

Project Overview

PV System

Grid-connected PV System

Climate Data	London Weather C., GBR (1986 - 2005)
PV Generator Output	9.38 kWp
PV Generator Surface	45.5 m ²
Number of PV Modules	25
Number of Inverters	1

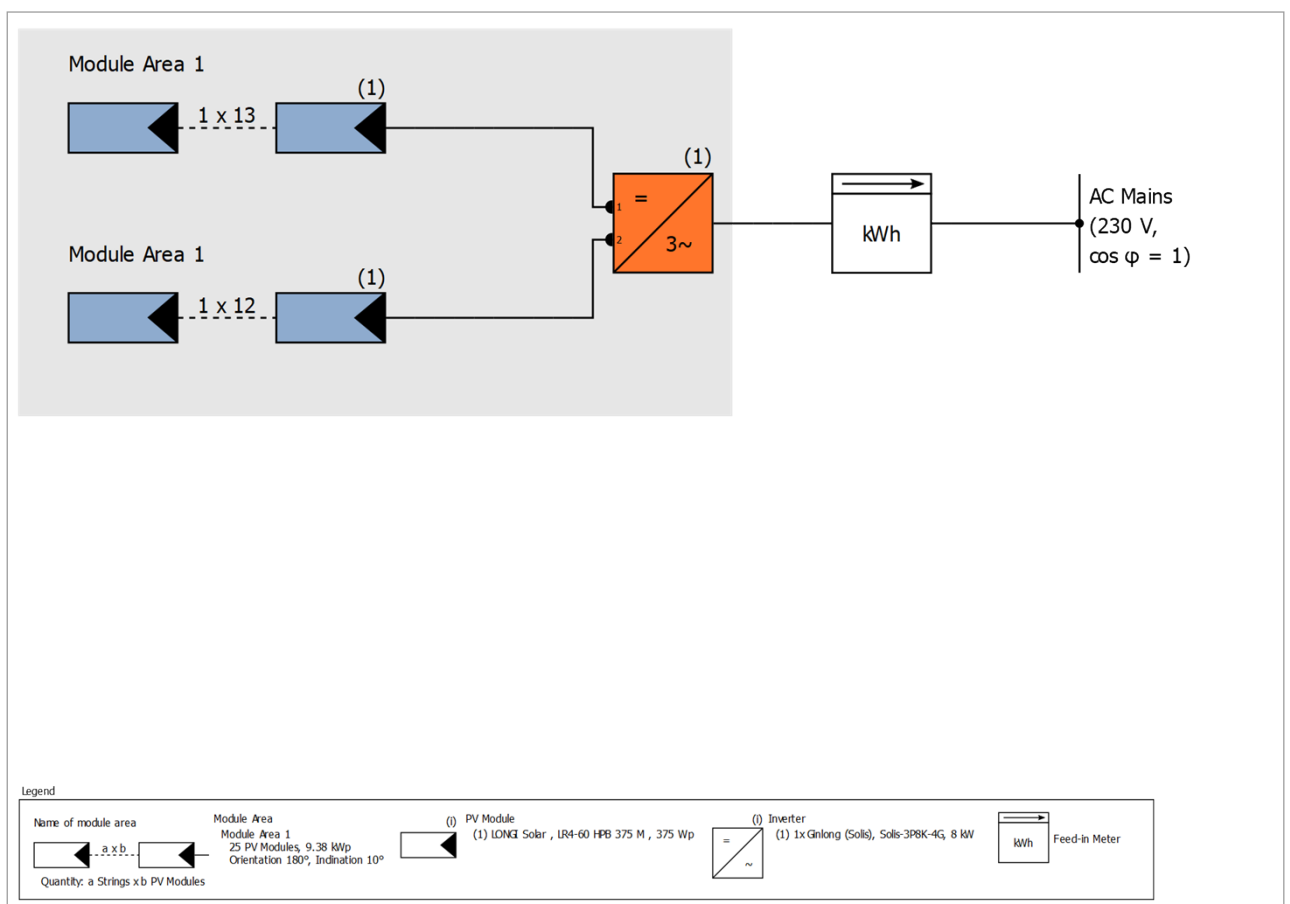


Figure: Schematic diagram

The yield

The yield

PV Generator Energy (AC grid)	8,710 kWh
Grid Feed-in	8,710 kWh
Down-regulation at Feed-in Point	0 kWh
Own Power Consumption	0.0 %
Solar Fraction	0.0 %
Spec. Annual Yield	928.62 kWh/kWp
Performance Ratio (PR)	92.8 %
CO ₂ Emissions avoided	5,224 kg / year

