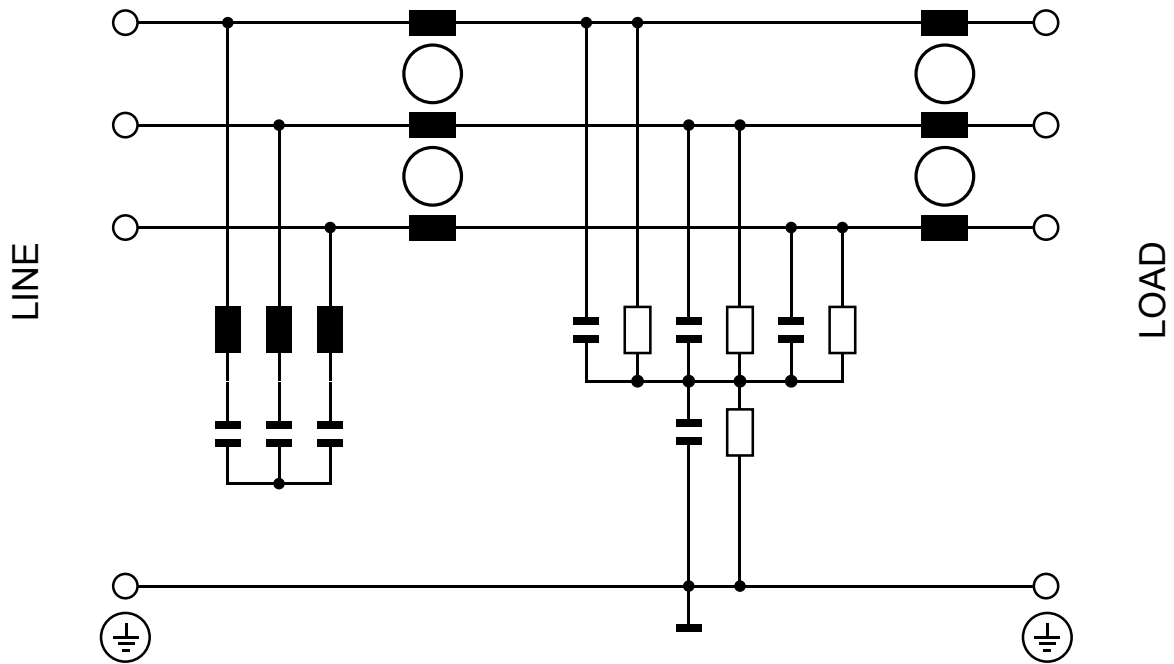


**Low leakage EMI filter for power electronics and converters**



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

Designation:	FS42753-25-33
Part Number:	822100
Customer's Part No.:	10108125

Document Number:	1041957	A
Created:	LUTSNO	2020-10-09
Checked:	LUTLUR	2020-10-09
Released:	LUTLUR	2020-10-09

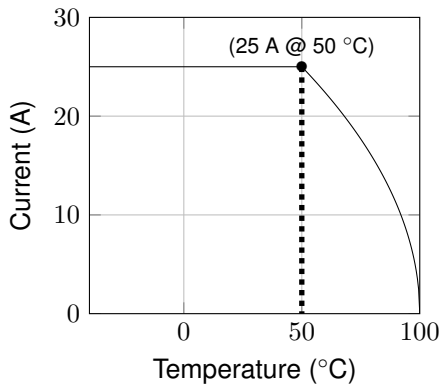
## Revision History

A	2020-10-09	LUTLUR	initial version
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## Electrical

Rated Current ( $I_{th}$ ):	25 A	@ 50 °C amb. Temperature
Nominal Operating Voltage:	480/277 +/- 10% VAC	
Rated Operating Voltage:	530/305 VAC	
Max. Operating Frequency:	60 Hz	
Leakage Current (IEC60939-3):	2.5 mA	@ Rated Voltage and 50 Hz
Leakage Current Worst Case:	116mA @ Rated Voltage and 50Hz	
Production Line Test Voltage:	2.28 kVDC*	for 2 s (L to L)
	2.26 kVDC*	for 2 s (L/L to PE)
(* Repetition with max. 80 % of the specified values)		
Overvoltage Category (IEC60664-1):	II	
Typ. Power Dissipation:	17.8 W	
Max. DC Resistance @ 25 °C:	9.5 mOhm	L - L'

## 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  $\Theta_N$   
 $\Theta_{act}$     actual ambient temperature  
 $\Theta_N$       temperature at which the rated current is defined  
 $\Theta_{max}$     rated maximum temperature of the component

## Environmental & Reliability

Operating Ambient Temp. Range:	-40 °C to 100 °C
Storage Temp. Range:	-40 °C to 100 °C
Cooling:	AN
Pollution Degree (IEC60664-1):	2
Climatic Class (IEC60068-1):	40/100/21

## Standards, Certifications and Compliances

Design Standard	Certification
UL 60939-3	E493879
IEC 60939-3	SE-ENEC-0037-71

### Material Compliances

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

## Mechanical

Line:	(-33) STB 10	Type:	Safety terminal block
		Torque (Nm):	1.5-1.8
		Flex Wire (AWG):	22-6
		Solid Wire (mm <sup>2</sup> ):	0.5-16
		Flex Wire (mm <sup>2</sup> ):	0.5-10
Load:	(-33) STB 10	Type:	Safety terminal block
		Torque (Nm):	1.5-1.8
		Flex Wire (AWG):	22-6
		Solid Wire (mm <sup>2</sup> ):	0.5-16
		Flex Wire (mm <sup>2</sup> ):	0.5-10
PE:	Thread M5	Torque (Nm):	2.0-2.2
Net Weight:	1.2 kg		
IP Class (IEC60529-1):	20		

### Annex 1

Description:	Mechanical Drawing
Document Number:	1004984

### Annex 2

Description:	Cross Reference Dimensions FS42753 series
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## Marking

### Annex 3

Description:	Product Label
Document Number:	1040970

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#### Annex 4

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Description:	Packaging Label
Document Number:	1043797

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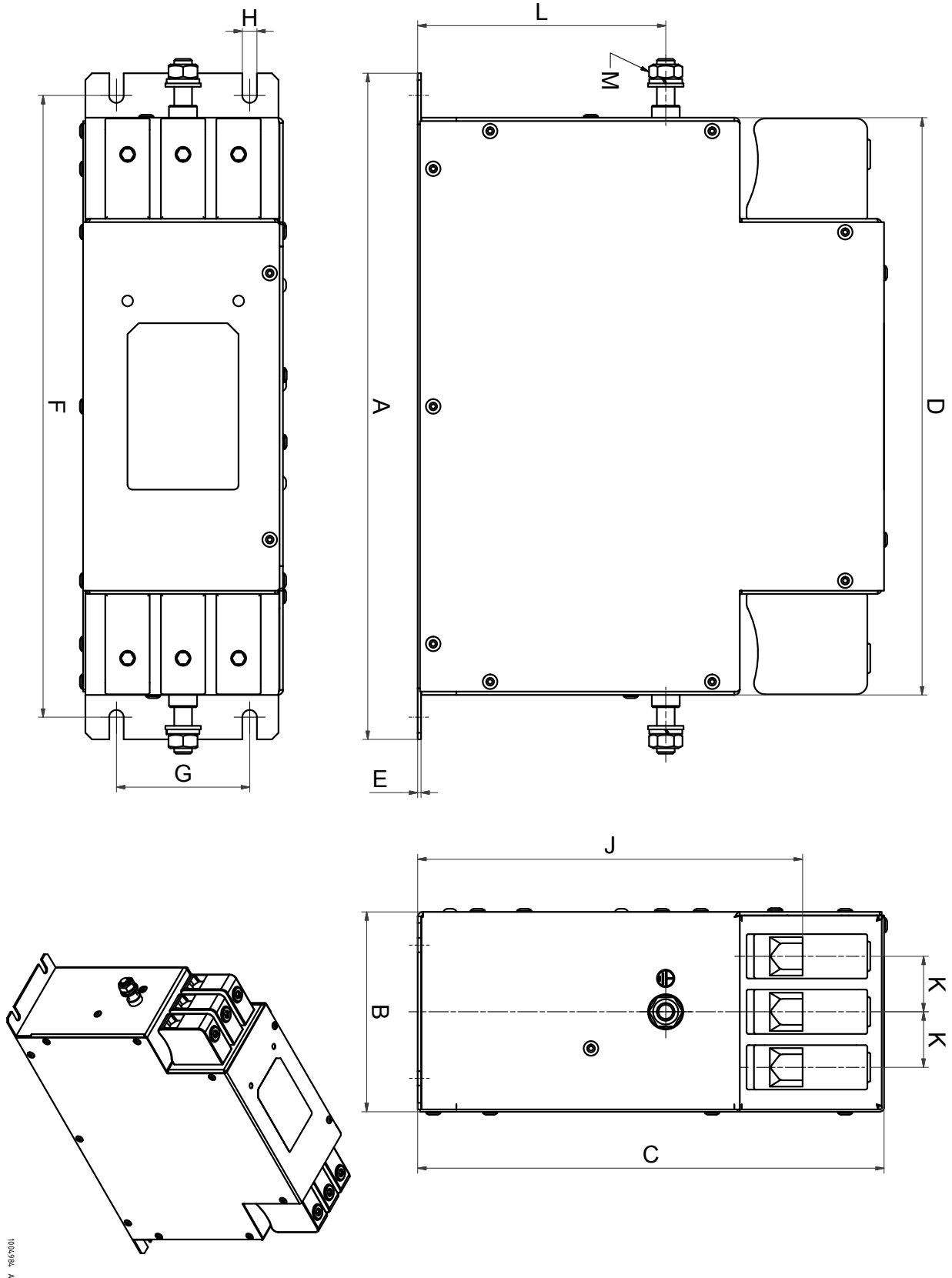
#### Annex 5

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Description:	Box Label
Document Number:	1043794

---

Annex 1



## Annex 2

## Dimensions FS42753 series

FS42753-10-44

A	B	C	D	E	F	G	H	J±2	K	L±1	M
185	40	120	157	0.8	175	20	4.5	102	11	76	M5

FS42753-16-44

A	B	C	D	E	F	G	H	J±2	K	L±1	M
195	45	140	164	0.8	180	25	5.4	122	11	93	M5

FS42753-20-33

FS42753-25-33

A	B	C	D	E	F	G	H	J±2	K	L±1	M
210	45	145	174	0.8	195	25	5.4	126	13	96	M5

FS42753-40-33

A	B	C	D	E	F	G	H	J±2	K	L±1	M
235	50	168	207	1	220	30	5.4	149	13	115	M6

FS42753-50-53

FS42753-63-53

A	B	C	D	E	F	G	H	J±2	K	L±1	M
255	65	180	226	1	240	45	5.4	156	16	120	M6

FS42753-80-34

A	B	C	D	E	F	G	H	J±2	K	L±1	M
290	80	205	250	1.2	270	50	6.5	172	22	110	M6

FS42753-83-35

FS42753-115-35

A	B	C	D	E	F	G	H	J±2	K	L±1	M
300	90	210	260	1.5	280	60	6.5	173	25	112	M8

**Annex 3**

**QR CODE**  
Example: FS42753-10-44 822097 10108121

WORK ORDER / PRODUCTION PLACE / DATA CODE YYWW ROHS

Material	Description	Customer number	Variable A	Variable B	Variable C
822097	FS42753-10-44	10108121	3x530/305V 50/60Hz	10A@50°C 40/100/21	1.0 - 1.2Nm / PE: 2.0 - 2.2Nm
822098	FS42753-16-44	10108123	3x530/305V 50/60Hz	16A@50°C 40/100/21	1.0 - 1.2Nm / PE: 2.0 - 2.2Nm
822099	FS42753-20-33	10108124	3x530/305V 50/60Hz	20A@50°C 40/100/21	1.5 - 1.8Nm / PE: 2.0 - 2.2Nm
822100	FS42753-25-33	10108125	3x530/305V 50/60Hz	25A@50°C 40/100/21	1.5 - 1.8Nm / PE: 2.0 - 2.2Nm
822101	FS42753-40-33	10108126	3x530/305V 50/60Hz	40A@50°C 40/100/21	1.5 - 1.8Nm / PE: 3.5 - 4.0Nm


**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  
06 for Hungary  
88 for China

LABEL: 251333  
SIZE: 46x30mm  
FILE: 1040970A

					created	08.10.2020	LUTEJE	
A	Add approvals	08.10.2020	no scale	A4	checked	08.10.2020	LUTLUR	
A3	Add approvals	08.10.2020			released	08.10.2020	LUTLUR	
A2	Add new product	31.08.2020	scale	format	status	date	user	
A1	Change size line load	11.08.2020	<b>LABEL</b>					
A0		16.07.2020						
rev.	change no. / change description	date	doc. description					
<b>SCHAFFNER</b>			several	FS42753-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.								
Template: SPC 159332 / A			<b>LAB</b>	1040970	A	1 / 1		
www.schaffner.com			doc. type	doc. number	doc. rev.	page		

Annex 4



**SCHAFFNER**  
Made in Thailand  
4LTH

\*10108125\*

\*FS42753-25-33\*

**FS42753-25-33**  
822100 / 2036R / 1 Pcs.

Country of origin  
Plain text:  
Made in .....

Data matrix (4L...):  
Thailand TH  
Hungary HU  
China CN  
Switzerland CH  
Germany DE  
Finland FI

ARTIKELNUMMER / PRODUKTIONSDATUM JAHR, WOCHE, R (RoHS) / ANZAHL BOX  
PART NO. / PRODUCTION-DATE YEAR, WEEK, R (RoHS) / QUANTITY PER BOX

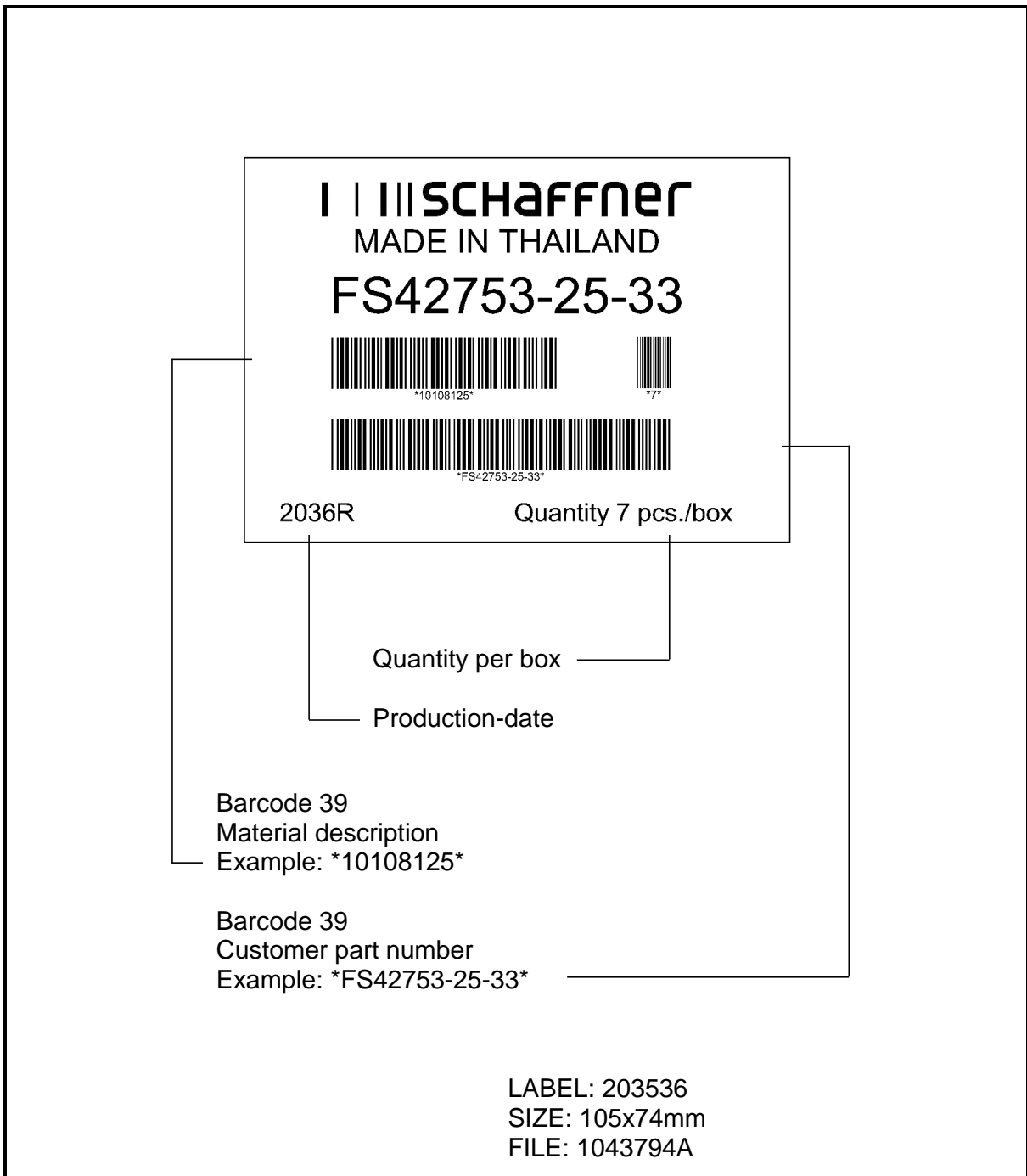
Barcode 39  
Material description  
Example: \*10108125\*

Barcode 39  
Customer part number  
Example: \*FS42753-25-33\*

LABEL: 203532  
SIZE: 70 x 41mm  
FILE: 1043797A

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					checked	04.09.2020	LUTLUR	
					released	08.10.2020	LUTLUR	
			scale	format	status	date	user	
A		08.10.2020	LABEL (INNER BOX)					
A0		02.09.2020						
rev.	change no. / change description	date	doc. description					
<b>SCHAFFNER</b>			822100	FS42753-25-33				
			mat. number	project				
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Template: SPC 159332 / A			www.schaffner.com	doc. type	doc. number	doc. rev.	page	

Annex 5



LABEL: 203536  
 SIZE: 105x74mm  
 FILE: 1043794A

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					checked	04.09.2020	LUTLUR
					released	08.10.2020	LUTLUR
			scale	format	status	date	user
A		08.10.2020	LABEL BOX				
A0		02.09.2020	doc. description				
rev.	change no. / change description	date	822100	FS42753-25-33			
			mat. number	project			
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Template: SPC 159332 / A			www.schaffner.com	doc. type	doc. number	doc. rev.	page

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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](http://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.