

EMC Filter



RoHS



FEATURES

- Ultra-wide input voltage range: 0-305VAC / 0-430VDC
- Working current: 40A MAX
- Operating temperature range: -40℃ to +85℃
- Conforms to EMC standards:  
IEC/EN61000-4 series, CISPR32/EN55032
- High surge suppression:  $\pm 4\text{kV}/6\text{kV}$
- Insertion loss: DM & CM > 50dB@10MHz
- Passed the safety standard: IEC62368

The product FC-L40Y belongs to the connected EMC auxiliary for 40A series power supply products. Adding FC-L40Y to the front end of the power supply can improve the EMC performance of the power supply products IEC/EN61000-4 series and CISPR32/EN55032 standards. The maximum input voltage of the power supply should not be greater than the maximum operating voltage of the auxiliary power supply, and the maximum input current should not be greater than the maximum operating current of the filter.

Selection Guide

Model	Operating Voltage(VAC)		Operating Current(A)		Surge Performance	Matching The Power Model
	Typ. (Range)	Max*	Typ.	Max		
FC-L40Y	115/230 (0-305)	310	-	40.0	Line-Line $\pm 4\text{kV}$ Line-PE $\pm 6\text{kV}$	LMF3000-20BXX

Note: 1. \*Input voltage should not exceed this value, otherwise permanent irreparable damage may be caused.

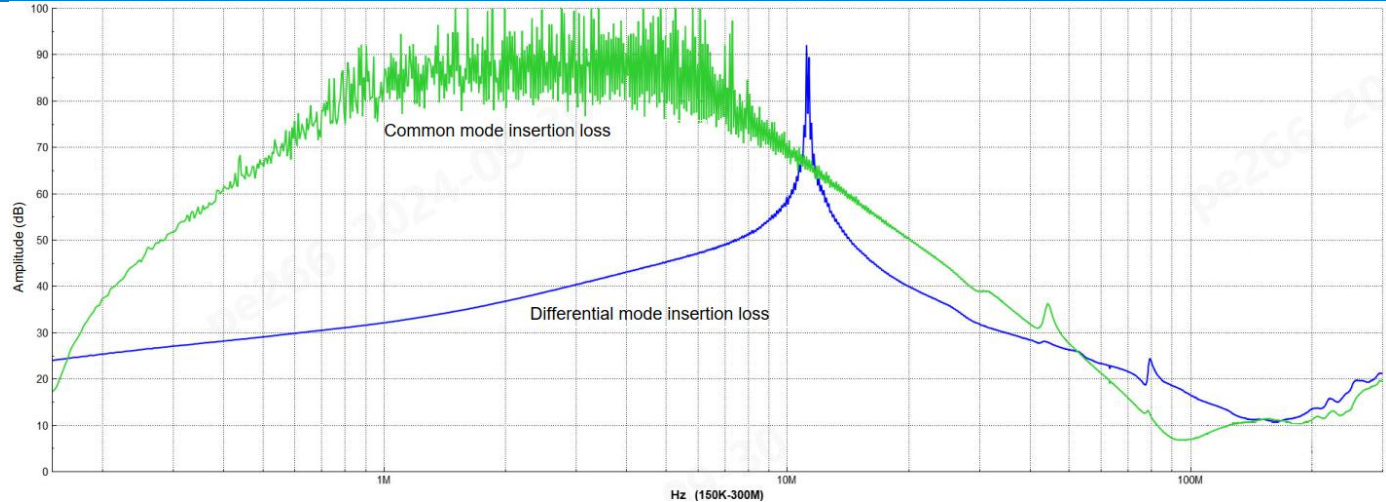
General Specifications

Item		Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature			-40	--	+85	℃
Storage Temperature			-40	--	+85	
Storage Humidity		Non-condensing	5	--	95	%RH
Isolation Voltage	IN(L) - ⊕	Test time 1 minute, leakage current < 5mA	--	2000	--	VAC
	IN(N) - ⊕					
Insertion Loss (CM/DM)		150KHz~1MHz	15	20	--	dB
		1MHz~10MHz	30	35	--	dB
		10MHz~30MHz	30	35	--	dB
MTBF		MIL-HDBK-217F@25℃	250	--	--	K hours
Altitude			≤ 5000m			
Warranty			5 years			

Physical Characteristics

Case Material	Aluminium alloy
Dimension	140.00mm x70.00mm x 42.00mm
Weight	360g(Typ.)
Cooling Method	Free air convection

