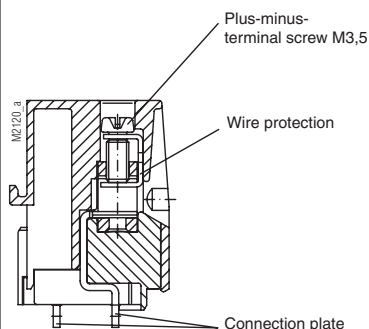


Insulated Enclosure KO 4735

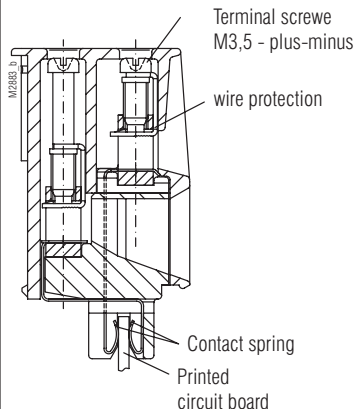
with 2 high current terminal blocks for solder connection
and 2 twin-level terminal blocks for Plug-in technology



- Width 45 mm
- High current terminal block for soldering
 - Max. 6 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. 14 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
 - Interchangeable plate
- 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



Technical Data

Order reference:	beige	grey RAL 7035	blue RAL 5015	clear	black
Base, with one clip PC	KO 4731-	1.3			1.1
Base, with one clip PA (UL)	KO 4731-				1.6
Base, with one clip PBT (UL)	KO 4731-	1.7			
Frame PC (UL)	KO 4735-	2-2.1	2-2.3	2-2.4	
Plate without terminal block					
release slots PC (UL)	KO 4730-	2-2.11	2-2.113	2-2.114	2-2.115
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-		3.158		
Terminal block, 4 term. PC	KO 4733-	3.11	3.13	3.14	
Terminal block, 4 term. PA (UL)	KO 4733-				3.124
Terminal block, 4 term. PBT (UL)	KO 4733-		3.157		
Terminal block, 7 term. PC	KO 4733-	3.1	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 4735-	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:

45 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 Meth. A:		212 °C	
ISO 306 Meth. B:	148 °C	212 °C	134 °C
compl. with ISO 75-2 Meth. A:	138 °C	230 °C	145 °C
Meth. B:	144 °C	210 °C	150 °C

Max. permitted power dissipation:

15 W for stand-alone enclosure
at normal climate 23/50-1

ISO 554

Specific thermal resistance:

R_{th} = 6.5 K / W for stand-alone enclosure

Flame retardancy:

complying with UL 94:

PC: V-0; PC: plate clear = V-2; PA: V-0; PBT: V-0

complying with IEC 60 707:

BH 2-30

Number of terminals:

high current terminal block	twin-level terminal block
6, < 6 on request	14, < 14 on request
Terminal material:	Cu-alloy tin-plated
Max. cross section for connection:	1 x 2.5 mm ² stranded ferruled
	DIN 46 228-1/-2/-3/-4
	1 x 4 mm ² solid
	2 x 1.5 mm ² stranded ferruled
	DIN 46 228-1/-2/-3/-4

Min. cross section for connection:

≥ 1 mm² solid

≥ 0.5 mm² strand.ferruled

Insulation of wires length:

11 mm

10 mm

Max. current carrying capacity:

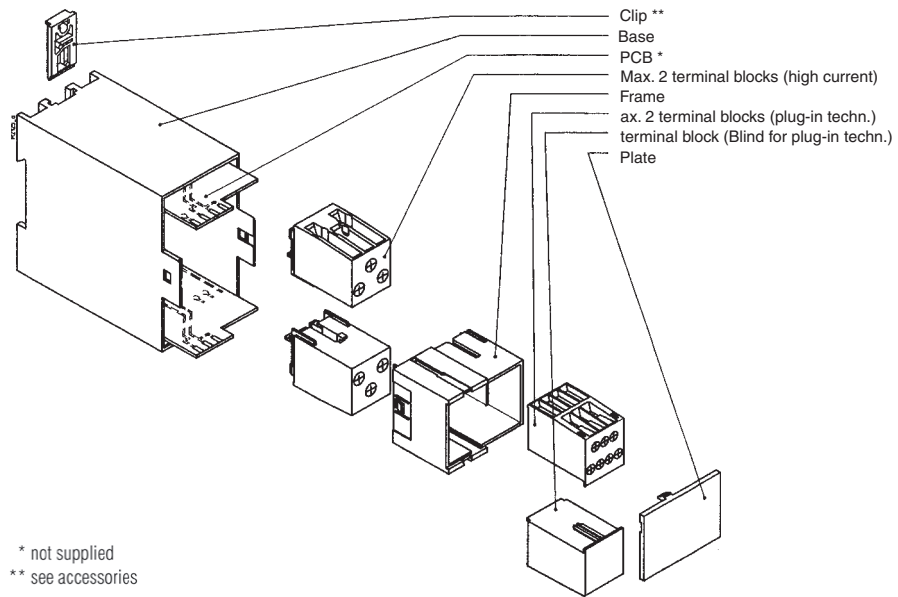
40 A

see table

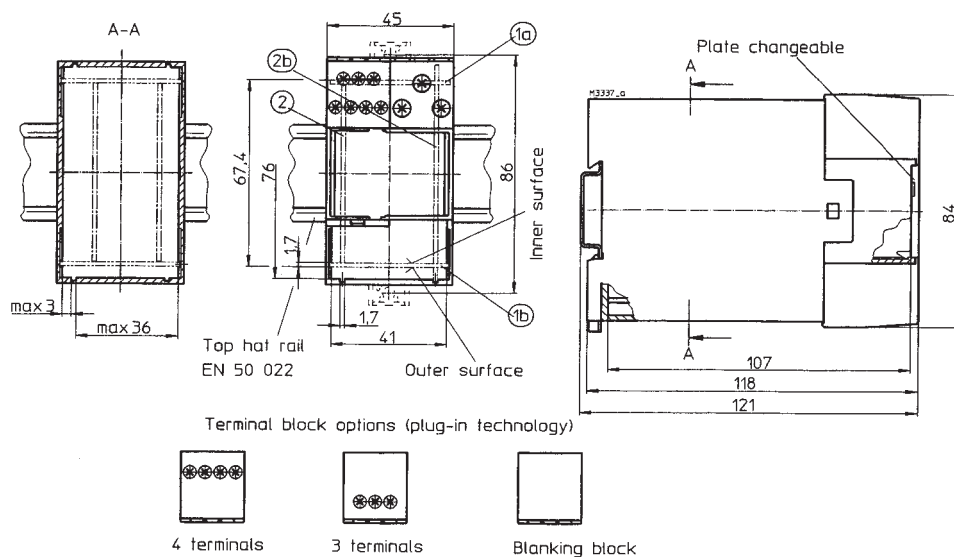
Technical Data

Max. current carrying capacity of terminal blocks:	(UL)			(UL)		(UL)
	Ex. 1	Ex. 2	Ex. 3	Ex. 4	Ex. 5	Ex. 6
Σ I _{max.} = 15 A	5 5 5					
Σ I _{max.} = 28 A	7 7 7 7	8 6 7 7	8 6 8 6			
Σ I _{max.} = 35 A	5 5 5	5 5 5	3 2 2	2 3 2	1 1 5	5 5 5
	5 5 5 5	8 4 4 4	8 6 7 7	7 7 7 7	8 6 8 6	3 7 7 3
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> = max. value per terminal point, <input type="checkbox"/> = max. value per terminal row </div>						
Wire fastening:	captive plus-minus-terminal screws M4		captive plus-minus-terminal screws M3,5			
Torque:	1.2 Nm		0.8 Nm			
Inner connection:	solder connection		direct connection of PCB			
Enclosure fastener:	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 $\hat{=}$ insulating material III a		IEC 60 664-1			
	PA: CTI 600 $\hat{=}$ insulating material I		IEC 60 664-1			
	PBT: CTI 225 $\hat{=}$ insulating material III		IEC 60 664-1			
Air gap and creepage distance:	\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	Enclosure: IP 40		IEC 60 529			
	Terminals: with terminal screws: IP 20		IEC 60 529			
			contact protection complies with VBG 4			
Printed area:	45 x 33 mm					
Printed circuit board:	see printed circuit design					
Printed circuit board holder:	guide ribs					
Net weight:	200 g					
Accessories:		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					

