Product Environmental Profile

Harmony GTO 10" & 12" Series

Harmony GTO







General information

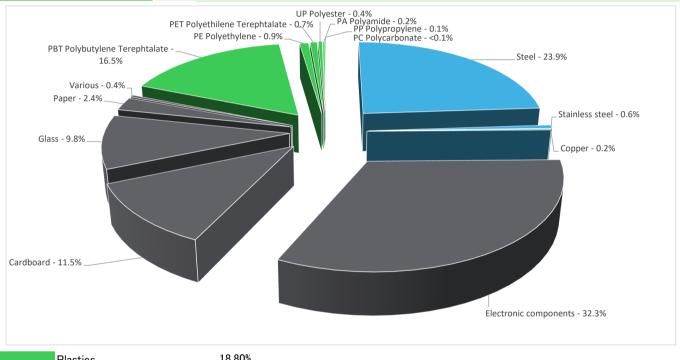
| Reference product | Harmony GTO 10" & 12" Series - HMIGTO6310 |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description of the product | Advanced touchscreen panel |
| Description of the range | Optimized Touchscreen HMI |
| | The environmental impacts of this reference product are representative of the impacts of the other products of the range which are developed with a similar technology. |
| Functional unit | To provide 12.1" TFT Smart Display during 10 years and maximum use rate at 17W, based on below function: - 12.1-inch Touchscreen panel. - SD Card Interface - Serial comunication interface (RS-422/485, RS-232C) - USB Interface (Tyepe-A, minir-B) - Ethernet interface |

<u>&</u>

Constituent materials

Reference product mass

3000 g including the product, its packaging and additional elements and accessories



 Plastics
 18.80%

 Metals
 24.70%

 Others
 56.40%

Substance assessment



Additional environmental information

End Of Life

Recyclability potential:

26%

Recyclability rate has been calculated based on REEECY'LAB tool developed by Ecosystem, for components/materials not covered by the tool, data from the "ECO'DEEE recyclability and recoverability calculation method" was taken. If no data was found a conservative assumption was used (0% recyclability).

Environmental impacts

| Reference service life time | 10 years | | | | | | |
|----------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--|--|--|
| Product category | Other equipments - Active product | | | | | | |
| Installation elements | cable, connectors, screws | | | | | | |
| Use scenario | The product is in active mode 100% of the time a power use of 17W, for 10 years. | | | | | | |
| Technological representativeness | Advanced touchscreen panel | | | | | | |
| Geographical representativeness | Europe, US, Asia | | | | | | |
| Energy model used | [A1 - A3] | [A5] | [B6] | [C1 - C4] | | | |
| | Electricity Mix; Production mix; Low voltage; ID | Electricity Mix; Production mix; Low voltage; US | Electricity Mix; Production mix; Low voltage; US | Electricity Mix; Production mix; Low voltage; US | | | |

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

| Mandatory Indicators | Harmony GTO 10" & 12" Series - HMIGTO6310 | | | | | | | |
|--------------------------------------------------------------|-------------------------------------------|----------|---------------|--------------|--------------|-----------|-------------|-----------------------|
| Impact indicators | Unit | Total | Manufacturing | Distribution | Installation | Use | End of Life | Loads and Benefits |
| impact indicators | Offic | Total | [A1 - A3] | [A4] | [A5] | [B1 - B7] | [C1 - C4] | [D] |
| Contribution to climate change | kg CO2 eq | 9.07E+02 | 2.05E+02 | 3.92E-01 | 7.37E-01 | 6.98E+02 | 3.13E+00 | -3.69E+00 |
| Contribution to climate change-fossil | kg CO2 eq | 9.06E+02 | 2.04E+02 | 3.92E-01 | 7.04E-01 | 6.97E+02 | 3.13E+00 | -3.66E+00 |
| Contribution to climate change-biogenic | kg CO2 eq | 8.80E-01 | 3.26E-01 | 0* | 3.27E-02 | 5.20E-01 | 1.27E-03 | -3.74E-02 |
| Contribution to climate change-land use and land use change | kg CO2 eq | 2.42E-06 | 2.40E-06 | 0* | 0* | 0* | 2.13E-08 | 0.00E+00 |
| Contribution to ozone depletion | kg CFC-11 eq | 1.08E-04 | 1.04E-04 | 0* | 4.87E-08 | 3.66E-06 | 2.87E-08 | -4.62E-07 |
| Contribution to acidification | mol H+ eq | 5.43E+00 | 1.08E+00 | 2.52E-03 | 2.93E-03 | 4.34E+00 | 8.31E-03 | -2.15E-02 |
| Contribution to eutrophication, freshwater | kg (PO4) ³⁻ eq | 2.49E-03 | 3.44E-04 | 0* | 5.31E-06 | 2.08E-03 | 5.30E-05 | -1.33E-05 |
| Contribution to eutrophication marine | kg N eq | 7.37E-01 | 2.40E-01 | 1.19E-03 | 7.77E-04 | 4.93E-01 | 2.04E-03 | -2.70E-03 |
| Contribution to eutrophication, terrestrial | mol N eq | 8.39E+00 | 2.56E+00 | 1.30E-02 | 5.88E-03 | 5.79E+00 | 1.89E-02 | -2.78E-02 |
| Contribution to photochemical ozone formation - human health | kg COVNM eq | 2.55E+00 | 9.07E-01 | 3.28E-03 | 1.57E-03 | 1.63E+00 | 6.36E-03 | -9.01E-03 |
| Contribution to resource use, minerals and metals | kg Sb eq | 1.64E-02 | 1.63E-02 | 0* | 0* | 3.27E-05 | 0* | -8.51E-04 |
| Contribution to resource use, fossils | MJ | 2.13E+04 | 2.65E+03 | 5.47E+00 | 7.67E+00 | 1.85E+04 | 1.49E+02 | -7.04E+01 |
| Contribution to water use | m3 eq | 7.57E+01 | 4.63E+01 | 0* | 3.14E-01 | 2.83E+01 | 8.15E-01 | -1.74E+00 |

