

#### APPLICATIONS

Case system for a multitude of applications, e.g. in plant engineering as control or measuring devices, in heating and air conditioning technology, in measuring and control technology. 19" technique, etc.

### PROTECTION CLASSES

- IP 65 When used in combination with cover
- IP 64 When used in combination with front frame or frame cover.
- IP 54 For combinations with front panel.

#### FMC

Cases marked with & are available with aluminium metallization on demand. We recommend to use conductive gaskets in order to achieve utmost bonding. See pages 207-209.













### VARIABLE, SUITABLE FOR DESK AND WALL. HIGH PROTECTION CLASS.

The VARIO-BOX is the case system with many variations.

Different component parts can be assembled to form wallmounting systems as well as table-top units.

The VARIO-BOX can be supplied as a complete standard assembly kit or in component parts.

#### YOUR ADVANTAGE

• Rear panel available in three versions: with/without terminal compartment or in an especially flat construction.

OKW

- Large terminal compartment easily accessible. also suitable for higher terminals
- · Cost-saving and easy assembly of component parts.
- · Combinations with long frame allow 19" installations according to DIN 41 494 (42 TE 3 HE) Due to the card guide which can be snapped in fast and easily, no additional equipment sections are required.
  - · The raised front frame protects the operating elements
  - · Ergonomically tilted position due to handle bar and tilt feet.
  - · Invisible assembly. Due to the wall-suspension element the case can be fixed to the wall when closed.
  - · Wide range of accessories.

### STANDARD COLOURS

Off-white, RAL 9002. Colour scheme matching the rear panel in pebble grey, RAL 7032. Rear panel also available in off-white, RAL 9002. for optional combi-nations. Please refer to colour chart page 214.

#### MATERIAL

ABS (UL 94 HB). Also available in other materials on request. Please refer to the specifications on pages 215-217.

### MODIFICATIONS AS PFR CUSTOMER'S REQUIREMENTS

Machining on modern CNC-controlled machines. Lacquering. Silk screen and tampo printing. See pages 210-213.

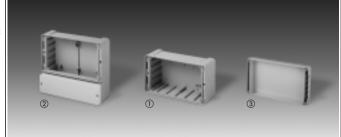
### VARIO-BOX

Overview Vario-Components

#### REAR PANEL

The VARIO-BOX rear panel is available in three different versions.

- 2 Rear Panel K3 with terminal compartment
- (1) Rear Panel 3 without terminal compartment
- 3 Rear Panel H3 for low mounting depth



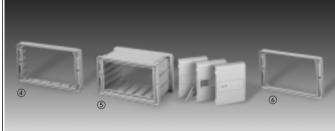
### **EXTENSION** MODULES FOR MOUNTING DEPTH

For extending the mounting depth, frames can be fitted:

(4) Frame K3

/ARIO-BOX

- (5) Frame I.3 (separate covers in different versions)
- 6 Adapter



(9)

(11)

#### FRONT CLOSING

The following components are available for the installation and protection of operating elements:

- 7 Front panel
- (8) Front frame 3
- (9) Frame cover 3
- 10 Cover 3 with hinge



### ACCESSORIES

- 12 Handle (Bail Arm)
- Wall suspension elements
- (4) 19" Card guide (15) Hinge
- 19" Mounting kit
- 19" Tapped and threaded strips
- ® Security element
- ® Knurled screw
- 20 Lock
- 26 Quick-action screw See pages 61-64.

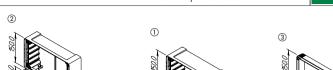


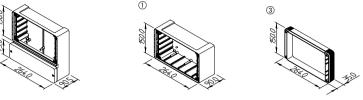
(7)

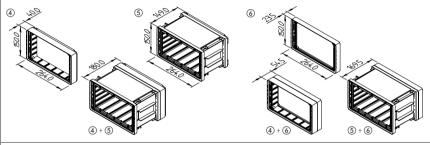


For standard assembly kits see pages  $52/53 \cdot \text{for further possibilities of combination and reference numbers see pages } 54ff$  .

