

ABB BETON

# **Product Environmental Profile** Environmental Product Declaration





To Document in compliance with ISO 14025: 2010 "Environmental labels and declarations. Type III environmental declarations"

n				
www.abb.com				
REGISTRATION NUMBER REV. LANG. PA				
ABBG-00144-V01.01-EN 1 en 1/11				
	1	1 en		



ABB is committed to continually promoting and embedding sustainability across its operations and value chain, aspiring to become a role model for others to follow. With its ABB Purpose, ABB is focusing on reducing harmful emissions, preserving natural resources and championing ethical and humane behavior.

Scan QR code for more information

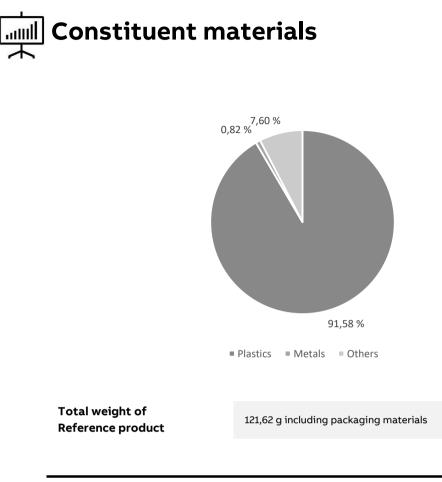




## **General Information**

Reference product	2TKA00004663 - AUB60
Description of the product	Mounting box AUB60 is especially designed for off site and on site casting applications. Box height is 68 mm. Box has two inlets with locking springs for 20 or 25 mm conduits. Additional inlets can be attached to other sides without need of any tooling. The mounting box includes a rotating, steplessly adjustable extension ring. The extension ring can be tilted 0-4°. Box combinations can be created without additional accessories and box has large inside space.
Functional unit	Protect persons during 20 years against direct contact with live parts and allow grouping monitoring, control, and protection devices in a single enclosure or a cabinet having the following dimensions $68 \times 133 \times 98$ (mm) while protecting against the penetration of solid objects and liquids (IP3X) in accordance with the standard IEC 60529.
Other products covered	2TKA00004657 - AUB60H 2TKA00004671 - AUB67 2TKA00004648 - AUB67H
Other products covered	2TKA00004657 - AUB60H 2TKA00004671 - AUB67

© Copyright 2023 ABB. All	Public	ABBG-00144-V01.01-EN	1	en	2/11
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE



Plastics as % of weight		Metals as % of	fweight	Others as % of weight		
Description	Weight-%	Description	Weight-%	Description	Weight-%	
Polypropylene	64,56	Steel	0,64	Carton	7,60	
Polyamide 6 GF25	10,65	Carbon steel	0,18	-	-	
Recycled PP	9,55	-	-	-	-	
Polycarbonate	4,93	-	-	-	-	
LDPE	1,89	-	-	-	-	

Products in this range comply with the RoHS Directive 2011/65/EU (covering 2015/863 (EU)) and national legisation. The plastic materials used in products are also halogen free materials (IEC/61249-2-21) and recyclable. The recycled plastic used in the product is from post-consumer plastic waste, which is collected from Finnish households

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00144-V01.01-EN	1	en	3/11
© Copyright 2023 ABB. All rights rese	rved.				

# $\mathcal{A}_{\underline{s}}$ Additional Environmental Information

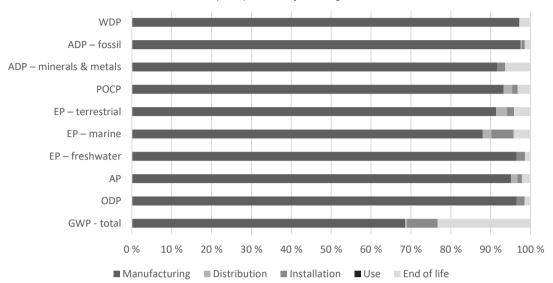
Manufacturing	Manufactured at ISO 14001 certified production site
Distribution	Product distribution optimised by setting up local distribution centres.
Installation	The product does not require special installation procedure and requires little to no energy to install. The disposal of the packaging materials is accounted during the installation phase.
Use	The product does not require special maintanence operations.
End of life	No special end-of-life treatment required. According to countries' practices this product can enter the usual end-of-life treatment process.
Benefits and loads beyond the system boundaries	Net benefits and loads calculated according to PCR ed 4 and formulas given in Annex G of the EN 50693

