# **SWITCH MODE POWER SUPPLY**



#### **Features**

- Compact, Low Cost & High Reliability
- 230VAC / 110VAC Input
- 100% Full Load Burn-in Test
- PROTECTION: Shortcircuit, Overvoltage & Overload
- CE Marked on all models
- Cooling by free air convection
- 1 Year Warranty

### **INPUT SPECIFICATION**

 Voltage Range
 100-120VAC; 200-240VAC

 Frequency Range
 47 - 63Hz

 Efficiency
 DR-60-12: 82%

 DR-60-24: 84%

 AC Current (typ.)
 1.2A / 115VAC; 0.8A / 230VAC (for cold start at 25°C)

 Inrush Current (typ.)
 18A / 115VAC; 36A / 230VAC (for cold start at 25°C)

### **OUTPUT SPECIFICATION**

Rated Current	DR-60-12 : 4.5A DR-60-24 : 2.5A	
Rated Power	60Watts	
Voltage ADJ. Range	DR-60-12 : 10.8~13.2V DR-60-24 : 21.6~26.4V	
Voltage Tolerance	±1%	
Ripple & Noise(max)	DR-60-12 : 120mVp-p DR-60-24 : 150mVp-p	
Setup Time	100ms / 230VAC ; 200ms / 115VAC at full load	
Rise Time	30ms / 230VAC ; 30ms / 115VAC at full load	
Hold Time(Tvp.)	100ms / 230VAC 23ms / 115VAC at full load	

### **PROTECTION**

Overload	105% to 160% rated load current
	Protection Type : constant current limiting
	recovers automatically after fault condition is removed
Overvoltage	DR-60-12 : 13.8 ~ 16.2V
	DR-60-24 : 27.6 ~ 32.4V
	Protection Type : shut down o/p voltage, re-power on to recover

#### **ENVIRONMENT**

Temperature	Working: -20°C to +60°C (derating is required according to temperature) Storage: -40°C to +85°C (with no icing or condensation)	
Humidity	Working: 20% to 90% RH (non-condensing)	
	Storage: 10% to 95% RH	
Vibration Resistance	10 to 500Hz, 10min/1cycle (2G) for 60min each in X, Y, Z directions	

### **STANDARDS**

Safety Standards	Accord with UL60950-1, TUV EN60950-1, EN50178	
EMC Standards	Meet the EN55022 CLASS B Equipment	
Harmonic Current	Compliance to EN61000-3-2,-3	
EMS Immunity	Compliance to EN61000-4-2, 3, 4, 5; ENV5020 EN55024, Light industry level, CLASS A	

#### **SECURITY**

Isolation Resistance	I/P and O/P ; I/P and FG ; O/P and FG : 100MΩ at 500VDC, 25°C, 70% RH	
Dielectric Strength	Between I/P and O/P: 3kVAC for 1 min	
	Between I/P and F.G: 1.5kVAC for 1 min	
	Between O/P and F.G: 0.5kVAC for 1 min	

### **OTHER SPECIFICATION**

Weight	0.3kg
Dimension (L*W*H)	78*93*56 mm

### **ORDER CODE**

MODEL	VOLTAGE	CURRENT
DR-60-12	12VDC	5.0A
DR-60-24	24VDC	2.5A

## **DIMENSIONS**

