



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 48/54Vdc Output
- Output Power: 30W to 50W
- 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 FSP030/050-DxAN3 series are highly reliable AC-DC switching power supplies with output power from 30W to 50W. All models of adapters provide different output voltages 48VDC 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

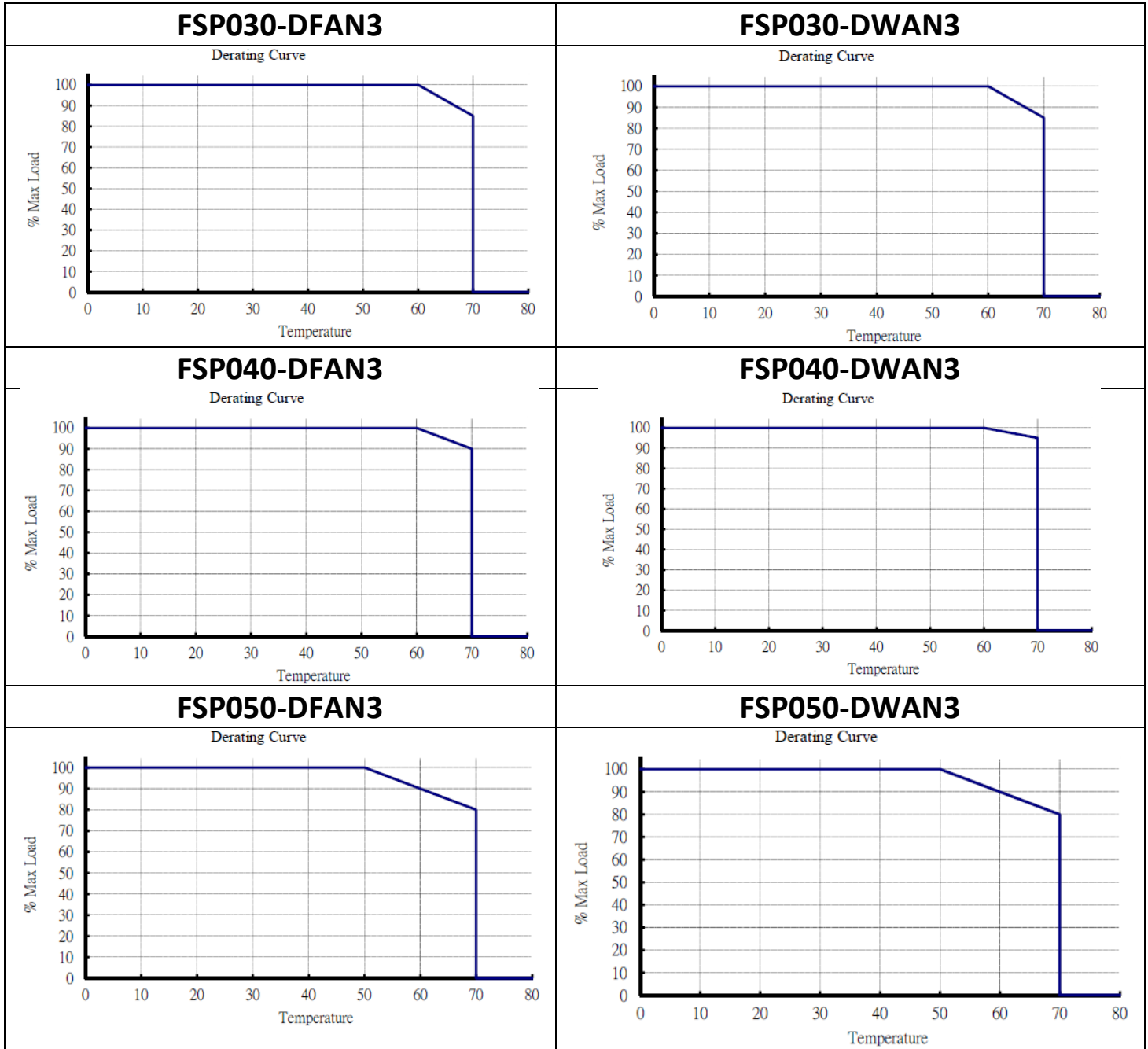


Specifications:

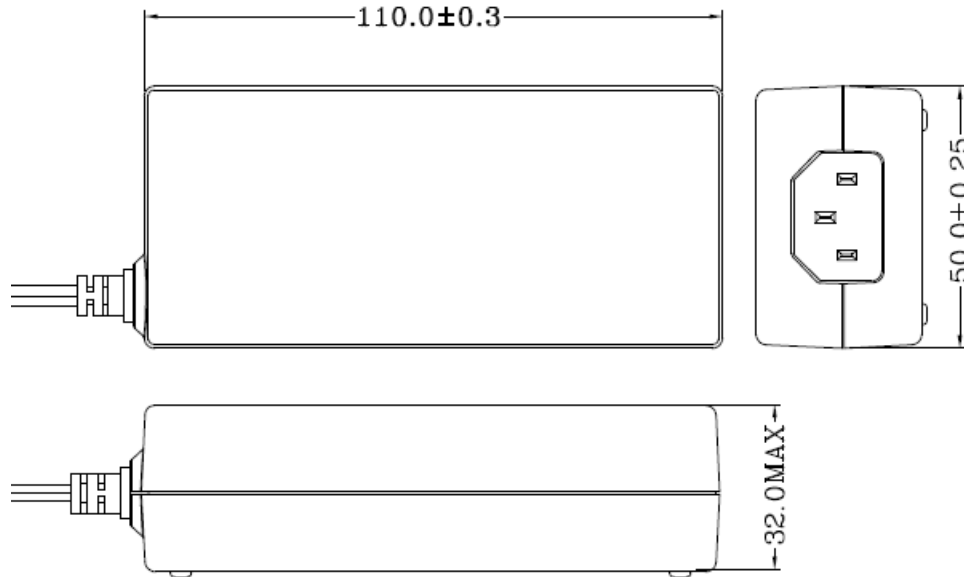
	Model	FSP030-DFAN3	FSP030-DWAN3	FSP040-DFAN3	FSP040-DWAN3	FSP050-DFAN3	FSP050-DWAN3
Output	Rated Voltage	48V	54V	48V	54V	48V	54V
	Current	0 ~ 0.62A	0 ~ 0.56A	0 ~ 0.83A	0 ~ 0.74A	0 ~ 1.04A	0 ~ 0.92A
	Watts	30W	30W	40W	40W	50W	50W
	Voltage Regulation	±5%					
	Overshoot	±10%					
	Dynamic Load Change	±10%					
	Ripple & Noise (Max.)	200mVp-p					
	Turn on Time (Max.)	3Sec					
	Rise Time (Max.)	40ms					
	Hold up Time (Min.)	8ms					
	Efficiency (Typical)	~ 88%	~ 89%	~ 90%	~ 90%	~ 91%	~ 91%
Input	Voltage Range	90 ~ 264Vac					
	Frequency Range	47 ~ 63Hz(±1Hz)					
	Current (Max.)	1.2A	1.2A	1.4A	1.4A	1.6A	1.6A
	Inrush Current (cold start, full load, 25°C)	57.5A @100Vac 126A@240Vac	48.5A@100Vac 113A@240Vac	59.5A@110Vac 121A@240Vac	59.5@110Vac 118A@240Vac	67.5@110Vac 137A@240Vac	61.5@110Vac 127A@240Vac
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz					
	No Load Power Consumption	0.075W					
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, 0.01g2/Hz at 5Hz, slopping to 0.02g2/Hz at 20Hz, And maintain 0.02g2/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)	110 x 50 x 32 mm					
	Adapter Weight (Typical)	280g					
	MTBF	Above 500K hours, Telcordia SR-332 (25°C)					
Note	Contact SPI for further information						



Power Derating



Mechanical Drawing (mm)

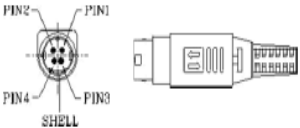

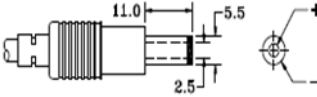
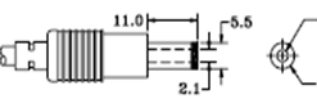
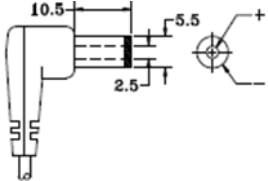
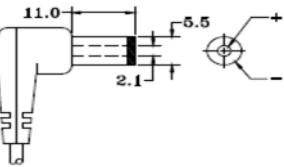
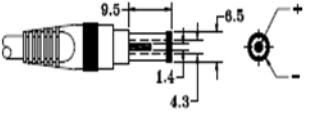


Optional Output DC Plugs

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	FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3	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	FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3	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	FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3	4-pin connector Singatron 2MJ3002, 2MJ-3432, or equivalent
	1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND	Male 4-pin plug without lock (molding type)	FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3	4-pin socket Kycon P/N: KPJX-4S-S or equivalent



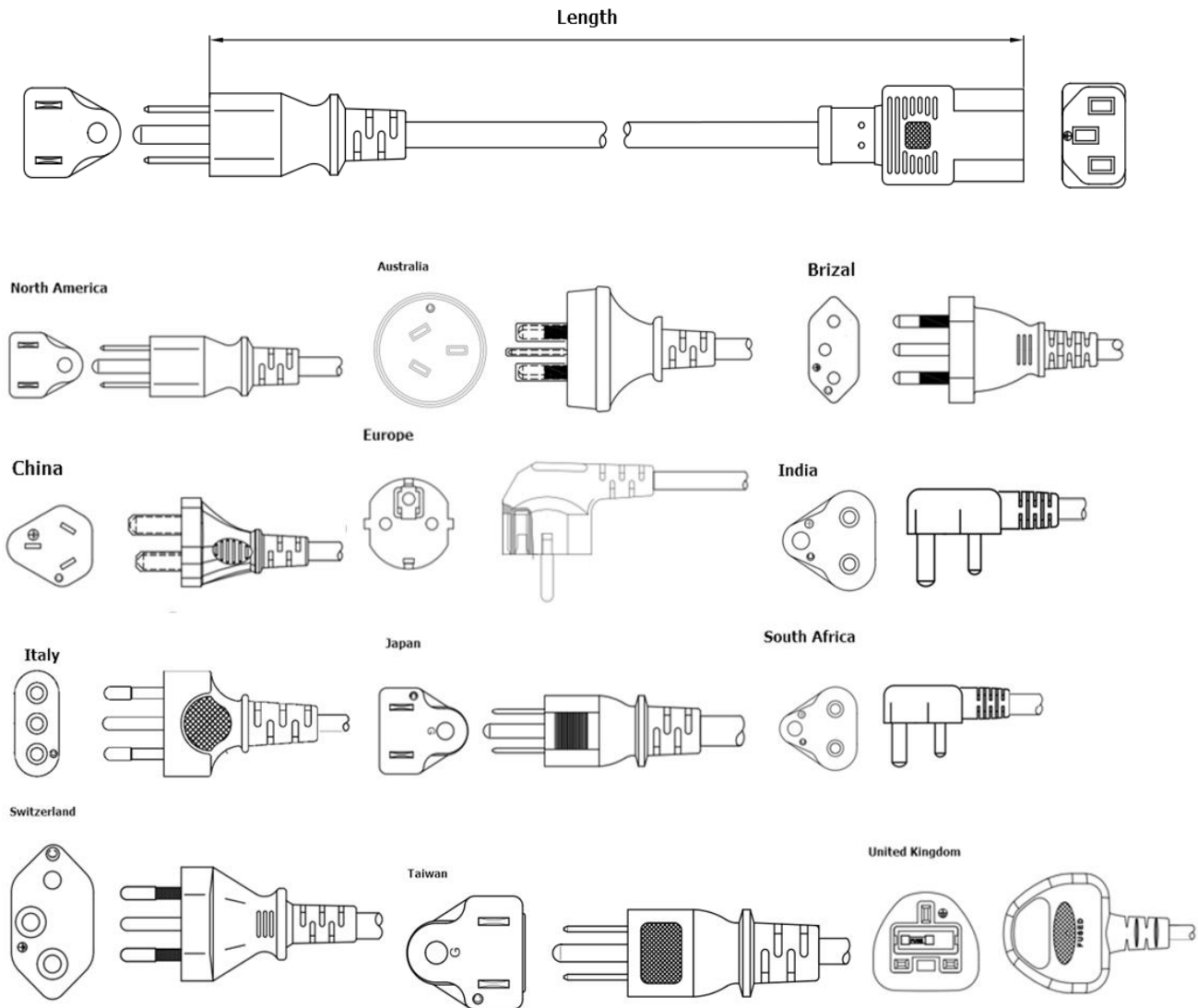
FSP030/050-DxAN3 Series AC-DC POWER SUPPLY

	<p>1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND</p>	<p>Male 4-pin plug with lock (molding type)</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>4-pin socket Kycon P/N: KPJX-4S-S or equivalent</p>
	<p>1: -V 2: +V</p>	<p>2-pin receptacle housing Molex 39-01-3025 with female terminal #5556 series or equivalent</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Molex plug housing 39-01-2021 with male terminal #5558 series or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel female connector (Fork & Groove type)</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel female connector (Fork & Groove type)</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Switchcraft, Type: RA722 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Switchcraft, Type: RA712 or equivalent</p>
	<p>Center: +V Sleeve: -V</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Barrel right angle female connector (Fork & Groove type)</p>
	<p>Center: +V Sleeve: -V</p>	<p>EIAJ RC-5320A plug type B with internal pin EIAJ-05 plug</p>	<p>FSP030-DFAN3 FSP030-DWAN3 FSP040-DFAN3 FSP040-DWAN3 FSP050-DFAN3 FSP050-DWAN3</p>	<p>Lumberg 1613 11 or Lumberg 1614 05 or equivalent</p>

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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