

Features:

- ✓ Small size 124*62*119
- ✓ High reliability
- ✓ Use TS-35/7.5 or TS-35/15 for easy installation and maintenance
- ✓ 90% efficiency, low loss
- ✓ Built-in active PFC
- ✓ Comply with RoHs6

Application:

- ✓ Industrial control
- ✓ Clean energy
- ✓ Track and traffic
- ✓ Production and Manufacturing
- ✓ It is very harsh on the size and use environment
- ✓ System with high requirements for life and reliability

EDP-240-48

PRODUCT SPECIFICATION

Power a Safe and Green world

Excellent **C**reative **U**nited

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Basic Parameter

Item	UNIT	Specification	Notes
Output Voltage	Vdc	48	
Adjustable range	V	48~53	
Rated current	A	0~5	
Peak Current	A	/	/
Rated power	W	240	
Ripple&noise	mVp-p	150	

DC output ripple & noise test conditions

- 1)Oscilloscope should be limited at 20MHZ bandwidth;
- 2)Connect 0.1UF ceramic capacitors and 47UF electrolytic capacitors in parallel at the end of the wire;
- 3)Connect the load and power supply with a 300mm twisted pair
- 4)Testing is done on the load port;

Input Characteristics

Item	UNIT	MIN	Rated	Max	Notes
Input Voltage	Vac	90	230	264	Refer to output derating curve.
	Vdc	127	310	370	
Input Frequency	Hz		47~63		
Input Current	A	/	/	1.5	230Vac Full load
				3.0	115Vac, Full Load.
Inrush Current	A	/	/	20	110Vac, Full Load. cold start.
				35	220Vac, Full Load. cold start.
Power Factor	/	0.98	/	/	110Vac, Full Load.
		0.95			220Vac, Full Load.
No-load loss	W			4	230Vac,No Load
Input Fuse			T5A/250Vac		

Output Characteristics

Item	Unit	Min	Typ	Max	Notes
Peak Power	W			/	/
Efficiency	%	91	92	/	230Vac/50Hz, Full Load.
Load Regulation	%	/	+/-1	/	230Vac Full~min load
Line Regulation	%	/	+/-1	/	100Vac~264Vac Full load
Setup Time	s	/	/	2	115Vac&230Vac Full Load
Rise Time	ms	/	/	200	The output voltages shall rise from 10% to 90% of their output voltage.
Hold time	ms	20	/	/	
Overshoot &undershoot Response	%			+/-5	Power on/off
Load dynamic response	%	/	/	+/-5	Settling time 20ms R/s 0.1A/us load 50%~100%full load
Capacitive Loads	uF			5000	

Environment Characteristics

ITEM	UNIT	MIN	Rated	MAX	Notes
Temperature	℃	-25	25	70	Operation Temperature ; 50~70℃ Refer to derating curve.
		-40	25	85	Storage Temperature
Humidity	℃	5%	RH	90%	Operation Humidity

		5%	RH	95%	Storage Humidity
Vibration	/	IEC 60068-2-6, Sine Wave: 10-500Hz, 2G, displacement of 0.35mm; 60 min per axis for all X, Y, Z directions			
Impact	/	IEC60068-2-27, Half Sine Wave: 30G for a duration of 18ms, 3 times per direction, 6 times in total			
Altitude	m	2000m derated above, 15%load/Km			
Cooling Mode		Air Cooling			
IP level		IP20			

Protection Function

Item	Requirement	Notes
Short Circuit Protection	No damage shut down O/P voltage	Recovers automatically after fault condition is removed
Over current Protection	110%~150% @ Io	Recovers automatically after fault condition is removed
Over voltage Protection	120~150% @ Vo	Reset must be need when over voltage to get right.
Over Temperature Protection	105°C±5°C, Shut down O/P voltage.	recovers automatically after temperature goes down

Short Circuit Protection time is above of 60s

Signals Function

Item	Requirement
Panel display	Green LED lights for power on.

Electrical Safety

Item	Test Method	Test Conditions
Withstand voltage	I/P-O/P	3000Vac. 60S, ≤10mA
	I/P-FG	1500Vac. 60S, ≤10mA
	O/P-FG	500Vac. 60S, ≤15mA
Withstand Resistance	I/P-O/P	500VDC. ≥5MΩ
	I/P-FG	500VDC. ≥5MΩ
	O/P-FG	500VDC. ≥5MΩ
Leakage Current	L、N-Case	3.5mA Max
	L、N-PE	3.5mA Max
PE Resistance	PE-Case	< 0.1Ohm
Design standards	UL508	
	EN60950-1	
	UL1310 Class2	/
	EN60335-1	/
	EN61347-1	/
	IEC60601-1	/

- 1) Criteria A: Normal performance within the specification limits
 2) Criteria B: Temporary degradation or loss of function which is self-recoverable
 3) Asymmetrical: Common mode (Line to earth)
 4) Symmetrical: Differential mode (Line to line)
 5) ” / ” : Non-conformance

Electromagnetic Compatibility

Item	Test Method	Test Conditions	
Electrostatic Discharge	IEC 61000-4-2 GB17626-2	Level 4 Criteria B) ; Air Discharge: ±8kV ; Contact Discharge: ±4kV	
Radiated Field	IEC 61000-4-3 GB17626-3	Level 3 Criteria A) ; 80-1000MHz, 3V/M, 80% modulation (1kHz) ;	
Electrical Fast Transient / Burst	IEC 61000-4-4 GB17626-4	Level 4 Criteria B) ±1kV	
Surge	IEC 61000-4-5 GB17626-5	Level 4 Criteria B) ; Common Mode3): 2kV ; Differential Mode4): 1kV	
Conducted	IEC 61000-4-6 GB17626-6	Level 3 Criteria A) 0.15-80MHz, 3Vrms , 80% modulation (1kHz)	
Power Frequency Magnetic Fields	IEC 61000-4-8 GB17626-8	/	
Impulse magnetic field immunity test	IEC 61000-4-9 GB17626-9	/	
Damped oscillatory magnetic field immunity test	IEC 61000-4-10 GB17626-10	/	
Voltage Dips and Interruptions	IEC 61000-4-11 GB17626-11	Voltage Dips >95% reduction,0.5 period	Criteria B
		Voltage Dips >30% reduction,25 period	Criteria C
		Voltage interruptions >95% reduction,250 period	Criteria C
Low Energy Pulse Test (Ring Wave)	IEC 61000-4-12 GB17626-12	/	
Harmonic Current Emission	IEC/EN 61000-3-2 GB17625-1	Class A	
Immunity Generic Standards		EN 55024,GB17618	
	/5)	EN55014-2	
	/5)	EN60601-1-2	
	/5)	EN61547	
	/5)	EN61000-6-1,EN50082-1,GB/T17799-1 EN 61000-6-2,EN55082-2,GB/T17799-2	
CE&RE		GB9254, CISPR 32, EN 55032 : Class B	
	/5)	GB4824, CISPR 11, EN 55011 : Class B	
	/5)	GB17743 , EN55015 , CISPR15 : Class B	
		GB4343-1, CISPR14 , EN55014-1 : Class B	
		EN 61000-6-3 , FCC Title 47, EN55011 : Class B	
Voltage Fluctuation and Flicker		IEC/EN 61000-3-3 , GB17625.2	
Component Power Supply for General		EN 61204-3	

1)Criteria A: Normal performance within the specification limits

2) Criteria B: Temporary degradation or loss of function which is self-recoverable

3)Asymmetrical: Common mode (Line to earth)

4)Symmetrical: Differential mode (Line to line)

5) " / " : Non-conformance

6)Power should be considered part of the element within the system, to be combined with the terminal device EMC acknowledgment;

Reliability

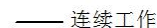
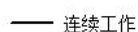
Item	Data	Test Conditions
Burn-in	100%	230Vac , 40°C±5°C , 4 hours
MTBF	500000H Min	230Vac , 25°C , MIL HDBK 217F
	/	230Vac , 40°C , MIL HDBK 217F
Warranty period	3 years	40°C , 230Vac , 80% Load
Design Service life	/	This calculated based on the actual conditions of use

Mechanical Installation

Item	Data	Note
Size	124 * 119* 62	
Weight	0.81	
Installation	mounted on 35mm DIN rails	TS-35/7.5或TS-35/15 EN 60715
Input Terminal	Pitch=7.62mm, 3pin	
	1 PIN--- FG	0.5N.M AWG 26 ... 10
	2 PIN---N	
	3 PIN--- L	
Output Terminal	Pitch=5.0mm, 4pin	
	1 PIN--- V-	0.5N.M AWG 26... 12
	2 PIN--- V-	
	3 PIN---V+	
	4 PIN---V+	

ECU

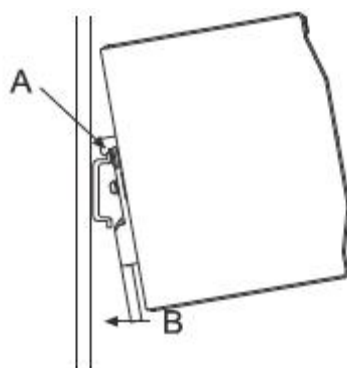
1. Product assembly:



3.Din track mounting:

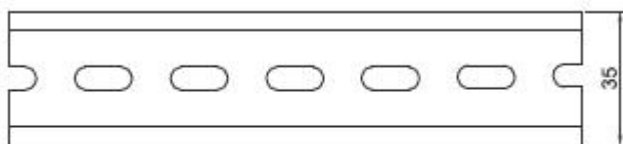
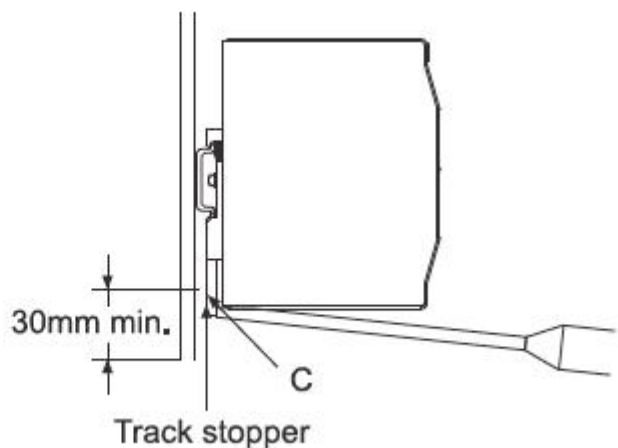
- (1) To mount the Block on a DIN track, hook portion (A) of the Block onto the track and press the Block in direction (B).

安装：将(A)部分挂入导轨，朝(B)方向按压卡入导轨



- (2) To dismount the Block, pull down portion (C) with a flat-blade screw-driver and pull out the Block.

拆卸：用平口螺丝刀下拉(C)部分拆卸电源



Install rail / 安装轨道: TS35/7.5 or TS35/15