Mibbo

MRC600-□ Series

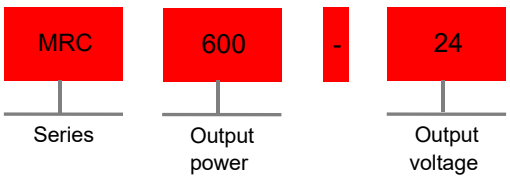
▲ Features

Superior performance with small ripple
Universal AC input/Full range
100% full load burn-in test
Protections:Short circuit/Overload/Over voltage/Over temp.
Built-in Active PFC function
Forced air cooling by built-in DC fan
Transient overload capacity:120%-150%
DC OK signal output
Terminal with protective cover
Surge protection
3-year warranty

▲ Applications

Industrial automation control system
Intelligent control system
Electronic instruments and devices
LED control
Household appliances

▲ Model encoding



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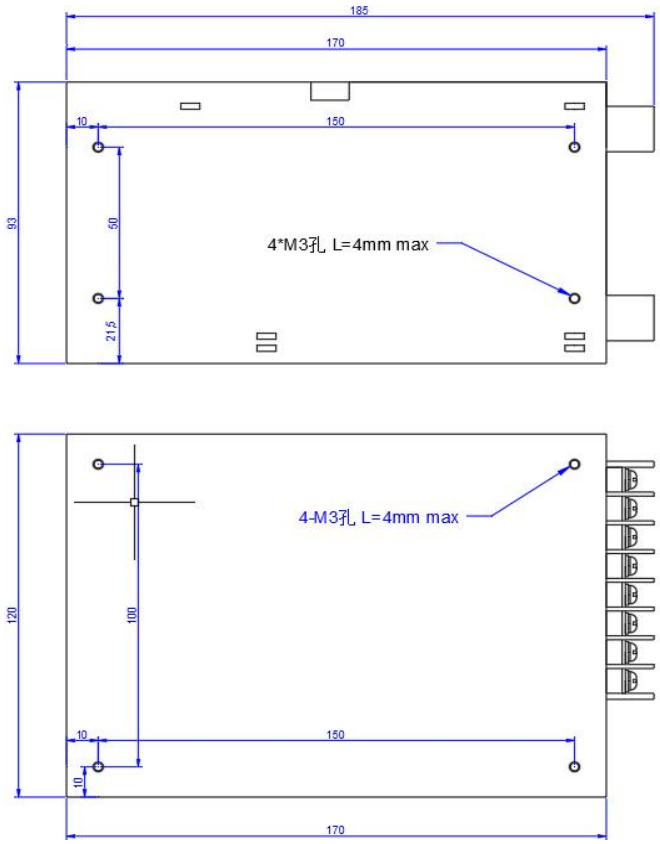
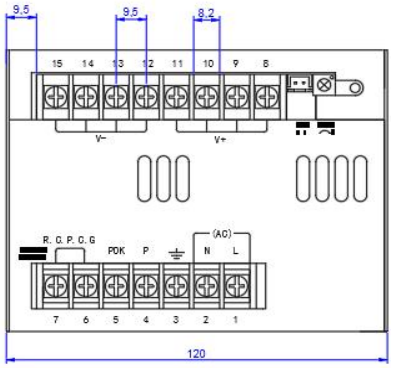
Specification

Input							
Input voltage *1	100-240VAC or 140-340VDC						
AC current	8.2A/100VAC 3.6A/230VAC						
Frequency range	47-63Hz						
Inrush current(max.)	40A/230VAC						
Output							
DC voltage	5V	12V	13.5V	15V	24V	27V	48V
Efficiency	79%	84%	85%	85%	86%	86%	87%
Voltage ADJ. range	±10%						
Rated current	80A	50A	44.5A	40A	25A	22.2A	12.5A
Rated power	400W	600W	600.75W	600W	600W	599.4W	600W
Ripple & noise(max.) *2	180mVp-p	240mVp-p	240mVp-p	240mVp-p	240mVp-p	240mVp-p	300mVp-p
Voltage tolerance *3	±2%	±1%	±1%	±1%	±1%	±1%	±1%
Line regulation *4	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Load regulation *5	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Start up, rise time	1200ms，50ms/230VAC 1200ms，50ms/115VAC(@Full load)						
Hold up time	30ms/230VAC 20ms/115VAC(@Full load)						
Status indicator	Green LED						
Protection							
Overload	105%-135% of rated output power						
	Constant current limiting, recover automatically after the fault condition is removed						
Over voltage	5.75-6.75V	13.8-16.2V	15.5-18.2V	18-21V	27.6-32.4V	31-36.5V	57.6-67.2V
	Shut down O/P voltage, re-power ON to recover						
Over temperature	Shut down O/P voltage, recover automatically after the temperature goes down						
Safety & EMC							
Withstand voltage	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC						
Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70％RH						
Safety standards *6	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				
	Harmonic Current	EN IEC 61000-3-2	Class A				
EMC immunity	**Parameter**	**Standard**	**Test level**				
	ESD	EN 61000-4-2	Level 3 8KV air;Level 2 4KV contact				
	Radiated Susceptibility	EN 61000-4-3	Level 2 3V/m				
	EFT/Burest	EN 61000-4-4	Level 3 2KV				
	Surge	EN 61000-4-5	Level 3 2KV/Line-Line;Level3 4kV/Line-Line-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:				
Environment							
Operating temperature	－25～＋60℃（please refer to Derating Curve）						
Storage temperature	－40-85℃						
Storage humidity	20～95％						
Vibration	10-500Hz,2G 10min/1 cycle, 60 min along with each X,Y,Z axes						

Others		
MTBF	≥197K hrs,MIL-HBDK-217F(25℃)	
Installation	Panel mounting	
Protection class	IP20	
Weight	1.9Kg	
Dimension(L*W*H)	170*120*93	
Ordering	**Description**	**Model**
	MRC 400W 80A 5V	MRC600-05
	MRC 600W 50A 12V	MRC600-12
	MRC 600.75W 44.5A 13.5V	MRC600-13.5
	MRC 600W 40A 15V	MRC600-15
	MRC 600W 25A 24V	MRC600-24
	MRC 599.4W 22.2A 27V	MRC600-27
	MRC 600W 48A 12.5V	MRC600-48

Installation instruction





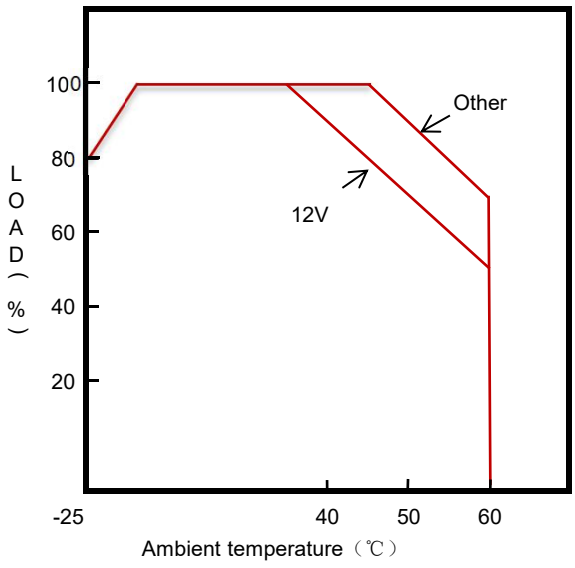
RS Connector(CN5) : JST B-XH or equivalent

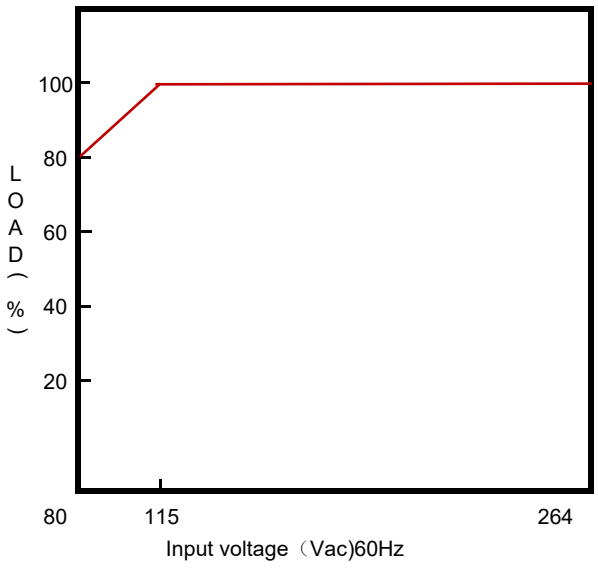
Pin No.	Assignment	Mating Housing	Terminal
1	RS+	JST XHP or equivalent	JST SXH-001T or equivalent
2	RS-		

Terminal Pin No. Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG ⏚
4	P(Current Share)
5	POK
6	R.C.G
7	R.C.
8~11	DC OUTPUT +V
12~15	DC OUTPUT -V

Derating curve





Note

1: All parameters are measured at F:230VAC，H:305VAC input,rated load and 25℃ of ambient temperature unless otherwise specified
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：Tolerance:includes set up tolerance,line regulation and load regulation.
4：Line regulation is measured from low line to high line at rated load
5：Load regulation is measured from 0% to 100% of rated load
6：According to GB4943.1，the power supply is only used in area which altitude lower than 2000m and non-tropical climates