

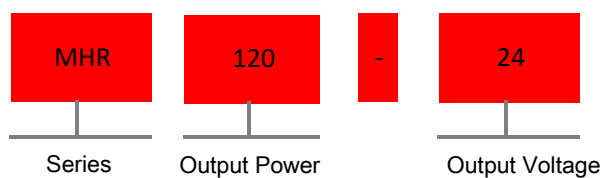
## MHR120-□ Series



### ▲ Features

- 180-550VAC ultra wide input for 1-phase or 2-phase
- Protections: Short circuit/Over load/Over voltage/Over temp.
- Cooling by free air convection
- Built-in constant current limiting circuit
- Mounting on DIN rail TS-35/7.5 or 15
- 100% full load burn-in test
- DC OK relay contact
- 3 years warranty

### ▲ Model encoding

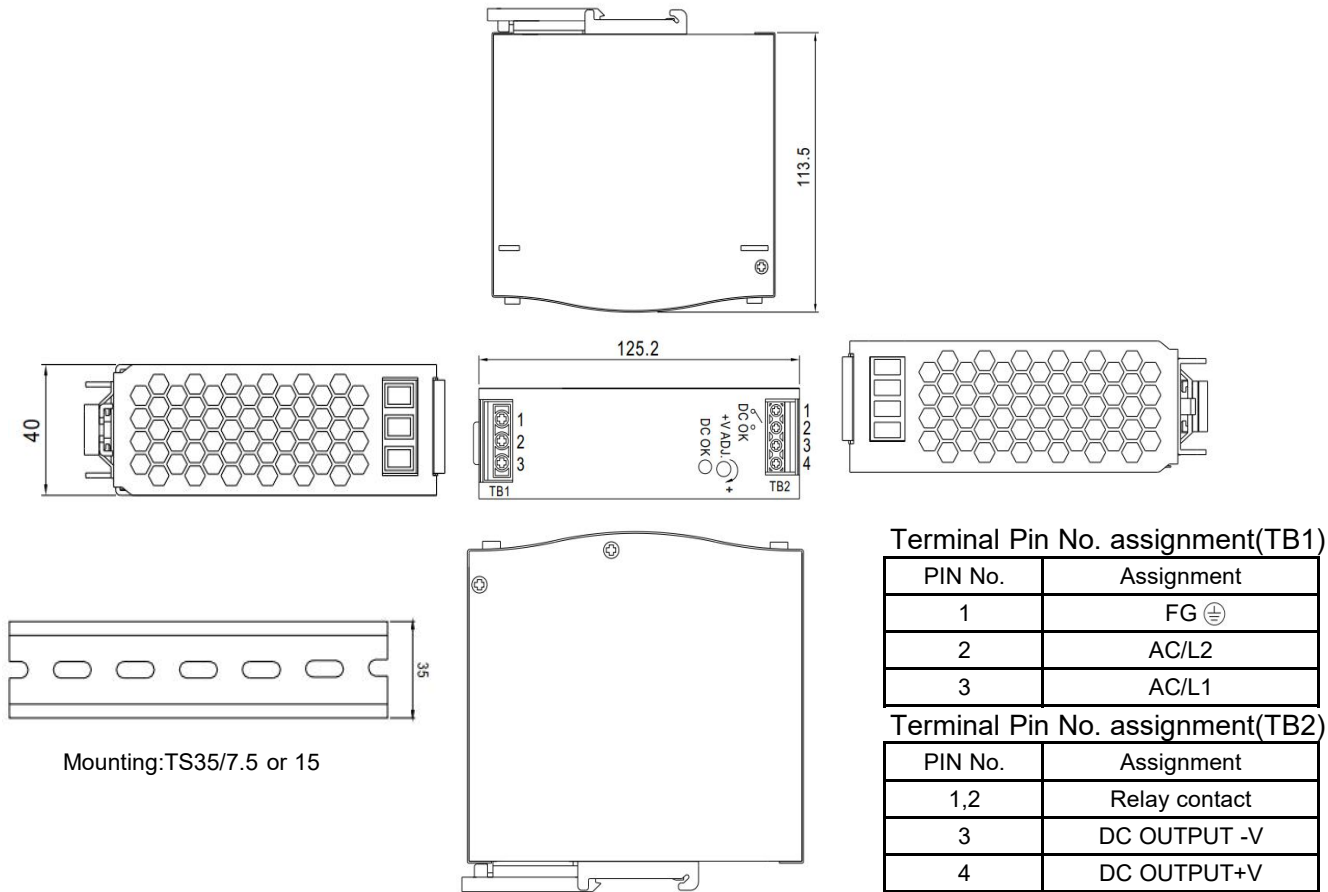




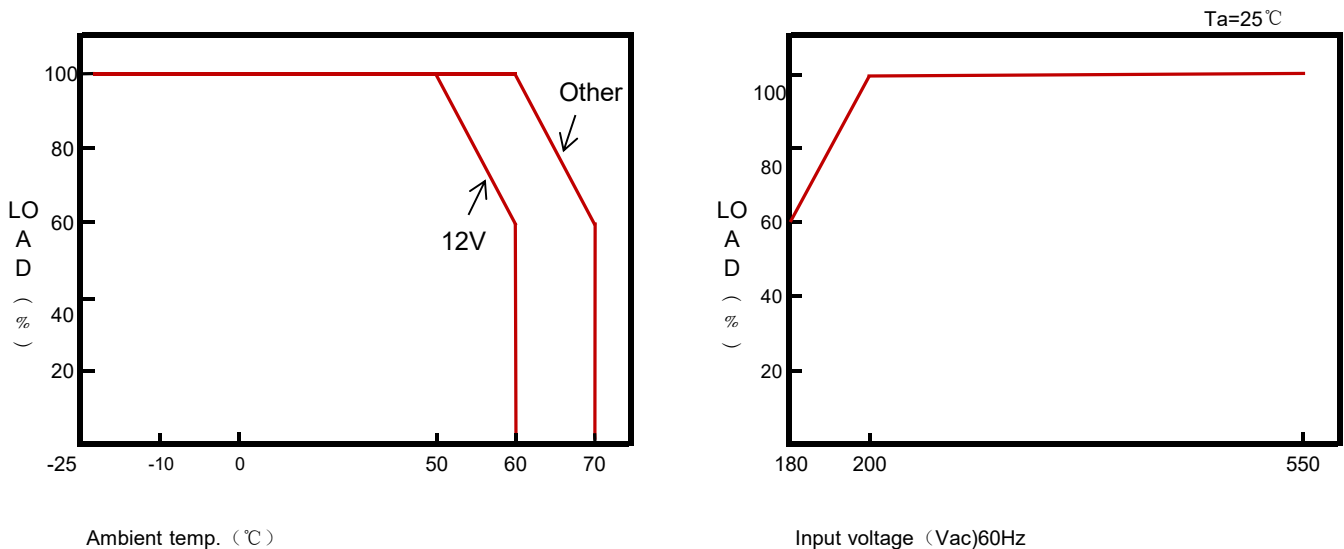
## Specification

Input			
Voltage range*1	180-550VAC or 254-780VDC		
AC current	0.7A/400VAC 1.2A/230VAC		
Frequency range	47-63Hz		
Inrush current (max)	冷启动: 50A		
Output			
DC voltage	12V	24V	48V
Voltage ADJ. range	12-15V	24-29V	48-58V
Current range	0-10A	0-5A	0-2.5A
Rated power	120W	120W	120W
Ripple & Noise(Max.)*3	120mVp-p	120mVp-p	150mVp-p
Voltage tolerance*4	±1.5%	±1%	±1%
Line regulation	±0.5%	±0.5%	±0.5%
Load regulation	±0.5%	±0.5%	±0.5%
Efficiency	89.5%/400V	91%/400V	92%/400V
Setup/Rise time	2000ms 70ms/400VAC 2000ms 70ms/230VAC(@Full load)		
Hold up time	50ms/400VAC 10ms/230VAC(@Full load)		
Status indicator	Green LED		
Protection			
Overload	105%-130% of rated power		
	Constant current limiting, recover automatically after the fault condition is removed		
Over voltage	16-18V	31-37V	60-67V
	Shut down output voltage. Re-power On to recover		
Over temp.	Shut down output voltage. Recover automatically when the temperature goes down		
