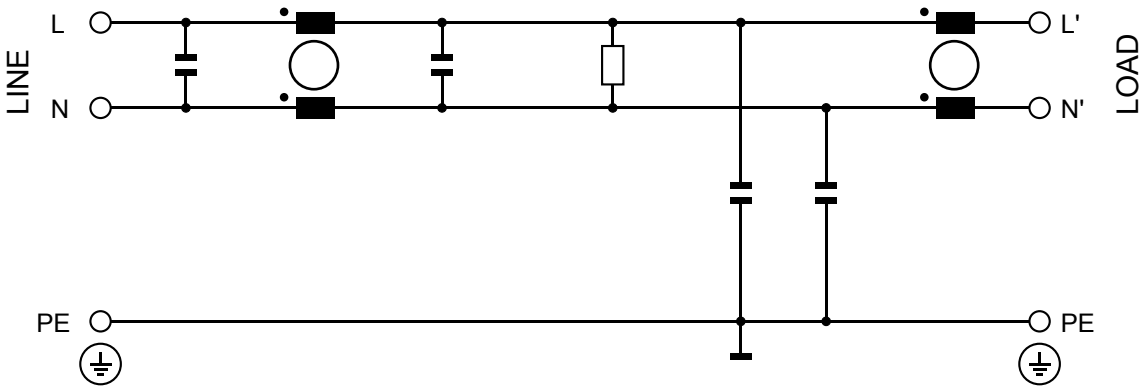
EMI filter for power electronics and converters



Tolerances L: +50 % -30 % C: +20 % -20 % R: +10 % -10 %

Designation:	FS43956-26-07-LL
Part Number:	823445
Customer's Designation:	AX-FIC1026-SE-LL

Document Number:	1077123	B
Created:	LUTSNO	2023-01-27
Checked:	LUTFVA	2023-02-01
Released:	LUTLUR	2023-02-02

We reserve all rights in this document and in the information contained therein. Passing on and/or copying of this document, use and/or communication of its content is not permitted without authorization of Schaffner. © **Copyright Schaffner. All rights reserved.**

Revision History

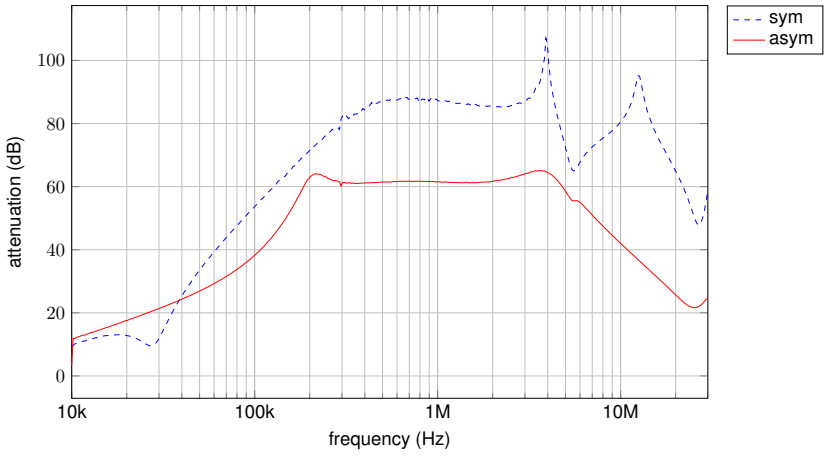
B	2023-02-02	LUTLUR	Label update	(Change Number: 20009375)
A	2023-01-24	LUTLUR	initial version	

Electrical

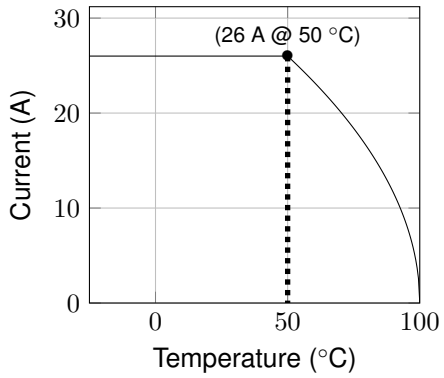
Rated Current (I_{th}):	26 A	@ 50 °C amb. Temperature
Rated Current (I_{th1}):	28.5 A	@ 40 °C amb. Temperature
Nominal Operating Voltage:	230 +/- 10% VAC	
Rated Operating Voltage:	250 VAC	
Max. Operating Frequency:	60 Hz	
Leakage Current (IEC60939-3):	2.59 mA	@ Rated Voltage and 50 Hz
Production Line Test Voltage:	2.25 kVDC*	for 2 s (L to PE)
	1.1 kVDC*	for 2 s (L to N)
	(* Repetition with max. 80 % of the specified values)	
Overvoltage Category (IEC60664-1):	III	
Max. DC Resistance @ 25 °C:	11 mOhm	L - L'

Typical Insertion Loss

Per CISPR 17 (50 Ω / 50 Ω)



Current Derating



$$I = I_N \cdot \sqrt{\frac{\Theta_{max} - \Theta_{act}}{\Theta_{max} - \Theta_N}}$$

for $\Theta_{act} > \Theta_N$ and $\Theta_{act} < \Theta_{max}$

I_N	rated current at Θ_N
Θ_{act}	actual ambient temperature
Θ_N	temperature at which the rated current is defined
Θ_{max}	rated maximum temperature of the component

Environmental & Reliability

Operating Ambient Temp. Range:	-25 °C to 100 °C
Cooling:	AN
Pollution Degree (IEC60664-1):	3
Climatic Class (IEC60068-1):	25/100/21

Standards, Certifications and Compliances

Design Standard	Certification
UL 60939-3	
IEC 60939-3	
UL 61800-5-1	
IEC 61800-5-1	
CSA C22.2 NO. 274	

Product Compliances
Low voltage directive 2014/35/EU
The Electrical Equipment (Safety) Regulations S.I. 2016/1101

Material Compliances
ROHS 2011/65/EU, 2015/863/EU

Mechanical

Line:	see comment		
Load:	(-07) Lace Ferrule	Type:	See Mechanical Drawing
PE:	Thread M5	Torque (Nm):	2.0-2.2
Net Weight:	1.1 kg		
IP Class (IEC60529-1):	20		

Comment to Line Terminal

Type: DG138T-10.16-02P-14-00AH
Torque (Nm): 1.2
Flex Wire (AWG): 20 - 6
Flex Wire (mm2): 0.5 - 16

Annexes

Annex 1

Description:	Mechanical Drawing
Document Number:	1039119

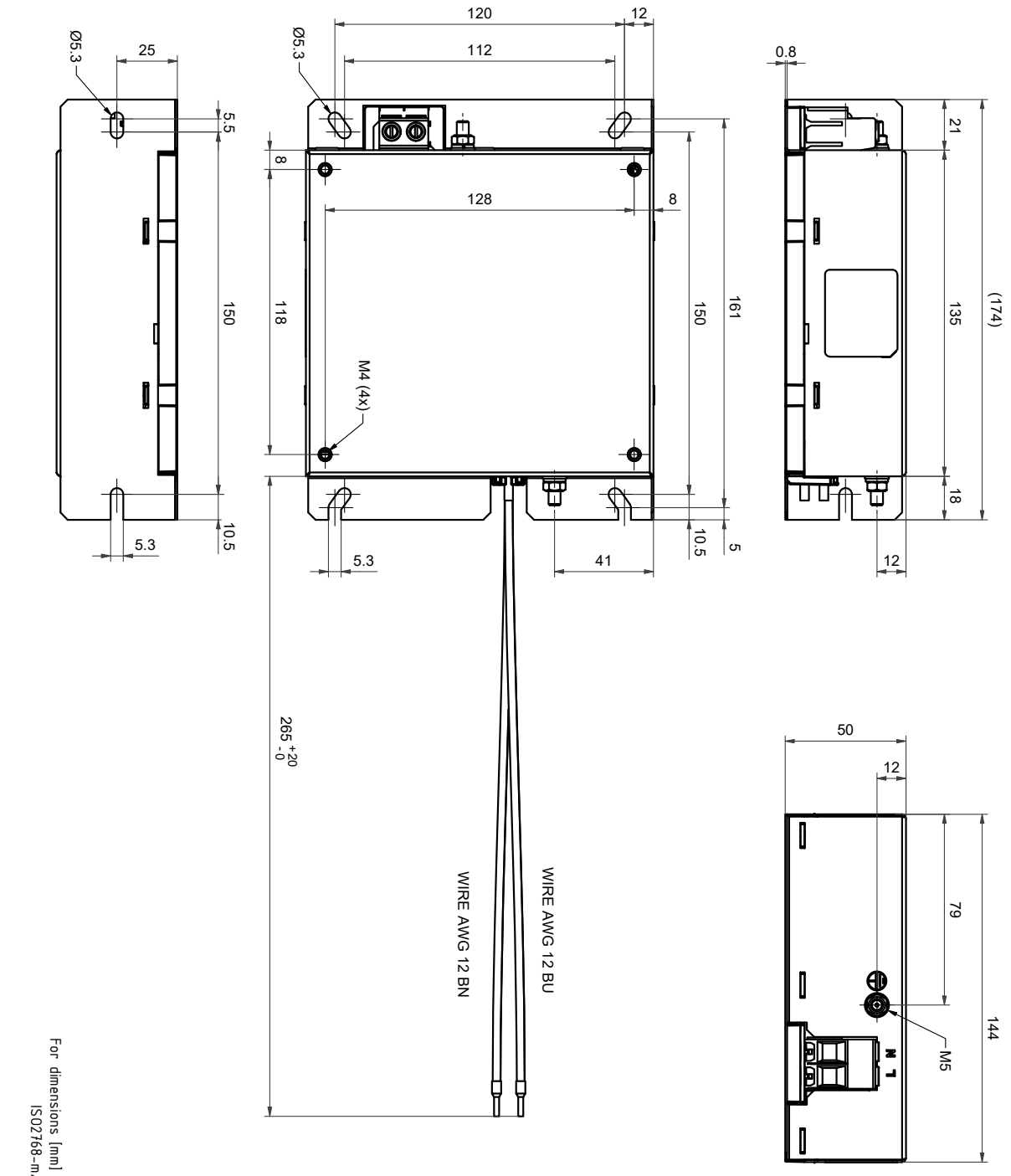
Annex 2

Description:	Product Label
Document Number:	1079061

Annex 3

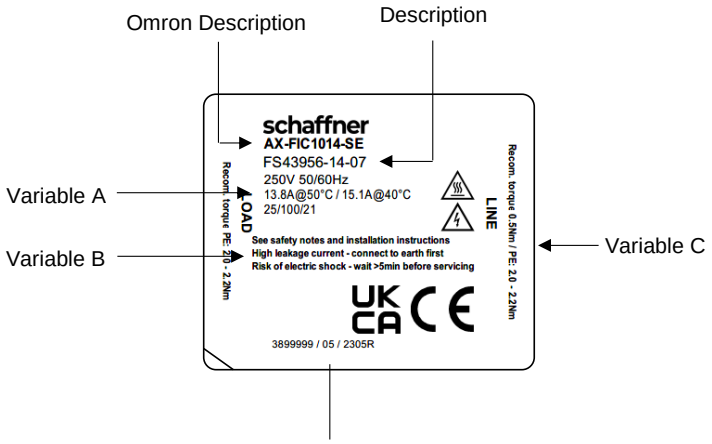
Description:	Packaging Label
Document Number:	1079069

Annex 1 - Mechanical Drawing



For dimensions [mm] without tolerances:
ISO2768-m/EN22768-m applies
1039119 B

Annex 2 - Product Label



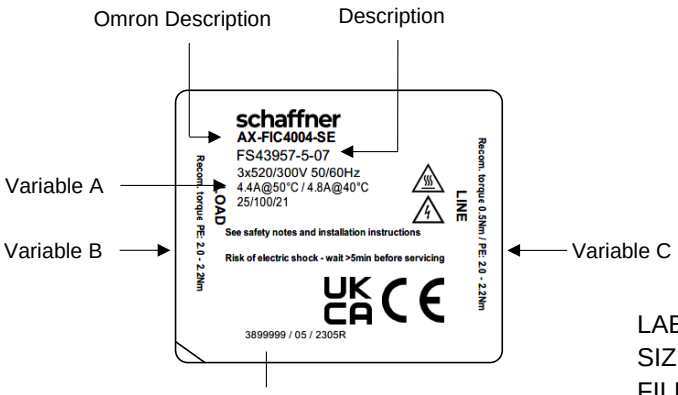
Mat.	Description	Omron Description	Variable A	Variable B	Variable C
823440	FS43956-14-07	AX-FIC1014-SE	13.8A@50°C / 15.1A@40°C	x	0.5Nm / PE: 2.0 - 2.2Nm
823442	FS43956-20-07	AX-FIC1021-SE	20.2A@50°C / 22.1A@40°C	x	0.5Nm / PE: 2.0 - 2.2Nm
823444	FS43956-26-07	AX-FIC1026-SE	26A@50°C / 28.5A@40°C	x	1.2Nm / PE: 2.0 - 2.2Nm
823446	FS43956-45-07	AX-FIC1045-SE	45.4A@50°C / 49.7A@40°C	x	1.5 - 1.8Nm / PE: 2.0 - 2.2Nm
823441	FS43956-14-07-LL	AX-FIC1014-SE-LL	13.8A@50°C / 15.1A@40°C		0.5Nm / PE: 2.0 - 2.2Nm
823443	FS43956-20-07-LL	AX-FIC1021-SE-LL	20.2A@50°C / 22.1A@40°C		0.5Nm / PE: 2.0 - 2.2Nm
823445	FS43956-26-07-LL	AX-FIC1026-SE-LL	26A@50°C / 28.5A@40°C		1.2Nm / PE: 2.0 - 2.2Nm
823447	FS43956-45-07-LL	AX-FIC1045-SE-LL	45.4A@50°C / 49.7A@40°C		1.5 - 1.8Nm / PE: 2.0 - 2.2Nm

Label printout directly from ZO11N based on the settings from Classification in SAP!
Packing labels are also printed directly from ZO11N!

Note: Production place
05 for Thailand
88 for China

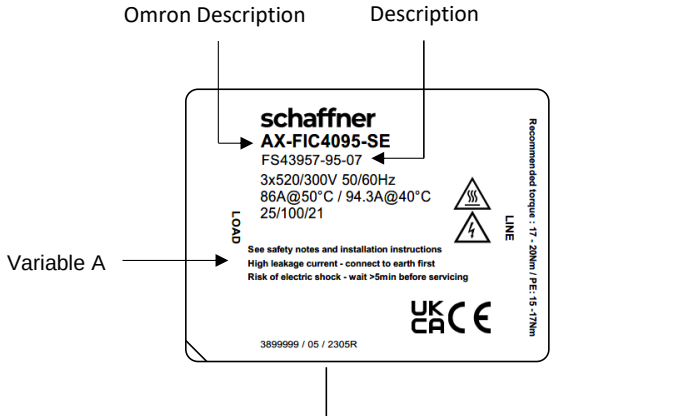
LABEL: 202154
SIZE: 36x30mm
FILE: L-202154-24

			no scale	A4	created	30.01.2023	LUTMST
					checked	30.01.2023	LUTLUR
B	20009375,Update Test Plan and Label	30.01.2023			released	30.01.2023	LUTLUR
A	New with CE and UKCA	21.12.2022	scale	format	status	date	user
A1	New with CE and UKCA	28.11.2022	LABEL				
A0		10.10.2022	doc. description				
rev.	change no. / change description	date					
schaffner			several	FS43956 / FS43957-SERIES			
			mat. number	project			
We reserve all rights in this document and in the information contained therein. Passing on and/or copying of this document, use and/or communication of its content is not permitted without authorization of Schaffner.			LAB	1079061	B	1 / 2	
Template: 02-31777 A		schaffner.com	doc. type	doc. number	doc. rev.	page	



LABEL: 202154
SIZE: 36x30mm
FILE: L-202154-24

Material	Description	Omron Description	Variable A	Variable B	Variable C
823448	FS43957-5-07	AX-FIC4004-SE	4.4A@50°C / 4.8A@40°C	PE: 2.0 - 2.2Nm	0.5Nm / PE: 2.0 - 2.2Nm
823450	FS43957-11-07	AX-FIC4011-SE	10.3A@50°C / 11.3A@40°C	PE: 2.0 - 2.2Nm	0.5Nm / PE: 2.0 - 2.2Nm
823452	FS43957-17-07	AX-FIC4017-SE	15.3A@50°C / 16.8A@40°C	PE: 2.0 - 2.2Nm	1.2Nm / PE: 2.0 - 2.2Nm
823454	FS43957-44-07	AX-FIC4044-SE	40A@50°C / 43.8A@40°C	PE: 2.0 - 2.2Nm	1.5 - 1.8Nm / PE: 2.0 - 2.2Nm
823456	FS43957-61-07	AX-FIC4061-SE	55.3A@50°C / 60.6A@40°C		2.0 - 2.3Nm / PE: 3.5 - 4.0Nm
823449	FS43957-5-07-LL	AX-FIC4004-SE-LL	4.4A@50°C / 4.8A@40°C	PE: 2.0 - 2.2Nm	0.5Nm / PE: 2.0 - 2.2Nm
823451	FS43957-11-07-LL	AX-FIC4011-SE-LL	10.3A@50°C / 11.3A@40°C	PE: 2.0 - 2.2Nm	0.5Nm / PE: 2.0 - 2.2Nm
823453	FS43957-17-07-LL	AX-FIC4017-SE-LL	15.3A@50°C / 16.8A@40°C	PE: 2.0 - 2.2Nm	1.2Nm / PE: 2.0 - 2.2Nm
823455	FS43957-44-07-LL	AX-FIC4044-SE-LL	40A@50°C / 43.8A@40°C	PE: 2.0 - 2.2Nm	1.5 - 1.8Nm / PE: 2.0 - 2.2Nm
823457	FS43957-61-07-LL	AX-FIC4061-SE-LL	55.3A@50°C / 60.6A@40°C		2.0 - 2.3Nm / PE: 3.5 - 4.0Nm

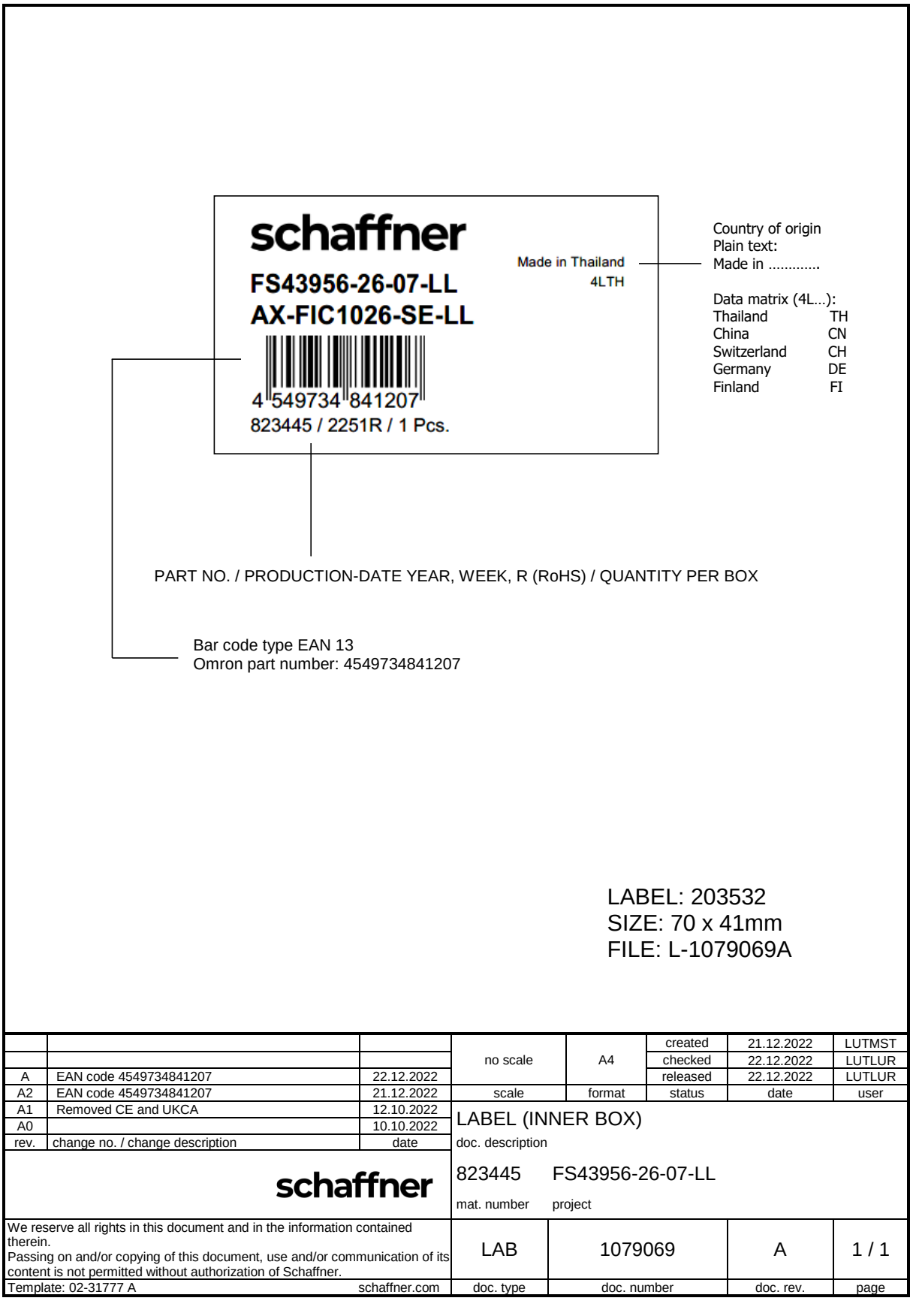


LABEL: 202466
SIZE: 60x45mm
FILE: L-202466-39

Material	Description	Omron Description	Variable A
823458	FS43957-95-07	AX-FIC4095-SE	X
823459	FS43957-95-07-LL	AX-FIC4095-SE-LL	

LAB	1079061	B	2 / 2

Annex 3 - Packaging Label



			no scale	A4	created	21.12.2022	LUTMST
					checked	22.12.2022	LUTLUR
A	EAN code 4549734841207	22.12.2022			released	22.12.2022	LUTLUR
A2	EAN code 4549734841207	21.12.2022	scale	format	status	date	user
A1	Removed CE and UKCA	12.10.2022	LABEL (INNER BOX)				
A0		10.10.2022	doc. description				
rev.	change no. / change description	date	823445 FS43956-26-07-LL				
	schaffner		mat. number project				

We reserve all rights in this document and in the information contained therein.
Passing on and/or copying of this document, use and/or communication of its content is not permitted without authorization of Schaffner.

LAB	1079069	A	1 / 1
doc. type	doc. number	doc. rev.	page

Template: 02-31777 A schaffner.com

Disclaimer

1. Product suitability for a given application must ultimately be determined by the user (the party that is putting the product into operation) on a case by case basis. Product functionality and suitability must be determined with proper verification within the final application. Neither Schaffner nor its subsidiaries will assume liability for any consequential downtimes or damages resulting from use of products outside their specifications or due to incomplete verification in application.

2. Do not attempt to install, operate, maintain or inspect any product until you have read and understood the related safety notes and installation guidelines delivered with the product. If not available, general safety and installation notes are available on Schaffner Website: www.schaffner.com.
Non-qualified persons are not allowed to install or maintain Schaffner products!

3. The user is responsible to observe compliance with all local installation and electrical regulations.

4. All products must have their safety earth connected using properly dimensioned connectors. It is recommended to avoid chaining safety earth of multiple equipment together.

5. Warnings, cautions and notes as displayed on the product label must be observed at all times.

6. Overcurrent or overvoltage applied to products or resulting from an improper setup (i.e. resonances) may cause substantial damages, represent a fire hazards and lead to body injury or death.

7. Unless specifically indicated in datasheet, products do not contain any protection components. Suitable overcurrent and overvoltage protection circuits must be placed upstream of the product to avoid any consequential damage in case of any system malfunction.

8. Products with capacitive elements can have significant amount of stored energy. If misused or mishandled it could lead to body harm, damage and eventually fire hazard.

9. Products have limited lifetime and are subject to ageing effects heavily depending on operating conditions and environment. Schaffner recommends to regularly check any inbuilt capacitance to ensure constant performance and considering replacement after 12 years from initial commissioning unless otherwise indicated. Even when properly operated as in specifications, it is not possible to rule out single malfunctioning or failures of components happening before the usual lifetime.
User is responsible to evaluate the environment in the application and eventually perform preventive maintenance before the above recommendation. User shall also evaluate risk of possible failures and implement proper containment actions to avoid damage or injury.

10. Schaffner reserves the right to change raw materials used in this product during its life cycle on the companys own discretion, mainly for the purpose of managing and maintaining a capable international supplier base and for ensuring prompt product availability at all times. All changes having no impact on form, fit, function and technical specifications according to company internal evaluation will be carried out without notification.
Stricter change management process can be implemented on request.