

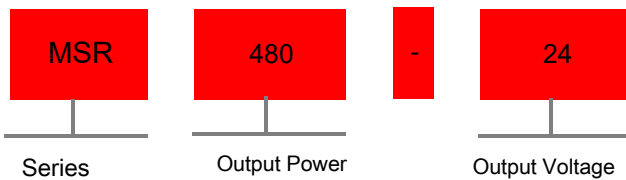
MSR480-□ Series



▲ Specification

- Peak load capability up to 150%
- Built-in active PFC function, $PF > 0.94$
- Efficiency $> 94\%$, Low power dissipation
- Protections: short circuit/overload/over voltage/over temperature
- Built-in constant current limiting circuit
- Mounting: DIN rail TS-35/7.5 or 15
- Built-in DC OK relay contact
- 100% full load burn-in test
- 3 years warranty

▲ Model Encoding

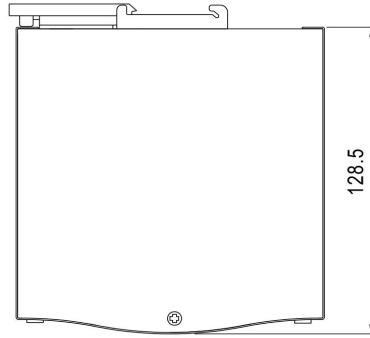




Specification

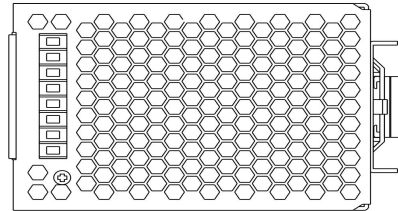
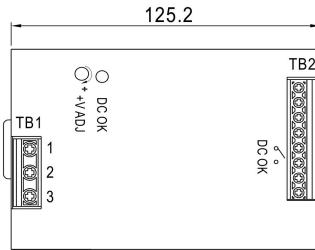
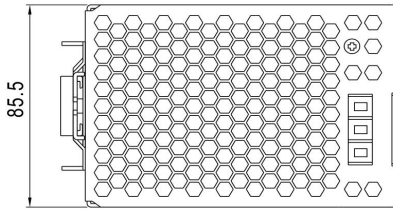
Input			
Input voltage *1	90-264VAC 127-370VDC		
AC current	5A/115VAC 2.5A/230VAC		
Frequency range	47-63Hz		
Inrush current(max.)	40A/115VAC 80A/230VAC		
Output			
DC voltage	24V	48V	
Rated current	20A	10A	
Current range	0-20A	0-10A	
Rated power	480W	480W	
Peak current	30A	15A	
Peak power *2	720W(3S)		
Rippl & noise(max.) *4	100mVp-p	120mVp-p	
Voltage ADJ. range	24-28V	48-55V	
Voltage tolerance *5	±1.2%	±1%	
Line regulation	±0.5%	±0.5%	
Load regulation	±1%	±1%	
Efficiency	94%	94%	
Start up, rise time	1500ms 150ms/230VAC ; 3000ms 150ms/115VAC(@Full load)		
Hold up time	14ms/230VAC(@Full load)		
Status indicator	Green LED		
Protection			
Over load	Normally works within 110%~150% rated output power for more than 3 seconds and then shut down o/p voltage. Automatically recover in 30 seconds >150% of rated power, Constant current limiting within 2 seconds and automatically recover. Shut down O/P in 2S		
Over voltage	29-33V	56-65V	
	Protection type:Shut down O/P voltage ,auto-recover or re-power on to recover		
Over temperature	Protection type: Shut down O/P voltage. automatically recover after the temperature goes down		
DC OK relay contact	60Vdc/0.3A, 30Vdc/1A, 30Vac/0.5A resistive load		
Safety & EMC			
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC O/P-DC OK:0.5KVAC		
Isolation resistance	I/P-O/P, I/P-FG, O/P-FG:>100M Ohms/500VDC/25°C/70%RH		
Safety standards	Design refer to EN IEC 62368-1、GB4943.1		
EMC emission	Parameter	Standard	Test level
	Conducted	EN 55032	Class B
	Radiated	EN 55032	Class B
	Voltage Flicker	EN 61000-3-3	Design refer to Class A
EMC immunity	Harmonic Current	EN IEC 61000-3-2	Class A
	Parameter	Standard	Test level
	ESD	EN 61000-4-2	Level 3 8KV air;Level 2 4KV contact
	Radiated Susceptibility	EN 61000-4-3	Level 3 10V/m
	EFT/Burest	EN 61000-4-4	Level 3 2KV/5KHZ
	Surge	EN 61000-4-5	Level 3 2KV/L-N;Level3 4KV/L-N-FG
	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:	
Environment			
Operating temperature	- 25~+70 °C (Refer to "Derating curve")		
Storage temp & humidity	- 40~+85°C, 10~95%RH		
Operating humidity	20~95%RH, Non-condensing		
Vibration	10-500Hz,2G 10min/1 cycle, 60 min along with each X,Y,Z axes		
Others			
MTBF	≥169.3Khrs MIL-HDBK-217F(25°C)		
Installation	TS35 DIN rail		
Protection class	IP20		
Weight	About 1.6kg		
Dimension	125.2*85.5*128.5mm(W*H*D)		
Data	Description	Model	
	MSR 480W 20A/24V	MSR480-24	
	MSR 480W 10A/48V	MSR480-48	

