EPREL Dataconverter

Manual

Inhalt

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# Version History

## Version 1.1.15

. Disclaimer Welcome Screen   
. Changed Round to Ceiling  
. Added Manual  
. Download process info  
. Parsing process info  
. XML Generating info

## Version 1.1.14

. Disabled free text trademark according to EPREL 1.53.0  
https://webgate.ec.europa.eu/fpfis/wikis/pages/viewpage.action?pageId=897385478

. Template updated to V0.6 - !PLEASE USE NEW VERSION!  
- Changes in round up ENERGY\_CONS\_ON\_MODE  
(Excel rounded down all values below x,5 new version corrected to round up all decimals)  
- Changed columns in DOWNLOAD sheet

## Version 1.1.13

. Added Error support in Excel Paring with row, column and sheet  
. (REGISTER\_PRODUCT\_MODEL)  
. Added DECLARE\_END\_DATE\_OF\_PLACEMENT\_ON\_MARKET Module  
. Added Tools Section  
. Added Download Labels and Fiches  
. Template Updated to V0.5

## Version 1.1.12

. Added Error support in Excel Paring with row, column and sheet  
(REGISTER\_PRODUCT\_MODEL)

## Version 1.1.11

. BugFix  
REGISTRATION parsed R9 value from wrong column

## Version 1.1.10

. Excel Template changed  
. Tools in Debug Mode Available

## Version 1.1.9

. Bug in Excel Parsing Fixed

## Version 1.1.8

. R9 Value -100 to 100

## Version 1.1.7:

. Reason for Change Typo fixed

. EPREL Registration Number Changed to String

## Version 1.1.6:

. FLUORESCENT typo  
. Updated Product Update  
. Updated Template V03

## Version 1.1.5:

. New Template V0.2  
. added Try/Catch to Registration  
. Error message while error on Parsing  
. adding Nature of registrant

. added Error handling  
. added full LAMP support for PRODUCT\_MODEL\_REGISTRATION  
. Registration with contact reference is working

## Release 1.0.1

. LogFile  
. BugFixes  
. Waiting Cursor  
. Save File Dialog improved

# File Source

<https://github.com/mplnck/EPREL_Dataconverter/raw/master/EPREL%20Dataconverter%20Setup/Release/EPREL%20Dataconverter%20Setup.msi>

# References

1. EPREL - User Guide - 02 Model registration - [https://webgate.ec.europa.eu/fpfis/wikis/display/EPREL/EPREL+Exchange+Model+Documentation?preview=/816809981/816809990/ProductModelExchangeModel.pdf - 27.09.2021](https://webgate.ec.europa.eu/fpfis/wikis/display/EPREL/EPREL+Exchange+Model+Documentation?preview=/816809981/816809990/ProductModelExchangeModel.pdf%20-%2027.09.2021)
2. ProductModelExchangeModel - <https://webgate.ec.europa.eu/fpfis/wikis/download/attachments/285088651/EPREL%20-%20User%20Guide%20-%2002%20Model%20registration%20-%20File%20upload%20v1.80.docx?version=1&modificationDate=1631190115548&api=v2> – 27.09.2021

# System requirements

Operating System Windows 10

Required Software Microsoft Excel

Browser[[1]](#footnote-1) Mozilla Firefox

# Installation

Please download the latest installer from the installation source and follow the instructions in the assistant.

# EPREL Dataconverter

To launch the EPREL Dataconverter application, double-click its desktop icon, or choose Start > Programs > nimbus Group GmbH > EPREL Dataconverter from the Start menu.

## Main Window

After starting the application, you need to accept the disclaimer, after this, you will see the main window with following options.

