

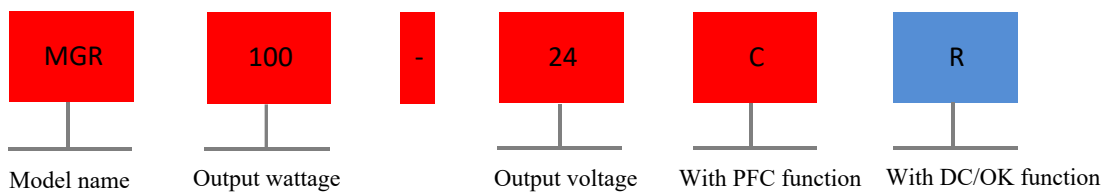
## MGR100-□C/CR Series



### ▲ Features

- Universal AC input/full range
- Protections: Short circuit/Overload/Over voltage/Over temperature
- ZCS/ZVS technology to reduce power dissipation
- 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 < 1W
- 100% full load burn-in test
- 3 years warranty

### ▲ Model Endoding



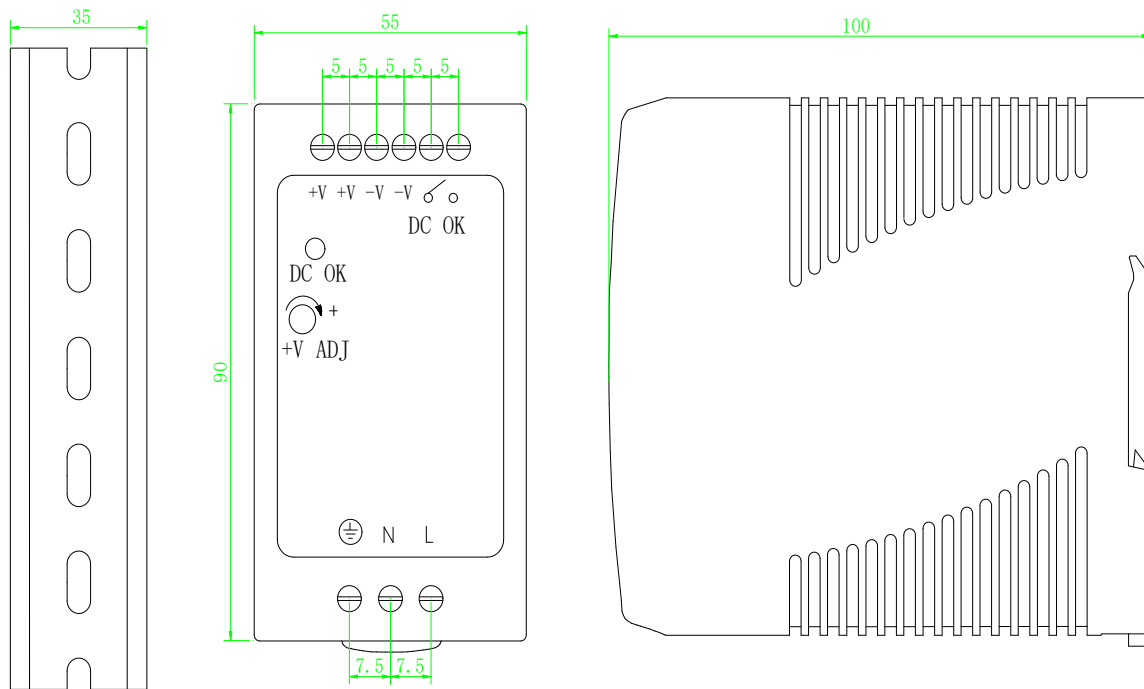


## Specifications

Input			
Voltage range <small>Note.1</small>	85-264VAC 120-370VDC		
AC current	1.3A/115VAC 0.8A/230VAC		
Frequency range	47-63Hz		
Inrush current (max)	Cold start: 30A/115VAC 60A/230VAC		
Output			
DC voltage (V)	12V	24V	48V
Efficiency	82%	85%	86%
Rated Current (A)	7.5A	4A	2A
Rated power(W)	90W	96W	96W
Voltage ADJ.range	12-15V	24-30V	48-56V
Ripple & noise(max ) <small>Note.3</small>	120mVp-p	150mVp-p	200mVp-p
Voltage tolerance <small>Note.4</small>	±1%	±1%	±1%
Line regulation	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%
Setup, rise time <small>Note.5</small>	3000ms 50ms/230VAC 3000ms 50ms/115VAC(at full load)		
Hold up time	50ms/230VAC 20ms/115VAC(at full load)		
Status indicator	Green LED		
Protection			
Overload	105%-150% rated output power		
	Protection type: Constant current limiting, recovers automatically after fault condition is removed		
Over voltage(V)	15.6-18V	31.2-36V	57.6-64.8V
	Protection type:Shut down O/P voltage ,re-power on to recover		
Over temperature	Shut down O/P voltage,auto-recovery or re-power on to recover		
DC OK signal	Relay contact rating(max.):30V/1A resistive		
Safety and EMC			
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	Design reference EN IEC 62368-1、GB 4943.1		
EMC emission	Parameter	Standard	Test Level/Note
	Conducted	EN 55032	Class B
	Radiated	EN 55032	Class B