### Overview Vario-Components – Outside dimensions in mm













- (each panel suitable for certain front combinations)
- 71) Front panel WR3









for you:

STANDARD

/ARIO-BOX

Page 52 contains a tabular list of combined assemblies, on page 53 you will see the corresponding photos. Pages 58/59 show dimensional drawings.

In addition to this, a multitude of case combinations are feasible according to your requirements, e.g. also with the flat rear panel H3 in case of a low mounting depth. The exploded view line drawings on pages 54-57 show you all feasible combinations. On pages 58-60 you will find dimensional drawings as well as reference numbers.

#### Sign translation:

without handle recess Side covers

■ with handle recess
■ without handle recess, with 2 tilt feet
with handle recess, with 2 tilt feet
with handle recess, with 2 tilt feet
with holes for mounting the handle

\* Coverin version SAN tansparent with hinge

\*\* Handle bar in colour combination with lateral parts in pebble grey, nush-button off-white

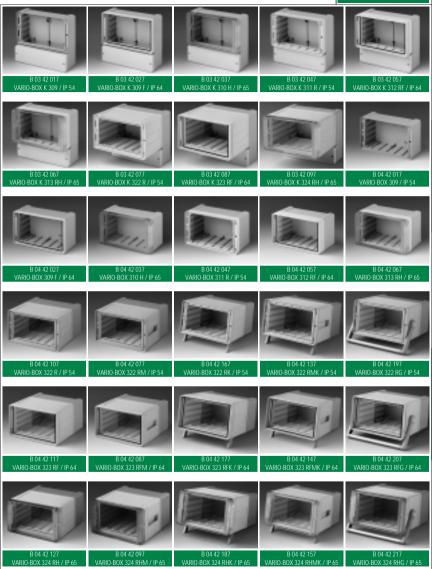
/ The front panels are /

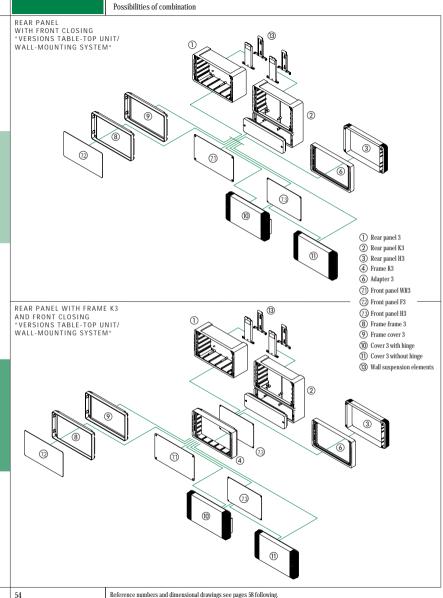
(•) = can be combined alternatively (only in case of 19" technique)

| STANDARD<br>KIT                               | Frame v. | /  |      | / <sub>□</sub> | WITH | /;;; | fron | cl. gask<br>t panel: | et and r | /   | ng elem        | ents, (Ball Arm)** | /   | not<br>stand<br>order<br>see pag | part of<br>lard kit<br>separa<br>se 60! | s. Please                            | Sandard kis                       |
|---|----------|----|------|----------------|------|------|------|----------------------|----------|-----|----------------|--------------------|-----|----------------------------------|---|--------------------------------------|-----------------------------------|
| Rear panel K3                                 | 14       | 14 | / 55 | / 55           | / 55 | / 55 | / 55 |                      | 14       | / ଓ | / <del>ž</del> | · .                | 1 4 | / Æ                              | / &                                     | 204 X 230 X 70.3                     | B 03 42 017 #                     |
|   |          |    |      |                |      |      |      | Х                    |          |     |                |                    | ٠   |                                  |   | 264 x 230 x 91.5                     | B 03 42 027 🗲                     |
| · with terminal compart.                      |          |    |      |                |      |      |      |                      | Х        | Х   |                |                    |     |                                  |   | 264 x 230 x 101                      | B 03 42 037                       |
| · in pebble grey<br>· with premarked openings | Χ        |    |      |                |      |      |      |                      |          | ^   |                |                    |     | •                                |   | 264 x 230 x 101<br>264 x 230 x 106.5 | B 03 42 047 #                     |
| on rear and bottom                            | X        |    |      |                |      |      |      | х                    |          |     |                |                    |     |                                  |   | 264 x 230 x 100.5                    | B 03 42 057 #                     |
| (further versions                             | X        |    |      |                |      |      |      | ^                    | Х        |     |                |                    |     |                                  |   | 204 X 230 X 123                      | 0 00 12 007 7                     |
| only as single parts,                         | Х        |    |      |                |      |      |      |                      |          | Х   |                |                    |     |                                  |   | 264 x 230 x 132.5                    | B 03 42 067                       |
| see page 60)                                  |          | Х  | Х    |                |      |      |      |                      |          |     |                |                    |     |                                  | (•)                                     | 264 x 230 x 215.5                    | B 03 42 077 🗲                     |
|   |          | Х  | Х    |                |      |      |      | Х                    |          |     |                |                    |     |                                  | (•)                                     | 264 x 230 x 233                      | B 03 42 087 🗲                     |
|   |          | Х  | Х    |                |      |      |      |                      | Х        |     |                |                    |     |                                  |   |                                      |                                   |
|   |          | Х  | Х    |                |      |      |      |                      |          | Х   |                |                    |     | •                                | (•)                                     | 264 x 230 x 241.5                    | B 03 42 097                       |
| Rear panel 3                                  |          |    |      |                |      |      |      |                      |          |     |                | ٠                  |     |                                  |   | 264 x 150 x 90                       | B 04 42 017 🗲                     |
|   |          |    |      |                |      |      |      | Х                    |          |     |                |                    | ٠   |                                  |   | 264 x 150 x 106.5                    | B 04 42 027 🗲                     |
| in pebble grey                                |          |    |      |                |      |      |      |                      | Х        | .,  |                |                    |     |                                  |   | 0/1 450 44/                          | 0.04.40.007                       |
| (in off-white only as                         | V        |    |      |                |      |      |      |                      |          | Х   |                |                    |     | ٠                                |   | 264 x 150 x 116                      | B 04 42 037                       |
| single part, see page 60)                     | X        |    |      |                |      |      |      | Х                    |          |     |                | •                  |     |                                  |   | 264 x 150 x 121.5<br>264 x 150 x 138 | B 04 42 047 7                     |
|   | X        |    |      |                |      |      |      | ^                    | Х        |     |                |                    | •   |                                  |   | 204 X 130 X 130                      | B 04 42 037 7                     |
|   | X        |    |      |                |      |      |      |                      | ^        | х   |                |                    |     |                                  |   | 264 x 150 x 147.5                    | B 04 42 067                       |
|   |          | Х  | Х    |                |      |      |      |                      |          |     |                |                    |     |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 107 #                     |
|   |          | Х  |      | Х              |      |      |      |                      |          |     |                |                    |     |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 077 #                     |
|   |          | Х  |      |                | Х    |      |      |                      |          |     |                |                    |     |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 167 #                     |
|   |          | Х  |      |                |      | Х    |      |                      |          |     |                |                    |     |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 137 🗲                     |
|   |          | Х  |      |                |      |      | Х    |                      |          |     | Х              | •                  |     |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 197 🗲                     |
|   |          | Х  | Х    |                |      |      |      | Х                    |          |     |                |                    | •   |                                  | (•)                                     | 264 x 150 x 230.5                    | B 04 42 117 🗲                     |
|   |          | Х  |      | Х              |      |      |      | Х                    |          |     |                |                    | ٠   |                                  | (•)                                     | 264 x 150 x 247                      | B 04 42 087 🗲                     |
|   |          | Х  |      |                | Х    |      |      | Х                    |          |     |                |                    | ٠   |                                  | (•)                                     | 264 x 150 x 247                      | B 04 42 177 🗲                     |
|   |          | Х  |      |                |      | Х    |      | Х                    |          |     |                |                    | ٠   |                                  | (•)                                     | 264 x 150 x 247                      | B 04 42 147 #                     |
|   |          | X  | Х    |                |      |      | Х    | Х                    | Х        |     | Х              |                    | ٠   |                                  | (•)                                     | 264 x 150 x 247                      | B 04 42 207 🗲                     |
|   |          | X  | X    | X              |      |      |      |                      | X        |     |                |                    |     |                                  |   |                                      | ▶ Please order                    |
|   |          | Х  |      | ^              | Х    |      |      |                      | X        |     |                |                    |     |                                  |   |                                      | single parts when<br>no reference |
|   |          | X  |      |                | ^    | Х    |      |                      | X        |     |                |                    |     |                                  |   |                                      | no reference<br>numbers are       |
|   |          | X  |      |                |      | ı ^  | Х    |                      | X        |     |                |                    |     |                                  |   |                                      | specified, page 60                |
|   |          | X  | Х    |                |      |      |      |                      |          | Х   |                |                    |     |                                  | (•)                                     | 264 x 150 x 256.5                    | B 04 42 127                       |
|   |          | Х  |      | Х              |      |      |      |                      |          | Х   |                |                    |     |                                  | (•)                                     | 264 x 150 x 256.5                    | B 04 42 097                       |
|   |          | Х  |      |                | Х    |      |      |                      |          | Х   |                |                    |     |                                  | (•)                                     | 264 x 150 x 256.5                    | B 04 42 187                       |
|   |          | Х  |      |                |      | Х    |      |                      |          | Х   |                |                    |     | ٠                                | (•)                                     | 264 x 150 x 256.5                    | B 04 42 157                       |
|   |          | Х  |      |                |      |      | Х    |                      |          | Х   | Х              |                    |     | •                                | (•)                                     | 264 x 150 x 256.5                    | B 04 42 217                       |
|   |          | _  |      |                |      |      |      |                      |          |     |                |                    |     |                                  |   |                                      |                                   |

