

# DIN SERIES 5 WATT

SINGLE OUTPUT  
AC/DC POWER SUPPLY  
DIN RAIL MOUNTABLE

## GENERAL SPECIFICATION

- UL / cUL / TUV / CE
- UNIVERSAL INPUT 90~265VAC
- HIGH EFFICIENCY UP TO 72%
- SHORT CIRCUIT PROTECTION
- INTERNAL INPUT FILTER



Spring Type

Screw Type

### 1) INPUT

Description	Min.	Max.	Condition
Rated Input Voltage(VAC)	100	248	Io nom
Input Voltage Range			Ta min ... Ta max
AC IN(VAC)	90	265	Io nom
DC IN(VDC)	120	370	
Line Frequency(Hz)	47	63	Vi nom, Io nom
Inrush Current(A)			Io nom
Vi: 115VAC		10	
Vi: 230VAC		18	

### 2) OUTPUT

MODEL NO.		OUTPUT VOLTAGE	OUTPUT CURRENT	EFFICIENCY (typ.)
Spring Type	Screw Type			
DIN5-05SX-CF	DINA5-05SX-CF	+5VDC	1000mA	67~69%
DIN5-12SX-CF	DINA5-12SX-CF	+12VDC	420mA	70~72%
DIN5-15SX-CF	DINA5-15SX-CF	+15VDC	340mA	70~72%
DIN5-24SX-CF	DINA5-24SX-CF	+24VDC	210mA	70~72%

Hold up time:(Io nom)

Vi=115 VAC  
Vi=230VAC

30ms, min.  
130Ms, min.

Output voltage accuracy (Vi nom, Io min ~ Io nom)

±1% max.

Voltage trim range:(Vo nom, Io nom)

5V...15V models  
24V

-10% min / +15% max.  
-10% min / +20% max.

Minimum load:(Vi nom)

0% min.

Line regulation (Io nom, Vi min ... Vi max)

±1% max.

Load regulation :(Vi nom, Io min ...Io nom)

±2% max.

**Transient recovery time:**(typ.50% load, step changed) 300µS typ.  
**Ripple and noise:**(Vi nom, Io nom,BW = 20MHz) 50mV max.  
**Temperature coefficient:** (Vi nom, Io min) ±0.02%/°C  
**Switching frequency:** (typ. Vi nom, Io nom) 100kHz

**DC ON indicator threshold at start up:** (Vo nom, Io nom)

5V model	4.5VDC min.
12V model	10.8VDC min.
15V model	13.5VDC min
24V model	21.6VDC min.

**DC LOW indicator threshold at start up:** (Vo nom, Io nom)

5V model	3.75VDC min. / 4.5VDC max.
12V model	9VDC min. / 10.8VDC max
15V model	11.25VDC min. / 13.5VDC max.
24V model	18VDC min. / 21.6VDC max.

**Isolation voltage(Input/Output)** 3000VAC, min.  
**Isolation resistance:** (Input / Output @ 500VDC,min.) 100MΩ,min.

### 3) ENVIRONMENT (Operating at Vi nom, Io nom):

<i>Operating Temperature(70 to 100%)</i>	-10°C to +50°C
<i>Derating(+51 to +71°C)</i>	2% / °C
<i>Storage Temperature</i>	-25°C to +85°C
<i>Relative humidity</i>	20~ 95 % R H
<i>Cooling</i>	Free-air convection
<i>MTBF:</i>	According to MIL-HDBK-217F, GF40 235,000 Hrs

### 4) MECHANICAL DRAWING

Case Material..... Plastic  
 Dimensions.....L90 x W22.5 x D115

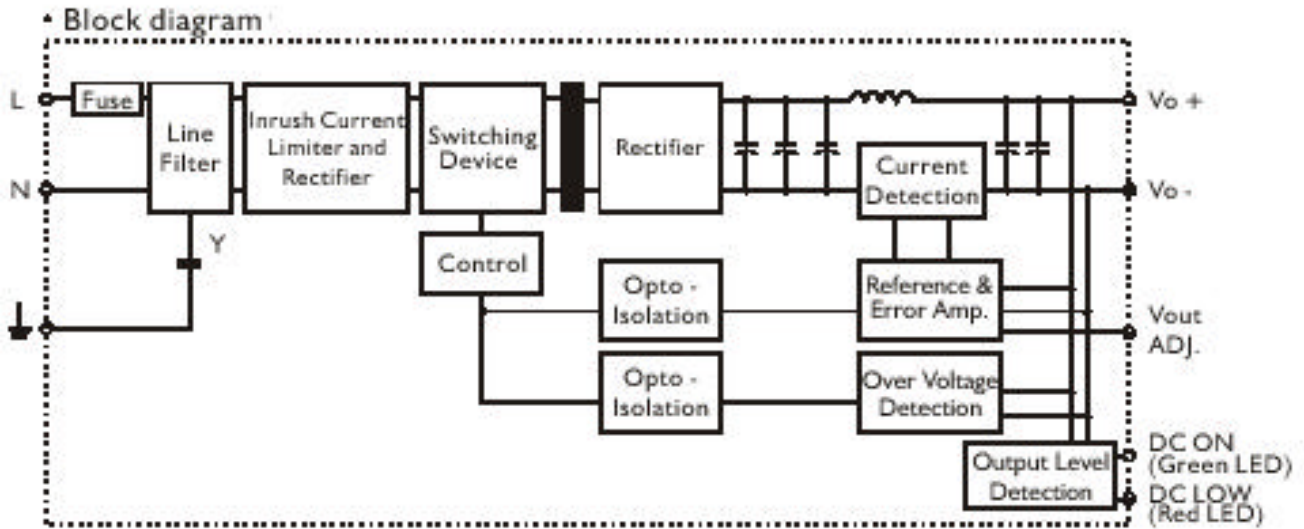
### 5) CONTROL AND PROTECTION

Input fuse	T2A / 250VAC internal
Rated over load protection(Vi nom):	110% ~ 135%
Over voltage protection(Vi nom, Io nom):	125% ~ 145%
Output short circuit(Vi nom, Io nom)	Hiccup mode

### 6) APPROVAL AND STANDARDS

UL / cUL	UL508 / UL1310 Listed, Class 2 Power Supply
TUV	EN60950
CE	EN50081-1 / EN55022 for EMI
	EN50082-1 / EN55024 for EMS
FCC	Class B

## 7) CIRCUIT SCHEMATIC



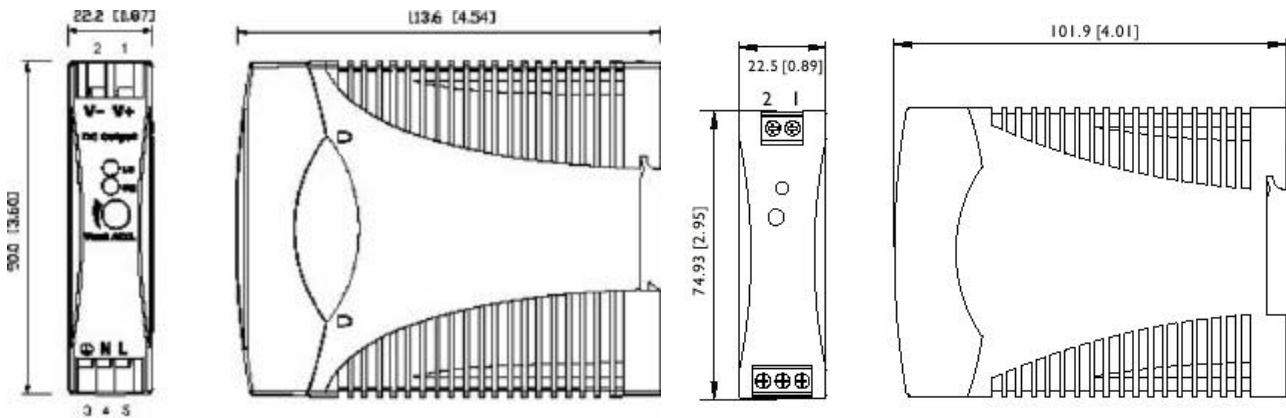
## 8) MECHANISM & PIN CONFIGURATION

### CONSTRUCTION

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail; tools required even to remove

### INSTALLATION

Ventilation / Cooling  
Normal convection  
Above/below 25mm free space  
For cooling recommended  
Connector size range  
Solid: 0.2-2.0mm (AWG24-14)  
(use copper conductors only)




*Spring Type*

*Screw Type*

## 9) PHYSICAL CHARACTERISTICS

CASE SIZE..... 90 x 22.5 x 115 mm 3.6 x 0.89 x 4.53 inches  
 CASE MATERIAL..... Plastic  
 WEIGHT.....115 g

## 10) PIN ASSIGNMENT

PIN NO.		Designation	Description
1	OUT	V +	Positive output terminal
2		V -	Negative output terminal
3	IN		Ground this terminal to minimize high-frequency emissions
4		N	Input terminals (neutral conductor, no polarity at DC input)
5		L	Input terminals (phase conductor, no polarity at DC input)
	OTHER	ON	Operation indicator LED
		LO	DC LOW indicator LED
		Vout Adj.	Trimmer-potentiometer for Vout adjustment

## 11) DERATING CURVE

