



Renewable Energy

# GRIDFIT<sup>250</sup>

## AC-INVERTER









## **GRIDFIT<sup>250</sup>** *A VERSATILE INVERTER*

The Exendis Gridfit 250 is a grid-connected inverter which combines safety with high quality and reliability. The Gridfit 250 is suitable for use with solar modules, and can be applied over a wide power range.

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## SAFETY

The Gridfit 250 is KEMA approved and meets the requirements of energy suppliers. An safety provision is the Ultra-Anti-Islanding concept. This provision makes sure that the inverter is switched off immediately in the event of a power cut. The inverter also switches off immediately in case of over or under voltage or excessively high or low frequency of the supply system.



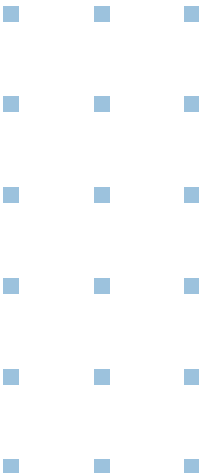
## QUALITY

Many years of research and development were undertaken before the Gridfit 250 went into production. The initial design concept came from the University of Paderborn. The design has taken into account differences in weather conditions, differences in (polluted) electricity supply systems and the varying requirements of the users. The product concept has been carefully translated into an inverter which does not just meet the required quality standards in the laboratory but also keeps giving the best possible performance under every type of condition in the field. At ECN various investigations were carried out of the harmonic interaction between inverters used

in parallel and the results from these studies were incorporated into the Gridfit 250. The result is a high-quality AC inverter.

## RELIABILITY

The solid appearance of the Gridfit 250 reflects the hard-wearing and reliable nature of this inverter. To ensure resistance to weather influences a safe high-quality DC connection was chosen. The Gridfit 250 has been tested extensively and tried out under the most strenuous conditions and without exception has emerged with a vote of reliability. This reliability is also reflected in the standard 5 year guarantee period!



## INSTALLATION

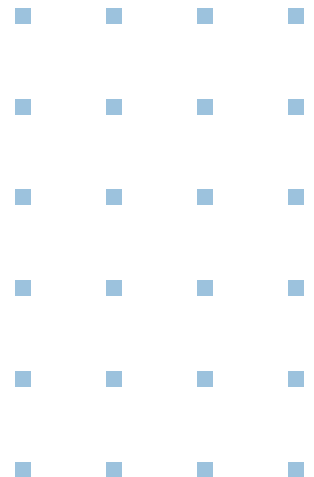
The Gridfit 250 is suitable for indoor as well as outdoor installation. On the AC side a H05RN-F cable is used which is weather and temperature resistant and has a mains plug. On the DC side the inverter is connected by means of high-quality PV Multi-Contact plugs. The mounting brackets, which can be turned in almost any position, can be moved grooves at the side of the inverter. This makes a modular structure possible, for instance, with 4 inverters in a row. If required, the inverter can be connected to the standard three-phase 400 Volt grid.





## **GRIDFIT250** *THE ADVANTAGES:*

- a high-quality inverter for a modest price
- suitable for inside or outside
- simple to connect
- suitable for wall-mounting
- suitable for parallel application
- suitable for an standard three phase 400 Volt system
  
- uses the latest and most advanced SMD technology
- uses optical signalling
- has galvanic separation between the AC and the DC side
- very fast maximum power point tracker
- extensively tried and tested; meets all required standards (ECN / KEMA)
  
- sturdy impact-proof housing
- components meet the most stringent standards
- very long life



# GRIDFIT250 SPECIFICATION DETAILS

Specification Details		250 (34 V)	250 (34 V)	250 (51 V)	250 (68 V)
Item	Dimension	Gridfit LV Class 1	Gridfit LV Class 2	Gridfit MV Class 1	Gridfit HV Class 1
<b>Input</b>					
Solar generator	Wp	250	250	230	250
Nominal Input Voltage	V DC	34	34	51	68
Mpp voltage range	V DC	27-50	27-50	38-75	54-120
Maximum Voltage	V DC	50	50	75	120
Nominal Input current	A	6,6	6,6	3,5	3,3
Input current range	A	0-7	0-7	0-5,2	0-5
<b>Output</b>					
Output power	Watt	200	200	165	200
Nominal Voltage	V AC	230	230	230	230
Output Voltage Range	V AC	230 +5 %-10%	230 +5 %-10%	230 +5 %-10%	230 +5 %-10%
Nominal current	A	0,87	0,87	0,71	0,87
Current range	A	0- 1,1	0-1,1	0-0,71	0-1,1
Frequency	Hz	50 +/- 0,5%	50 +/- 0,5%	50 +/- 0,5%	50 +/- 0,5%
Powerfactor		0,99	0,99	0,99	0,99
Efficiency Mpp tracking		>98%	>98%	>98%	>98%
European efficiency		>90%	>90%	>88%	>90%
Standby Power consumption	Watt	0,008	0,008	0,008	0,008
<b>Miscellaneous</b>					
Dimensions	mm	143x210x50	143x210x50	143x210x50	143x210x50
Weight	kG	1,8	1,8	1,8	1,8
Safety certification	Kema	EN 60950	EN 60950	EN 60950	EN 60950
EMI		EN 50081/82	EN 50081/82	EN 50081/82	EN 50081/82
Safety class		1	2	1	1
Ambient temperature range	°c	-25+60	-25+60	-25+60	-25+60
Protection Group		IP 65	IP 65	IP 65	IP 65
DC connector		MC contact	MC contact	MC contact	MC contact
Mains connector		3 pole AC plug	2 pole AC plug	3 pole Ac plug	3 pole Acplug
expected life	Years	20	20	20	20





*Every day the sun sends us sufficient energy to keep the total world population supplied with energy for years and years.*

Our sun is a virtually inexhaustible source of energy. If we succeed in making use of this solar energy on a large scale it will mean a substantial and lasting contribution to providing a solution to the energy supply question. Exendis Renewable Energy B.V. has set itself the goal of playing a prominent role in the development of technology that makes large-scale application of solar energy possible. To do this it can draw on its many years of experience in the area of energy conversion and the creation of reliable energy facilities. With the collaboration of its clients, Exendis Renewable Energy B.V. is developing innovative solutions for railway, road and air transport infrastructures, industry, shipbuilding, energy distribution and defence.

As an innovative enterprise Exendis Renewable Energy B.V. is an enthusiastic contributor when it comes to sustainable energy provision. In addition to the Gridfit 250, Exendis also supplies larger inverters, up to 150 KVA, for use with solar power systems, among other things. Exendis Renewable Energy B.V. is also working to develop technology that will enable wind energy and fuel cells to contribute on a large(r) scale to a sustainable future.

**EXENDIS Renewable Energy B.V.**

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