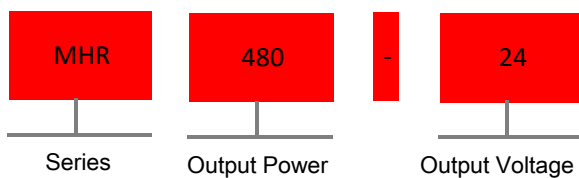




▲ Features

- 180-550VAC ultra wide input for 1-phase or 2-phase
- Protections: Short circuit/Over load/Over voltage/Over temp.
- Efficiency up to 93%, low power consumption
- Built-in active PFC
- DC OK relay contact
- Mounting on DIN rail TS-35/7.5 or 15
- Cooling by free air convection
- 100% full load burn-in test
- 3 years warranty

▲ Model encoding



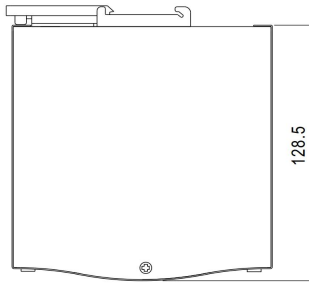
Specification

Input			
Voltage range*1	180-550VAC或254-780VDC		
AC current	1.6A/400VAC 4A/230VAC		
Frequency range	47-63Hz		
Power factor	PF \geq 0.84/400VAC PF \geq 0.84/230VAC		
Inrush current (max)	Cold start: 50A		
Output			
DC voltage	24V		48V
Voltage ADJ. range	24-28V		48-55V
Current range	0-20A		0-10A
Rated power	480W		480W
Ripple & Noise(Max.)*3	100mVp-p		150mVp-p
Voltage tolerance*4	\pm 1.0%		\pm 1.0%
Line regulation	\pm 0.5%		\pm 0.5%
Load regulation	\pm 1.0%		\pm 1.0%
Efficiency	92%		93%
Setup/Rise time	800ms 150ms 18ms/400VAC 2000ms 150ms 16ms/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, shut down O/P voltage after 3 sec.Recover in 1 min after the fault condition is removed		
Over voltage	29-33V		56-65V
	Shut down O/P voltage. Recover in 1 min after the fault condition is removed		
Over temp.	95 \pm 5 $^{\circ}$ C (TSW): detect on heatsink of the power switch		
	Shut down O/P voltage. Recover automatically when the temperature goes down		
DC OK signal	Relay contact capacity: 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 $^{\circ}$ C/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 2 3V/m
	EFT/Burest	EN 61000-4-4	Level 3 2KV
	Surge	EN 61000-4-5	Level 3 2KV/L-N;Level3,4kV/L-N-FG
	Conducted	EN 61000-4-6	Level 2 3V/m
	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 Temp.*5	-30 \sim +70 $^{\circ}$ C (Refer to "Derating Curve")		
Storage temperature	-40 \sim +85 $^{\circ}$ C 10-95%RH		
Operating humidity	20-95% RH, non-condensing		
Vibration	10 \sim 500Hz, 2G 10 min/1 cycle, period for 60 min. each along X, Y, Z axes		

Others		
MTBF	≥112.8K hrs MIL-HDBK-217F(25°C)	
Weight	~1.7kg	
Dimension	85.5*125.2*128.5mm	
Ordering	Description	Model
	MHR 480W 20A/24V	MHR480-24
	MHR 480W 10A/48V	MHR480-48

