Product Environmental Profile

InRow 300mm Economizer(RH300)

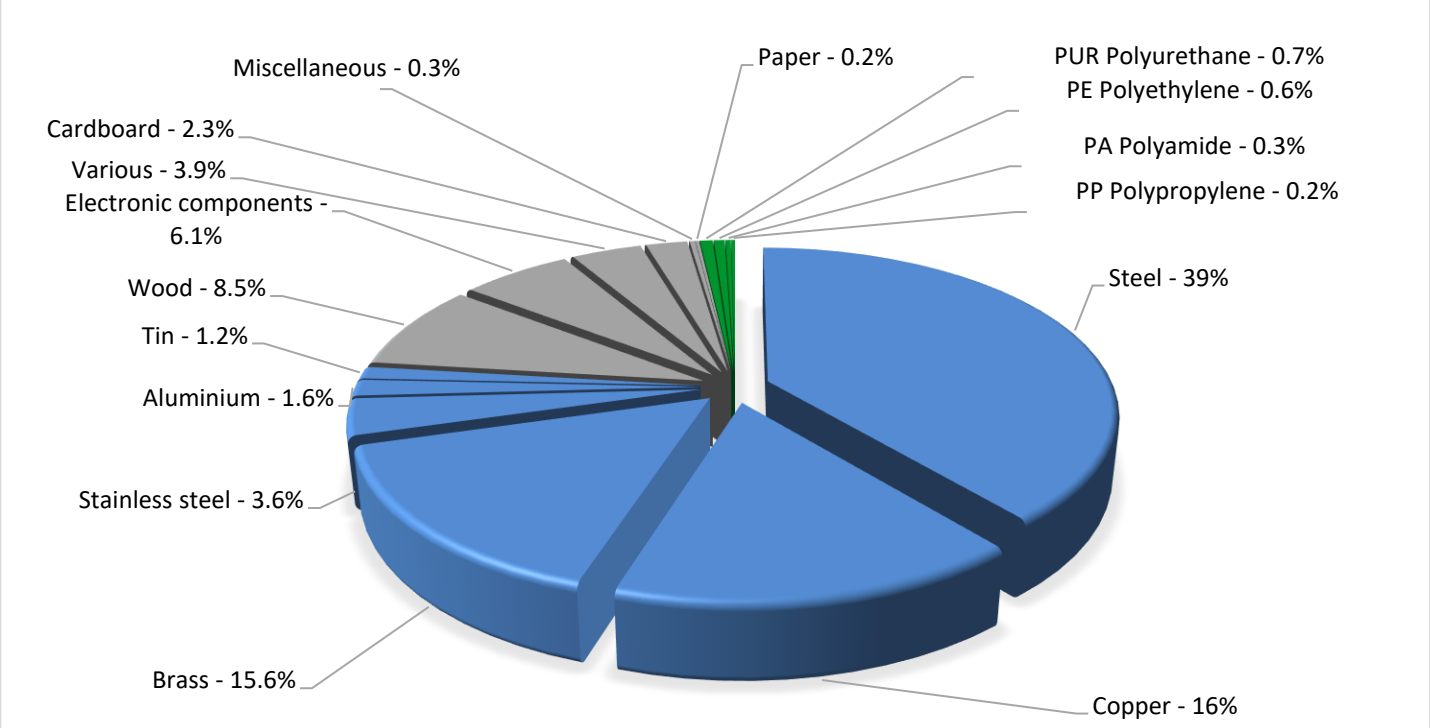
InRow Economizer 300mm

General information

Representative product	InRow 300mm Economizer(RH300) - ACRH301P
Description of the product	The InRow Economizer 300mm series is the newest close-coupled cooling solution from Schneider Electric and the optimal choice for edge and enterprise customers. The unlimited energy efficient and powerfully compact design makes the new InRow Economizer unit the most versatile and predictable cooling system for next generation energy efficiency and green (low carbon emission) data centers InRow 300mm unit is available in economizer, twin-cool, air-cooled and water-cooled options.
Description of the range	25kw cooling output, 200-240v for inRow and 400v/3ph or 200v/3ph for hydronic moduels The environmental impacts of this referenced product are representative of the impacts of the other products of the range which are developed with a similar technology.
Functional unit	To optimize the cooling of a server load by providing 25,000 W of cooling output over a lifespan of 10 years

Constituent materials

Reference product mass	450000 g including the product, its packaging and additional elements and accessories



	Plastics	1.8%
	Metals	77.0%
	Others	21.2%

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 EU 2015/863) and do not contain, or only contain in the authorised proportions, lead, mercury, cadmium, hexavalent chromium flame retardants (polybrominated biphenyls - PBB, polybrominated diphenyl ethers – PBDE, Bis(2-ethylhexyl) phthalate -DEHP, Butyl benzyl phthalate -BBP, Dibutyl phthalate – DBP, Diisobutyl phthalate - DIBP) 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 InRow 300mm Economizer(RH300) 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 66610.4 g, consisting of wood (57.63%), cardboard and paper (16.90%), metal(10.83%) ,desiccant(3.75%) and polethylene film (10.89%) Product distribution optimised by setting up local distribution centres
Installation	The InRow 300mm water cooled &economizer does not require any special installation materials or operations. Installation is to be performed by qualified personnel.
Use	The product is designed in active mode 85% of the time with a power use of 6100w, in standby mode 10% of time with a power use of 100w , in service mode 5% of the time without power consumption.
End of life	End of life optimized to decrease the amount of waste and allow recovery of the product components and materials This product contains Lithium metal coin batteries (3g), Printed Circuit Boards>10cm2 (27104g) and Electrolytic Capacitors (61.77g) that should be separated from the stream of waste so as to optimize end-of-life treatment. The location of these components and other recommendations are given in the End of Life Instruction document which is available on the Schneider-Electric Green Premium website http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page Recyclability potential: **78%** 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).

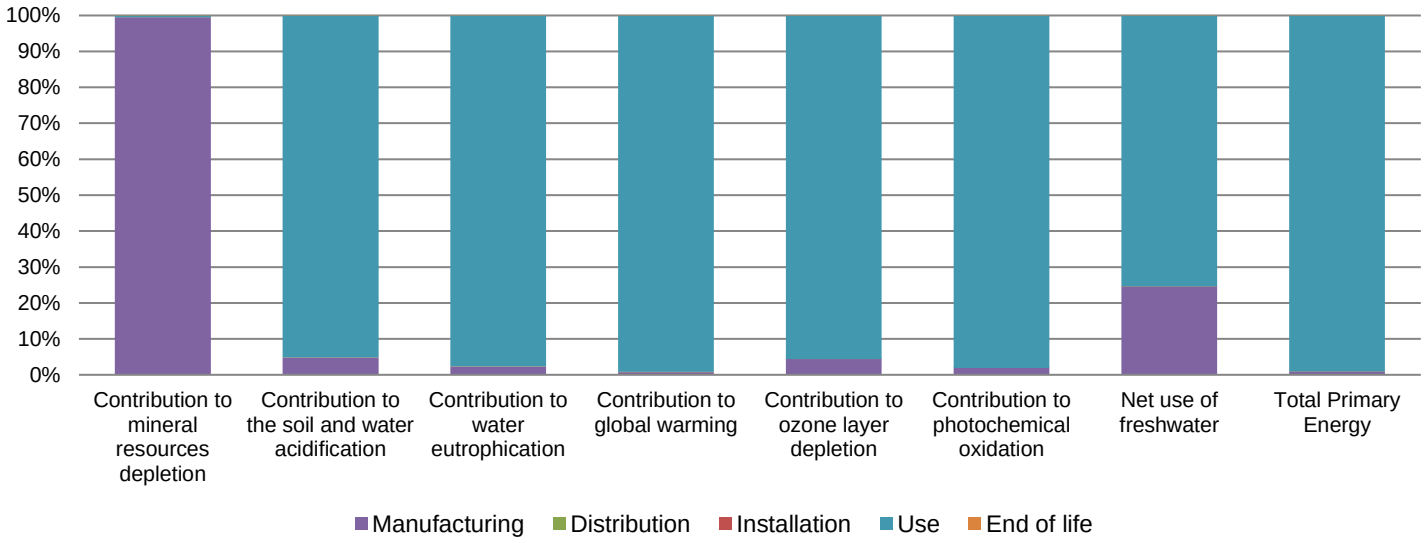
Environmental impacts

Reference life time	10 years
Installation elements	Transport and disposal of packaging are accounted for during installation. No special installation components needed.
Use scenario	The product is designed in active mode 85% of the time with a power use of 6100w, in standby mode 10% of time with a power use of 100w , in service mode 5% of the time without power consumption.
Geographical representativeness	USA, Canada, Australia
Technological representativeness	The InRow Economizer 300mm series is the newest close-coupled cooling solution from Schneider Electric and the optimal choice for edge and enterprise customers. The unlimited energy efficient and powerfully compact design makes the new InRow Economizer unit the most versatile and predictable cooling system for next generation energy efficiency and green (low carbon emission) data centers InRow 300mm unit is available in economizer, twin-cool, air-cooled and water-cooled options.

Energy model used	**Manufacturing**	**Installation**	**Use**	**End of life**
	Energy model used: Indian	Electricity mix AC; Europe consistent; consumption mix, at power plant; US	Electricity mix AC; Europe consistent; consumption mix, at power plant; US	Electricity mix AC; Europe consistent; consumption mix, at power plant; US

Compulsory indicators	**InRow 300mm Economizer(RH300) - ACRH301P**						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	8.25E-01	8.21E-01	0*	0*	3.97E-03	0*
Contribution to the soil and water acidification	kg SO_2 eq	3.39E+02	1.62E+01	2.65E-01	0*	3.23E+02	1.24E-01
Contribution to water eutrophication	kg PO_4^{3-} eq	8.74E+01	1.98E+00	6.11E-02	1.68E-02	8.53E+01	3.68E-02
Contribution to global warming	kg CO_2 eq	3.27E+05	2.51E+03	5.81E+01	4.28E+01	3.24E+05	7.67E+01
Contribution to ozone layer depletion	kg CFC11 eq	1.06E-02	4.70E-04	0*	0*	1.02E-02	3.60E-06
Contribution to photochemical oxidation	kg C_2H_4 eq	5.41E+01	1.02E+00	1.89E-02	1.00E-02	5.31E+01	1.26E-02

Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	6.82E+02	1.68E+02	0*	0*	5.14E+02	0*
Total Primary Energy	MJ	5.57E+06	4.95E+04	8.21E+02	0*	5.52E+06	5.99E+02



Optional indicators	InRow 300mm Economizer(RH300) - ACRH301P						
Impact indicators	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	4.28E+06	2.67E+04	8.16E+02	0*	4.25E+06	4.83E+02
Contribution to air pollution	m³	3.33E+07	1.20E+06	0*	0*	3.21E+07	4.25E+03
Contribution to water pollution	m³	1.55E+07	1.68E+05	9.55E+03	0*	1.53E+07	5.56E+03
Resources use	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	2.01E+01	2.01E+01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	3.17E+05	1.66E+03	0*	0*	3.15E+05	0*
Total use of non-renewable primary energy resources	MJ	5.26E+06	4.79E+04	8.20E+02	0*	5.21E+06	5.99E+02
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3.16E+05	8.03E+02	0*	0*	3.15E+05	0*
Use of renewable primary energy resources used as raw material	MJ	8.56E+02	8.56E+02	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	5.25E+06	4.67E+04	8.20E+02	0*	5.21E+06	5.99E+02
Use of non renewable primary energy resources used as raw material	MJ	1.20E+03	1.20E+03	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	5.46E+04	3.46E+04	0*	0*	1.95E+04	4.98E+02
Non hazardous waste disposed	kg	5.02E+04	1.36E+03	0*	4.32E+01	4.88E+04	0*
Radioactive waste disposed	kg	1.21E+01	6.87E-01	1.47E-03	1.38E-03	1.14E+01	3.09E-03
Other environmental information	**Unit**	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	3.66E+02	3.81E+01	0*	2.75E+01	0*	3.00E+02
Components for reuse	kg	0.00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1.26E+01	0*	0*	0*	0*	1.26E+01
Exported Energy	MJ	6.04E+01	3.65E+01	0*	2.39E+01	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.9.3, database version 2016-11 in compliance with ISO14044.

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

According to this environmental analysis, proportionality rules may be used to evaluate the impacts of other products of this range.

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	ENVPEP2108007_V1	*Drafting rules*	PCR-ed3-EN-2015 04 02
Date of issue	02/2022	*Supplemented by*	PSR-0005-ed2-EN-2016 03 29
Validity period	5 years	*Information and reference documents*	www.pep-ecopassport.org

Independent verification of the declaration and data

Internal X External

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 - Self-declared environmental claims (Type II environmental labelling) »

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