DESCRIPTIONS

3W, DC/DC Converter



RoHS

Note: The image certification marks are for reference only; please refer to the selection table for actual specifications. Certification is based on the physical mark or packaging label.

CE Report EN62368-1

UKCA Report BS EN62368-1

FEATURES

- Input voltage range: 0-305VAC / 0-430VDC
- Operating temperature range: -40℃ to +85℃
- Conforms to EMC standards: IEC/EN61000-4, CISPR32/EN55032
- High surge suppression: ±2kV/4kV, ±4kV/6kV
- Insertion loss DM up to 75dB & CM up to 50dB
- Conforms to the safety standard IEC62368/IEC60939

APPLICATIONS

- Industrial control
- Power
- Home appliances
- Instrumentation
- Communication
- Civil applications

Selection Guide

Certification	Model	Operating Voltage(VAC)		Operating Current(A)		Surge Performance
		Typ. (Range)	Max	Typ.	Max	
--	EFP2W03	230 (0-305)	310	-	3.0	Line-Line ±2kV Line-PE ±4kV
EN/BS EN	EFP2W032	230 (0-305)	310	-	3.0	Line-Line ±4kV Line-PE ±6kV
--	EFP2W06	230 (0-305)	310	-	6.0	Line-Line ±2kV Line-PE ±4kV
EN/BS EN	EFP2W062	230 (0-305)	310	-	6.0	Line-Line ±4kV Line-PE ±6kV

Note:1.* Product model suffix "E2S" for wiring type package expansion, suffix "D4S" for rail type package expansion.
2.The product picture is for reference only.For details, please refer to the actual product.