# Environmental impacts

Reference lifetime	20 years
Product category	Unequipped enclosures and cabinets
Installation elements	No additional elements needed
Use scenario	Non applicable for unequipped enclosures and cabinets
Geographical representativeness	Nordics with emphasis on Sweden
Technological representativeness	The manufactruing processes considered are representative of the products production
Software and database used	Software: SimaPro version 9.4.0.2 Database: ecoinvent 3.8, Industry data 2.0, and ELCD
	-
Energy model used	
Energy model used Manufacturing	Electricity, low voltage {LT}  market for   Cut-off, S
	Electricity, low voltage {LT}  market for   Cut-off, S Electricity, low voltage {SE}  market for   Cut-off, S
Manufacturing	
Manufacturing	
Manufacturing Installation Use	Electricity, low voltage {SE}  market for   Cut-off, S

© Copyright 2023 ABB. All	rights reserved.				· .
Approved	Public	ABBG-00144-V01.01-EN	1	en	4/11
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE

## Common base of mandatory indicators



% Environmental Impact per Life Cycle Stage of Reference Product

### **Environmental impact indicators**

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
GWP-total	kg CO₂ eq.	7,58E-01	5,20E-01	3,38E-03	5,85E-02	0,00E+00	1,77E-01	-3,50E-02
GWP-fossil	kg CO₂ eq.	7,47E-01	5,56E-01	3,38E-03	1,13E-02	0,00E+00	1,77E-01	-3,55E-0
GWP-biogenic	kg CO₂ eq.	9,47E-03	-3,78E-02	-4,49E-07	4,72E-02	0,00E+00	3,50E-05	4,29E-04
GWP-luluc	kg CO₂ eq.	1,78E-03	1,66E-03	0,00E+00	4,05E-05	0,00E+00	7,58E-05	9,98E-06
GWP-fossil = Global GWP-biogenic = Glo GWP-luluc = Global	bal Warming Po	tential bioger	nic	nge				
ODP	kg CFC-11 eq.	3,30E-08	3,19E-08	5,00E-12	6,39E-10	0,00E+00	4,93E-10	-3,91E-10
ODP = Depletion po	otential of the str	atospheric o	zone layer					
AP	H+ eq.	2,65E-03	2,52E-03	4,20E-05	3,00E-05	0,00E+00	5,73E-05	-1,64E-0
AP = Acidification p	otential, Accumu	lated Exceed	lance					
EP-freshwater	kg P eq.	1,26E-04	1,21E-04	1,24E-09	2,61E-06	0,00E+00	1,76E-06	-1,81E-0
EP-marine	kg N eq.	6,24E-04	5,49E-04	1,38E-05	3,43E-05	0,00E+00	2,67E-05	-3,81E-0
EP-terrestrial	mol N eq.	5,70E-03	5,20E-03	1,51E-04	1,06E-04	0,00E+00	2,67E-05 2,35E-04	
EP-terrestrial EP-freshwater = Eu EP-marine = Eutrop EP-terrestrial = Eutr	mol N eq. trophication pot hication potenti	5,70E-03 ential, fractio al, fraction of ntial, Accumu	5,20E-03 on of nutrients re f nutrients reach ulated Exceedance	1,51E-04 eaching freshwat ing marine end c ce	1,06E-04 er end compartr ompartment	0,00E+00 ment	2,35E-04	-3,31E-04
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop	mol N eq. trophication pot hication potenti rophication pote	5,70E-03 ential, fractic al, fraction of	5,20E-03 on of nutrients re f nutrients reach	1,51E-04 eaching freshwat	1,06E-04 er end comparti	0,00E+00 ment		-3,31E-04
EP-terrestrial EP-freshwater = Eu EP-marine = Eutrop EP-terrestrial = Eutr	mol N eq. trophication pot chication potenti rophication pote kg NMVOC eq.	5,70E-03 ential, fraction al, fraction of ntial, Accumu 1,77E-03	5,20E-03 on of nutrients reach ulated Exceedance 1,65E-03	1,51E-04 eaching freshwat ing marine end c ce	1,06E-04 er end compartr ompartment	0,00E+00 ment	2,35E-04	-3,31E-04
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop EP-terrestrial = Eutro POCP	mol N eq. trophication pot chication potenti rophication pote kg NMVOC eq.	5,70E-03 ential, fraction al, fraction of ntial, Accumu 1,77E-03	5,20E-03 on of nutrients reach ulated Exceedance 1,65E-03	1,51E-04 eaching freshwat ing marine end c ce	1,06E-04 er end compartr ompartment	0,00E+00 ment 0,00E+00	2,35E-04	-3,31E-04
