



Features

- Meet Efficiency Level VI; CoC Version 5 Tier 2
- Operation up to 5, 000 meters
- Full Range AC Input from 90 to 264 Vac
- IEC320-C14 AC Inlet
- Single regulated output from 12/19.5/24 /54Vdc Output
- Output Power: 180W and 230W
- High efficiency and reliability
- Class I Power Adapter
- OVP, OCP, Short circuit and thermal protection
- UL/cUL, FCC, TUV, EMC safety approvals
- Meet NRCAN, COC Tier 2, GEMS, CONUEE efficiency requirements
- Meet KC, CCC, RCM, BSMI, PSB, BIS, CU, PSE, NOM safety requirements
- 100% burn-in/Hi-Pot/ATE
- Operation in tropical climate environment
- Custom designs available

Level VI



Description

The SPI FSP180/230-AxAN3 series are highly reliable AC-DC switching power supplies with output power from 180W to 2300W. All models of adapters provide different output voltages 12VDC, 19VDC, 24VDC, and 54VDC with optional DC plug that fit into the demands for various types of consumer, commercial, and industrial electronic devices. They are enclosed in a 94V-0 rated polycarbonate case with an IEC320-C14 inlet to mate with various AC power cords for world-wide use. All models meet FCC Part 15 class B, IC ICES-003, and EMC emission limitations, and comply with Department of Energy (DOE) and Energy-related Products (ErP) standards.

Applications

- Desktop/All-in-One/Notebook PCs
- LCD/LED Monitors
- POS systems
- Office electronic devices
- Telecommunication devices
- Test measurement equipment
- Industrial equipment



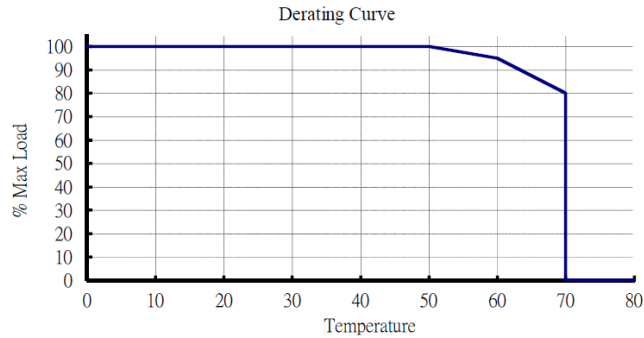
Specifications:

	Model	FSP180-AHAN3	FSP192-AHAN3	FSP230-AJAN3	FSP230-AAAN3	FSP230-AWAN3
Output	Rated Voltage	12V	12V	19.5V	24V	54
	Current	0 ~ 15A	0 ~ 16A	0 ~ 11.79A	0 ~ 9.58A	0 ~ 4.26A
	Watts	180W	192W	230W	230W	230W
	Voltage Regulation	±5%				
	Overshoot	±10%				
	Dynamic Load Change	±10%				
	Ripple & Noise (Max.)	350mVp-p				
	Turn on Time (Max.)	3Sec				
	Rise Time (Max.)	50ms				60ms
	Hold up Time (Min.)	10ms				
	Efficiency (Typical)	89% ~ 90%	89% ~ 90%	91% ~ 92%	92% ~ 93%	93% ~ 94%
Input	Voltage Range	90 ~ 264Vac				
	Frequency Range	47 ~ 63Hz(±1Hz)				
	Current (Max.)	2.5A	2.5A	3A	3A	3A
	Inrush Current (cold start, full load, 25°C)	77A @115Vac 185A@230Vac	86@115Vac 174A@230Vac	77A@100Vac 185A @240Vac	79A@100Vac 153A @240Vac	114A @115Vac 225A@230Vac
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz				
	No Load Power Consumption	0.21W				
Protection	Short Circuit Protection	output shut down and auto-recovery after Fault condition removed				
	Over Current Protection	output shut down and auto-recovery after Fault condition removed				
	Over Voltage Protection	output shut down at 160% of voltage and recovery after AC reset				
	Over Temperature Protection	output shut down at abnormal temperature and recovery after AC reset				
Safety & Compliance	Safety Approvals	CB,UL/cUL, TUV				
	EMI/EMC	FCC Part 15 Class B, EMC				
	RoHS	2011/65/EU; (EU) 2015/863				
	Hi Pot	Input to output 1.5KV for 1 minute				
	Insulation Resistance	Input to Output at 500Vdc ≥20MΩ				
Environment	Operating Temperature/ Humidity	0~40°C/20~80% (safety) 40 to 70°C Linearly de-rating, need to check safety with system				
	Storage Temperature/ Humidity	-20~80°C/10~90%				
	Vibration	(1) Non-operating, 0.01g ² /Hz at 5Hz, slopping to 0.02g ² /Hz at 20Hz, And maintain 0.02g ² /Hz from 20Hz ~ 500Hz (2) PSD=3.13grms, 15 minutes/axis (3) Vibration duration:15minutes (4) Vibration waveform: Random (5) Force Direction X,Y,Z				
Other	Dimension ((L*W*H)	177 x 86 x 32.2 mm				
	Adapter Weight (Typical)	650g				
	MTBF	Above 500K hours, Telcordia SR-332 (25°C)				
Note	Contact SPI for further information					

