Summary

1. Empty modules

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2. Printed circuit board holder

Series 20 000..........................................................................................................................47
Empty modules

Selection table

- Component holder module.
- Usable PCB type CMS area 24.5 cm² perpendicular to the rail.
- 4 screws terminals 2.5 mm².
- Heat dissipation 1 W.
- Spacing 9 mm (.35”).

- Component holder module.
- Usable PCB area 13.5 cm² perpendicular to the rail.
- 8 screw terminals 2.5 mm².
- Heat dissipation 2 W.
- Spacing 18 (.71”) - 23 (.91”) and 28 mm (1.10”).

- Component holder module.
- Usable PCB area 35 cm² perpendicular to the rail.
- 12 screw terminals 2.5 mm² optional. 12 plug-in screw connections or 12 quick-connect tabs series 6.35 mm or HE 14 connector : 2 x 22 points.
- Heat dissipation 4 W.
- Spacing 22.5 (.88”) and 35 mm (1.37”).

- Component holder.
- Usable PCB area 27 cm² perpendicular to the rail.
- 8 screws terminals 2.5 mm².
- Heat dissipation 1 W.
- Spacing 11.5 (.45”) - 15 (.59”) - 18.5 mm (.72”).

- Interface module.
- Usable PCB area 6.7 to 470 mm parallel to the rail.
- 3 widths available : 75 - 100 - 125 mm.
- Any type of PCB terminals and/or connectors may be used.

- Printed Circuit Board Holder.
- Variable PCB length from 60 to 1000 mm.
- 2 PCB width : 71 - 100 mm.
- PCB thickness up to : 1.6 mm.
Empty modules
"series 8 000"

Features

A series 8 000 module is made of three parts:
- Body of molded polyamide (holding the terminals).
- Two polyamide end plates of different thickness, which, snapped onto the body, protect the electronic components and determine the overall spacing.
- Transparent front side.

How to order

Indicate the part numbers of an insulator and the 2 end plates and the 1 front side.

| 1 standard type black | EBS...A | 1SNA 104 034 | P16 00 |
| 1 end plate | PFN 2.N | 1SNA 103 770 | P17 00 |
| 1 end plate 1 mm black | PFN 1.N | 1SNA 103 772 | P05 00 |
| 1 front side | CP8000 | 1SNA 176 300 | P11 00 |

End plate PFN 2.N - Thickness 3.5 mm.
| Black | PFN 2.N | 1SNA 103 770 | P17 00 |

End plate PFN 1.N - Thickness 1 mm.
| Black | PFN 1.N | 1SNA 103 772 | P05 00 |

Transparent front side.
| CP8000 | 1SNA 176 300 | P11 00 |

Standard type EBS... body equipped with 4 screw-clamp terminals.
| Black | EBS...A | 1SNA 104 034 | P16 00 |

| Accessories |
| Marking method | RC55 | see marking |
Empty modules
"series 8 000"

Dimensions
Component holder spacing is determined by required internal volume for component packaging.

Electrical and mechanical characteristics

1. Electrical

<table>
<thead>
<tr>
<th>TYPE OF CONNECTION</th>
<th>SCREW-CLAMP A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting capacity</td>
<td>Rigid conductor: 0 to 4 mm²</td>
</tr>
<tr>
<td></td>
<td>Flexible conductor: 0 to 2.5 mm²</td>
</tr>
<tr>
<td></td>
<td>AWG: 20 to 120 AWG</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>DIN Gr. C: 250 V – and 300 V =</td>
</tr>
<tr>
<td></td>
<td>NFC Cat. C: 250 V – and =</td>
</tr>
<tr>
<td>Remarks</td>
<td>wire stripping length 7 mm</td>
</tr>
<tr>
<td></td>
<td>0 recommended screwdriver 3.5 mm</td>
</tr>
</tbody>
</table>

2. Mechanical

- Body: polyamide UL 94.V0, black
- Working temperature: -40°C to +100°C
- Arc creepage index: KB 600
- Storage temperature: -55°C to +110°C

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.
- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.