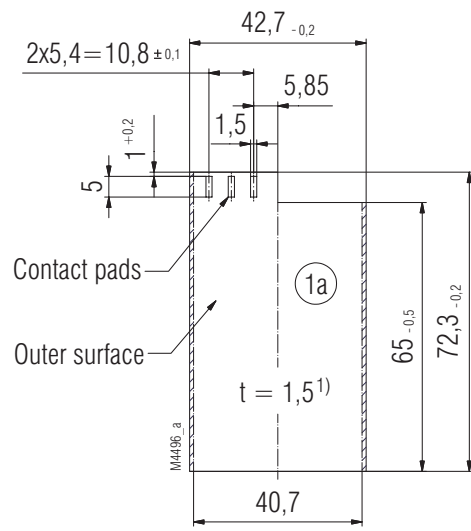
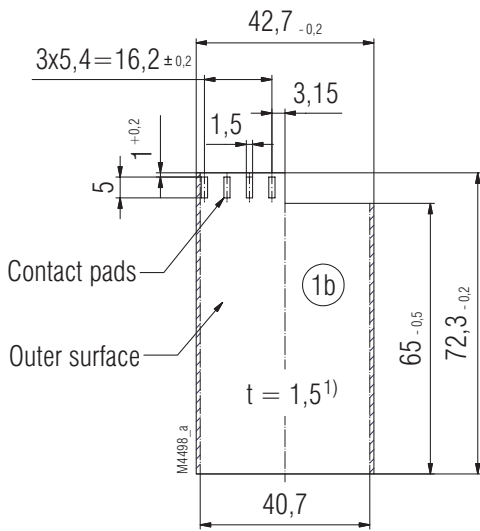
Exploded view



Dimensions

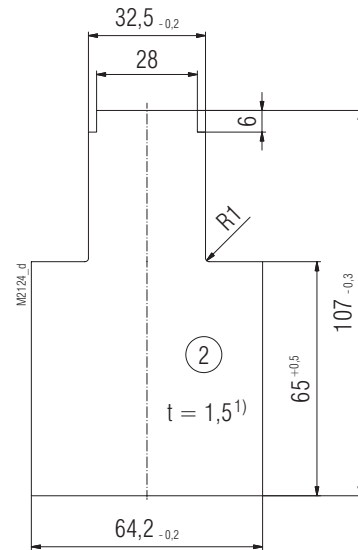
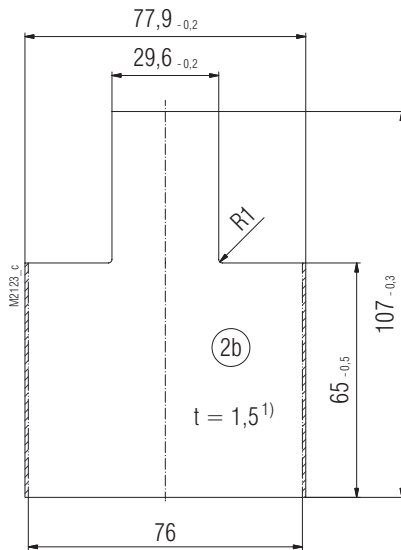
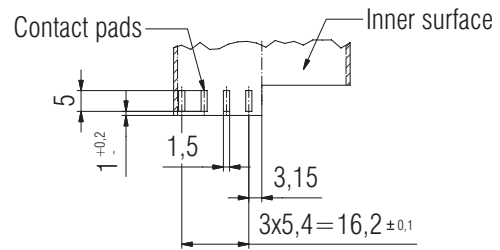
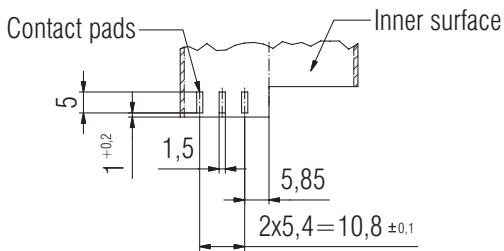


