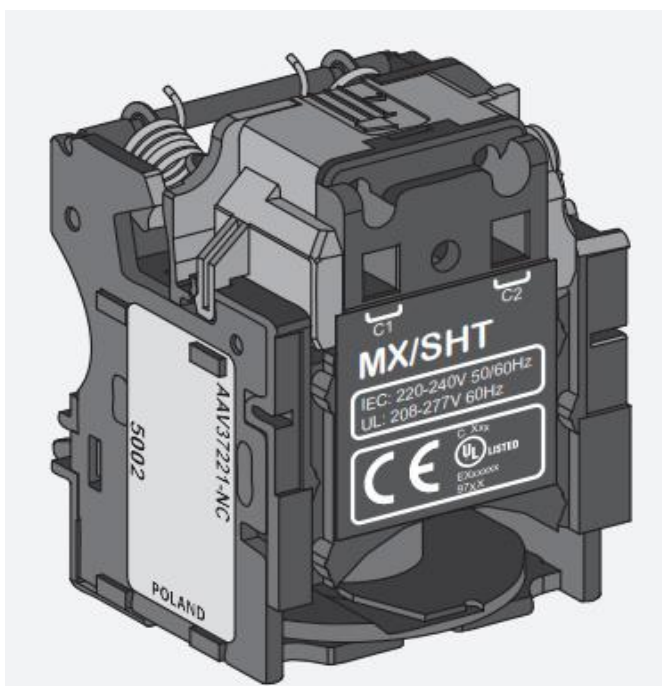


# Product Environmental Profile

**Shunt trip release MX, ComPacT NSX, 220/240VAC 50/60Hz, 208/277VAC 60Hz, screwless spring terminal connections**





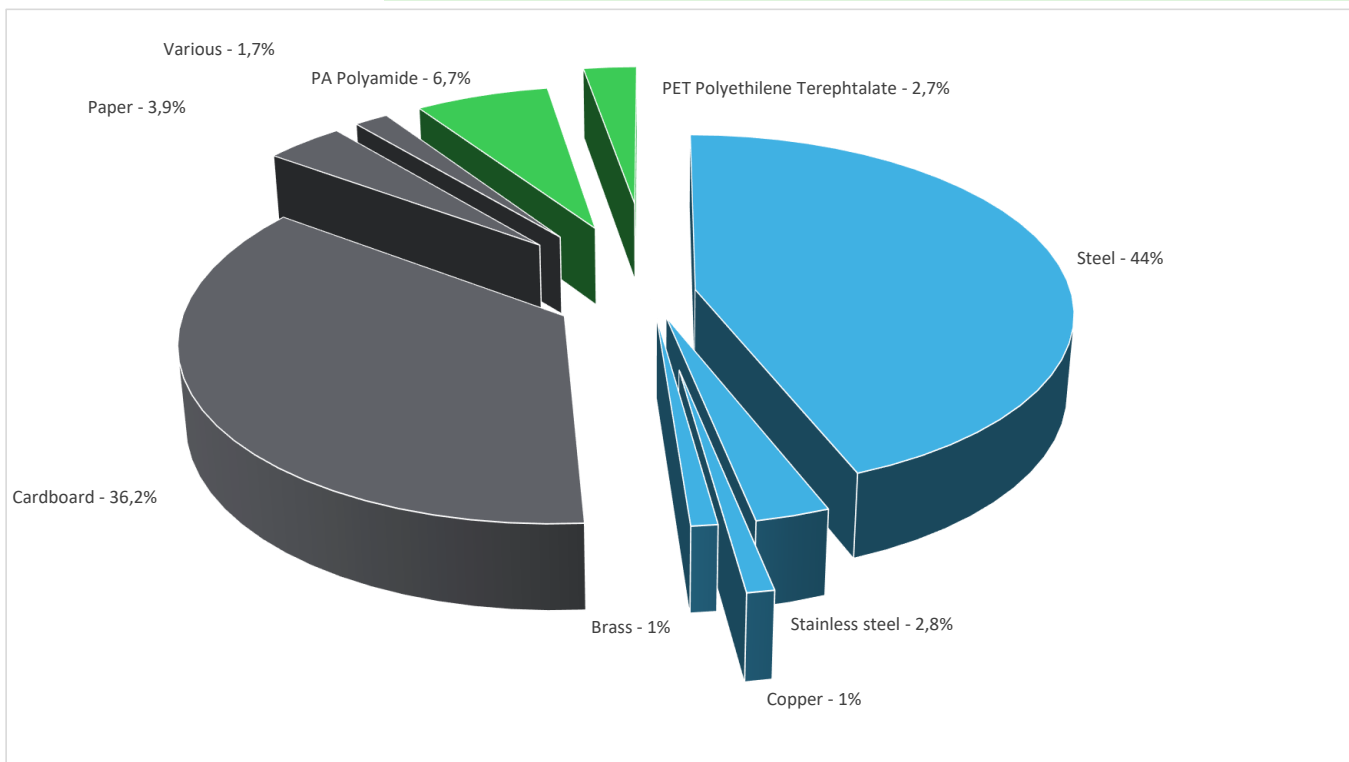
## General information

|                            |   |
|----------------------------|---|
| Reference product          | Shunt trip release MX, ComPacT NSX, 220/240VAC 50/60Hz, 208/277VAC 60Hz, screwless spring terminal connections - LV429387 |
| Description of the product | The NSX shunt release opens the circuit breaker when it is supplied. It automatically trips the breaker.                  |
| Functional unit            | Shunt allow user to remotely trip the circuit breaker during 10 years in accordance with IEC 60947-2.                     |



## Constituent materials

|                        |  |
|------------------------|--|
| Reference product mass | 120 g including the product, its packaging and additional elements and accessories |
|------------------------|--|



|          |       |
|----------|-------|
| Plastics | 9,4%  |
| Metals   | 48,8% |
| Others   | 41,8% |



## Substance assessment

Details of ROHS and REACH substances information are available on the Schneider-Electric Green Premium website

<https://www.se.com/ww/en/work/support/green-premium/>



## Additional environmental information

|             |                          |            |  |
|-------------|--------------------------|------------|--|
| End Of Life | Recyclability potential: | <b>80%</b> | Recyclability rate has been calculated based on REEECYLAB 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            | No special components needed  |   |   |   |
| Use scenario                     | The product is in active mode 0,00015% of the time with a power use of 10VA and in off mode 99,99% of the time, for 10 years  |   |   |   |
| Technological representativeness | The modules of technologies such as material production, manufacturing process and transport technology used in this PEP analysis (LCA-EIME in this case) are similar and representative of the actual type of technologies used to make the product. |   |   |   |
| Geographical representativeness  | Europe  |   |   |   |
| Energy model used                | [A1 - A3]   | [A5]  | [B6]  | [C1 - C4]   |
|                                  | Electricity Mix; Production mix; Low voltage; UE-27   | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 | Electricity Mix; AC; consumption mix, at consumer; < 1kV; EU-27 |

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   |                           | Shunt trip release MX, ComPacT NSX, 220/240VAC 50/60Hz, 208/277VAC 60Hz, screwless spring terminal connections - LV429387 |               |              |              |           |             |           |