 $\label{lem:conditional} \textit{Additional indicators for the French regulation are available as well}$

| Inventory flows Indicators | | | Harmony GTO 10" & 12" Series - HMIGTO6310 | | | | | |
|-----------------------------------------------------------------------------------------------------------------|---------|----------|-------------------------------------------|--------------|--------------|-----------|-------------|-----------------------|
| Inventory flows | Unit | Total | Manufact. | Distribution | Installation | Use | End of Life | Loads and Benefits |
| | | | [A1 - A3] | [A4] | [A5] | [B1 - B7] | [C1 - C4] | [D] |
| Contribution to use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 1.98E+03 | 4.25E+01 | 0* | 5.49E-01 | 1.94E+03 | 0* | 3.84E+00 |
| Contribution to use of renewable primary energy resources used as raw material | MJ | 7.87E+00 | 7.87E+00 | 0* | 0* | 0* | 0* | -7.27E+00 |
| Contribution to total use of renewable primary energy resources | MJ | 1.99E+03 | 5.04E+01 | 0* | 5.49E-01 | 1.94E+03 | 0* | -3.43E+00 |
| Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ | 2.13E+04 | 2.63E+03 | 5.47E+00 | 7.67E+00 | 1.85E+04 | 1.49E+02 | -7.04E+01 |
| Contribution to use of non renewable primary energy resources used as raw material | MJ | 2.40E+01 | 2.40E+01 | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to total use of non-renewable primary energy resources | MJ | 2.13E+04 | 2.65E+03 | 5.47E+00 | 7.67E+00 | 1.85E+04 | 1.49E+02 | -7.04E+01 |
| Contribution to use of secondary material | kg | 2.59E-02 | 2.59E-02 | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to use of renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to use of non renewable secondary fuels | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to net use of freshwater | m³ | 1.76E+00 | 1.08E+00 | 0* | 7.31E-03 | 6.58E-01 | 1.90E-02 | -4.05E-02 |
| Contribution to hazardous waste disposed | kg | 3.68E+02 | 3.47E+02 | 0* | 0* | 1.63E+01 | 4.11E+00 | -6.72E+01 |
| Contribution to non hazardous waste disposed | kg | 1.45E+02 | 3.47E+01 | 0* | 2.39E+00 | 1.08E+02 | 2.38E-02 | -1.27E+01 |
| Contribution to radioactive waste disposed | kg | 4.68E-02 | 3.25E-02 | 9.79E-06 | 3.21E-04 | 1.40E-02 | 2.02E-05 | -1.52E-03 |
| Contribution to components for reuse | kg | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to materials for recycling | kg | 1.11E+00 | 3.76E-03 | 0* | 4.04E-01 | 0* | 7.02E-01 | 0.00E+00 |
| Contribution to materials for energy recovery | kg | 1.33E-09 | 1.33E-09 | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to exported energy | MJ | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to biogenic carbon content of the product | kg de C | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |
| Contribution to biogenic carbon content of the associated packaging | kg de C | 0.00E+00 | 0* | 0* | 0* | 0* | 0* | 0.00E+00 |

^{*} represents less than 0.01% of the total life cycle of the reference flow

Life cycle assessment performed with EIME version v5.9.4, database version 2022-01 in compliance with ISO14044.

Detailed results, including all the optional indicators mentioned in PCRed4, and the split of the Use Phase (B1 to B7), are available in the LCA report and on demand in a digital format - Country Customer Care Center - http://www.schneider-electric.com/contact

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range, ratios to apply can be provided

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

| Registration number: | ENVPEP1402026_V2 | Drafting rules | PEP-PCR-ed4-2021 09 06 | | | | |
|-------------------------------------------------------------------------------------------|------------------|-------------------------------------|-------------------------|--|--|--|--|
| Verifier accreditation N° | 0 | Supplemented by | PSR-0005-ed2-2016 03 29 | | | | |
| Date of issue | 2023/10/23 | Information and reference documents | www.pep-ecopassport.org | | | | |
| | | Validity period | 5 years | | | | |
| Independent verification of the declaration and data, in compliance with ISO 14021 : 2016 | | | | | | | |
| Internal X | External | | | | | | |
| The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain) | | | | | | | |
| PEP are compliant with XP C08-100-1 :2016 or EN 50693:2019 | | | | | | | |
| The elements of the present PEP cannot be compared with elements from another program. | | | | | | | |

Document in compliance with ISO 14021 : 2016 « Environmental labels and declarations. Type II environmental declarations »

Schneider Electric Industries SAS

Country Customer Care Center http://www.se.com/contact

35, rue Joseph Monier CS 30323 F- 92500 Rueil Malmaison Cedex RCS Nanterre 954 503 439 Capital social 928 298 512 €

www.se.com

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