



**CI48-250**  
(CI Distribution enclosure)

Representative product	CI48-250 (Y7-83642) Product Category: Unequipped enclosures and cabinets			
Description of the product	Eaton's all-insulated Ci power distribution enclosures have been designed to meet the most stringent requirements and offer a consistent system for up to 1600 A. These all-insulated distribution enclosures provide an IP65 degree of protection and are insensitive to almost any environmental impact such as dust, moisture, and water. Enclosure made of Polycarbonate. It makes CI insulated enclosures shock-proof and resistant to acid smoke. The cover is designed to rest on four spring-loaded fittings, providing stability along with the stable carrier-frame profiles. Captive, foamed sealings enhance its reliability, while wedge-type connectors made of insulating material interconnect the enclosures seamlessly. Additionally, the system includes transparent covers and is consistent for applications up to 1600 A			
Homogeneous Product Family	PEP covers following part numbers under homogenous family:			
	Y7-78896	Y7-194555	Y7-194552	Y7-194553
	Y7-98469	Y7-1891	Y7-194617	Y7-1896
	Y7-38555	Y7-26690	Y7-36182	Y7-36511
	Y7-21944	Y7-34138	Y7-194615	Y7-33809
	Y7-31765	Y7-31436	Y7-194614	Y7-12452
	Y7-194613	Y7-97879	Y7-27019	Y7-24646
	Y7-194612	Y7-22273	Y7-19900	Y7-93133
	Y7-17527	Y7-15154	Y7-194610	Y7-21943
	Y7-10408	Y7-194609	Y7-19570	Y7-98208
	Y7-194554	Y7-38884	Y7-194616	Y7-17198
	Y7-29392	Y7-95506	Y7-194611	Y7-12781

Functional unit	Protect people from direct contact with live active parts and ensure the grouping of control, command and protection devices in a single enclosure or cabinet having the following dimensions 750 x 375 x 275 with rated current 1600 A, while protecting them against mechanical impacts (IK10) and the penetration of solid objects and liquids (IP65), according to the appropriate use scenario, and for the reference service life of the product of 20 years.
Company information	Eaton Industries (Austria) GmbH Eugenia 1, 3943 Schrems, Austria Email: <a href="mailto:productstewardship-es@eaton.com">productstewardship-es@eaton.com</a>

Constituent Materials of			
Reference Product:	6.98E+00 kg (with packaging)		
Materials	Category PEP Material	Mass (kg)	Percentage (%)
Plastics	polycarbonate	4.87E+00	69.8%
Plastics	glass fiber	1.26E+00	18.1%
Others	cardboard	6.46E-01	9.3%
Others	wood	1.66E-01	2.4%
Plastics	polyethylene	3.32E-02	0.5%
Total		6.98E+00	100.0%

Additional Environmental Information	
Manufacturing	The reference product is assembled at an Eaton plant holding management system certifications according to ISO 14001 standards.
Distribution	Eaton is committed to minimizing weight and volume of product and packaging with focus to optimize transport efficiency.
Installation	During installation of the product only standard tools are needed, which do not require any additional energy source and no waste other than the obsolete product packaging is generated during this step.
Use	Product do not consume any energy or do not have any heat losses in Use Phase End-of-Life:
End of life	The recyclability rate of the overall product is 75% if properly dismantled prior to further processing at a recycling facility. The rate is calculated 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	
<p>The calculation of the environmental impacts is the result of the Product's Life Cycle Analysis in accordance with ISO 14040/44, covering the entire lifecycle, i.e., "Cradle-to-Grave" including the following life cycle phases: production, distribution, installation, use and end of life. System modelling was carried out using the commercial LCA software EIME v6.2 with database version CODDE-2024-04.</p> <p>Indicators Set used: PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v1.0</p>	
Manufacturing Phase	The product is assembled as well as packed at Eaton facility Eaton Industries (Austria) GmbH Eugenia 1, 3943 Schrems, Austria. Energy Model: Europe
Distribution Phase	Distribution of the product in its packaging from the Eaton's last logistics platform to the installation place in Europe is considered as per PCR rules. Energy Model: Europe
Installation Phase	Product is installed in Europe and treatment of packaging waste are considered in this phase. Energy Model: Europe

Use Phase	Product do not consume any energy or do not have any heat losses in Use Phase.
End of life Phase	Product disposed with WEEE guidelines. Energy model used: Europe
Module-D	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 loads beyond the boundaries of the system and are not to be included in the life cycle totals.

