



Product Environmental Profile

FRONT EXTERNAL ROTARY HANDLE





■ LEGRAND'S ENVIRONMENTAL COMMITMENTS |

- Incorporate environmental management into our industrial sites
- Of all Legrand sites worldwide, over 80% are ISO 14001-certified (sites belonging to the Group for more than five years).
- Involve the environment in product design

Provide our customers with all relevant information (composition, consumption, end of life, etc.).

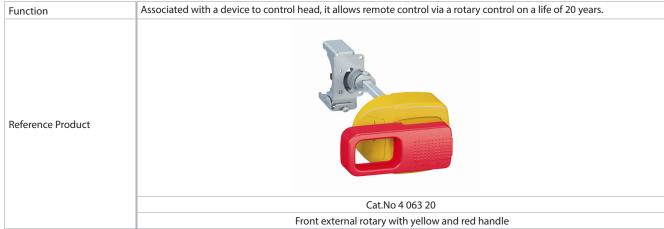
Reduce the environmental impact of products over their whole life cycle.

• Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.



REFERENCE PRODUCT



The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the company.



PRODUCTS CONCERNED

The environmental data are representative of the following products:

C	Catalogue Numbers
4	063 19, 4 063 20





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CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It does not contain substances covered by the RoHS Directive (2002/95/EC and its revision 2011/65/EC)

It contains none of the 138 candidate substances covered by appendix XIV of the REACH regulation dated 19/12/2012

Total weight of Reference Product	425 g (wit	h unit packaging)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	23.1%	Steel	19.1%		
PA	7.8%	Zamak	12.8%		
PE	2.0%	Al	12.4%		
SBS	1.1%	Copper alloys	3.2%		
other plastic	<0,1%				
				Packaging as % of weight	
				Paper/Cardboard	18.5%
Total plastics	34%	Total metals	47.5%	Total other and packaging	18.5%

Estimated recycled material content: 31 % of weight.



MANUFACTURE _____

This Reference Product comes from a site that have received ISO14001 certification.



DISTRIBUTION

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 780 km by road from our warehouse to the local point of distribution into the market in Europe

Packaging is compliant with european directive 2004/12/EC concerning packaging and packaging waste. At their end of life the recyclability rate is 100% (in % of packaging weight).



INSTALLATION

Installation components not delivered with the product are not taken into account.



USE

Servicing and maintenance:

Under normal conditions of use, this type of Product requires no servicing or maintenance

Consumable

no consumables are necessary to use this type of product.





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■ END OF LIFE ■

Development teams integrate product end-of-life factors in the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse.

• Recyclability rate:

Calculated using the method given in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 97 %. This value is based on data collected from a technological channel operating on an industrial basis. It does not prejudge the effective use of the channel for electrical and electronic products at the end of their life.

Separated into:

plastic materials (excluding packaging)
 metal materials (excluding packaging)
 other materials (excluding packaging)
 packaging (all types of materials)
 18 %



■ ENVIRONMENTAL IMPACTS ■

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end-of-life. It is representative from products marketed and used in Europe, in compliance with the local current standards

The following modelling elements were taken into account:

Manufacture	Unit packaging taken into account. As required by the "PEP ecopassport" programme all transport for the manufacturing of the Reference Product, including materials and components, has been taken in account.
Distribution	Transport between the last Group distribution centre and an average delivery to the sales area.
Installation	Installation components not delivered with the product are not taken into account.
Use	 Under normal conditions of use, this type of product requires no servicing or maintenance. No consumables are necessary to use this type of product. Product category: envelope Use scenario: no energy consumption during the 20 years working life. This modelling duration does not constitute a minimum durabilty requirement.
End of life	In view of the data avalaible on the date of creation of the document, and in accordance with the requirements of the PCR of the "PEP ecopassport" programme, transport of the Reference Product by road only once, over a distance of 1000 km, to a processing site at end of life was counted.
Software used	EIME V5 and its database «Legrand-2012-10-31 version 3» made from the database «CODDE-2012-07»



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■ ENVIRONMENTAL IMPACTS (continued)

		Total for Li	ife cycle	Raw material ar manufactu		Distributio	n	Installation	ı	Use		End of life	
	Global warming	3.68E+07	g~CO ₂ eq.	3.61E+07	98%	4.00E+05	1%	0.00E+00	0%	0.00E+00	0%	3.23E+05	< 1%
	Ozone depletion	9.43E+00	g~CFC-11 eq.	8.91E+00	95%	2.83E-01	3%	0.00E+00	0%	0.00E+00	0%	2.29E-01	2%
indicators	Water eutrophication	2.81E+03	g~PO ₄ ³-eq.	2.80E+03	100%	6.64E+00	< 1%	0.00E+00	0%	0.00E+00	0%	5.39E+00	< 1%
tory ind	Photochemical ozone creation	1.34E+04	g~C ₂ H ₄ eq.	1.28E+04	95%	3.47E+02	3%	0.00E+00	0%	0.00E+00	0%	2.81E+02	2%
Mandatory	Air acidification	6.55E+03	g~H+ eq.	6.46E+03	99%	5.09E+01	< 1%	0.00E+00	0%	0.00E+00	0%	4.27E+01	< 1%
	Total energy depletion	5.31E+05	МЈ	5.22E+05	98%	5.05E+03	< 1%	0.00E+00	0%	0.00E+00	0%	4.10E+03	< 1%
	Water depletion	1.99E+05	dm³	1.98E+05	100%	4.79E+02	< 1%	0.00E+00	0%	0.00E+00	0%	3.89E+02	< 1%

Optional indicators	Raw material depletion	1.94E-11	year ⁻¹	1.94E-11	100%	6.88E-15	< 1%	0.00E+00	0%	0.00E+00	0%	5.58E-15	< 1%
	Air toxicity	9.45E+09	m³	9.31E+09	99%	7.52E+07	< 1%	0.00E+00	0%	0.00E+00	0%	6.33E+07	< 1%
	Water toxicity	1.04E+04	m³	1.03E+04	99%	5.57E+01	< 1%	0.00E+00	0%	0.00E+00	0%	4.51E+01	< 1%
ō	Hazardous waste production	1.76E+03	kg	1.76E+03	100%	1.49E-01	< 1%	0.00E+00	0%	0.00E+00	0%	1.21E-01	< 1%

The environmental impacts of the Reference Product are representative of the products covered by the PEP, which therefore constitute a homgeneous environmental family. To determine the environmental impact of a product covered by the PEP other than the cat. number (ref 4 063 20), the following rules apply:

Indicators Manufacturing, Distribution, Installation, Use and End of life phases are identical except Water Depletion. Multiply indicator Water Depletion by 0.7

The values of these impacts are valid for the context specified in this document. They must not be used directly to draw up the environmental balance sheet for the installation.

N°enregistrement: LGRP-2014-010-v1-en	Règles de rédaction : PCR : PEP-PCR-ed complété par le PSR : PSR-0005-ed	
N° d'habilitation du vérificateur: VH02	opassport.org	
Date d'édition : 12-2014		
Vérification indépendante de la déclaration et des donné Interne ☑Externe ☐	PEP	
Conforme à la norme ISO 14025 : 2006 déclarations envir	eco	
La revue critique du PCR a été conduite par un panel d'ex	PASS	
Les éléments du présent PEP ne peuvent pas être compa	PORT®	