

Features

- Input Voltage Range 85-305VAC
- Super Small Design
- Low no-load power consumption
- Up to 87% Efficiency
- Single Output 5-48V DC
- Protections: SCP, OLP, OVP
- Three Years Warranty

RS PRO Enclosed AC/DC

RS Stock No.: 0813905

0813906

0813908

0813909



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

- This Series is a high-efficiency and standards-compliant 20W Encapsulated AC/DC PCB Mount Power Supply.
- Designed for use in applications such as industrial control and automation systems.
- This series is supplied with a Pin Connection input connection and supports input voltages of 85~305V AC 47~63Hz.

Electrical Specifications

RS Stock#	Input Voltage	Output Voltage	Output Current	Output Wattage	Efficiency (Typ)	Max. Capacitive Load (uF)
0813905	85~305V AC	5 V	4 A	20 W	85.0	8000
0813906	85~305V AC	12 V	1.67 A	20.04 W	86.0	4000
0813908	85~305V AC	15 V	1.33 A	19.95 W	87.0	3000
0813909	85~305V AC	24 V	0.83 A	19.92 W	87.0	1000

Input Specifications

Input Voltage	85~305V AC/100~430V DC
Frequency Range	47~63Hz
AC Current	0.50A at 115VAC / 0.30A at 230VAC
Inrush Current	Cold Start 45A at 115V AC / 45A at 230V AC
Leakage Current	< 0.1mA/277V AC, 50Hz

Output Specifications

Ripple & Noise	150mVp-p
Voltage Tolerance	±1.5%
Line Regulation	±0.5%
Load Regulation	±1.0%
No Load Power Consumption	0.1W/230VAC 3.3v, 5v, 12v, 15v
	0.12W/230VAC 24v
Set up	1500ms, 40ms at 230VAC at full load
Rise Time	1500ms, 40ms at 115VAC at full load
Hold up Time	50ms at 230VAC at full load / 8ms at 115VAC at full load

Protection Specifications

Over Load	105~150% Rated Output Power
	Constant current limiting, unit will shutdown after 3 sec. re-power on to recover
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature	Shut down o/p voltage, re-power on to recover.
Over Voltage	115~135% Rated Output Voltage
	Shut down o/p voltage, re-power on to recover

Environmental

Working TEMP.	-20 ~ +65°C (Please refer to "Derating Curve" section)
Working Humidity	20 ~ 90%RH Non-condensing
Storage TEMP. Humidity	-40 ~ +85°C, 10 ~ 95%RH Non-condensing
TEMP. Coefficient	±0.03%/(0 ~ 50°C) on load output
Vibration	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes
Safety Protection	Class I
Over Voltage Category	OVC II / According to BS EN/EN61558, BS EN/EN50178, BS EN/EN60664-1, BS EN/EN62477-1; altitude up to 2000 meters

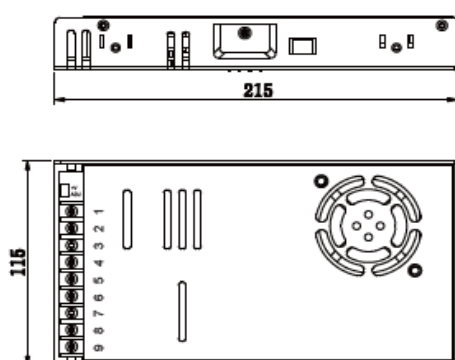
Safety & EMC

Safety Standards	EN62368-1 approved, design to meet: BS EN62368-1, EN60335-1, EN61558-1
Withstand Voltage	I/P-O/P:3KVAC/1min I/P-FG:2KVAC/1min O/P-FG:0.5KVAC/1min
Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN55035 BS EN/EN61000-3-2, BS EN/EN61000-3-3
EMC Immunity	Compliance to BS EN/EN61000-4-11 Criteria B, BS EN/EN61000-4-2,3,4,5,6,8 Criteria A

Electrical Drawing

Drawing & Label

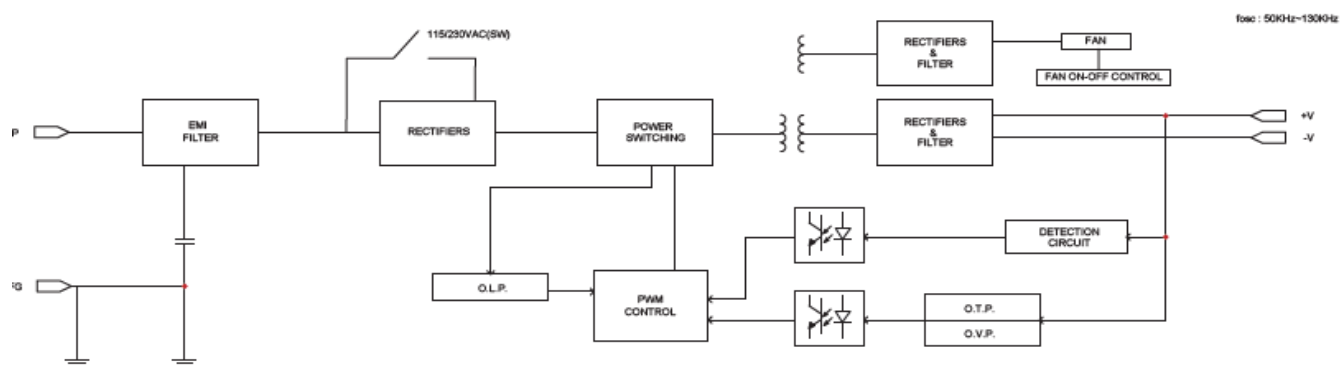
(Unit: mm , tolerance: ± 1 mm)



Terminal Pin No. Assignment

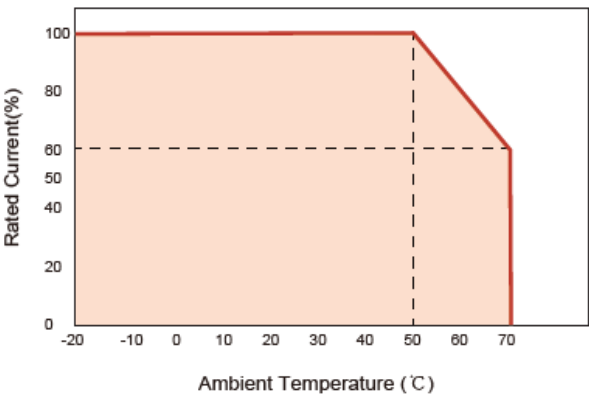
Pin No.	Assignment
1	DC OUTPUT +V
2	DC OUTPUT +V
3	DC OUTPUT +V
4	DC OUTPUT -V
5	DC OUTPUT -V
6	DC OUTPUT -V
7	PG
8	AC/N
9	AC/L

Block Diagram



Engineering Data

Derating Curve



Static Characteristics