Insertion Loss Specifications

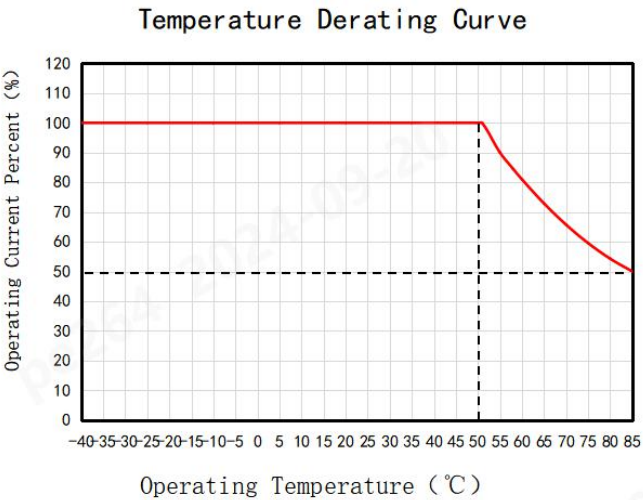
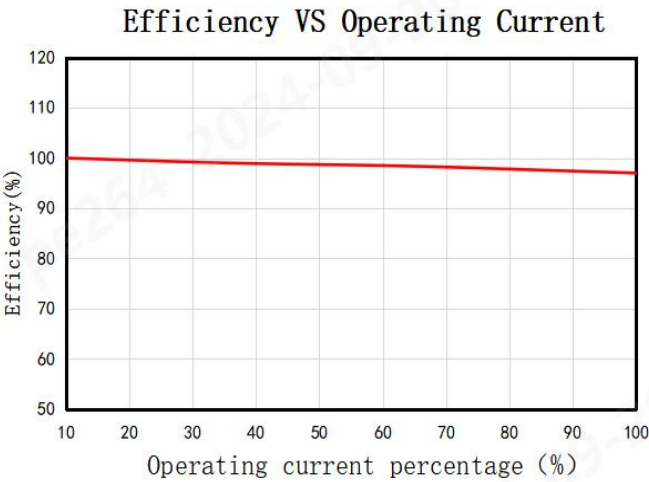


EMC Characteristics

EMI	CE	CISPR32/EN55032	CLASS B	
	Harmonics	IEC/EN61000-3-2	CLASS A and CLASS D	
EMS	ESD	IEC/EN61000-4-2	Contact ±8kV Air ±15kV	perf. Criteria A
	RS	IEC/EN61000-4-3	10V/m	perf. Criteria A
	EFT	IEC/EN61000-4-4	±4kV	perf. Criteria A
	CS	IEC61000-4-6	10V r.m.s	perf. Criteria A
	Surge	IEC/EN61000-4-5	Line-Line ±4kV Line-PE ±6kV	perf. Criteria A

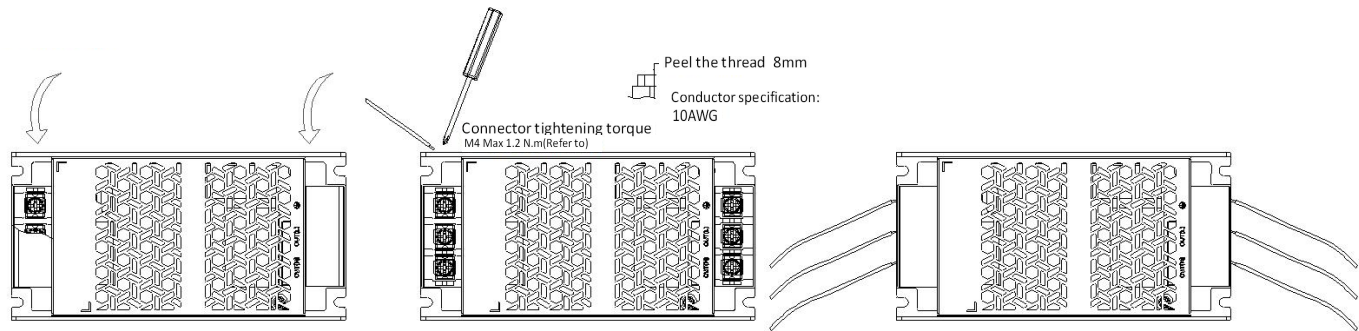
Note: \* The above performance indicators are the results of our power supply LMF3000-20BXX test.

Product Characteristic Curve

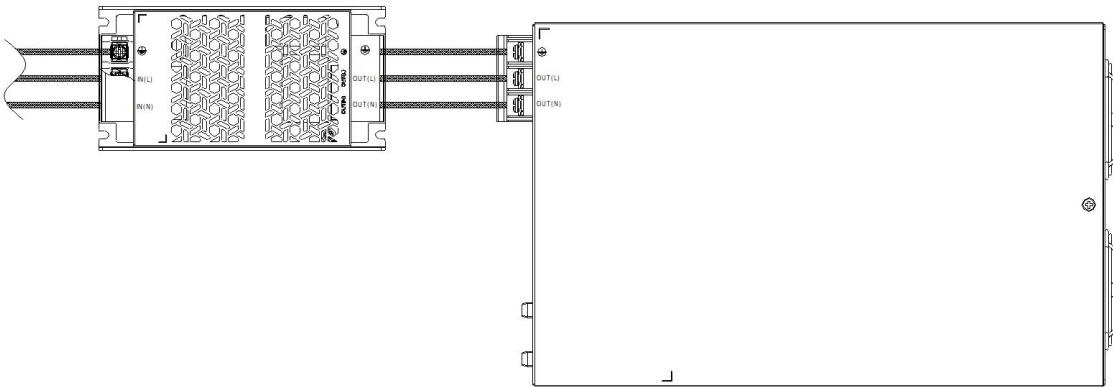


Note: This product is suitable for applications using natural air cooling; for applications in closed environment please consult factory or one of our FAE.

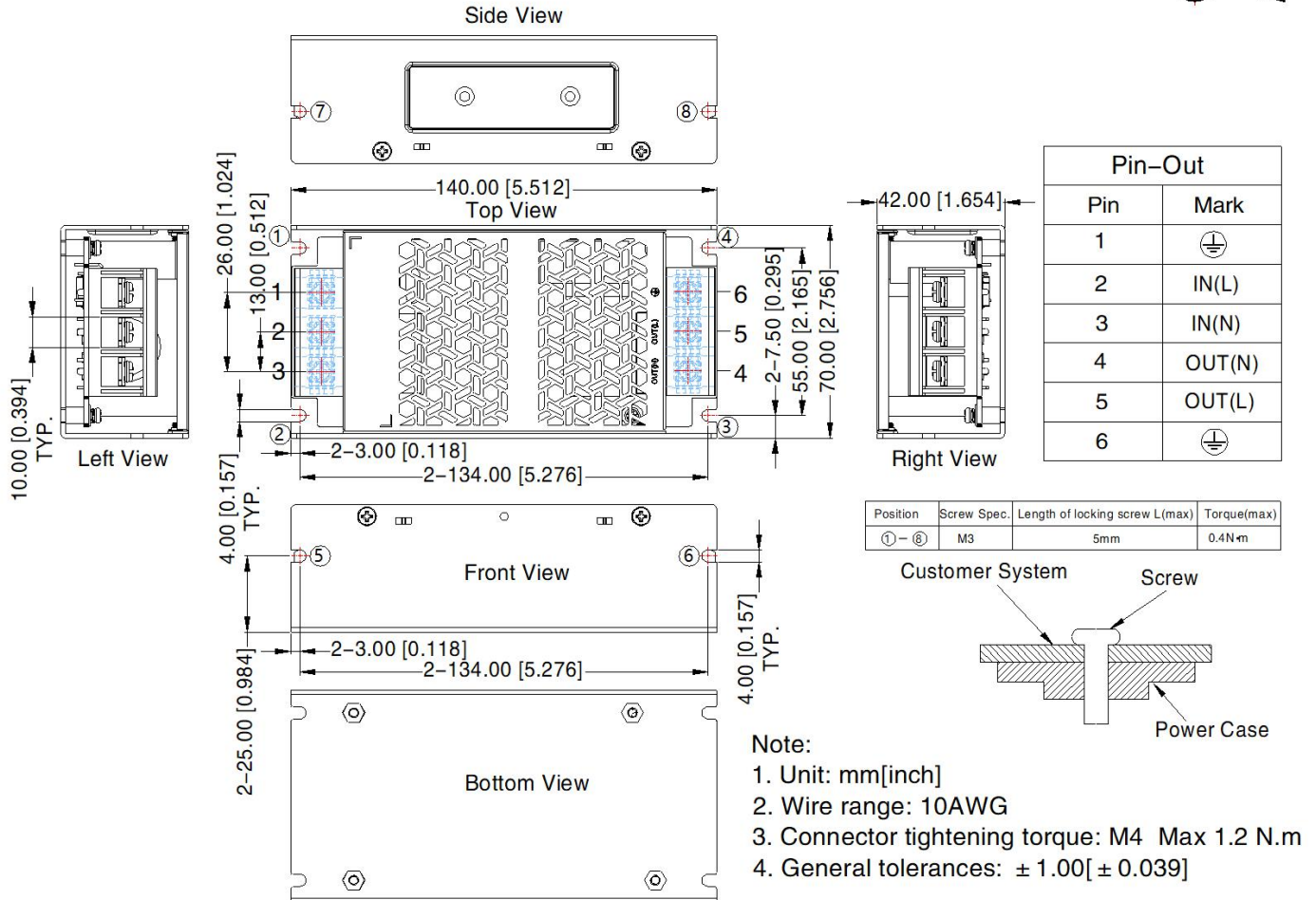
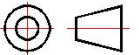
Installation Instruction



Wiring Schematic Diagram



## Dimensions and Recommended Layout

THIRD ANGLE PROJECTION 

Note:

- For additional information on Product Packaging please refer to [www.mornsun-power.com](http://www.mornsun-power.com). Packaging bag number: 58220276;
- Unless otherwise specified, data in this datasheet should be tested under the conditions of  $T_a=25^{\circ}\text{C}$ , humidity<75%RH with nominal input voltage and rated load;
- All index testing methods in this datasheet are based on our company corporate standards;
- We can provide product customization service, please contact our technicians directly for specific information;
- Products are related to laws and regulations: see "Features" and "EMC";
- Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units;

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