Installation instruction



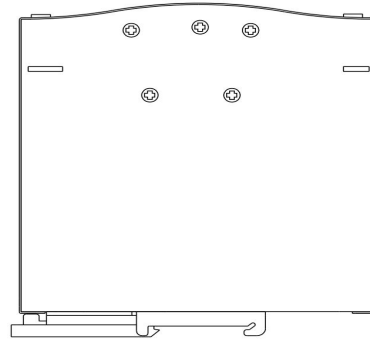
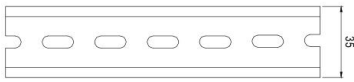
Terminal PIN No. assignment(TB1)

PIN No.	Assignment
1	FG (⊕)
2	AC/N
3	AC/L



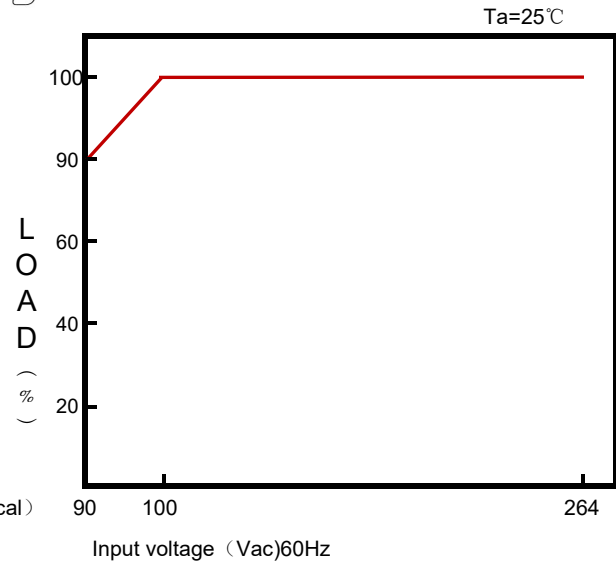
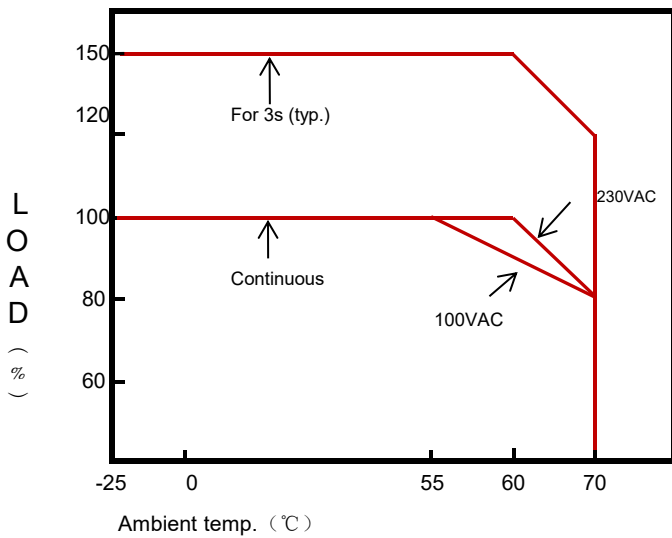
Terminal PIN No. assignment(TB2)

PIN No.	Assignment
1,2	DC OUTPUT +V
3,4	DC OUTPUT -V
5,6	Relay contact
7,8	NC



DIN rail: TS35/7.5 or TS35/15

Derating curve



- Note:**
- 1.3s max. and the average power is not allowed to surpass rating power
 - 2.All parameters are measured at 230VAC input, rated load and 25°C of ambient temperature unless otherwise specified.
 - 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.After burn-in 30 min.
 - 6.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.
 - 7.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).
 - 8.Derating may be needed under low input voltage. Please refer to derating curve for more details.