



# AMERICAN ELECTRICAL, INC.

## INDUSTRIAL ELECTRICAL ACCESSORIES

425 SOUTHLAKE BLVD. • SUITE 9-B • RICHMOND, VA 23236 • (804) 379-2899 • FAX: (804) 379-8935

## A NEW GENERATION OF RAIL MOUNTED POWER SUPPLIES



### WIDE RANGE

- COMPACT HOUSING - 20A, 3PH ONLY 3.39 INCHES LONG
- HORIZONTAL MOUNTING - UP TO 40A, 3 PHASE

### OUTPUT

- 24V / 1.25 TO 20A - SINGLE PHASE
- 24V / 10, 20, AND 40A - 3 PHASE

### UNIVERSAL INPUT

- 115 / 230 VAC
- 3 X 340 / 550 VAC

### LOAD SHARING

- PARALLEL OPERATION
- REDUNDANCY

### HIGH EFFICIENCY

- TYPICAL 90%

### INCREASED OPERATING TEMPERATURE

- 100% AT 140°F

### STATUS INDICATION

- POWER ON INDICATION
- OVERLOAD STATUS LED

### TOUCH SAFE POWER ENTRY

- COVERED POWER ENTRY
- CONVENIENT CUSTOMER INPUT TERMINALS

### APPROVALS

- UL / CSA AND EN 60950
- EMC CERTIFIED

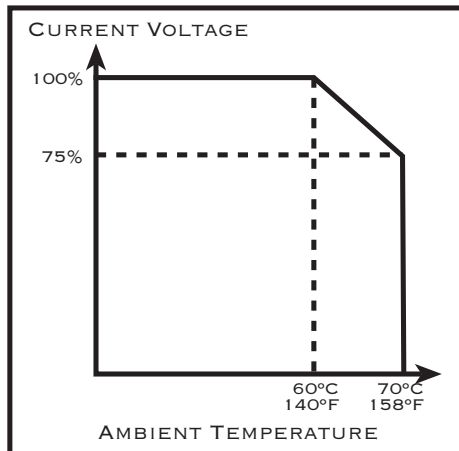
DESCRIPTION	AEI PART NO.	INPUT VOLTS (VAC)	PHASE	OUTPUT VOLTS (VDC)	OUTPUT CURRENT (AMPS)	POWER (WATTS)	DIMENSIONS L X W X H (INCHES)
SLIM LINE	F2400125	115*/230	1	24	1.25	30	1.77 x 2.83 x 4.13
	F240050S	115*/230	1	24	5	120	2.76 x 5.20 x 5.47
	F24010S	115*/230	1	24	10	240	2.76 x 5.81 x 6.46
SLIM LINE 3 PHASE	F24010S-3	3x 340-550	3	24	10	240	3.18 x 6.02 x 6.29
	F24020S-3	3x 340-550	3	24	20	480	3.99 x 8.94 x 6.81
HORIZONTAL	F240025	115*/230	1	24	2.5	60	4.25 x 4.84 x 2.56
	F240050	115*/230	1	24	5	120	5.79 x 4.84 x 3.39
	F24010	115*/230	1	24	10	240	8.07 x 4.84 x 3.39
	F24020	195-265	1	24	20	480	9.45 x 6.02 x 3.39
HORIZONTAL 3 PHASE	F24020-3	3x 340-550	3	24	20	480	9.45 x 6.02 x 3.39
	F24040-3	3x 340-550	3	24	40	960	11.50 x 7.28 x 5.12

\* INDICATES STANDARD VOLTAGE INPUTS

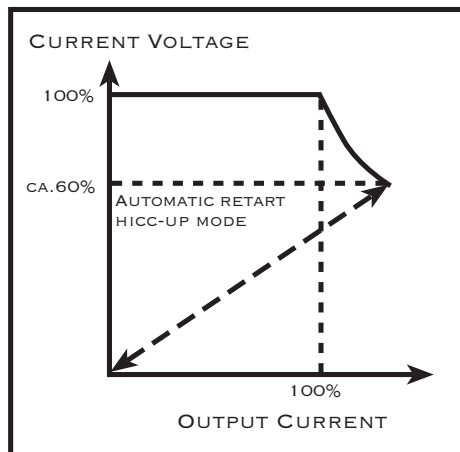


# TECHNICAL DATA

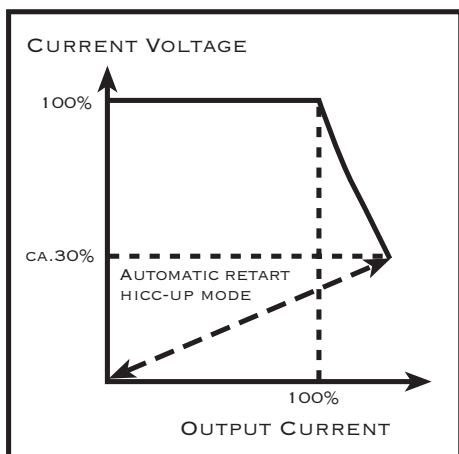
## DERATING



## CURRENT LIMITATION CURVE 1.25 A / 2 A



## CURRENT LIMITATION CURVE 5 / 10 / 20 / 40 A



## REGULATION

LINE REGULATION	< 0.2% WITH $U_{IN} \pm 15\%$
LOAD REGULATION	< 1% WITH $0 A \rightarrow > I_{NOM}$
DYNAMICS	< 2 MS WITH $10 \leftrightarrow 90\% I_{NOM}$ PEAKS < 2%

## PROTECTION AND MONITORING

CURRENT LIMITATION	PROTECTION AGAINST CONTINUOUS SHORT CIRCUIT
OVERLOAD PROTECTION	YES
NON-LOAD PROTECTION	YES
OVERVOLTAGE PROTECTION	YES

## SAFETY

OUTPUT	VDE 0805 / EN 60950 / IEC 950 / UL1950 SAFETY VOLTAGE (SELV) ACC. TO EN 60950
PROTECTIVE SYSTEM	CLASS I / CLASS II AT $\begin{matrix} 149002-31001 \\ 149002-21001 \end{matrix}$
DEGREE OF PROTECTION	IP 20
LEAKAGE CURRENT (1.25A / 2A)	< 0.25 MA (47-63 HZ LINE FREQUENCY)
LEAKAGE CURRENT (5A / 10A)	< 0.75 MA (47-63 HZ LINE FREQUENCY)
LEAKAGE CURRENT (20A / 40A)	< 3.50 MA (47-63 HZ LINE FREQUENCY)

## EMV - CERTIFIED

RFI SUPPRESSION	EMISSION (EN 50081-1/-2) EN 55011 / EN55022 CLASS B
	IMMUNITY (EN 50082-1, EN 61000-6-2)
STATIC DISCHARGE ESD IEC 1000-4-2	ACC. TO EN 61000-6-2 8KV CONTACT DISCHARGE 15KV FREE AIR DISCHARGE
ELEKTROMAGNETIC FIELDS IEC 1000-4-3	ACC. TO EN 61000-4-3 10V/M
BURST IEC 1000-4-4	ACC. TO EN61000-4-4 4KV INPUT 2KV OUTPUT / AC-COUPLED
SURGE IEC 1000-4-5	ACC. TO EN61000-4-5 4KV ASYMMETRIC 4KV SYMMETRIC
FORM OF ELECTRICAL INTERFERENCE IEC 1000-4-6	ACC. TO EN 61000-4-6 10 V, 150 KHZ ... 80 MHZ

## OPERATIONAL DATA

TEMPERATURE RANGE	-10°C / 14°F TO +70°C / 158°F WITH FREE CONVECTION
POWER DERATING	2.5% / K FROM +60°C / 140°F (SEE DIAGRAM)
STORAGE TEMPERATURE	-25°C / -13°F TO +85°C / 185°F
STATIC DISCHARGE ESD IEC 1000-4-2	ACC. TO EN 61000-6-2 8KV CONTACT DISCHARGE 15KV FREE AIR DISCHARGE

## INSTALLATION

INSTALLATION	EASY ACCESS MOUNTING BRACKET FOR RAIL DIN EN 50022-35
MOUNTING POSITION	UPRIGHT WITH INPUT TERMINALS ON TOP. OUTPUT TERMINALS UNDERNEATH.