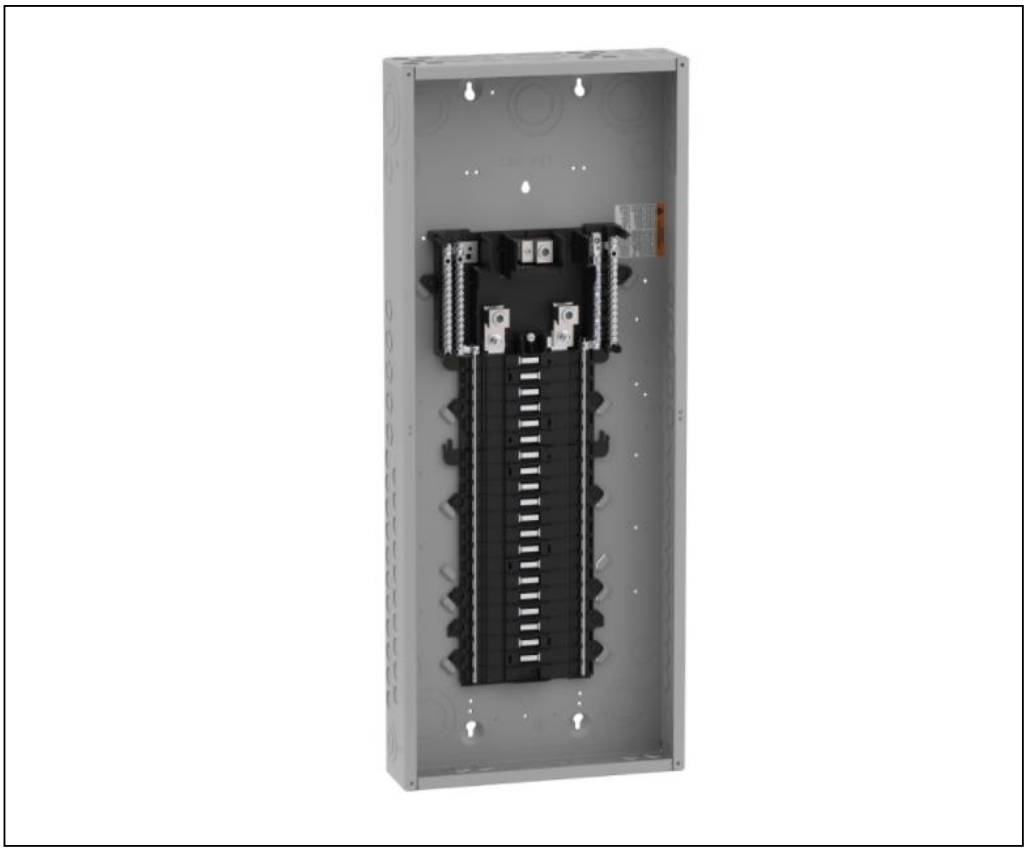
Product Environmental Profile

QO™ Convertible Main Load Centers

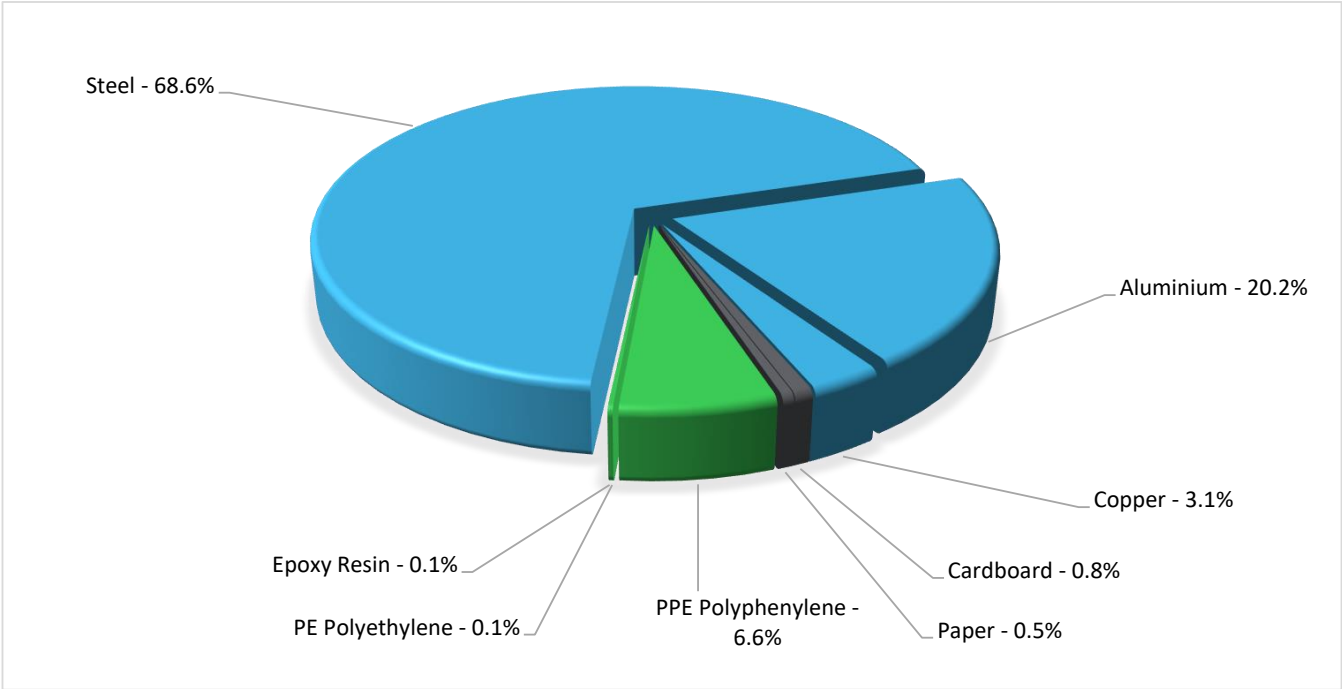


General information

Representative product	QO™ Convertible Main Load Centers - QO140L200PG
Description of the product	Square D™ QO™ Convertible Main Load Centers are listed to comply with standards for lighting and appliance panelboards to distribute power in residential, commercial and industrial applications. QO Load Centers are tested and listed only for QO circuit breakers.
Functional unit	Protect persons during 20 years against direct contact with live parts and allow grouping monitoring, control and protection devices in a single enclosure or a cabinet having the following dimensions 858mm×361mm×95mm, comply with UL 67 and CSA22.2 with an available offer: •Suitable for use on 120/240 Vac and 48 Vdc systems •Rated 30 to 400 amps 2 to 60 circuits •3/4" circuit breaker width •Single and three phase

Constituent materials

Reference product mass	9520 g	including the product, its packaging and additional elements and accessories



Plastics	6.8%
Metals	91.9%
Others	1.3%

Substance assessment

Products of this range are designed in conformity with the requirements of the RoHS directive (European Directive 2011/65/EU of 8 June 2011) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium or flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers - PBDE) as mentioned in the Directive

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

http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page

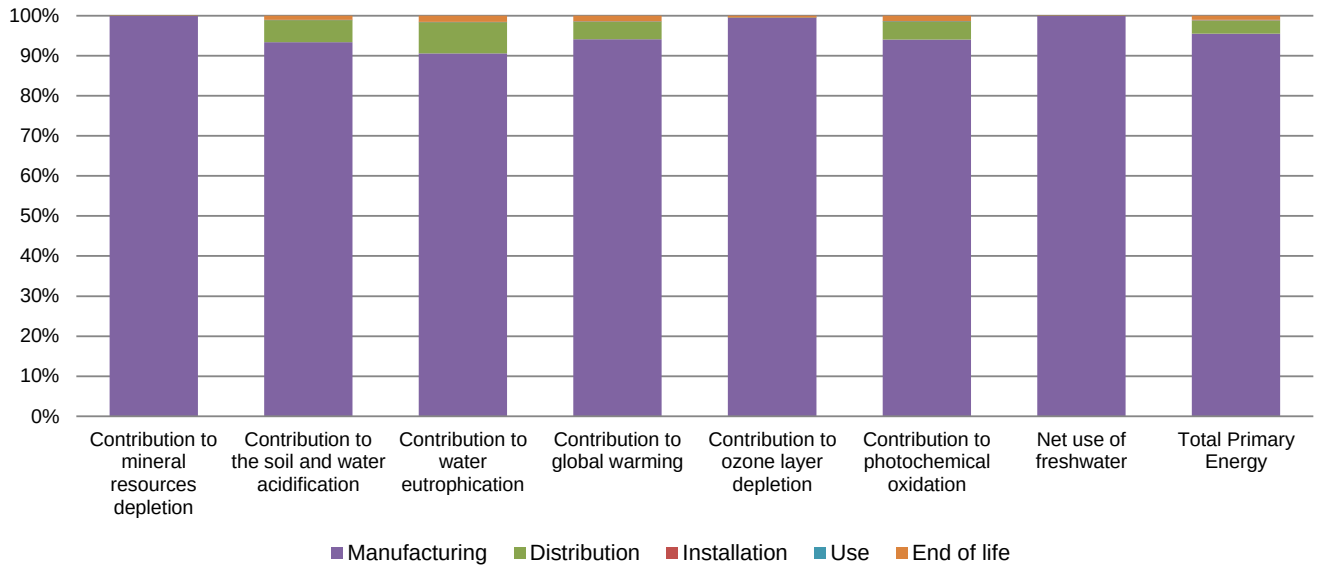
Additional environmental information

The QO™ Convertible Main Load Centers presents the following relevent environmental aspects	
Manufacturing	Manufactured at a Schneider Electric production site ISO14001 certified
Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 134.6 g, consisting of Cardboard (64.93%), paper (33.44%), PE film (1.63%)
Installation	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials are accounted for during the installation phase (including transport to disposal).
Use	The product does not require special maintenance operations.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process. Recyclability potential: **88%** Based on "ECO'DEEE recyclability and recoverability calculation method" (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

Environmental impacts

Reference life time	20 years			
Product category	Unequipped enclosures and cabinets			
Installation elements	No special installation components need during installation phase, but transport of packaging to disposal, and disposal of packaging accounted for during installation.			
Use scenario	Usage time rate 100% with a power use of 0.00072W for 10 years.			
Geographical representativeness	United States of America			
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 in production.			
Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: Lexington	Electricity mix; AC; consumption mix, at consumer; 120V; US	Electricity mix; AC; consumption mix, at consumer; 120V; US	Electricity mix; AC; consumption mix, at consumer; 120V; US

Compulsory indicators	QO™ Convertible Main Load Centers - QO140L200PG						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	8.96E-03	8.96E-03	0*	0*	0*	0*
Contribution to the soil and water acidification	kg SO_2 eq	2.65E-01	2.47E-01	1.46E-02	3.12E-05	8.36E-05	2.79E-03
Contribution to water eutrophication	kg PO_4^{3-} eq	4.30E-02	3.89E-02	3.35E-03	9.03E-06	2.20E-05	6.75E-04
Contribution to global warming	kg CO_2 eq	7.30E+01	6.87E+01	3.22E+00	7.51E-03	8.73E-02	9.98E-01
Contribution to ozone layer depletion	kg CFC11 eq	1.25E-05	1.24E-05	6.52E-09	0*	1.58E-09	5.84E-08
Contribution to photochemical oxidation	kg C_2H_4 eq	2.27E-02	2.14E-02	1.04E-03	2.33E-06	1.34E-05	3.00E-04
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m^3	3.97E+00	3.97E+00	0*	0*	0*	1.13E-03
Total Primary Energy	MJ	1.35E+03	1.29E+03	4.55E+01	0*	1.18E+00	1.40E+01



Optional indicators		QO™ Convertible Main Load Centers - QO140L200PG					
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	7.31E+02	6.73E+02	4.52E+01	9.61E-02	1.06E+00	1.12E+01
Contribution to air pollution	m³	1.78E+04	1.76E+04	1.34E+02	0*	7.42E+00	9.90E+01
Contribution to water pollution	m³	3.92E+03	3.27E+03	5.29E+02	1.12E+00	4.31E+00	1.08E+02
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	3.46E-01	3.46E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	3.15E+01	3.13E+01	6.06E-02	0*	7.06E-02	1.57E-02
Total use of non-renewable primary energy resources	MJ	1.32E+03	1.26E+03	4.54E+01	0*	1.11E+00	1.40E+01
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	2.90E+01	2.89E+01	6.06E-02	0*	7.06E-02	1.57E-02
Use of renewable primary energy resources used as raw material	MJ	2.43E+00	2.43E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	1.29E+03	1.23E+03	4.54E+01	0*	1.11E+00	1.40E+01
Use of non renewable primary energy resources used as raw material	MJ	2.86E+01	2.86E+01	0*	0*	0*	0*
Use of non renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Use of renewable secondary fuels	MJ	0.00E+00	0*	0*	0*	0*	0*
Waste categories	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Hazardous waste disposed	kg	7.26E+02	7.15E+02	0*	0*	0*	1.08E+01
Non hazardous waste disposed	kg	8.50E+01	8.49E+01	1.14E-01	0*	1.34E-02	4.31E-02
Radioactive waste disposed	kg	5.92E-02	5.90E-02	8.14E-05	0*	0*	6.63E-05
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	9.60E+00	9.63E-01	0*	1.30E-01	0*	8.51E+00
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	3.32E-02	0*	0*	0*	0*	3.32E-02
Exported Energy	MJ	4.10E-04	3.85E-05	0*	3.71E-04	0*	0*

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

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

The manufacturing phase is the life cycle phase which has the greatest impact on the majority of environmental indicators (based on compulsory indicators).

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 :	SCHN-00901-V01.01-EN	*Drafting rules*	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH32	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Date of issue	08/2023	*Information and reference documents*	www.pep-ecopassport.org
		Validity period	5 years

Independent verification of the declaration and data, in compliance with ISO 14025 : 2010

Internal External X

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)

PEP are compliant with XP C08-100-1 :2016

The elements of the present PEP cannot be compared with elements from another program.

Document in compliance with ISO 14025 : 2010 « Environmental labels and declarations. Type III environmental declarations »

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Published by Schneider Electric

SCHN-00901-V01.01-EN

08/2023