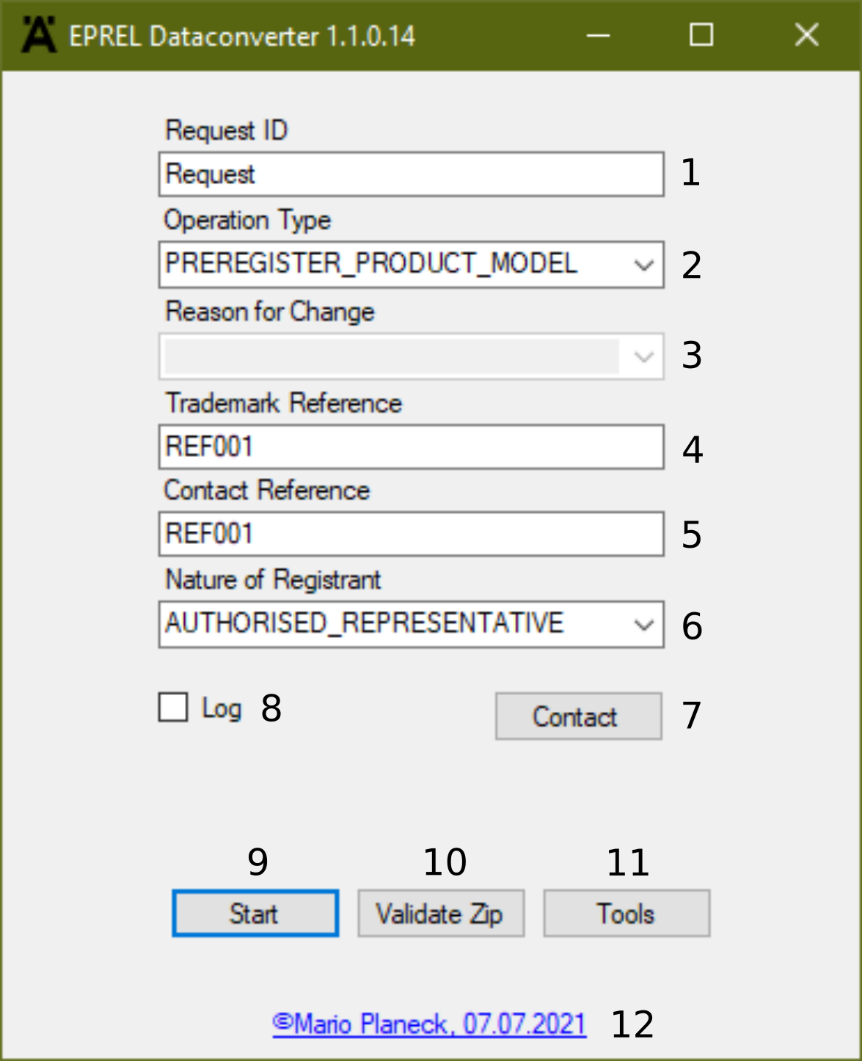


Figure Main Window

1. ID of the transaction to be provided by the supplier. It is a free text, but XML reserved characters must be avoided (i.e. &, <, >, etc.)[[2]](#footnote-2)
2. There is one operation for each model to create. This section will be repeated as many times as operations (models to create/update/etc.) needed.

Available operations to perform on a product model:

* REGISTER\_PRODUCT\_MODEL: Legal registration of a product model (compliance data + energy label + product information sheet).
* UPDATE\_PRODUCT\_MODEL: Correction of a legal declaration of product model information accordingly to the Article 12(10) of the EU regulation 2017/1369. This operation can only be used to correct errors or to complete an existing product model (in case of pre-registration for example). This operation must not be used in case of changes made on a product that are relevant for the label or the product information (Article 4 (12) of the EU regulation 2017/1369). In that case, a new product model shall be registered.
* DECLARE\_END\_DATE\_OF\_PLACEMENT\_ON\_MARKET: Declaration of starting date of the 15 years retention period of compliance data. (ON\_MARKET\_END\_DATE) Article 4(6) and 16(q) of the EU regulation 2017/1369.
* PREREGISTER\_PRODUCT\_MODEL: Operation used to early get an EPREL\_PRODUCT\_MODEL\_ID that could be used to generate a QR Code. This operation could be useful for suppliers who would like to prepare the packaging of their goods with the energy label a long time before putting their products on the EU market.

1. Only needed for the operation of type "UPDATE\_PRODUCT\_MODEL" when the latest version of the product model is already in status "PUBLISHED" in EPREL.

* CORRECT\_TYPO: supplier has done a mistake when declaring a value and needs correction.
* CHANGE\_IN\_STANDARDS: the testing standards can change and some values need to be modified.
* LABEL\_SCALE\_RANGE\_CHANGE: In a same Delegated Regulation the scale of energy efficiency may change with the years (i.e. Reversible air conditioners classified in energy efficiency classes A - G from 01/01/2013 to 31/12/2014, A+ - F from 01/01/2015 to 31/12/2016, etc.) and model needs to be modified.
* CHANGE\_REQUESTED\_BY\_MSA: If MSA detects an error or mistake that does not need a new model registration, it can ask the supplier to modify some values of a registered model.
* ADDED\_INFORMATION\_NO\_EFFECT\_ON\_DECLARATION: During the lifecycle of a model it might be, that either the company itself produces more helpful information, or clarification, or that it turns out that for communication with MSA this information speeds up their understanding (though strictly speaking not legally necessary). Additional information, that does not change in such a case the model, this cannot lead to a forced change in model number (=no new registration), a change of model would then not make any sense.
* REQUEST\_CHANGE\_BY\_EXTERNAL\_BODY: A Certification Body very frequently detect errors in declared data, sometimes typing mistakes, many times performance data which, after test in Independent Laboratory, need correction (“re-rating”). Data linked to a product can represent up to dozens of values, and it can happen that one, a few, or more, need adjustment. New models each time is not sustainable.

There is another reason for change in the UI, which is to set the date of end of placement on the market, but it is not necessary in system- to-system because there is a special operation for doing it (DECLARE\_END\_DATE\_OF\_PLACEMENT\_ON\_MARKET).

