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*Schroff*

# FRONT PANELS, PLUG-IN-UNITS, FRAME TYPE PLUG-IN-UNITS



**Content** **Front panels, plug-in units, frame-type plug-in units**

Cabinets ..... 1

Wall mounted cases ..... 2

Accessories for cabinets and wall mounted cases . 3

Climate control . 4

Electronics cases ..... 5

Subracks/ 19" chassis .... 6

**Front panels, plug-in units ... 7**

Systems ..... 8

Power supply units ..... 9

Backplanes ... 10

Connectors, front panel component system ..... 11

Appendix ..... 12

## Front panels

- Extensive standard range
- Individual modification to customer requirements: drill holes, cut-outs
- Individual printing
- Front Panel Express



## Plug-in units

- Front panels with handles in various designs
  - Extensive standard range
  - Individual modification to customer requirements: drill holes, cut-outs
  - Individual printing
  - Front Panel Express



Front panels, plug-in units, frame-type plug-in units

Overview ..... 7.0

Frame-type plug-in units

- To hold and protect PCBs
- High stability
- Outstanding cooling
- With or without EMC shielding



Front panels.. 7.2

Plug-in units.. 7.16

Frame type plug-in units.. 7.64

minipac..... 7.98

PCB accessories... 7.102

minipac

- Convenient small case - flexible enough for all your requirements
- To accommodate non-standardised or standardised PCBs
- As desktop enclosure, for wall mounting or mounting on a DIN support rail

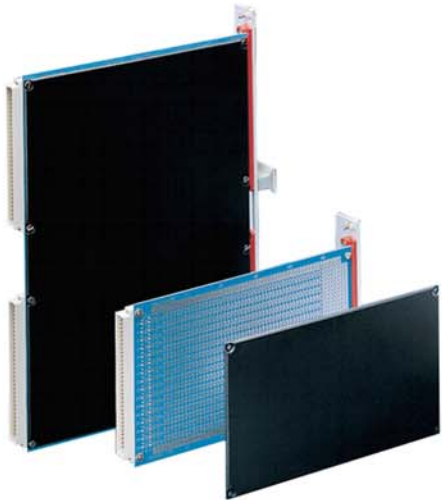


Assembly material..... 7.107

Modules to mount drive units see chapter System Accessories .. 8.110

Accessories

- Brackets, handles, covers
- Assembly material
- Tools



Cabinets ..... 1

Wall mounted cases ..... 2

Accessories for cabinets and wall mounted cases . 3

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Subracks/ 19" chassis .... 6

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Appendix ..... 12



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Standards

- IEC 60297-3-101/IEEE 1101.1/10

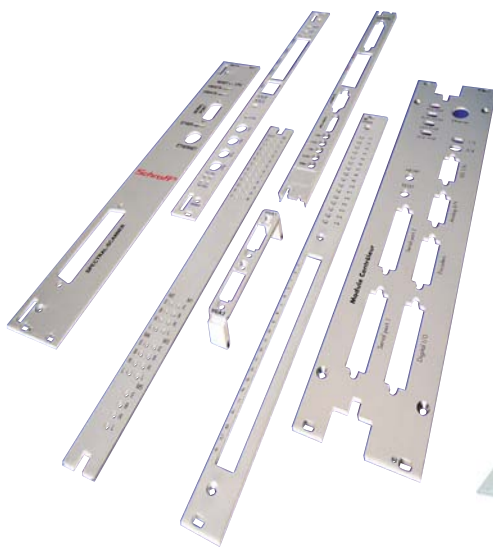


ServicePLUS

- e.g. individual colouring
- e.g. customised cut-outs
- e.g. printing
- e.g. mounting service
- e.g. special dimensions

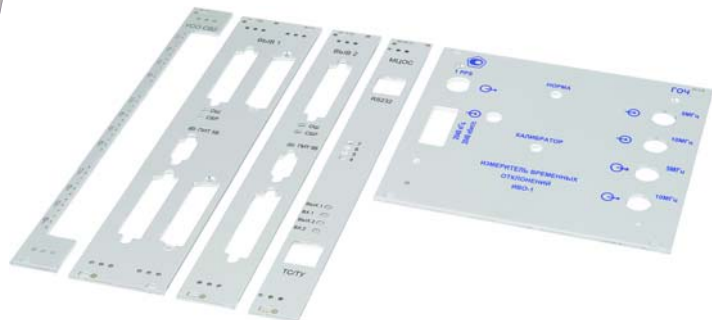
[www.frontpanelexpress.eu](http://www.frontpanelexpress.eu)

30407004



**FRONT PANEL EXPRESS**

32304003



04210001 044603009

## Front panels

Overview ..... 7.2

### Front panels for fitting in subracks, cases and systems

- Extensive standard range with various finishes and materials (aluminium or stainless steel)
- Front Panel Express:  
Fast delivery service of customised versions (from 2 days)
- EMC shielding retrofittable



04292001

#### Front panels, unshielded

- Aluminium, clear anodised
- Aluminium, clear pre-anodised, cut edge untreated
- Aluminium, front anodised, rear iridescent green chromated
- Other finishes on request



04600006

#### Front panels shieldable, flat

- With lateral grooves to fit EMC gaskets (stainless steel)
- Compatible with the shielded U profile version



04602004

#### Front panels, shieldable, U profile

- With lateral groove to fix a textile self-adhesive EMC gasket
- Compatible with the shielded flat version
- High robustness through U profile



04295001 04295002

#### Further front panels

- Hinged/folding front panels
- Front panels with GND/earthing
- Mezzanine front panels
- AdvancedTCA front panels
- MicroTCA front panels
- AdvancedMC front panels

#### Front panels

Unshielded ..... 7.4  
 Shieldable ..... 7.5  
 EMC stainless steel gaskets .... 7.6  
 Assembly tool .... 7.6

#### Front panels

Shieldable (U profile) ..... 7.7  
 EMC textile gasket ..... 7.6

#### Further front panels

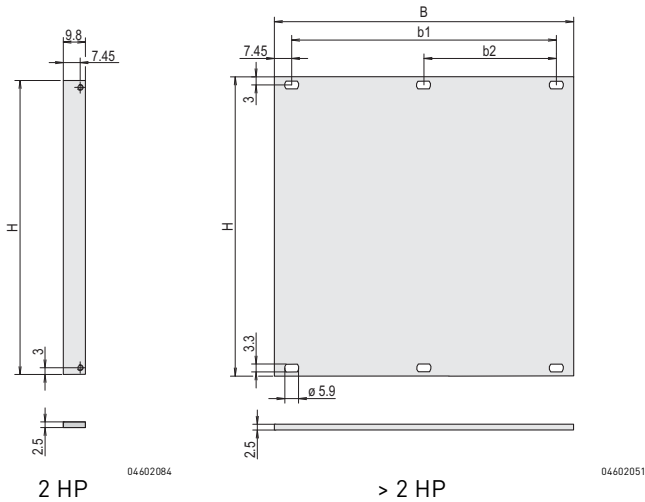
Hinged ..... 7.8  
 Hinged, shielded . 7.9  
 For D-Sub connectors ..... 7.10  
 For Coax connectors ..... 7.11  
 3 U with GND/earthing ..... 7.11  
 Mezzanine front panels ..... 7.12

#### Assembly kit ..... 7.107

AdvancedTCA front panels ..... 8.12  
 MicroTCA front panels ..... 8.65  
 AdvancedMC front panels ..... 8.60

## Front panels

### Front panels, unshielded



■ Front panel, Al, 2.5 mm

■ Versions:

- Al, anodised
- Al, anodised, cut edges plain
- Al, front anodised, rear iridescent green chromated

#### Note

- Other sizes and finishes available on request
- Please order fixing material separately, see chapter Assembly parts, page 7.107

### Order Information

Height H	Width	B	b1	b2	Qty	Anodised, cut edges plain	Anodised	Front anodised, rear colorless chromated	
U	mm	HP	mm	mm	1)	Part no.	Part no.	Part no.	
1	39.5	84	426.4	411.5	203.2	1	-	-	20850-426
2	84.0	84	426.4	411.5	203.2	1	30818-271	30807-416	30847-461
3	128.4	2	9.8	-	-	1 (SPQ 5) <sup>1)</sup>	30810-433	30810-432	30847-470
3	128.4	3	14.9	-	-	1 (SPQ 5) <sup>1)</sup>	30818-272	30807-508	30847-471
3	128.4	4	20.0	-	-	1 (SPQ 5) <sup>1)</sup>	30818-273	30807-481	30838-043
3	128.4	5	25.0	-	-	1 (SPQ 5) <sup>1)</sup>	30818-274	30807-510	30838-044
3	128.4	6	30.1	-	-	1 (SPQ 5) <sup>1)</sup>	30818-275	30807-482	30838-045
3	128.4	7	35.2	-	-	1 (SPQ 5) <sup>1)</sup>	30818-276	30807-509	30838-046
3	128.4	8	40.3	25.4 <sup>2)</sup>	-	1 (SPQ 5) <sup>1)</sup>	30818-277	30807-484	30838-047
3	128.4	10	50.5	35.6	-	1 (SPQ 5) <sup>1)</sup>	30818-279	30807-483	30838-049
3	128.4	12	60.6	45.7	-	1 (SPQ 5) <sup>1)</sup>	30818-281	30807-485	30838-051
3	128.4	14	70.8	55.9	-	1 (SPQ 5) <sup>1)</sup>	30818-282	30807-501	30838-053
3	128.4	21	106.3	91.4	-	1 (SPQ 5) <sup>1)</sup>	30818-289	30807-487	30838-060
3	128.4	28	141.9	127.0	-	1 (SPQ 5) <sup>1)</sup>	30818-296	30807-496	30838-067
3	128.4	42	213.0	198.1	101.6 <sup>2)</sup>	1	30818-310	30807-494	30838-081
3	128.4	63	319.7	304.8	157.5	1	30818-331	30808-067	30838-102
3	128.4	84	426.4	411.5	203.2	1	30818-352	30807-506	30838-123
4	172.9	84	426.4	411.5	203.2	1	30818-434	30807-596	30847-465
6	261.8	2	9.8	-	-	1 (SPQ 5) <sup>1)</sup>	30818-747	30818-741	30847-472
6	261.8	4	20.0	-	-	1 (SPQ 5) <sup>1)</sup>	30818-518	30807-778	30838-124
6	261.8	5	25.0	-	-	1 (SPQ 5) <sup>1)</sup>	30818-519	30807-777	30838-125
6	261.8	6	30.1	-	-	1 (SPQ 5) <sup>1)</sup>	30818-520	30807-752	30838-126
6	261.8	7	35.2	-	-	1 (SPQ 5) <sup>1)</sup>	30818-521	-	30838-127
6	261.8	8	40.3	25.4 <sup>2)</sup>	-	1 (SPQ 5) <sup>1)</sup>	30818-522	30807-779	30838-128
6	261.8	10	50.5	35.6	-	1 (SPQ 5) <sup>1)</sup>	30818-524	30807-753	30838-130
6	261.8	12	60.6	45.7	-	1 (SPQ 5) <sup>1)</sup>	30818-526	30807-755	30838-132
6	261.8	14	70.8	55.9	-	1 (SPQ 5) <sup>1)</sup>	30818-528	30807-758	30838-134
6	261.8	16	80.9	66.0	-	1 (SPQ 5) <sup>1)</sup>	30818-530	30807-780	30838-136
6	261.8	21	106.3	91.4	-	1 (SPQ 5) <sup>1)</sup>	30818-535	30807-757	30838-141
6	261.8	28	141.9	127.0	-	1 (SPQ 5) <sup>1)</sup>	30818-542	30807-766	30838-148
6	261.8	42	213.0	198.1	101.6 <sup>2)</sup>	1	30818-556	30807-764	30838-162
6	261.8	63	319.7	304.8	157.5	1	30818-577	30807-771	30838-183
6	261.8	84	426.4	411.5	203.2	1	30818-598	30807-776	30838-204
9	395.1	84	426.4	411.5	203.2	1	-	-	30847-556

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

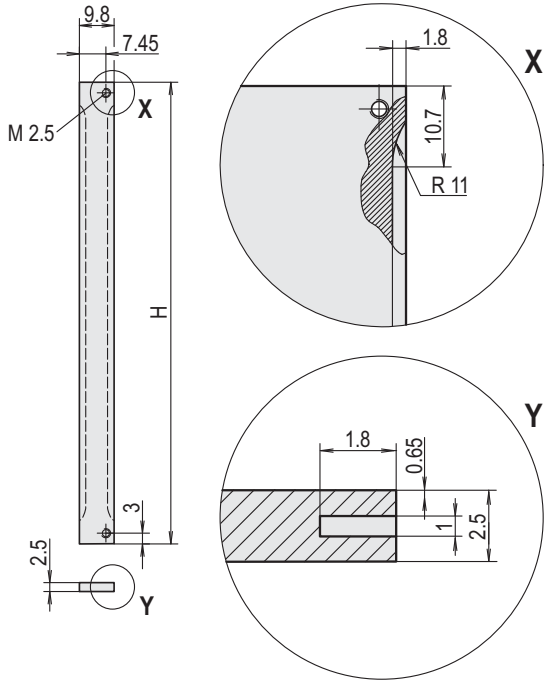
2) This dimension is only available for "front anodised, rear iridescent green chromated" version

- Please order fixing material (sleeves, collar screws) separately, see page 7.107



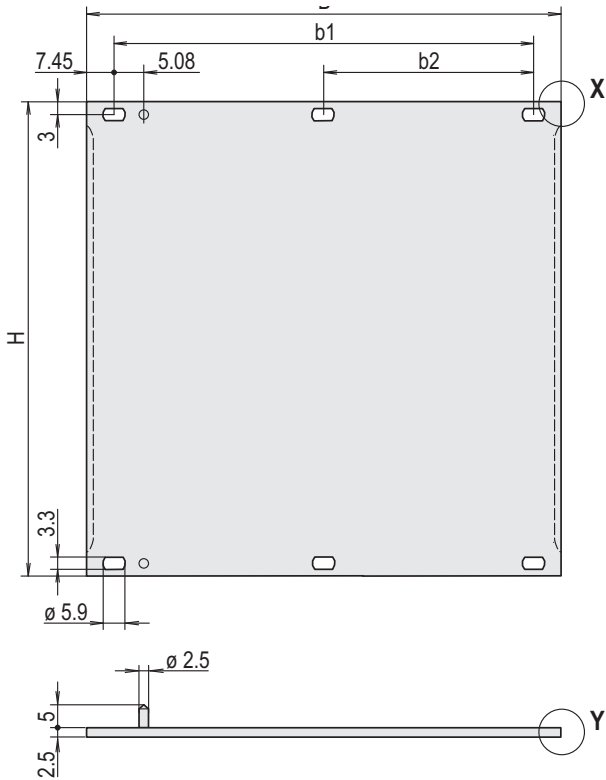
# Front panels

## Front panels, shieldable



2 HP

04602052



> 2 HP

04608154

- Front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated, 2 alignment pins pressed-in, stainless steel
- Shielding with stainless steel EMC gasket

### Order Information

Height H U	Width B mm	HP	b1 mm	b2 mm	Align- ment pin	Qty	Part no.	
2	84	84	426.4	411.5	203.2	-	1	<b>30846-588</b>
3	128.4	2	9.8	-	-	-	1 (SPQ 5) <sup>1)</sup>	<b>30846-864</b>
3	128.4	3	14.9	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-425</b>
3	128.4	4	20	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-426</b>
3	128.4	5	25	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-427</b>
3	128.4	6	30.1	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-428</b>
3	128.4	7	35.2	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-429</b>
3	128.4	8	40.3	25.4	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-430</b>
3	128.4	10	50.5	35.6	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-431</b>
3	128.4	12	60.6	45.7	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-432</b>
3	128.4	14	70.8	55.9	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-433</b>
3	128.4	21	106.3	91.4	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-434</b>
3	128.4	28	141.9	127	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-436</b>
3	128.4	42	213	198.1	101.6	x	1	<b>20846-437</b>
3	128.4	63	319.7	304.8	157.5	x	1	<b>20846-438</b>
3	128.4	84	426.4	411.5	203.2	-	1	<b>30846-676</b>
4	172.9	84	426.4	411.5	203.2	-	1	<b>30846-683</b>
6	261.8	2	9.8	-	-	-	1 (SPQ 5) <sup>1)</sup>	<b>30846-865</b>
6	261.8	4	20	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-443</b>
6	261.8	5	25	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-444</b>
6	261.8	6	30.1	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-445</b>
6	261.8	7	35.2	-	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-446</b>
6	261.8	8	40.3	25.4	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-447</b>
6	261.8	10	50.5	35.6	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-448</b>
6	261.8	12	60.6	45.7	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-449</b>
6	261.8	14	70.8	55.9	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-450</b>
6	261.8	16	80.9	66	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-456</b>
6	261.8	21	106.3	91.4	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-451</b>
6	261.8	28	141.9	127	-	x	1 (SPQ 5) <sup>1)</sup>	<b>20846-452</b>
6	261.8	42	213	198.1	101.6	x	1	<b>20846-453</b>
6	261.8	63	319.7	304.8	157.5	x	1	<b>20846-454</b>
6	261.8	84	426.4	411.5	203.2	-	1	<b>30846-771</b>
9	395.1	84	426.4	411.5	203.2	-	1	<b>30846-859</b>

Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 5 pieces or a multiple.  
Pricing is per individual item.

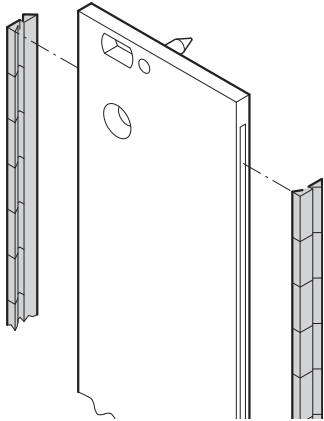
### Note

- Please order fixing material (sleeves, collar screws) separately, see page 7.107
- Please order stainless steel EMC gasket separately, see page 7.6

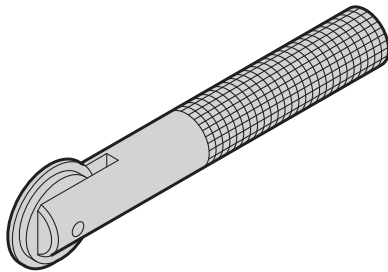


## Front panels

### Stainless steel EMC gasket



Montagewerkzeug



bga45760

aza45937

- The stainless steel EMC gaskets are inserted into the lateral slots of the shieldable front panels (2 pieces per front panel)

#### Delivery comprises

Item	Qty	Description
1	10/100	EMC gasket (stainless steel)

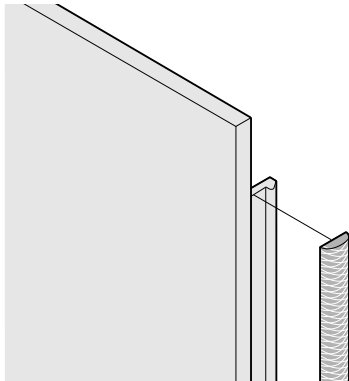
#### Order Information

Height U	Height mm	Qty/PU	Part no.
2	52	10	21101-775
3	97	10	21101-705
3	97	100	21101-706
4	142	10	21101-713
4	142	100	21101-714
5	187	10	21101-777
5	187	100	21101-778
6	232	10	21101-707
6	232	100	21101-708
9	367	10	21101-709
9	367	100	21101-710
Assembly tool for EMC gasket (stainless steel), 1 piece			24560-270

#### Note

- Please order assembly tool separately

### Textile EMC gasket



04602054

- Textile EMC gasket is glued laterally on the front panel, in the groove of the right-hand profile
- 2 temperature ranges
  - Temperature range -40... +70 °C
  - Temperature range -40... +85 °C

#### Delivery includes

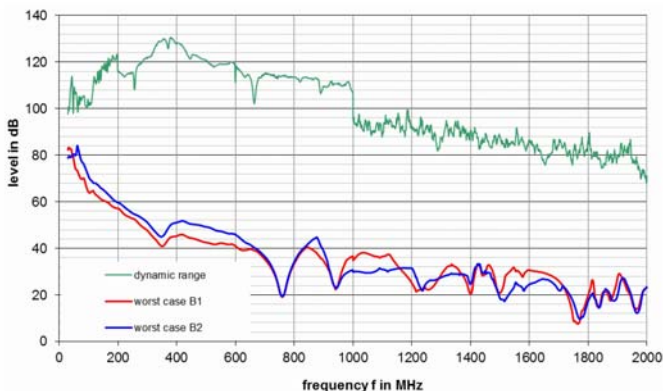
Item	Qty	Description
1	see Order Information	EMC textile gasket, core: TPE foam (-40... +70 °C), Core: silicon with hollow chamber (-40... +85 °C), sleeve: textile cladding with CuNi coating