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop EP-terrestrial = Eutrop POCP POCP = Formation ADP-minerals &	mol N eq. trophication potenti rophication potenti rophication pote kg NMVOC eq. potential of trop	5,70E-03 ential, fractic al, fraction of ntial, Accumu 1,77E-03 ospheric ozo	5,20E-03 on of nutrients re f nutrients reach ulated Exceedand 1,65E-03 ne	1,51E-04 eaching freshwat ing marine end c ce 3,83E-05	1,06E-04 er end compartr ompartment 2,50E-05	0,00E+00 ment 0,00E+00 0,00E+00	2,35E-04 5,68E-05	-3,31E-04 -1,17E-04 -7,99E-04
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop EP-terrestrial = Eutrop POCP POCP = Formation ADP-minerals & metals	mol N eq. trophication pote- trophication potenti rophication pote- kg NMVOC eq. potential of trop kg Sb eq. MJ tals = Abiotic dep	5,70E-03 ential, fractical, fraction of intial, Accumu 1,77E-03 ospheric ozo 2,51E-06 1,32E+01 poletion poten	5,20E-03 on of nutrients rec f nutrients reach ulated Exceedance 1,65E-03 ne 2,30E-06 1,29E+01 tial for non-fossi	1,51E-04 eaching freshwat ing marine end c ce 3,83E-05 1,30E-10 4,61E-02	1,06E-04 er end compart ompartment 2,50E-05 4,85E-08	0,00E+00 ment 0,00E+00 0,00E+00	2,35E-04 5,68E-05 1,60E-07	-3,31E-04 -1,17E-04 -7,99E-04
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop EP-terrestrial = Eutrop POCP POCP = Formation ADP-minerals & metals ADP-fossil ADP-minerals & met	mol N eq. trophication pote- trophication potenti rophication pote- kg NMVOC eq. potential of trop kg Sb eq. MJ tals = Abiotic dep	5,70E-03 ential, fractical, fraction of intial, Accumu 1,77E-03 ospheric ozo 2,51E-06 1,32E+01 poletion poten	5,20E-03 on of nutrients rec f nutrients reach ulated Exceedance 1,65E-03 ne 2,30E-06 1,29E+01 tial for non-fossi	1,51E-04 eaching freshwat ing marine end c ce 3,83E-05 1,30E-10 4,61E-02	1,06E-04 er end compart ompartment 2,50E-05 4,85E-08	0,00E+00 ment 0,00E+00 0,00E+00 0,00E+00	2,35E-04 5,68E-05 1,60E-07	-3,31E-04 -1,17E-04 -7,99E-04 -9,73E-0
EP-terrestrial EP-freshwater = Eur EP-marine = Eutrop EP-terrestrial = Eutrop POCP POCP = Formation ADP-minerals & metals ADP-fossil ADP-fossil = Abiotic	mol N eq. trophication potenti rophication potenti kg NMVOC eq. potential of trop kg Sb eq. MJ tals = Abiotic dep c depletion for fo m <sup>3</sup> e depr.	5,70E-03 ential, fraction al, fraction of ntial, Accumu 1,77E-03 ospheric ozo 2,51E-06 1,32E+01 oletion poten ssil resources	5,20E-03 on of nutrients reach ulated Exceedance 1,65E-03 ne 2,30E-06 1,29E+01 tial for non-fossi s potential	1,51E-04 eaching freshwat ing marine end c ce 3,83E-05 1,30E-10 4,61E-02 il resources	1,06E-04 er end comparti ompartment 2,50E-05 4,85E-08 9,34E-02	0,00E+00 ment 0,00E+00 0,00E+00 0,00E+00	2,35E-04 5,68E-05 1,60E-07 1,90E-01	-3,31E-04 -1,17E-04 -7,99E-04 -9,73E-02
EP-terrestrial EP-freshwater = Eut EP-marine = Eutrop EP-terrestrial = Eutrop POCP POCP = Formation ADP-minerals & metals ADP-fossil ADP-fossil = Abiotic WDP	mol N eq. trophication potenti rophication potenti rophication potenti kg NMVOC eq. potential of trop kg Sb eq. MJ tals = Abiotic dep c depletion for fo m <sup>3</sup> e depr. vation potential	5,70E-03 ential, fraction al, fraction of ntial, Accumu 1,77E-03 ospheric ozo 2,51E-06 1,32E+01 oletion poten ssil resources	5,20E-03 on of nutrients reach ulated Exceedance 1,65E-03 ne 2,30E-06 1,29E+01 tial for non-fossi s potential	1,51E-04 eaching freshwat ing marine end c ce 3,83E-05 1,30E-10 4,61E-02 il resources	1,06E-04 er end compart ompartment 2,50E-05 4,85E-08 9,34E-02 1,24E-05	0,00E+00 ment 0,00E+00 0,00E+00 0,00E+00	2,35E-04 5,68E-05 1,60E-07 1,90E-01	-3,31E-04 -1,17E-04 -7,99E-08 -9,73E-01

