

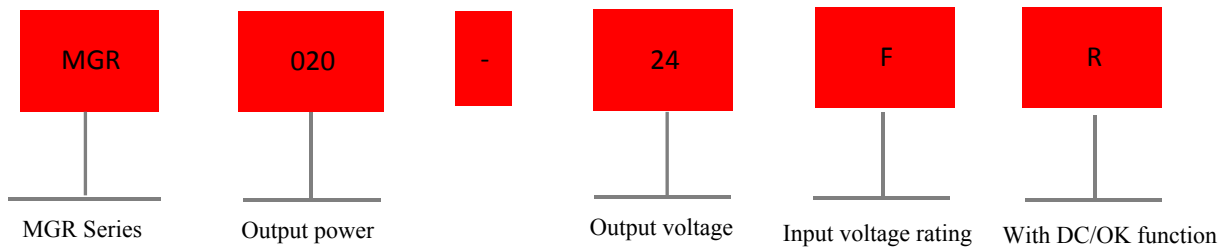
MGR020-□FR Series



▲ 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 code

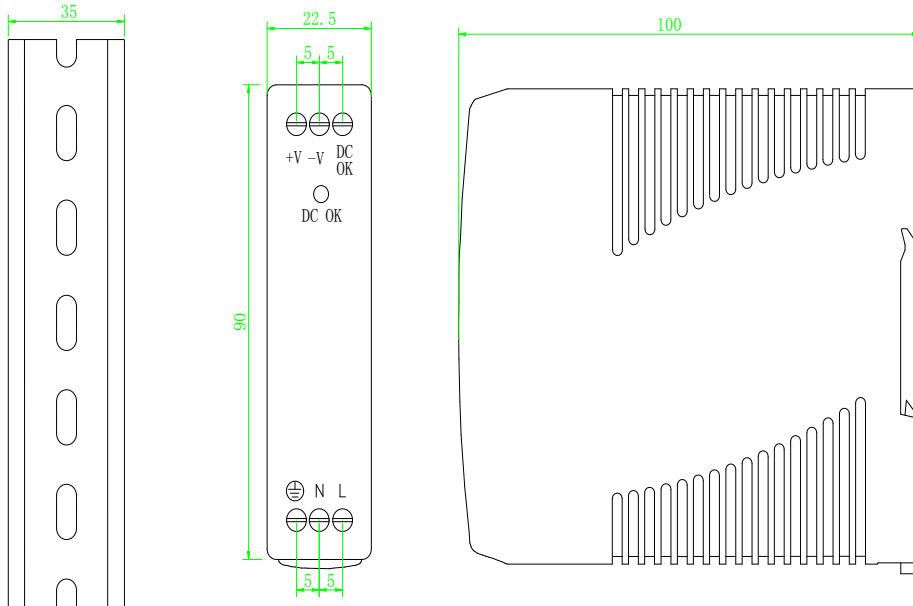




Electrical specifications

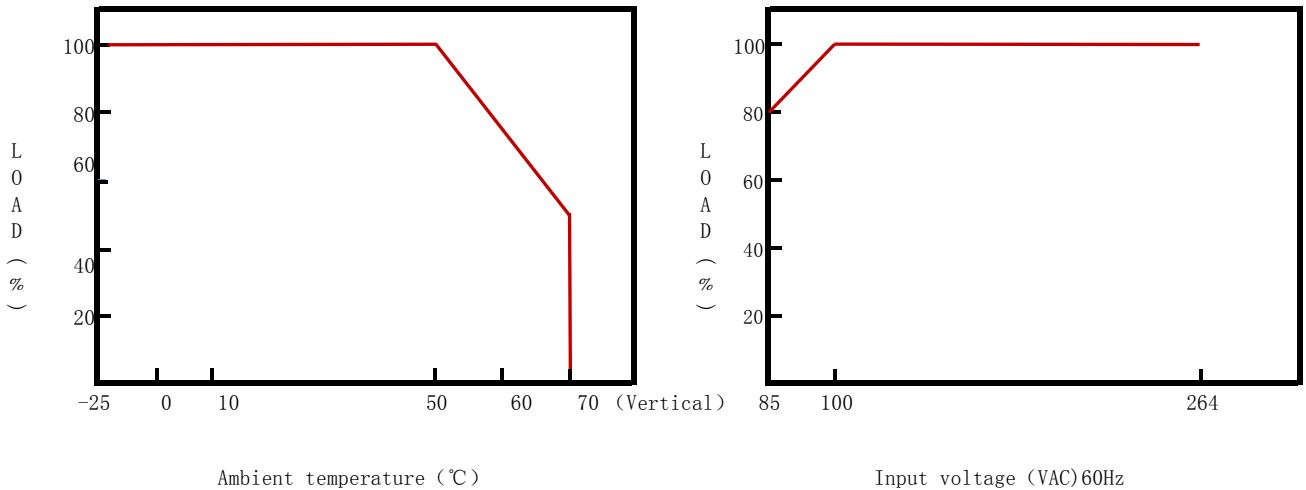
Input parameter				
Voltage range	85-264VAC 120-370VDC			
AC current	0.55A/115VAC 0.35A/230VAC			
Frequency range	47-63Hz			
Inrush current (max)	Cold start: 20A/115VAC 40A/230VAC			
Output parameter				
DC voltage (V)	5V	12V	15V	24V
Efficiency	76%	80%	80%	83%
Rated Current (A)	0-3A	0-1.67A	0-1.34A	0-1A
Rated power(W)	15W	20W	20W	24W
Voltage adj.range	±10%			
Ripple & noise(max)Note.1	80mVp-p	100mVp-p	100mVp-p	120mVp-p
Voltage tolerange Note.3	±2%	±1%	±1%	±1%
Line regulation	±1%	±1%	±1%	±1%
Load regulation	±1%	±1%	±1%	±1%
Setup, rise time Note.4	500ms 30ms/230VAC 1000ms 30ms/115VAC(at full load)			
Hold up time	50ms/230VAC 20ms/115VAC(at full load)			
Status indicator	Green LED			
Protect function				
Overload	The rated output power is 110%-160%			
	Protection mode: Constand current limiting, recovers automatically after fault condition is removed			
Over voltage(V)	5.75-6.75V	13.8-16.2V	17.25-20.25V	27.6-32.4V
	Protection mode:Shut down O/P voltage ,re-power on to recover			
DC OK active signal(max.)	3.75-6V/50mA	9-13.5V/40mA	11.5-16.5V/40mA	18-27V/20mA
Safety and electromagnetic compatibility				
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 specification	60950-1、GB4943.1			
EMC emission	Design reference EN55022(CISPR22)Class B,EN61000-3-2,-3			
EMC immunity	Design reference EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61000-6-1, light industry level, criteria A			
Environmental parameters				
Working temperature	- 25~+70 °C (Refer to "Derating curve ")			
Storage temperature	- 20~+85°C			
Storage humidity	10-95% RH			
Vibration	10-500Hz,2G 10 min/cycle X,Y,Z axis 60 minutes.			
The other parameters				
Mean time between failure	236.9K hrs min MIL-HDBK-217F(25°C)			
Installation	Ts35 Guide rail installation			
Protection class	IP20			
Weight	0.2kg			
Length*width*height	90*22.5*100			
Order data	Parameters to describes	Order type		
	MGR 15W 3A/5V	MGR020-05FR		
	MGR 20W 1.67A/12V	MGR020-12FR		
	MGR 20W 1.34A/15V	MGR020-15FR		
	MGR 24W 1A/24V	MGR020-24FR		

Installation diagram



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

Derating curve



- Note:**
1. Ripple & noise are measured at 20MHZ of bandwidth by using a "12"twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
 2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
 3. Tolerance: includes set up tolerance, line regulation and load regulation.
 4. 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
 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)
 6. The power supply is considered a component which will be installed into a final equipment .The final equipment must be re-confirmed that is still meets EMC directives, For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies