

Product Environmental Profile

MWS3A Presence detector



LEGRAND'S ENVIRONMENTAL COMMITMENTS

• **Incorporate environmental management into our industrial sites**

Of all Legrand sites worldwide, over 85% are ISO 14001-certified (sites belonging to the Group for more than five years).

• **Offer our customers environmentally friendly solutions**

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


• **Involve the environment in product design and provide informations in compliance with ISO 14025**

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

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



REFERENCE PRODUCT

Function	"Detects presence and in some cases absence and ambient light in an application zone to enable control of electrical circuit (Switching/Dimming) for different outputs (DD, AD, VFC, DNET1, DALI etc) for a time period), using microwave detection of objects, complying with RED-2014/53/EU and LVD-2014/35/EU standards for tertiary or similar used for 10 years."
Reference Product	
	Cat.No CP-330020
	BP-MWS3A-DD. - DALI/DSI digital dimming, adjustable head, flush mounted, microwave, presence/absence detector



PRODUCTS CONCERNED

The environmental data is representative of the following products:

The model does not take account of possible accessories.

PRODUCT	REFERENCES
BP-MWS3A-DD	CP-330020
AP-MWS3A-DD-R2	CP-330022
AP-MWS3A-PRM	CP-330030
AP-MWS3A-PRM-2CH-R2	CP-330033
AP-MWS3A-PRM-VFC-LV-R2	CP-330043
BP-MWS3A-AD	CP-330000
BP-MWS3A-DD-LEGRAND	/
BP-MWS3A-DD-R2	CP-330022
BP-MWS3A-DD-R3-LEGRAND	/
BP-MWS3A-PRM	CP-330030
BP-MWS3A-PRM-2CH	CP-330031
BP-MWS3A-PRM-R2	CP-330037
AP-VITP7-MWS3A	CP-510012
OP-EBR-MWS3A	CP-170192
AP-VITM4-MWS3A-PRM	CP-480076
BP-VITM4-MWS3A-PRM	CP-480076
BP-VITM6-MWS3A-DD	CP-490109

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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 respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU amended by delegated directive (EU) 2015/863, and its amendment 2017/2102/EU.

Total weight of Reference Product		0.25 kg (all packaging included)			
Product alone weight 0.16 kg					
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	28.5 %	Aluminium	4.2 %	Electronic board	23.5 %
ABS	5.8 %	Steel	2.4 %		
PMMA	0.5 %				
PVC	0.4 %				
PE	0.1 %				
Packaging (alone) : 0.09 kg					
PE	0.2 %			Cardboard	17.7 %
				Wood	8.4 %
				Paper	8.3 %
Total plastics : 0.09 kg	35.5 %	Total metals : 0.02 kg	6.6 %	Total others : 0.14 kg	57.9 %



■ MANUFACTURE

This Reference Product comes from sites 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 19000 Km by boat and 1000 Km by trucks from our warehouse to the local point of distribution into the market in Europe.



■ INSTALLATION

For the installation of the product, only standard tools are needed.



■ USE

Under normal conditions of use, this product requires no servicing, no maintenance or additional products.



■ END OF LIFE

The product end of life factors are taken into account during 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.

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ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life.

For each phase, the following modelling elements were taken in account:

System Limit	Manufacture A1-A3	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
	Distribution A4	Transport between the last Group distribution centre and an average delivery point in the sales area.
	Installation A5	The end of life of the packaging.
	Use B1-B7	<ul style="list-style-type: none">• Product category: Active Products• Use scenario: Continuous operation at 50% of active product (1.32 W) and at 50 % of standby product (0.771W). This modeling time is not a maximum durability requirement.• Energy model: Electricity Mix_Global_2020.
	End of life C1-C4	The default end-of-life scenario for an international perimeter in accordance with the PCR-ed4-EN-2021 09 06.
D Module		Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and burdens beyond the boundaries of the system, and are not to be included in the life cycle totals.
Software and data-base used		The set of indicators used is Indicators for PEF EF 3.1 (Conforme: PEP ed.4, EN15804+A2) v2.0 EIME V6 and its CODDE-2024-06-11 database

Unless otherwise indicated the modelling energetic mix are those integrated in the data modules used from the aforementioned database.

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ENVIRONMENTAL IMPACTS

	Total Life Cycle		Manufacturing	Distribution	Installation	Use ⁽¹⁾			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
Climate change - total	6.74E+01	kg CO2 eq.	8.35E+00	7.53E-02	1.62E-01	5.87E+01	0.00E+00	5.87E+01	8.77E-02	-2.04E-01
Climate change - fossil fuels	6.73E+01	kg CO2 eq.	8.45E+00	7.53E-02	3.08E-02	5.86E+01	0.00E+00	5.86E+01	8.73E-02	-1.21E-01
Climate change - biogenics	7.23E-02	kg CO2 eq.	-1.06E-01	0.00E+00	1.32E-01	4.63E-02	0.00E+00	4.63E-02	4.19E-04	-8.28E-02
Climate change - land use and land use transformation	9.13E-05	kg CO2 eq.	9.13E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0*	0.00E+00
Ozone depletion	9.33E-07	kg.equivalent. CFC-11	6.49E-07	9.78E-11	1.07E-09	2.76E-07	0.00E+00	2.76E-07	6.84E-09	-2.03E-08
Acidification (AP)	4.20E-01	mole of H+ equiv	5.13E-02	2.61E-03	1.83E-04	3.66E-01	0.00E+00	3.66E-01	6.22E-04	-1.37E-03
Freshwater eutrophication	6.51E-05	kg P eq.	1.17E-05	2.59E-08	2.43E-08	4.24E-05	0.00E+00	4.24E-05	1.10E-05	-1.90E-07
Marine aquatic eutrophication	5.11E-02	kg of N equiv	9.29E-03	6.17E-04	4.42E-05	4.11E-02	0.00E+00	4.11E-02	1.30E-04	-5.87E-05
Terrestrial eutrophication	6.02E-01	mole of N equiv	1.01E-01	6.75E-03	5.81E-04	4.92E-01	0.00E+00	4.92E-01	1.61E-03	-8.43E-04
Photochemical ozone formation	1.67E-01	kg of NMVOC equiv	2.89E-02	1.74E-03	1.25E-04	1.36E-01	0.00E+00	1.36E-01	3.91E-04	-3.31E-04
Depletion of abiotic resources - elements	3.05E-03	kg.equivalent. Sb	3.04E-03	0*	0*	8.10E-06	0.00E+00	8.10E-06	3.58E-07	-4.63E-04
Depletion of abiotic resources - fossil fuels	1.19E+03	MJ	1.20E+02	9.52E-01	5.70E-01	1.06E+03	0.00E+00	1.06E+03	2.40E+00	-3.70E+00
Water requirement	5.02E+00	m3 of equiv. deprivation worldwide	1.76E+00	0*	1.29E-03	3.23E+00	0.00E+00	3.23E+00	2.19E-02	-7.62E-02
Emission of fine particles	2.53E-06	incidence of diseases	2.98E-07	1.38E-08	1.27E-09	2.21E-06	0.00E+00	2.21E-06	4.40E-09	-1.01E-08

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

⁽¹⁾ For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table.

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column.

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	Total Life Cycle		Manufacturing	Distribution	Installation	Use ⁽¹⁾			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
Ionizing radiation. human health	7.30E+01	kBq of U235 equiv.	4.98E+01	0*	1.29E-02	2.32E+01	0.00E+00	2.32E+01	2.28E-02	-5.11E-01
Ecotoxicity (fresh water)	1.36E+02	CTUe	2.88E+01	4.49E-02	7.33E-01	1.05E+02	0.00E+00	1.05E+02	1.84E+00	-1.55E-01
Human toxicity. carcinogenic effects	2.80E-08	CTUh	2.04E-08	0*	5.37E-12	7.23E-09	0.00E+00	7.23E-09	3.30E-10	4.24E-09
Human toxicity. non-carcinogenic effects	3.25E-07	CTUh	7.65E-08	0*	2.20E-10	2.46E-07	0.00E+00	2.46E-07	1.95E-09	-4.18E-08
Impacts related to land use/soil quality	9.40E-01	-	2.99E-01	0.00E+00	5.98E-04	6.08E-01	0.00E+00	6.08E-01	3.33E-02	0.00E+00
Use of renewable primary energy. excluding renewable primary energy resources used as raw materials	1.36E+02	MJ	2.75E+00	0*	4.31E-02	1.33E+02	0.00E+00	1.33E+02	8.03E-02	-2.83E-01
Use of renewable primary energy resources used as raw materials	7.79E-01	MJ	7.79E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.37E-01
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	1.37E+02	MJ	3.53E+00	0*	4.31E-02	1.33E+02	0.00E+00	1.33E+02	8.03E-02	6.54E-01
Use of non-renewable primary energy. excluding non-renewable primary energy resources used as raw materials	1.18E+03	MJ	1.16E+02	9.52E-01	5.70E-01	1.06E+03	0.00E+00	1.06E+03	2.40E+00	-3.59E+00
Use of non-renewable primary energy resources used as raw materials	3.52E+00	MJ	3.52E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.16E-01
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	1.19E+03	MJ	1.20E+02	9.52E-01	5.70E-01	1.06E+03	0.00E+00	1.06E+03	2.40E+00	-3.70E+00

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

⁽¹⁾ For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table.

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column.

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Total Life Cycle			Manufacturing	Distribution	Installation	Use ⁽¹⁾			End of Life	Module D
			A1-A3	A4	A5	Total B1-B7	B2	B6	C1-C4	
Use of secondary materials	5.39E-02	kg	5.39E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	0.00E+00	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	0.00E+00	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water	1.17E-01	m ³	4.11E-02	0*	5.02E-05	7.53E-02	0.00E+00	7.53E-02	5.32E-04	-1.77E-03
Hazardous waste disposed of	6.51E+00	kg	4.84E+00	0.00E+00	3.19E-02	1.47E+00	0.00E+00	1.47E+00	1.69E-01	-7.52E+00
Non-hazardous waste disposed of	1.22E+01	kg	2.20E+00	2.30E-03	4.45E-03	9.98E+00	0.00E+00	9.98E+00	5.32E-02	-2.30E-01
Radioactive waste disposed of	2.40E-03	kg	1.15E-03	1.59E-06	1.84E-06	1.21E-03	0.00E+00	1.21E-03	3.67E-05	-1.87E-04
Components for re-use	0.00E+00	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	2.98E-02	kg	6.30E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-02	0.00E+00
Materials for energy recovery	1.20E-08	kg	1.20E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	0.00E+00	MJ by energy vector	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of primary energy during the life cycle	1.32E+03	MJ	1.23E+02	9.53E-01	6.13E-01	1.20E+03	0.00E+00	1.20E+03	2.48E+00	-3.05E+00

Biogenic carbon content of the product	0.00E+00	kg of C.	0.00E+00
Biogenic carbon content of the associated packaging	4.06E-02	kg of C.	4.06E-02

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

(1) For the Use stage and in accordance with the PCR in force, information modules B1, B3, B4, B5 and B7, which all have indicator values equal to «0» (zero), are not represented in this table.

For biogenic carbon storage, the methodology used is -1/+1.

In accordance with current RCP rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column.

The values of the indicators defined in PCR-ed4-EN-2021 09 06 are available in digital format in the database on the pep-ecopassport.org website.

The life cycle analysis complies with the specific rules applicable to Autonomous Electrical Safety Devices PSR0005-ed3.1-FR-2023 12 08, available at www.pep-ecopassport.org.

For all the products concerned (see § «Products concerned»), take these impact values.

Digital service-related impacts of the product are not assessed (terminals, telecommunication networks and computer centres).


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To obtain the environmental impact values of products other than the Reference Product, take the environmental impact values of the Reference Product and multiply them by the values in the coefficient table below.

References	Designation	coef to apply per phase of the life cycle						
		total Life Cycle	Manu- facturing [A1-A3]	Distribution [A4]	Installation [A5]	Use [B2]	Use [B6]	End of life [C1-C4]
BP-MWS3A-DD	DALI/DSI digital dimming, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, up to 20 drivers/ballasts	1.0	1.0	1.0	1.0	1.0	1.0	1.0
AP-MWS3A-DD-R2	Adjustable head, long range, flush mounted, ceiling, microwave presence/absence detectors, R2	1.0	0.9	1.0	1.0	1.0	1.0	1.1
AP-MWS3A-PRM	PRM switching, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector	1.0	1.0	1.0	1.0	1.0	1.1	1.1
AP-MWS3A-PRM-2CH-R2	PRM switching, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, 2-channel, R2	1.0	1.0	1.0	1.0	1.0	1.2	1.0
AP-MWS3A-PRM-VFC-LV-R2	PRM switching, adjustable head, IP40, ceiling, flush mounted, microwave, presence/absence detector, low voltage, volt free contact, R2	1.0	0.9	1.0	1.0	1.0	1.1	1.0
BP-MWS3A-AD	1-10v analogue dimming, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, up to 10 drivers/ballasts	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BP-MWS3A-DD-LEGRAND	DALI/DSI digital dimming, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, up to 20 drivers/ballasts	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BP-MWS3A-DD-R2	DALI/DSI digital dimming, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, up to 20 drivers/ballasts	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BP-MWS3A-DD-R3-LEGRAND	DALI/DSI digital dimming, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, up to 20 drivers/ballasts	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BP-MWS3A-PRM	PRM switching, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector	1.0	1.0	1.0	1.0	1.0	0.9	1.1
BP-MWS3A-PRM-2CH	PRM switching, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, 2-channel	1.0	1.1	1.0	1.0	1.0	1.2	1.0
BP-MWS3A-PRM-R2	PRM switching, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector, R2	0.9	0.9	0.9	1.0	1.0	0.9	0.8
AP-VITP7-MWS3A	Vitesse, Adjustable head, long range, flush mounted, ceiling, microwave presence/absence detectors	0.9	0.8	0.9	1.0	1.0	0.2	0.8
OP-EBR-MWS3A	RAPID, adjustable head, long range, IP40, ceiling, flush mounted, microwave, presence/absence detector	0.9	0.8	1.0	1.0	1.0	0.2	1.0
AP-VITM4-MWS3A-PRM	PRM switching, adjustable head, IP40, ceiling, flush mounted, microwave, presence/absence detector, c/w 3m lead	1.0	0.9	1.0	1.0	1.0	0.9	1.0
BP-VITM4-MWS3A-PRM	PRM switching, adjustable head, IP40, ceiling, flush mounted, microwave, presence/absence detector, c/w 3m lead	1.0	0.9	1.0	1.0	1.0	0.9	1.0
BP-VITM6-MWS3A-DD	DALI/DSI digital dimming, compact, IP40, ceiling, flush mounted, microwave, presence/absence detector, c/w 3m lead, up to 20 drivers/ballasts	1.0	0.9	0.9	1.0	1.0	1.0	0.7

Registration number: LGRP-01793-V01.02-EN		Drafting rules: « PEP-PCR-ed4-EN-2021 09 06 » Supplemented by «PSR-0005 ed3.1-2023 12 08»	
Verifier accreditation N°: VH08		Information and reference documents : www.pep-ecopassport.org	
Date of issue: 10-2024		Validity period: 5 years	
Independent verification of the declaration and data, in compliance with ISO 14025 : 2006			
Internal <input type="checkbox"/> External <input checked="" type="checkbox"/>			
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEP are compliant with XP C08-100-1 :2016 or EN 50693 :2019			
The elements of the present PEP cannot be compared with elements from another program			
Document in compliance with ISO 14025 : 2006: «Environmental labels and declarations. Type III environmental declarations»			

Environmental data in alignment with EN 15804: 2012 + A2 : 2019