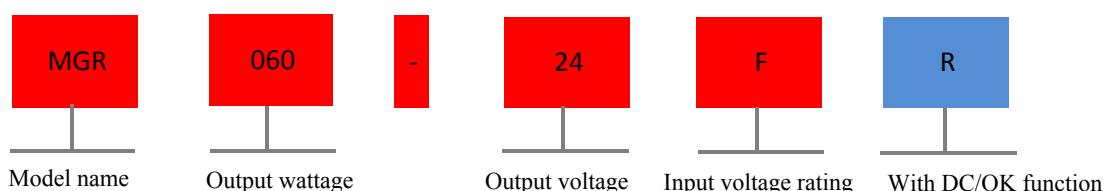


**MGR060-□F/FR Series****▲ Features**

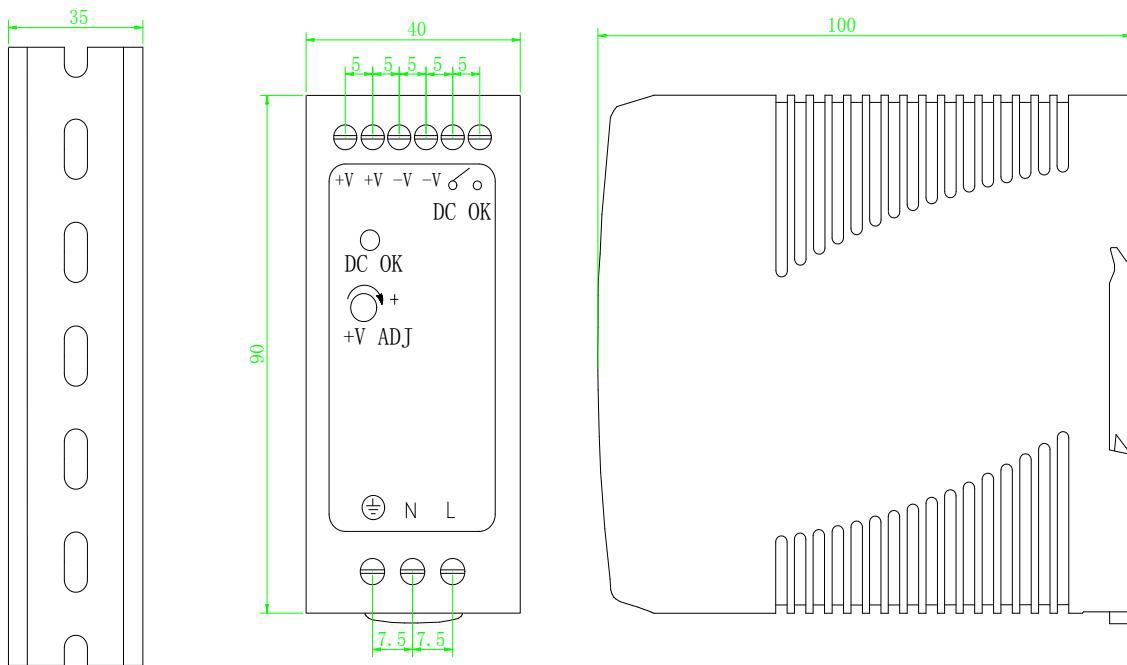
- Universal AC input/full range
- Protections: short circuit/overload/over voltage
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- Built in DC OK active signal
- LED indicator for power on
- No load power consumption <0.75W
- 100% full load burn -in test
- 3 years warranty

