

TECHNICAL DATASHEET

90W 19V Adapter

FSP090-DBAC3 / FSP090-DBBC3



FSP090-DBAC3 / BC3

FEATURES

- · Certified IEC 62368-1
- · Meet Energy Efficiency DOE Level VI
- Meet ErP Lot 7
- · High Reliability
- Over Current Protection
- · Over Temperature Protection
- · Over Voltage Protection
- With PFC Circuit

SAFETY STANDARD APPROVAL









DESCRIPTION

This product is an 90 watts AC to DC PD adapter intended for use in systems such as mini-PC or POS with 19V input. This adapter operates at 90 to 264Vac input. The unit meets CISPR32 EN55032 CLASS B, and FCC PART 15B Class B emission limits, and is designed for ITE application.

INPUT SPECIFICATIONS

Input voltage: 90-264 VAC

Input current: 100Vac ≤ 1.5A, 240Vac ≤ 1.8A at full load

47-63 Hz

No load power

Input frequency:

consumption:

115Vac, 230Vac ≤ 0.21W

Leakage current: 264Vac / 50Hz ≤ 0.25mA

OUTPUT SPECIFICATIONS

Output voltage/current: See rating chart

Max. output power: 90W

Protection:

Over voltage: The adapter will shut down caused by in-

ternal fault. That will be return to normal

state by AC reset. See chart.

Over current: The power will shutdown without damage.

Over Temperature: The power supply will enter into shut down

while the abnormal thermal rise occurs.

ENVIRONMENTAL SPECITICATIONS

Operating temperature: 0~70°C (> 40°C derating)

Storage temperature: -20~+80°C

Operating humidity: 20~80% RH non-condensing Storage humidity: 10~90% RH non-condensing

GENERAL SPECIFICATIONS

Power factor: $PF \ge 0.9$ at 100Vac/240Vac input

Efficiency: See the chart at next page

Hold-up time ≥ 10ms at 100 or 240Vac with max. load

Inrush current: No damage, I2T Shall be less than 29% of

the rating of adapter critical component

Operating altitude: 5,000 meters

MTBF: ≥ 30K hrs with 230Vac / Max. load at 25°C

EMC Performance

EN55032: Class B conducted, class B radiated FCC: Class B conducted, class B radiated

VCCI: Class B conducted, class B radiated

EN61000-3-2: Harmonic distortion, Class D

EN61000-3-3: Line flicker

EN61000-4-2: ESD, ±8 KV air & ±4 KV contact

EN61000-4-3: Radiated immunity, 3 V/m
EN61000-4-4: Fast transient / burst. ±1 KV

EN61000-4-5: Surge, ±1 KV diff., ±2 KV com.

EN61000-4-6: Conducted immunity, 3 Vrms
EN61000-4-8: Magnetic field immunity, 1A/m

EN61000-4-11: Voltage dip immunity, 30% reduction for 500

ms, >95% reduction for 10 ms, and 100%

reduction for 5000 ms

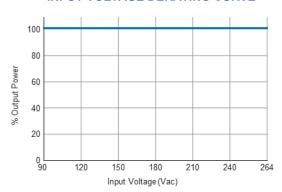


TECHNICAL DATASHEET

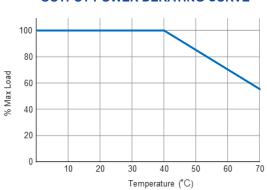
90W 19V Adapter

FSP090-DBAC3 / FSP090-DBBC3

INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Output Voltage	Output Current	AC Inlet	Efficiency		Over Voltage
				DOE (Level VII)	ErP Lot 7	Protection
FSP090-DBAC3	19V	4.74A	C14	≥ 88%	≥ 88%	28 Volts
FSP090-DBBC3	19V	4.74A	C6	≥ 88%	≥ 88%	28 Volts

MECHANICAL & AC CONNECTOR SPECIFICTIONS

FSP090-DBAC3 / FSP090-DBBC3