#### Order Information

Height U	Height mm	Qty/PU piece	Part no. Temperature range -40... +70 °C	Part no. Temperature range -40... +85 °C
2	52	10	21101-857	21102-857
3	97	10	21101-853	21102-853
3	97	100	21101-854	21102-854
4	142	10	21101-858	21102-858
5	187	10	21101-978	21102-978
6	232	10	21101-855	21102-855
6	232	100	21101-856	21102-856
9	365	10	21101-859	21102-859
9	365	100	21101-904	-

#### EMC characteristic (typical, green)

B1 (red): -40 ... -70 °C, B2 (blue): -40 ... -85 °C



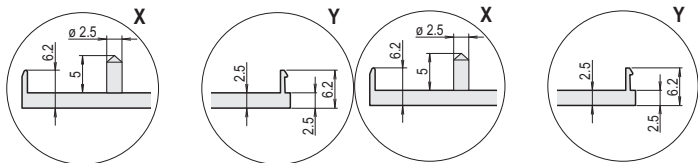
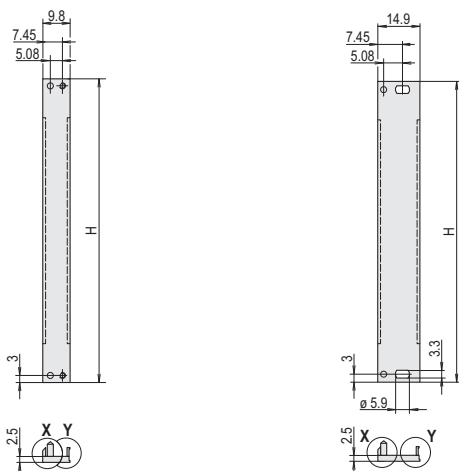
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## Front panels

### Front panels, U profile, shieldable

2 HP

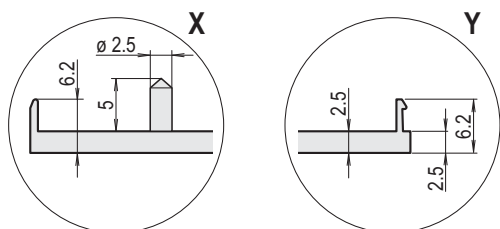
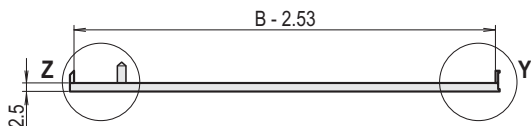
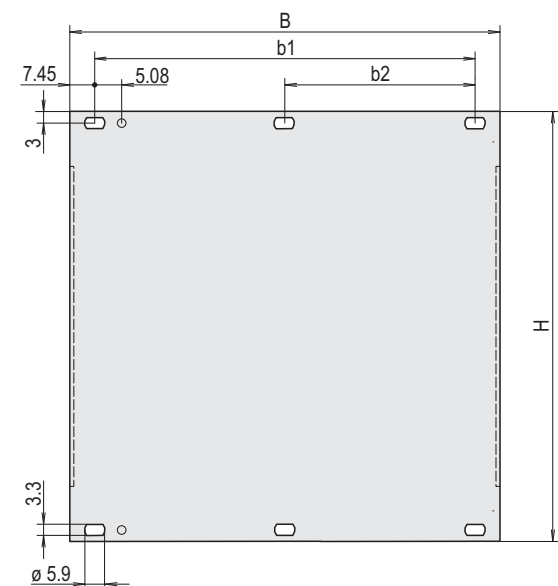
3 U



044608155

044608158

> 3 HP



044608156

- High stability through U profile
- Front panel, U profile, Al, front anodised, rear conductive, 2 alignment pins pressed-in, stainless steel
- Differences in the finish between 2 ... 12 HP and 14 ... 84 HP

### Order Information

Height H	Width B	b1	b2	Align-ment pin	Qty	Part no.		
U mm	HP	mm	mm	mm				
2	84	84	426.4	411.5	203.2	-	1 (SPQ 5)1	<b>20848-262</b>
3	128.4	2	9.8	-	-	x	1 (SPQ 5)1	<b>30849-001</b>
3	128.4	3	14.9	-	-	x	1 (SPQ 5)1	<b>30849-004</b>
3	128.4	4	20	-	-	x	1 (SPQ 5)1	<b>30848-354</b>
3	128.4	5	25	-	-	x	1 (SPQ 5)1	<b>30848-378</b>
3	128.4	6	30.1	-	-	x	1 (SPQ 5)1	<b>30848-380</b>
3	128.4	7	35.2	-	-	x	1 (SPQ 5)1	<b>30848-382</b>
3	128.4	8	40.3	25.4	-	x	1 (SPQ 5)1	<b>30848-356</b>
3	128.4	10	50.5	35.6	-	x	1 (SPQ 5)1	<b>30848-386</b>
3	128.4	12	60.6	45.7	-	x	1 (SPQ 5)1	<b>30848-358</b>
3	128.4	14	70.8	55.9	-	x	1 (SPQ 5)1	<b>20848-013</b>
3	128.4	16	80.9	66	-	x	1 (SPQ 5)1	<b>20848-015</b>
3	128.4	21	106.3	91.4	-	x	1 (SPQ 5)1	<b>20848-020</b>
3	128.4	28	141.9	127	-	x	1 (SPQ 5)1	<b>20848-027</b>
3	128.4	42	213	198.1	101.6	x	1	<b>20848-047</b>
3	128.4	63	319.7	304.8	157.5	x	1	<b>20848-068</b>
3	128.4	84	426.4	411.5	203.2	-	1	<b>20848-097</b>
4	172.9	84	426.4	411.5	203.2	-	1	<b>20848-271</b>
6	261.8	2	9.8	-	-	x	1 (SPQ 5)1	<b>30849-002</b>
6	261.8	4	20	-	-	x	1 (SPQ 5)1	<b>30848-355</b>
6	261.8	5	25	-	-	x	1 (SPQ 5)1	<b>30848-379</b>
6	261.8	6	30.1	-	-	x	1 (SPQ 5)1	<b>30848-381</b>
6	261.8	7	35.2	-	-	x	1 (SPQ 5)1	<b>30848-383</b>
6	261.8	8	40.3	25.4	-	x	1 (SPQ 5)1	<b>30848-357</b>
6	261.8	10	50.5	35.6	-	x	1 (SPQ 5)1	<b>30848-387</b>
6	261.8	12	60.6	45.7	-	x	1 (SPQ 5)1	<b>30848-359</b>
6	261.8	14	70.8	55.9	-	x	1 (SPQ 5)1	<b>20848-106</b>
6	261.8	16	80.9	66	-	x	1 (SPQ 5)1	<b>20848-108</b>
6	261.8	21	106.3	91.4	-	x	1 (SPQ 5)1	<b>20848-113</b>
6	261.8	28	141.9	127	-	x	1 (SPQ 5)1	<b>20848-120</b>
6	261.8	42	213	198.1	101.6	x	1	<b>20848-139</b>
6	261.8	63	319.7	304.8	157.5	x	1	<b>20848-160</b>
6	261.8	84	426.4	411.5	208.3	-	1	<b>20848-189</b>
9	395.1	84	426.4	411.5	203.2	-	1	<b>20848-280</b>

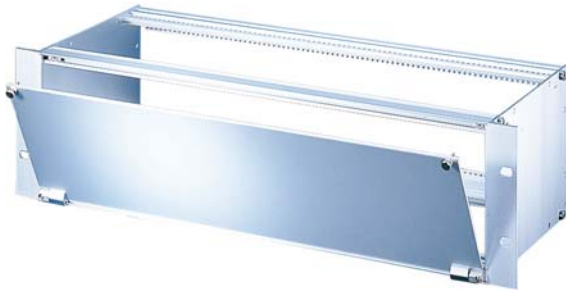
1) Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 5 pieces or a multiple.  
Pricing is per individual item.

### Note

- Differences in finish between 2 ... 12 HP and 14 ... 84 HP
  - 2 ... 12 HP: one-part U-profile
  - 14 ... 84 HP: multi-part U-profile (front panel with crimped profiles)
- Please order fixing material (sleeves, collar screws) separately, see page 7.107
- Please order textile EMC gasket separately, see page 7.6

## Front panels

### Front panels, bottom-hinged



- Suitable for subracks (europacPRO) and cases (ratiopacPRO, propacPRO, compacPRO)
- Front panel can be unhinged at 135° (not ratiopacPRO) opening angle
- The useable width is not restricted
- Mounts on the horizontal rails
- 2 versions:
  - unshielded
  - shielded, U front panel with textile EMC gasket

04295001

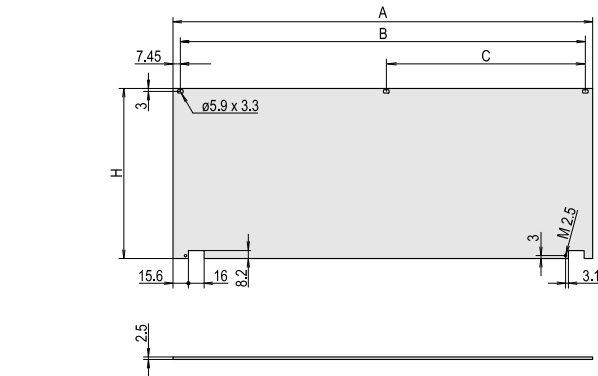
### Delivery comprises (kit)

Item	Qty		Description
	Unshielded	Shielded	
1	1	-	Front panel, hinged, Al, 2.5 mm, anodised, cut edges plain
1a	-	1	Front panel, U profile, hinged, Al, 2.5 mm, front anodised, rear iridescent green chromated
2	2	3	Hinge, Zn die-cast, nickel-plated
3	2	3	Sleeve, PA
4	2	3	Knurled screw M2.5 x 12.3, nickel-plated
5	-	1	EMC textile gasket, core: foam, sleeve: textile cladding with CuNi coating
6	1	1	Assembly kit

