AMCHARD

EN-240-XX-F

AC/DC 240W Enclosed Switching Power Supply

Universal 85-264VAC or 120-373VDC Input voltage

Accepts AC or DC input(dual-use of same terminal)

Operating ambient temperature range:-40℃ to +70℃

High efficlency,high reliability

DC OK function

Built-inactive PFC function

150% peak load output for 3 seconds

LED indicator for power on

Output short circuit,over-current,over-voltage,over-temperature protection

650g/Typ.

RoHS CE 3 years Warranty

Electrical Specifications

Model number		EN-240-12-F	EN-240-24-F	EN-240-48-F
Output	DC Output	12V	24V	48V
	Rated current	16A	10A	5A
	Current range	0-16A	0-10A	0-5A
	Rated power	192W	240W	240W
	Ripple & Noise(20MHz) Typ./Max.	50/100mVp-p	60/120mVp-p	75/150mVp-p
	Voltage Regulation Range	12-14V	24-28V	48-53V
	Linear Regulation	±0.5%	±0.5%	±0.5%
	Load Regulation	±1%	±1%	±1%
	Nominal Output Voltage and Current (Vo/Io)	12V/16A	24V/10A	48V/5A
	Stand-by Power Consumption	4W		
	Hold-up Time	20ms		
Input	Input Voltage range	AC 85V-264V DC 120V-373V		
	Frequency range	47-63Hz		
	Efficiency(230VAC)	92%	94.00%	94.00%
	Maximum Input Current	3A max@115VAC 1.5A max@230VAC		
	surge current	15A typ@115VAC cold start 30A typ @230VAC cold start		
	Leakage Current	<0.5mA@264V		
Protection	Over Load Protection	230VAC,rated load	Normal temperature/high temperature:110%-200%Io,self-recovery;	
			Low temperature:≥105%Io,self-recovery	
	Over VoltageProtection	≤18V (Output voltage turn off, re-power on for recover)	≤35V (Output voltage turn off, re-power on for recover)	≤60V (Output voltage turn off, re-power on for recover)
	Short-Circuit Protection	Recovery time<10s after the short circuit disappear	Constant current,continuous,self-recovery	
	Over-temperature Protection	80℃ Typ.@230VAC, rated load		

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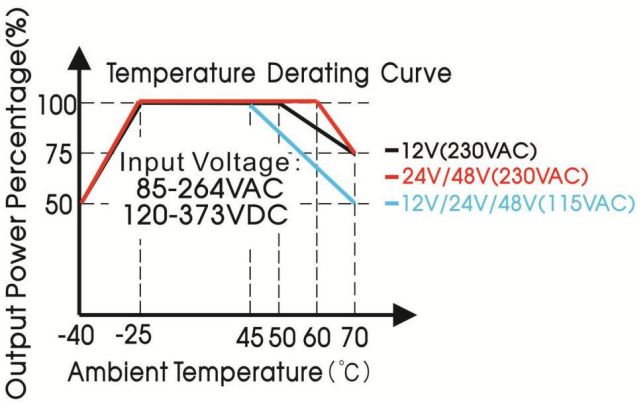
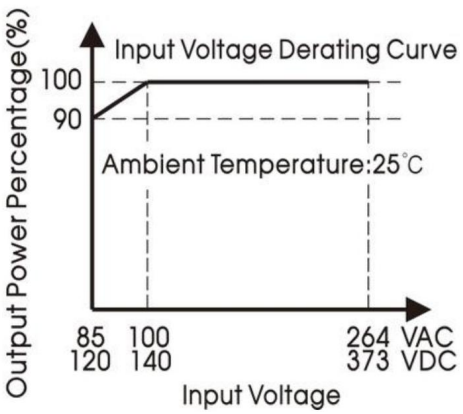
Model number		EN-240-12-F	EN-240-24-F	EN-240-48-F
Environment	Operating Temperature/Humidity	-40°C-+70°C/90%RH Max. Non-condensing		
	Storage Temperature/Humidity	-40°C-+85°C/95%RH Max. Non-condensing		
General	Withstand voltage	I/P-O/P: 3KVAC I/P-FG 2KVAC O/P-FG: 500VAC		
	Insulation impedance	I/P-O/P,I/P-FG,O/P-FG: 50MΩ/ 500VDC		
Emissions	CE	CISPR32/EN55032 CLASS B		
	RE	CISPR32/EN55032 CLASS B		
	Harmonic current	IEC/EN61000-3-2 CLASS A		
Immunity	ESD	IEC/EN61000-4-2 Contact ±6KV/Air ±8KV		perf.Criteria A
	RS	IEC/EN 61000-4-310V/m		perf.Criteria A
	EFT	IEC/EN 61000-4-4 ±2KV		perf.Criteria A
	Surge	IEC/EN61000-4-5 line to line±2KV/line to ground±4KV		perf.Criteria A
	CS	IEC/EN61000-4-6 10 Vrm.s		perf.Criteria A
	Voltage dips,short interruptions and voltage variations immunity	IEC/EN61000-4-110%,70%		perf.Criteria B
Other	Max. Capacitive Load (μF)	160000	40000	10000
	MTBF	>30KH MIL-HDBK-217F(25°C)		
	Switching Frequency	1000kHz		
Mechanical	Case Material	Metal (AL1100, SGCC) and Plastic (PC940)		
	Dimensions	124.00 x 41.00 x 110.00mm		
	Weight	650g(Typ.)		
Cooling Method	Free air convection			

Note:
1. Unless otherwise specified, all parameters are measured under the input 230VAC, rated load, and 25°C ambient temperature.
2. Ripple and noise measurement method: output terminals are paralleled with 0.1uf and 47uf capacitors, and measured at 20MHZ bandwidth.
3. Linear adjustment rate measurement method: rated load, input from low voltage to high voltage test.
4. Load adjustment rate measurement method: from 0A to rated load.





