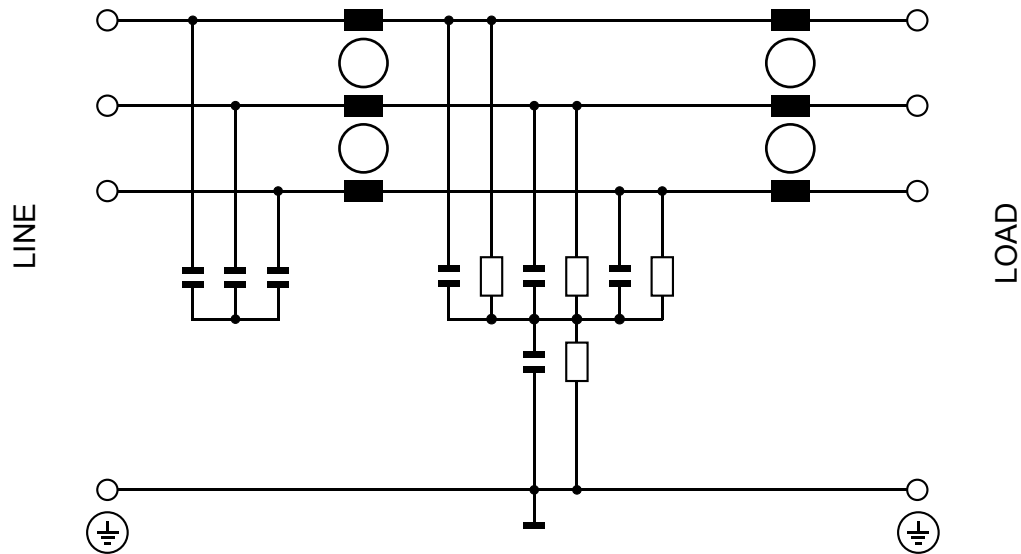


Low leakage EMI filter for power electronics and converters



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

Designation: FS42753-10-44

Part Number: 822097

Customer's Part No.: 10108121

Document Number: 1040874 A

Created: LUTSNO 2020-10-08

Checked: LUTLUR 2020-10-09

Released: LUTLUR 2020-10-09

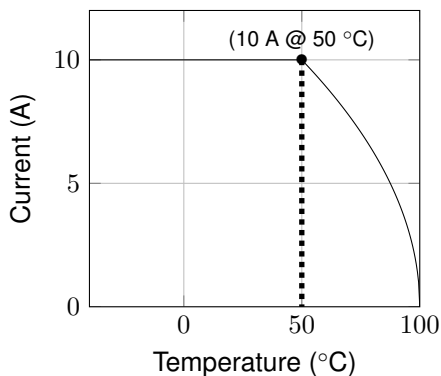
Revision History

| | | | |
|---|------------|--------|-----------------|
| A | 2020-10-09 | LUTLUR | initial version |
|---|------------|--------|-----------------|

Electrical

| | | |
|---|--------------------------------|---------------------------|
| Rated Current (I_{th}): | 10 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: | 112mA @ 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: | 7.1 W | |
| Max. DC Resistance @ 25 °C: | 23.7 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 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: | -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: | (-44) STB 6 | Type: | Safety terminal block |
| | | Torque (Nm): | 1.0-1.2 |
| | | Flex Wire (AWG): | 20-8 |
| | | Solid Wire (mm ²): | 0.5-10 |
| | | Flex Wire (mm ²): | 0.5-6 |
| Load: | (-44) STB 6 | Type: | Safety terminal block |
| | | Torque (Nm): | 1.0-1.2 |
| | | Flex Wire (AWG): | 20-8 |
| | | Solid Wire (mm ²): | 0.5-10 |
| | | Flex Wire (mm ²): | 0.5-6 |
| PE: | Thread M5 | Torque (Nm): | 2.0-2.2 |
| Net Weight: | 0.76 kg | | |
| IP Class (IEC60529-1): | 20 | | |

Annex 1

| | |
|------------------|--------------------|
| Description: | Mechanical Drawing |
| Document Number: | 1004984 |

Annex 2

| | |
|--------------|---|
| Description: | Cross Reference Dimensions FS42753 series |
|--------------|---|

Marking

Annex 3

| | |
|------------------|---------------|
| Description: | Product Label |
| Document Number: | 1040970 |

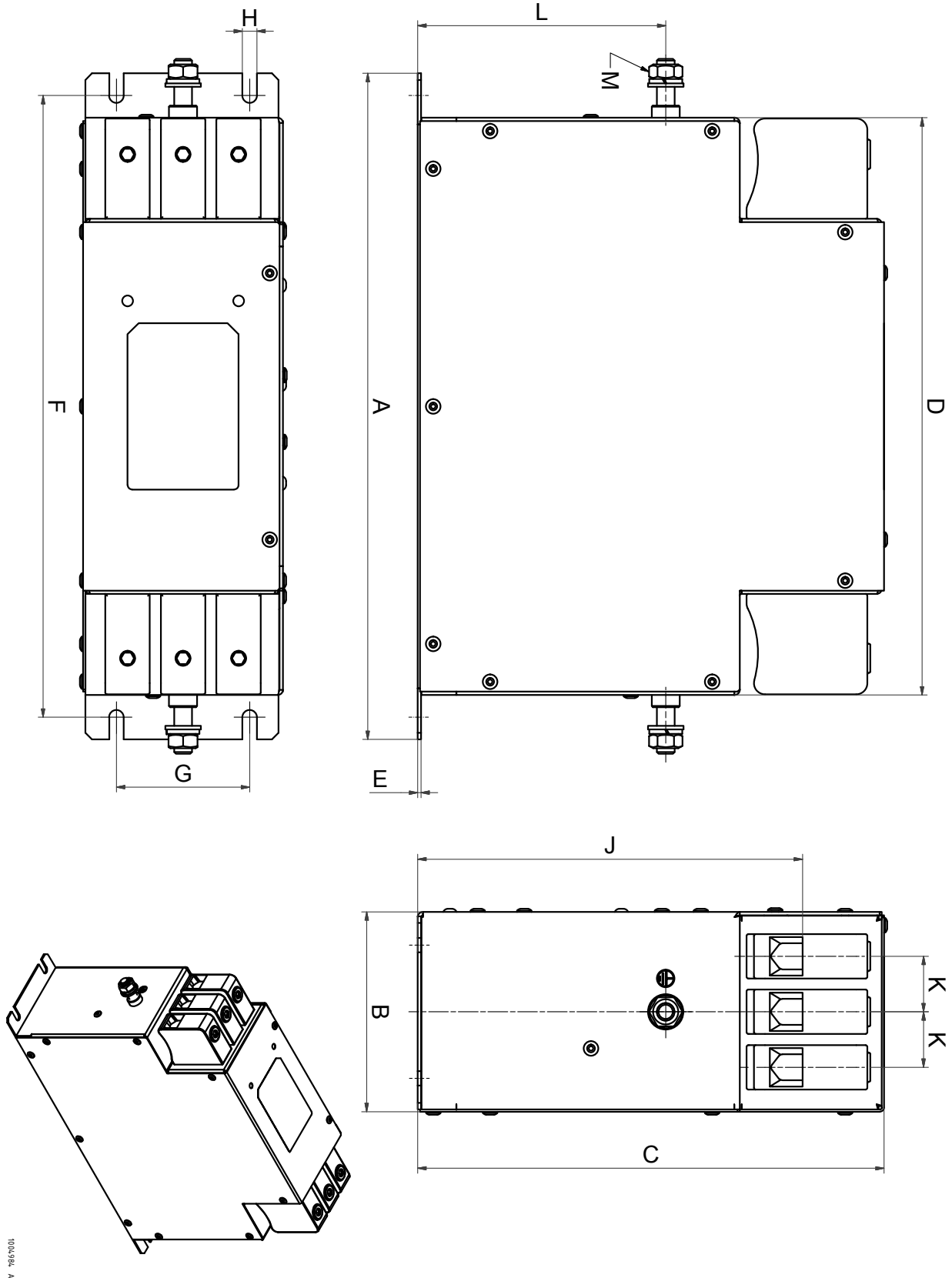
Annex 4

| | |
|------------------|-----------------|
| Description: | Packaging Label |
| Document Number: | 1043779 |

Annex 5

| | |
|------------------|-----------|
| Description: | Box Label |
| Document Number: | 1043778 |

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

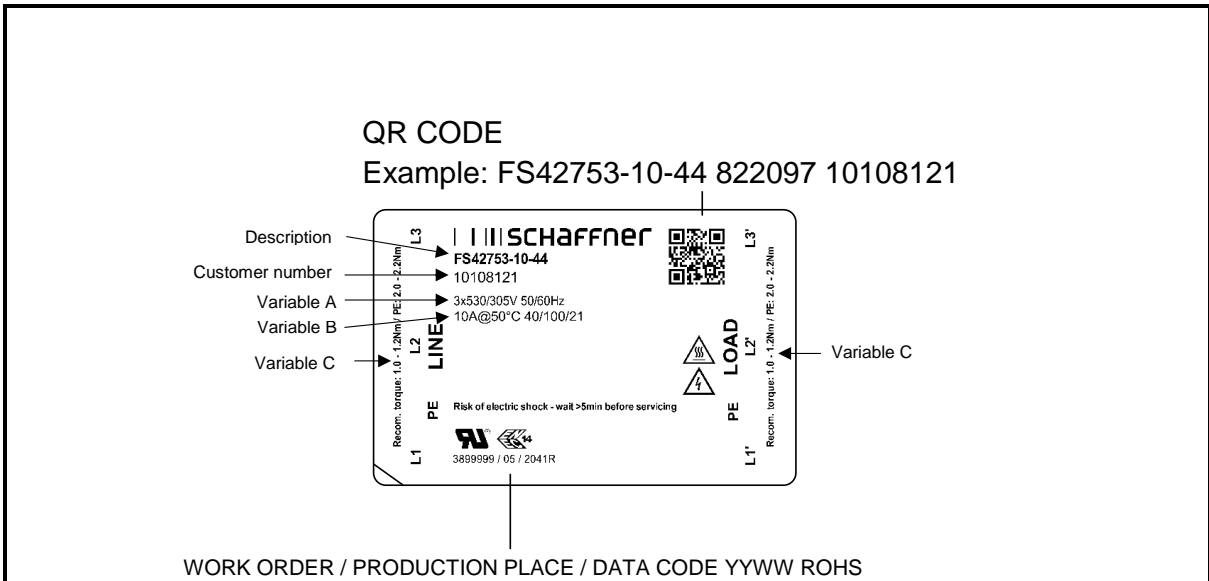
| A | B | C | D | E | F | G | H | J±2 | K | L±1 | M |
|-----|----|-----|-----|-----|-----|----|-----|-----|----|-----|----|
| 290 | 80 | 205 | 250 | 1.2 | 270 | 50 | 6.5 | 172 | 22 | 110 | M6 |

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



| 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 | LABEL | | | | | |
| A0 | | 16.07.2020 | | | | | | |
| rev. | change no. / change description | date | doc. description | | | | | |
| SCHAFFNER | | | several | FS42753-SERIES | | | | |
| | | | mat. number | project | | | | |
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| Template: SPC 159332 / A | | | LAB | 1040970 | A | 1 / 1 | | |
| www.schaffner.com | | | doc. type | doc. number | doc. rev. | page | | |

Annex 4



SCHAFFNER
Made in Thailand
4LTH

10108121

FS42753-10-44

FS42753-10-44
822097 / 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

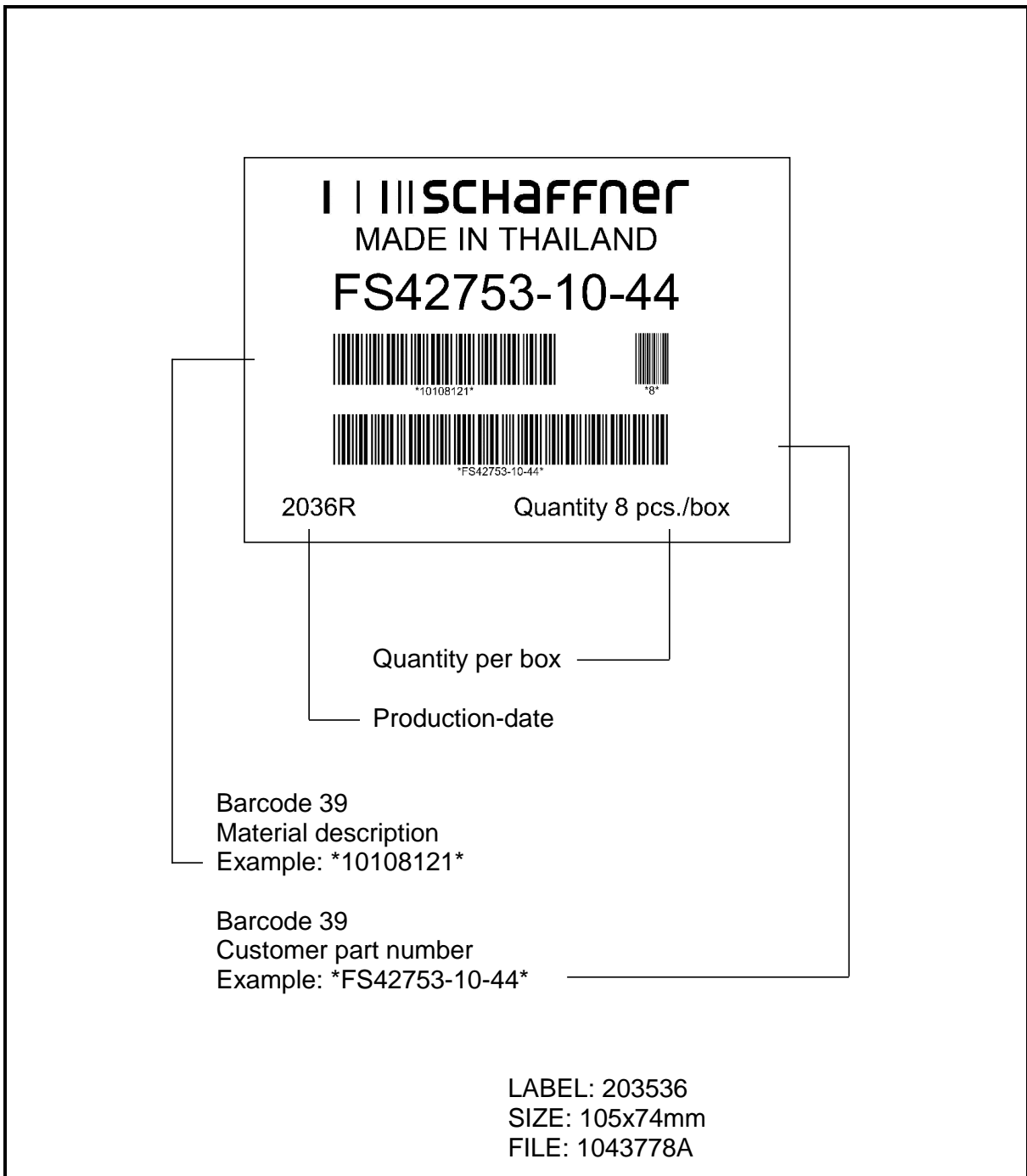
Barcode 39
Material description
Example: *10108121*

Barcode 39
Customer part number
Example: *FS42753-10-44*

LABEL: 203532
SIZE: 70 x 41mm
FILE: 1043779A

| | | | | | | | | |
|---|---------------------------------|------------|-------------------|---------------|-------------|------------|--------|--|
| | | | no scale | A4 | created | 02.09.2020 | LUTLNI | |
| | | | | | 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 | | | | | |
| SCHAFFNER | | | 822097 | FS42753-10-44 | | | | |
| | | | 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: 1043778A

| | | | | | | | |
|---|---------------------------------|------------|-------------------|---------------|-------------|------------|--------|
| | | | no scale | A4 | created | 02.09.2020 | LUTLNI |
| | | | | | 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 | 822097 | FS42753-10-44 | | | |
| | | | 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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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.
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