## Environmental Impact for Functional Unit

### Environmental Impact Indicators: Mandatory

Mandatory environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B1-B7 - Use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Climate change - total	kg CO2 eq.	3.27E+01	2.63E+01	1.40E+00	1.41E+00	0.00E+00	3.57E+00	-1.66E+01
Climate change - fossil fuels	kg CO2 eq.	3.18E+01	2.62E+01	1.40E+00	6.46E-01	0.00E+00	3.55E+00	-1.64E+01
Climate change - biogenics	kg CO2 eq.	8.53E-01	7.31E-02	0.00E+00	7.64E-01	0.00E+00	1.60E-02	-1.27E-01
Climate change - land use and land use transformation	kg CO2 eq.	7.23E-03	7.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.18E-03
Ozone depletion	kg eq. CFC-11	7.43E-07	6.62E-07	2.15E-09	7.65E-09	0.00E+00	7.10E-08	-3.40E-07
Acidification (AP)	mole of H+ eq.	9.89E-02	7.13E-02	8.90E-03	1.95E-03	0.00E+00	1.68E-02	-3.17E-02
Freshwater eutrophication	kg P eq.	1.77E-04	1.55E-04	5.27E-07	7.76E-06	0.00E+00	1.35E-05	-1.05E-04
Marine aquatic eutrophication	kg of N eq.	2.34E-02	1.50E-02	4.17E-03	9.24E-04	0.00E+00	3.28E-03	-8.48E-03
Terrestrial eutrophication	mole of N eq.	2.88E-01	1.97E-01	4.58E-02	6.84E-03	0.00E+00	3.90E-02	-8.92E-02
Photochemical ozone formation	kg of NMVOC eq.	7.83E-02	5.57E-02	1.15E-02	1.55E-03	0.00E+00	9.43E-03	-2.90E-02
Depletion of abiotic resources - elements	kg eq. Sb	2.86E-06	3.29E-06	5.53E-08	2.30E-08	0.00E+00	-5.07E-07	-2.40E-06
Depletion of abiotic resources - fossil fuels	MJ	7.62E+02	6.76E+02	1.96E+01	5.87E+00	0.00E+00	6.07E+01	-4.21E+02
Water scarcity	m3 of eq.. deprivation worldwide	5.77E+00	5.30E+00	5.34E-03	4.96E-02	0.00E+00	4.15E-01	-3.33E+00

Inventory Flow Indicators: Mandatory

Inventory flow indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B1-B7 - Use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	MJ	6.72E+01	5.73E+01	2.62E-02	8.02E-01	0.00E+00	8.99E+00	-2.23E+01
Use of renewable primary energy resources used as raw materials	MJ	1.59E+01	1.59E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.58E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	8.31E+01	7.31E+01	2.62E-02	8.02E-01	0.00E+00	8.99E+00	-2.99E+01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	MJ	5.95E+02	5.09E+02	1.96E+01	5.87E+00	0.00E+00	6.07E+01	-2.79E+02
Use of non-renewable primary energy resources used as raw materials	MJ	1.67E+02	1.67E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.42E+02
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	7.62E+02	6.76E+02	1.96E+01	5.87E+00	0.00E+00	6.07E+01	-4.21E+02
Use of secondary materials	kg	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	MJ	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	MJ	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	m3	1.37E-01	1.24E-01	1.24E-04	3.77E-03	0.00E+00	9.66E-03	-7.75E-02
Hazardous waste disposed of	kg	6.58E+00	3.74E-01	0.00E+00	1.43E-02	0.00E+00	6.19E+00	-6.08E-02
Non-hazardous waste disposed of	kg	2.21E+01	1.86E+01	4.93E-02	2.50E-01	0.00E+00	3.19E+00	-1.27E+01
Radioactive waste disposed of	kg	8.88E-03	8.39E-03	3.51E-05	3.57E-05	0.00E+00	4.12E-04	-6.82E-03
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	5.28E+00	2.93E-01	0.00E+00	4.21E-01	0.00E+00	4.57E+00	0.00E+00
Materials for energy recovery	kg	2.45E-01	1.50E-01	0.00E+00	4.62E-02	0.00E+00	4.87E-02	0.00E+00
Exported energy	MJ by energy vector	5.50E-02	5.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the product	kg of C.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg of C.	2.76E-01	2.76E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Environmental Impact Indicators: Optional

