



BY HEATRAESADIA



DATA SHEET

Megaflo Eco Solar PV Ready Direct

UNVENTED CYLINDER

The Megaflo Eco Solar PV Ready takes the energy harvested by PV panels on the roof and transfers it directly to the cylinder delivering free hot water.

Operating on any PV array, with the panels wired straight into the cylinder, it requires no roof work or additional training to install[†] and the pre-wired controller makes installation quick and simple.

[†]No training in addition to Hot Water Unvented Storage Systems (G3) is required.

| | | | |
|--------------------------------|-------------------------|--------------------------|-----------------|
| 72 l/min at 3 bar | 2x 3kW | 210-300 Litres | 60 mm |
| MAX FLOW | IMMERSION HEATERS | NOMINAL CAPACITY | INSULATION |



FEATURES

- Fully wired Solar iBoost control
- Wireless communication
- High grade duplex stainless steel
- High performance insulation
- Internal floating baffle
- Megaflo combination valve delivering up to 72l/min at 3 bar

BENEFITS

- No special wiring required, easy to install
- For ease of siting
- High corrosion resistance and a high strength to weight ratio
- Reduces heat loss for better energy efficiency
- Faster installation
- Outstanding performance

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SPECIFICATIONS

| Model | 210DD | 250DD | 300DD |
|---|----------|----------|----------|
| Product code | 95050354 | 95050355 | 95050356 |
| Nominal capacity (litres) | 210 | 250 | 300 |
| Internal expansion with floating baffle | √ | √ | √ |
| Insulation thickness (mm) | 60 | 60 | 60 |
| Immersion heater rating (kW) | 2 x 3 | 2 x 3 | 2 x 3 |
| Weight empty (kg) | 44 | 49 | 57 |
| Weight full (kg) | 243 | 285 | 340 |
| Standing heat loss (kWh/24h) | 1.42 | 1.61 | 1.69 |
| Standing heat loss (kWh/year) | 518.3 | 587.65 | 616.85 |
| Max flow at 3 bar (l/min)** | 70 | 70 | 70 |
| Max flow at 1 bar (l/min)** | 40 | 40 | 40 |
| 1st hour performance at 45K (l/hr)† | 324 | 364 | 414 |
| Continuous performance at 45K (l/hr)† | 114 | 114 | 114 |
| Heat up time direct at 45K (mins)‡ | 102 | 121 | 146 |

*At primary flow temperature 80°C. **MCWS static pressure. †Calculated using nominal capacities and recovery using maximum electrical input.

Electric output from immersion heaters will be limited by the maximum peak output from the PV panels connected when the PV input to the Megaflo Eco Solar PV Ready is being provided.

ERP TECHNICAL DATA

| | | | |
|--|--------|--------|--------|
| Storage volume V in litres @ 3 bar | 199 | 236 | 283 |
| Mixed water at 40°C V40 in litres | 241 | 307 | 359 |
| The declared load profile L | L | XL | XL |
| The water heating energy efficiency class of the model | C | C | C |
| The water heating energy efficiency in % | 37.5 | 37.8 | 37.7 |
| The annual electricity consumption in kWh | 2731 | 3513 | 4443 |
| The daily electricity consumption in kWh | 12.670 | 20.480 | 20.580 |
| The thermostat temperature settings of the water heater, as placed on the market by the supplier | | 60°C | |

TECHNICAL SPECIFICATION

| | |
|---|--|
| Maximum supply pressure to incoming mains cold water combination valve (supplied) | 1.6 MPa (16 bar) |
| Minimum recommended supply pressure and flow rate | 0.15 MPa (1.5 bar) – 20 litres per minute |
| Operating pressure | 0.3 MPa (3 bar) |
| Inner water container | High grade Duplex stainless steel pressure tested to 16 bar |
| Thermal insulation (nominal thickness 60mm) | CFC/HCFC free, fire retardant expanded polyurethane foam with zero ozone depletion Global warming potential (GWP) = 3.1 |
| Pressure relief valve | 0.8 MPa (8 bar) |
| Immersion heater rating (AC supply only) | 3kW @ 240V 2.8kW @ 230V |
| Connections | 22mm compression |
| Domestic Hot Water Expansion | Megaflo Eco Solar PV Ready has an internal air gap with floating baffle, which accommodates hot water expansion. Meaning that there is no need to fit an external expansion vessel |

COMPONENTS

The following components are supplied as standard with Megaflo Eco Solar PV Ready Direct

