



**UNIVERSAL INPUT**

# FSAP15 SERIES 15 WATT DIN RAIL SWITCHING POWER SUPPLIES

## GENERAL SPECIFICATIONS

Construction	Industrial, rugged plastic case.
Connectors / Terminals	Screw terminals
DIN Rail Mounting Bracket	Secure snap-on spring-loaded clip
Adjustable Settings	Output voltage adjustment
Efficiency (1)	≥ 78%: 12V model; ≥ 81%: 24V model
Cooling, Free Space, Mounting Clearances	Convection Free air (Refer to mechanical spec)
Parallel Operation	Use with external diode
Status Indicators	"DC-OK" LED

## FEATURES

- ◆ Wide Range Input 90 – 264 VAC, no manual switching
- ◆ Rugged plastic case construction
- ◆ Compact Size
- ◆ Low Noise and Ripple, Line Regulation and Load Regulation
- ◆ Overload and Short Circuit Protections
- ◆ "DC OK" visual indicator LED
- ◆ Low EMI meets EN55022-B, FCC-15B, EN55024 standards
- ◆ Certified to UL508 Safety standards
- ◆ Meets UL1604 Hazardous Location standard

## DESCRIPTION

**A system power solution.** The FSAP15 Series DIN Rail power supplies offer high quality performance at low cost value. They are "parallel capable" to permit load sharing and have high increased reliability for industrial and critical system applications. (2)

**State of the art technology.** Switching technology and small compact high-frequency transformers achieve high DC regulation and stability in small lightweight packages.

**Easy installation, safety and reliability.** These supplies incorporate a rugged plastic case and a secure DIN Rail mounting clip. DIN screw terminals are easily accessible and ensure a safe and reliable installation.

## INPUT SPECIFICATIONS

Input Voltage	90 – 264 VAC
Input Frequency	47 to 63 Hz
Input Current (1)	< 0.42 A at full load
Inrush Current (1)	< 25 A at full load
Power Factor	Meets EN61000-3-2 requirements
Internal Fuse	Included

## ENVIRONMENTAL

Operating Temperature	-10 to +60°C max. From 50 to +60°C derate linearly from 100% to 50% load
Storage Temperature	-25 to +85°C
Operating Humidity	5% to 95% RH, non-condensing
Vibration and Shock	IEC68-2-6 and IEC68-2-27
Hazardous Substances	Compliant with RoHS Directive

## OUTPUT SPECIFICATIONS

Total Output Power	Refer to Ratings Table
Output Voltage / Current	Refer to Ratings Table
Minimum Load	No minimum load required
Start Up Time (1)	< 1 Sec at full load
Hold Up Time	≥ 16 mSec at full load
Line Regulation (1)	< ± 0.5%
Load Regulation, Drift	< ± 1.0%
Over / Undershoot	–
Ripple and Noise (1)	< 1% pk-pk, 20MHz, full load
Damage Protections:	Continuous Protection & auto recovery.
Short Circuit:	Auto recovery
Overvoltage:	Above 120% to 135% of max rating
Overcurrent:	Above 110% to 150% of max rating
Reverse Voltage Protection	< 25V, < 35V for 12V, 24V models (1) (2)

## EMC and SAFETY (2)

EMI Standards	EN55022-B, FCC-15B, EN55024
Safety Standards	UL508 listed, CE (EMC/LVD), Meets EN60950-1
Hazardous Location Standard	Meets UL1604 Class 1, Div 2, A,B,C,D
Harmonic Distortion	Meets EN61000-3-2
Power Limiting	Meets UL1310, Class 2

## NOTES

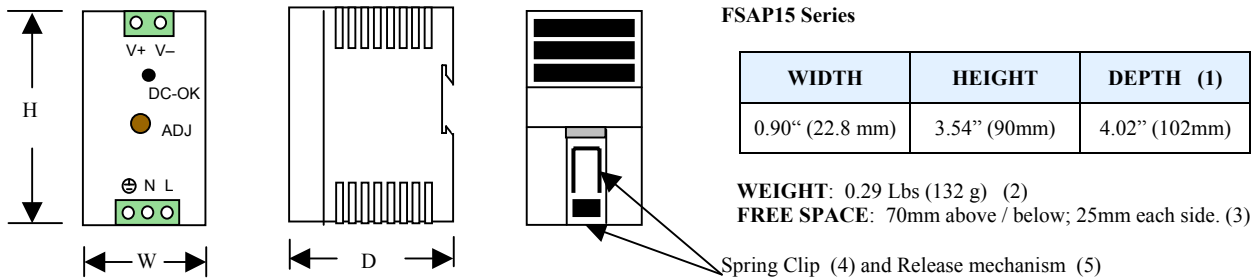
1. Depends upon specific model selection, output voltage, and/or upon 120 or 40 VAC operation.
2. Products are rated for industrial environments and are not to be used nor are warranted in aerospace, medical or lifesafety applications.



## OUTPUT VOLTAGE / CURRENT RATINGS

MODEL	OUTPUT	ADJUST RANGE	OUTPUT CURRENT	OUTPUT POWER
FSAP15-12	12 V @ 1.25 A	10 – 14 V	1.25 – 1.07 A	15 W max
FSAP15-11	24 V @ 0.63 A	22 – 28 V	0.68 – 0.54 A	15 W max

## MECHANICAL SPECIFICATIONS



### NOTES

1. DEPTH includes the 0.3125" (9mm) DIN Rail mounting clip.
2. WEIGHT is 'net', excluding packaging/shipping.
3. FREE SPACE - Units are rated for convectional cooling and require free space on both sides and above / below unit for proper airflow and heat dissipation. Recommended clearances are at higher ambient operating temperatures. Unit mounting direction must be vertical.
4. SPRING CLIP is built into the case.
5. RELEASE MECHANISM is on the rear side bottom. It slides downward to engage or release the unit from the Din Rail mounting bracket.
6. "DC OK" LED INDICATOR. The green indicator lights up indicating the unit operates normally. The indicator turns off indicating power failure (overload etc) or there is no AC input.

## PIN ASSIGNMENTS

CONNECTOR	TERMINAL	TYPE	WIRE SIZE
AC Input (Bottom)	N, L	Screw Terminals	14 – 22 AWG
DC Output (Top)	V+, V-	Screw Terminals	12 – 14 AWG