

DEFENDER 1 Single Phase 4.7 KW - 21 KW

Uninterrupted Emergency Lighting and Power Systems SPECIFICATIONS

The Defender 1 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 a small footprint.

POWER RATING

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

INPUT

V, 208V, 240V, 277V or 480V input 60Hz

OUTPUT

- V, 240V, 277V, 480V, 120/240 or 120/277VAC
True "on-line" design is ≥92% efficient at 100% linear load

BATTERIES

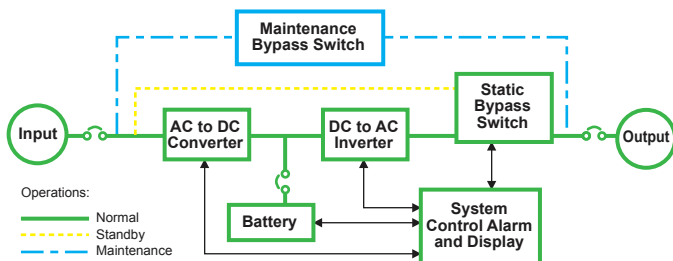
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year prorated warranty
- DSP Smart Battery Monitoring System is **TEMPERATURE COMPENSATED** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP overcharge protection standard

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

- UL 924, UL 1778, meets NFPA 101, NFPA 70, NEC and 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 "Watchdog Monitoring" Protection System performance and reliability features
- Surge protection against load surges as defined in ANSI/IEEE C62.45 category A and B

DIAGNOSTICS AND MAINTENANCE

- DSP/PWM Watchdog Monitoring System provides complete self diagnostic capabilities and LED Monitor
- Informative advanced DSP 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
- Systems up to 14 KW are self contained; larger systems require external battery cabinet(s)
- NEMA 1 rated

INSTALLATION

- Modular design and small footprint allow easy installation in electrical closet or other convenient locations
- 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

Defender 1 Series	Power Rating	UPS			Battery			Weight (combined)	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions			Cabinet Dimensions						Input	Output		
DE1	KVA/KW	W	H	D	W	H	D	(lbs)	BTU's	Sealed, Maintenance free (AGM) lead calcium	Select	Select	Input and output circuit breakers standard	UL924 UL1778 NFPA 101 NFPA 70 NEC
	4.7*	42"	71"	22.5"	not required			1200	1278.4		120,	120,		
	5.25*	42"	71"	22.5"	not required			1200	1428		208,	277,		
	7.0*	42"	71"	22.5"	not required			1450	1904		240,	480,		
	8.0*	42"	71"	22.5"	not required			1450	2176		277	120/240		
	10.0*	42"	71"	22.5"	not required			1820	2720		or	120/277		
	12.5*	42"	71"	22.5"	not required			2210	3264		480			
	14.0*	42"	71"	22.5"	not required			2550	3808					
	18.0	42"	71"	22.5"	42"	71"	22.5"	3750	4896					
21.0	42"	71"	22.5"	42"	71"	22.5"	4375	5712						

Note: (*) Represents optional smaller cabinet for 4.7 to 14KW with dimensions 40" 48"H 36"D. Please contact us for more information.

The Defender 1 provides the simplicity and reliability that is critical when providing an alternative source of power to any environment. Easy installation ...simplicity...connect the DE1 to the emergency circuit(s) and everything is backed up...reliability...during a power outage. All lighting connected to the DE1 will simply continue to operate at "full light output". DSPM 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. Equipment and lamp life are maximized.

We sincerely hope you never experience a real emergency, but if you do, you deserve the **security, safety** and **peace of mind** that the Defender 1 from **DSPM** ensures.

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:

DE1 - 8.0 - 120/277 - ECM277/3 OCB/277/3/20/1 - 30

Description of example:

(8.0 KW, 120 Voltage In, 277 Voltage Out, 3 277V Environmental Control Modules, 3 Output 277 Voltage Circuit Breakers at 20amps, 2 pole, 30 minute run time)

DE1	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>
		4.7	120/120	<u>ECM277</u> - 277V Environmental control module ² /qty	5
		5.25	120/277	<u>NOF</u> - Normally OFF output circuit/voltage / qty/pole	10
		7.0	120/480	<u>NOH</u> - Normally OFF "Hold ON"/voltage/qty/pole	15
		8.0	120/120-240	<u>OCB</u> - Output circuit breakers / voltage / quantity/amps/pole	20
		10.0	120/120-277	<u>EPO</u> - Emergency power off	25
		12.5	208/120	<u>RSSP</u> - Remote Indicator Panel	30
		14.0	208/120-120	<u>SNMP</u> - SNMP Card	45
		18.0	208/277	<u>FC</u> - Form C Contacts	60
		21.0	208/480	<u>SRB</u> - Seismic rated bracket	90 (Standard)
			208/120-240	<u>STU1</u> - Onsite start-up	120
			208/120-277	<u>IDB</u> - Internal dimmer bypass	180
			240/120	<u>EMB</u> - External maintenance bypass switch	240
			240/277	<u>EW</u> - Extended warranty	
			240/480		



Job Name:

Type:

Part #:

Notes: