



Features

- Meet Efficiency Level VI
- Operation up to 5,000 meters
- Full Range AC Input from 90 to 264 Vac
- IEC320-C6 AC Inlet
- Single regulated output from 12/19/24 Vdc Output
- Output Power: 36W and 45W
- High efficiency and reliability
- Class I Power Adapter
- OVP, OCP, Short circuit and thermal protection
- UL/cUL, FCC, TUV, EMC safety approvals
- Meet NRCAN, ERP COC Tier 1, 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



Description

The SPI FSP036/045-RxBN2 series are highly reliable AC-DC switching power supplies with output power from 36W to 45W. All models of adapters provide different output voltages 12VDC, 19VDC, and 24VDC 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-C6 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

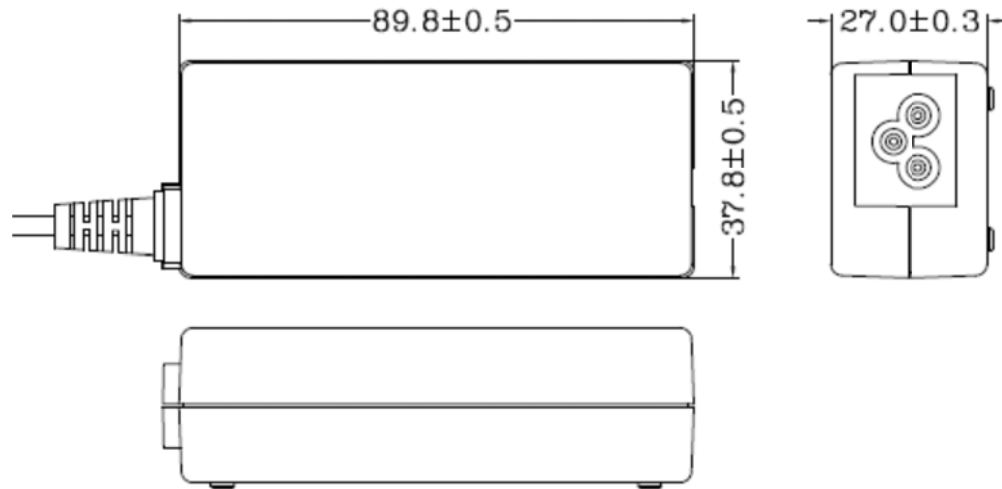
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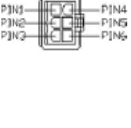
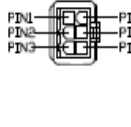
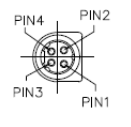
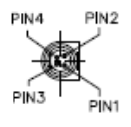
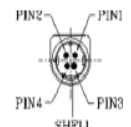
FSP036/045-RxBN2 Series AC-DC POWER SUPPLY

	Model	FSP036-RBBN2	FSP045-REBN2	FSP045-RABN2
Output	Rated Voltage	12V	19V	24V
	Current	0 ~ 3A	0 ~ 2.37A	0 ~ 1.9A
	Watts	36W	45W	45W
	Voltage Regulation	±2.5%		
	Overshoot	±10%		
	Dynamic Load Change	±10%		
	Ripple & Noise (Max.)	300mVp-p	380mVp-p	380mVp-p
	Turn on Time (Max.)	3Sec		
	Rise Time (Max.)	100ms		
	Hold up Time (Min.)	5ms		
	Efficiency (Typical)	87% ~ 88% DOE IV / CoC Tier 1	87% ~ 88% DOE IV / CoC Tier 1	88% ~ 89% DOE IV / CoC Tier 1
Input	Voltage Range	90 ~ 264Vac		
	Frequency Range	47 ~ 63Hz(±1Hz)		
	Current (Max.)	1.2A	1.5A	1.5A
	Inrush Current (cold start, full load,25°C)	81.2A@100Vac 83.2A@240Vac	66.4A@110Vac 86.4A@240Vac	59.6A@110Vac 99.5A @240Vac
	Leakage Current (Max.)	0.25mA at 264VAC/50Hz		
	No Load Power Consumption	0.1W		
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		
	Hi Pot	Input to output 1.5KV for 1 minute		
	Insulation Resistance	Input to Output at 500Vdc ≥20MΩ		
Environment	Operating Temperature/ Humidity	-20~40°C/10~90%	0~40°C/20~80%	
	Storage Temperature/ Humidity	-20~75°C/5~90%	-20~70°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)	89.8 x 37.8 x 27.5 mm		
	Adapter Weight (Typical)	250g		
	MTBF	Above 100K hours, Telcordia SR-332 (25°C)		
Note	Contact SPI for further information			

Mechanical Drawing (mm)



Optional Output DC Plugs 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	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	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	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	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	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	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)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent
	1: +V 2: +V 3: -V 4: -V Shell: -V & AC GND	Male 4-pin plug with lock (molding type)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	4-pin socket Kycon P/N: KPJX-4S-S or equivalent



