



SPECIFICATIONS

The Defender Plus 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

- 2.4 KW - 4.2 KW (or 2,400 Watts - 4,200 Watts) single phase output unit uses the latest DSP/PWM technology to provide the most advanced performance and reliability features

INPUT

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

OUTPUT

- 120V, 277V, 480V, 120/240 or 120/277VAC output 60Hz.
True "on-line" design is $\geq 92\%$ efficient at 100% linear load

BATTERIES

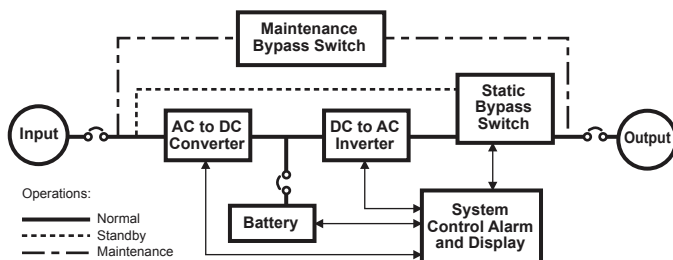
- Sealed, maintenance-free, lead calcium (AGM) batteries
- 10-Year prorated warranty
- DSP/PWM Smart Battery Monitoring System is **TEMPERATURE COMPENSATED** maintaining maximum runtime and battery life
- Microprocessor controlled recharge and DSP/PWM overcharge protection standard

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



083-0004-02 Rev. B

Catalog Number	
Project	Notes
Signature	Date

2.4 KW - 4.2 KW

Single Phase

Uninterrupted
Emergency
Lighting and
Power
Systems



PROTECTION

- Provides overload, surge and undercurrent protection using DSP/PWM technology and Envoy *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 Envoy *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

- Space saving small footprint
- Modular design enables flexible installation

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

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



Defender Plus Series	Power Rating	UPS			Weight	British Thermal Unit	Battery Type	Voltage (VAC)		Output Protection	Safety Approvals
		Cabinet Dimensions						Input	Output		
DPLUS	KVA/KW	W	H	D	(lbs)	BTU's	Sealed, Maintenance free (AGM) lead calcium	Input	Output	Input and output circuit breakers standard	UL924 UL1778 NFPA 101 NFPA 70 NEC
	2.4	26"	44"	26"	700	652.8		<u>Select</u>	<u>Select</u>		
	2.6	26"	44"	26"	700	707.2		120, 208, 240, 277 or 480	120, 277, 480, 120/240 or 120/277		
	3.0	26"	44"	26"	800	816					
	3.4	26"	44"	26"	800	924.8					
	3.8	26"	44"	26"	800	1033.6					
	4.2	26"	44"	26"	920	1142.4					

The Defender Plus provides the simplicity and reliability that is critical when providing an alternative source of power to any environment. Easy installation ...”simplicity”...connect the Plus to the emergency circuit(s) and everything is backed up...”reliability”...during a power outage. All lighting connected to the Plus will simply continue to operate at “**full light output**”. Envoy 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 Plus from **Envoy** 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:

DPLUS - 4.2 - 277/277 - ECM277/3 OCB/277/3/20/1 - 45

Description of example:

(4.2 KW, 277 Voltage In, 277 Voltage Out, 3 277V Environmental Control Modules, 3 Output 277 Voltage Circuit Breakers at 20amps, 2 pole, 45 minute run time)

DPLUS					
FAMILY	POWER RATING	VOLTAGE ¹		OPTIONS	TIME ³
	KW	Input/Output	Input/Output		Minutes
	2.4	120/120	240/120-240	ECM120 - 120V Environmental control module ² /qty	5
	2.6	120/277	240/120-277	ECM277 - 277V Environmental control module ² /qty	10
	3.0	120/480	277/120	NOF - Normally OFF output circuit/voltage / qty/pole	15
	3.4	120/120-240	277/277	NOH - Normally OFF "Hold ON"/voltage/qty/pole	20
	3.8	120/120-277	277/480	OCB - Output circuit breakers / voltage / quantity/amps/pole	25
	4.2	208/120	277/120-240	EPO - Emergency power off	30
		208/277	277/120-277	RSSP - Remote Indicator Panel	45
		208/480	480/120	SNMP - SNMP Card	60
		208/120-240	480/277	FC - Form C Contacts	90 (Standard)
		208/120-277	480/480	SRB - Seismic rated bracket	120
		240/120	480/120-240	STU1 - Onsite start-up	180
		240/277	480/120-277	IDB - Internal dimmer bypass	240
		240/480		EMB - External maintenance bypass switch	
				EW - Extended warranty	

NOTES:

1-Consult factory for other voltage requirements.

Special voltages may effect the weight, size and number or cabinets.

2-One ECM is used per switching device or circuit.

3-Consult factory for other run times.

Specifications subject to change without notice.