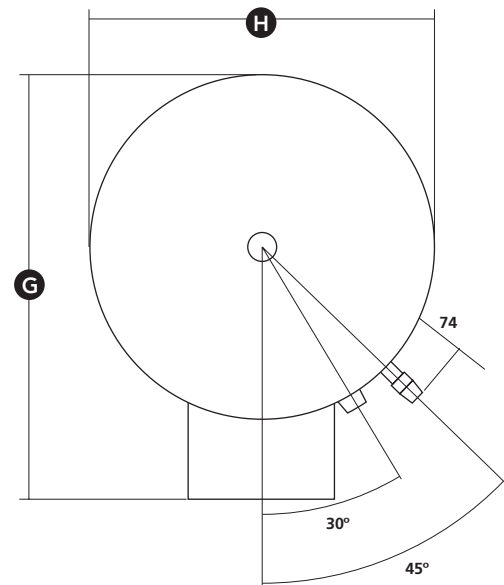
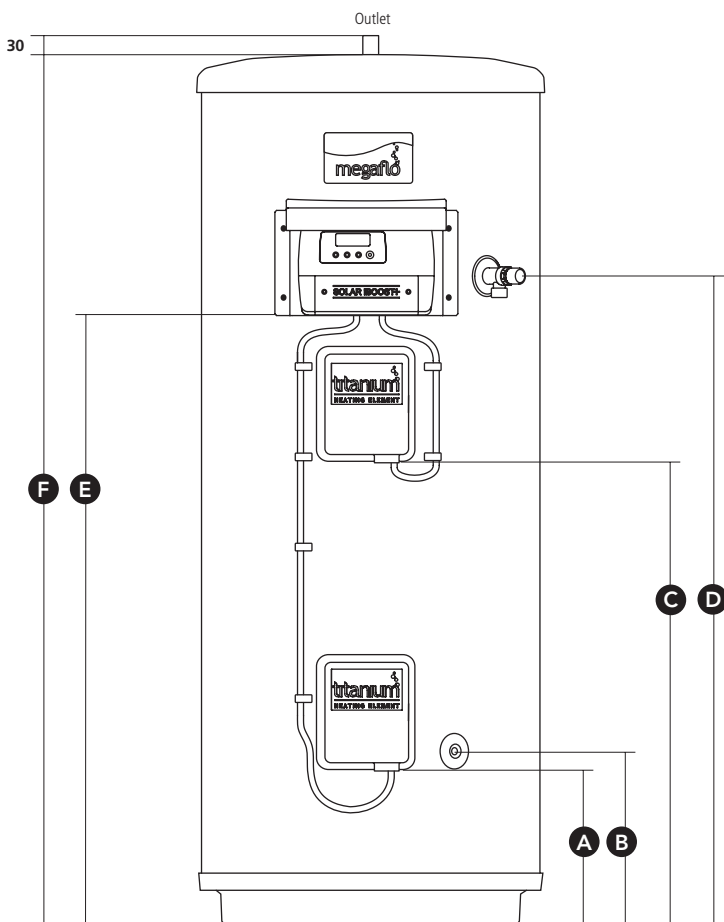
| | |
|--------------|---|
| Immersion(s) | Factory fitted immersion heater(s) and thermal controls. Titanium element(s) as standard |
| Cold water | Cold water inlet control kit comprising of 0.3MPa (3 bar) pressure reducing valve 0.8MPa (8 bar) pressure relief valve (BS EB 1567, BS EN 1491, EN 13959) 1/4 turn isolating valve, line strainer, non-return valve, drain valve |
| Safety | Factory fitted temperature and pressure relief valve set at 90°C / 1 Mpa (10 bar) (BS EN 1490) inc. T&P valve insulation kit 15/22mm Tundish |
| Controls | Solar iBoost Control (pre-wired), Clamp, Sender, Buddy remote display and control |

DIMENSIONS

| Model | 210DD | 250DD | 300DD |
|--------------------------|-------|-------|-------|
| A Cable entry lower (mm) | 275 | 275 | 275 |
| B DHW inlet (mm) | 307 | 307 | 307 |
| C Heater 1 control (mm) | 801 | 1008 | 1312 |
| D T&P relief valve (mm) | 1095 | 1322 | 1574 |
| E Solar PV control (mm) | 1052 | 744 | 744 |
| F Height (mm) | 1485 | 1736 | 2051 |
| G Depth (mm) | 714 | 714 | 714 |
| H Width (mm) | 579 | 579 | 579 |

FRONT VIEW

PLAN VIEW



ACCESSORIES

Swept Tee for Direct Secondary Return

94 970 033



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CODES OF PRACTICE/LEGISLATION

EU Directives:

- Pressure Equipment Directive 97/23/EC.
- Low Voltage Directive (LVD) 2014/30/EU.
- RoHS Directive 2011/65/EU.
- Electromagnetic Compatibility (EMC) Directive 2014/35/EU.

Legislation:

- Building Regulations Part G and Part L (England and Wales).
- Scottish Building Standards Section 4 and Section 6.
- Building Regulations (Northern Ireland) Parts F1 and F2 and Part P.
- Water Supply (Water Fittings) Regulations (England and Wales).
- The Water Byelaws 2004 (Scotland).
- Water Supply (Water Fittings) Regulations (Northern Ireland).

Standards:

- Relevant clauses of the following standards are complied with:
- EN 12897 – Specification for indirectly heated unvented cylinders.
- EN 60335-2-21 – Safety-Particular requirements for storage water heaters.
- The stainless steel materials used comply with the relevant clauses of:
- EN 10088 – Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes.
- EN 50440:2106 – Efficiency of Domestic Electric Storage Water Heaters and Training Methods.

Components supplied comply with the following standards:

- BS EN 1490 Building Valves – Combined Temperature and Pressure Relief Valves.
- BS EN 1491 Building Valves – Expansion Valves.
- BS 6144 Specification for Expansion Vessels Using An Internal Diaphragm For Unvented Water Supply Systems.
- BS EN 1567 Building Valves – Water Pressure Reducing Valves and Combination Reducing Valves.
- BS EN 60730-1 Automatic Electrical Controls – For households and similar use. Part 1: General Requirements.
- BS EN 60730-2-8 Automatic Electrical Controls – Particular Requirements for Electrically Operated Water Valves.
- BS EN 13959 Anti-pollution Check Valves.

The use of these water heaters will aid in compliance with:

- Health and Safety Executive Approved Code of Practice L8: The control of legionella bacteria in water systems.
- BS EN 806 Parts 1 to 5: Specification for installations inside buildings conveying water for human consumption.
- BS 8558 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings.
- Chartered Institute of Building Services Engineers Guide B and Guide F.

Manufactured in a factory approved to:

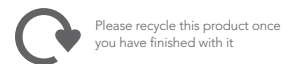
- BS EN ISO 9001
- OHSAS 18001
- ISO 50001
- ISO 14001

Megaflo Eco approvals:

- Kiwa Certification Number: 1608707.
- Nemko Certification Number: P16221050.



For more information
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Issue 4 2018