FSP036/045-RxBN2 Series AC-DC POWER SUPPLY

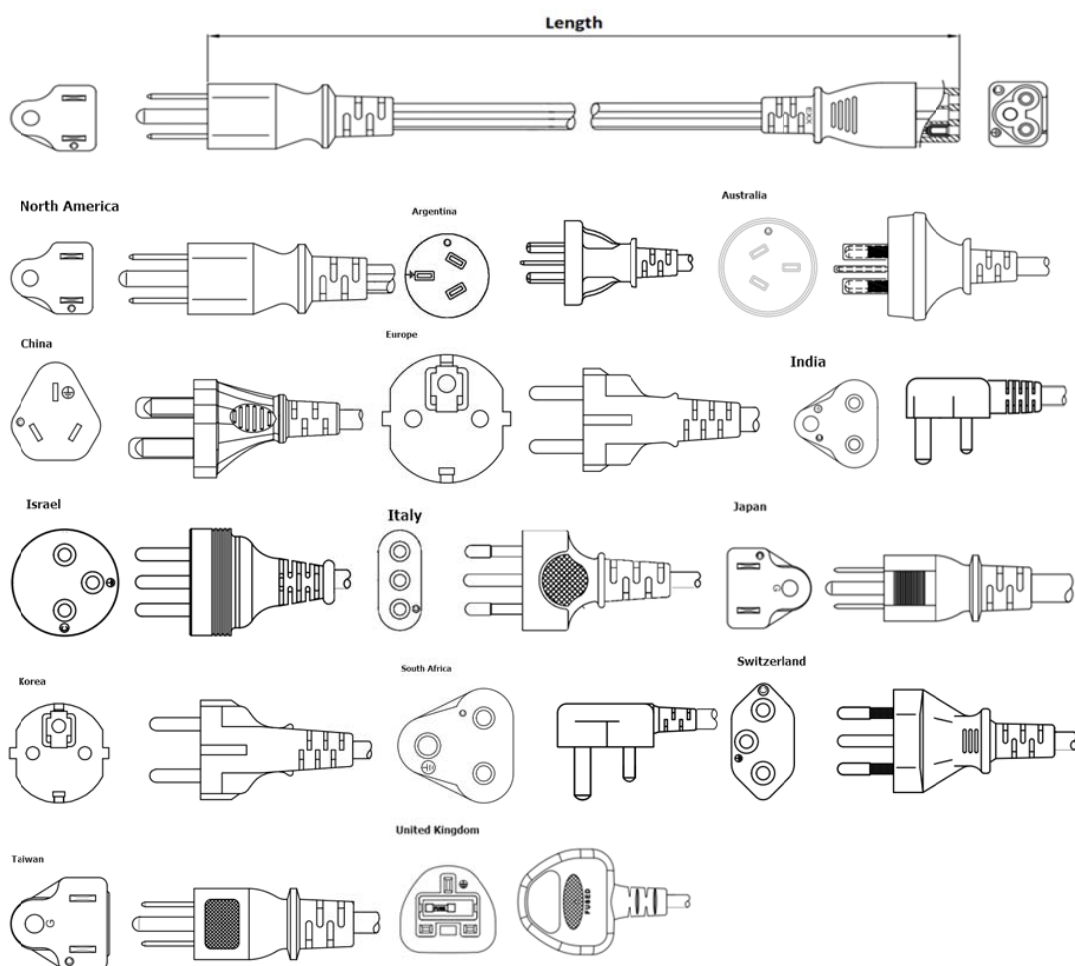
	1: -V 2: +V	2-pin receptacle housing Molex 39-01-3025 with female terminal #5556 series or equivalent	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Molex plug housing 39-01-2021 with male terminal #5558 series or equivalent
	Center: +V Sleeve: -V	Barrel female connector (Fork & Groove type)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Switchcraft, Type: RA712 or equivalent
	Center: +V Sleeve: -V	Barrel female connector (Fork & Groove type)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Switchcraft, Type: RA722 or equivalent
	Center: +V Sleeve: -V	Barrel right angle female connector (Fork & Groove type)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Switchcraft, Type: RA712 or equivalent
	Center: +V Sleeve: -V	Barrel right angle female connector (Fork & Groove type)	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Barrel right angle female connector (Fork & Groove type)
	Center: +V Sleeve: -V	EIAJ RC-5320A plug type B with internal pin EIAJ-05 plug	FSP036-RBBN2 FSP045-REBN2 FSP045-RABN2	Lumberg 1613 11 or Lumberg 1614 05 or equivalent

Note: Contact SPI for further information



Optional AC Power Cords

Country	SPI P/N	Cable Type	Length
North America	PCR-S3US-183D	SPT-2	1830 mm +/- 50
Argentina	PCR-S3AR-183B	H03VV-F	1830 mm +/- 50
Australia	PCR-S3AU-183B	H05VV-F	1830 mm +/- 50
China	PCR-S3CN-183B	RVV 300/300	1830 mm +/- 50
Europe	PCR-S3EU-183B	H05VV-F	1830 mm +/- 50
India	PCR-S3OUK-183B	H05VV-F	1830 mm +/- 50
Israel	PCR-S3IS-183B	H03VV-F	1830 mm +/- 50
Italy	PCR-S3IT-183B	H05VV-F	1830 mm +/- 50
Japan	PCR-S3JP-183A	VCTF	1830 mm +/- 50
Korea	PCR-S3KR-183B	H03VV-F	1830 mm +/- 50
South Africa	PCR-S3SA-183B	H05VV-F	1830 mm +/- 50
Switzerland	PCR-S3SW-183B	H05VV-F	1830 mm +/- 50
Taiwan	PCR-S3TW-183A	VCTF	1830 mm +/- 50
United Kingdom	PCR-S3UK-183B	H05VV-F	1830 mm +/- 50



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