Printed circuit board designs

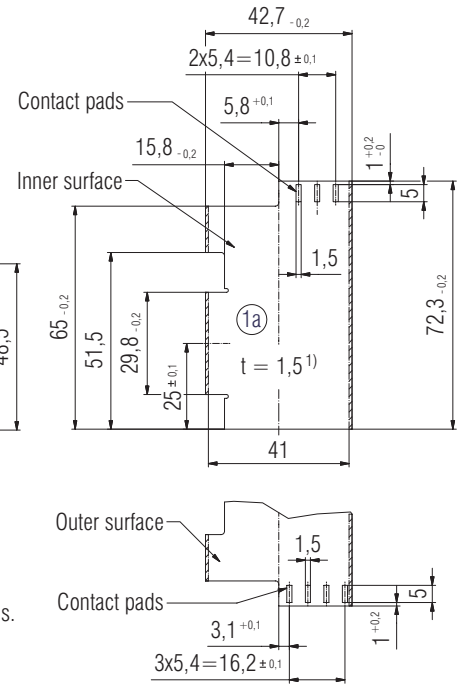
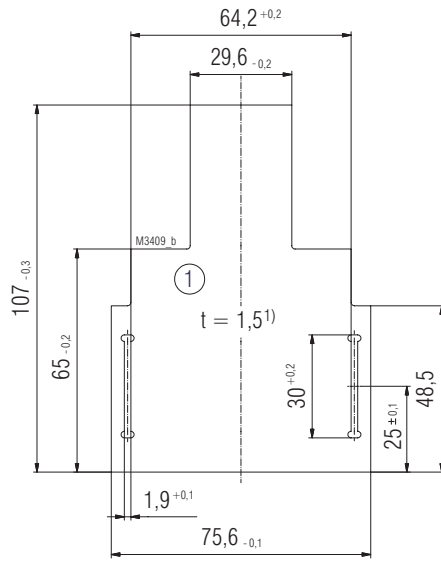
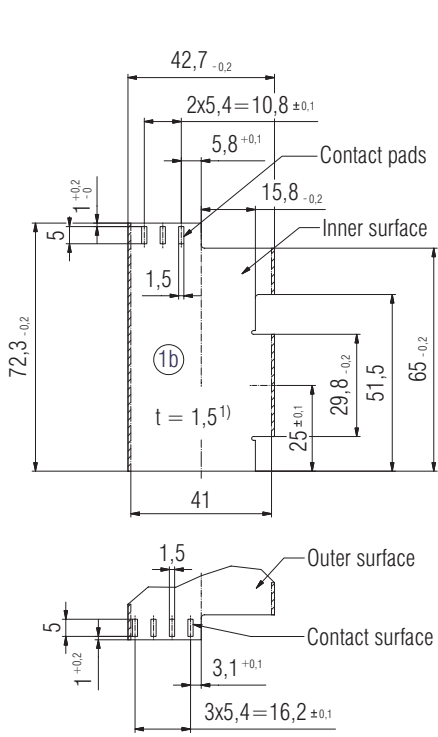


Recommendation for tin plating of contact pads.
Pure tin Sn100, 10.....30µm thickness


Recommendation for tin plating of contact pads.
Pure tin Sn100, 10.....30µm thickness



Possible pcb configurations



Recommendation for tin plating of contact pads.
Pure tin Sn100, 10.....30µm thickness

 Inhibited surface
max. inner radius R1

¹) Tolerance complying with DIN EN 60249-2-4
General tolerance : PERFAG 2 E

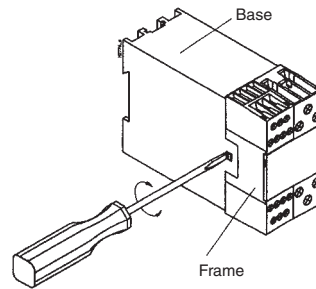
Notes on Housing Opening

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.



3. Removing the plate

- Insert a screwdriver in the side recess of the plate
- Turn the screwdriver to the right or left
- The plate disengages and can be removed