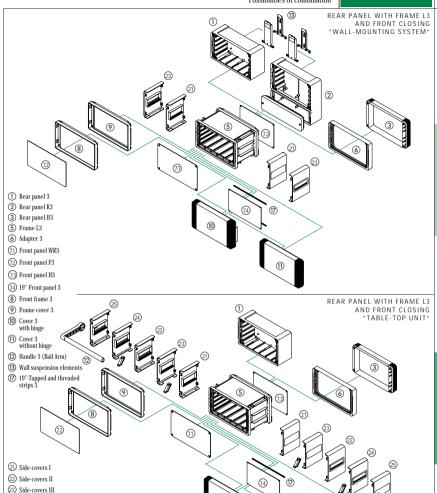
52

Part-No. with # see EMC page 49

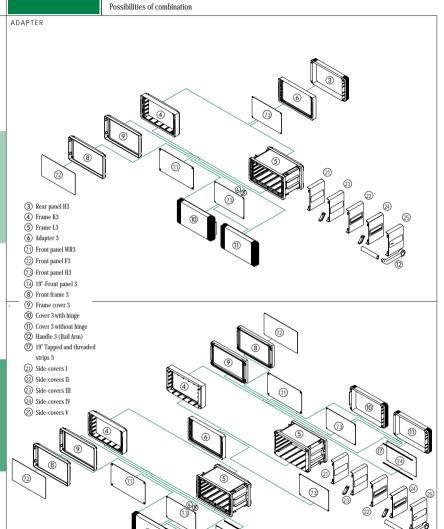








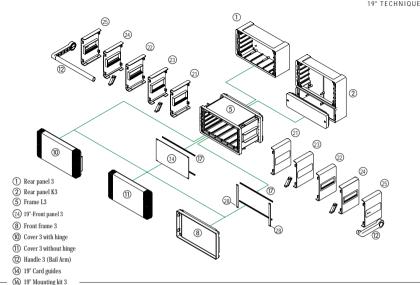
24 Side-covers IV 25 Side-covers V





19" TECHNIQUE

VARIO-FRAME L3



Example of assembly (view from behind)

