

**CONNECT AND PROTECT**

# AdvancedMC Carriers

01/2025

  
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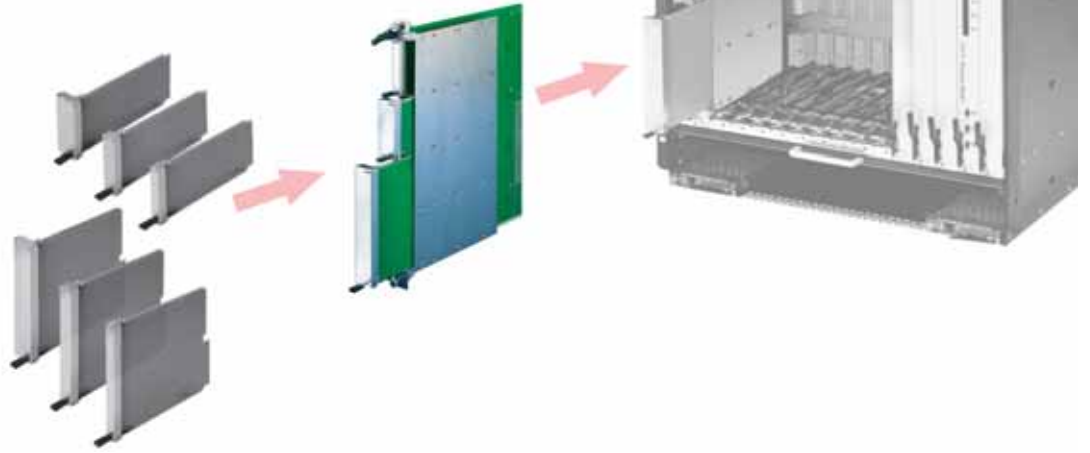
**SCHROFF**

# Systems – AdvancedMC carriers

## OVERVIEW

### MAIN CATALOG

- 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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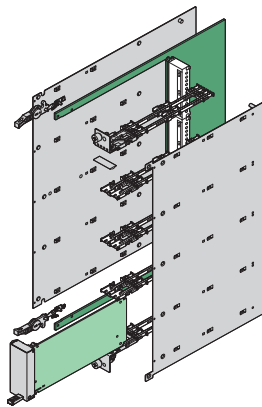
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### ADVANCEDMC CARRIERS

AdvancedMC carriers are plug-in units that are slotted into an AdvancedTCA system. They contain the carrier board that accepts AdvancedMC modules.

Electrical connection to the AdvancedTCA backplane is via connectors. With the fully-assembled AdvancedMC carrier in place, cost-effective additional functions may be integrated into the system.

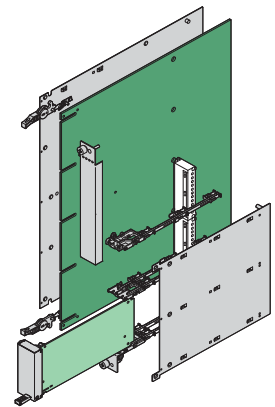
The standard, in accordance with PICMG specification AMC.0 R2.0, defines three different mechanical versions:



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#### Cutaway carrier

- Carrier board is cut out in the area of the AdvancedMC modules
- Max. placement:  
8 single compact or 4 single full-size AdvancedMC modules
- Combinations of full-size and compact modules are possible



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#### Hybrid carrier

- Carrier board is a combination of conventional and cutaway carrier
- The maximum placement depends on the carrier board design
- Combinations of all AdvancedMC modules are possible

# Systems – AdvancedMC carriers

## OVERVIEW

Overview ..... 8.26

### ADVANCEDMC CARRIERS FOR ADVANCED TCA SYSTEMS

- **Cutaway and hybrid carrier mechanics for**
  - compact AdvancedMC carrier boards
  - Mid-size AdvancedMC carrier boards
  - Full-size AdvancedMC carrier boards
- **Standard versions from stock**
- **Individual carrier/module combination of your choice**



#### ADVANCEDMC CARRIERS

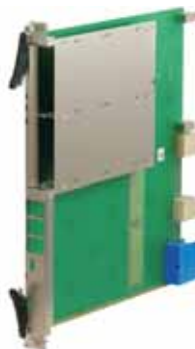
- 1 slot chassis, 8 U, 6 HP for AdvancedTCA systems
- Inserter/extractor handle for microswitch activation
- Versions
  - **Cutaway carrier** for compact and full-size modules

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#### INDIVIDUAL SOLUTIONS ON REQUEST

- AdvancedMC hybrid carrier
- AdvancedMC hybrid mechanics for rugged AdvancedMC modules (MicroTCA.1)



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#### SERVICEPLUS

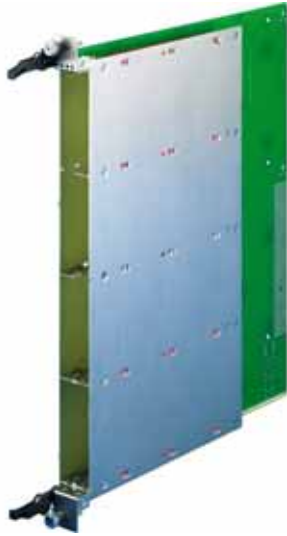
- e.g. individual configuration and fitting of hybrid carriers)
- e.g. modifications (cut-outs, special colours)
- e.g. custom solutions (special sizes)

Cutaway carriers  
For compact and full-size modules  
Complete kits . . . . . **8.28**  
Kit without struts, guide rails . . . . . **8.29**  
Guide rails/struts **8.30**  
Microswitches . . . . . **8.31**  
Differences between standard and MF handles for AMC carriers . . . . . **8.31**

ServicePLUS configuration  
Hybrid carrier . . . . . **8.34**

# Systems – AdvancedMC cutaway carrier

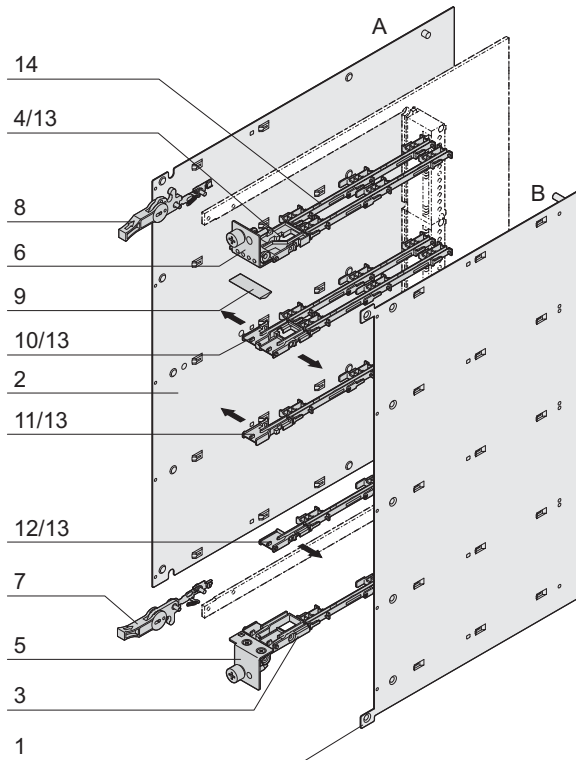
## CARRIER MECHANICS FOR COMPACT AND FULL-SIZE ADVANCEDMC MODULES



- Mechanics for cutaway carrier board (carrier **with** 3 different struts, guide rails, ESD clips)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG® AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation hot-swap

### DELIVERY COMPRISES (Kit)

Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs
7	1	Standard inserter/extractor handle, with microswitch operation, plastic lever, black
8	1	Standard inserter/extractor handle, plastic lever, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	3	Support member between cover A and B
11	3	Support member for cover A (on the left)
12	3	Support member for cover B (on the right)
13	8	ESD clip
14	10	AdvancedMC guide rail, PBT, UL 94 V-0, red
15	1	Assembly kit



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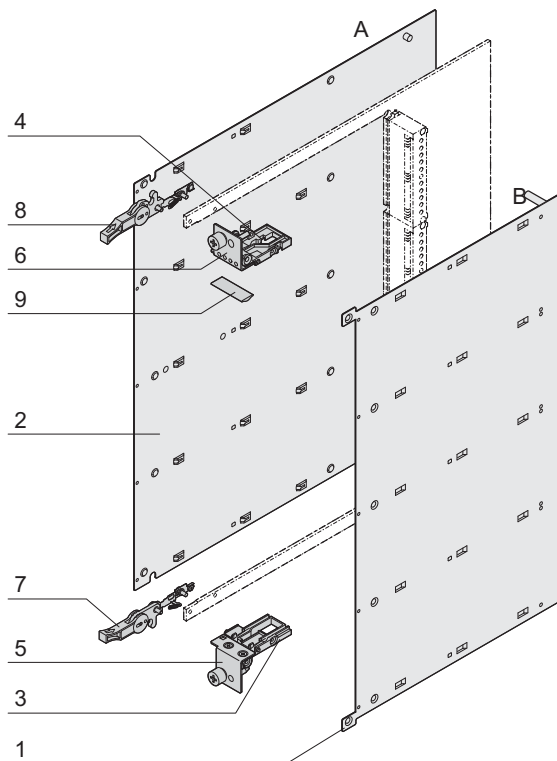
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### ORDER INFORMATION

Description	Part no.
Carrier mechanics for AdvancedMC compact and full-size modules <b>with</b> struts, ESD clips and guide rails	<b>10849-001</b>
<b>Accessories</b>	
Microswitch, <b>normally closed</b> , for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	<b>20849-236</b>
Microswitch, <b>normally open</b> , for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	<b>20849-235</b>
Description inserter/extractor handle	<b>Page 8.31</b>
Microswitch description	<b>Page 8.31</b>
AdvancedMC module mechanics	<b>Page 8.56</b>

# Systems – AdvancedMC cutaway carrier

## CARRIER MECHANICS FOR COMPACT AND FULL-SIZE ADVANCEDMC MODULES



- Mechanics for cutaway carrier board (carrier **without** struts, guide rails, ESD clips, for individual placement)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG® AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation (hot-swap)

### DELIVERY COMPRISES (Kit)

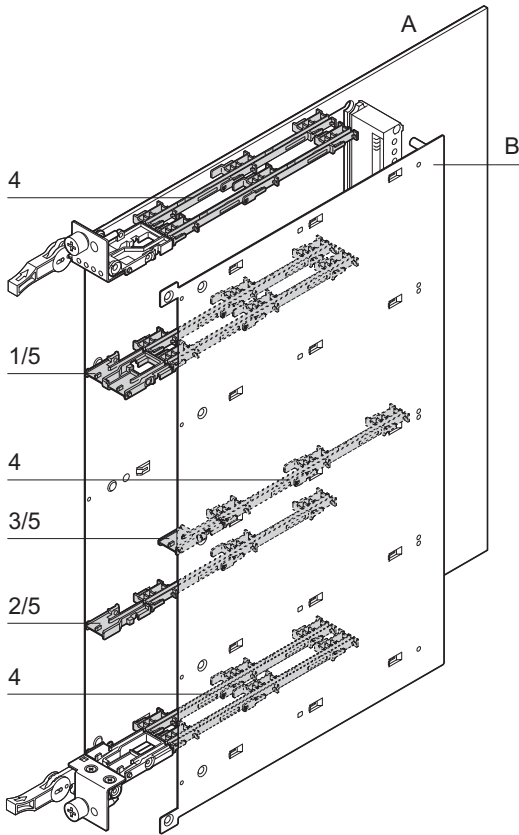
Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs
7	1	Standard inserter/extractor handle, with microswitch operation, plastic lever, black
8	1	Standard inserter/extractor handle, plastic lever, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	1	Assembly kit

### ORDER INFORMATION

Description	Part no.
Carrier mechanics for AdvancedMC compact and full-size modules without struts, ESD clips and guide rails	<b>10849-002</b>
<b>Accessories</b>	
Microswitch, <b>normally closed</b> , for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	<b>20849-236</b>
Microswitch, <b>normally open</b> , for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	<b>20849-235</b>
Further struts, ESD clips and guide rails	<b>Page 8.30</b>
Description inserter/extractor handle	<b>Page 8.31</b>
Microswitch description	<b>Page 8.31</b>
AdvancedMC module mechanics	<b>Page 8.56</b>

# Systems – AdvancedMC cutaway carrier

## BOARD GUIDES/STRUTS FOR ADVANCEDMC COMPACT AND FULL-SIZE MODULES



- Struts and guide rails are always required to guide boards
- 3 different struts
  - The strut is assembled between the cover plates A and B
  - The strut is assembled on the left of cover plate A
  - The strut is assembled on the right of cover plate B
- The ESD clip pushes into the strut (one per board guide)
- The guide rails clip into the cover plate

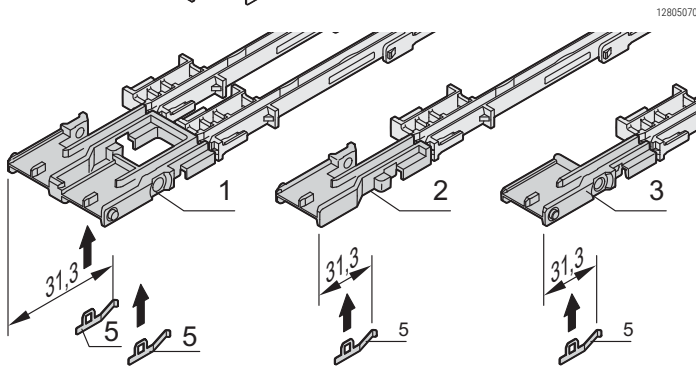
### ORDER INFORMATION

Item	Description	Qty/PU	Part no.
1	Strut between cover A (left) and B (right), Zn die-cast, nickel-plated	10	<b>20849-009</b>
2	Splitting extrusion (strut) for cover A (left), Zn die-cast, nickel-plated	10	<b>20849-010</b>
3	Splitting extrusion (strut) for cover B (on the right), Zn die-cast, nickel-plated	10	<b>20849-011</b>
4	AdvancedMC guide rail, PBT, UL 94 V-0, red	10	<b>20849-008</b>
5	ESD clip, stainless spring steel, for deflection of electrostatic charges	50	<b>20849-021</b>

### Accessories

Microswitch, **normally closed**, for AdvancedMC carrier (compact and full-size modules)  
for soldering (SMD), PU 10 pieces, page 8.31 **20849-236**

Microswitch, **normally open**, for AdvancedMC carrier (compact and full-size modules)  
for soldering (SMD), PU 10 pieces - page 8.31 **20849-235**

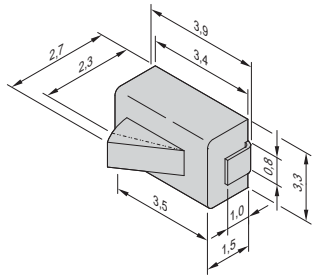


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# Systems – AdvancedMC cutaway carrier

## MICROSWITCH FOR CARRIER (COMPACT AND FULL-SIZE ADVANCEDMC MODULES)



- Microswitch for soldering (SMD)

### ORDER INFORMATION

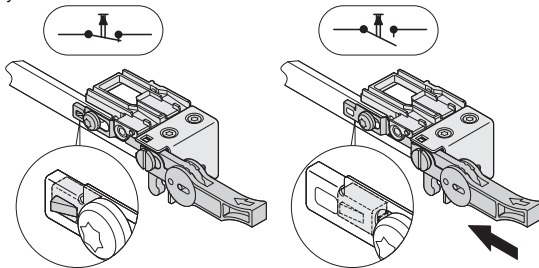
Description	Qty/PU	Part no.
Microswitch, <b>normally closed</b> , for AdvancedMC carrier (compact and full-size modules)	10	<b>20849-236</b>
Microswitch, <b>normally open</b> , for AdvancedMC carrier (compact and full-size modules)	10	<b>20849-235</b>

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### Technical data

Max. switch current	1 mA, 5 V <sub>DC</sub>
Operating temperature	-15 °C ... +70 °C
Electrical lifespan	10 <sup>5</sup> switching cycles

"Normally closed"

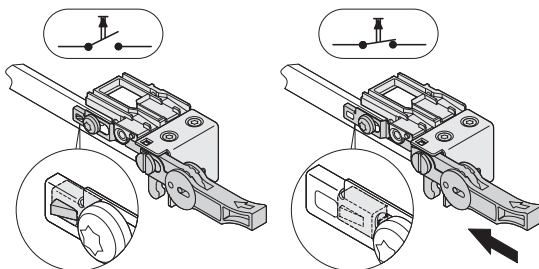


Handle in inoperative position

Handle activated

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Closer



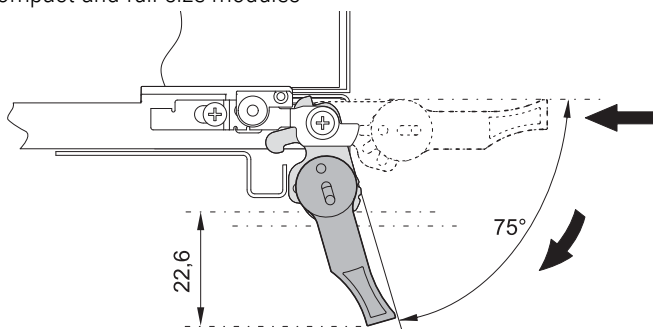
Handle in inoperative position

Handle activated

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## DIFFERENCES BETWEEN STANDARD AND MF HANDLE FOR ADVANCEDMC CARRIER (COMPACT AND FULL-SIZE MODULES)

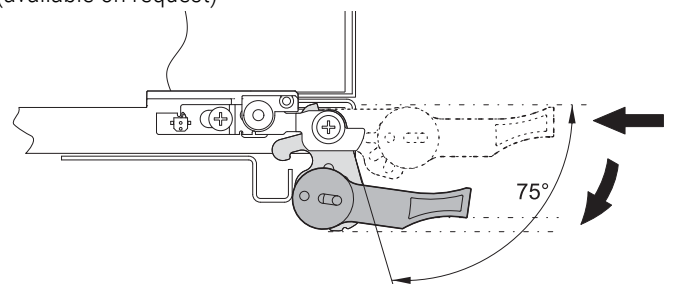
**Standard front handle** - is included in delivery of carriers for compact and full-size modules



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- Extractor handle 75° opening angle
- Insertion/extraction in one step
- Swing range: 23 mm below and above the pitch line
- Included in delivery of carrier

**MF handle** - can be exchanged by standard handle if needed (available on request)



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- Extractor handle 75° opening angle
- Insertion/extraction in three steps (2 operations)
- Small swing range (0 mm) below and above the pitch line. The lower respectively upper limit of the carrier is not exceeded during extraction.



# Systems – AdvancedMC carrier Ser-

**SERVICEPLUS: SOLUTION**



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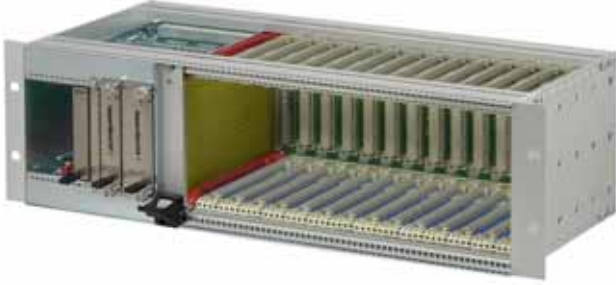
## **ADVANCEDMC CARRIER MECHANICS**

- The carrier board is a combination of conventional and cutaway carriers
- Max. placement depends on the design of the carrier board
- Custom versions on request
  - Single/double combinations
  - Handles
    - AdvancedTCA IEA
    - AdvancedTCA Southco



# Systems – ServicePLUS

## APPLICATION EXAMPLES



- Hybrid system, modification of a MicroTCA single-module board cage into a 3 U chassis to DIN EN 60297 <sup>12908007</sup>



- MicroTCA system, 1 U for 6 single mid-size AMC modules; power supply, increased air inlet and exhaust area with inwardly curved side panels <sup>12908005</sup>



- MicroTCA chassis with hot-swap fan unit and power supply <sup>12909001</sup>



- CompactPCI chassis with hot-swap fan unit and custom finishing <sup>12309002</sup>



- CompactPCI chassis with 48 V<sub>DC</sub> power supply <sup>12309001</sup>



- 2 slot, 2 U AdvancedTCA chassis with custom colour <sup>12709003</sup>

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