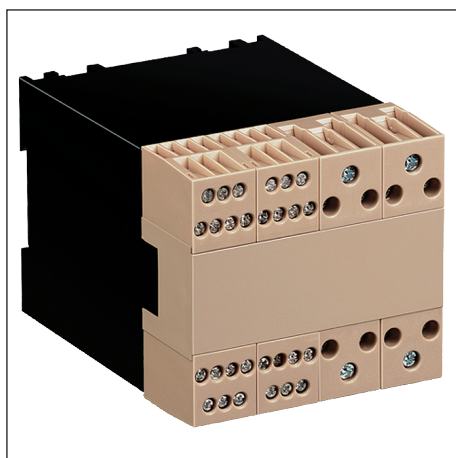
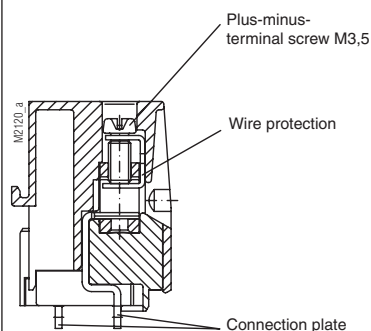


# Insulated Enclosure KO 4737

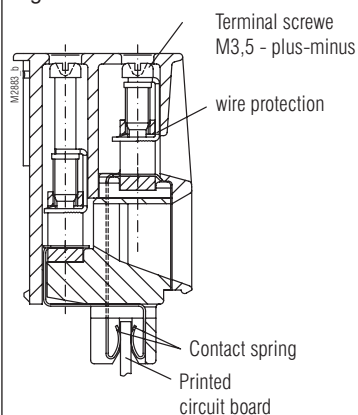
with 4 high current terminal blocks for solder connection  
and 4 twin-level terminal blocks for Plug-in technology



- Width 90 mm
- High current terminal block for soldering
  - Max. 12 box terminals with captive plus-minus terminal screw
  - Electrical connection of PCB to terminal via stranded ferruled
- twin-level terminal block for plug-in technology
  - Max. 28 box terminals with captive plus-minus terminal screw
  - Twin-level terminal
  - Removable terminal blocks for connection with PCB
  - Terminal blocks with choice of 3-; 4- or 7-terminals or as blanking block
- Installation of SMD components on outer surface (soldering side) possible
- Can be used for EExi complying with EN 50 020



High current terminal block for soldering



Twin-level box terminal for plug-in technology

## Approval and Marking



## Technische Daten

Order reference:	beige	grey RAL 7035	blue RAL 5015	clear	black
Base, with one clip PC	KO 4733-	1.6			1.1
Base, with one clip PA (UL)	KO 4733-				1.4
Base, with one clip PBT (UL)	KO 4733-	1.5			
Frame PC (UL)	KO 4737-	1-1.1	1-1.3	1-1.4	
Terminal block, 3 term. PC	KO 4733-	3.21	3.23	3.24	
Terminal block, 3 term. PA (UL)	KO 4733-				3.126
Terminal block, 3 term. PBT (UL)	KO 4733-	3.11	3.158	3.14	
Terminal block, 4 term. PC	KO 4733-		3.13		3.124
Terminal block, 4 term. PA (UL)	KO 4733-				3.124
Terminal block, 4 term. PBT (UL)	KO 4733-	3.1	3.157		
Terminal block, 7 term. PC	KO 4733-		3.3	3.4	
Terminal block, 7 term. PA (UL)	KO 4733-				3.123
Terminal block, 7 term. PBT (UL)	KO 4733-		3.156		
Blanking block PC	KO 4733-	3.31	3.33	3.34	
High current terminal block, 3 terminals PC	KO 4734-	4.5			
High current terminal block, 3 terminals PA (UL)	KO 4734-				4.23
High current terminal block, 3 terminals PBT (UL)	KO 4734-		4.26		

**Outer dimensions:** 90 x 84 x 118 mm  
**Enclosure material:** PC-GF, Base black, front beige




Temperature stability:	PC	PA	PBT
complying with UL 746 B:	125 °C	120 °C	120 °C
complying with Vicat ISO 306	Meth. A: 148 °C	Meth. A: 212 °C Meth. B: 212 °C	134 °C
compl. with ISO 75-2	Meth. A: 138 °C Meth. B: 144 °C	230 °C 210 °C	145 °C 150 °C


**Max. permitted power dissipation:** 22 W for stand-alone enclosure at normal climate 23/50-1 ISO 554

**Specific thermal resistance:** R<sub>th</sub> = 5.5 K / W for stand-alone enclosure

**Flame retardancy:**  
 complying with UL 94: PC: V-0; PA: plate clear = V-2; PA: V-0; PBT: V-0  
 complying with IEC 60 707: BH 2-30

	high current terminal block	twin-level terminal block
<b>Number of terminals:</b>	12, < 12 on request	28, < 28 on request
<b>Terminal material:</b>	steel strip, tin-plated	Cu-alloy tin-plated
<b>Max. cross section for connection:</b>	1 x 10 mm <sup>2</sup> solid insulation 11 mm	1 x 2.5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3/-4
	1 x 6 mm <sup>2</sup> -12 stranded ferruled DIN 46 228-1/-2/-3/-4	1 x 4 mm <sup>2</sup> solid 2 x 1.5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3/-4
<b>Min. cross section for connection:</b>	≥ 1 mm <sup>2</sup> solid ≥ 0.5 mm <sup>2</sup> strand.ferruled	
<b>Insulation of wires length:</b>	11 mm	10 mm
<b>Max. current carrying capacity:</b>	40 A	see table

Max. current carrying capacity twin-level box terminal	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Ex. 5
 Σ I <sub>max.</sub> = 15 A	5 5 5				
 Σ I <sub>max.</sub> = 28 A	7 7 7 7	8 6 7 7	8 6 8 6		
 Σ I <sub>max.</sub> = 35 A	5 5 5 5	5 5 5 5	3 2 2	2 3 2	1 1 5
	5 5 5 5	8 4 4 4	8 6 7 7	7 7 7 7	8 6 8 6

□ = max. value per terminal point,  = max. value per terminal row

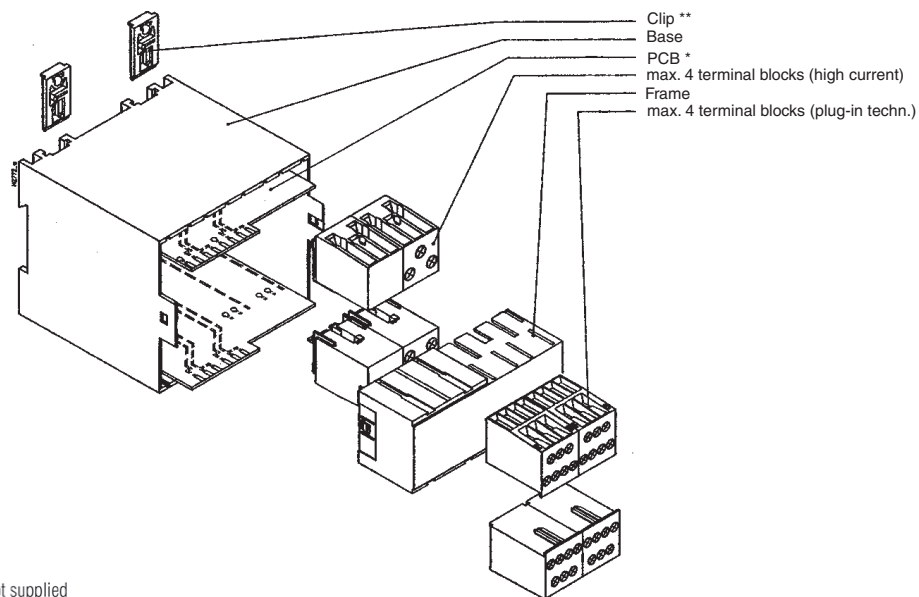
All specifications correspond to the technology used at time of publication.  
 We reserve the right to make improvements and changes of a technical nature at any time.