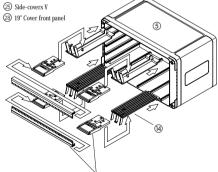
WITH 19" CARD GUIDES AND 19"-MOUNTING KIT 3

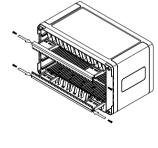


23) Side-covers III

(17) 19" Tapped and threaded

(24) Side-covers IV



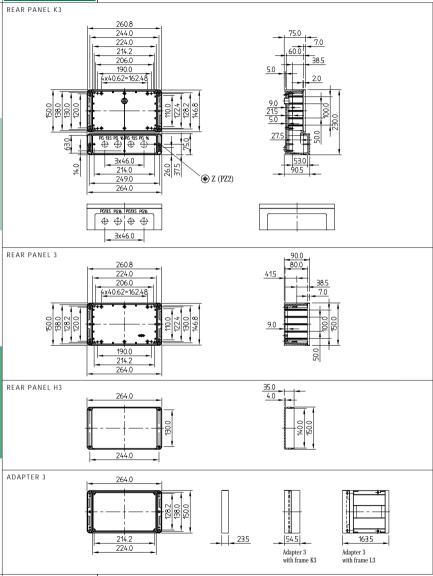


VARIO-BOX

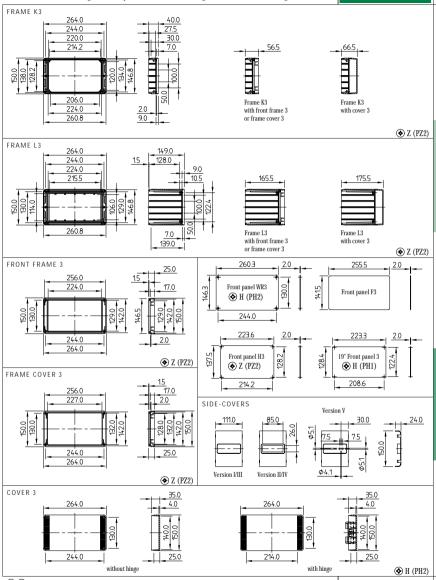


### VARIO-BOX

Drawing Vario-Components – Detailed drawing available on demand in dwg or dxf format.



### Drawing Vario-Components – Detailed drawing available on demand in dwg or dxf format.





### VARIO-BOX

Assembly as single pieces for individual combinations

| ORDER DATA | OF VARIO-BOX          | SINGLE | PIECES | (dimensional drawing on pages 58/59; part-no. with $\gamma$ see | EMC | page 49) |
|------------|-----------------------|--------|--------|---|-----|----------|
| Article    | Version / Application |        |        | Supply  | l   | Part-No. |