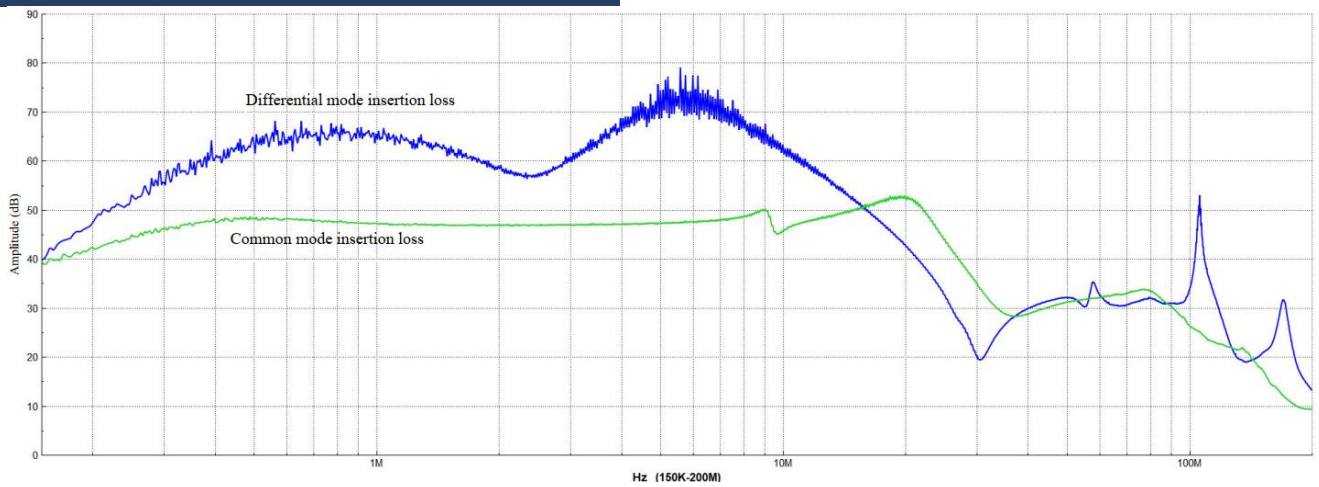
Specifications

Product Specifications	Item		Operating Conditions	Min.	Typ.	Max.	Unit
General Specifications	Operating Temperature			-40	--	+85	℃
	Storage Temperature			-40	--	+105	
	Storage Humidity			--	--	95	%RH
	Isolation Voltage		IN(L) ~ PE, IN(N) ~ PE, test time 1 minute, leakage current < 3.5mA	2000	--	--	VAC
	Insertion Loss（CM/DM）		150kHz~1MHz	25	30	-	dB
			1MHz~10MHz	30	35	-	dB
			10MHz~30MHz	18	20	-	dB
	MTBF			MIL-HDBK-217F@25℃≥1000,000 h			
	Impact and Vibration Test			10-55Hz, 5G, 30 Min. along X, Y and Z			
	Altitude		80-110kPa	≦5000m			
Mechanical Specifications	Case Material		Black plastic; flame-retardant and heat-resistant (UL94 V-0)				
	Dimensin	EFP2W03x EFP2W06x	Horizontal packaging	85.00mm x 39.00mm x 28.90mm			
			E2S wiring type package	85.00mm x 39.00mm x 29.90mm			
			D2S wiring type package	89.00mm x 39.00mm x 36.40mm			
	Weight	EFP2W03	Horizontal packaging	68g(Typ.)			
			E2S wiring type package	94g(Typ.)			
			D2S wiring type package	105g(Typ.)			
		EFP2W032	Horizontal packaging	74g(Typ.)			
			E2S wiring type package	100g(Typ.)			
			D2S wiring type package	111g(Typ.)			
		EFP2W06	Horizontal packaging	72g(Typ.)			
			E2S wiring type package	98g(Typ.)			
			D2S wiring type package	109g(Typ.)			
		EFP2W062	Horizontal packaging	78g(Typ.)			
			E2S wiring type package	104g(Typ.)			
			D2S wiring type package	115g(Typ.)			
	Cooling Method		Free air convection				

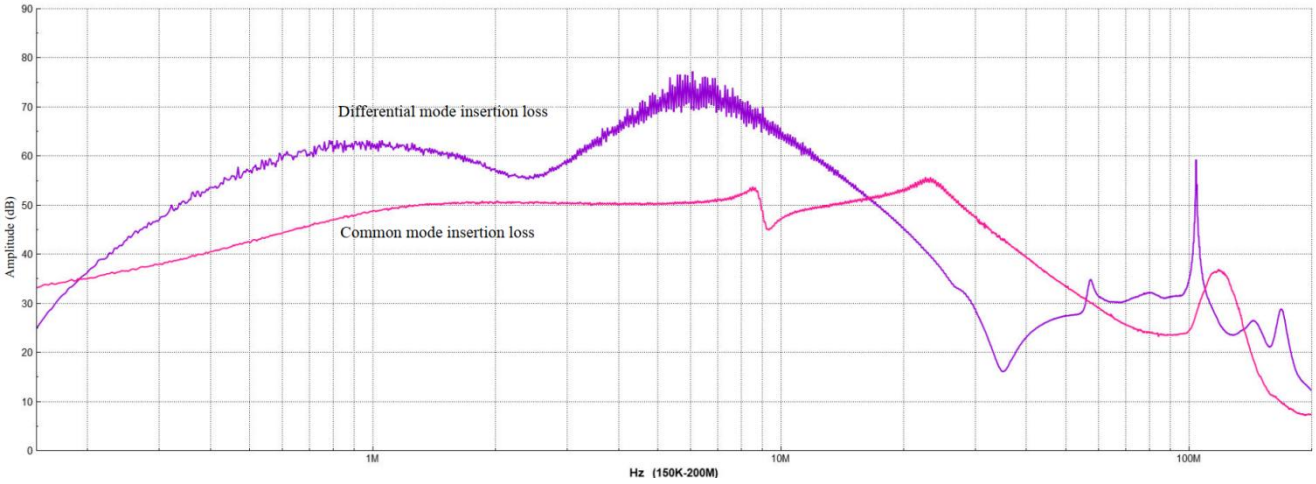
Electromagnetic Compatibility (EMC)

Electromagnetic Compatibility (EMC)	EMI	CE		CISPR32/EN55032	150KHz-30MHz Class B	
		RE		CISPR32/EN55032	30MHz-1GHz Class B	
	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
		PFMF		IEC61000-4-8	50/60Hz 30A/m	perf. Criteria A
		Surge	EFP2W03/06	IEC61000-4-5	Line-Line ±2kV; Line-PE ±4kV	perf. Criteria A
			EFP2W032/062		Line-Line ±4kV; Line-PE ±6kV	perf. Criteria B

