

MQR120-□F Series



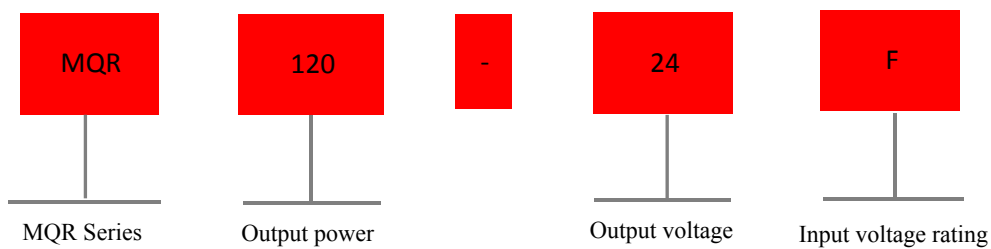
▲ Features

- Universal AC input/Full range
- Protections: short circuit/overload/over voltage/over temperature
- Cooling by free air convection
- Can be installed on DIN rail TS-35/7.5 or 15
- 100% full load burn in-test
- 3 years warranty

▲ Applications

- Industrial control system
- Semiconductor fabrication equipment
- Factory automation
- Electro-mechanical apparatus

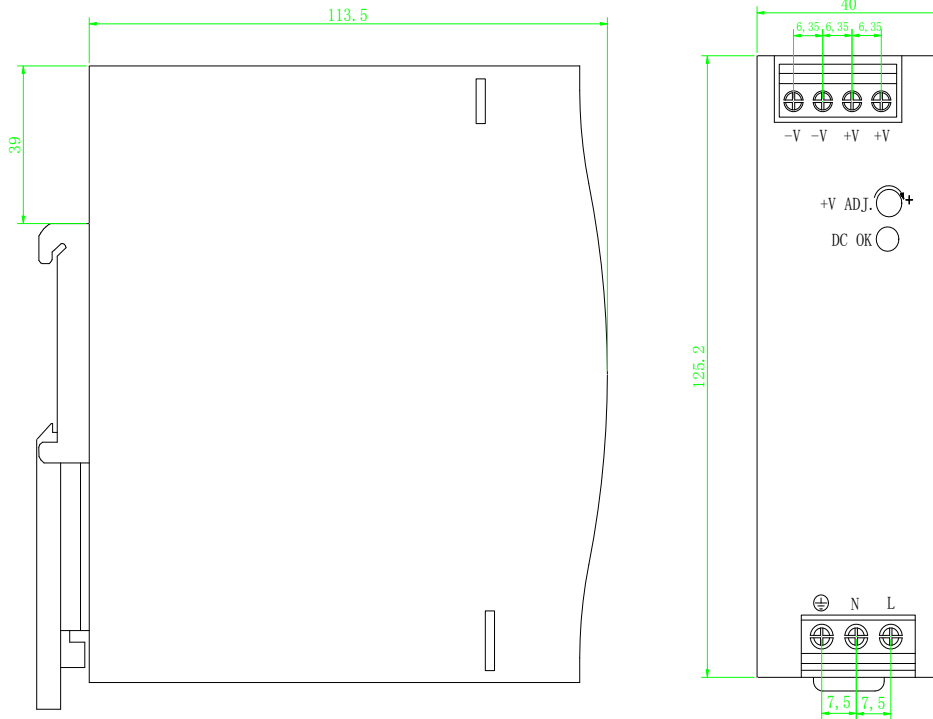
▲ Model code



Electrical specifications

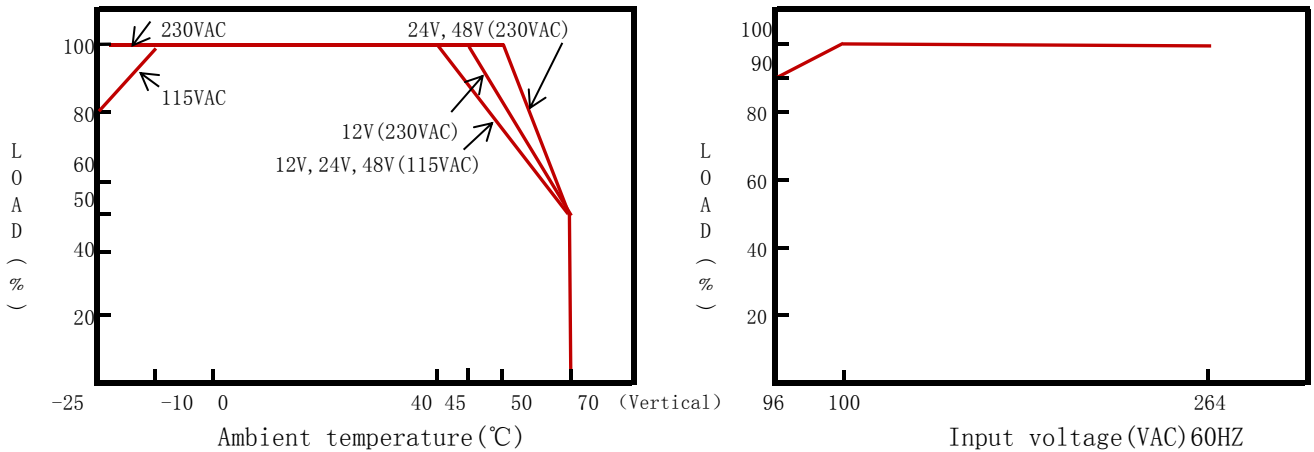
Input parameter			
Voltage range Note.1	96-264VAC 120-370VDC		
AC current	2.25A/115VAC 1.3A/230VAC		
Frequency range	47-63Hz		
Inrush current (max)	20A/115VAC 35A/230VAC		
Output parameter			
DC voltage (V)	12V	24V	48V
Efficiency	84%	87%	88%
Rated Current (A)	10A	5A	2.5A
Rated power(W)	120W	120W	120W
Voltage adj. range	±10%		
Ripple & noise(max)Note.2	100mVp-p	120mVp-p	150mVp-p
Voltage tolerange Note.4	±2%	±1%	±1%
Line regulation	±0.5%	±0.5%	±0.5%
Load regulation	±1%	±1%	±1%
Setup, rise time	1200ms 60ms/230VAC 2500ms 60ms/115VAC(at full load)		
Hold up time	16ms/230VAC 10ms/115VAC(at full load)		
Status indicator	Green LED		
Protect function			
Overload	The rated output power is 105%-150%		
	Protection mode: Constant current limiting, recovers automatically after fault condition is removed		
Over voltage(V)	14-17V	29-33V	56-65V
	Protection mode:Shut down O/P voltage ,re-power on to recover		
Over temperature	Shut down O/P voltage ,re-power on to recover		
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	- 40~+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	474.6K hrs min MIL-HDBK-217F(25°C)		
Installation	Ts35 installation		
Protection class	IP20		
Weight	0.65kg		
Length*width*height	125.2*40*113.5		
Order data	Parameters to describes	Order type	
	MQR 120W 10A/12V	MQR120-12F	
	MQR 120W 5A/24V	MQR120-24F	
	MQR 120W 2.5A/48V	MQR120-48F	

Installation diagram



Derating curve

Tightening Torque Max. :10.35 kgf-cm (9 Lb-in)



Note:

1. Derating may be needed under low input voltage. Please check the derating curve for more details.
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. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
4. Tolerance: includes set up tolerance, line regulation and load regulation.
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 it still meets EMC directives
7. Installation clearances: 40mm on top, 20mm on the bottom, 5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is