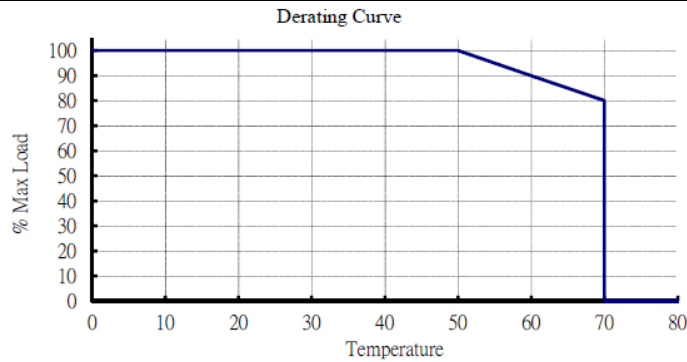


Power Derating

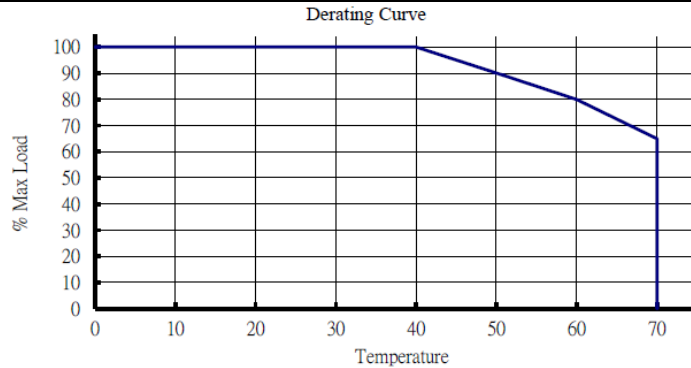
FSP180-AHAN3



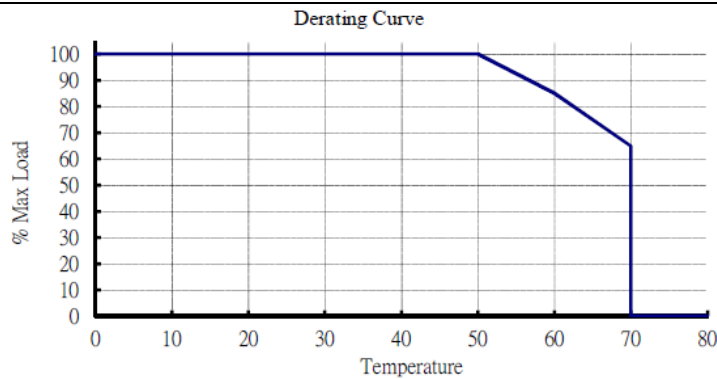
FSP192-AHAN3



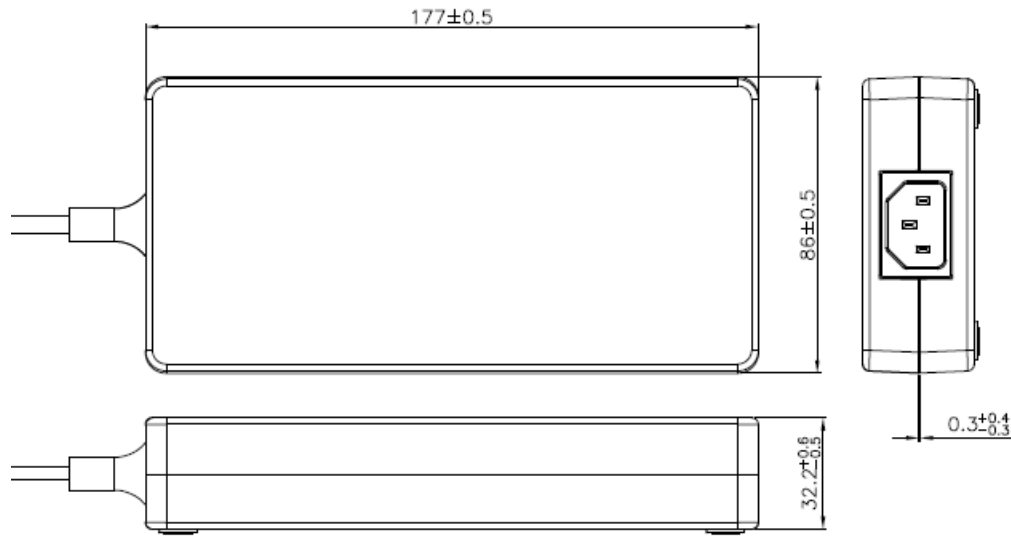
FSP230-AAAN3



FSP230-AWAN3



Mechanical Drawing (mm)