|   | Article                  | Version / Application  | Supply  | Part-No.      |
|---|--------------------------|--|---|---------------|
| Ì | Rear panel K3            | ② ABS, pebble grey with premarked openings on rear and bottom                                  | Each 1 rear panel K3, 1 terminal compartment cover,   | B 05 42 108 🗲 |
|   | (with terminal comp.)    | ② ABS, off-white with premarked openings on rear and bottom                                    | 2 o-ring sealings, fixings                            | B 05 42 107 🗲 |
|   |                          | ② ABS, pebble grey with premarked openings only on rear  |   | B 05 42 118 🗲 |
|   |                          | ② ABS, off-white with premarked openings only on rear  |   | B 05 42 117 🗲 |
| Ì | Rear panel 3             | ① ABS, pebble grey   | Each 1 rear panel 3, 1 o-ring sealing,                | B 05 42 128 🗲 |
|   | (without terminal comp.) | ① ABS, off-white   | fixings, 4 rubber feet                                | B 05 42 127 🗲 |
|   | Rear panel H3            | ③ ABS, pebble grey   | 1 rear panel H3                                       | B 05 42 318   |
|   | Frame K3                 | (4) ABS, off-white   | 1 frame K3, 1 o-ring sealing, fixings                 | B 05 42 207 🗲 |
|   | Frame L3                 | (5) ABS, off-white   | 1 frame L3, 1 o-ring sealing, fixings                 | B 05 42 227 🗲 |
|   | Side-covers              | ② Version I, ABS, off-white without handle recess  | Each 2 side-covers                                    | B 05 02 417   |
|   |                          | (22) Version II, ABS, off-white with handle recess   |   | B 05 02 407   |
|   |                          | ② Version III, same version I but with tilt feet   | Each 2 side-covers, 2 tilt feet in pebble grey        | B 05 02 437   |
|   |                          | ② Version IV, same version II but with tilt feet   |   | B 05 02 427   |
|   |                          | (25) Version V, ABS, off-white without handle recess<br>but with holes for mounting the handle | 2 side-covers   | B 05 02 447   |
|   | Adapter 3                | 6 ABS, off-white   | 1 adapter, 2 o-ring sealings, fixings                 | B 05 42 057 🗲 |
| Ì | Front frame 3            | (8) ABS, off-white   | 1 front frame, fixings                                | B 05 42 247 🗲 |
| Ì | Frame cover 3            | ABS, off-white   | 1 frame cover, fixings                                | B 06 42 147 🗲 |
| Ì | Cover 3                  | (10) SAN, transparent, with hinge, left-hand or right-hand hinge                               | Each 1 cover with preassembled hinge, standard-fixing | B 05 43 301   |
|   |                          | (10) ABS, pebble grey, with hinge, left-hand or right-hand hinge                               | with 2 cross-head screws                              | B 05 42 308   |
|   |                          | ① SAN, transparent, without hinge  | Each 1 cover without hinge, standard-fixing with      | B 05 43 321   |
|   |                          | (1) ABS, pebble grey, without hinge  | 4 cross-head screws                                   | B 05 42 328   |
|   | Front panel WR3          | (7.1) for rear panel 3/K3, panel K3/L3, matt anodized aluminium                                | 1 front panel , 4 screws                              | B 06 40 100   |
|   | Front panel F3           | (12) for snap-in fitting to all combinations with front frame 3                                | 1 front panel (matt anodized aluminium)               | B 06 40 120   |
|   | Front panel H3           | 7.3 for all combinations with cover matt anodized aluminium                                    | 1 front panel, 4 screws                               | B 06 40 130   |
|   | 19*-Front panel 3        | (74) for frame L3 with cover/front frame 3 (only for 19" technique,                            | 1 front panel (matt anodized aluminium), 4 screws     | B 06 40 110   |

# 19" Tapped and threaded strip necessary) A C C E S S O R I E S (please refer to pages 61–64 for detailed description and photo)

| Article                                | Version / A  | pplication  | Supply   | Part-No.    |  |
|--|--|---|--|-------------|--|
| Wall suspension elem.                  | (13) Polyan  | nide glass-reinforced, pebble grey                        | Each 2 pieces two-element hinges, fastening elements       | B 06 03 308 |  |
| Handle 3 (Bail Arm)                    | 12) Latera   | l parts pebble grey, push-button off-white                | Each 2 lateral parts (polyamide glass-reinforced),         | B 05 43 528 |  |
|  | 12) Latera   | l parts and push-button off-white                         | 1 aluminium section (matt anodized aluminium),             | B 05 43 527 |  |
|  | 12 Latera  | l parts off-white, push-button pebble grey                | fixings  | B 05 43 526 |  |
| Hinge                                  | (15) Polyan  | nide glass-filled, pebble grey, with quick-action lock    | 1 two-element hinge, fixings                               | B 05 03 538 |  |
|  | (15) Polyan  | nide glass-filled, pebble grey, without quick-action lock |  | B 05 03 548 |  |
| 19" Card guides                        | (14) ABS, pebble grey, 42 TE, 3 HE, max. up to 5 sets per case |   | Each 1 top guide, 1 bottom guide (corr. 1 set)             | B 06 02 508 |  |
| 19" Mounting kit 3                     | (6) allows   | DIN41612/41617 connectors to be assembled (frame L3) $$   | 4 supports, 2 aluminium profiles, fastening elements       | B 05 02 558 |  |
| 19" Tapping Strip 3                    | (17) Galvar  | ized steel, 223.5 mm long (44 TE), suitable for frame L3  | 2 tapped and threaded strips                               | B 06 40 510 |  |
| 19" Cover front panel 3                | 28 Width   | 2 TE, suitable for frame L3, aluminium                    | 1 cover front panel, 2 screws                              | B 06 00 150 |  |
| Security Element                       | , 9 ,  |   | 2 security elements, 2 screws for terminal compartment lid | B 06 00 310 |  |
| Knurled screw                          |  |   | 2 knurled screws   | B 06 00 348 |  |
| Lock 20 for securing the front cover 3 |  | curing the front cover 3                                  | 1 lock with spring clip                                    | B 06 00 320 |  |
| Quick-action screw                     | (26) for lock  | sing the front cover 3                                    | 2 special-type screws with spring clip and rubber cushion  | B 06 00 330 |  |
| 00                                     |  |   |  |             |  |

VARIO-BOX

### VARIO-BOX ACCESSORIES

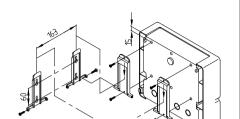
Example of assembly

Version



WALL SUSPEN-SION ELEMENTS The wall suspension elements allow wall-mounting,





fixing and removing the complete case with cover closed. Tightly joined with rear panel.

Supply:
Two wall parts, two case.

Two wall parts, two case parts.
Fixing kit.

**◆** Z (PZ2)

Part-No.





glass-filled polyamide, pebble grey RAL 7032



♠ H (PH2)

| Material                                  | Version                            |
|---|------------------------------------|
| lateral parts glass-reinforced polyamide, | Pebble grey, push button off-white |
| handle section of matt anodized aluminiu  | m Off-white, push button off-white |
|   | Off-white, push button pebble grey |



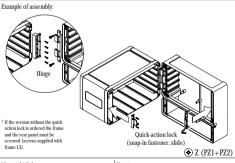
VARIO

Can be used as carry handle or a tilt foot bar. Strong push-button mechanism give 30° indexing. Combine with side covers version V.

Supply: 2 lateral parts. 1 aluminium section. Fixings.

| Part-N  | lo. |
|---------|-----|
| B 05 43 | 528 |
| B 05 43 | 527 |
| B 05 43 | 526 |





| I | Material / Colour      | Version                          |  |  |
|---|------------------------|----------------------------------|--|--|
| I | glass-filled polyamide | Hinge with quick-action lock     |  |  |
| l | pebble grey RAL 7032   | Hinge without quick-action lock* |  |  |

### HINGE

For easy access to the wiring level. The hinge can be fitted to the left or to the right. It can be used with the rear panel 3 / K3 and the frame L3.

### Supply:

1 two-element hinge. fasting elements.

|   | Pai | t-N | lo.  |  |
|---|-----|-----|------|--|
| В | 05  | 03  | 538  |  |
| R | N5  | U3  | 5/18 |  |

### <u>OKW</u>

### VARIO-BOX 19" ACCESSORIES

The version with the long frame L3, together with the 19" mounting kit, enables the fitting of

DIN 41 612 and DIN 41 617 connectors.

Cases with a terminal compartment will only accept connectors with contacts up to 13 mm long.



The same mounting kit is used for both connector types.







DIN 41 617







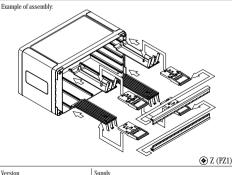
with or without a plastic lock The version with the lock enables easy access to the wiring level. If the version without the lock is ordered the frame and the rear panel must be

screwed in place.



### 19" CONNECTOR MOUNTING KIT 3

This kit allows DIN 41 612 or DIN 41 617 connectors to be assembled to frame L3 when 19" card guides are fitted. Easy access to this can be achieved using the hinge kit.





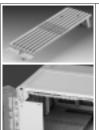


Part-No. B 05 02 558 
 Version
 Supply

 ABS, pebble grey RAL 7032
 4 supports, 2 aluminium profiles, fixings

# VARIO-BOX 19" ACCESSORIES

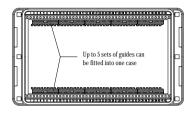






Version

Glass-filled polyamide, pebble grey RAL 7032



Supply

1 set (1 top guide, 1 bottom guide)

| 19" | CARD  | GUIDES |
|-----|-------|--------|
| (42 | TF. 3 | HF)    |

These 19" guides clip into frame L3 (⑤) to form a subrack up to a maximum of 42 TE x 3 HE. Each guide has 7 card positions. Up to 5 sets of guides can be fitted into one case. This gives a maximum of 39 card positions. The guides are designed to accept 100 x 160 mm Eurocards. Not suitable for cassette units.

| Part-No. |             |  |  |  |
|----------|-------------|--|--|--|
|          | B 06 02 508 |  |  |  |
| 0 "      | TADDED AND  |  |  |  |

### TAPPED AND THREADED STRIPS 3

For mounting in frame L3 (⑤) if 19" front panels or cover front panels are used.

Part-No.

When fitting, 2 tapped strips B0640510 should also be ordered. For combination with frame L3 (3) fitted with either front cover or front

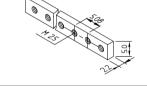
19" COVER FRONT

Fits on frame L3 (5) when mounting partial front panels or closing of gap between case width of 44 TE and effective width 42 TE.

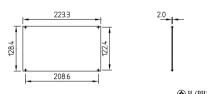
PANFL

19" FRONT-

PANEL 3



| Galvanized steel, 223.5 mm long (44 TE) 2 tapping strips |  |
|--|--|



| 208.6                   | <b>→</b> ₩ (PH1)        | frame 3. Ideal as a full front panel for 19" systems. |
|-------------------------|-------------------------|---|
| Version                 | Supply                  | Part-No.  |
| Matt anodized aluminium | 1 Front panel, 4 screws | B 06 40 110   |



| _   | 10.1 |
|-----|------|
| T   | H —  |
| Ī   | 1 1  |
| 787 | 2.4  |
| 티크  | [4]  |
| +   | 1    |
| _   | 7.4  |
| _   | -    |

| (♦) | Н | (PH1) |  |
|-----|---|-------|--|
|     |   |       |  |

| Version                             | Supply                  | Part-No.    |
|-------------------------------------|-------------------------|-------------|
| Width 2 TE, matt anodized aluminium | 1 Front panel, 2 screws | B 06 00 150 |

## ×

### SECURITY

Polypropylene – for front cover and cover of terminal compartment.

Supply:

2 security elements 2 screws 3x35 mm (only necessary when using the securing element with terminal compartment liab)

Part-No.

B 06 00 3

### KNURLED SCREW

For locking the front cover 3 (③. ①) instead of the standard cross-head screws when combined with frame K3 or frame L3.

Supply: 2 knurled screws 2 locating bushes

Part-No.

### B 06 00 34

#### LOCK

For securing the front cover 3 to the case when combined with rear panel  $3\ (\textcircled{2})$  / (3) and frame L3 (\textcircled{3}). Additional machining of the cover (drilling) required.

Supply: 1 lock with spring clip

Part-No.

#### QUICK-ACTION SCREW

Same use as knurled screw, but additional machining (drilling) of the cover required.

Supply:

2 special-type screws with spring clip and rubber cushion

Part-No.