Printed circuit boards

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.
- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.
Empty modules
"series 10 000"

Features
A series 10 000 module is made of three parts:
- Body of molded polyamide (holding the terminals).
- Two polyamide end plates of different thickness, which, snapped onto the body, protect the electronic components and determine the overall spacing.

End plate without airing holes - Type PFN 3.
Grey
PFN 3.G
1SNA 114 289 : 24\(x\)

End plate with airing holes PFN 1 - Thickness 3.5 mm.
Grey
PFN 1.G
1SNA 113 091 000:00
Orange
PFN 1.O
1SNA 103 259 100:00
Blue (1)
PFN 1.B
1SNA 123 091 020:00
Black
PFN 1.N
1SNA 107 007 020:00
(1) Material not kept in stock

PREPUNCHED printed circuit board.
CI 115
1SNA 174 021 : 16\(x\)

Type EBP body equipped with 8 screw clamp-terminals with 4 drilling.
Grey
EBP...A
1SNA 113 214 : 17\(x\)

Standard type EBS body equipped with 8 screw-clamp terminals.
Grey
EBS...A
1SNA 114 533 : 000:00
Orange
EBS...A
1SNA 103 305 : 020:00
Blue (1)
EBS...A
1SNA 124 533 : 020:00
Black
EBS...A
1SNA 104 071 : 23\(x\)
(1) Material not kept in stock

End plate with airing holes type PFN 2 - Thickness 8.5 mm.
Grey
PFN 2.G
1SNA 113 095 : 04\(x\)
Orange
PFN 2.O
1SNA 103 260 : 10\(x\)
Blue (1)
PFN 2.B
1SNA 123 091 : 06\(x\)
Black
PFN 2.N
1SNA 107 008 : 00\(x\)
(1) Material not kept in stock

Option
Type "EBP" body with 4 holes for indicator or potentiometers, etc...

How to order
Indicate the part numbers of an insulator and the 2 end plates.
Example: for a 23 mm spacing module equipped with 8 screw-clamp connections, you must order:

<table>
<thead>
<tr>
<th>Grey</th>
<th>Insulator</th>
<th>1SNA 114 533 : 000:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey</td>
<td>End plate 3.5</td>
<td>1SNA 113 091 : 000:00</td>
</tr>
<tr>
<td>Grey</td>
<td>End plate 8.5</td>
<td>1SNA 113 095 : 04(x)</td>
</tr>
</tbody>
</table>
Empty modules
"series 10 000"

Dimensions
Component holder spacing is determined by required internal volume for component packaging.
* : Max. height of components

- 2 end plates 3,5
- 1 end plate 3,5
- 1 end plate 8,5
- 2 end plates 8,5

Electrical and mechanical characteristics

1. Electrical

<table>
<thead>
<tr>
<th>TYPE OF CONNECTION</th>
<th>SCREW-CLAMP A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting capacity</td>
<td>Rigid conductor 0 to 4 mm²</td>
</tr>
<tr>
<td></td>
<td>Flexible conductor 0 to 2,5 mm²</td>
</tr>
<tr>
<td></td>
<td>AWG 20 to 12 AWG</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>NFC Cat. C 250 V – and 300 V</td>
</tr>
<tr>
<td></td>
<td>CSA</td>
</tr>
<tr>
<td>Remarks</td>
<td>wire stripping length 7 mm</td>
</tr>
<tr>
<td></td>
<td>Ø recommended screwdriver 3,5 mm</td>
</tr>
</tbody>
</table>

2. Mechanical

- **Body**: polyamide UL 94.V0
- **Working temperature**: -40°C to +100°C
- **Arc creepage index**: KB 600
- **Storage temperature**: -55°C to +110°C

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.

- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.

3. Thermal

- Maximum temperature near the modules

Accessories
Printed circuit boards

- **Material**: Epoxy resin UL94 V0
- **Thickness of copper**: 35 µm
- **Prepunched boards**

- **Printed circuit boards**
  - **Material**: Epoxy resin UL94 V0
  - **Thickness of copper**: 35 µm
  - **Prepunched boards**

- **Remarks**
  - Ø recommended screwdriver 3,5 mm

The characteristics shown on the left are given as a guide and may be modified without notice.
Empty modules
"series 11 000"

Features
A series 10 000 module is made of three parts:
- Body of molded polyamide (holding the terminals).
- Two polyamide end plates of different thickness, which, snapped onto the body, protect the electronic components and determine the overall spacing.

Accessories

Marking method | RC55 | see marking

LEFT end plate - Thickness 3 mm.
Grey | PF 11.G | 1SNA 116 519 | 11.00
Orange | PF 11.O | 1SNA 103 595 | 11.00
Blue (1) | PF 11.B | 1SNA 126 519 | 11.00
(1) Material not kept in stock

RIGHT end plate - Thickness 15 mm.
Grey | PF 13.G | 1SNA 116 718 | 23.00
Orange | PF 13.O | 1SNA 103 762 | 03.00
Blue (1) | PF 13.B | 1SNA 126 718 | 25.00
(1) Material not kept in stock

Quick-connect tab series 250 6.3 x 0.8 mm.
PF 11...

PF 13.G

PREPUNCHED printed circuit board.
Cl 1.1.P1 | 1SNA 175 207 | 07.00

Body equipped with screw-clamp terminals
Grey | BFU2 S6.G | 1SNA 116 523 | 00.00
Orange | BFU2 S6.O | 1SNA 103 599 | 21.00
Blue (1) | BFU2 S6.B | 1SNA 126 523 | 02.00
(1) Material not kept in stock

12 wire-clamps ABCDEFGHJKLM*

Grey | BFU2 S12.G | 1SNA 116 522 | 07.00
Orange | BFU2 S12.O | 1SNA 103 598 | 20.00
Blue (1) | BFU2 S12.B | 1SNA 126 522 | 01.00
(1) Material not kept in stock

Options
This module option is fitted with ABB connector (6 points) or a flat cable connector (type HE 14 up to 22 points). The other module parts are identical to the version without a connector.

Fitted body can receive 2 plug-in connectors BFU2 S12.G.CP

How to order
Example:
for a unit equipped with 12 screw-clamps + 6 quick-connect tabs, order:

Body 12 wire-clamp - Grey | 1SNA 116 522 | 07.00
Left end plate - Grey | 1SNA 116 519 | 14.00
Right end plate - Grey | 1SNA 116 520 | 11.00
Quick-connect tabs | 1SNA 174 445 | 24.00
Empty modules
"series 11 000"

Dimensions

* : Max. height of components

Electrical and mechanical characteristics

1. Electrical

<table>
<thead>
<tr>
<th>TYPE OF CONNECTION</th>
<th>Screw-Clamp</th>
<th>Quick-connect 6,3 x 0,8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecting capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solid</td>
<td>0,5 to 4 mm²</td>
<td></td>
</tr>
<tr>
<td>Stranded</td>
<td>0,5 to 2,5 mm²</td>
<td>0,3 to 2,5 mm</td>
</tr>
<tr>
<td>AWG</td>
<td>20 to 12 AWG</td>
<td>22 to 14 AWG</td>
</tr>
<tr>
<td>DIN Gr. C</td>
<td>250 V ~ and 300 V =</td>
<td>250 V ~ and 300 V =</td>
</tr>
<tr>
<td>Rated voltage NFC Cat. C</td>
<td>250 V ~ and =</td>
<td>250 V ~ and =</td>
</tr>
</tbody>
</table>

Nota

- Wire stripping length 7 mm
- pre-insulated quickconnect or with thermo shrinkable sleeve
- Recommended screwdriver 3,5 mm
- Tabs can be used as soldered connection

2. Mechanical

Body : polyamide UL 94.V0
Working temperature : -40°C to +100°C
Arc creepage index : KB 600
Storage temperature : -55°C to +110°C

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.

- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.

Maximum temperature near the modules

The characteristics shown on the left are given as a guide and may be modified without notice

3. Thermal

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.

- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.

Accessories

Printed circuit boards

Material : Epoxy resin UL94 V0
- Thickness of copper : 35 μm
- Thickness of circuit : 0,8 mm
Prepunched boards

Note : Secondary P.C.B. can be adapted in which the customers is free to select the desired mother board connection system.

Note : the secondary P.C.B.s are not kept in stock
Empty modules
"series 30 000"

Features

A series 10 000 module is made of three parts:
- Body of molded polyamide (holding the terminals).
- Two polyamide end plates of different thickness, which, snapped onto the body, protect the electronic components and determine the overall spacing.

How to order

Indicate the part numbers of an insulator and the 2 end plates.
Example: for a 15 mm spacing module equipped with 8 screw-clamp connections, you must order:

<table>
<thead>
<tr>
<th>Spacing</th>
<th>Body</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5</td>
<td>1 x EBP...</td>
<td>2 x PFN 1</td>
</tr>
<tr>
<td>15</td>
<td>1 x EBP...</td>
<td>1 x PFN 1 + 1 x PFN 3</td>
</tr>
<tr>
<td>18.5</td>
<td>1 x EBP...</td>
<td>2 x PFN 3</td>
</tr>
</tbody>
</table>

End plate with airing holes PFN 1.N - Thickness 1 mm.
Black PFN 1.N ISNA 103 834 R1400

End plate with airing holes PFN 3.N - Thickness 4.5 mm.
Black PFN 3.N ISNA 103 836 R1600

Option

Type "EBP" body with 4 holes for indicator or potentiometers, etc...

How to order

Indicate the part numbers of an insulator and the 2 end plates.
Example: for a 15 mm spacing module equipped with 8 screw-clamp connections, you must order:

1 standard type black EBP8A ISNA 104 035 R1730
1 end plate 1 mm black PFN 1.N ISNA 103 834 R1430
1 end plate 4.5 mm black PFN 3.N ISNA 103 836 R1630
Empty modules
"series 30 000"

Dimensions
Component holder spacing is determined by required internal volume for component packaging.

Electrical and mechanical characteristics
1. Electrical

<table>
<thead>
<tr>
<th>TYPE OF CONNECTION</th>
<th>SCREW-CLAMP A</th>
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</thead>
<tbody>
<tr>
<td>Connecting capacity</td>
<td>Rigid conductor: 0 to 4 mm²</td>
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<td>Flexible conductor: 0 to 2.5 mm²</td>
</tr>
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<td></td>
<td>AWG: 20 to 120 AWG</td>
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<td>Rated voltage</td>
<td>NFC Cat. C: 250 V – and 300 V =</td>
</tr>
<tr>
<td></td>
<td>CSA: 250 V – and =</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Remarks</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>wire stripping length</td>
<td>7 mm</td>
</tr>
<tr>
<td>Ø recommended screwdriver</td>
<td>3.5 mm</td>
</tr>
</tbody>
</table>

2. Mechanical

- Body: polyamide UL 94.V0
- Working temperature: -40°C to +100°C
- Arc creepage index: KB 600
- Storage temperature: -55°C to +110°C

3. Thermal

- For maximum reliability, the mounting method must be determined according to the power dissipated in the interface module, and the ambient temperature around the modules.

- Inversely, knowing the type of mounting, A or B, and the power dissipated, the curve (left) determines the maximum recommended ambient temperature.

The characteristics shown on the left are given as a guide and may be modified without notice

Printed circuit boards

Usable P.C.B. area

Copper area
Empty modules
"series 20 000"

Features
The modules of the series 20 000 are modular in width and in length.

Possible multiple lengths : \( Lu = N \times 2.54 \text{ mm} \cdot 0.10" \)
(N min. = 8   N max. = 100)

For this, we advise 5 stackable spacers. Make up your assembly in order to obtain the size \( Le \) (total length of spacers) knowing that :
\[ Le = Lu - 10.16 \text{ mm} \cdot .40" \]

You must order : 2 end plates FEF... 2 universal mounting feet AF... and 1 protective under-plate PPF..., corresponding to the required width.

<table>
<thead>
<tr>
<th>( Lu )</th>
<th>FE F</th>
<th>ENF 7</th>
<th>ENF 101</th>
<th>ENF 25</th>
<th>ENF 12</th>
<th>ENF 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.30&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.40&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.50&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.60&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.70&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.80&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.90&quot;</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1.00&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible lengths : Minimum usage PCB area 10.16 mm \( .40" \)

- 3 widths available
- Lengths in multiples of 2.54 mm \( .10" \)

Widths:
- \( A = 56.2 \text{ mm} .2.213" \) : PPF1
- \( B = 81.6 \text{ mm} .3.213" \) : PPF2
- \( C = 107 \text{ mm} .4.21" \) : PPF3

Lengths of spacers

<table>
<thead>
<tr>
<th>( Lu )</th>
<th>FE F</th>
<th>ENF 7</th>
<th>ENF 101</th>
<th>ENF 25</th>
<th>ENF 12</th>
<th>ENF 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.08 .20&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.62 .30&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.7 .50&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.4 1.00&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101.6 4.00&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You must order : 2 end plates FEF... 2 universal mounting feet AF... and 1 protective under-plate PPF..., corresponding to the required width.

<table>
<thead>
<tr>
<th>( Lu )</th>
<th>FE F</th>
<th>ENF 7</th>
<th>ENF 101</th>
<th>ENF 25</th>
<th>ENF 12</th>
<th>ENF 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>66.2 .65&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.5 .60&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>117 .40&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Empty modules**
"series 20 000"

**Simplified models**
For reduced circuit lengths, ABB offers two simplified versions.

1. \( \text{Lu} = 10.16 \text{ mm}\, \cdot \, 40^\circ \) soit \( N = 4 \)
Composition: (1 universal mounting foot only with neither spacers nor protective plate).

<table>
<thead>
<tr>
<th>Usable PCB area</th>
<th>2 end plates FEF...</th>
<th>1 universal mounting foot AF...</th>
</tr>
</thead>
<tbody>
<tr>
<td>66 x 10,16</td>
<td>1SNA 103 332</td>
<td>24.00</td>
</tr>
<tr>
<td>2.60( \times )40&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.5 x 10,16</td>
<td>1SNA 103 339</td>
<td>23.00</td>
</tr>
<tr>
<td>3.60( \times )40&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>117 x 10,16</td>
<td>1SNA 103 341</td>
<td>25.00</td>
</tr>
<tr>
<td>4.60( \times )40&quot;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. \( \text{Lu} = 17.78 \text{ mm}\, \cdot \, 70^\circ \) soit \( N = 7 \)
Composition: (without protective plate).

<table>
<thead>
<tr>
<th>Usable PCB area</th>
<th>2 end plates FEF...</th>
<th>1 universal mounting foot AF...</th>
<th>2 spacers ENF 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>66 x 15,24</td>
<td>1SNA 103 332</td>
<td>24.00</td>
<td>1SNA 103 323</td>
</tr>
<tr>
<td>2.60( \times )50&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.5 x 15,24</td>
<td>1SNA 103 339</td>
<td>23.00</td>
<td>1SNA 103 324</td>
</tr>
<tr>
<td>3.60( \times )50&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>117 x 15,24</td>
<td>1SNA 103 341</td>
<td>25.00</td>
<td>1SNA 103 325</td>
</tr>
<tr>
<td>4.60( \times )50&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overall dimensions**
Overall dimensions: \( \text{Lt} = \text{Lu} + 2.5 \text{ mm}\, \cdot \, 10^\circ \) \( \text{It} = \text{lu} + 8.5 \text{ mm}\, \cdot \, 335^\circ \)
Height including rail:
\[ h_{\text{on}} = 31.5 \text{ mm}\, \cdot \, 1.24^\circ \]
\[ h_{\text{on}} = 26.5 \text{ mm}\, \cdot \, 1.05^\circ \]
\[ h_{\text{on}} = 34 \text{ mm}\, \cdot \, 1.34^\circ \]
Dimensions of printed circuit:
\[ L_c = \text{Lu} + \, \cdot \, .04^\circ \]
\[ \text{thickness} : \, \cdot \, 1.6 \text{ mm}\, \cdot \, .063^\circ \]
\[ L_c = \text{lu} + 5 \, \cdot \, .197^\circ \]

Size limits of protective plates:
\[ L_p = \text{Lu} - 17.8 \text{ mm}\, \cdot \, 70^\circ \] (cut both sides of \( L_p \)).

**Spacing:** 7,4 mm

**Accessories**
**Shield, grounding connector**
The shield connector 1SNA 174 846 | 260 | DIN 1 or DIN 3, allows an electrical connection between the printed circuit board and the rail (double face PCB mandatory). For use with AF 50, AF 76 and AF 101 mounting feet.

Note: for \( N \) of more than 47, we recommend the use of one or several additional universal mounting feet (please consult us).
Printed circuit board holder
"series 20 000"

Features
The extruded PVC serie 20 000 holders allow:
- 2 PCB width: 71 mm or 100 mm
- PCB length: 60 mm to 100 mm
- PCB thickness: 1.6 mm
- Assembly snaps onto DIN 1 or DIN 3 (EN 50035 and 50022)

Complete assembly includes:
- 1 body 71 or 100 mm
- 1 left foot section
- 1 right foot section
- 4 screws per foot

Material
Body: (delivered in 1000 mm length)
PVC rigid extruded class M2, orange
End plate and mounting foot:
Molded polyamide UL 94 V0 orange

Working temperature: -20 °C to +70 °C
Storage temperature: -20 °C to +70 °C

Dimensions

Extruded rail length Lex = L Cl - .020 (.4 mm theoretic clearance between P.C.B. and mounted support)

<table>
<thead>
<tr>
<th>SE 71</th>
<th>SE 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>inch</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>2.79&quot;</td>
</tr>
<tr>
<td>100</td>
<td>3.94&quot;</td>
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<tr>
<td>B</td>
<td>75</td>
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<tr>
<td>2.96&quot;</td>
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<td>104</td>
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<tr>
<td>4.09&quot;</td>
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</tr>
<tr>
<td>C</td>
<td>57.8</td>
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<tr>
<td>86.5</td>
<td></td>
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<tr>
<td>3.42&quot;</td>
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</tbody>
</table>

Overall dimensions = P.C.B. length + 1.5 mm
Printed circuit board holder
"series 20 000"

Features
The extruded PVC serie 20 000 holders allows:
- 2 PCB width: 71 mm or 100 mm
- PCB length: 60 mm to 1000 mm
- PCB thickness: 1.6 mm
- Assembly snaps onto DIN 1 or DIN 3 (EN 50035 and 50022)

Complete assembly includes:
- 1 body 71 or 100 mm
- 2 end plates
- 4 screws for end plates
- 2 feet for length L de 60 to 250 mm
- 3 feet for length L de 250 to 500 mm
- 4 feet for length L de 500 to 750 mm
- 5 feet for length L de 750 to 1000 mm
- 2 screws per foot

Actual PCB width

| Body L = 1000 mm | SE 71 | 15 103 868 (ECO) |
| End plate        | FEF 71 | 15 103 724 (ECO) |
| Screws for end plate | VSSFP Pozidriv | 15 178 100 (ECO) |
| Foot             | AF 50 | 15 103 323 (ECO) |
| Screw for foot   | VSAF  | 15 174 582 (ECO) |

Note: drilling for screws VSAF are not done.

Material specification
Body: (delivered in 1000 mm length)
PVC rigid extruded class M2 (orange)
Working temperature: -20 °C to +70 °C
Storage temperature: -20 °C to +70 °C

End plate and mounting foot:
Molded polyamide UL 94 V2 (orange)

Dimensions

| Holder | PCB |

Drill from bottom in center of grooves
* Rail length margin L: +0.5/0.020" +0.2/0.008"

<table>
<thead>
<tr>
<th>holder</th>
<th>SE 71</th>
<th>SE 100</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>D</td>
<td>75</td>
<td>2.96&quot;</td>
</tr>
</tbody>
</table>

(1): For component pins less than 2 mm.
(2): For component pins longer than 2 mm.
* PCB length margin L: +0.002" +0.2/0.008"