Optional Output DC Plugs

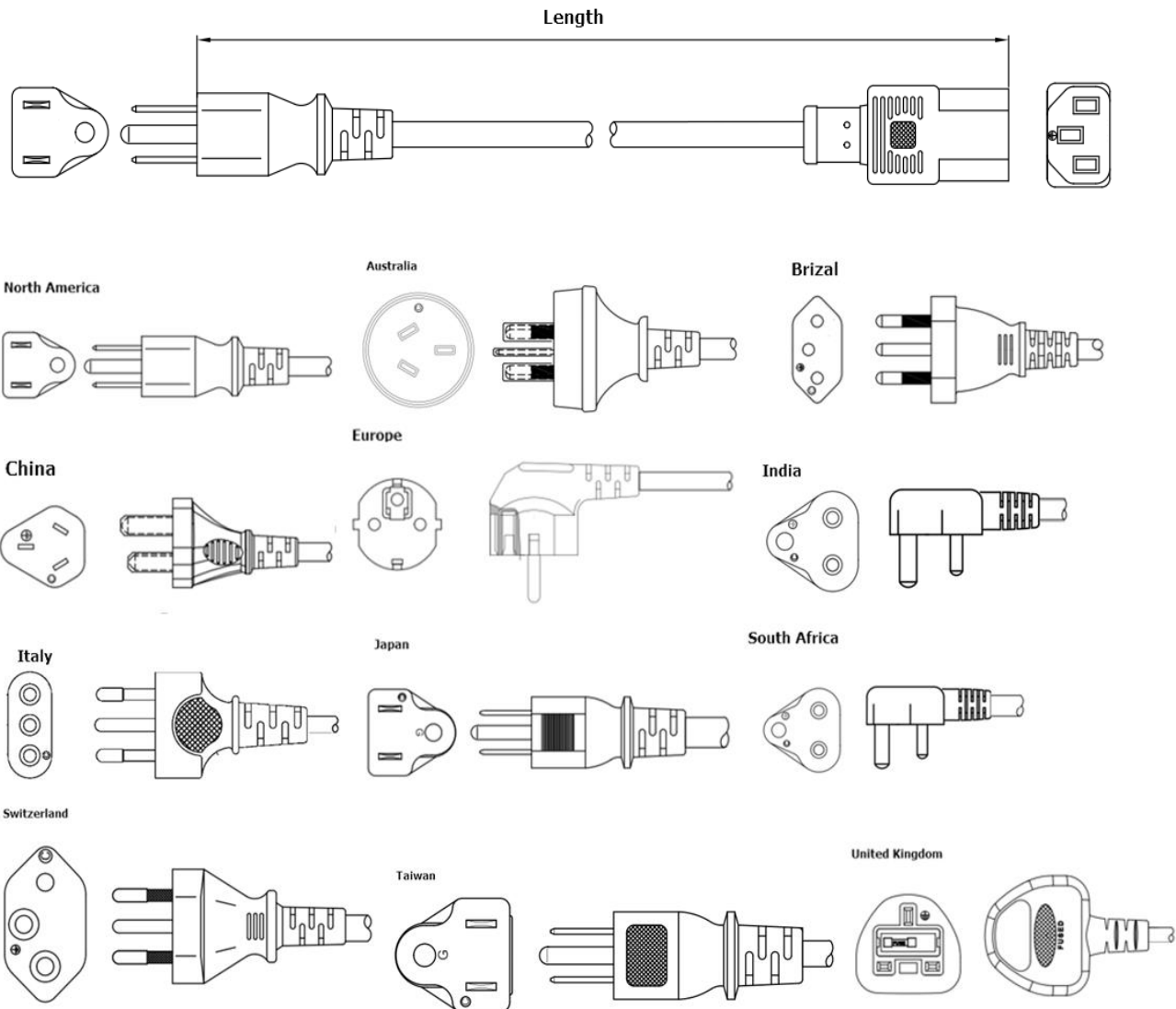
Profile & Dimension	Pinouts	Description	Suitable for SPI Models	Suggested Mating Connector
	1: -V 2: -V 3: -V 4: +V 5: +V 6: +V	6-pin connector Molex receptacle housing 39-01-2060 with female terminal #5556 series or equivalent	FSP180-AHAN3 FSP192-AHAN3 FSP230-AJAN3 FSP230-AAAN3 FSP230-AWAN3	Molex plug housing 39-01-2066 with male terminal #5558 series or equivalent
	1: -V 2: -V 3: -V 4: +V 5: +V 6: +V	6-pin connector Molex receptacle housing 39-01-2065 with female terminal #5556 series or equivalent	FSP180-AHAN3 FSP192-AHAN3 FSP230-AJAN3 FSP230-AAAN3 FSP230-AWAN3	Molex plug housing 39-01-2066 with male terminal #5558 series or equivalent
	1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND	Female 4-pin plug without lock (molding type) Singatron 3MP-3432 or