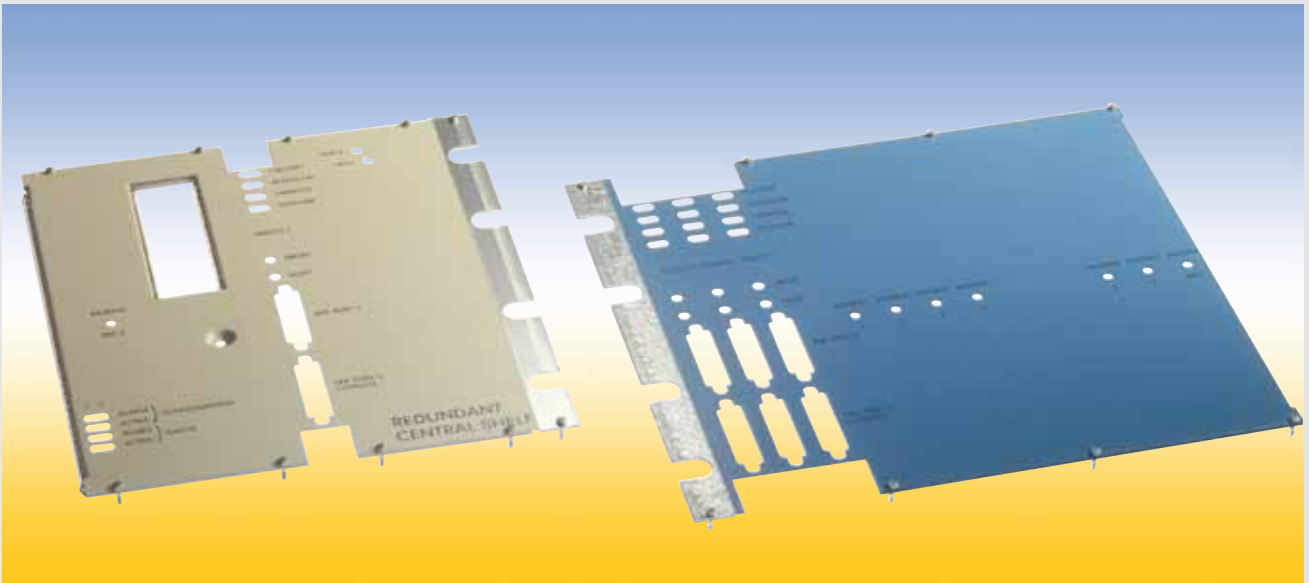


## Front Panels

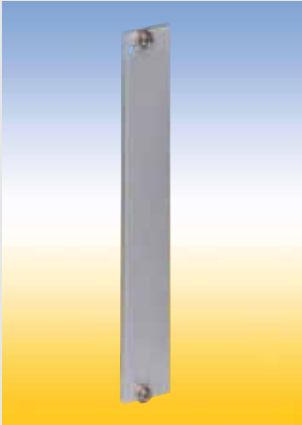


In addition to the wide range of standard front panels we also provide on request individual customer specific custom front panels with punching, surface finish and silk screening. Textured or smooth painted in all relevant RAL-colors, abrasion-resistant silk-screen printing as well as color coordinated engraving gives your front panel an individual appearance.

Please ask your local representative for your  
**individual front panel design.**  
You find your contact person on our home-page  
[www.intermas-el.com](http://www.intermas-el.com)

# Front Panels and Handles

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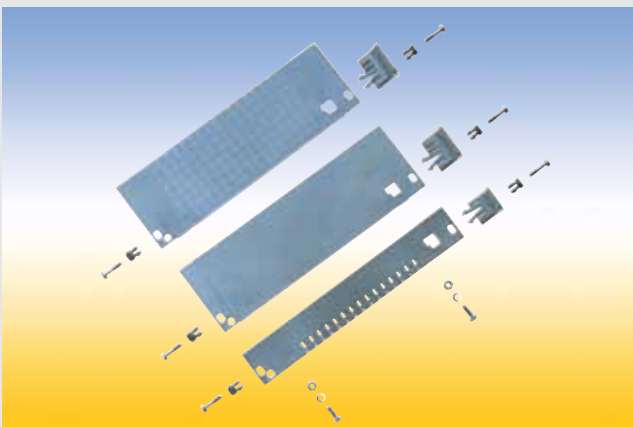
✓ Blind Front Panels



✓ Front Panels with Handle  
✓ Handles

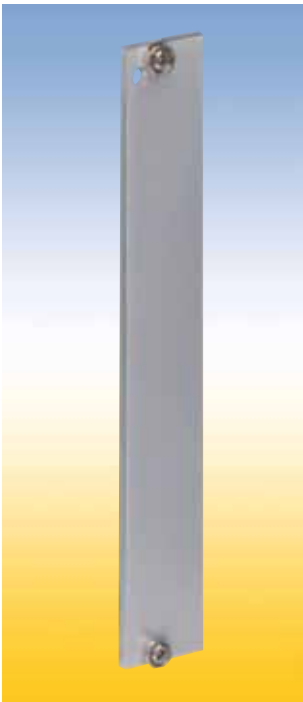
✓ Front Panels with Ejector Handle  
✓ Ejector Handles

✓ Front Panels with IEEE Handle  
✓ IEEE-Handles



✓ Plastic Front Panels

# Blind Front Panels



## Blind Front Panels

For covering empty sections or to carry various components in subracks.

Four versions are available:

1. Flat front panel blank

The front side is covered with a removable transparent foil.

2. Flat front panel anodized

Front anodized, rear conductive.

3. Flat front panel RFI

Front anodized, rear conductive, with slits in the side edges for insertion of RFI springs.

4. Extruded front panel RFI

Made of extruded aluminum alloy, with slits in the side edges for insertion of RFI springs for contact.

Surface finish is colorless chromated.

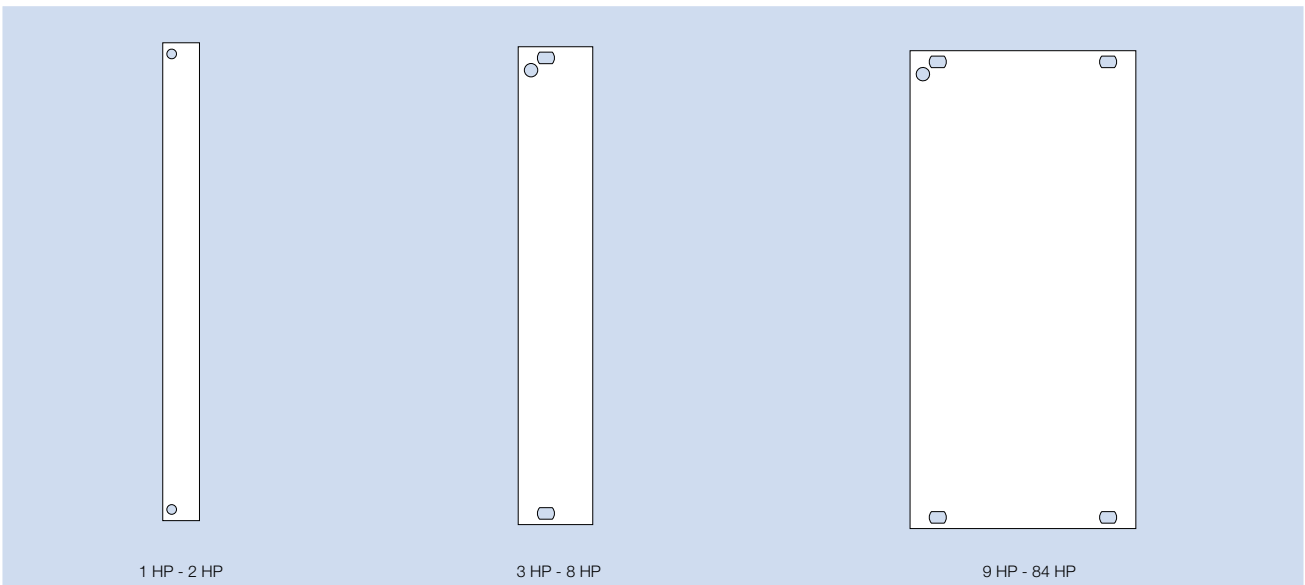
## Material

Flat front panel: aluminum 2.5 mm thick

Extruded front panel: aluminum

## Delivery

Front panels are delivered unassembled as single parts or as a kit.



# Blind Front Panels

## Ordering details blind front panels (flat front panel)

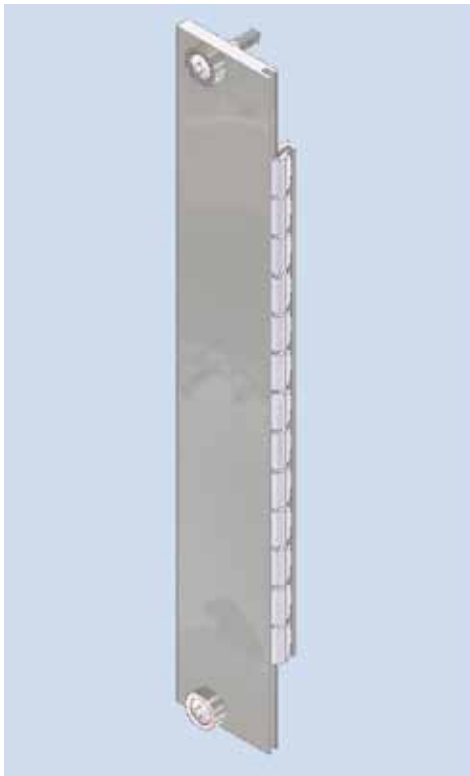
	nom. width [HP]	3 U blank order no. <b>409.</b>	3 U anodized/ conductive order no. <b>409.</b>	6 U blank order no. <b>409.</b>	6 U anodized/ conductive order no. <b>409.</b>
Blind front panel	1	<b>097 201</b>	-	<b>097 601</b>	-
Blind front panel	2	<b>097 202</b>	-	<b>097 602</b>	-
Blind front panel	3	<b>097 203</b>	-	<b>097 603</b>	-
Blind front panel	4	<b>097 204</b>	<b>097 404</b>	<b>097 604</b>	<b>097 804</b>
Blind front panel	5	<b>097 205</b>	-	<b>097 605</b>	-
Blind front panel	6	<b>097 206</b>	<b>097 406</b>	<b>097 606</b>	<b>097 806</b>
Blind front panel	7	<b>097 207</b>	-	<b>097 607</b>	-
Blind front panel	8	<b>097 208</b>	<b>097 408</b>	<b>097 608</b>	<b>097 808</b>
Blind front panel	10	<b>097 210</b>	-	<b>097 610</b>	-
Blind front panel	12	<b>097 212</b>	<b>097 412</b>	<b>097 612</b>	<b>097 812</b>
Blind front panel	14	<b>097 214</b>	<b>097 414</b>	<b>097 614</b>	<b>097 814</b>
Blind front panel	21	<b>097 221</b>	<b>097 421</b>	<b>097 621</b>	<b>097 821</b>
Blind front panel	28	<b>097 228</b>	<b>097 428</b>	<b>097 628</b>	<b>097 828</b>
Blind front panel	42	<b>097 242</b>	<b>097 442</b>	<b>097 642</b>	<b>097 842</b>
Blind front panel	84	<b>097 284</b>	<b>097 484</b>	<b>097 684</b>	<b>097 884</b>

## Accessories

Minimum order quantity 100 pieces

	pieces for 1-2 HP	pieces for 3-8 HP	pieces for 9-85 HP	order no. 409.
Screw retainer M2.5 gray	-	2	4	100 539
Screw retainer M2.5 black	-	2	4	100 538
Cross-head screw M 2.5 x 11.3	2	2	4	101 917

# Blind Front Panels RFI



## Ordering details kit - blind front panel RFI

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
1	114 453	-	114 464	-
2	114 454	-	114 465	-
3	114 455	-	114 466	-
4	114 361	113 583	114 387	-
5	114 362	-	114 388	-
6	114 363	113 586	114 389	-
7	114 365	-	114 390	-
8	114 366	-	114 391	-
9	114 367	-	114 392	-
10	114 368	-	114 393	-
12	-	113 589	-	113 608
14	-	113 590	-	113 609
21	-	113 592	-	113 611
28	-	113 593	-	113 612
42	-	113 594	-	113 613
43	-	114 487	-	-
84	-	113 595	-	113 614
85	-	113 596	-	-

**Finish:** flat front panel: front side anodized, rear side conductive  
extruded front panel: colorless chromated

## Delivery kit - blind front panel RFI:

	pieces for 1-2 HP	pieces for 3-8 HP	pieces for 9-43 HP	pieces for 44-85 HP
Front panel	1	1	1	1
RFI spring F3 extruded/flat	1 / 2	1 / 2	1 / 2	1 / 2
Grounding bushing M2.5	-	2	4	6
Mounting parts-kit	1	1	1	1

## Accessories

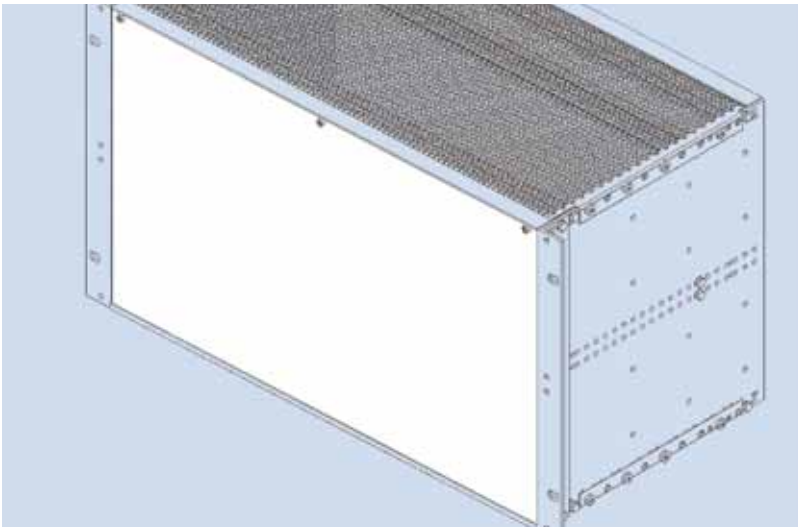
Roller cutter to assemble the RFI spring F3

order no.: 409. 118 433

## Ordering details single part blind front panel RFI

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
1	114 458	-	114 469	-
2	114 459	-	114 470	-
3	113 027	-	114 476	-
4	111 608	112 252	111 618	-
5	113 028	-	114 384	-
6	111 609	112 258	111 619	-
7	111 610	-	111 620	-
8	111 611	-	111 621	-
9	113 029	-	114 385	-
10	113 030	-	114 386	-
12	-	112 551	-	112 611
14	-	112 557	-	112 617
21	-	112 578	-	112 638
28	-	112 821	-	112 943
42	-	112 581	-	112 641
43	-	114 082	-	-
84	-	113 598	-	113 617
85	-	113 599	-	-

# Front Panels plug-in, hinged



## Plug-in Front Panel 85 HP

The front panel bottom edge is inserted in the groove of a specially profiled rail. With slits in the side edges for insertion of RFI springs.

To be used in combination with below mentioned flanges only.

### Finish:

front side anodized, rear side conductive

### Delivery:

1 front panel  
3 grounding bushing M 2.5  
3 cross-head screw M 2.5 x 11.3

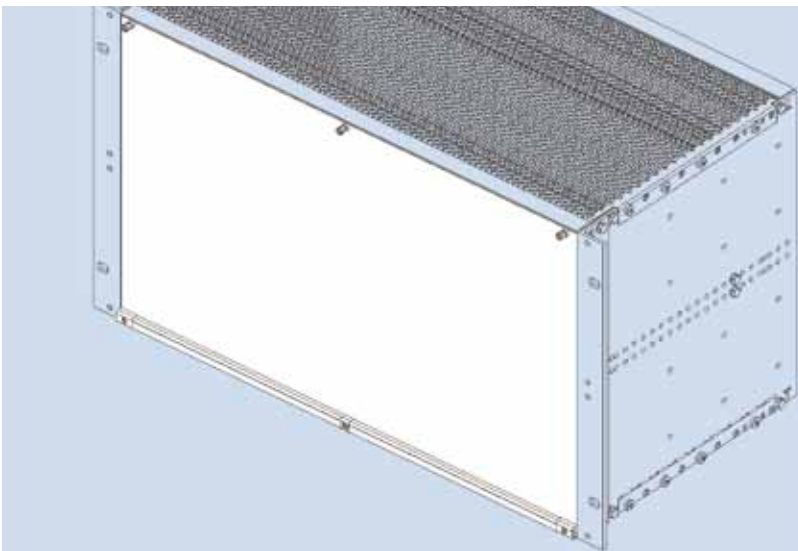
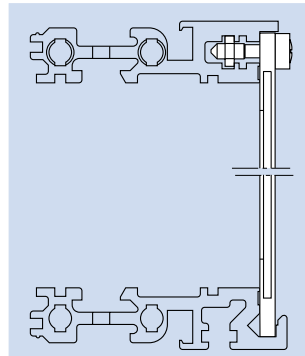
### Ordering details for kit

	order no. <b>409.</b>
Plug-in front panel 3 U	<b>113 948</b>
Plug-in front panel 6 U	<b>113 950</b>

### Accessories

	order no. 409.
Profiled rail VE12SFP-RFI-85	114 562
Flange RFI - FP - 3 U	114 708
Flange RFI - FP - 6 U	114 715
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116

For one flat front panel 2 RFI springs are needed.



## Hinged Front Panel 85 HP

With slits in the side edges for insertion of RFI springs. The hinge is screwed to the profiled rail of the subrack. An 84 HP threaded strip is needed.

To be used in combination with below mentioned flanges only.

### Finish:

front side anodized, rear side conductive

### Delivery:

1 front panel  
1 hinge  
3 grounding bushings  
Mounting parts

**Delivery:** as unassembled kit.

**Assembled kits on request.**

### Ordering details for kit

	order no. 409.
Hinged front panel 3 U	<b>113 705</b>
Hinged front panel 6 U	<b>113 706</b>

### Accessories

	order no. 409.
Threaded strip 84 HP	078 428
Flange RFI - FP - 3 U	114 708
Flange RFI - FP - 6 U	114 715
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116

For one flat front panel 2 RFI springs are needed.

# Front Panels with Handle



## Front Panels with Handle

For assembly on a PCB.  
Handle and front connector are screwed on the front panel.  
The plain front panel is easy to modify.

Four versions are available:

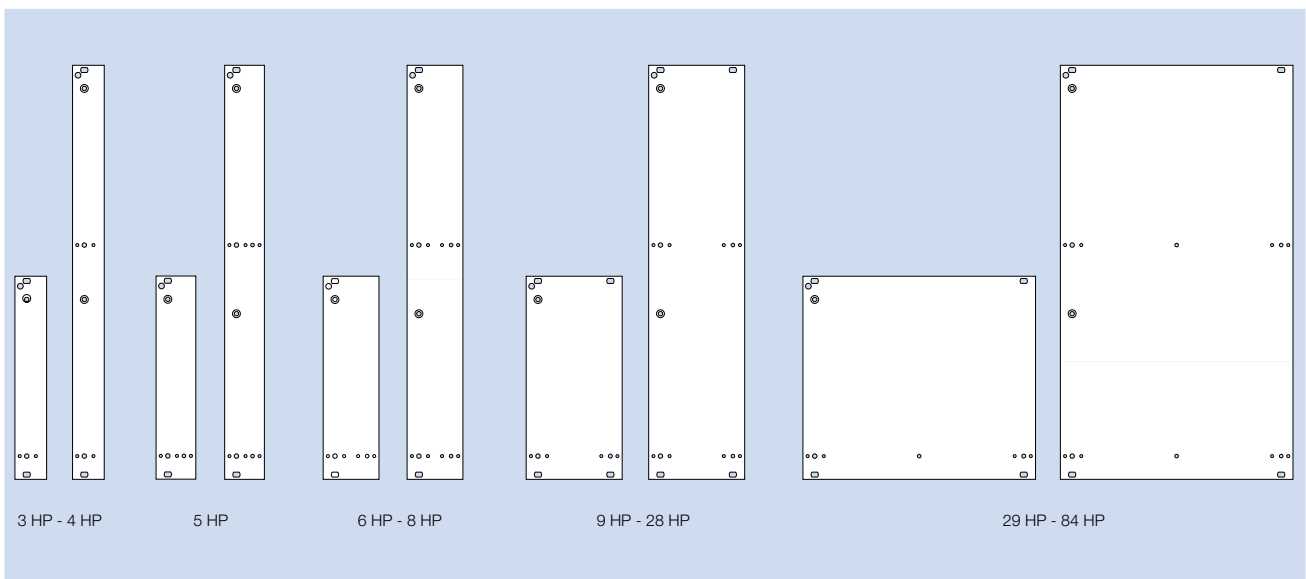
1. Flat front panel blank  
The front side is covered with a removable transparent foil.
2. Flat front panel anodized  
Front anodized, rear conductive.
3. Flat front panel RFI  
Front anodized, rear conductive.  
With slits in the side edges for insertion of RFI springs.
4. Extruded front panel RFI  
Made of extruded aluminum alloy, with slits in the side edges for insertion of RFI springs for contact.  
Surface finish is colorless chromated.

## Material

Flat front panel: aluminum 2.5 mm thick  
Extruded front panel: aluminum

## Delivery

Front panels are delivered unassembled as single parts or as a kit.



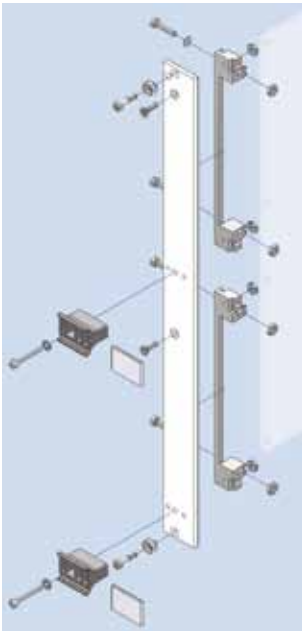
Hole pattern of the front panels

# Front Panels with Handle



## Ordering details kit - front panel with handle (flat front panels)

nom. width [HP]	3 U anodized/ conductive order no. <b>409.</b>	6 U anodized/ conductive order no. <b>409.</b>
4	<b>107 518</b>	<b>122 624</b>
6	<b>122 622</b>	<b>122 625</b>
8	<b>107 520</b>	<b>122 626</b>
10	<b>107 521</b>	<b>122 627</b>
12	<b>107 522</b>	<b>122 628</b>



## Delivery kit - front panel with handle

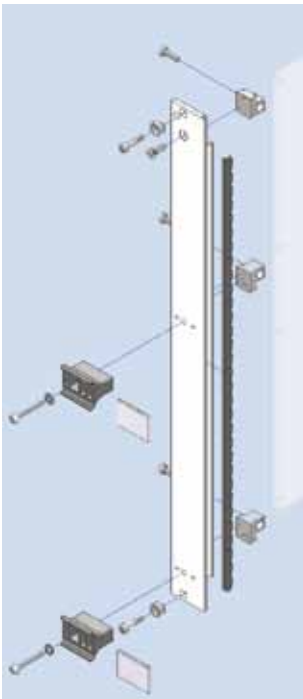
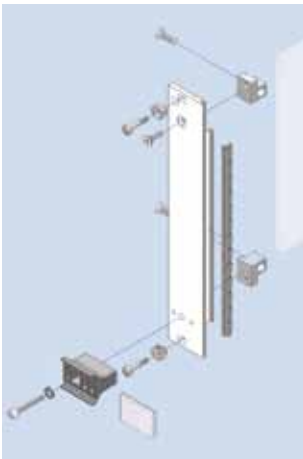
	3 U pieces for 3-8 HP	3 U pieces for 9-12 HP	6 U pieces for 3-8 HP	6 U pieces for 9-12 HP
Front panel	1	1	1	1
Handle gray	1	1	2	2
Ident-plate aluminum	1	1	2	2
Front connector FEE	1	1	2	2
Screw retainer M 2.5	2	4	2	4
Mounting parts	1	1	1	1

## Ordering details - single part front panel for handle (flat front panel)

nom. width [HP]	3 U blank order no. 409.	3 U anodized/ conductive order no. 409.	6 U blank order no. 409.	6 U anodized/ conductive order no. 409.
3	096 403	-	096 703	-
4	096 404	096 604	096 704	096 904
5	096 405	096 605	096 705	096 905
6	096 406	096 606	096 706	096 906
7	096 407	-	096 707	-
8	096 408	096 608	096 708	096 908
10	096 410	096 610	096 710	096 910
12	096 412	096 612	096 712	096 912
16	096 416	-	096 716	-
21	096 421	-	096 721	-



# Front Panels RFI with Handle



## Ordering details kit - front panel RFI with handle

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
3	114 537	-	114 541	-
4	114 377	-	114 404	-
5	114 378	-	114 405	-
6	114 379	-	114 406	-
7	114 380	-	114 407	-
8	114 381	-	114 408	-
10	114 383	-	114 410	-
12	-	113 685	-	113 693

### Finish:

Flat front panel: front side anodized, rear side conductive  
 Extruded front panel: colorless chromated

## Delivery kit - front panel RFI with handle

	3 U pieces for 3-8 HP	3 U pieces for 9-12 HP	6 U pieces for 3-8 HP	6 U pieces for 9-12 HP
Front panel	1	1	1	1
Handle gray	1	1	2	2
Ident-plate aluminum	1	1	2	2
Front connector metal	2	2	3	3
Grounding bushing M 2.5	2	4	2	4
Mounting parts	1	1	1	1

## Accessories

	order no. 409.
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116
For assemble the RFI spring F3	
Roller cutter	118 433

*For one flat front panel 2 RFI-springs are needed.*

## Ordering details single part front panel RFI for handle

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
3	114 538	-	114 540	-
4	114 370	113 711	114 396	-
5	114 371	-	114 397	-
6	114 372	113 723	114 399	-
7	114 373	-	114 400	-
8	114 374	113 725	114 401	-
10	114 376	-	114 403	-
12	-	113 729	-	113 762

# Handle and Handle Strip

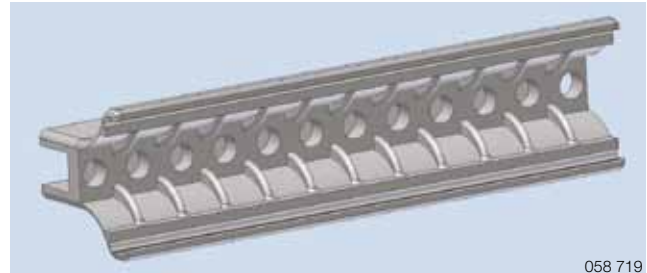


## Handle FP

Assembled with M2.5 screws and with 1 additional self tapping screw from 6 HP. The handle is held against torsion by means of two nipples.

## Technical data

Material	Polycarbonate, 10% fiber-glass reinforced
Color	gray RAL 7032, black
Continuous temperature	- 40 °C to + 100 °C
Fire protection class	UL 94 V-0



058 719

## Ordering details handle FP

width [HP]	length [mm]	gray order no. 409.	black order no. 409.
3	13.80	<b>102 115</b>	<b>041 657</b>
4	18.88	<b>102 114</b>	<b>100 667</b>
5	23.96	<b>103 005</b>	<b>103 205</b>
6	29.04	<b>103 006</b>	<b>103 206</b>
7	34.12	<b>103 007</b>	<b>103 207</b>
8	39.20	<b>103 008</b>	<b>103 208</b>

## Ordering details handle strip FP

width [HP]	length [mm]	gray order no. 409.	black order no. 409.
10	49.36	<b>103 810</b>	<b>058 910</b>
12	59.52	<b>103 812</b>	<b>058 912</b>
16	79.84	<b>103 816</b>	<b>058 916</b>
21	105.24	<b>103 821</b>	<b>058 921</b>
42	211.92	<b>103 842</b>	<b>058 942</b>

## Accessories handles:

Minimum order quantity each 100 pieces

	order no. 409.
Pan head screw M 2.5 x 16	094 605
Washer 2.7	013 911
Hexagonal nut M 2.5 DIN 439	013 938
Self tapping screw M 2.5 x 10	040 401



## Ident Plate

for handle FP.  
The ident plate is markable and printable, snapped in after mounting the handle to the front panel.

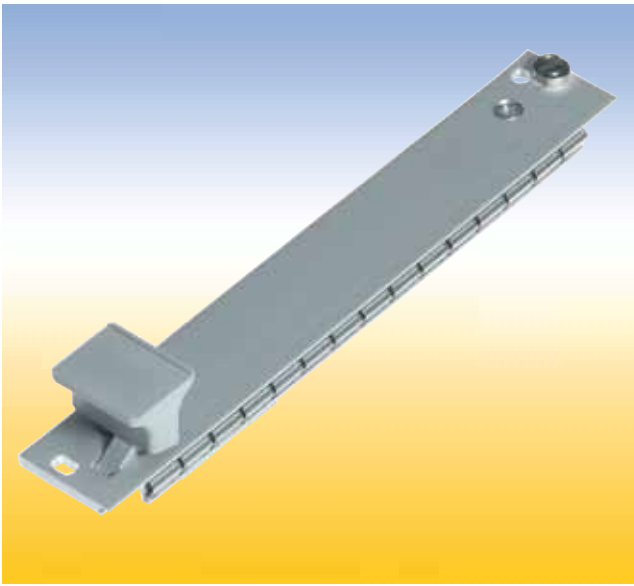
## Technical data

Material	aluminum or Polycarbonate, crystal clear
Finish	Alu: silver silk-anodized
Continuous temperature	PC: - 40 °C to + 115 °C
Fire protection class	PC: UL 94 V-2

## Ordering details ident-plate

width [HP]	length [mm]	aluminum order no. 409.	crystal clear order no. 409.
3	13.80	<b>017 929</b>	<b>089 238</b>
4	18.88	<b>017 956</b>	<b>089 240</b>
5	23.96	<b>022 791</b>	-
6	29.04	<b>022 792</b>	-
7	34.12	<b>022 793</b>	-
8	39.20	<b>022 794</b>	-
10	49.36	<b>022 796</b>	-
12	59.52	<b>022 798</b>	-
16	79.84	<b>022 802</b>	-
21	105.24	<b>022 807</b>	-
42	211.92	<b>040 652</b>	-

# Front Panels with Ejector Handle



## Front Panels with Ejector Handle

For easy release of PCB's with high pin connections. The ejector handle is extends through the front panel and is screwed together with the bearing bushing at the front connector.

Four versions are available:

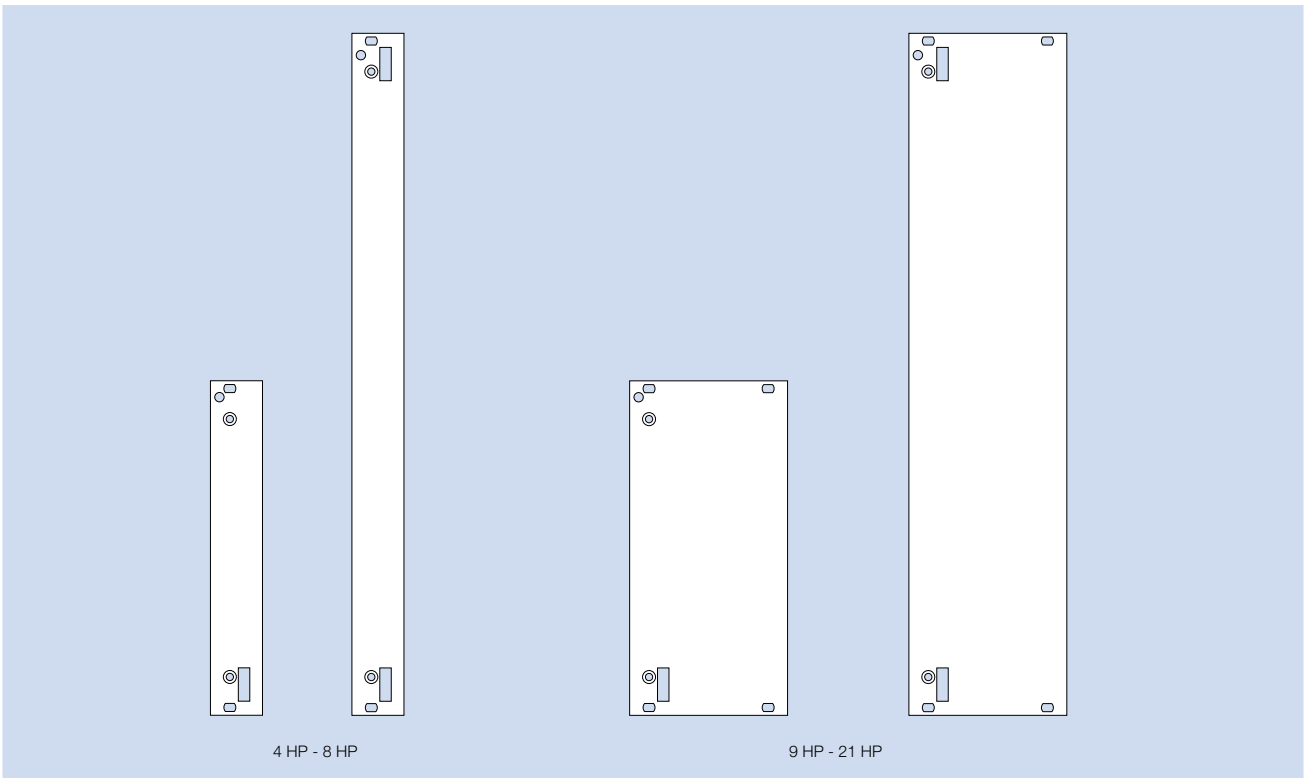
1. Flat front panel blank.  
The front side is covered with a removable transparent foil.
2. Flat front panel anodized.  
Front anodized, rear conductive.
3. Flat front panel RFI  
Front anodized, rear conductive. With slits in the side edges for insertion of RFI springs.
4. Extruded front panel RFI  
Made of extruded aluminum alloy, with slits in the side edges for insertion of RFI springs for contact. Surface finish is colorless chromated.

## Material

Flat front panel: aluminum 2.5 mm thick  
Extruded front panel: aluminum

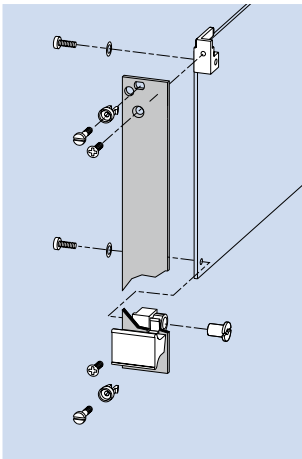
## Delivery

Front panels are delivered unassembled as single parts or as a kit.



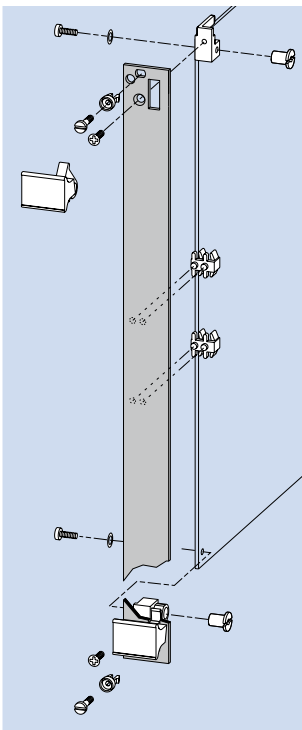
Hole pattern of the front panels

# Front Panels with Ejector Handle



## Ordering details kit - front panel with ejector handle (flat front panels)

nom. width [HP]	3 U blank order no. <b>409.</b>	3 U anodized/ conductive order no. <b>409.</b>	6 U blank order no. <b>409.</b>	6 U anodized/ conductive order no. <b>409.</b>
4	<b>168 913</b>	<b>168 919</b>	<b>122 639</b>	<b>122 645</b>
5	<b>168 914</b>	-	<b>122 640</b>	-
6	<b>168 915</b>	-	<b>122 641</b>	-
8	<b>168 916</b>	<b>168 920</b>	<b>122 642</b>	<b>122 646</b>
10	<b>168 917</b>	-	<b>122 643</b>	-
12	<b>168 918</b>	<b>168 921</b>	<b>122 644</b>	<b>122 647</b>



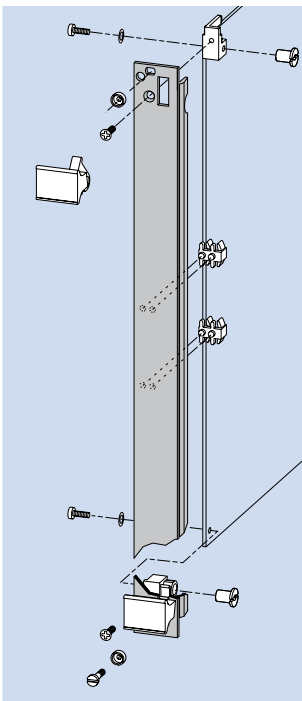
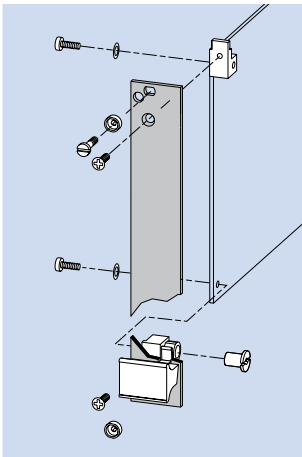
## Delivery kit - front panel with ejector handle

	3 U pieces for 4-8 HP	3 U pieces for 9-12 HP	6 U pieces for 4-8 HP	6 U pieces for 9-12 HP
Front panel	1	1	1	1
Ejector handle top, gray	-	-	1	1
Ejector handle bottom, gray	1	1	1	1
Bearing bushing	1	1	2	2
Front connector metal	2	2	2	2
Front panel support plug-in	-	-	2	2
Screw retainer M 2.5	2	4	2	4
Mounting parts	1	1	1	1

## Ordering details single part front panel for ejector handle (flat front panels)

nom. width [HP]	3 U blank order no. 409.	3 U anodized/ conductive order no. 409.	6 U for support plugged-in blank order no. 409.	6 U for support plugged-in anodized/ conductive order no. 409.	6 U for support screwed blank order no. 409.	6 U for support screwed anodized/ conductive order no. 409.
4	168 900	168 908	102 404	102 344	102 454	102 384
5	168 901	-	102 405	-	-	-
6	168 902	-	102 406	-	-	-
8	168 903	168 909	102 408	102 348	102 458	102 388
10	168 904	-	102 410	-	-	-
12	168 905	168 910	102 412	102 352	102 462	102 392
16	168 906	168 911	102 416	102 356	-	-
21	168 907	168 912	102 421	102 361	-	-

# Front Panels RFI with Ejector Handle



## Ordering details - kit front panel RFI with ejector handle

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
4	113 655	113 620	113 662	-
5	113 656	-	113 663	-
6	113 657	113 622	113 665	-
7	113 658	-	113 667	-
8	113 659	-	113 668	-
9	113 660	-	113 669	-
10	113 661	-	113 670	-
12	-	113 626	-	113 640

### Finish:

Flat front panel: front side anodized, rear side conductive  
 Extruded front panel: colorless chromated

## Delivery kit - front panel RFI with ejector handle

	3 U pieces for 4-8 HP	3 U pieces for 9-12 HP	6 U pieces for 4-8 HP	6 U pieces for 9-12 HP
Front panel	1	1	1	1
ejector handle top, gray	-	-	1	1
ejector handle bottom, gray	1	1	1	1
Bearing bushing	1	1	2	2
Front connector metal	2	2	2	2
Front panel support plug-in	-	-	2	2
Grounding bushing M 2.5	2	4	2	4
Mounting parts	1	1	1	1

## Accessories

	order no. 409.
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116
<small>For assemble the RFI spring F3</small>	
Roller cutter	118 433

For one flat front panel 2 RFI-springs are needed.

## Ordering details single part front panel RFI for ejector handle

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
4	111 847	112 644	111 613	-
5	113 170	-	113 147	-
6	111 604	112 650	111 614	-
7	111 605	-	111 615	-
8	111 606	-	111 616	-
9	113 171	-	113 148	-
10	113 172	-	113 149	-
12	-	112 668	-	112 725

# Ejector Handle 4 HP

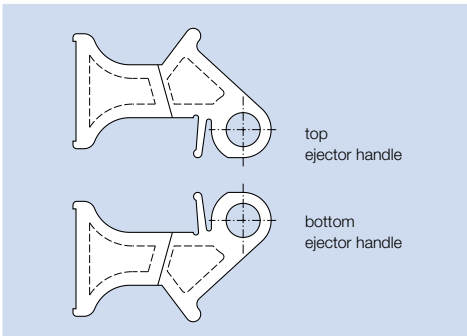


## Ejector Handle

The ejector handle extends through the front panel and is screwed together with the bearing bushing at the front connector.

## Technical data

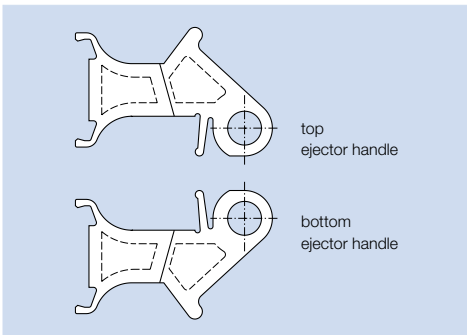
Material	Polycarbonate, 10% fiber-glass reinforced
Color	gray, black
Continuous temperature	- 40 °C to + 100 °C
Fire protection class	UL 94 V-0



## Ordering details ejector handle 4 HP

version	gray order no. <b>409.</b>	black order no. <b>409.</b>
top	<b>101 923</b>	<b>094 458</b>
bottom	<b>101 924</b>	<b>094 459</b>

Mounting parts see front connectors



## Ejector handle 4 HP

Front side open, for assembly with a ident-plate.

## Ordering details ejector handle 4 HP

version	gray order no. <b>409.</b>	black order no. <b>409.</b>
top	<b>102 117</b>	<b>101 843</b>
bottom	<b>102 118</b>	<b>101 844</b>

Mounting parts see front connectors



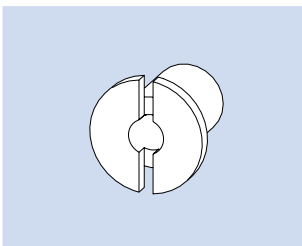
## Ident-plate 4 HP

The ident-plate is markable and printable. Snapped in after mounting the handle at the front panel.

**Material:** aluminum

**Finish:** silver silk-matt anodized

order no.: **409. 017 956**



## Bearing Bushing 4

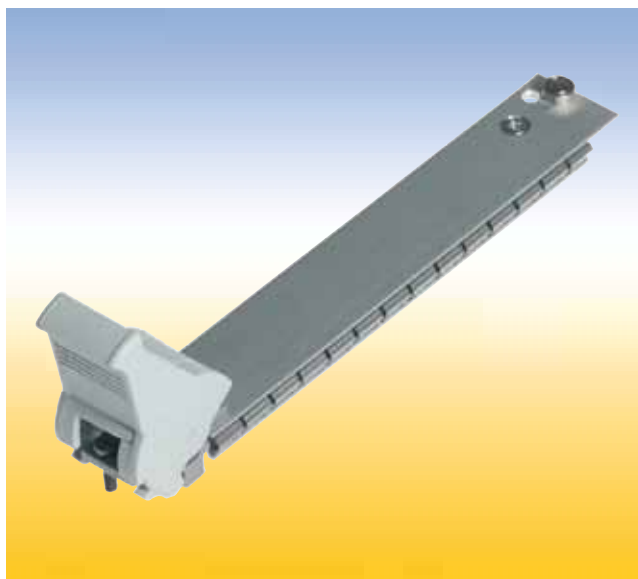
for handle 4 HP

**Material:** steel, galvanized

**Finish:** colorless chromated

order no.: **409. 065 888**

# Front Panels RFI with IEEE Handle



## Front Panels with IEEE Handle

For easy pull of PCB's with high density connectors accordance specification IEEE 1101.10. The assembled handle kit is stuck in the milled space of the front panel and is secured with a clamped spring. Afterwards the PCB are screwed on the intergrated front connector.

Two versions with IEEE handle are available:

1. Flat front panel RFI

Front anodized, rear conductive. With slits in the side edges for insertion of RFI springs.

2. Extruded front panel RFI

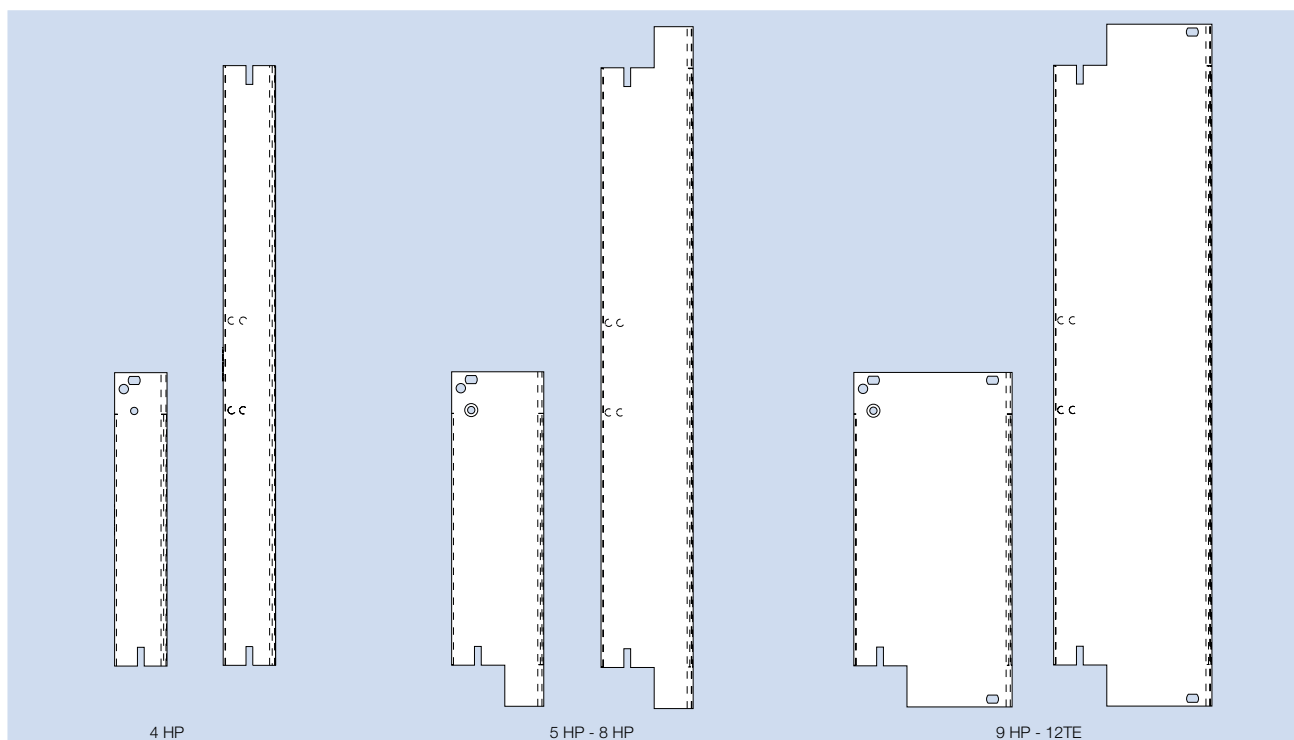
Made of extruded aluminum alloy, with slits in the side edges for insertion of RFI springs or for contacting. Surface finish is colorless chromated.

## Delivery

Front panels are delivered with the assembled IEEE handle as single parts or as a kit.

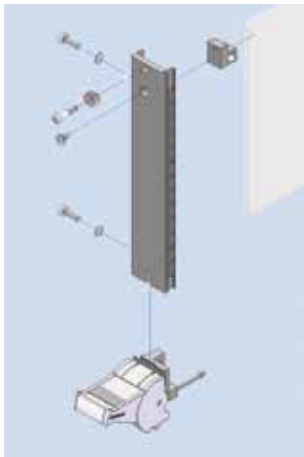
### Technical data

Material	Front panel: aluminum Handle: Polycarbonate
Finish	Front panel: <i>flat</i> : front side anodized, rear side conductive <i>extruded</i> : colorless chromated
Color	handle: RAL 7035 or black
Continous temperature	- 40 °C to + 100 °C
Fire protection class	UL 94 V-0



Hole pattern of the front panels

# Front Panels RFI with IEEE Handle gray without hot-swap



## Ordering details kit - front panel RFI with IEEE-handle, gray, without hot-swap

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
4	113 671	113 641	113 674	-
6	113 672	-	113 675	-
8	113 673	-	113 676	-
10	114 463	-	114 475	-
12	-	113 647	-	113 654

## Delivery kit front panel RFI with IEEE-Handle without hot-swap

	3 U pieces for 4-8 HP	3 U pieces for 9-12 HP	6 U pieces for 4-8 HP	6 U pieces for 9-12 HP
Front panel	1	1	1	1
IEEE-handle top gray	-	-	1	1
IEEE-handle bottom gray	1	1	1	1
Front connector metal	1	1	-	-
Front panel support plug-in	-	-	2	2
Grounding bushing M 2.5	1	3	-	2
Mounting parts	1	1	1	1

## Accessories

	order no. 409.
<i>For one flat front panel 2 RFI-springs are needed.</i>	
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116
<i>For assemble the RFI spring F3</i>	
Roller cutter	118 433

## Ordering details single part front panel RFI for IEEE handle

nom. width [HP]	3 U extruded order no. 409.	3 U flat order no. 409.	6 U extruded order no. 409.	6 U flat order no. 409.
4	112 152	113 079	112 154	-
5	112 408	-	112 400	-
6	112 409	112 778	112 401	-
7	112 410	-	112 402	-
8	112 411	-	112 403	-
9	112 412	-	112 404	-
10	112 413	-	112 405	-
12	-	112 790	-	112 773



## IEEE Handle 4 HP without hot-swap

**Color:** gray, RAL 7035

### Delivery:

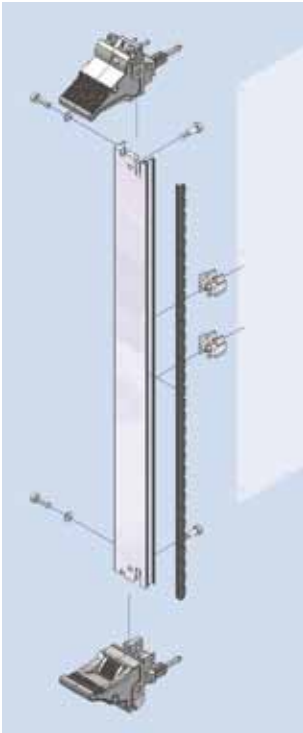
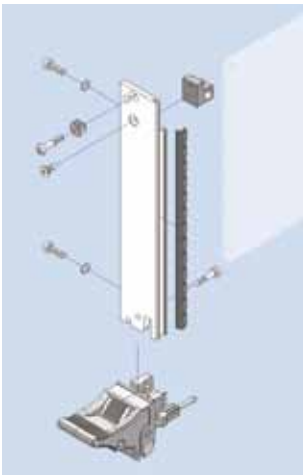
Assembled handle with mounting parts.

## Ordering details

	order no. 409.
IEEE handle 4HP bottom	114 413
IEEE handle 4HP top	114 415



# Front Panels RFI with IEEE Handle black with hot-swap



## Ordering details kit - extruded front panel RFI with IEEE handle, black, hot-swap in the bottom handle

nom. width [HP]	3 U order no. 409.	6 U order no. 409.
4	<b>122 607</b>	<b>122 610</b>
6	<b>122 608</b>	<b>122 611</b>
8	<b>122 609</b>	<b>122 612</b>

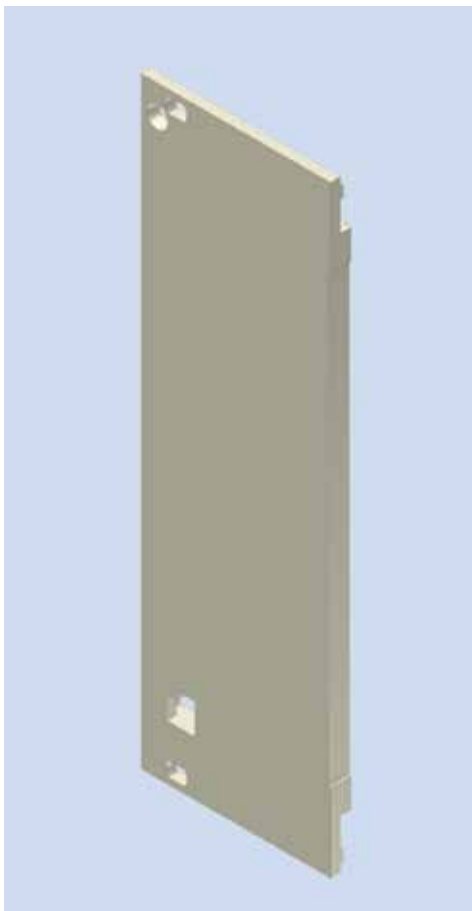
## Delivery kit

	3 U pieces for 4-8 HP	6 U pieces for 4-8HP
Front panel	1	1
IEEE handle topblack	-	1
IEEE handle bottom black	1	1
Micro switch	1	1
Front connector metal	1	-
Front panel support plug-in	-	2
Grounding bushing M 2.5	1	-
Mounting parts	1	1

## Accessories

	order no. 409.
<i>For one flat front panel 2 RFI-springs are needed.</i>	
RFI spring F3 - 3U	111 112
RFI spring F3 - 6U	111 116
<i>For assemble the RFI spring F3</i>	
Roller cutter	118 433

# Plastic Front Panel, Snap-in Handle



## Plastic Front Panels

On the rear side of the 2 mm thick front panel is an integrated front connector for attaching 1.6 mm thickness 3 U PCBs. The handle snaps in into the front panel, therefore the front panel can be modified easily.

### Delivery

As single part

### Technical data

Material	Polycarbonate, 10% fiber-glass reinforced
Color	RAL 7032, pearl gray or black
Continuous temperature	- 40 °C to + 115 °C
Fire protection class	UL 94 V-0

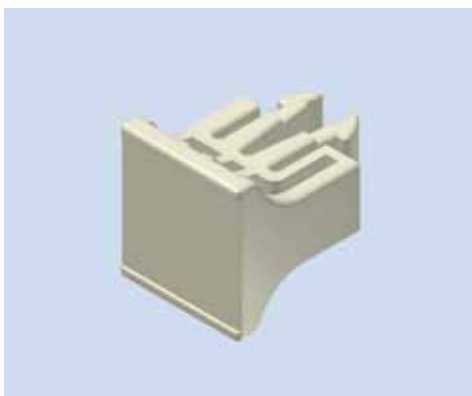
### Ordering details plastic front panel

nom. width [HP]	3 U pearl gray order no. <b>409.</b>	3 U black order no. <b>409.</b>
3	<b>035 004</b>	-
4	-	-
8	<b>035 665</b>	<b>040 387</b>

### Accessories

Minimum order quantity 100 pieces

	order no. 409.
Screw retainer 2 - M 2.5, gray	085 689
Cross-head screw M 2.5 x 10. 8	056 135



## Snap-in Handle

For use with 2 mm thick front panels of plastic. The handle snaps in into the front panel.

Front panels aluminum on request

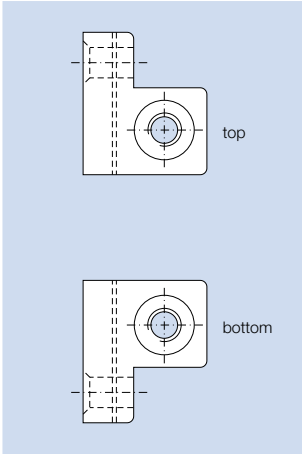
### Technical data

Material	Polycarbonate, 10% fiber-glass reinforced
Color	RAL 7032, pearl gray or black
Continuous temperature	- 40 °C to + 105 °C
Fire protection class	UL 94 V-0

### Ordering details snap-in handle

nom. width [HP]	RAL 7032 order no. <b>409.</b>	pearl gray order no. <b>409.</b>	black order no. <b>409.</b>
3	<b>043 035</b>	<b>035 528</b>	<b>040 385</b>
4	<b>043 036</b>	<b>035 529</b>	<b>040 386</b>

# Front Connector



## Front Connector

**Material:** zinc die-cast  
**Finish:** untreated

### Ordering details

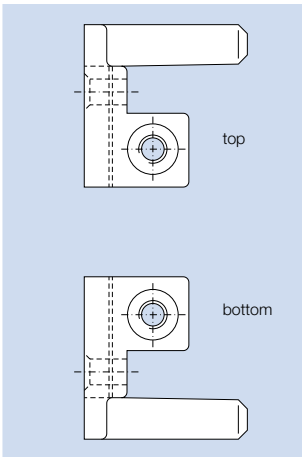
	order no. <b>409.</b>
Front connector top	<b>099 731</b>
Front connector bottom	<b>099 730</b>

### Accessories

**Counter sunk screw M 2.5 x 6**  
self tapping

Minimum order quantity 100 pieces

order no.:	<b>409. 067 624</b>
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## Front Connector with Male Contact

For pre-mating front panel grounding.

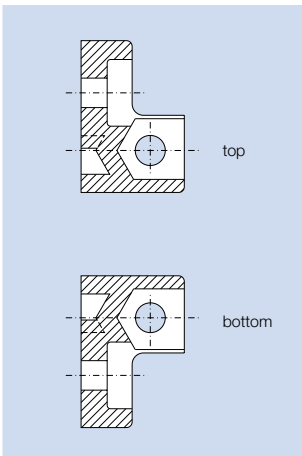
**Material:** zinc die-cast  
**Finish:** tin-plated

### Ordering details

	order no. <b>409.</b>
Front connector top	<b>107 728</b>
Front connector bottom	<b>107 727</b>

### Accessories

	order no. 409.
Front panel grounding contact	<b>058 102</b>
Minimum order quantity 100 pieces	
Self tapping counter sunk screw M 2.5 x 6	<b>067 624</b>



## Plastic Front Connector

### Technical data

Material	Polycarbonate, 10% fiber-glass reinforced
Color	gray
Continuous temperature	- 40 °C to + 100 °C
Fire protection class	UL 94 V-0

### Ordering details

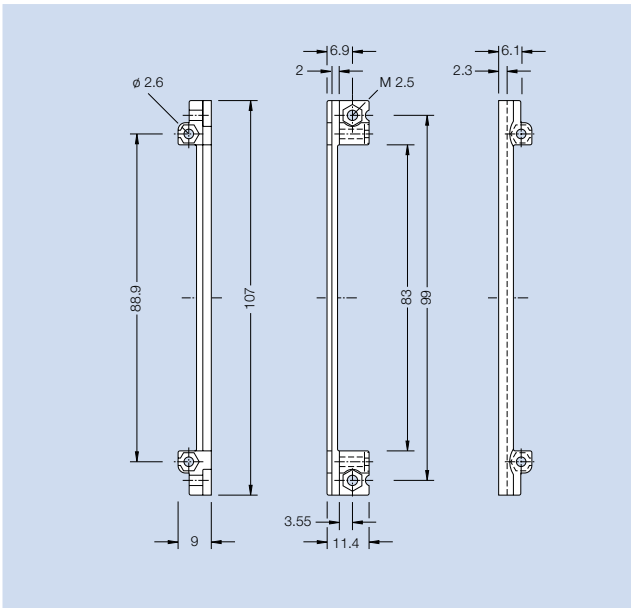
	order no. <b>409.</b>
Front connector top	<b>065 883</b>
Front connector bottom	<b>065 882</b>

### Accessories

Minimum order quantity 100 pieces

	order no. 409.
Hexagonal nut M 2.5	013 938
Counter sunk screw M 2.5 x 6	<b>067 624</b>

# Front Connector FEE, Front Panel Support



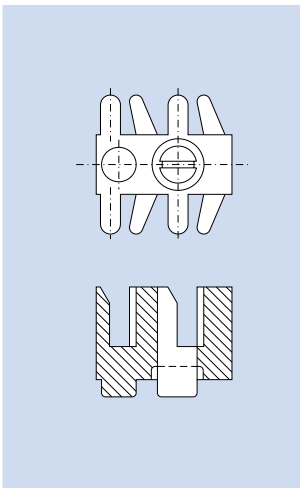
## Front Connector FEE

With inserted nut M 2.5 for fastening to the front panel.  
Also for use with front mounted Elements (FEE).

### Technical data

Material	Polycarbonate, 10% fiber-glass reinforced nut: steel, galvanized and chromated
Color	gray
Continuous temperature	- 40 °C to + 115 °C
Fire protection class	UL 94 V-0

order no.: **409. 024 830**



## Front Panel Support

For PCB's with a height over 3 U used with two-piece front connector.  
Prevents deflection of the front panel when inserting the PCB.

### Technical data

Material	Polycarbonate, 10% fiber-glass reinforced
Color	gray
Continuous temperature	- 40 °C to + 100 °C
Fire protection class	UL 94 V-0

order no.: **409. 092 786**

# Screw Retainer, Grounding Bushing, Quick Lock E



Screw retainer, Grounding bushing and Screw

## Screw Retainer 2.5 - M 2.5

For 2.5 mm thick front panels, for plugging in the screw

### Technical data

Material	POM
Color	gray or black
Continuous temperature	- 40 °C to + 100 °C

### Ordering details

Minimum order quantity 100 pieces

	Color	order no. <b>409.</b>
Screw retainer 2.5 - M 2.5	gray	<b>100 539</b>
Screw retainer 2.5 - M 2.5	black	<b>100 538</b>

## Grounding Bushing M 2.5

Pressed into the front panel. Secures the screw M 2.5 and provides electrical bonding between the screw and front panel and subrack; even when the front panel is anodized.

**Material:** brass, nickel plated

Minimum order quantity 10 pieces

order no.: **409. 082 594**

## Screw M 2.5 x 11.3

for 2.5 mm thick front panels

**Material:** knurled head screw: steel, nickel plated  
others: stainless steel

### Ordering details

Minimum order quantity 100 pieces

	head form	order no. <b>409.</b>
Pan head screw	slotted	<b>100 540</b>
Oval head screw	cross slot	<b>101 917</b>
Knurled head screw	knurled	<b>101 918</b>



## Quick Lock E

for 2.5 mm thick front panels.  
Slot head.

Minimum order quantity 10 pieces

order no.: **409. 097 957**

### Technical data

Material	sleeve: POM bolt: steel, galvanized
Color	gray
Continuous temperature	- 40 °C to + 100 °C