## Common base of mandatory indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
PERE	MJ	1,48E+00	1,40E+00	5,18E-05	1,79E-02	0,00E+00	6,20E-02	-1,39E-02
PERM	MJ	5,66E-01	5,66E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,05E+00	1,97E+00	5,18E-05	1,79E-02	0,00E+00	6,20E-02	-1,39E-02
PENRE	MJ	8,13E+00	7,80E+00	4,61E-02	9,34E-02	0,00E+00	1,90E-01	-9,76E-01
PENRM	MJ	5,07E+00	5,07E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	1,32E+01	1,29E+01	4,61E-02	9,34E-02	0,00E+00	1,90E-01	-9,76E-01

#### Inventory flows indicator – Resource use indicators

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials

PERM = Use of renewable primary energy resources used as raw materials

PERT = Total Use of renewable primary energy resources

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials

PENRM = Use of non-renewable primary energy resources used as raw materials

PENRT = Total Use of non-renewable primary energy resources

## Inventory flows indicator – Indicators describing the use of secondary materials, water, and energy resources

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
SM	kg	2,95E-02	2,95E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m³	4,21E-03	3,82E-03	4,03E-07	5,31E-05	0,00E+00	3,40E-04	2,65E-04

SM = Use of secondary material

RSF = Use of renewable secondary fuels

NRSF = Use of non-renewable secondary fuels

FW = Use of net fresh water

#### Inventory flows indicator - Waste category indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Hazardous waste disposed	kg	7,61E-06	7,32E-06	0,00E+00	1,30E-07	0,00E+00	1,68E-07	-4,61E-07
Non-hazardous waste disposed	kg	8,95E-03	7,80E-03	1,15E-04	5,20E-04	0,00E+00	5,18E-04	1,19E-02
Radioactive waste disposed	kg	3,20E-05	2,92E-05	8,13E-08	4,29E-07	0,00E+00	2,30E-06	6,29E-06

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE		
Approved	Public	ABBG-00144-V01.01-EN	1	en	6/11		
© Copyright 2023 ABB. All rights reserved.							

## Common base of mandatory indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Components for re- use	kg	5,10E-04	0,00E+00	0,00E+00	5,10E-04	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	3,85E-02	0,00E+00	0,00E+00	1,11E-02	0,00E+00	2,74E-02	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	1,02E+00	0,00E+00	0,00E+00	1,74E-01	0,00E+00	8,49E-01	0,00E+00

## Inventory flows indicator – Output flow indicators

#### Inventory flow indicator – other indicators

Indicator	Unit	Total
Biogenic carbon content of the product	kg of C	0,00E+00
Biogenic carbon content of the associated packaging	kg of C	1,80E-02

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE		
Approved	Public	ABBG-00144-V01.01-EN	1	en	7/11		
© Copyright 2023 ABB. All rights reserved.							

## **Optional indicators**

## **Environmental indicators**

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
Total use of primary energy during the life cycle	МЈ	1,52E+01	1,48E+01	4,62E-02	1,11E-01	0,00E+00	2,52E-01	-9,90E-01
Emissions of fine particles	inci- dence of dis- eases	2,35E-08	2,25E-08	2,70E-10	3,36E-10	0,00E+00	4,06E-10	-2,16E-09
Ionizing radiation, human health	kBq U235 eq.	1,09E-01	9,67E-02	7,95E-06	1,59E-03	0,00E+00	1,03E-02	-2,36E-05
Ecotoxicity (fresh water)	CTUe	4,79E+00	4,14E+00	2,23E-03	1,43E-01	0,00E+00	5,00E-01	2,65E-02
Human toxicity, car- cinogenic effects	CTUh	3,44E-10	2,90E-10	5,73E-14	6,80E-12	0,00E+00	4,72E-11	-1,94E-11
Human toxicity, non- carcinogenic effects	CTUh	4,67E-09	3,71E-09	1,43E-12	1,54E-10	0,00E+00	8,03E-10	-2,74E-11
Impact related to land use/soil quality		5,70E+00	5,59E+00	0,00E+00	5,12E-02	0,00E+00	5,80E-02	-2,33E-02

## Other indicators

Indicator	Unit	Total	Manu- facturing	Distri- bution	Instal- lation	Use	End of life	Bene- fits
No Other indicators used								

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE		
Approved	Public	ABBG-00144-V01.01-EN	1	en	8/11		
© Copyright 2023 ABB. All rights reserved.							

For other products than the Reference product covered by this PEP, the environmental impacts for each phase of the lifecycle are obtained by multiplying the values of the Reference product by the following coefficients:

\* The manufacturing stages coefficient values take into account the different manufacturing location of the products, which for the three products listed below is ABB WA's factory in Porvoo, Finland

AUB67 AUB60H AUB67H -	1,23 1,13 1,41	1,66 1,11 2,03	1,70 1,17	1,00 1,00	1,65 1,09	2,27
AUB67H	1,41			1,00	1.09	
		2,03			,	1,15
-	-		2,46	1,00	1,86	2,77
_		-	-	-	-	-
	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
_	-	-	-	-	-	_
_	_	-	-	-	-	_
-	-	-	-	-	-	_
-	-	-	-	-	-	_
_	-	-	-	-	-	_
-	-	-	-	-	-	_
-	-	-	-	-	-	-
ATUS	SECURITY LEV	'EL	REGISTRATION NU	MBER	REV. LANG.	PAGE

PORT

Registration number:	Drafting Rules: PCR-ed4-EN-2021 09 06				
ABBG-00144-V01.01-EN	Supplemented by: PSR-0005-ed2-EN-2016 03 29				
Verifier accreditation number:	Information and reference documents:				
VH32	www.pep-ecopassport.org				
Date of issue: 05-2023	Validity period: 5 years				
Independent verification of the declaration and data, in compliance with ISO 14025: 2010					

External

۲

0

from any other program.

The PCR review was conducted by a panel of experts chaired by Julie Orgelet

The components of the present PEP may not be compared with components

Document in compliance with ISO 14025: 2006 "Environmental labels and

PEPs are compliant with XP C08-100-1:2016 or EN 50693:2019

declarations. Type III environmental declarations"

Internal

(DDemain)

Approved	Public	ABBG-00144-V01.01-EN	1	en	10/11
STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE

## Environmental Impact Indicator Glossary

## Impact indicators

Indicator	Description	Unit
Global warming potential (GWP) - total	Indicator of potential global warming caused by emissions to air contributing to the greenhouse effect. The total global warming potential (GWP-total) is the sum of three sub-categories of climate change. GWP-total = GWP-fossil + GWP-biogenic + GWP- land use and land use change	kg CO₂ eq.
Ozone depletion (ODP)	Emissions to air that contribute to the destruction of the stratospheric ozone layer	kg CFC-11 eq.
Acidification of soil and water (A)	Acidification of soils and water caused by the release of certain gases to the atmosphere, such as nitrogen oxides and sulphur oxides	H+ eq.
Eutrophication (E)	Indicator of the contribution to eutrophication of water by the enrichment of the aquatic ecosystem with nutritional elements, e.g. industrial or domestic effluents, agriculture, etc. This indicator is divided to three: freshwater, marine and terrestrial.	kg P eq., kg N eq., mole N eq.
Photochemical ozone creation (POCP)	Indicator of emissions of gases that affect the creation of photochemical ozone in the lower atmosphere (smog) because of the rays of the sun.	kg NMVOC eq.
Depletion of abiotic resources – elements (ADPe)	Indicator of the depletion of natural non-fossil resources	kg Sb eq.
Depletion of abiotic resources – fossil fuels (ADPf)	The use of non-renewable fossil resources in an unsustainable way (e.g. from material to waste)	MJ (lower heating value)
Water Deprivation potential (WDP)	Deprivation-weighted water consumption. Assesses the potential of water deprivation, to either humans or ecosystems, building on the assumption that the less water remaining available per area, the more likely another user will be deprived.	m³ e depr.

#### **Resource use indicators**

Indicator	Description	Unit
Total use of primary energy	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) + Total use of renewable primary energy re-sources (primary energy and primary energy resources used as raw materials)	MJ (lower heating value)

STATUS	SECURITY LEVEL	REGISTRATION NUMBER	REV.	LANG.	PAGE
Approved	Public	ABBG-00144-V01.01-EN	1	en	11/11
© Copyright 2023 ABB. All righ	nts reserved.				