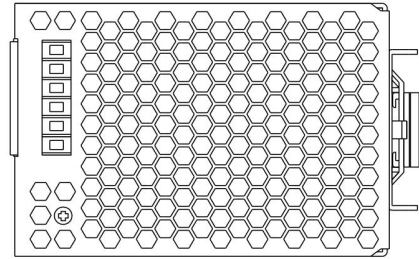
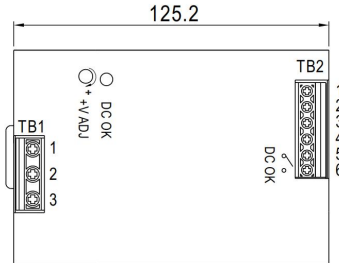
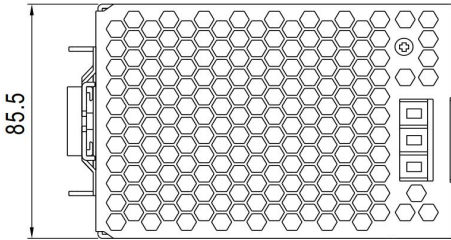
Installation instruction

Input(TB1)	"Terminal torque 9 Lb-in"
Output(TB2)	"Terminal torque 7 Lb-in"



Terminal Pin No. assignment(TB1)

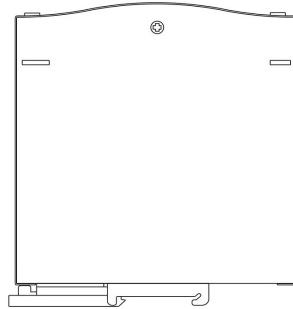
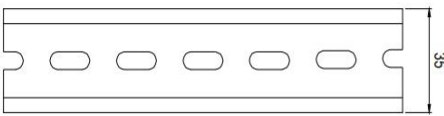
PIN No.	Assignment
1	FG⊕
2	AC/L2
3	AL/L1



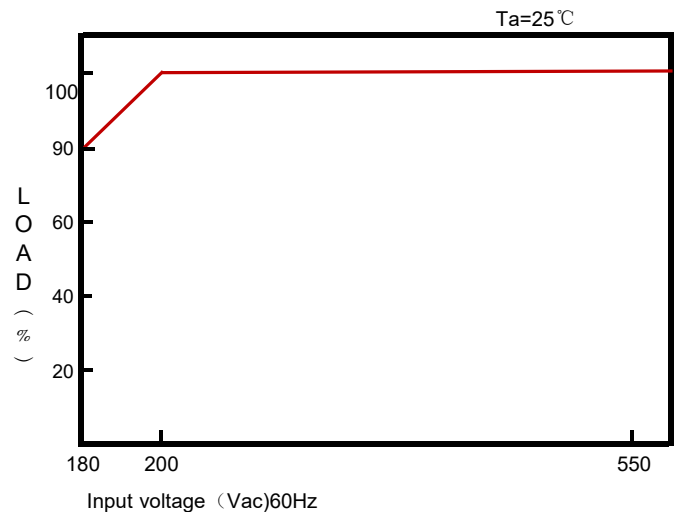
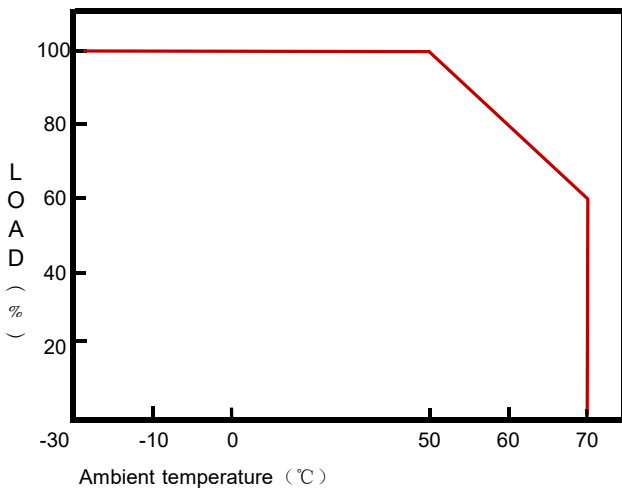
Terminal Pin No. assignment(TB2)

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

Mounting: TS35/7.5 or 15



Derating curve



Note:

- Derating may be needed under low input voltage. Please refer to derating curve for more details.
- 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
- 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.
- 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).
- All parameters are measured at 400VAC input, rated load and 25°C of ambient temperature unless otherwise specified.