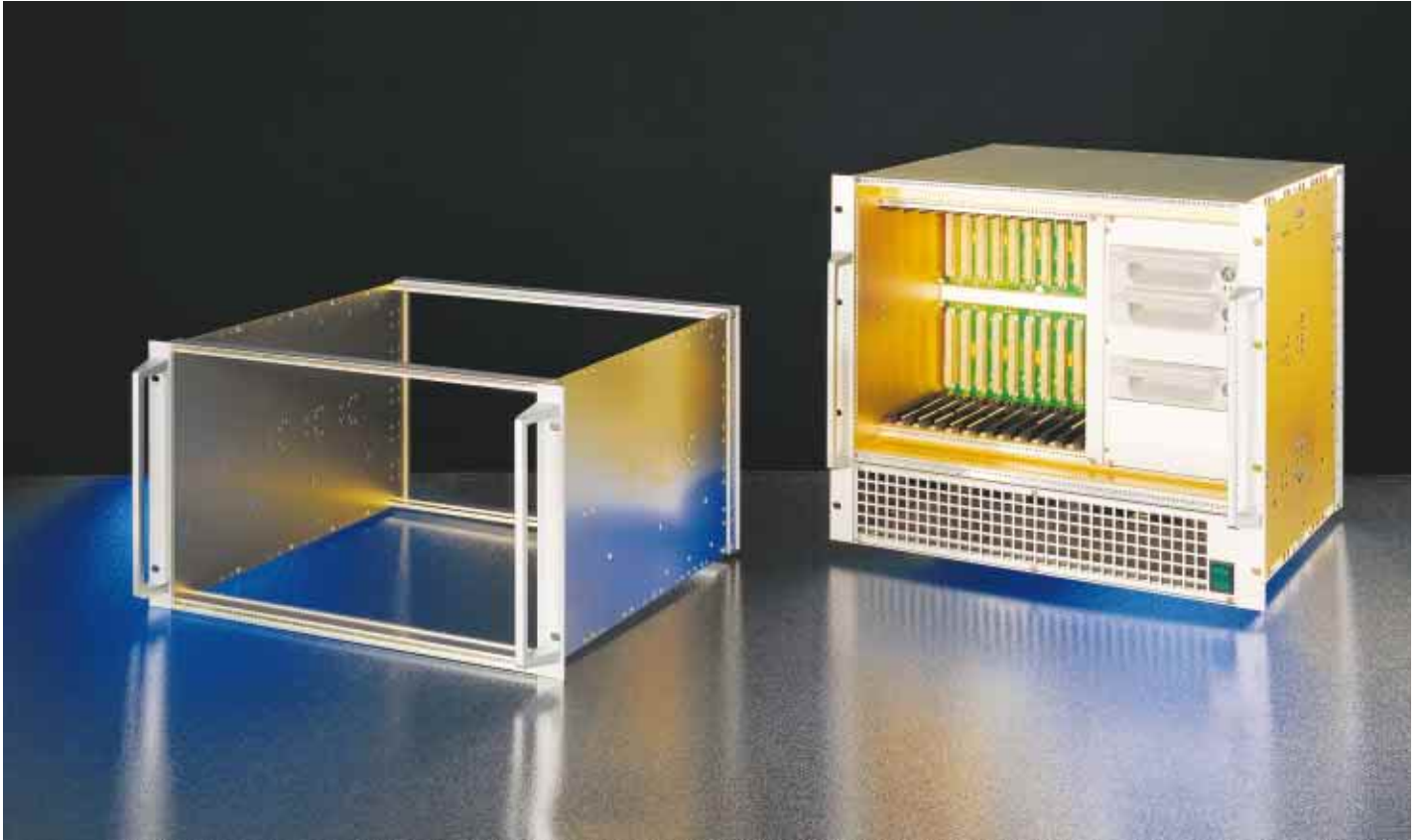


EMC sub-rack type 12

19" sub-rack,
EMC-shielded, modular



Technical features

- Various configuration possibilities
- EMC-shielded up to superior level
- Dimensions according to IEC 60297
- Sturdy and solid
- Card mounting possible from front and rear

Adaptation options

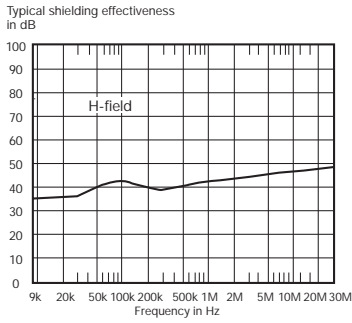
- Numerous accessories
- Mounting chassis
- Horizontal and vertical eurocard mounting

Application examples

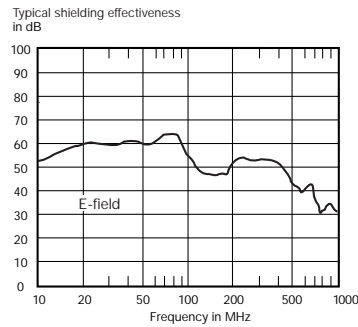
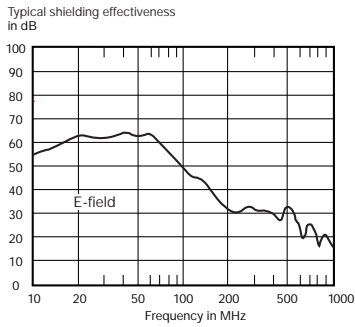
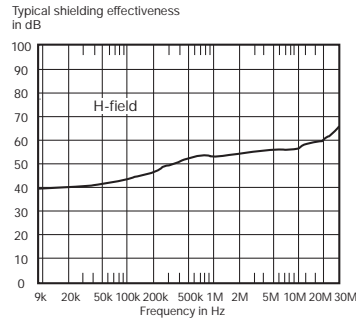
- VME system

EMC sub-rack type 12

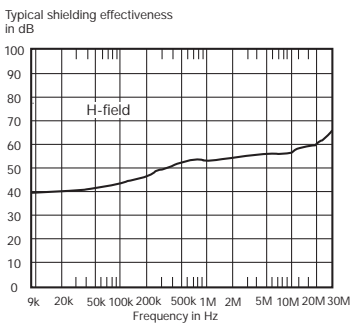
EMC basic level
Sub-rack type 12
with standard front panels (cover
panels perforated or unperforated)



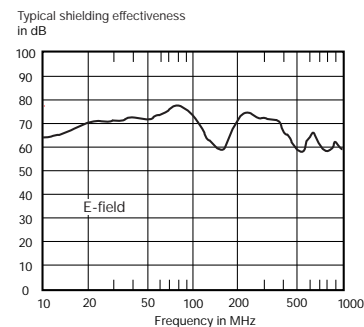
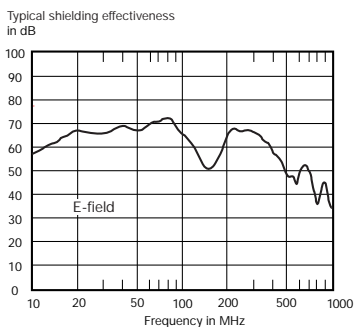
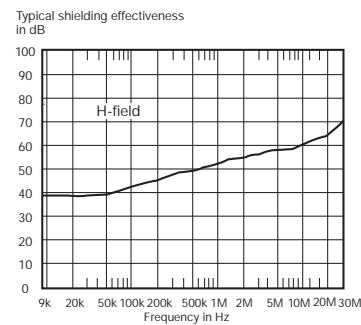
Advanced EMC level
Sub-rack type 12
with EMC front panels
(cover panels perforated)



Advanced EMC level
Sub-rack type 12
with EMC front panels
(cover panels unperforated)



Superior EMC level
Sub-rack type 12 with
EMC front panels and gasket kit
(cover panels unperforated)



EMC sub-rack type 12

Basic construction

- 19" sub-rack
- Dimensions according to IEC 60297
- Card mounting from front and rear
- Sturdy and solid