## Technical Data

Wire fastening:	captive plus-minus-terminal screws M4	captive plus-minus-terminal screws M3,5
	Box terminal with self raising wire protection	
Torque:	1.2 Nm	0.8 Nm
Inner connection:	solder connection	direct connection of PCB
<b>Enclosure fastener:</b>	1) Snap-on fastener on top hat rail EN 50 022 2) Screw fixing M4, grid 90 mm with additional clip as accessories	
Creepage current resistance:	PC: CTI 175 $\cong$ insulating material III a IEC 60 664-1 PA: CTI 600 $\cong$ insulating material I IEC 60 664-1 PBT: CTI 225 $\cong$ insulating material III IEC 60 664-1	
<b>Air gap and creepage distance:</b>	$\geq 5.5$ mm complying with IEC 60 664-1	$\geq 3.3$ mm complying with IEC 60 664-1 with plugged-in PCB
Type of protection	IP 40 IEC 60 529	
Enclosure:	with terminal screws: IP 20 IEC 60 529	
Terminals:	contact protection complies with VBG 4	
Printed area:	90 x 33 mm	
<b>Printed circuit board:</b>	see printed circuit design	
Printed circuit board holder:	guide ribs	
Net weight:	320 g	

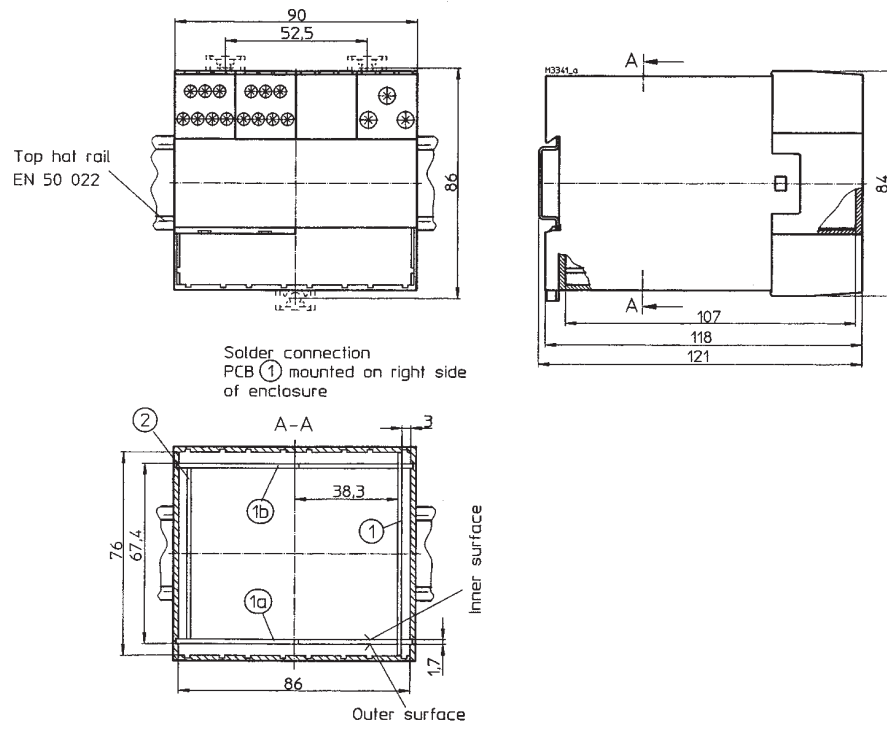
<b>Accessories:</b>		beige	grey RAL 7035	blue RAL 5015	black
Legend plate for twin-level terminal block	KO 4730-	3-1.1	3-13	3-1.4	3-1.5
2 clips for screw fastener	ET 4086-0-2				

