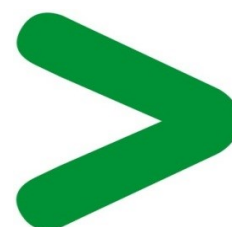


Product Environmental Profile

TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range

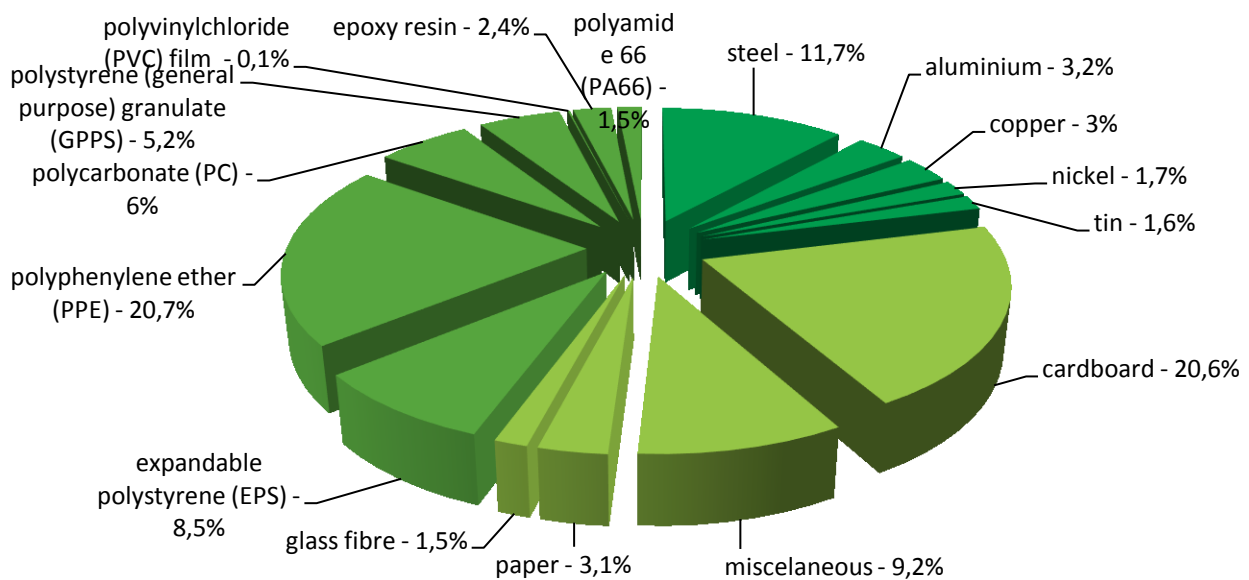


 **General information**

Representative product	TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range -TM258LF66DT4L compact base M258 - 66 + 4 I/O - 24 V DC
Description of the product	The TM258LF66DT4L is a compact, high-performance and fully expandable logic controller from the Modicon M258 Logic Controller range with 66 Discrete I/O, 4 Analogue input and 24 Discrete output with 4 fast output
Description of the range	The Modicon Motion Controllers LMC058 and Modicon Logic Controllers M258 are compact base, 42 to 66 + 4 I/O, 24 V DC PLCs. The Modicon LMC058 and Modicon M258 Controllers perform different control requirements: pressure, temperature, counting, speed, position control, motion, etc. 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 expand digital and/or analog I/O control system configurations 100% of the time for 10 years, at ambient temperature from -10°C to +60°C, max. altitude 2000 meters, 15Gn11ms (shock resistance), humidity 5% to 95% (without condensation)

Constituent materials

Reference product mass 838,54 g including the product, its packaging and additional elements and accessories



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

As the products of the range are designed in accordance with the RoHS Directive (European Directive 2002/95/EC of 27 January 2003), they can be incorporated without any restriction in an assembly or an installation subject to this 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 TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range presents the following relevant environmental aspects

Manufacturing Manufactured at a production site complying with the regulations

Distribution	Weight and volume of the packaging optimized, based on the European Union's packaging directive Packaging weight is 241,2 g, consisting of cardboard (71%) and plastics (29%)
Installation	The product requires manual installation
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 This product contains electronic cards (149g, 93g, 16,0g, 14,2g and 2 units of 12,0g, 2 units of 10,3g, 2 units of 13,4g), lithium battery (8,4g) 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: 23% 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

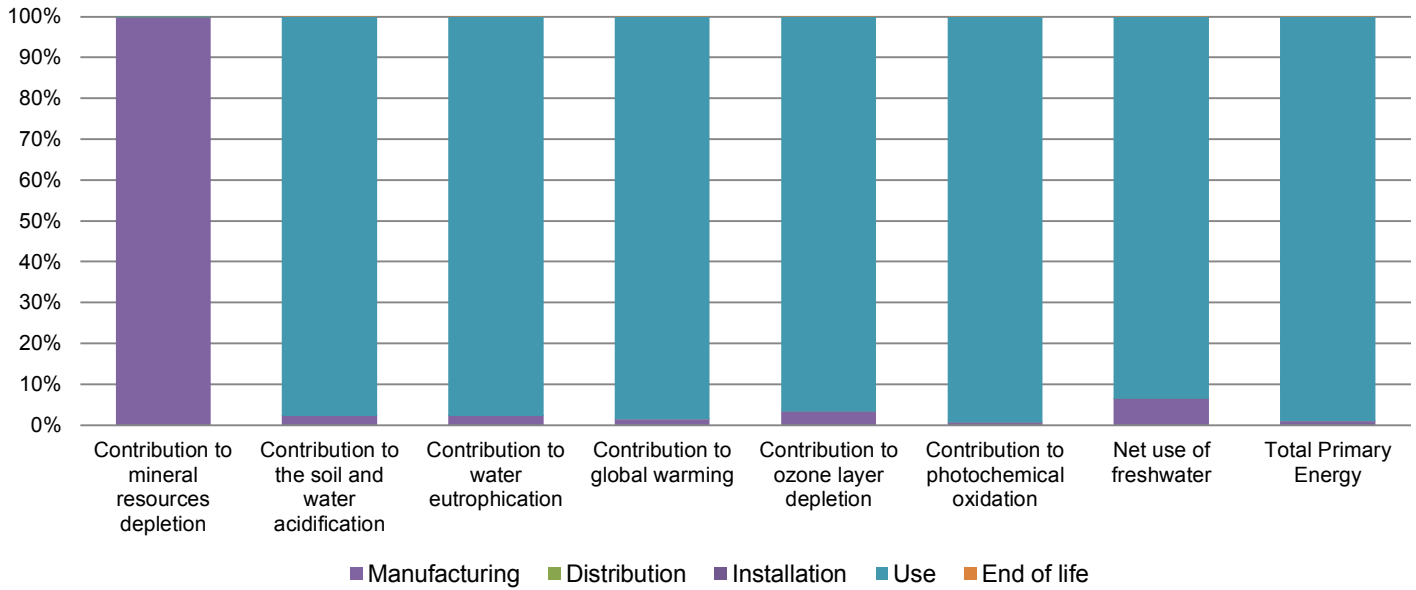
Reference life time	10 years			
Product category	Active products			
Installation elements	No special components needed for the product installation			
Use scenario	Consumed power is 32,4 W, 100 % of the time in Active mode			
Geographical representativeness	Europe			
Technological representativeness	The TM258LF66DT4L is a compact, high-performance and fully expandable logic controller from the Modicon M258 Logic Controller range with 66 Discrete I/O, 4 Analogue input and 24 Discrete output with 4 fast output			
Energy model used	Manufacturing	Installation	Use	End of life
	Energy model used: Austria	Electricity mix; AC; consumption mix, at consumer; 220V - 230V; RER	Electricity mix; AC; consumption mix, at consumer; 220V - 230V; RER	Electricity mix; AC; consumption mix, at consumer; 220V - 230V; RER

Compulsory indicators		TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range - TM258LF66DT4L compact base M258 - 66 + 4 I/O - 24 V DC					
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to mineral resources depletion	kg Sb eq	2,63E-02	2,63E-02	0*	0*	4,18E-05	0*
Contribution to the soil and water acidification	kg SO ₂ eq	1,27E+00	2,87E-02	4,94E-04	0*	1,24E+00	3,20E-04
Contribution to water eutrophication	kg PO ₄ ³⁻ eq	3,39E-01	7,61E-03	1,14E-04	0*	3,31E-01	1,59E-04
Contribution to global warming	kg CO ₂ eq	1,63E+03	2,27E+01	0*	0*	1,61E+03	4,98E-01
Contribution to ozone layer depletion	kg CFC11 eq	9,21E-05	3,01E-06	0*	0*	8,91E-05	1,78E-08

SCHN-00090-V01.01-EN - PEP ECOPASSPORT® - TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range

Contribution to photochemical oxidation kg C₂H₄ eq 7,58E-01 4,94E-03 0* 0* 7,53E-01 0*

Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Net use of freshwater	m3	5,02E+00	3,20E-01	0*	0*	4,70E+00	0*
Total Primary Energy	MJ	3,14E+04	2,98E+02	0*	0*	3,11E+04	0*



Optional indicators							
TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range - TM258LF66DT4L compact base M258 - 66 + 4 I/O - 24 V DC							
Impact indicators	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Contribution to fossil resources depletion	MJ	2,40E+04	2,85E+02	0*	0*	2,37E+04	0*
Contribution to air pollution	m³	2,77E+05	2,33E+03	0*	0*	2,75E+05	0*
Contribution to water pollution	m³	5,21E+04	2,08E+03	1,78E+01	0*	4,99E+04	2,14E+01
Resources use	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Use of secondary material	kg	1,53E-01	1,53E-01	0*	0*	0*	0*
Total use of renewable primary energy resources	MJ	3,39E+01	7,58E+00	0*	0*	2,63E+01	0*
Total use of non-renewable primary energy resources	MJ	3,14E+04	2,91E+02	0*	0*	3,11E+04	0*
Use of renewable primary energy excluding renewable primary energy used as raw material	MJ	3,00E+01	3,64E+00	0*	0*	2,63E+01	0*

SCHN-00090-V01.01-EN - PEP ECOPASSPORT® - TM258LF66DT4L - reference product for compact base Modicon M258 Logic controller and LMC058 Motion controller range

Use of renewable primary energy resources used as raw material	MJ	3,94E+00	3,94E+00	0*	0*	0*	0*
Use of non renewable primary energy excluding non renewable primary energy used as raw material	MJ	3,13E+04	2,77E+02	0*	0*	3,11E+04	0*
Use of non renewable primary energy resources used as raw material	MJ	1,40E+01	1,40E+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	3,06E+02	8,35E+01	0*	2,93E-01	2,21E+02	1,39E+00
Non hazardous waste disposed	kg	1,21E+02	1,04E+01	0*	0*	1,10E+02	0*
Radioactive waste disposed	kg	1,58E-01	2,48E-03	0*	0*	1,55E-01	0*
Other environmental information	Unit	Total	Manufacturing	Distribution	Installation	Use	End of Life
Materials for recycling	kg	4,44E-01	1,10E-01	0*	1,90E-01	0*	1,44E-01
Components for reuse	kg	0,00E+00	0*	0*	0*	0*	0*
Materials for energy recovery	kg	1,57E-01	2,21E-02	0*	0*	0*	1,35E-01
Exported Energy	MJ	0,00E+00	0*	0*	0*	0*	0*

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

Life cycle assessment performed with EIME version EIME v5.5, database version 2015-04.

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.

To extrapolate the impact to another product from the range, apply the following extrapolation rules to each indicator per life cycle stage:

MANUFACTURING(i) = Mass of (electronics) in grams / 343,5

DISTRIBUTION (i) = Mass of (product) in grams / 856,9

INSTALLATION (i) = constant

USE (i) = Power absorbed (including dissipation) in watts / 32,66

END OF LIFE (i) = Mass of (product) in grams / 616,6

TOTAL (i) = \sum Life Cycle Stages (i)

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 N°	SCHN-00090-V01.01-EN	Drafting rules	PCR-ed3-EN-2015 04 02
Verifier accreditation N°	VH08	Information and reference documents	www.pep-ecopassport.org
Date of issue	01/2017	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)			
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 »			



[Schneider Electric Country Customer Care Center](#)

35, rue Joseph Monier

CS 30323

F- 92506 Rueil Malmaison Cedex

RCS Nanterre 954 503 439

Capital social 896 313 776 €

www.schneider-electric.com

SCHN-00090-V01.01-EN

Published by Schneider Electric

© 2016 - Schneider Electric – All rights reserved

01/2017