Material

Aluminum extrusions, electrically conductive

Side panels 2 mm aluminum, alodine yellow

Vertical section aluminum, clear anodized

Scope of supply

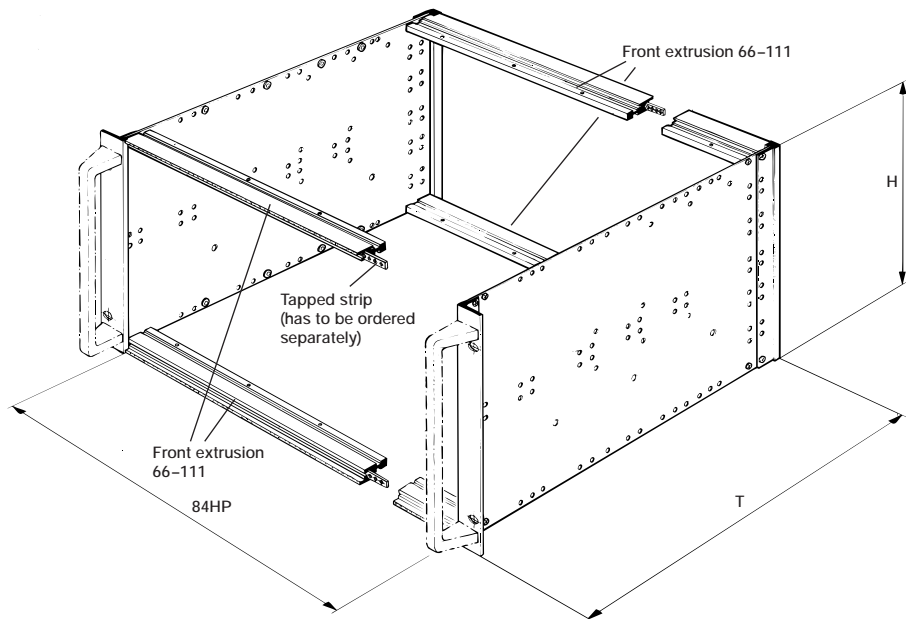
2 side panels

4 extrusions

4 vertical sections

incl. fixing material

in kit form



EMC sub-rack type 12

Basic type 84HP without handles



| Height H | Depth T | | | |
|----------|------------------------|-------------------------|-------------------------|-------------------------|
| | 250 mm <i>9.84"</i> | 300 mm <i>11.81"</i> | 400 mm <i>15.74"</i> | 500 mm <i>19.68"</i> |
| 3U | 12-00312-10 | 12-00313-10 | 12-00314-10 | 12-00315-10 |
| 4U | | 12-00413-10 | 12-00414-10 | 12-00415-10 |
| 6U | | 12-00613-10 | 12-00614-10 | 12-00615-10 |
| 7U | | 12-00713-10 | 12-00714-10 | 12-00715-10 |
| 9U | | | 12-00914-10 | 12-00915-10 |

Basic type 84HP with handles



| Height H | Depth T | | | |
|----------|------------------------|-------------------------|-------------------------|-------------------------|
| | 250 mm <i>9.84"</i> | 300 mm <i>11.81"</i> | 400 mm <i>15.74"</i> | 500 mm <i>19.68"</i> |
| 3U | 12-00312-20 | 12-00313-20 | 12-00314-20 | 12-00315-20 |
| 4U | | 12-00413-20 | 12-00414-20 | 12-00415-20 |
| 6U | | 12-00613-20 | 12-00614-20 | 12-00615-20 |
| 7U | | 12-00713-20 | 12-00714-20 | 12-00715-20 |
| 9U | | | 12-00914-20 | 12-00915-20 |

Basic type 84HP with handles and fixing possibility for telescopic rails

| Height H | Depth T | | |
|----------|-------------------------|-------------------------|-------------------------|
| | 300 mm <i>11.81"</i> | 400 mm <i>15.74"</i> | 500 mm <i>19.68"</i> |
| 3U | 12-00313-30 | 12-00314-30 | |
| 4U | 12-00413-30 | 12-00414-30 | 12-00415-30 |
| 6U | 12-00613-30 | 12-00614-30 | 12-00615-30 |
| 7U | 12-00713-30 | 12-00714-30 | 12-00715-30 |
| 9U | | 12-00914-30 | 12-00915-30 |

Tapped strip

| Size | Packing unit | Part No. |
|-----------|--------------|----------|
| M2.5 84HP | 10 pcs. | 63-089 |
| M3 84HP | 10 pcs. | 63-068 |