Financial Analysis

Your Gain

Total investment costs	0.00 £
Return on Assets	299.80 %
Amortization Period	More than 25 Years
Electricity Production Costs	0 £/kWh
Energy Balance/Feed-in Concept	Full Feed-in

The results have been calculated with a mathematical model calculation from Valentin Software GmbH (PV*SOL algorithms). The actual yields from the solar power system may differ as a result of weather variations, the efficiency of the modules and inverter, and other factors.

Set-up of the System

Overview

System Data

Type of System	Grid-connected PV System
Start of Operation	17/03/2021

Climate Data

Location	London Weather C., GBR (1986 - 2005)
Resolution of the data	1 h
Simulation models used:	
- Diffuse Irradiation onto Horizontal Plane	Hofmann
- Irradiance onto tilted surface	Hay & Davies

Module Areas

1. Module Area - Module Area 1

PV Generator, 1. Module Area - Module Area 1

Name	Module Area 1
PV Modules	25 x LR4-60 HPB 375 M (v1)
Manufacturer	LONGI Solar
Inclination	10 °
Orientation	South 180 °
Installation Type	Mounted - Roof
PV Generator Surface	45.5 m ²

Inverter configuration

Configuration 1

Module Area	Module Area 1
Inverter 1	
Model	Solis-3P8K-4G (v1)
Manufacturer	Ginlong (Solis)
Quantity	1
Sizing Factor	117.2 %
Configuration	MPP 1: 1 x 13
	MPP 2: 1 x 12

AC Mains

AC Mains

Number of Phases	3
Mains Voltage (1-phase)	230 V
Displacement Power Factor (cos phi)	+/- 1

Simulation Results

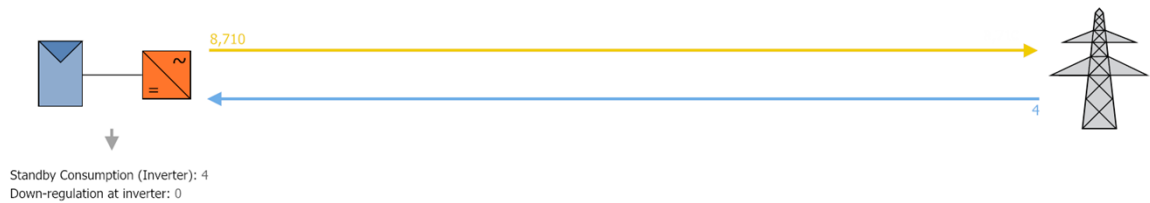
Results Total System

PV System

PV Generator Output	9.4 kWp
Spec. Annual Yield	928.62 kWh/kWp
Performance Ratio (PR)	92.8 %
Grid Feed-in	8,710 kWh/Year
Grid Feed-in in the first year (incl. module degradation)	8,512 kWh/Year
Standby Consumption (Inverter)	4 kWh/Year
CO ₂ Emissions avoided	5,224 kg / year

Energy Flow Graph

Project: Greville St



All values in kWh
Small deviations in the totals can occur due to rounding
created with PV*SOL

