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| logo_ec_17_colors_300dpi | EUROPEAN COMMISSION  DIRECTORATE-GENERAL FOR MOBILITY AND TRANSPORT  DIRECTORATE-GENERAL FOR ENERGY  SRD - Shared Resource Directorate  **SRD.4 - Informatics & Logistics** |

European Product Registry for Energy Labelling (EPREL)

Water Heaters (Solar devices)

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| Revised by: |  |
| Approved by: |  |
| Public: | Limited |

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## Document History

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| 1.00 | 23/07/2018 | Draft Document created by Oscar Miralles (OM) |
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|  |  |  |

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## Bibliography

|  |  |
| --- | --- |
| [1] | EPREL, *Bussiness Glossary,* 2016. |
| [2] | EPREL, *COMMISSION DELEGATED REGULATION (EU) No 812/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heate.* |
| [3] | EPREL, XML Exchange Model, 2018. |

## Abbreviations and Glossary

See document "EPREL – Business Glossary" [1]

# Introduction and purpose

This document is a summary of all that is necessary for the EPREL to generate the UI form (list of fields and mock-up screenshot) for each product group, to generate the labels and to generate the product information sheet.

# Water heaters (Solar device)

COMMISSION DELEGATED REGULATION (EU) No 812/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device [2].

These product group concerns 4 types of products "Water heaters", “Hot water storage tanks”, “Solar devices”, "Packages of water heater and solar device". They will have separate Product Information Sheets.

This document is intended only for “Solar devices”.

## Fields/Exchange model

List of fields extracted from the Regulation mentioned above and their correspondence with the fields in Data Exchange Model [3] class “SolarDevice”. The column “Item” is a reference to the field as defined in the Annex IV “Product fiche”; the name of the field, the type, if mandatory, a short description how it’s filled or the units used, and field in the data exchange model.

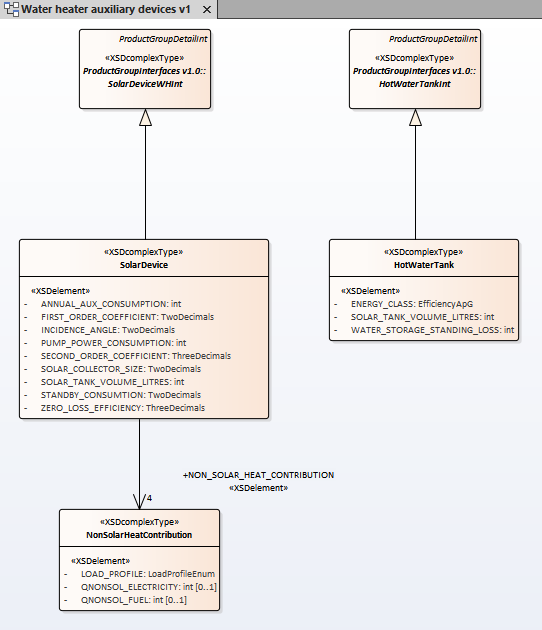


Figure 1 Exchange model

| Item | Field | Type | Mandatory | Description | Exchange model |
| --- | --- | --- | --- | --- | --- |
| 3.1(a) | Supplier's name or trademark | Text | TRUE |  |  |
| 3.1(b) | Supplier's model identifier | Text | TRUE |  |  |
| 3.1(c) | Solar collector aperture area | Number (2 decimals) | TRUE | m2 | SOLAR\_COLLECTOR\_SIZE |
| 3.1(d) | Zero-loss efficiency | Number (3 decimals) | TRUE | % | ZERO\_LOSS\_EFFICIENCY |
| 3.1(e) | First-order coefficient | Number (2 decimals) | TRUE | W/(m2 x K) | FIRST\_ORDER\_  COEFFICIENT |
| 3.1(f) | Second-order coefficient | Number (3 decimals) | TRUE | W/(m2 x K2) | SECOND\_ORDER\_  COEFFICIENT |
| 3.1(g) | Incidence angle modifier | Number (2 decimals) | TRUE |  | INCIDENCE\_ANGLE |
| 3.1(h) | Storage volume | Number (No decimals) | TRUE | Litters | SOLAR\_TANK\_  VOLUME\_LITRES |
| 3.1(i) | For the load profiles M, L, XL and XXL (all profiles need to be filled) | | | | |
| Load profile | List | TRUE | M, L, XL, XXL | LOAD\_PROFILE |
| Annual non-solar heat contribution (Electricity) | Number (No decimals) | FALSE | kWh | QNONSOL\_ELECTRICITY |
| Annual non-solar heat contribution (Fuel) | Number (No decimals) | FALSE | GCV | QNONSOL\_FUEL |
| 3.1(j) | Pump power consumption | Number (No decimals) | TRUE | W | PUMP\_POWER\_  CONSUMPTION |
| 3.1(k) | Standby power consumption | Number (2 decimals) | TRUE | W | STANDBY\_CONSUMTION |
| 3.1(l) | Annual auxiliary electricity consumption | Number (No decimals) | TRUE | kWh | ANNUAL\_AUX\_  CONSUMPTION |

## Mock-up

These are the mock-up screenshots of how the UI form will look like for the supplier to enter the model information manually.

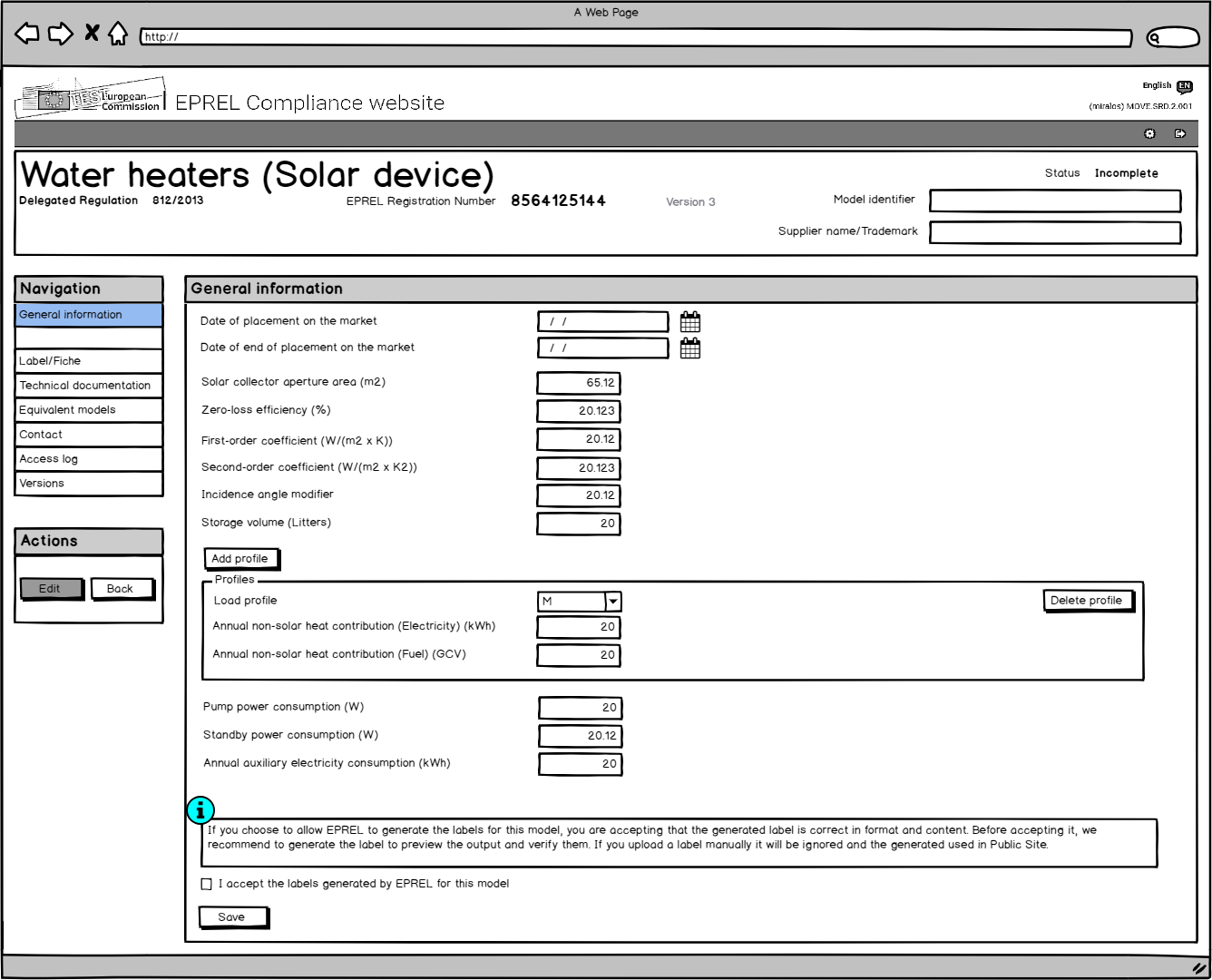


Figure 2 Mock-up

## Labels

THERE ARE NO LABELS FOR THIS PRODUCT GROUP

## Product Information Sheet

This is a template of the product information sheet using the fields from the Annex IV “Product fiche”.

|  |  |
| --- | --- |
| **Product Information Sheet** | |
| Delegated Regulation (EU) | 812/2013 |
| Supplier name or trademark | [Supplier name or trademark] |
| Model identifier | [Model identifier] |
| Solar collector aperture area | [Solar collector aperture area] m2 |
| Zero-loss efficiency | [Zero-loss efficiency] % |
| First-order coefficient | [First-order coefficient] W/(m2 x K) |
| Second-order coefficient | [Second-order coefficient] W/(m2 x K2) |
| Incidence angle modifier | [Incidence angle modifier] |
| Storage volume | [Storage volume] Litters |
| ***(Repeat this section with the next 2 fields for the profiles declared)***  **Profile: [Load profile]** | |
| Annual non-solar heat contribution (Electricity) | [Annual non-solar heat contribution (Electricity)] (kWh) |
| Annual non-solar heat contribution (Fuel) | [Annual non-solar heat contribution (Fuel)] (GCV) |
| *(End profile section)* | |
| Pump power consumption | [Pump power consumption] (W) |
| Standby power consumption | [Standby power consumption] (W) |
| Annual auxiliary electricity consumption | [Annual auxiliary electricity consumption] (kWh) |