|--|---------------------------|---|---------------|--------------|--------------|-----------|-------------|-----------|
| Impact indicators  | Unit                      | Total   | Manufacturing | Distribution | Installation | Use       | End of Life | Benefits  |
|  |                           |   | [A1 - A3]     | [A4]         | [A5]         | [B1 - B7] | [C1 - C4]   | [D]       |
| Contribution to climate change                               | kg CO2 eq                 | 7,24E-01  | 4,24E-01      | 3,46E-02     | 8,33E-02     | 8,38E-04  | 1,81E-01    | -3,78E-01 |
| Contribution to climate change-fossil                        | kg CO2 eq                 | 7,12E-01  | 4,16E-01      | 3,46E-02     | 7,96E-02     | 8,38E-04  | 1,81E-01    | -3,76E-01 |
| Contribution to climate change-biogenic                      | kg CO2 eq                 | 1,21E-02  | 8,13E-03      | 0*           | 3,70E-03     | 0*        | 2,69E-04    | -1,93E-03 |
| Contribution to climate change-land use and land use change  | kg CO2 eq                 | 3,93E-09  | 0*            | 0*           | 0*           | 0*        | 3,93E-09    | 0,00E+00  |
| Contribution to ozone depletion                              | kg CFC-11 eq              | 6,02E-08  | 2,33E-08      | 3,05E-08     | 5,51E-09     | 1,53E-10  | 7,04E-10    | -5,38E-08 |
| Contribution to acidification                                | mol H+ eq                 | 3,43E-03  | 2,37E-03      | 1,50E-04     | 3,31E-04     | 7,06E-06  | 5,69E-04    | -2,36E-03 |
| Contribution to eutrophication, freshwater                   | kg (PO4) <sup>3-</sup> eq | 1,13E-05  | 2,32E-06      | 4,05E-09     | 6,02E-07     | 0*        | 8,41E-06    | -8,22E-07 |
| Contribution to eutrophication marine                        | kg N eq                   | 6,29E-04  | 3,69E-04      | 6,91E-05     | 8,76E-05     | 5,76E-07  | 1,02E-04    | -2,37E-04 |
| Contribution to eutrophication, terrestrial                  | mol N eq                  | 6,47E-03  | 3,93E-03      | 7,49E-04     | 6,61E-04     | 6,27E-06  | 1,13E-03    | -2,65E-03 |
| Contribution to photochemical ozone formation - human health | kg COVNM eq               | 2,07E-03  | 1,25E-03      | 2,45E-04     | 1,77E-04     | 1,91E-06  | 4,00E-04    | -9,09E-04 |
| Contribution to resource use, minerals and metals            | kg Sb eq                  | 2,83E-05  | 2,81E-05      | 0*           | 0*           | 0*        | 2,42E-07    | -1,09E-04 |
| Contribution to resource use, fossils                        | MJ                        | 2,32E+01  | 1,05E+01      | 4,20E-01     | 8,67E-01     | 1,54E-02  | 1,14E+01    | -8,17E+00 |
| Contribution to water use                                    | m3 eq                     | 2,84E-01  | 1,79E-01      | 1,75E-03     | 3,56E-02     | 9,19E-05  | 6,74E-02    | -1,70E-01 |

Additional indicators for the French regulation are available as well

| Inventory flows Indicators  |         | Shunt trip release MX, ComPacT NSX, 220/240VAC 50/60Hz, 208/277VAC 60Hz, screwless spring terminal connections - LV429387 |           |              |              |           |             |           |
|---|---------|---|-----------|--------------|--------------|-----------|-------------|-----------|
| Inventory flows   | Unit    | Total   | Manufact. | Distribution | Installation | Use       | End of Life | 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      | 1,54E-02  | 0*        | 2,81E-06     | 6,22E-02     | 1,19E-03  | 6,44E-03    | 7,19E-02  |
| Contribution to use of renewable primary energy resources used as raw material                                  | MJ      | 3,28E-01  | 3,28E-01  | 0*           | 0*           | 0*        | 0*          | -2,32E-01 |
| Contribution to total use of renewable primary energy resources   | MJ      | 3,44E-01  | 2,74E-01  | 0*           | 6,22E-02     | 1,19E-03  | 6,44E-03    | -1,60E-01 |
| Contribution to use of non renewable primary energy excluding non renewable primary energy used as raw material | MJ      | 2,28E+01  | 1,01E+01  | 4,20E-01     | 8,67E-01     | 1,54E-02  | 1,14E+01    | -8,17E+00 |
| Contribution to use of non renewable primary energy resources used as raw material                              | MJ      | 3,60E-01  | 3,60E-01  | 0*           | 0*           | 0*        | 0*          | 0,00E+00  |
| Contribution to total use of non-renewable primary energy resources   | MJ      | 2,32E+01  | 1,05E+01  | 4,20E-01     | 8,67E-01     | 1,54E-02  | 1,14E+01    | -8,17E+00 |
| Contribution to use of secondary material   | kg      | 3,22E-02  | 3,22E-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      | 6,62E-03  | 4,18E-03  | 4,09E-05     | 8,28E-04     | 2,14E-06  | 1,57E-03    | -3,95E-03 |
| Contribution to hazardous waste disposed  | kg      | 2,31E+00  | 2,24E+00  | 0*           | 9,85E-04     | 0*        | 7,29E-02    | -8,60E+00 |
| Contribution to non hazardous waste disposed  | kg      | 8,82E-01  | 5,97E-01  | 0*           | 2,71E-01     | 3,07E-03  | 1,11E-02    | -6,13E-01 |
| Contribution to radioactive waste disposed  | kg      | 1,63E-04  | 1,16E-04  | 6,88E-06     | 3,64E-05     | 2,50E-06  | 1,07E-06    | -1,42E-04 |
| Contribution to components for reuse  | kg      | 0,00E+00  | 0*        | 0*           | 0*           | 0*        | 0*          | 0,00E+00  |
| Contribution to materials for recycling   | kg      | 1,01E-01  | 0*        | 0*           | 4,58E-02     | 0*        | 5,55E-02    | 0,00E+00  |
| Contribution to materials for energy recovery   | kg      | 0,00E+00  | 0*        | 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>

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.

