM120 – 120V Environmental Control Module²/qty	Minutes
	3.0	208Y/120-208Y/120	ECM277 – 277V Environmental Control Module ² /qty	5
	4.5	208Y/120-480Y/277	NOF – Normally "OFF" output circuit/voltage/qty/pole	10
	6.0	480Y/277-208Y/120	NOH – Normally OFF "HOLD ON"/voltage/qty/pole	15
	8.0	480Y/277-480Y/277	OCB – Output Circuit Breakers/voltage/qty/amps/pole	20
	10.0	208-208Y/120	EPO – Emergency Power Off	25
	12.0	208-480Y/277	RSSP – Remote Indicator Panel	30
	16.0	480-208Y/120	SNMP – SNMP Card	45
	20.0	480-480Y/277	FC – Form "C" Contacts	60
	24.0		SRB – Seismic Rated Bracket	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		EW – Extended Warranty	
	80.0			
	100.0			
	125.0			

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