## Exploded view

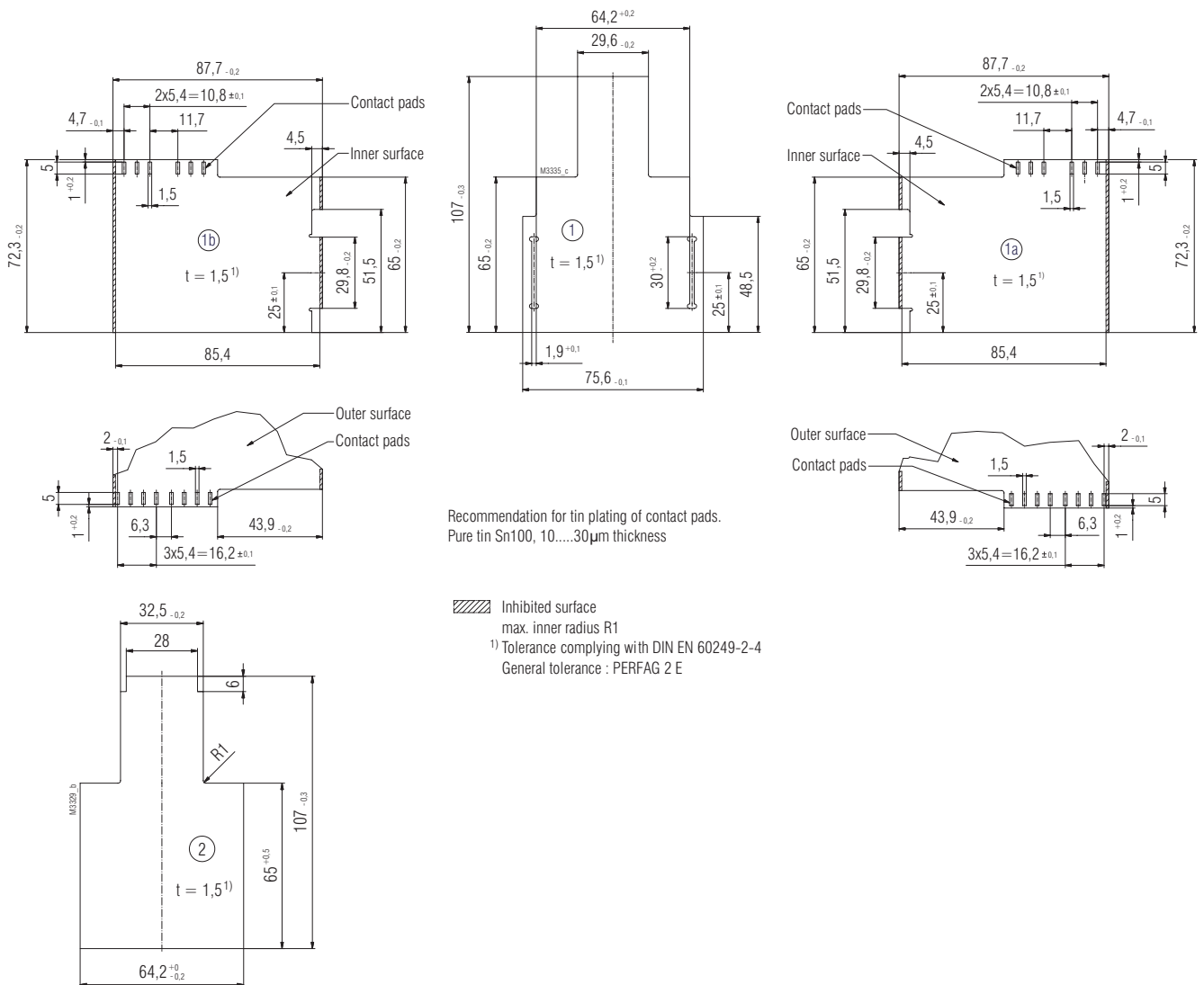


\* not supplied  
\*\* see accessories

## Dimensions



## Printed circuit board designs



## Notes on Housing Opening

### 1. Tool

- for all functions use 0.8 x 4,0 or 0.8 x 4.5 screwdriver

### 2. Removing of terminal blocks and frame

- Insert a screwdriver in the side recesses of the base (underneath)
- With light pressure, turn the screwdriver to the left or right.
- The snap-in lug of the frame disengages.
- Repeat disengaging process on opposite side.
- Terminal blocks with frame can be removed.

