



AN AFRICAN ENERGY PARTNER



# Energier Home

Inverter/Charger  
1kW - 3kW



**TS**  
Temperature Sensor  
(Included with the inverter)



**RCC**  
Simple remote monitor  
with LED Display



**LMD**  
Load Management Device



**CM**  
Automatic Generator Start



The Energier inverter/charger can be used in multiple applications – as a power backup system or as part of a simple hybrid solar system with grid or generator power.

This is a true sine wave inverter/charger with a powerful battery charger, a high speed automatic transfer switch and a toroidal transformer.

It has excellent surge characteristics, so it can start demanding loads like refrigerators, pumps, air conditioners, etc.

It is specially adapted for areas with a weak or unstable electricity grid and has a robust charger that helps battery life by making sure batteries get fully charged.

- Transformer-type inverter/charger with pure sine wave output.
- Can be used for power backup or solar hybrid systems.
- Can start heavy loads like motors and compressors.
- Multi-stage battery charger with included battery temperature compensation.
- Equalization charge option for flooded batteries.
- Can adapt to low power or erratic generators.
- Can adapt to a fluctuating and intermittent electricity grid.
- Working temperature up to 60 C and tropicalization of components.
- Optional generator start module.
- Dry contacts avoid corrosion of contactor faces.



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MODEL NO.	12VDC	CD1040L	CD2080L	
	24VDC		CD2040M	CD3060M

## Inverter

Nominal Voltage		12VDC/24VDC		
Cont. output power at 40C (W)		1000W	2000W	3000W
Cosφ		0.9-1		
Overload Capability	>150%	20s		
	>125%	1min		
	>110%	15min		
Surge		300%		
Output Voltage		230VAC		
Output Frequency		50Hz		
Efficiency (Max)	12V	88%		
	24V	88%		
Bypass Range	Standard Mode	184VAC - 264VAC		
	GEN	160VAC - 280VAC		
Crest Factor		3:1		
THD		<3%		
Zero Load Power		22	36	62
Zero Load Power (Save Mode)		5	9	16
Output Circuit Breaker		10A	15A	30A
Overload Protection		auto disconnect with 3 times restart attempt		
Shortcut Protection		auto disconnect		

## Charger

Normal Output Voltage		12VDC/24VDC		
Max Output Current (A) - Adjustable		40A	80A/40A	60A
AC Input Range Gen Mode		170VAC - 250VAC		
Battery Types		AGM/Flooded/Flooded Sealed		
Absorption Time		variable		
Temperature Compensation		-4m / °C / cell		
Charger Circuit Breaker		10A	15A	30A

## Other Data

Transfer Time	GEN	2s		
	GRID	15ms		
Transfer Switch		40A		
Battery Connector		M8x2		
AC Connector		Terminal block (M3 screw)		

## Mechanical Data

Enclosure		Steel with powder paint		
Dimension (mm)		430x190x135	500x220x180	
Net Weight (kgs)		14	18.5	22.5
Cooling		Forced Fan		
Protection		IP20		

## Standard

Safety		EN60950-1		
EMC		EN55022, EN55024, EN61000-3-2, EN6100-33-3		