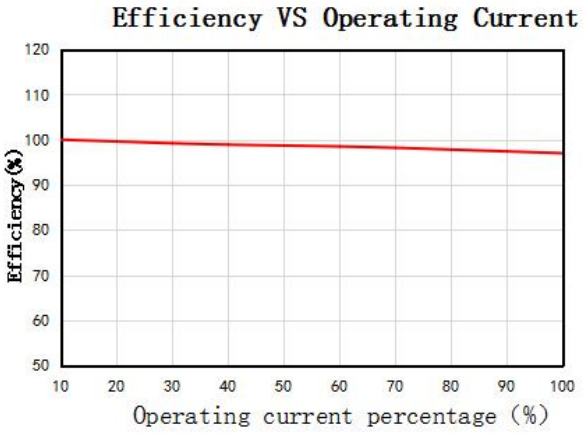
EFP2W03x Insertion Loss Specifications

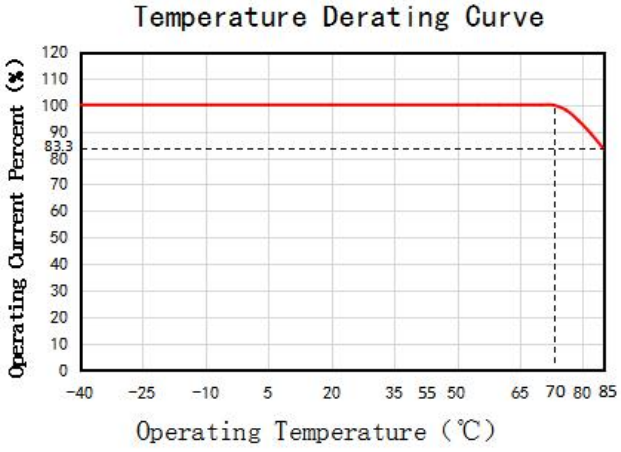


EFP2W06x Insertion Loss Specifications



Product Typical Curve

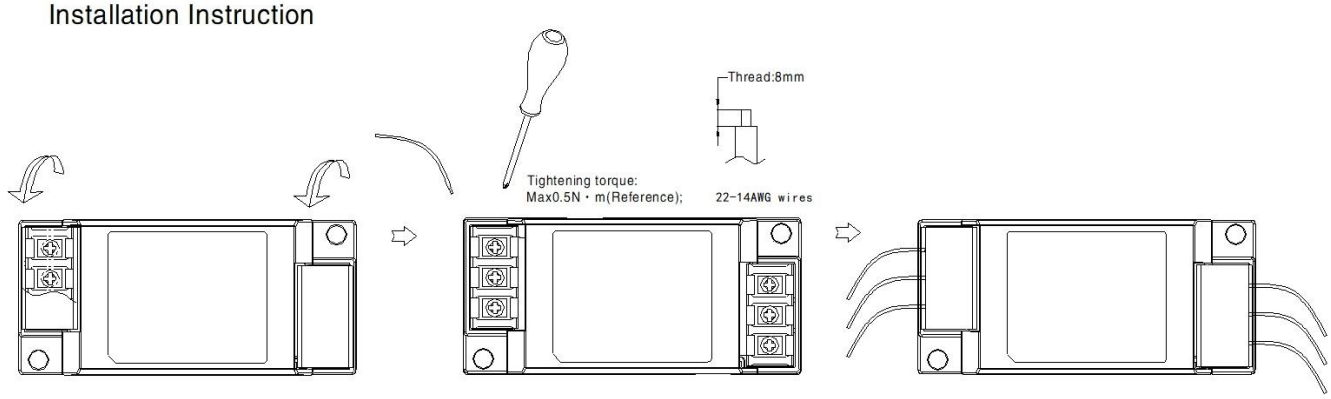




Note: This product is suitable for applications using natural air cooling.