1. The value must refer to a Trademark reference (internal code) defined centrally in the EPREL database. Advantage of this option is that trademark names cannot be misspelled as they are defined once at organisation level. The name of the trademark with this reference will be used on generated energy labels and product fiches.
2. Reference to the contact defined in the EPREL database. If the reference not specified, a fall back strategy is applied.

The system uses "CONTACT\_REFERENCE" and links the product to the related contact found in its DB.

* 1. If the CONTACT\_REFERENCE cannot be found in the database or this reference is related to a department or organisation that is out of the scope of the submitting system => the registration of the model is rejected.
  2. If the reference is not specified, the system tries to link the product model to the contact defined at the level of the department (If more than one contact defined at department level => the registration of the model is rejected)
  3. If the product mode is not linked to a department, the system tries to link the product model to the contact defined at organisation level.

If more than one contact is defined at organisation level or if there's no contact defined => the registration of the model is rejected.

The reference of the contact detail can be retrieved either directly from the EPREL-compliance web application or via the ReferenceDataService.

1. Suppliers can be of three type (Manufacturers and/or Importers and/or Authorised representative). When registering a model supplier has to indicate with which hat he is registering. If supplier has only one type assigned, this type will be set by default; if supplier is of multiple types, this field will have to be informed.

Possible values:

* MANUFACTURER
* IMPORTER
* AUTHORISED\_REPRESENTATIVE

1. The contact details using the structure “ModelSpecificContactDetails” defined in the model.

THIS OPTION WILL NOT BE AVAILABLE IN A NEAR FUTURE. ONLY CONTACTS BY REFERENCE WILL BE ALLOWED WHEN REGISTERING/UPDATING MODELS. PLEASE USE REFERENCE.

1. Shows the LOG. If you have trouble check the log before you contact support. Usually it gives a hint where the problem is.
2. Run the process (please make sure you have a fully filled Excel sheet (ref. Application process) )
3. If you already have a zip file you can validate the zip file in its structure.
4. Tools
5. Date of version release. Link to support