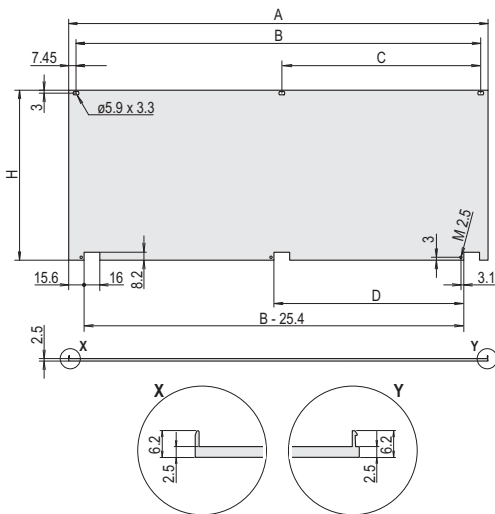
04602080

### Note

- Unshielded: Dimension C for 84 HP only



Unshielded



Shielded

04602079

### Order Information

Dimensions							Shielded	Unshielded
Height	Width	A	B	C	D	H	Part no.	Part no.
U	HP	mm	mm	mm	mm	mm		
3	28	141.9	127.0	-	-	128.4	20848-608	20838-280
3	42	213.0	198.1	101.6	86.4	128.4	20848-599	20838-271
3	63	319.7	304.8	157.5	137.2	128.4	20848-600	20838-272
3	84	426.4	411.5	208.3 <sup>1)</sup>	193.0	128.4	20848-601	20838-273
4	42	213.0	198.1	101.6	86.4	172.9	20848-605	20838-277
4	63	319.7	304.8	157.5	137.2	172.9	20848-606	20838-278
4	84	426.4	411.5	208.3 <sup>1)</sup>	193.0	172.9	20848-607	20838-279
6	28	141.9	127.0	-	-	261.8	20848-696	-
6	42	213.0	198.1	101.6	86.4	261.8	20848-602	20838-274
6	63	319.7	304.8	157.5	137.2	261.8	20848-603	20838-275
6	84	426.4	411.5	208.3 <sup>1)</sup>	193.0	261.8	20848-604	20838-276

1) Dimension with unshielded front panel

Front panels

Front panel, hinged, shielded



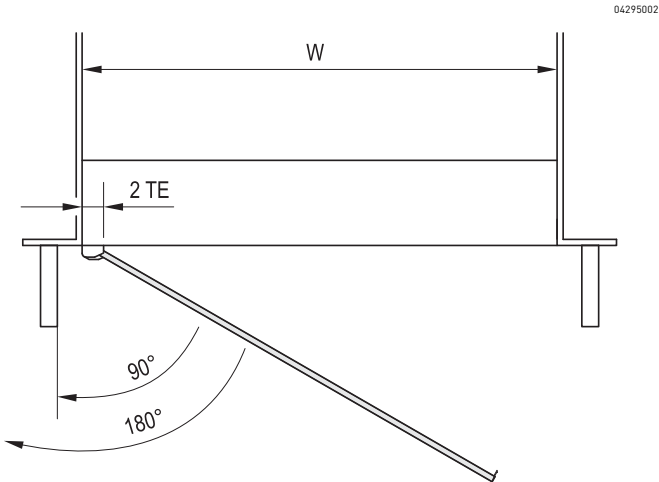
- Suitable for subracks (europacPRO) and cases (ratiopacPRO, propacPRO, compacPRO)
- Mounts on horizontal rails
- Front panel with textile EMC gasket
- Hinges can be fitted on left or right

Delivery comprises (kit)

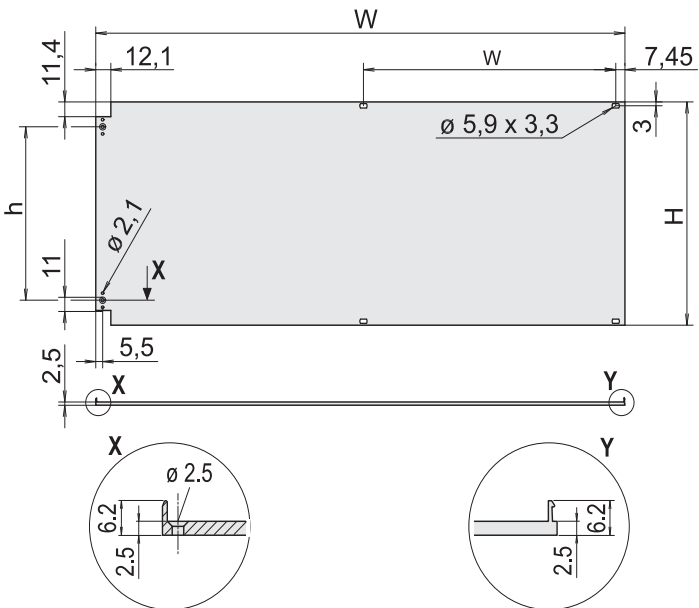
Item	Qty	Description
1	1	Front panel, hinged, Al, 2.5 mm, front anodised, rear iridescent green chromated
2	2	Hinge, Zn die-cast, chrome-plated
3	1	Textile EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
4	1	Assembly kit

Order Information

Height	H	h	W	w	Part no.
U	mm	mm	mm	mm	
3	128.4	89.9	426.4	203.2	<b>20848-611</b>
6	261.8	223.2	426.4	203.2	<b>20848-617</b>



04295002



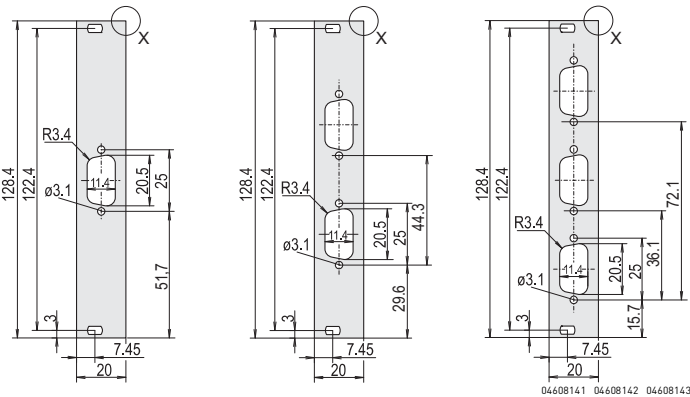
06106053

04602081

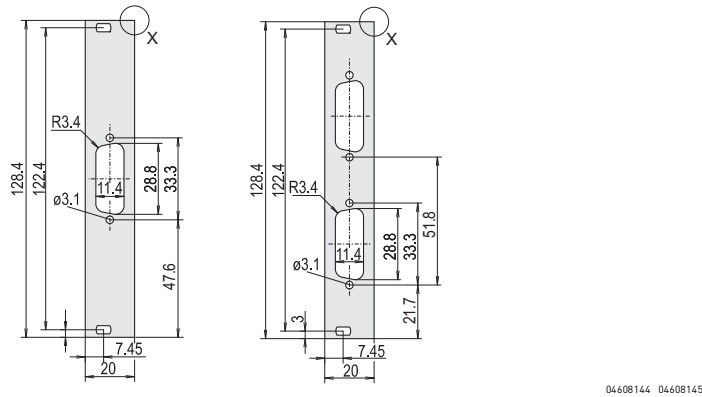


## Front panels

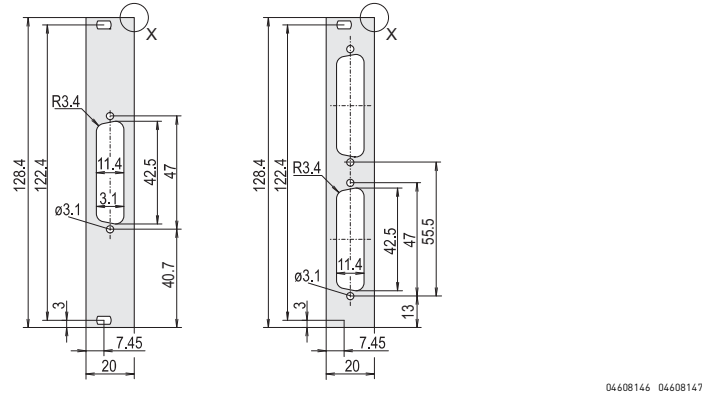
### Front panels for D-Sub connectors



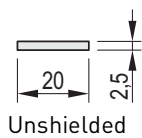
Cut-out 9-pin



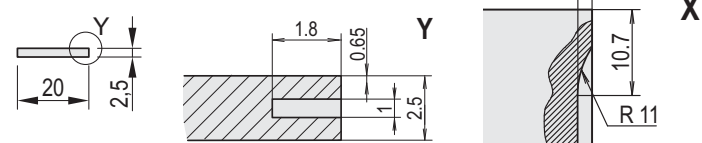
Cut-out 15-pin



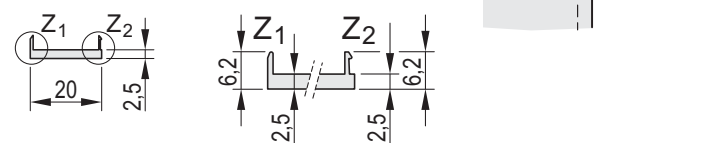
Cut-out 25-pin



Unshielded



EMC gasket, stainless steel



For textile EMC gasket

04608150 04608151 04608149 04608148 04608152 04608153

- 3 U/4 HP
- Aluminium, front anodised, rear iridescent green chromated
- Shielding through: stainless steel EMC or textile EMC gasket (please order separately)

### Delivery comprises

Item	Description
1a	Front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated
1b	Front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated; for EMC stainless steel gasket
1c	Front panel, U profile, Al, 2.5 mm, front anodised, rear conductive; for EMC gasket (textile)

### Order Information

Cut-out	Qty	Unshielded Part no. 1a	For EMC gasket	
			Stainless steel Part no. 1b	Textile Part no. 1c
1 × 9-polig	1 piece (SPQ 5)	<b>30118-341</b>	<b>30118-348</b>	30849-749
2 × 9-polig	1 piece (SPQ 5)	<b>30118-344</b>	<b>30118-351</b>	30849-750
3 × 9-polig	1 piece (SPQ 5)	<b>30118-347</b>	30118-354	30849-751
1 × 15-polig	1 piece (SPQ 5)	<b>30118-342</b>	<b>30118-349</b>	30849-752
2 × 15-polig	1 piece (SPQ 5)	<b>30118-345</b>	30118-352	30849-753
1 × 25-polig	1 piece (SPQ 5)	<b>30118-343</b>	30118-350	30849-754
2 × 25-polig	1 piece (SPQ 5)	<b>30118-346</b>	30118-353	30849-755

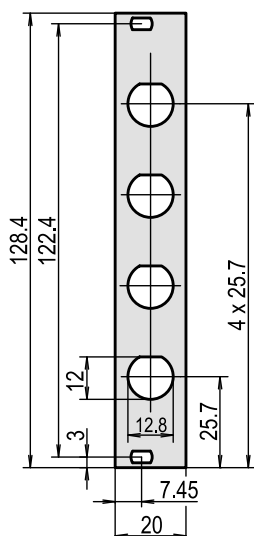
Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 5 pieces or a multiple.  
Pricing is per individual item.

### Note

- Please order fixing material (sleeves, collar screws) separately, see page 7.107
- Please order stainless steel EMC gasket separately, see page 7.6
- Please order textile EMC gasket separately, see page 7.6

## Front panels

### Front panels for Coax connectors



04602057

- 3 U/4 HP

- Aluminium, 2.5 mm, front anodised, rear iridescent green chromated

#### Order Information

Description	Qty/PU	Part no.
Cut-out 4 x Coax, unshielded	1	<b>30118-355</b>

#### Note

- Please order fixing material (sleeves, collar screws) separately, see page 7.107

### Front panels 3 U with GND/earthing connection



02998001

- Earthed front panel (protection class 1)

#### Delivery comprises (items 1 – 3 assembled)

Item	Qty	Description
1	1	Front panel 3 U, Al, 2.5 mm, front anodised, rear iridescent green chromated with GND/earthing connection
2	4	Plastic sleeve, PA, grey
3	4	Collar screws, M2.5 x 11 and 12.3 Pozidrive, St, nickel-plated
4	1	GND/earthing kit, length of GND/earthing cable 320 mm

#### Order Information

Height U	Width HP	Qty	Part no.
3	7	1 piece (SPQ 5)	<b>20119-159</b>
3	14	1 piece (SPQ 5)	<b>20119-160</b>
3	21	1 piece (SPQ 5)	<b>20119-161</b>
3	28	1 piece (SPQ 5)	<b>20119-162</b>
3	42	1	<b>20119-163</b>

Delivery is exclusively made in Standard Pack Quantity (SPQ):

Please order at least 5 pieces or a multiple.

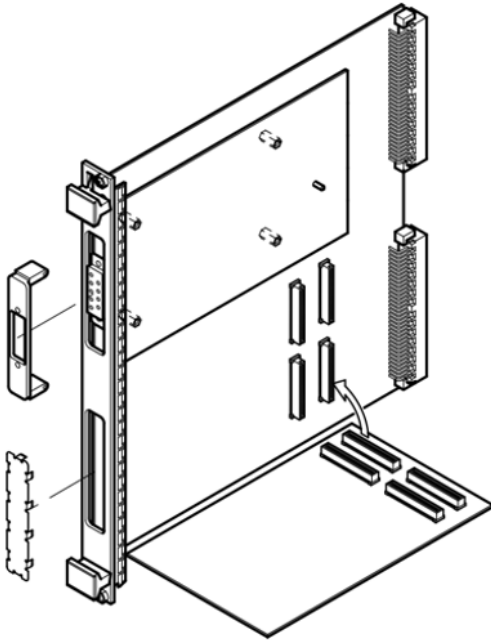
Pricing is per individual item.

#### Note

- Please order fixing material (sleeves, collar screws) separately, see page 7.107

## Front panels

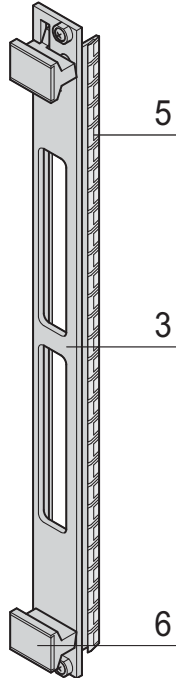
### PMC Mezzanine front panels



04615054

- Based on PCI 2.2 specification (PCI = Peripheral Component Interface)
- In accordance with PMC mezzanine specification IEEE P 1386

### PMC mezzanine front panel kit, shielded, with trapezoidal extractor handle Type 1



Item 3: front panel, item 5: EMC gasket, item 6: front handle

MPA44845

- PMC= PCI Mezzanine Card
- For module size 194 x 74 mm2
- In accordance with specification IEEE P1386 (CMC= Common Mezzanine Card)
- 6 U/4 HP front panel with stainless steel EMC gasket and front handles

#### Delivery includes (assembled)

Item	Qty	Description
3	1	PMC front panel, Al extrusion, 6 U, 4 HP, clear passivated
5	1	EMC gasket (St, stainless)
6	2	Trapeziform extractor handle, type 1

#### Order Information

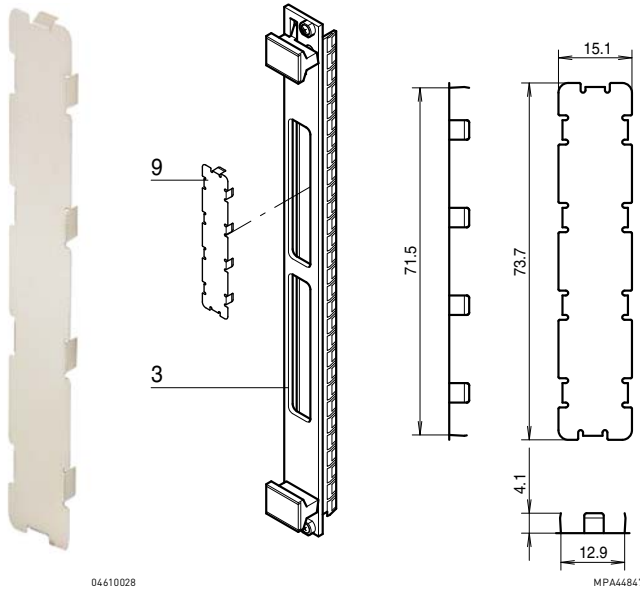
Item	Description	Part No.
3+5+6	Front panel with 2 cut-outs	20897-950

#### Accessories

Spacer to mount PMC and FMC mezzanine boards	see page 7.15
Voltage keying/coding pin for PMC mezzanine boards	see page 7.15
PMC cover for front panel cutouts for EMC shielding, PMC gasket for mezzanine front panels	see page 7.13
PMC gasket for mezzanine front panels	see page 7.13

## Front panels

### PMC cutout cover for EMC protection



04610028

Item 9: EMC cover; Item 3: front panel

MPA44847

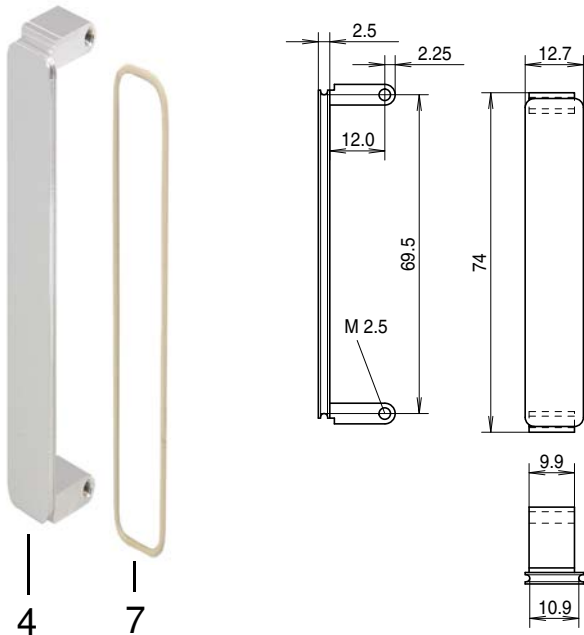
- EMC cover to close unused cut-outs in the PMC mezzanine front panels
- Material stainless steel, 0.2 mm
- Colour: black or bright

#### Order Information

Colour	Qty	Part no.
Black	1 piece (SPQ 10)	<b>60835-024</b>
Bright	1 piece (SPQ 10)	<b>60835-022</b>

Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 10 pieces or a multiple.  
Pricing is per individual item.

### PMC bezel for mezzanine front panels



04610029

mpa44846

- Mezzanine front panel is fitted into PMC front panel cut-outs; EMC shielding with conductive O-ring
- Material:
  - Aluminium extrusion (anodised, contact surfaces conductive)
  - Zinc die-cast (untreated, black or chrome-plated, matt)

#### Delivery comprises (kit)

Item	Qty	Description
4	1	PMC bezel for mezzanine front panel, Zn die-cast or Al extrusion
7	1	EMC gasket (O-ring), Cho-Seal

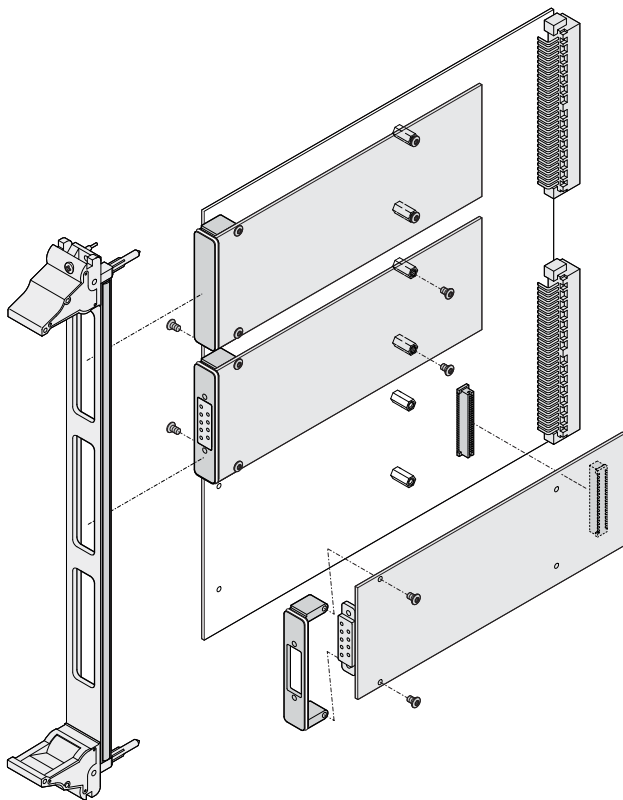
#### Order Information

PMC mezzanine front panel	Qty/PU	with EMC gasket Part no.	without EMC gasket Part no.
<b>Material</b>			
Al extrusion, anodised, contact surfaces conductive	1	<b>20835-598</b>	-
Al extrusion, anodised, contact surfaces conductive	10	<b>20835-889</b>	<b>20835-899</b>
Zn die-cast, untreated	1	<b>20835-890</b>	-
Zn die-cast, untreated	10	20835-893	20835-896
Zinc die-cast, black, chromated	1	<b>20835-922</b>	-
Zinc die-cast, black, chromated	10	20835-924	20835-931
Zinc die-cast, chrome-plated, matt	1	<b>20835-923</b>	-
Zinc die-cast, chrome-plated, matt	10	20835-928	20835-929
<b>Cheesehead screw</b> M2.5 × 5 mm, PU 100 pieces			<b>21100-624</b>
<b>EMC gasket</b> O-ring, 1 piece (Standard Pack Quantity 10 pieces)			<b>60835-021</b>



## Front panels

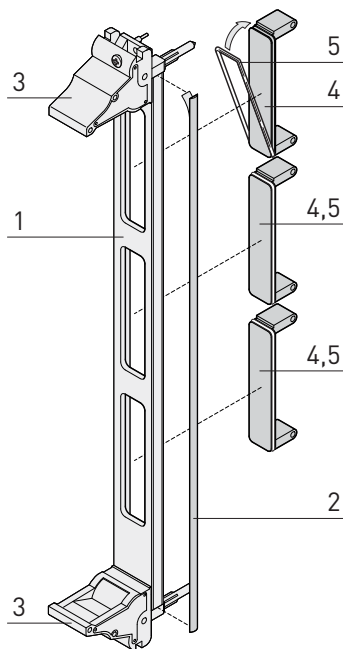
### FMC mezzanine front panels



04615052

- FMC = FPGA mezzanine card
- For standard defined I/O mezzanine modules which connect to carrier cards
- For single 69.0 x 76.5 mm or double 139.0 x 76.5 mm modules
- In accordance with Vita 57.1 specification

### FMC mezzanine front panel kit, shielded, with IEL handle



04615050

- 3 U or 6 U, 4 HP, U-shaped front panels with textile gasketing
- 1 or 3 FMC cutouts (depending on height)
- 1 or 2 IEL front handles (depending on height)
- EMC shielded, both the front panel and the FMC bezels

#### Delivery includes (assembled)

Item	Qty		Description
	3 U	6 U	
1	1	1	FMC front panel, U profile, Al, 4 HP, front anodized, rear conductive, 3 U has 1 cut out, 6 U has 3 cut outs
2	1	1	EMC textile gasket for front panel
3	1	2	IEL handle (handel, black, RAL 9005; button, light grey, RAL 7035)
4	1	3	FMC bezel for front panel cut outs
5	1	3	EMC gasket (O-ring)
6	1	1	Assembly kit

#### Order Information

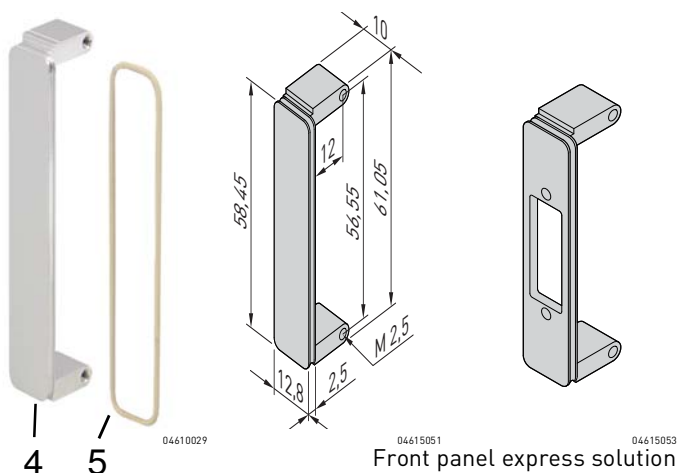
Height	Part no.
U	
3	20836-253
6	20836-254

#### Accessories

Spacer to mount PMC mezzanine boards	see page 7.15
--------------------------------------	---------------

## Front panels

### EMC bezel for FMC Mezzanine front panel cut-outs



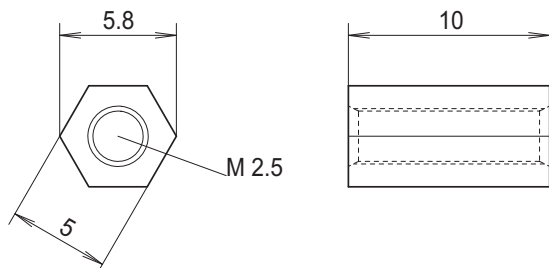
Front panel express solution

- FMC bezel is fitted into FMC Mezzanine front panel cut-outs
- Material, Al extrusion (anodised, contact surface conductive)
- Shielding for FMC bezels with an optional conductive O-ring, please order separately

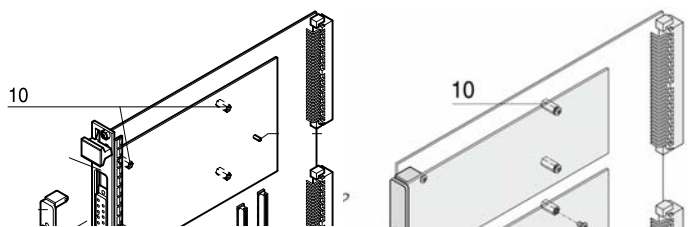
#### Order Information

Description	Item	Qty/PU piece	Part no.
EMC bezel for FMC Mezzanine front panel cut outs	4	10	20835-849
<b>Accessories</b>			
EMC gasket for mezzanine front panel item 5, O-ring, (VITA 57.1), 1 piece (standard pack quantity 10 pieces)			<b>60835-077</b>
Cheesehead screw M2.5 x 5 mm, PU 100 pieces			<b>21100-624</b>

### Spacer to mount PMC and FMC mezzanine boards



MPA44850



Spacer within PMC application

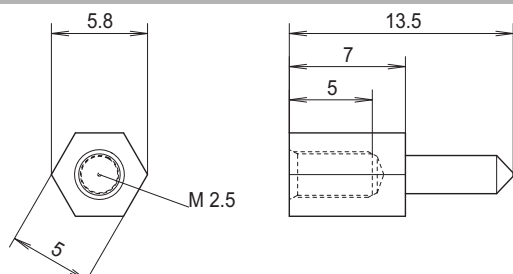
- To provide a standoff between mezzanine boards per the IEEE P1386 or VITA 57.1 specification and the carrier card

#### Order Information

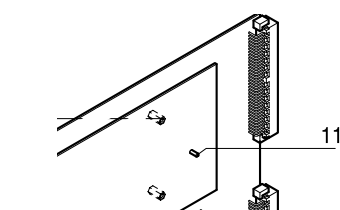
Description	Item	Material	Qty	Part no.
Spacer	10	St, zinc-plated	1 piece (SPQ 10)	<b>60897-278</b>

Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 10 pieces or a multiple.  
Pricing is per individual item.

### Voltage keying/coding pin for PMC mezzanine boards



MPZU6325



Application

- To prevent accidental damage when fitting mezzanine boards, keying/coding pins are bolted to the VMEbus boards to distinguish between 3.3 V and 5 V operation. The mezzanine boards have a hole drilled in the appropriate position. The keying/coding pin thus ensures that only mezzanine boards with the same operating voltage can be inserted. For double-height euroboards 2 pieces are required.

#### Order Information

Description	Item	Material	Qty	Part no.
Keying/coding pin 5 V/3.3 V	11	St, zinc-plated	1 piece (SPQ 10)	<b>60827-026</b>

Delivery is exclusively made in Standard Pack Quantity (SPQ):  
Please order at least 10 pieces or a multiple.  
Pricing is per individual item.

Cabinets ..... 1

Wall mounted cases ..... 2

Accessories for cabinets and wall mounted cases . 3

Climate control . 4

Electronics cases ..... 5

Subracks/ 19" chassis .... 6

Front panels, plug-in units ... 7

Systems ..... 8

Power supply units ..... 9

Backplanes ... 10

Connectors, front panel component system ..... 11

Appendix ..... 12



04612001

Plug-in units as kits or from individual parts

- Handles in different designs for various applications
- Inserter/extractor handles for forces up to 1500 N
- Upgradable EMC shielding

Standards

- IEC 60297-3-101 / IEEE 1101.1/11
- IEC 60297-3-102 / IEEE 1101.10
- IEC 60297-3-103
- IEC 1296



30407004

ServicePLUS

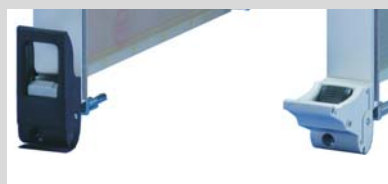
- e.g. individual configuration and assembly
- e.g. modifications (special colours or sizes)
- e.g. custom solutions with modification to the plug-in units

[www.frontpanelexpress.eu](http://www.frontpanelexpress.eu)

## Plug-in units

Overview ..... 7.17

### Handles for plug-in units



04602005

**For CompactPCI and VME64x applications**  
Inserter/extractor handle, type IEL/IET, allows keying/coding and insertion/extraction forces up to 700 N per pair

Kit  
Page

7.18

Individual  
components  
Page

7.20

Plug-in units with injector  
and extractor handles

For CompactPCI  
and VME64x  
applications ..... 7.18



04605005

**For VPX, VXS, CompactPCI and VME64x applications**

Inserter/extractor handle, type XL, allows keying/coding and insertion/extraction forces up to 1500 N per pair

7.30

7.31

For VPX, VXS,  
CompactPCI and  
VME64x  
applications ..... 7.30



04604059

**For e.g. VMEbus applications**

Trapeziform extractor handle, type 2

7.33

7.35

For e.g. VMEbus  
applications  
type 2 ..... 7.33



04692005

**For e.g. VMEbus applications**

Trapeziform extractor handle, type 1

7.40

7.42

For e.g. VMEbus  
applications  
type 1 ..... 7.40



04692011

**For Multibus® II applications**

Extractor handle, multibus type II, IEC 60297

-

7.46

For Multibus®  
II applications .... 7.46



04692008

**For plug-in units in accordance with IEC 60297**

Extractor handle in key form 1

-

7.48

For plug-in units  
in accordance  
with IEC 60297 ... 7.48



04692010

**For plug-in units in accordance with IEC 60297**

Extractor handle in key form 2

-

7.51

For plug-in units  
in accordance  
with IEC 60297 ... 7.51



04692003

**For plug-in units in accordance with IEC 60297**

Static handle

7.54

7.56

For plug-in units  
in accordance  
with IEC 60297 ... 7.54



04692004

**Accessories for plug-in units**

Mechanical protection for static trapeziform handle and fixing materials kit

7.64

-

Accessories for  
plug-in units ..... 7.62

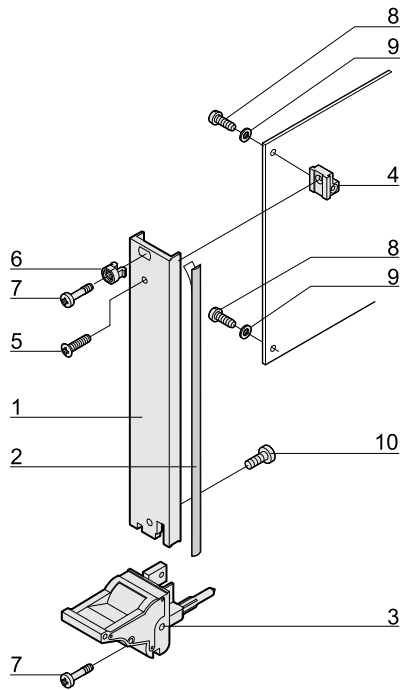
PCB cover ..... 7.64



## Plug-in units – for CompactPCI, VME64x

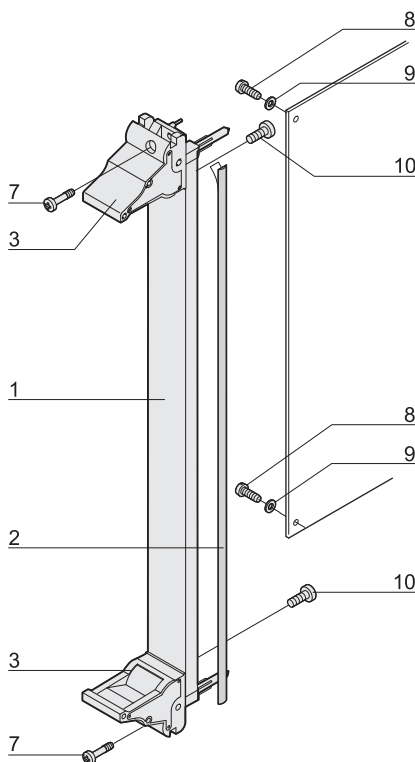
### Kits

3 U



04602073

6 U



04602074

### Plug-in units with IEL inserter/extractor handle for CompactPCI/VME64x applications

- In accordance with IEEE 1101.10 and IEC 60297-3-102
- Codable to IEC 60297-3-103/ IEEE 1101.10
- Front panel shielded
- Suitable for insertion and extraction forces up to 700 N (per pair)
- Suitable for fitting microswitches

### Delivery comprises (kit)

Item	3 U		6 U		Description
	<8HP	>8HP	<8HP	>8HP	
1	1	1	1	1	Front panel (U profile), Al, front anodised, rear conductive
2	1	1	1	1	EMC sealing (textile), core: foam, sleeve: textile cladding, CuNi coated
3	1	1	2	2	Handle with integrated alignment pin for perforated strips and guide rails, lever: plastic, PC, black, RAL 9005 key: plastic, PC, light grey, RAL 7035
4	1	1	-	-	Board support, die-cast zinc
5	1	1	-	-	Raised Pozidrive countersunk screw M2.5 x 8, St, nickel-plated
6	1	3	-	2	Sleeve, PA, grey
7	2	4	2	4	Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated
8	2	2	2	2	Panhead screw with Torx/slot, M2.5 x 6, St, zinc-plated, self-locking
9	2	2	2	2	Washer A2.7, DIN 125, St, nickel-plated
10	1	1	2	2	Panhead screw with Torx, M2.5 x 7, St, nickel-plated

### Order Information

Width HP	Part no. Rear I/O	Part no. Front assembly
<b>3 U Height</b>		
4	20848-751	20848-585
6	-	20848-587
8	20848-752	20848-589
10	-	20848-590
12	-	20848-591
<b>6 U Height</b>		
4	-	20848-592
6	-	20848-594
8	-	20848-596
10	-	20848-597
12	-	20848-598

### Accessories

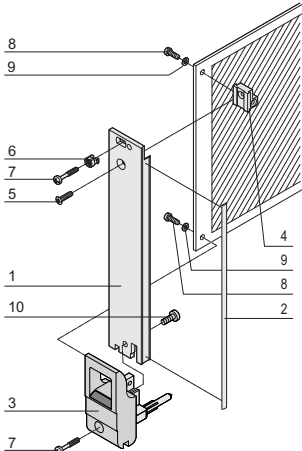
Microswitch for handles, CompactPCI/VME64x application PU 10 pieces	20817-606
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- Dimension drawing of front profile see page 7.26
- Description of microswitch see page 7.31

Plug-in units – for CompactPCI, VME64x

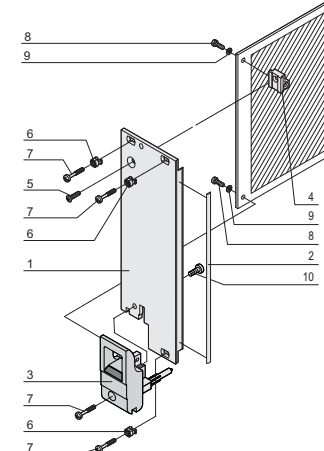
Kits

3 U



< 8 HP

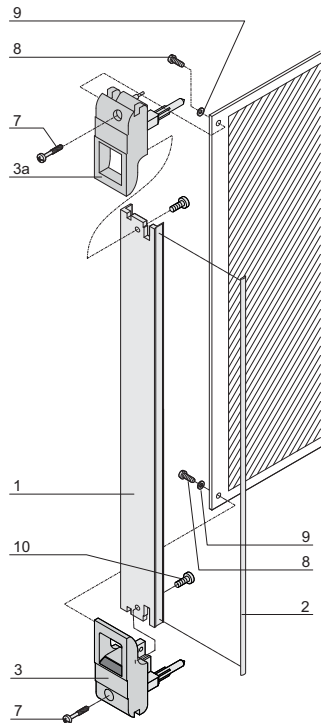
04613051



≥8 HP

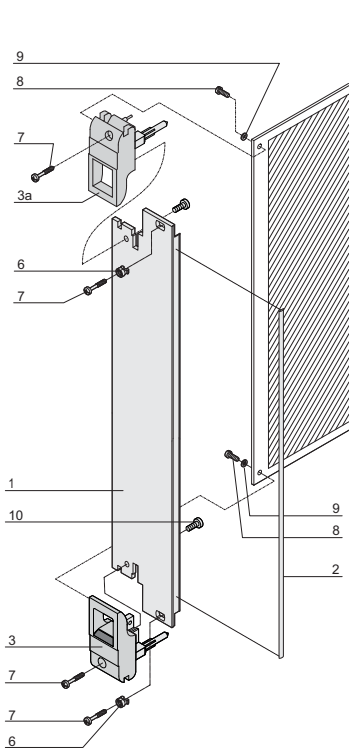
04613052

6 U



< 8 HP

04613053



≥8 HP

04613054

Plug-in units with IET insertion/extractor handle for CompactPCI/VME64x applications

- Suitable for insertion and extraction forces up to 700 N (per pair)
- Version for telecoms applications
- To IEEE 1101.10 and IEC 60297-3-102
- Codable to IEC 60297-3-103/ IEEE 1101.10
- Front panel, shielded (3 U, 6 HP)
- designed for fitting of microswitches
- Online download of 3D CAD data

**NEW**

Delivery includes (Kit)

Item	Qty				Description
	3 U		6 U		
	<8 HP	≥8 HP	<8 HP	≥8 HP	
1	1	1	1	1	Front panel (U profile), Al, front anodized, rear conductive
2	1	1	1	1	EMC sealing (textile), core: foam, sleeve: textile cladding, CuNi coated
3	1	1	2	2	Handle with integrated alignment pin for perforated strips and guide rails, lever: plastic, PC, black, RAL 9005 Key: Plastic, PC, light gray, RAL 7035
4	1	1	-	-	Board support, die-cast zinc
5	1	1	-	-	Raised Pozidrive countersunk screw M2.5 × 8, St, nickel-plated
6	1	3	-	2	Sleeve, PA, gray
7	2	4	2	4	Pozidrive collar screw, M2.5 × 12.3, St, nickel-plated
8	2	2	2	2	Panhead screw with Torx/slot, M2.5 × 6, St, zinc-plated, self-locking
9	2	2	2	2	Washer A2.7, DIN 125, St, nickel-plated
10	1	1	2	2	Panhead screw with Torx, M2.5 × 7, St, nickel-plated

Order Information

Width HP	Part no.
<b>3 U Height</b>	
4	<b>20848-763</b>
8	<b>20848-764</b>
12	<b>20848-765</b>
<b>6 U Height</b>	
4	<b>20848-766</b>
8	<b>20848-767</b>
12	<b>20848-768</b>
<b>Accessories</b>	
Coding peg, PC, UL 94 V-0, grey, RAL 7035 PU 100 pieces	<b>20817-501</b>
Microswitch for handles, CompactPCI/VME64x application PU 10 pieces	<b>20817-606</b>

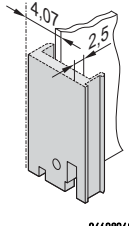
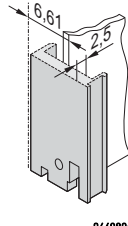
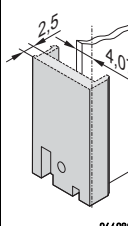
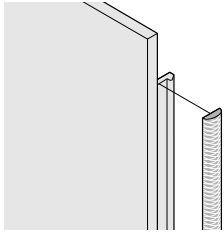
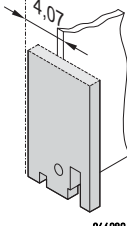
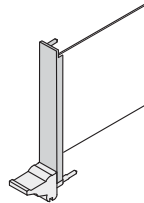
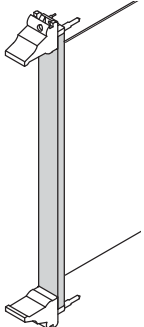
- For description of coding peg and microswitch see page 7.23
- Description of microswitch see page 7.31

## Plug-in units – for CompactPCI, VME64x

Individual components

Front panels, U-profiles, for extractor handles, type IEL, IET

### Order Information

	Front panel, U profile, shieldable			Textile EMC gasket		Front panel, flat, unshielded, front mounting	
	Front mounting	Front mounting, PCB fixing with 0.1" offset	Rear I/O mounting				
	 04608060	 04608062	 04608061	 B9A45760		 04608063	
	Al extrusion, 2.5 mm, front anodised, rear conductive; alignment pin pressed-in (3 U only), stainless steel; manufacturing process causes various surface structures to appear between 4 to 12 HP and 14 to 16 HP			always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C		front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated	
<b>Width HP</b>	1 piece (SPQ 5) <sup>1)</sup>	1 piece (SPQ 5) <sup>1)</sup>	1 piece (SPQ 5) <sup>1)</sup>	PU 10 pieces	PU 100 pieces	1 piece (SPQ 5) <sup>1)</sup>	
<b>3 U Height</b>							
 04608067	4	30848-312	30848-426	30848-867			30848-327
	5	30848-300	30848-427	-			30848-328
	6	30848-313	30848-428	-			30848-329
	7	30848-301	30848-429	-			30848-330
	8	30848-314	30848-430	30848-869			30848-331
	9	20848-227	-	-	21101-853	21101-854	-
	10	30848-315	30848-431	-			30848-333
	11	20848-228	-	-			-
	12	30848-316	30848-432	30848-985			30848-335
	14	20848-230	-	-			-
16	20848-232	-	-			-	
<b>6 U Height</b>							
 04608066	4	30848-317	30848-317	30848-317			30848-336
	5	30848-304	30848-304	30848-304			30848-337
	6	30848-318	30848-318	30848-318			30848-338
	7	30848-305	30848-305	30848-305			30848-339
	8	30848-319	30848-319	30848-319			30848-340
	9	20848-243	20848-243	20848-243	21101-855	21101-856	-
	10	30848-320	30848-320	30848-320			30848-342
	11	20848-244	20848-244	20848-244			-
	12	30848-321	30848-321	30848-321			30848-344
	14	20848-246	20848-246	20848-246			-
16	20848-248	20848-248	20848-248			-	
Fixing material see page	7.23	7.23	7.23			7.23	
Dimensions see page	7.26	7.26	7.25			7.27	

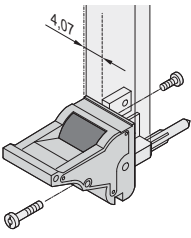
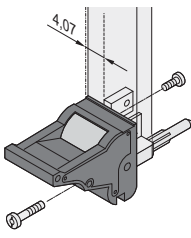
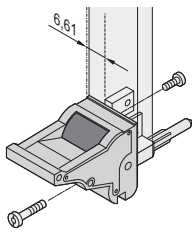
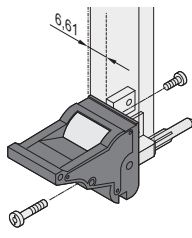
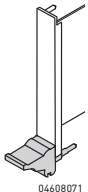
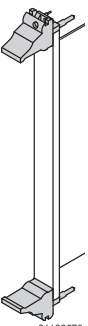
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Part no. includes one packing unit (PU); delivery is exclusively made in PU

**Plug-in units – for CompactPCI, VME64x**

**Individual components**      **Inserter/extractor handle, type IEL**

**Order Information**

	Inserter/extractor handle, type IEL, board fixing without offset				Inserter/extractor handle, type IEL, board fixing with 0.1" offset				
	lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		
	 <p>04608050</p>		 <p>04608052</p>		 <p>04608051</p>		 <p>04608053</p>		
	<p>in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; block die-cast zinc, nickel-plated, with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated</p>				<p>in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; 0.1" offset is used for PSUs with SMD Plus, block die-cast zinc, nickel plated; with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated</p>				
<b>Assembly</b>	<b>PU 10 pieces</b>	<b>PU 100 pieces</b>	<b>PU 10 pieces</b>	<b>PU 100 pieces</b>	<b>PU 10 pieces</b>	<b>PU 100 pieces</b>	<b>PU 10 pieces</b>	<b>PU 100 pieces</b>	
 <p>04608071</p>	<b>3 U Height bottom</b>								
	<b>Front side</b>	<b>20817-620</b>	<b>20817-621</b>	<b>20817-612</b>	<b>20817-613</b>	<b>20817-690</b>	<b>20817-691</b>	<b>20817-682</b>	<b>20817-683</b>
	<b>Rear I/O</b>	<b>20817-622</b>	<b>20817-623</b>	<b>20817-614</b>	<b>20817-615</b>	-	-	-	-
 <p>04608070</p>	<b>6 U Height top</b>								
	<b>Front side</b>	<b>20817-622</b>	<b>20817-623</b>	<b>20817-614</b>	<b>20817-615</b>	<b>20817-692</b>	<b>20817-693</b>	<b>20817-684</b>	<b>20817-685</b>
	<b>Rear I/O</b>	<b>20817-620</b>	<b>20817-621</b>	<b>20817-612</b>	<b>20817-613</b>	-	-	-	-
	<b>bottom</b>								
	<b>Front side</b>	<b>20817-620</b>	<b>20817-621</b>	<b>20817-612</b>	<b>20817-613</b>	<b>20817-690</b>	<b>20817-691</b>	<b>20817-682</b>	<b>20817-683</b>
	<b>Rear I/O</b>	<b>20817-622</b>	<b>20817-623</b>	<b>20817-614</b>	<b>20817-615</b>	-	-	-	-
<b>Dimensions see page</b>	7.28				7.28				

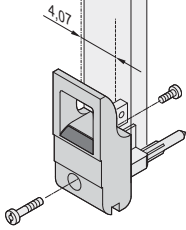
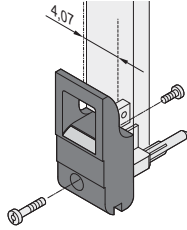
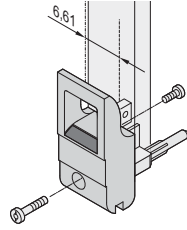
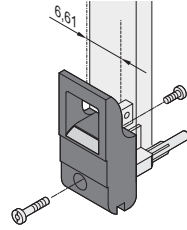
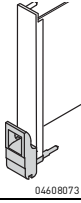
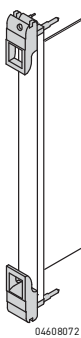


## Plug-in units – for CompactPCI, VME64x

Individual components

Insertor/extractor handle, type IET

### Order Information

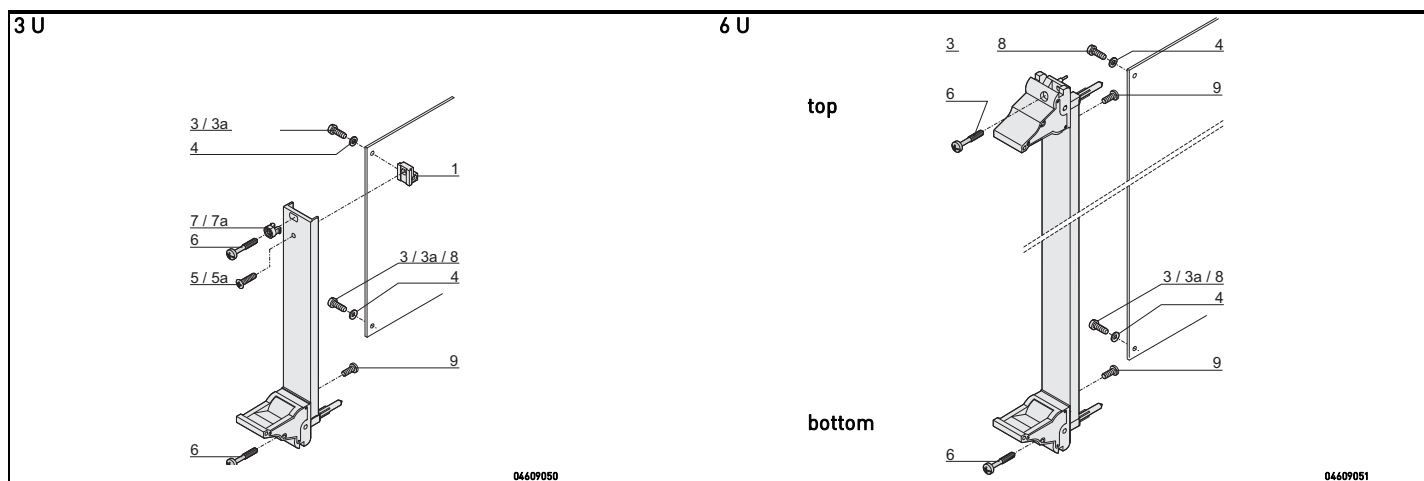
	Insertor/extractor handle, type IET, board fixing without offset				Insertor/extractor handle, type IET, board fixing with 0.1" offset				
	lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		
	 04608054		 04608056		 04608055		 04608057		
	<p>in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; block die-cast zinc, nickel-plated, with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, Slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated</p>				<p>in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; 0.1" offset is used for PSUs with SMD Plus: block die-cast zinc, nickel plated; with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated</p>				
Assembly	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	
 04608073	<b>3 U Height bottom</b>								
	Front side	20817-660	20817-661	20817-652	20817-653	20817-714	20817-715	20817-706	20817-707
	Rear I/O	20817-662	20817-663	20817-654	20817-655	-	-	-	-
 04608072	<b>6 U Height top</b>								
	Front side	20817-662	20817-663	20817-654	20817-655	20817-716	20817-717	20817-708	20817-709
	Rear I/O	20817-660	20817-661	20817-652	20817-653	-	-	-	-
	<b>bottom</b>								
	Front side	20817-660	20817-661	20817-652	20817-653	20817-714	20817-715	20817-706	20817-707
	Rear I/O	20817-662	20817-663	20817-654	20817-655	-	-	-	-
Fixing material see page	7.23				7.23				
Dimensions see page	7.29				7.29				







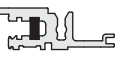




Plug-in units – for CompactPCI, VME64x

Individual components

inserter/extractor handles, type IEL/IET, fixing material

Order Information



Fixing material	Item	3 U	3 U		6 U		Qty/PU	Part no.
			< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP		
Printed board bracket Zn die-cast	1		1	1	-	-	1 piece (SPG 10) <sup>1)</sup>	<b>60807-181</b>
Pozidrive panhead screw M2.5 × 6, St, nickel-plated , not for 0.1" offset	3		2	2	2	2	100	<b>21101-219</b>
Slotted panhead screw with Torx 8 M2.5 × 6, St, zinc-plated, self-securing thread not for 0.1" offset	3a		2	2	2	2	100	<b>24560-159</b>
Washer 2.7, DIN 125, St, nickel-plated	4		2	2	2	2	100	<b>21100-721</b>
Raised Pozidrive countersunk panhead screw M2.5 × 8, St, nickel-plated	5		1	1	-	-	100	<b>21100-429</b>
Raised countersunk panhead screw with Torx 8 M2.5 × 8, St, nickel-plated	5a		1	1	-	-	100	<b>24560-164</b>
Pozidrive/slotted collar screw M2.5 × 12.3, St, nickel-plated	6		1	3	-	2	100	<b>21101-101</b>
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	7		1	3	-	2	100	<b>21100-464</b>
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steel	7a		1	3	-	2	100	<b>21100-662</b>
Pozidrive panhead screw for IEL/IET handle with 0.1" offset M2.5 × 10, nickel-plated steel	8		2	2	2	2	100	<b>21101-220</b>
Torx panhead screw M2.5 × 7, St, nickel-plated, Torx 8,	9		1	1	2	2	100	<b>24560-147</b>

SPQ [standard pack quantity]: Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple