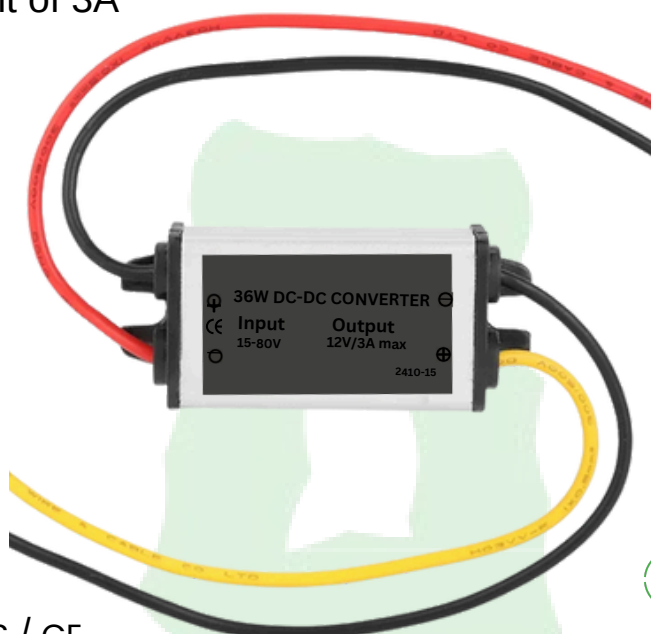


Input voltage	Output voltage	Output current	Output power	Efficiency	Size
15-80V DC	12V DC	3A	36W	91%	50*24*19mm

The RW-1200-72V-12V-36W is a Non-isolated DC-DC converter that uses a synchronous rectification technology, and features high efficiency and power density. It has the dimensions of 50*24*19mm and provides the rated output voltage of 12V and the maximum output current of 3A



Features

- Design meeting RoHS / CE
- High efficiency: 91% (@72V_{in}, 25°C)
- Input transient absorption protection
- Output transient absorption protection
- Support -40 °C environment
- 100% full load burn-in test
- 3 month warranty
- Remote ON/OFF control (optional)
- Waterproof level IP68

Applications

- Industrial
- Alternative Energy
- Golf Cart
- Forklift
- Electromotor
- Telecommunications
- Boat & Yacht
- Medical
- LED Marketplaces and so on

Model naming method
RW-1200-72V-12V-36W

RW-1200: SKU NAME
72V: Input voltage
12V : Output voltage
36W: Output Power

Parameter	Min.	Typ	Max.	Units	Remarks
Absolute maximum ratings					
Operating ambient temperature	-40	-	+50	°C	
Shell ambient temperature	-40	-	80	°C	
Storage temperature	-55	-	100	°C	
Operating humidity	5	-	95	%	Non-condensing
Atmospheric pressure	62	-	106	Kpa	
Altitude	-	-	4000	m	
Cooling way	-	-	-		Natural cooling

Input characteristics

Input voltage	15	48/72	80	V	-
Max. input voltage	-	-	80	V	Continuous
No load current		0.1	0.12	W	Vin =72V

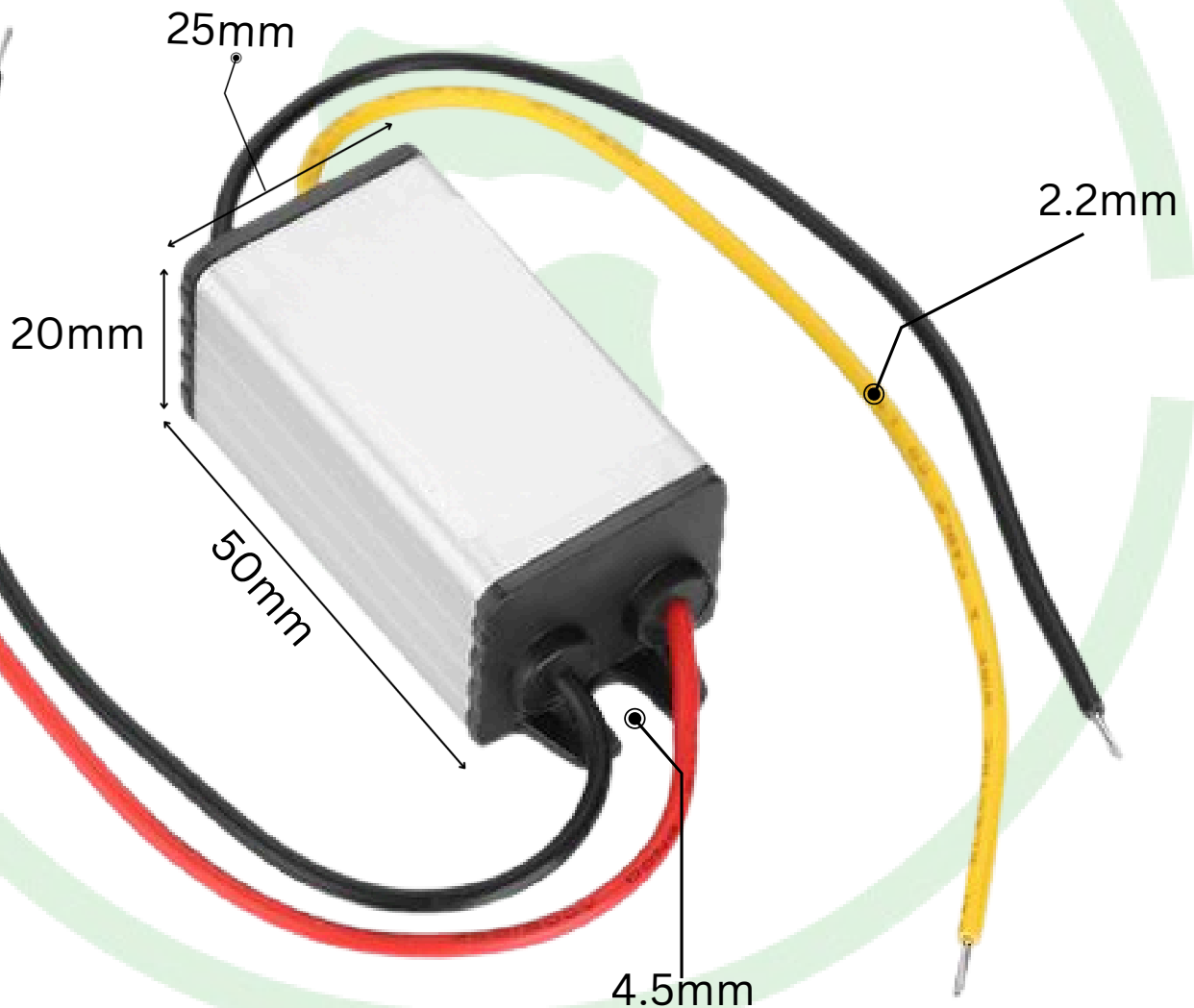
Output characteristics

Efficiency	-	91	-	%	Vin =72V; Iout =3A
Output voltage	11.8	12	12.3	V	Vin =72V; Iout =3A
Regulator accuracy	-	±1	-	%	
Voltage regulation	-	±1	-	%	
Load Regulation	-	±1	-	%	
Overvoltage protection	-	82	-	V	@25°C TVS clamp protection
Output current	0	-	3	A	
Overcurrent protection				A	
External capacitance	0	200	1000	μF	Don't need
Output ripple and noise	-	18	22	mVp-p	Vin =15-80V; Iout=3A Bandwidth: 20 MHz;
Output voltage rise time	-	120	150	mS	
Boot delay time	-	180	250	mS	
Out voltage overshoot	-	1	2	%	Vin=72V , 50%-75% ; Load step
Over temperature protection	-	-	80	°C	Shell temperature, @ 80°C Restore working
Short circuit protection	-	-	-		Long-term (4 hours) short circuit is not damaged, Hiccup mode

Safety and EMC features				
Anti-electric Strength	Input to Output		V	Leakage current ≤ 3.5mA, 1min, no breakdown, no arcing
	Input to Shell	≥500	V	
	Output to Shell	≥500	V	
Insulation resistance	Input to Output	≥50	MΩ	Test voltage = 500V
	Input to Shell			
	Output to Shell			
Other characteristics				
Weight	≥50	g		
Package	Color box			
MTBF	≥200,000	H	Vin =72V; Iout =3A	
Switching frequency	220±10	KHz		

Thermal Consideration

Sufficient airflow should be provided to help ensure reliable operating of the RW-1200-72V-12V-36W. Therefore, thermal components are mounted on the top surface of RW-1200-72V-12V-36W to dissipate heat to the surrounding environment by conduction, convection, and radiation. Proper airflow can be verified by measuring the temperature at the middle of the base plate.



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