## Tools Window

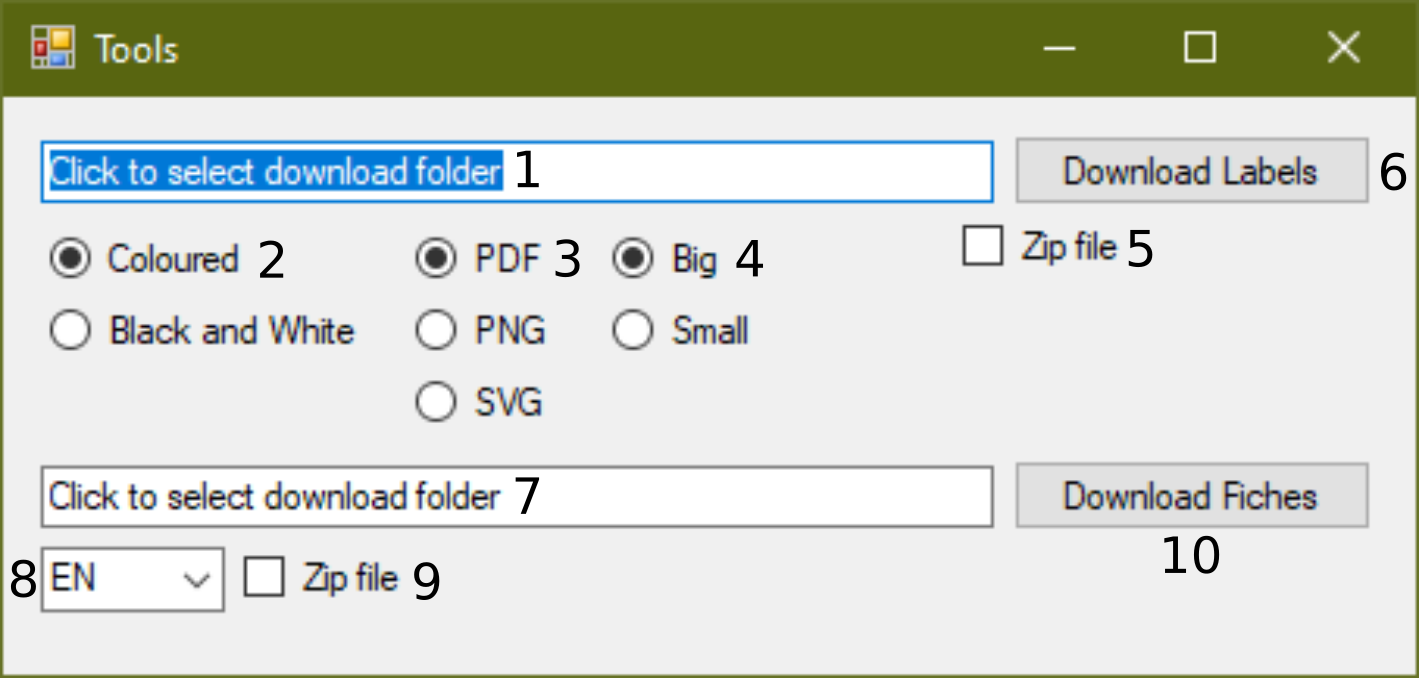


Figure Tools Window

1. Click to select folder, where the labels should be downloaded
2. Select colour type of the labels
3. Select file format for the labels
4. Select size type for the labels
5. Select, if all data (all colour, all size, etc.) should be downloaded
6. Start download process for labels
7. Click to select folder, where the fiches should be downloaded
8. Select specific language
9. Select, if all languages should be downloaded
10. Start download process for fiches

## Excel Template

To use the EPREL Dataconverter properly, you need to fill the excel template. The template can be found in the installation folder. If the installation folder was not changed within the installation process, the file is located:

C:\Program Files (x86)\nimbus Group GmbH\EPREL Dataconverter Version 1.1.14\Vorlage\_EPREL\_ECO-V0.6.xlsx

For each operation type you need to fill out the specific sheet. The arrangement of the columns must not be changed. It is possible to add as much columns at the end of the table but not in between.

The data for the products must start in row 2. Also there must no blank lines between the products which should be registered. For more information filling the Excel sheet refer to Product Model Content Structure in the Attachments area.

For a successful REGISTER\_PRODUCT\_MODEL and UPDATE\_OPERATION the technical documentation is mandatory. For this part please switch to the sheet attachments.

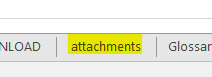


Figure Attachment sheet

For each MODEL\_IDENTIFIER you need to upload a document out of each category except ADDITIONAL\_PART.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Key | Field | Obligation | Type | Description |
| MODEL\_IDENTIFIER | Supplier's model identifier | M | Text | Model identifier of the product model. |
| DESCRIPTION | Document description | Calculated by spreadsheet | Text | Description of the File being uploaded to EPREL |
| LANGUAGE | Language | M | Language Code | Language of the document. If two or more languages apply, separate with semicolon (e.g. DE;EN) |
| ADDITIONAL\_PART | Additional information | O | Boolean | In addition, the supplier may upload additional parts of the technical documentation on a voluntary basis into the database. |
| CALCULATIONS | Calculations | M | Boolean | Calculations performed with the measured parameters |
| GENERAL\_DESCRIPTION | General information | M | Boolean | A general description of the model, sufficient for it to be unequivocally and easily identified |
| MEASURED\_TECHNICAL\_PARAMETERS | Measured data | M | Boolean | Measured technical parameters of the model |
| REFERENCES\_TO\_HARMONISED\_STANDARDS | References to harmonised standards | M | Boolean | References to the harmonised standards applied or other measurement standards used |
| TESTING\_CONDITIONS | Testing conditions | M | Boolean | Testing conditions if not described sufficiently in REFERENCES\_TO\_HARMONISED\_STANDARDS |
| SPECIFIC\_PRECAUTIONS | Precautions | M | Boolean | Specific precautions that shall be taken when the model is assembled, installed, maintained or tested |
| FILE\_NAME | File name | M | Text | Filename to be uploaded. The allowed formats for the attachments are \*.PDF, \*.TXT, \*.DOCX, \*.RTF, \*.XLSX, \*.PPS. |

Table Attachment description

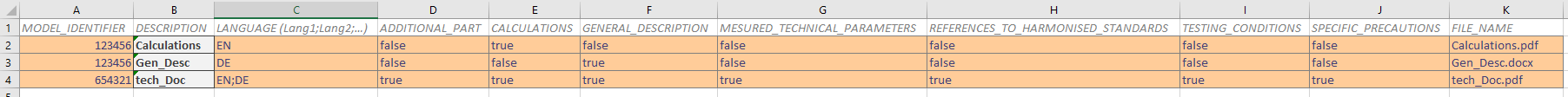


Figure Attachment example

It is possible to register multiple documents for one MODEL\_IDENTIFIER like in row 2 and 3 as seen in Figure 4 or multiple categories for one MODEL\_IDENTIFIER.

# Application process

After successfully filling the template a full process will be possible. After pressing the Start button in the main window the applications ask for choosing an Excel file. Please choose the file with the filled information based on the provided template.

In the next step the application will parse the Excel data and convert it into an XML file. In this process two possible errors may occur.

## Parsing Error

Please check the data in the Excel file. The applications were not able to go through the cells of the spreadsheet. Usually the log will help in which column or cell the mistake is placed (ref. Figure 5).

|  |  |
| --- | --- |
| Figure Parsing error | Figure XML Error |

## Generating Error

If the provided data in the cells are not correct (e.g. Type must be text but the cell is filled with a numeric value) the application will give a hint in the Log where the mistake Is (ref. Figure 6)

This process will take a while until the application will ask you, where to save the generated ZIP file.