Optional Environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B1-B7 - Use	C1-C4 - End of life	D - Benefits and loads beyond the system boundaries
Emission of fine particles	incidence of diseases	7.55E-07	5.52E-07	7.24E-08	1.23E-08	0.00E+00	1.18E-07	-2.36E-07
Ionizing radiation, human health	kBq of U235 eq.	2.07E+01	1.78E+01	3.42E-03	1.09E-01	0.00E+00	2.83E+00	-6.02E+00
Ecotoxicity, fresh water	CTUe	2.88E+02	2.66E+02	9.21E-01	8.24E+00	0.00E+00	1.28E+01	-1.91E+02
Human toxicity, cancer effects	CTUh	2.06E-07	1.43E-07	2.47E-11	6.20E-08	0.00E+00	3.84E-10	-7.58E-08
Human toxicity, non-cancer effects	CTUh	2.08E-07	1.91E-07	4.78E-10	1.78E-09	0.00E+00	1.47E-08	-1.47E-07
Impacts related to land use/soil quality	-	2.02E+01	2.02E+01	0.00E+00	8.14E-04	0.00E+00	0.00E+00	-1.72E+01
Total use of primary energy during the life cycle	MJ	8.45E+02	7.49E+02	1.96E+01	6.68E+00	0.00E+00	6.97E+01	-4.50E+02

To evaluate the environmental impact of other products covered by this PEP, multiply the impact figures by


Factors for Manufacturing, Distribution, Installation, Use, End-of-Life Phase and Module D:

Part Number	Description	All Phases environmental Indicators
Y7-83642 (REFERENCE)	CI48-250	1.00
Y7-78896	CI48-200	0.79
Y7-194555	CI45X-250	0.86
Y7-194552	CI45E-250	0.78
Y7-194553	CI45E-250-RAL7035	0.78
Y7-194554	CI45-250	0.71
Y7-98469	CI45X-200	0.78
Y7-1891	CI45E-200	0.70
Y7-194617	CI45E-200-RAL7035	0.69
Y7-1896	CI45-200	0.62
Y7-38884	CI44X-250	0.61
Y7-38555	CI44E-250	0.60
Y7-26690	CI44-250	0.55
Y7-36182	CI44E-200	0.55
Y7-36511	CI44X-200	0.55
Y7-194616	CI44E-200-RAL7035	0.53
Y7-21944	CI44-200	0.51
Y7-34138	CI44X-150	0.55
Y7-194615	CI44E-150-RAL7035	0.48
Y7-33809	CI44E-150	0.46

Y7-17198	CI44-150	0.43
Y7-31765	CI44X-125	0.52
Y7-31436	CI44E-125	0.44
Y7-194614	CI44E-125-RAL7035	0.44
Y7-12452	CI44-125	0.41
Y7-29392	CI43X-200	0.49
Y7-194613	CI43E-200-RAL7035	0.40
Y7-97879	CI43E-200	0.38
Y7-27019	CI43-200	0.36
Y7-24646	CI43X-150	0.43
Y7-95506	CI43E-150	0.34
Y7-194612	CI43E-150-RAL7035	0.34
Y7-22273	CI43-150	0.30
Y7-19900	CI43X-125	0.41
Y7-93133	CI43E-125	0.32
Y7-194611	CI43E-125-RAL7035	0.32
Y7-17527	CI43-125	0.28
Y7-15154	CI23X-150	0.28
Y7-194610	CI23E-150-RAL7035	0.24
Y7-21943	CI23E-150	0.24
Y7-12781	CI23-150	0.21
Y7-10408	CI23X-125	0.26
Y7-194609	CI23E-125-RAL7035	0.21
Y7-19570	CI23E-125	0.21
Y7-98208	CI23-125	0.19
Y7-78896	CI48-200	0.79

## Disclaimer

This Product Environmental Profile and its content is based on information available to us. It refers to the product at the date of issue. We make no express or implied representations or warranties with respect to the information contained herein.

Registration number:	EATO-00213-V01.01-EN	Drafting rules	PCR-ed4-EN-2021 09 06
Verifier accreditation number:	VH54	Supplemented by	PSR-0005-ed3.1-EN-2023 12 08
Date of issue	09-2024	Information and reference documents	<a href="http://www.pep-ecopassport.org">www.pep-ecopassport.org</a>
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal	X	External	
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019			
The components of the present PEP may not be compared with components from any other program.			
Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"			