Figure: Energy Flow Graph

Plans and parts list

Circuit Diagram

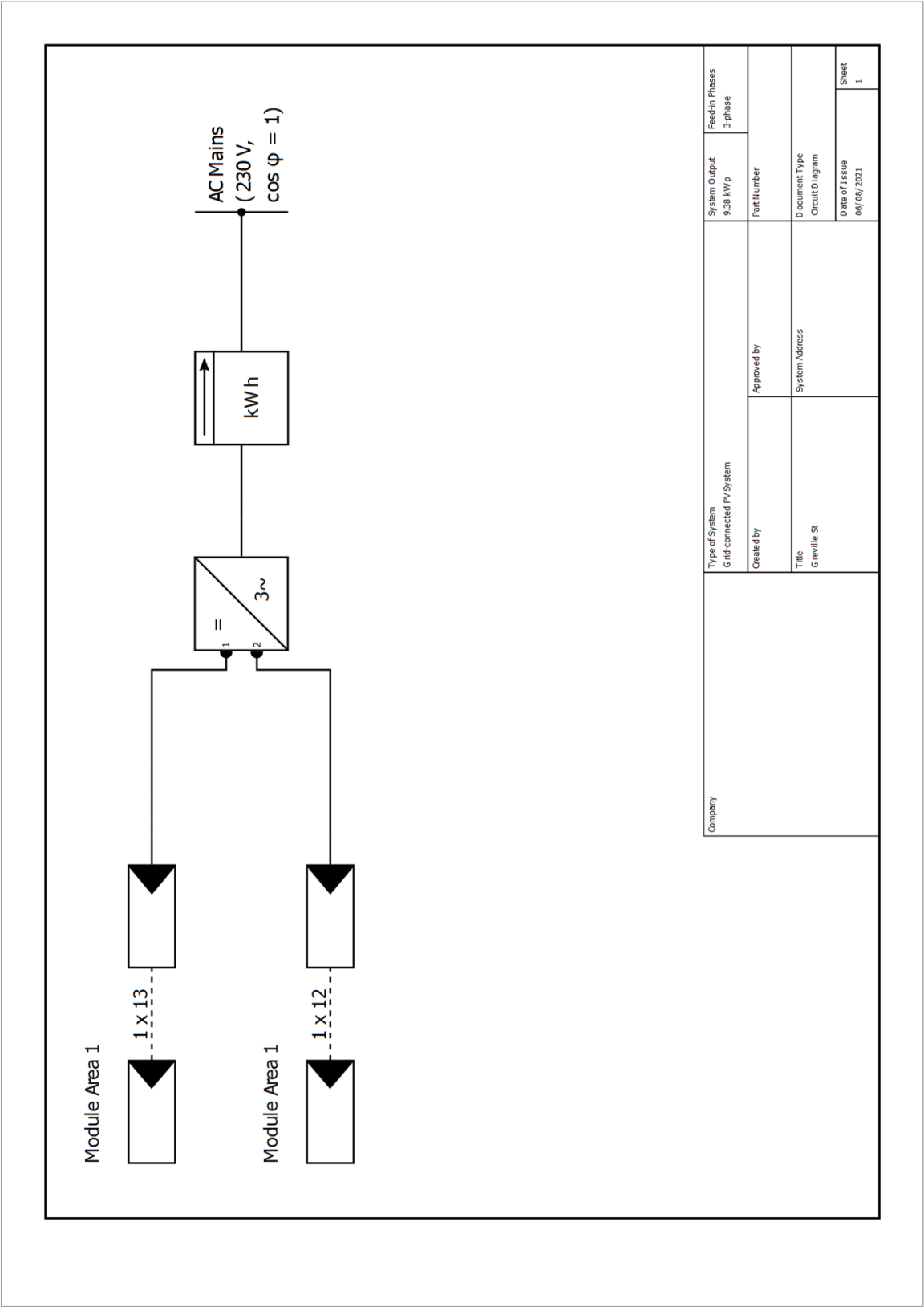


Figure: Circuit Diagram

Parts list

Parts list

#	Type	Item number	Manufacturer	Name	Quantity	Unit
1	PV Module		LONGI Solar	LR4-60 HPB 375 M	25	Piece
2	Inverter		Ginlong (Solis)	Solis-3P8K-4G	1	Piece
3	Components			Feed-in Meter	1	Piece