**IMPORTANT! Please do not change the name of the file. It must be named productModelRegistrationTable.zip**

In the next step the application needs the folder where all technical documentation is located. Please make sure, that the spectral files and technical documentation is located in one folder, without subfolders. The application will load them in the Zip file and organise it as necessary. Additionally, you can validate your ZIP file in the next step. After successfully running the software the zip file can now be uploaded into the EPREL Database.

# Tools

Before using the download tool some preparations need to be done. In the spreadsheet based on the template the sheet DOWNLOAD must be filled with the EPREL\_REGISTRATION\_NUMBER and MODEL\_IDENTIFIER. The tool only downloads the data for the MODEL\_IDENTIFIERS filled in this sheet.

# Attachments

## Product Model Content Structure

The following table is a helping hand for filling the Excel template. The data is based on the guides provided by the European Commission[[3]](#footnote-3). Please check the current version.

M = Mandatory  
O = Optional  
H = Hide  
D = Disabled

| **Key** | **Field** | **Obligation** | **Type** | **Length/**  **Range** | **Format** | **Unit** | **Observations** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| General Information0 | | | | | | | |
| EPREL\_MODEL\_REGISTRATION\_NUMBER | Registration number | O | Unsigned long |  |  |  | Unique identifier determined at registration time by the EPREL system. This registration number is candidate to be the dynamic part of the link that would present as a QR code in future Energy labels. This registration number is generated by the EPREL at creation time and therefore must not be provided for operations   * REGISTER\_PRODUCT\_MODEL * PREREGISTER\_PRODUCT\_MODEL   The EPREL registration number become mandatory for operations   * UPDATE\_PRODUCT\_MODEL * DECLARE\_END\_DATE\_OF\_PLACEMENT\_ON\_MARKET |
| MODEL\_IDENTIFIER | Supplier's model identifier | M | Text | 255 |  |  | Model identifier of the product model. |
| CONSIDER\_GENERATED\_LABEL\_AS\_PROVIDED | Kind of providing the label | M | Boolean | true/ false |  |  | Suppliers have to provide Energy labels. The label must also be generated from the EU database.  As these two obligations can be considered as redundant, suppliers can decide to consider labels generated by the EC database as labels provided in their own.  By setting the value of the Boolean attribute to TRUE, the supplier request the label, generated from the EC database, to be considered as if it was provided by itself. |
| ON\_MARKET\_START\_DATE | Date of placement on the market | M | Date |  | dd.mm.yyyy |  | Date on which the model will be/has been placed on the market (or put into service). Since neither the public, the EC nor MSAs will be able to access to product details before this date the registration will not be considered as effective until the ON\_MARKET\_START\_DATE has been reached. |
| ON\_MARKET\_END\_DATE | Date of end of placement on the market | O | Date |  | dd.mm.yyyy |  | Date after which the final unit of the model has been placed on the market. This date does not have to be provided at registration time. This date will be mainly used to evaluate the retention period as described in EU Regulation 1369/2017 - Article 4.6. |
| VISIBLE\_TO\_UK\_MSA | Compliance data visible to UK MSA | O | Boolean |  | true/false |  | Optional flag to indicate if the product compliance information (technical documentation, equivalents and ICSMS data) should be visible to the Market Surveillance Authority for the United Kingdom. The handling of the flag is the following:   * For suppliers based at UK/Northern Ireland: if the flag is omitted, it is considered as being "true" by default. If the flat is sent as "false", an error will occur. * For suppliers based at an EU country: if the flag is omitted, it is considered as being "false" by default. |
| Lighting Technology | | | | | | | |
| LIGHTING\_TECHNOLOGY | Lighting technology used | **M** | List | HL, LFL\_T5\_HE, LFL\_T5\_HO, CFLNI, OTHER\_FL, HPS, MH, OTHER\_HID, LED, OLED, MIXED, OTHER |  |  | List of technologies (Annex V Table 3):  HL = HL LFL T5 HE = LFL\_T5\_HE LFL T5 HO = LFL\_T5\_HO CFLni = CFLNI other FL = OTHER\_FL HPS = HPS MH = MH other HID = OTHER\_HID LED = LED OLED = OLED mixed = MIXED other = OTHER |
| DIRECTIONAL | Non-directional or directional | **M** | List | NDLS, DLS |  |  | NDLS = Non-directional DLS = Directional |
| CAP\_TYPE | Light source cap-type (or other electric interface) | **M** | Text | 255 |  |  | Free text |
| MAINS | Mains or non-mains | **M** | List | MLS, NMLS |  |  | MLS = Mains NMLS = Non-mains |
| CONNECTED\_LIGHT\_SOURCE | Connected light source (CLS) | **M** | Boolean | true/false |  |  |  |
| COLOUR\_TUNEABLE\_LIGHT\_SOURCE | Colour-tuneable light source | **M** | Boolean | true/false |  |  |  |
| Depending on the lighting technology used ENVELOPE might be mandatory:  IF [LIGHTING\_TECHNOLOGY] = MIXED THEN M  IF [LIGHTING\_TECHNOLOGY] = OTHER\_HID THEN M  IF [LIGHTING\_TECHNOLOGY] = HPS THEN M  IF [LIGHTING\_TECHNOLOGY] = MH THEN M  IF [LIGHTING\_TECHNOLOGY] = Others value/NULL then H | | | | | | | |
| ENVELOPE | Envelope | **M/H** | List | NO, SECOND, NON\_CLEAR, SECOND\_NON\_CLEAR |  |  | List of envelopes: NO = No SECOND = Second NON\_CLEAR = Non-clear SECOND\_NON\_CLEAR = Second + Non-clear |
| END IF [LIGHTING\_TECHNOLOGY] | | | | | | | |
| HIGH\_LUNINANCE\_LIGHT\_SOURCE | High luminance light source | **M** | Boolean | true/false |  |  |  |
| ANTI\_GLARE\_SHIELD | Anti-glare shield | **M** | Boolean | true/false |  |  |  |
| DIMMABLE | Dimmable | **M** | List | YES, NO, SPECIFIC |  |  | List of dimmable: YES = Yes NO = No SPECIFIC = Only with specific dimmers |
| General product parameters | | | | | | | |
| ENERGY\_CONS\_ON\_MODE | Energy consumption in on-mode | **M** | Number (No decimals) | 1 - 99999 | ##### | KWh/1000h | Will be calculated within the Excel sheet. Please check correctness before uploading to the EPREL database. |
| ENERGY\_CLASS | Energy Efficiency Class | **M** | List | A - G |  |  | List of classes (Annex II Table 1) A, B, C, D, E, F, G  Will be calculated within the Excel sheet. Please check correctness before uploading to the EPREL database. |
| LUMINOUS\_FLUX | Useful luminous flux | **M** | Number (No decimals) | 1 - 999999 | ###### | lm | In fiche will be shown together with beam angle: [value] in [Sphere (360°)/Wide cone (120°)/Narrow cone (90°)] |
| BEAM\_ANGLE\_CORRESPONDENCE | Beam angle correspondence | **M** | List | SPHERE\_360, WIDE\_CONE\_120, NARROW\_CONE\_90 |  |  | List of beam angle correspondences: - SPHERE\_360: Sphere (360°) - WIDE\_CONE\_120: Wide cone (120°) - NARROW\_CONE\_90: Narrow cone (90°) |
| CORRELATED\_COLOUR\_TEMP\_TYPE | Correlated colour temperature type | **M** | List | SINGLE\_VALUE, RANGE, STEPS |  |  | Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set. Options: SINGLE\_VALUE - Single value RANGE - Range STEPS - Steps |
| IF [CORRELATED\_COLOUR\_TEMP\_TYPE] = SINGLE\_VALUE then [CORRELATED\_COLOUR\_TEMP\_SINGLE] = M | | | | | | | |
| CORRELATED\_COLOUR\_TEMP\_SINGLE | Correlated colour temperature | **M** | Number (No decimals) | 1 - 99999 | ##### | K | Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set. Values will end in "00", i.e. 99900 (No validation) |
| END if [CORRELATED\_COLOUR\_TEMP\_TYPE] = SINGLE | | | | | | | |
| If [CORRELATED\_COLOUR\_TEMP\_TYPE] = RANGE THEN [CORRELATED\_COLOUR\_TEMP\_MIN] = M AND [CORRELATED\_COLOUR\_TEMP\_MAX] = M | | | | | | | |
| CORRELATED\_COLOUR\_TEMP\_MIN | Correlated colour temperature | **M** | Number  (No decimals) | 1 - 99999 | ##### | K | Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set. Values will end in "00", i.e. 99900 (No validation) If type is Range then add 2 steps - fill the range (min-max) Fiche will show X...X |
| CORRELATED\_COLOUR\_TEMP\_MAX | Correlated colour temperature | **M** | Number  (No decimals) | 1 - 99999 | ##### | K |  |
| END IF [CORRELATED\_COLOUR\_TEMP\_TYPE] = RANGE | | | | | | | |
| If [CORRELATED\_COLOUR\_TEMP\_TYPE] = STEPS THEN allow n (minimum 1) | | | | | | | |
| CORRELATED\_COLOUR\_TEMP\_1 | Correlated colour temperature | **M** | Number  (No decimals) | 1 - 99999 | ##### | K | Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set. Values will end in "00", i.e. 99900 (No validation) If type is Steps then add as many steps as necessary. Fiche will show: X or X (or X...) |
| … | … | **…** | … | … | … | … |
| CORRELATED\_COLOUR\_TEMP\_n | Correlated colour temperature | **M** | Number  (No decimals) | 1 - 99999 | ##### | K |
| END IF [CORRELATED\_COLOUR\_TEMP\_TYPE] = STEPS | | | | | | | |
| POWER\_ON\_MODE | On-mode power | **M** | Number (1 decimals) | 0.1 - 9999.9 | ####.# | W |  |
| POWER\_STANDBY | Standby power | **M** | Number (2 decimals) | 0.00 - 0.99 | #.## | W | Annex VI 1(e )6 -> ‘standby power (Psb) in W, **including when it is zero**; Max value: 0.50 (No validation) |
| IF [CONNECTED\_LIGHTSOURCE] = CLS THEN M  ELSE NULL | | | | | | | |
| POWER\_STANDBY\_NETWORKED | Networked standby power for CLS | **M** | Number (2 decimals) | 0.00 - 0.99 | #.## | W | This field is only for Connected light sources |
| END IF [CONNECTED\_LIGHTSOURCE] | | | | | | | |
| COLOUR\_RENDERING\_INDEX | Colour rendering index | **O This field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 100 | ### |  | Max value: 100 Fill this value or the range (min-max) below |
| MIN\_COLOUR\_RENDERING\_INDEX | Colour rendering index range (Minimum) | **O Previous field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 100 | ### |  |
| MAX\_COLOUR\_RENDERING\_INDEX | Colour rendering index range (Maximum) | **O Previous field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 100 | ### |  |
| DIMENSION\_HEIGHT | Outer dimensions (Height) | **M** | Number (No decimals) | 1 - 99999 | ##### | mm | Outer dimensions without separate control gear, lighting control parts and non-lighting control parts, if any |
| DIMENSION\_WIDTH | Outer dimensions (Width) | **M** | Number (No decimals) | 1 - 99999 | ##### |
| DIMENSION\_DEPTH | Outer dimensions (Depth) | **M** | Number (No decimals) | 1 - 99999 | ##### |
| SPECTRAL\_POWER\_DISTRIBUTION\_IMAGE | Spectral power distribution in the range 250 nm to 800 nm, at full-load | **M** | Text | 255 |  |  | Path to image of the graphic attached. Image file: In common image format (JPG, PNG, TIFF, SVG). Size of file limited to maximum 2 Mb Resolution minimum 1024x1024 px |
| CLAIM\_EQUIVALENT\_POWER | Claim of equivalent power | **M** | Boolean | Yes/Not applicable |  |  | Yes = TRUE Not applicable = FALSE 'yes': An equivalence claim involving the power of a replaced light source type may be given only: – for directional light sources, if the light source type is listed in Table 4 and if the luminous flux of the light source in a 90 ° cone (Φ90°) is not lower than the corresponding reference luminous flux in Table 4. The reference luminous flux shall be multiplied by the correction factor in Table 5. For LED light sources, it shall be in addition multiplied by the correction factor in Table 6; – for non-directional light sources, the claimed equivalent incandescent light source power (rounded to 1 W) shall be that corresponding in Table 7 to the luminous flux of the light source. The intermediate values of both the luminous flux and the claimed equivalent light source power (rounded to the nearest 1 W) shall be calculated by linear interpolation between the two adjacent values. |
| IF [CLAIM\_EQUIVALENT\_POWER] = TRUE THEN M  ELSE H | | | | | | | |
| EQUIVALENT\_POWER | Equivalent power | **M** | Number (No decimals) | 1 - 99999 | ##### | W | Only if CLAIM\_EQUIVALENT\_POWER = TRUE |
| END IF [CLAIM\_EQUIVALENT\_POWER] | | | | | | | |
| CHROMATICITY\_COORD\_X | Chromaticity coordinate (x) | **M** | Number (3 decimals) | 0.001 - 0.999 | #.### |  |  |
| CHROMATICITY\_COORD\_Y | Chromaticity coordinate (y) | **M** | Number (3 decimals) | 0.001 - 0.999 | #.### |  |  |
| IF [DIRECTIONAL] = DLS then [PEAK\_LUMINOUS\_INTENSITY] = M AND [BEAM\_ANGLE] = O AND/OR [MIN\_BEAM\_ANGLE]/[MAX\_BEAM\_ANGLE] = M  IF [DIRECTIONAL] = NDLS THEN [PEAK\_LUMINOUS\_INTENSITY] = NULL AND [BEAM\_ANGLE] = NULL AND [MIN\_BEAM\_ANGLE] = NULL AND [MAX\_BEAM\_ANGLE] = NULL | | | | | | | |
| Parameters for directional light sources | | | | | | | |
| PEAK\_LUMINOUS\_INTENSITY | Peak luminous intensity | **M** | Number (No decimals) | 1 - 999999 | ##### | cd |  |
| BEAM\_ANGLE | Beam angle | **O This field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 180 | ### | degrees | Fill this value or the range (min-max) below |
| MIN\_BEAM\_ANGLE | Beam angle range (Minimum) | **O Previous field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 180 | ### | degrees |
| MAX\_BEAM\_ANGLE | Beam angle range (Maximum) | **O Previous field AND/OR Min/Max must be filled** | Number (No decimals) | 1 - 180 | ### | degrees |
| END IF [DIRECTIONAL] | | | | | | | |
| IF [LIGHTING\_TECHNOLOGY] = LED OR OLED THEN [R9\_COLOUR\_RENDERING\_INDEX] = M AND [SURVIVAL\_FACTOR] = O AND [LUMEN\_MAINTNANCE\_FACTOR] = O  ELSE [R9\_COLOUR\_RENDERING\_INDEX] = NULL AND [SURVIVAL\_FACTOR] = NULL AND [LUMEN\_MAINTNANCE\_FACTOR] = NULL | | | | | | | |
| Parameters for LED and OLED light sources | | | | | | | |
| R9\_COLOUR\_RENDERING\_INDEX | R9 Colour rendering index | **M** | Number (No decimals) | -100 - 100 | ### |  |  |
| SURVIVAL\_FACTOR | Survival factor | **O** | Number (2 decimals) | 0.00 - 1.00 | #.## |  | It is a percentage: 100% = 1.00 50% = 0.50 Regulation 2021/340 (Omnibus) (4) Light sources specifically designed and exclusively marketed for products in the scope of Commission Regulations (EU) 2019/2023, (EU) 2019/2022, (EU) No 932/2012 and (EU) 2019/2019, shall be exempt from the requirements of points 1(e)(7b), 1(e)(7c) and 1(e)(7d) of Annex VI to this Regulation.’; |
| LUMEN\_MAINTENANCE\_FACTOR | Lumen maintenance factor | **O** | Number (2 decimals) | 0.00 - 1.00 | #.## |  |
| IF [MAINS] = MLS THEN [DISPLACEMENT\_FACTOR] = M AND [COLOUR\_CONSISTENCY] = M AND [CLAIM\_LED\_REPLACE\_FLOURESCENT] = M  ELSE [DISPLACEMENT\_FACTOR] = NULL AND [COLOUR\_CONSISTENCY] = NULL AND [CLAIM\_LED\_REPLACE\_FLOURESCENT] = NULL | | | | | | | |
| Parameters for LED and OLED mains light sources | | | | | | | |
| DISPLACEMENT\_FACTOR | Displacement factor | **M** | Number (2 decimals) | 0.00 - 1.00 | #.## |  |  |
| COLOUR\_CONSISTENCY | Colour consistency in McAdam ellipses | **M** | Number (No decimals) | 0 - 9 | # |  |  |
| CLAIM\_LED\_REPLACE\_FLUORESCENT | Claims that an LED light source replaces a fluorescent light source without integrated ballast of a particular wattage | **M** | Boolean | Yes/Not applicable |  |  | Yes = TRUE Not applicable = FALSE 'yes': Claim that a LED light source replaces a fluorescent light source without integrated ballast of a particular wattage. This claim may be made only if: – the luminous intensity in any direction around the tube axis does not deviate by more than 25 % from the average luminous intensity around the tube; and – the luminous flux of the LED light source is not lower than the luminous flux of the fluorescent light source of the claimed wattage. The luminous flux of the fluorescent light source shall be obtained by multiplying the claimed wattage with the minimum luminous efficacy value corresponding to the fluorescent light source in Table 8; and – the wattage of the LED light source is not higher than the wattage of the fluorescent light source it is claimed to replace. The technical documentation file shall provide the data to support such claims. |
| IF [CLAIM\_LED\_REPLACE\_FLOURESCENT] = TRUE THEN [REPLACEMENT\_CLAIM] = M  ELSE [REPLACEMENT\_CLAIM] = NULL | | | | | | | |
| REPLACEMENT\_CLAIM | Replacement claim | **M** | Number (No decimals) | 1 - 999 | ### | W | Only if CLAIM\_LED\_REPLACE\_FLUORESCENT = TRUE |
| END IF [CLAIM\_LED\_FLOURESCENT] | | | | | | | |
| FLICKER\_METRIC | Flicker metric | **M** | Number (1 decimals) | 0.0 - 9.9 | #.# | W | Max value: 1.0 (No validation) |
| STROBOSCOPIC\_EFFECT\_METRIC | Stroboscopic effect metric | **M** | Number (1 decimals) | 0.0 - 9.9 | #.# | W | Max value: 2.0 (No validation) |
| END IF [MAINS] | | | | | | | |
| END IF [LIGHTING\_TECHNOLOGY] | | | | | | | |

1. Only needed, if you want to use the download tool [↑](#footnote-ref-1)
2. EPREL - User Guide - 02 Model registration [1] [↑](#footnote-ref-2)
3. EPREL - User Guide - 02 Model registration [1] and ProductModelExchangeModel [2] [↑](#footnote-ref-3)