Installation Instruction

Installation Instruction



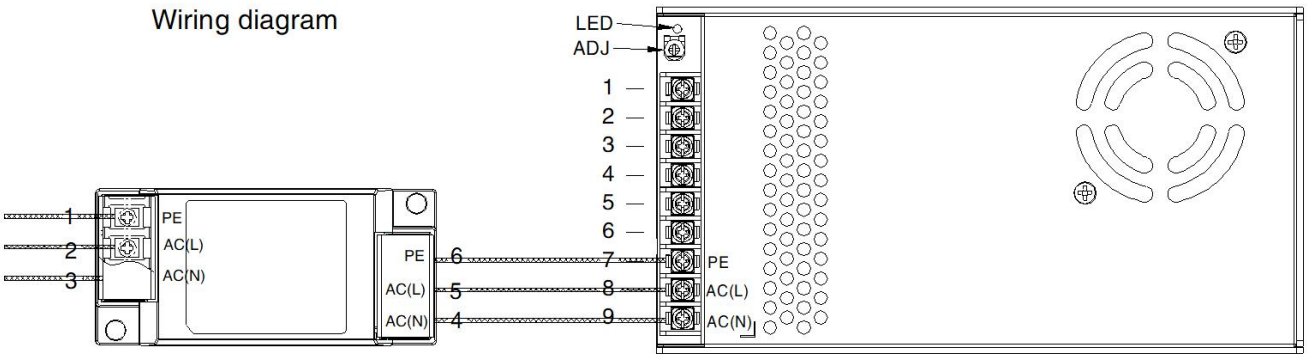
①Remove the protective cover from both ends to the top;

②Use a Phillips screwdriver to loosen the terminal screw,insert the lead head under the terminal,and then lock the terminal screw;

③Put on the protective cover.

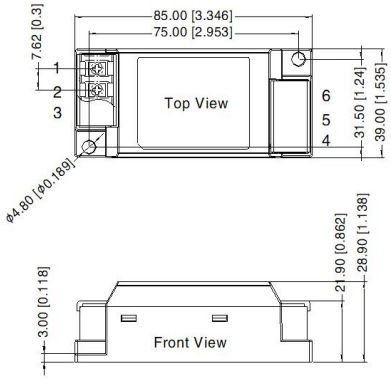
Wiring Schematic Diagram

Wiring diagram



Dimensions and Recommended Layout

THIRD ANGLE PROJECTION

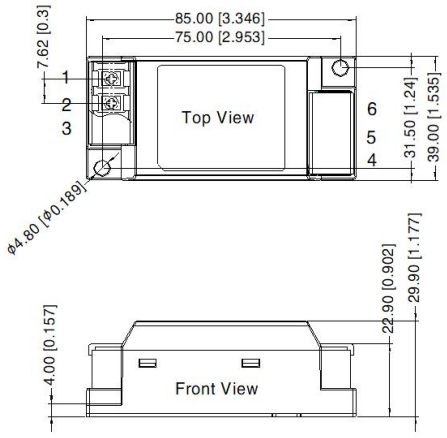


Pin–Out	
Pin	Mark
1	⏚
2	IN(L)
3	IN(N)
4	OUT(N)
5	OUT(L)
6	⏚

Note:
Unit: mm[inch]
Wire range: 22–14 AWG
Tightening torque: Max 0.5 N・m
General tolerances: ±1.00[±0.039]

E2S Dimensions and Recommended Layout

THIRD ANGLE PROJECTION

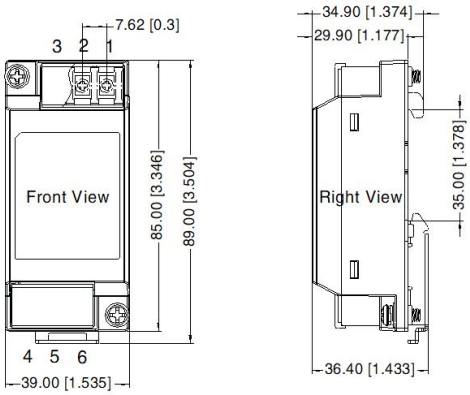


Pin–Out	
Pin	Mark
1	⏚
2	IN(L)
3	IN(N)
4	OUT(N)
5	OUT(L)
6	⏚

Note:
Unit: mm[inch]
Wire range: 22–14 AWG
Tightening torque: Max 0.5 N・m
General tolerances: ±1.00[±0.039]

D2S Dimensions and Recommended Layout

THIRD ANGLE PROJECTION



Pin–Out	
Pin	Mark
1	⏚
2	IN(L)
3	IN(N)
4	OUT(N)
5	OUT(L)
6	⏚

Note:
Unit: mm[inch]
Wire range: 22–14 AWG
Tightening torque: Max 0.5 N・m
Mounting rail: TS35
General tolerances: ±1.00[±0.039]

Note:
1. If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
2. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25℃, humidity<75% with nominal input voltage and rated output load;
3. All index testing methods in this datasheet are based on our company corporate standards;
4. Products are related to laws and regulations: see "Features" and "EMC";
5. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.