# 36W Charger for hand-held electrical tool



#### ■ Feature:

·Miniaturized Design: Small size and light weight

·Class II

·Protection: Short Circuit/Over Load/Overvoltage

· RoHS, Reach compliance

·LED indicate

·High surge/ESD protection specification, High Reliability

### ■ Application:

 $\cdot \text{Charging}$  for the lithium battery of the hand-held electrical tool

·Supporting use according to customerspecific shapes

## ■ Description:

36W charger for hand-held electrical tool, is designed with a plastic shell, which can effectively prevent users from electrical hazards. Its efficiency meets the latest energy efficiency requirements. It can work safely and effectively at an ambient temperature of  $-20^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ . It has complete Protection function and compliance with the «Technical safety code for management, operation, inspection maintenance of hand-held motoroperated tools».

#### Key Specification

ve a	ecification			
Model				
Output	Voltage	12V	18V	
	Rated current	3A	2A	
	Current range	2.8 ~ 3.2A	1.8 ~ 2.2A	
	Rated Power	36W 36W		
	Voltage range	10.8 ~ 12.6V	16.8 ~ 21V	
	Mode	CV	CV	
Input	Voltage range	90 ~ 264VAC		
	Frequency range	47 ~ 63Hz		
	Efficiency (Typ.)	78.8%	78. 8%	
	Safety Standard	UL1310; IEC60335		
Safety	Safety Type	"●" Indicates that it is currently certified, "©" Indicates that the applicant meet the certification requirement but not be certified		
	СВ	0	0	
	CE+LVD	0	0	
	BIS	0	0	
	UL/CUL	0	0	
	GS	0	0	
	PSE	0	0	
	PSB	0	0	
	CCC	0	0	
	RCM	0	0	
	BSMI	0	0	
	IRAM	0	0	
	KC	0	0	
	SABS	0	0	
	SAS0	0	0	
	EAC	0	0	
	B-MARK	0	0	
	SII	0	0	
	BR	0	0	

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## **Electrical Specification**

Mode1	rical Specification				
MOTO I	Voltage	12V	18	V	
Output	Rated Current	3A	2A		
	Current Range	2.7 ~ 3.3A	1.	8 ~ 2.2A	
	Rated Frequency	36W	36	W	
	Ripple&Noise (max)Remark2	500mVp-p	50	OmVp-p	
	Voltage Range	10.8 ~ 12.6V	16	.8 ~ 21V	
	Mode	CV	CV		
	Line Regulation	±1.0%	±	1.0%	
	Load Regulation	±3.0%	±	±3.0%	
	Start/Rise time	2000ms, 80ms/230VAC 3000ms, 80ms/115VAC(Full load)			
	Hold-up time(Typ.)	20ms/230VAC 10ms/115VAC(Full load)			
	Voltage Range	90 ~ 264VAC(available at 277VAC, compliance 300VAC at India)			
	Frequency Range	47 ~ 63Hz			
Input	Standby comsuption	100mW		100mW	
	Efficiency(Typ.)	78. 8%		78.8%	
	Input Current(Typ.)	0.8A max @100~24	OVac 0.	8A max @100~240Vac	
	Surge Current (Typ.)	COLD START 30A/1	00Vac 40A/240Vac C0	LD START 30A/100Vac 40A/240Vac	
Protecti on		145% max of rated output power			
	Overload	Hic-cup mode while the output voltage is less than 50% of the rated output.  Constant current mode while the output voltage is 50%~100% of the rated output.  Recovers automatically after fault condition is removed			
		>12.6V		1V	
	Overvoltage	Protection Type: Turn off the output, through the PWM control chip built-in VI voltage clamping			
	Work Temperature	-20°C ~50°C			
Environm ent	Work Humidity	10%~90%			
	Storage Temperatur&Humidity	-30℃~80℃, 5%~95%			
	Temperature coefficient	±0.03%/℃ (0~50℃)			
	Vibration resistant	10 ~ 500Hz, 1G 10mins/ circle , X, Y, Z 30mins for each			
	Altitude	5000m			
	Hi-pot	I/P-O/P:UL AC 1.5KVrms/50Hz 60s 5mA max; CE AC 3.75KVrms/50Hz 60s 5mA max			
	Isolation Resistane	I/P-O/P:100M Ohm	ıs / 500VDC / 25℃/ 70% RH		
ЕМС		Parameter	Standard	Test Level / Note	
		Conducted	EN55032(CISPR32), FCC Par	t 15B Class B	
	EMI	Radiated	EN55032(CISPR32), FCC Par	t 15B Class B	
		Harmonic	EN61000-3-2	Class A	
		Voltage Flicker	EN61000-3-3		
	EN55035, EN61000-6-2, EN61204-3				
		Parameter	Standard	Test Level /Note	
		ESD	EN61000-4-2	Level 3, 15KV air; Level 2, 8KV contact, criteria A	
		Radiated Susceptibility	EN61000-4-3	Level 3, criteria A	
	EMS	EFT/Burest	EN61000-4-4	Level 3, criteria A	
		Surge	EN61000-4-5	Level 4, 4KV/L-N, criteria A	
		Conducted	EN61000-4-6	Level 3, criteria A	
	İ	Magnetic Field	EN61000-4-8	Level 4, criteria A	
		Voltage Dips and	EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods,	
	MTBF	Voltage Dips and interruptions		25 periods, >95% interruptions 250 periods	
Others	MTBF Size(L*W*H)	Voltage Dips and interruptions	EN61000-4-11  DBK-217F (25°C, rated input	25 periods, >95% interruptions 250 periods	

<sup>2.</sup> Ripple and noise measurement method: capacitance of 0.1uF and 47uF in parallel at the terminal and the measurement is performed under the 20MHZ bandwidth.

3. Accuracy: includes setting error, linear adjustment rate and load adjustment rate.

<sup>4.</sup> The power supply adapter is an independent component, but the final adapter still needs to be confirmed in connection with the electromagnetic compatibility of the terminal equipment.