equivalent	FSP180-AHAN3 FSP192-AHAN3 FSP230-AJAN3 FSP230-AAAN3 FSP230-AWAN3	4-pin connector Singatron 2MJ3002, 2MJ-3432, or equivalent

Note: Contact SPI for further information



Optional AC Power Cords

Country	Cable Type	Length	SPI P/N
North America	SVT	1830 mm +/- 50	PCR-B3US-183C
Australia	H05VV-F	1830 mm +/- 50	PCR-B3AU-183B
Brazil	H05VV-F	1830 mm +/- 50	PCR-B3BR-183B
China	RVV 300/500	1830 mm +/- 50	PCR-B3CN-183B
India	H05VV-F	1830 mm +/- 50	PCR-B3OUK-183B
Italy	H05VV-F	1830 mm +/- 50	PCR-B3IT-183B
Japan	VCTF	1830 mm +/- 50	PCR-B3JP-183A
South Africa	H05VV-F	1830 mm +/- 50	PCR-B3SA-183B
Switzerland	H05VV-F	1830 mm +/- 50	PCR-B3SW-183B
Taiwan	VCTF	1830 mm +/- 50	PCR-B3TW-183A
United Kingdom	H05VV-F	1830 mm +/- 50	PCR-B3UK-183B



Note: Contact SPI for further information

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