DC OK signal	Relay contact capacity: 30V/1A 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℃/70% RH		
Safety standard	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 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	
Environment			
Operating Temp.	-25~+70 ℃ (Refer to "Derating Curve")		
Storage Temp.	-40~+85℃		
Storage Humidity	20-95%RH, non-condensing		
Vibration	10~500Hz, 2G 10 min/1 cycle, period for 60 min. each along X, Y, Z axes		
Others			
MTBF	≥268K hrs MIL-HDBK-217F(25℃)		
Weight	~ 0.65kg		
Dimension	125.2*40*113.5mm		
Ordering	Description	Model	
	MHR 120W 10A/12V	MHR120-12	
	MHR 120W 5A/24V	MHR120-24	
	MHR 120W 2.5A/48V	MHR120-48	

## Installation instruction



## Derating curve



- Note:**
- All parameters are measured at 400VAC input, rated load and  $25^\circ\text{C}$  of ambient temperature unless otherwise specified.
  - Ripple & noise are measured at 20MHz of bandwidth by using a 12' twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
  - Tolerance: includes set up tolerance, line regulation and load regulation.
  - 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
  - The setup time is measured at cold start. Turning ON/OFF the power supply very quick may lead to increase of the setup time.
  - The ambient temperature derating of  $3.5^\circ\text{C}/1000\text{m}$  with fanless models and of  $5^\circ\text{C}/1000\text{m}$  with fan models for operating altitude higher than 2000m(6500ft).