Note: 1.With an AC input voltage between 85 -100VAC and a DC input between 120-140VDC the output power must be derated as per the temperature derating curves;
2.This product is suitable for applications using natural air cooling;

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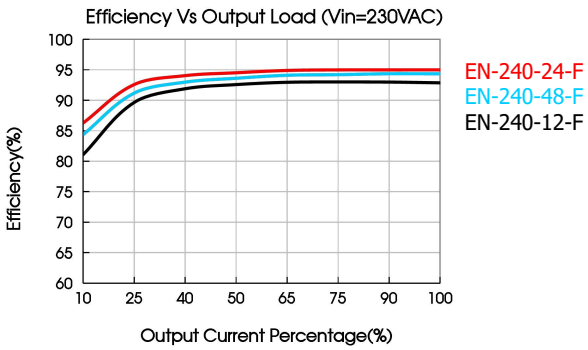
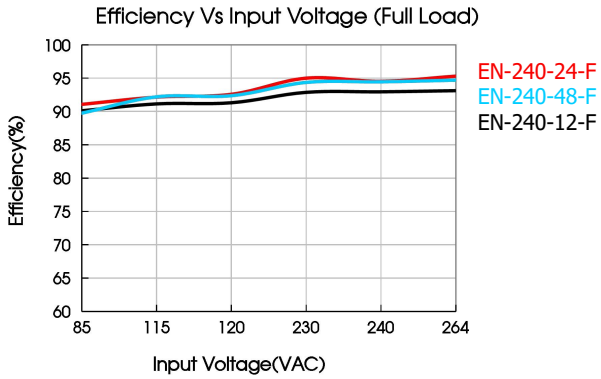
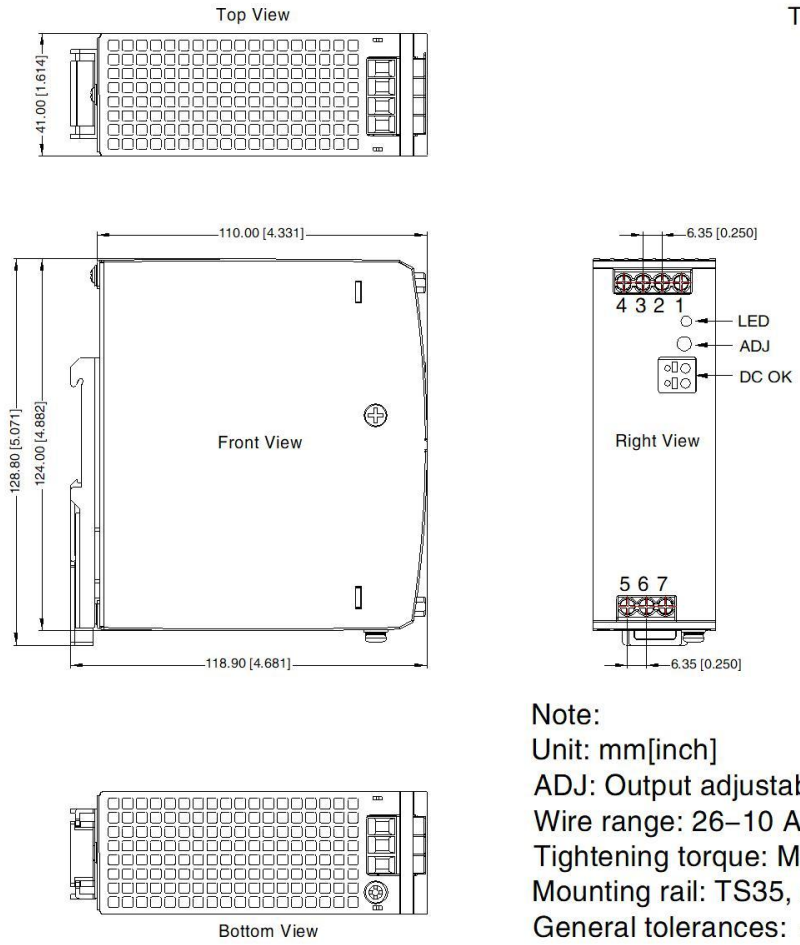




Demission and Recommended layout



THIRD ANGLE PROJECTION

Pin–Out	
Pin	Mark
1	–Vo
2	–Vo
3	+Vo
4	+Vo
5	AC(N)
6	AC(L)
7	⏚

Note:
Unit: mm[inch]
ADJ: Output adjustable resistor
Wire range: 26–10 AWG
Tightening torque: Max 0.4 N·m
Mounting rail: TS35, rail needs to connect safety ground
General tolerances: ± 1.00[± 0.039]