	Voltage Flicker	EN 61000-3-3	Design reference Class A
	Harmonic Current	EN IEC 61000-3-2	Design reference Class A
EMC immunity	Parameter	Standard	Test Level/Note
	ESD	EN 61000-4-2	Level 3 8KV air
	Radiated Susceptibility	EN 61000-4-3	Level 2 3V/m
	EFT/Burest	EN 61000-4-4	Level 2 1KV/5KHZ
	Surge	EN 61000-4-5	Level 2 1KV/L-N;Level2 2KV/L-N-FG
	Conducted	EN 61000-4-6	Level 2 3V
	Magnetic Field	EN 61000-4-8	Level 2 3A/m
	Voltage Dips and interruptions	EN 61000-4-11	< 5% residual voltage for 0.5 cycles .70% residual voltage for 25 cycles , < 5% residual voltage for 250 cycles:
Environmental			
Working temperature	- 10~+60 °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		

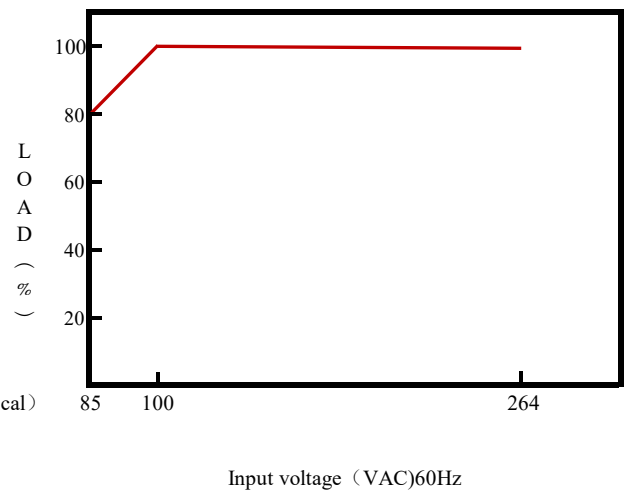
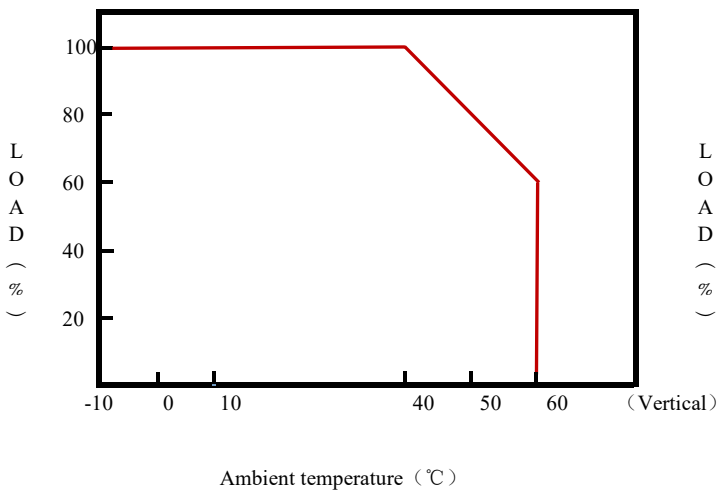
Others		
Mean time between failure	346K hrs min MIL-HDBK-217F(25°C)	
Installation	Install on DIN rail TS35	
Protection class	IP20	
Weight	0.45kg	
Length*width*height	90*55*100mm	
Data	Details	Model name
	MGR 90W 7.5A/12V	MGR100-12C
	MGR 96W 4A/24V	MGR100-24C
	MGR 96W 2A/48V	MGR100-48C
	MGR 90W 7.5A/12V	MGR100-12CR
	MGR 96W 4A/24V	MGR100-24CR
	MGR 96W 2A/48V	MGR100-48CR

## 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. Derating may be needed under low input voltages, please check the derating curve for more detail.
  2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
  3. Ripple & noise are measured at 20MHZ of bandwidth by using a "12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
  4. Tolerance: includes set up tolerance, line regulation and load regulation.
  5. Length of set up time is measured at cold first statr. Turning ON/OFF the power supply may lead to increase of the set up time
  6. 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)