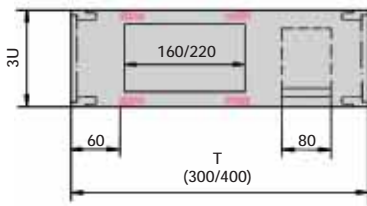
EMC sub-rack type 12



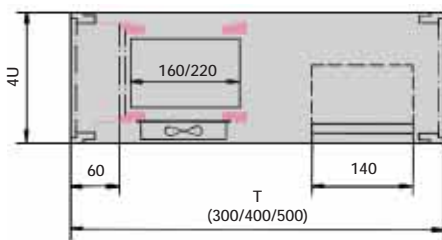
Adaptation kits



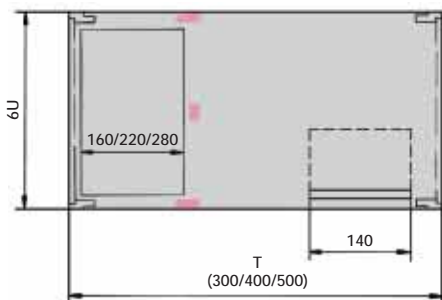
| Type A | Part No. |
|---|-----------|
| Front mounting of single eurocards of depths 160/220/280 mm (6.29/8.66/11.02") in a 3U sub-rack | 12-001-.0 |



| Type B | Part No. |
|--|-----------|
| Recessed mounting of single eurocards without part front panels of depths 160/220 mm (6.29/8.66") in a 3U sub-rack | 12-002-.0 |

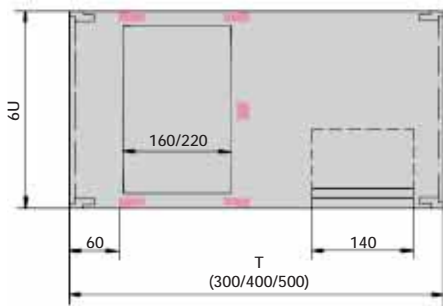


| Type C | Part No. |
|---|-----------|
| Recessed mounting of single eurocards with or without part front panels of depths 160/220 mm (6.29/8.66") with possibility of integrated vertical ventilation of the circuit cards in a 4U sub-rack | 12-003-.0 |

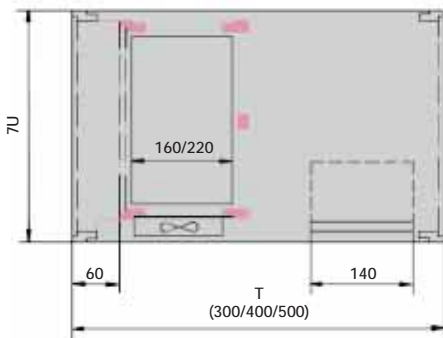


| Type D | Part No. |
|--|-----------|
| Front mounted double eurocards of depths 160/220/280 mm (6.29/8.66/11.02") in a 6U sub-rack | 12-004-.0 |
| Important: EMC front panels should be used for flush mounting of 6U sub-racks (see page 104) | |

EMC sub-rack type 12



| Type E | Part No. |
|---|-----------|
| Recessed mounting of double eurocards without front panels of depths 160/220 mm (6.29/8.66") in a 6U sub-rack | 12-005-.0 |



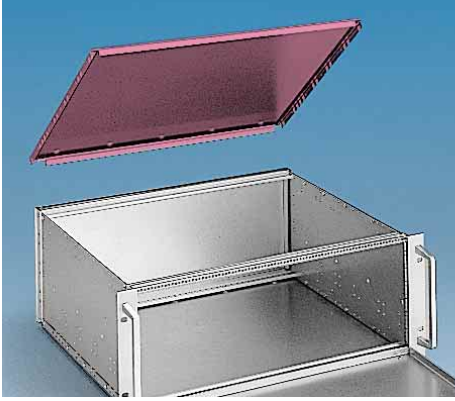
| Type F | Part No. |
|--|-----------|
| Recessed mounting of double eurocards with or without front panels of depths 160/220 mm (6.29/8.66") with the possibility of integrated vertical ventilation of the circuit cards in a 7U sub-rack | 12-006-.0 |

Order code: 12-xxx-.0 for mounting:
 (for internal extrusions) ↓
 3 = connector DIN 41 612 (66-140)
 6 = backplanes insulated from chassis (66-193)
 7 = backplanes connected to earth/chassis (66-194)

Scope of supply:
 In kit form, consisting of:

| Part No. | Description | Material | Finish | Quantity for adaptation kits type | | | | | |
|-----------------------------|---------------------------|---------------------------|-------------|-----------------------------------|---|---|---|---|---|
| | | | | A | B | C | D | E | F |
| 12-xxx-30 | Internal extrusion 66-193 | alu | alodine | - | 2 | - | - | 2 | - |
| | Internal extrusion 66-137 | alu | alodine | 2 | 2 | 2 | 2 | 2 | 2 |
| | Center extrusion 66-190 | alu | alodine | - | - | - | 1 | 1 | 1 |
| | Front extrusion 66-111 | alu | alodine | - | - | 2 | - | - | 2 |
| | Auxiliary cover top | alu | alodine | - | - | 1 | - | - | 1 |
| | Auxiliary cover bottom | alu | alodine | - | - | 1 | - | - | 1 |
| | Fixing material | - | - | 1 | 1 | 1 | 1 | 1 | 1 |
| | 12-xxx-60 | Internal extrusion 66-193 | alu | alodine | 2 | 4 | 2 | 2 | 4 |
| Center extrusion 66-192 | alu | alodine | - | - | - | 1 | 1 | 1 | |
| Front extrusion 66-111 | alu | alodine | - | - | 2 | - | - | 2 | |
| Insulating extrusion 66-901 | plastic | - | 2 | 2 | 2 | 4 | 4 | 4 | |
| Tapped strips M2.5 | steel | zinc plated | 2 | 2 | 2 | 4 | 4 | 4 | |
| Auxiliary cover top | alu | alodine | - | - | 1 | - | - | 1 | |
| Auxiliary cover bottom | alu | alodine | - | - | 1 | - | - | 1 | |
| Fixing material | - | - | 1 | 1 | 1 | 2 | 2 | 2 | |
| 12-xxx-70 | Internal extrusion 66-193 | alu | alodine | - | 2 | - | - | 2 | - |
| | Internal extrusion 66-194 | alu | alodine | 2 | 2 | 2 | 2 | 2 | 2 |
| | Center extrusion 66-195 | alu | alodine | - | - | - | 1 | 1 | 1 |
| | Front extrusion 66-111 | alu | alodine | - | - | 2 | - | - | 2 |
| | Tapped strips M2.5 | steel | zinc plated | 2 | 2 | 2 | 4 | 4 | 4 |
| | Auxiliary cover top | alu | alodine | - | - | 1 | - | - | 1 |
| | Auxiliary cover bottom | alu | alodine | - | - | 1 | - | - | 1 |
| | Fixing material | - | - | 1 | 1 | 1 | 2 | 2 | 2 |

EMC sub-rack type 12



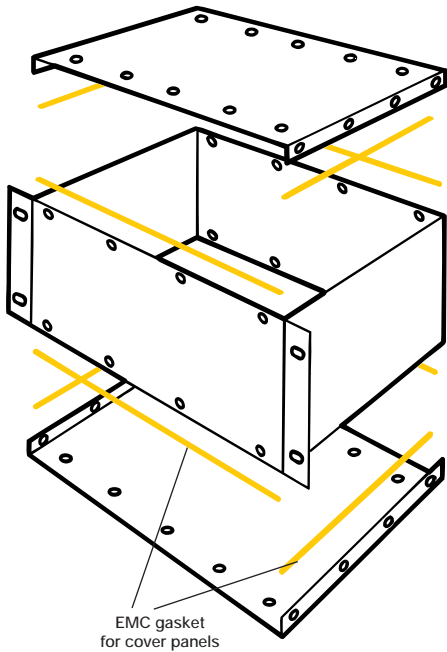
Bottom/top panel (1 piece)

Aluminum 1.5 mm, alodine yellow

| Description | for case depth T | | | |
|--------------|------------------|------------------|------------------|------------------|
| | 250 mm 9.84" | 300 mm 11.81" | 400 mm 15.74" | 500 mm 19.68" |
| unperforated | 11-731 | 11-729 | 11-725 | 11-726 |
| perforated | 11-732 | 11-730 | 11-727 | 11-728 |

Fixing material

| Part | Part No. |
|---|----------|
| for 1 panel (18 special earthing screws M3 x 6) | 63-171 |
| Special earthing screw M3 x 6, 100-pack | 63-372 |



Cover panel gasket kit

| Depth | Width | Part No. |
|---------------|-------|-----------|
| 250 mm 9.84" | 84HP | 63-836-02 |
| 300 mm 11.81" | 84HP | 63-836-03 |
| 400 mm 15.74" | 84HP | 63-836-04 |
| 500 mm 19.68" | 84HP | 63-836-05 |

The "superior EMC level" can be achieved by fixing this EMC gasket on the unperforated cover panels.

Mounting chassis

| Chassis depth | 84HP |
|---------------|--------|
| 80 mm 3.14" | 14-832 |
| 140 mm 5.51" | 14-836 |

The chassis of raw 2 mm aluminum is screwed to the side panels with the fixing material.

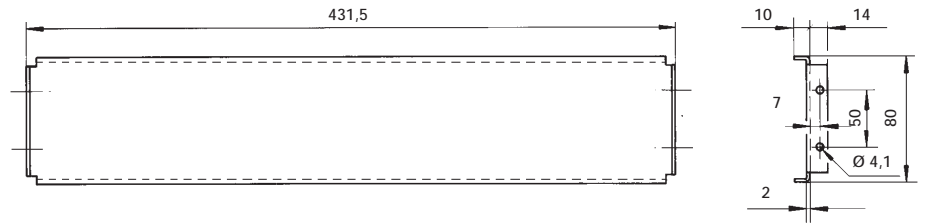
Fixing material

| Part | Part No. |
|------------------------|----------|
| for 1 mounting chassis | 63-314 |

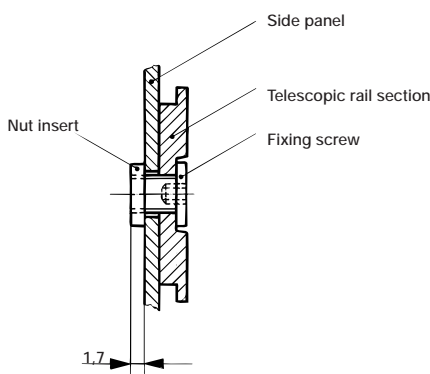
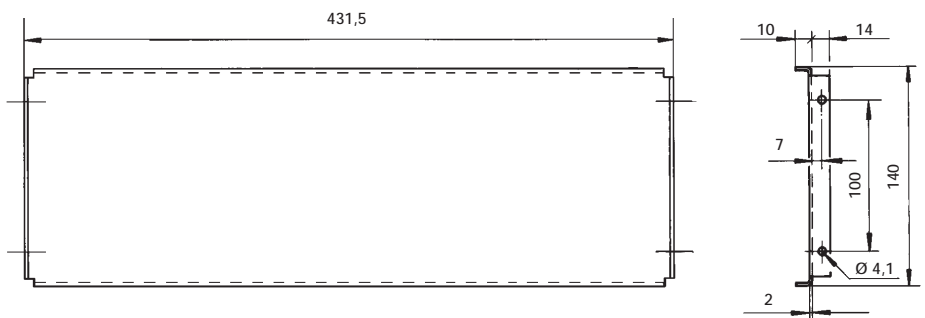
| Part | Packing unit | Part No. |
|----------------------|--------------------|----------|
| Earthing nut M4 | Pack size 100 pcs. | 63-197 |
| Retaining ring 2 mm | Pack size 100 pcs. | 63-006 |
| Philips screw M4 x 6 | Pack size 100 pcs. | 1910-18 |

EMC sub-rack type 12

Mounting chassis 80



Mounting chassis 140



Fixing material for telescopic rail mounting, type 12

| Part | Part No. |
|------------------------------------|----------|
| Set for 1 pair of telescopic rails | 63-763 |

When screwed to the telescopic rail section, the nut inserts are drawn into the sub-rack. The telescopic rail is mounted on the sub-rack from the outside.

The nut inserts and screws are not insulated. In order to ensure clearance of circuit board from side panels.

When partitioning the sub-rack 1U in the area of the telescopic rails, the front extrusion fixing holes must be countersunk and extrusions mounted with M4 x 10 countersunk screws.