

About GridCo

GridCo is a Danish based company specialized in development and manufacturing of Grid Inverter solutions for small scale renewable applications. Our goal is to supply Grid Inverter Modules designed “fit-for-purpose” in close contact with the OEM manufacturer.

GridCo is a competitive partner in all aspects. Competitiveness through innovation is deeply founded in our DNA, continuously seeking optimum Grid Inverter solutions in close cooperation with our OEM-partners.

Let GridCo help you in designing a Grid Inverter solution for your specific renewable energy application.



Technical specifications

GCO Grid Inverters 10-30kW



Gridco ApS
Sdr. Tingvej 10
DK-6630 Rødding
Denmark

Tlf.: +45 7384 8503
E-mail: info@gridcoenergy.com
www.gridcoenergy.com



	GCO-10	GCO-15	GCO-20	GCO-30
GENERAL SPECIFICATIONS				
Operating temperature	Ambient temperature -20°C to 60°C, recommended 24 hour average ≤ 40°C (derating ≥ 45 °C)			
Enclosure	Power coated RAL 7032			
Protection degree	IP20 (enclosure rating EN60529)			
Cooling	Forced cooling by fans			
Relative humidity	≤ 95% non-condensating			
Operating Altitude	2000m			
Safety Class	Class I metal enclosure with protective earth			
Weight	50 kg (110 lbs)	50 kg (110 lbs)	65 kg (143 lbs)	65 kg (143 lbs)
Dimensions (HxWxD)	681x475x196mm	681x475x196mm	681x475x196mm	681x475x196mm
POWER INPUT DC				
Operating voltage	+/- 400-440 VDC			
Maximum voltage survival	+/- 500VDC			
Rated current	13.5 A	20 A	26.5 A	40 A
GRID OUTPUT (AC)				
Rated grid voltage	400 V AC 3P + N + PE (+/- 20%) 230 V AC 1P + N + PE (+/- 20%)		400 V AC 3P + N + PE (+/- 20%)	
Rated power	10 kW	15 kW	20 kW	30 kW
Maximum power	10.5 kVA	16 kVA	21 kVA	32 kVA
Rated current (rms)	1 x 48 A / 3 x 16	1 x 72 / 3 x 24 A	3 x 32 A	3 x 48 A
Max. Inrush Current	≤ 125% x nom. current			
Frequency Nominal	50 / 60 Hz			
Frequency Range	45-65 Hz			
Nominal power factor	> 0.99 at full power			
Power factor (cos)	0.80 inductive – 0.80 capacitive			
DC current injection	0.25% of rated current			
Harmonic distortion	< 3 % THDI			
Stand by power (off grid)	< 2 W	< 2 W	< 2 W	< 2 W
Maximum efficiency	97.5 %	97.5 %	97.5 %	97.5 %
Fuse	External fuses required			
SAFETY DEVICES				
Anti-Islanding protection	Compatible with national standards.			
Safety devices AC side	<ul style="list-style-type: none"> voltage / frequency window redundant AC relays integrated RCD (AC/DC sensitive), trip levels: 30 mA jump, 300 mA continuous class II surge protection (varistors) 			
OPTIONS NOT INCLUDED				
Interface	<ul style="list-style-type: none"> RS485 communication Ethernet connection module System control I/O (6 analogue inputs, 8 digital inputs, 8 digital outputs, 4 relay CO contacts) SMART GRID prepared 			

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NORMATIVE REFERENCES				
Directive LVD	2006/95/EC			
Directive EMC	2004/108/EC			
Safety	EN 50178			
EMC immunity	EN 61000-6-1, EN 61000-6-2			
EMC emission	EN 61000-6-3, EN 61000-6-4			
Utility interference	EN 6100-3-2/-3	EN 61000-3-11/-12		
FUNCTIONAL SAFETY				
Germany (DE)	VDE 0126-1-1/A1, VDE AR-N 4105 (August 2011)			
United Kingdom (UK)	G83/2, G59/3	G59/3		
France (FR)	UTE C15-712-1			
Belgium (BE)	Synergrid C10/11 – Rev 2012-06, Synergrid C10/17- Rev 8 may 2009			
France (FR)	UTE NF C 15-712-1			
Denmark (DK)	TF 3.2.1	Guidelines for energy plants greater than 16A		
Spain (ES)	RD1699 (2011) , RD661 (2007)			
Portugal (PT)	VDE 0126-1-1, ISO/IEC Guide 67: 2004 - System No.5			

