

### **MQR480-**□**C** Series



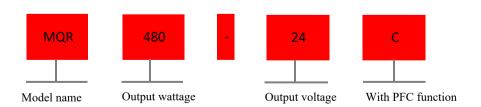
## **▲** Features

Universal AC input/Full range
Built-in active PFC function
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 Encoding





### **Specifications**

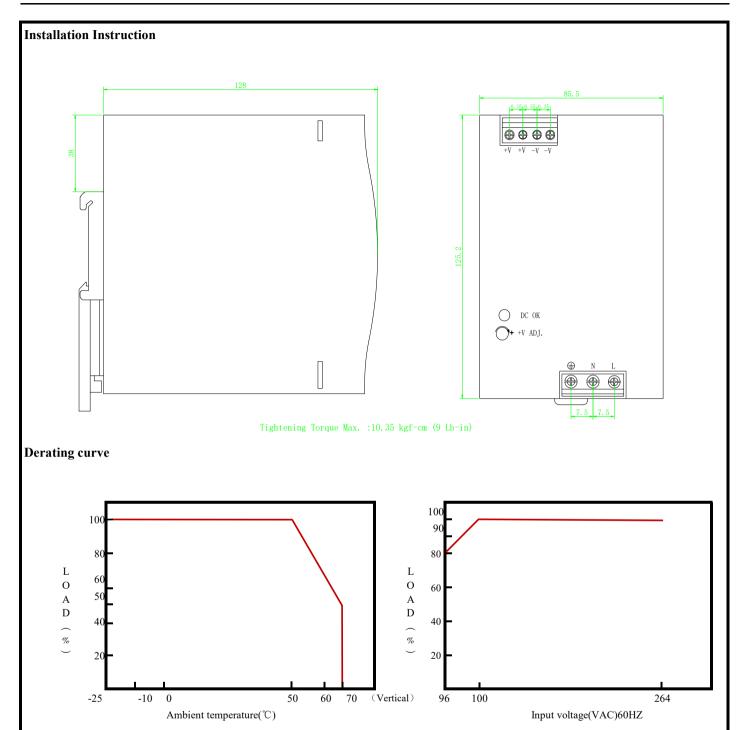
Input				
Voltage range Note.1	96-264VAC 120-370VDC			
AC current	4.8A/115VAC 2.4A/230VAC			
Frequency range	47-63Hz			
Inrush current (max)	20A/115VAC 35A/230VAC			
Output				
DC voltage (V)	24V		48V	
Efficiency	90%		90%	
Rated Current (A)	20A		10A	
Rated power(W)	480W		480W	
Voltage ADJ. range	±10%			
Ripple & noise(max ) Note.2	150mVp-p 150mVp-p			
Voltage tolerange Note.4	±1%		±1%	
Line regulation	±0.5%		±0.5%	
Load regulation	±1%	% ±1%		
Setup, rise time	1500ms 100ms/230VAC 3000ms 100ms/115VAC(at full load)			
Hold up time	16ms/230VAC 16ms/115VAC(at full load)			
Status indicator	Green LED			
Protection				
Overload  Over voltage(V)	105%-130% rated output power			
	Protection type: Constant current limiting, until will shut down after 3sec.re-power on to recover			
O(V)	29-33V		56-65V	
Over voltage(V)	Protection type:Shut down O/P voltage ,re-power on to recover			
Over temperature	Shut down O/P voltage ,re-power on to recover			
Safety and EMC				
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC			
Isolation resistance	//P-O/P,//P-FG,O/P-FG :100M Ohms/500VDC/25 ℃/70 % RH			
Safety standards	60950-1、GB4943.1			
	Parameter	Standard	Test Level/Note	
	Conducted	EN 55032	Class A	
EMC emission	Radiated	EN 55032	Class A	
	Voltage Flicker	EN 61000-3-3	Design reference Class A	
	Harmonic Current	EN IEC 61000-3-2	Design reference Class A	
	Parameter	Standard	Test Level/Note	
	ESD	EN 61000-4-2	Level 3 8KV air;Level 2 4KV contact	
EMC immunity	Radiated Susceptibility	EN 61000-4-3	Level 2 10V/m	
	EFT/Burest	EN 61000-4-4	Level 3 2KV/5KHZ	
	Surge	EN 61000-4-5	Level 3 2KV/Line-Line;Level3 4kV/Line-Line-F	
	Conducted	EN 61000-4-6	Level 3 10V	
	Magnetic Field	EN 61000-4-8	Level 4 30A/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	
			ayoloo 1-070 residuali voltage tol 200 tyties	



Environmental					
Working temperature	- 25~+70 °C (Refer to "Derating curve")				
Storage temperature	- 40∼+85°C	- 40∼+85℃			
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	146.8K hrs min MIL-HDBK-217F(25°C	146.8K hrs min MIL-HDBK-217F(25℃)			
Installation	Install on DIN rail TS35				
Protection class	IP20				
Weight	1.9kg				
Length*width*height	125.2*85.5*128.5mm				
Data	Details	Model name			
	MQR 480W 20A/24V	MQR480-24C			
	MQR 480W 10A/48V	MQR480-48C			



**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 0.1 uf & 47 uf 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  $3.5^{\circ}$ C/1000m with fanless models and of  $5^{\circ}$ 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 reconfirmed that is 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 recommended.