**▲ Model Encoding**

**Specifications**

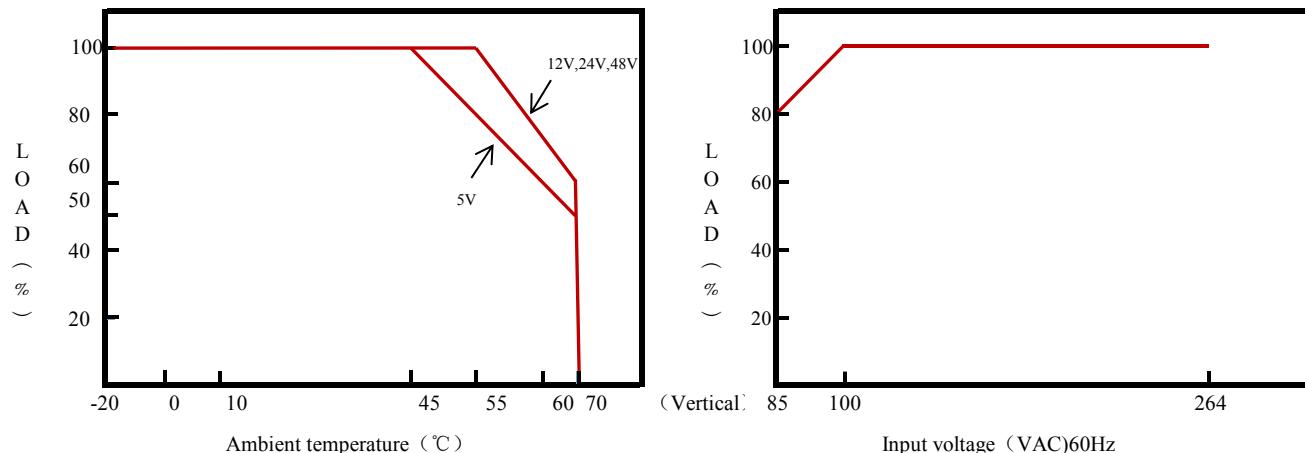
<b>Input</b>				
Voltage range	85-264VAC 120-370VDC			
AC current	1.8A/115VAC 1A/230VAC			
Frequency range	47-63Hz			
Inrush current (max)	Cold start: 30A/115VAC 60A/230VAC			
<b>Output</b>				
DC voltage (V)	5V	12V	24V	48V
Efficiency	78%	86%	88%	88%
Rated Current (A)	10A	5A	2.5A	1.25A
Rated power(W)	50W	60W	60W	60W
Voltage ADJ.range	5-6V	12-15V	24-30V	48-56V
Ripple & noise(max ) Note.2	80mVp-p	120mVp-p	150mVp-p	200mVp-p
Voltage tolerange Note.3	±2%	±1%	±1%	±1%
Line regulation	±1%	±1%	±1%	±1%
Load regulation	±1.5%	±1%	±1%	±1%
Setup, rise time Note.4	500ms 30ms/230VAC 500ms 30ms/115VAC(at full load)			
Hold up time	50ms/230VAC 20ms/115VAC(at full load)			
Status indicator	Green LED			
<b>Protection</b>				
Overload	105%-150% rated output power Protection type: Constant current limiting, recovers automatically after fault condition is removed.			
Over voltage(V)	6.25-7.25V	15.6-18V	31.2-36V	57.6-64.8V Protection type: Shut down O/P voltage ,re-power on to recover.
DC OK signal	Relay contact rating(max.):30V/1A resistive			
<b>Safety and EMC</b>				
Withstand voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC			
Isolation resistance	I/P-O/P,I/P-FG,O/P-FG :100M Ohms/500VDC/25°C/70 % RH			
Safety standards	60950-1、GB4943.1			
EMC emission	Compliance to EN55011, EN55032(CISPR32)EN61204-3 Class B,EN61000-3-2,-3			
EMC immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024,EN61000-6-2,EN61204-3. heavy industry level, criteria A			
<b>Environmental</b>				
Working temperature	- 20~+70 °C (Refer to "Derating curve ")			
Storage temperature	- 40~+85°C			
Storage humidity	10-95 % RH			
Vibration	Component:10-500Hz,2G 10 min/1cycle ,60 min each along X,Y,Z axes			
<b>Others</b>				
Mean time between failure	299.2K hrs min MIL-HDBK-217F(25°C)			
Installation	Install on DIN rail TS35			
Protection class	IP20			
Weight	0.35kg			
Length*width*height	90*40*100mm			
<b>Data</b>		<b>Details</b>	<b>Mode name</b>	
	MGR 50W 10A/5V	MGR060-05F		
	MGR 60W 5A/12V	MGR060-12F		
	MGR 60W 2.5A/24V	MGR060-24F		
	MGR 60W 1.25A/48V	MGR060-48F		
	MGR 50W 10A/5V	MGR060-05FR		
	MGR 60W 5A/12V	MGR060-12FR		
	MGR 60W 2.5A/24V	MGR060-24FR		
	MGR 60W 1.25A/48V	MGR060-48FR		

### Installation Instruction



Install DIN rail TS35/7.5 or TS35/15  
Tightening Torque Max. :5 kgf-cm (4.4 Lb-in)

### Derating curve



- Note:**
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  2. Ripple & noise are measured at 20MHZ of bandwidth by using a "12"twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
  3. Tolerance: includes set up tolerance, line regulation and load regulation.
  4. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time
  5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft)