



SWITCHGEAR

ABB RBK pro

# RBK pro

## Fuse switch disconnectors

designed for distribution of electricity and protection of electrical equipment against short-circuits and overloads with industrial fuse links.







## APPLICATIONS

RBK fuse switch disconnectors are designed for distribution of electricity and protection of electrical equipment against short-circuits and overloads with industrial fuse links. They are conforming to EN 60947-1, EN 60947-3, IEC 60947-1, IEC 60947-3 standards. They are intended for installation in low voltage distribution boards, cable and metering cabinets.

## CONSTRUCTION

- thermoplastic parts of RBK fuse switch disconnectors are made of fibre glass strengthened polyamide with halogen free flame retardant added and have highest possible flammability class – V0,
- RBK fuse switch disconnectors consist of following parts:
  - three pole main base with spring-loaded contacts designed for connection of circular or sector-shaped conductors, conductors with lug terminals or bars,
  - removable cover with fuse links,
- arc chutes with steel deionization plates over top contacts,
- silver plated contacts providing low power loss.

## MOUNTING

- on mounting plate
  - RBK 00 pro, RBK 1 pro, RBK 2 pro, RBK 3,
- on double DIN rail
  - RBK 00 pro,
- on to busbar systems:
  - 60 mm busbar system,
  - RBK 00 pro-S, RBK 1pro-S, RBK 2pro-S – installation on to busbar system with hooked clamps,
  - 100 mm busbar system,
  - RBK 2-S, RBK 1 pro-S – installation on to bus bar system with hooked clamps.

## OPERATING CONDITIONS

- to be installed in the room free of any dust, aggressive or explosive gases,
- altitude up to 2000 meters above sea level,
- outdoor – in cabinets with protection degree > IP 34,
- ambient temperature from -25 °C to +55 °C,
- relative humidity of the air should not be higher than 50% at temperature of +40°.

## FUNCTIONALITY:

- making and breaking operations should be done with determined movement,
- possible connection of circular or sector-shaped conductors with bare ends (V-terminals, 2V-terminals) or conductors with lug terminals (screw terminals),
- voltage test performed through test holes in fuse link cover,
- fuse links state monitoring.

## CONFORMITY WITH STANDARDS EN 60947-1, EN 60947-3, IEC 60947-1, IEC 60947-3

Table 72. RBK FUSE SWITCH DISCONNECTORS TECHNICAL DATA

Parameters		RBK 000 pro RBK 000 pro-S					RBP 000 pro RBP 000 pro-S			RBK 00 pro RBK 00 pro-S			RBK 00 pro-V 120			RBK 1 pro		RBK 1 pro-S			RBK 2 pro RBK 2 pro-S			
Rated thermal current $I_{th}^{1)}$	A	160					125			160			160			250		250			400			
Rated voltage $U_n$	V	690					690			690			690			690		690			690			
Utilization category	-	AC -23B	AC -22B	AC -22B	AC -21B	DC -21B	AC -22B	AC -23B	DC -21B	AC -23B	DC -21B	DC -22B	AC -23B	AC -22B	DC -22B	AC -23B	DC -22B	AC -23B	AC -22B	DC -22B <sup>2)</sup>	AC -23B	DC -21B	DC -22B	
Rated switching current $I_e$	A	100	100	160	160	160	125	125	125	160	160	160	160	160	160	250	250	250	250	250	400	400	400	
Rated switching voltage $U_e$	V	400	690	400	690	250	690	400	440	690	440	250	400	690	250	690	250	400	690	250	690	440	220	
Rated short circuit withstand current	690 V	100				15	80	20		80	20		100	20	80	25	80	25	80	100	25	80	15	20
	400 V	100				15	100	20		100	20		100	20	100	25	100	25	100	100	25	100	15	20
Rated short circuit making current	690 V	25				15	80	20		80	20		100	20	80	25	80	25	80	100	25	80	15	20
	400 V	80				15	100	20		100	20		100	20	100	25	100	25	100	100	25	100	15	20
	500 V	80				15	100	20		100	20		100	20	100	25	100	25	100	100	25	100	15	20
Rated insulation voltage $U_i$	V	1000					1000			1000			1000			1000		1000			1000			
Rated impulse withstand voltage $U_{imp}$	kV	8					6			8			8			8	8	8			12			
Rated frequency	Hz	50-60		-		50-60	-		50-60	-		50-60	-		50-60	-		50-60	-		50-60	-		
Mechanical durability	Number of cycles	2000					1600			1600			1600			1600		1600			1000			
Electrical durability		300					200			200			200			200		200			200			
IP degree of protection	IP	20					30			20			20			30		30			20			
Weight	kg	~0,6 ~0,9					~0,5 ~0,7			~0,7 ~0,90			~0,9			~2		~2,5			~3 ~4,50			
Size of fuse links	-	000					000			00			00			1		1			2			

Parameters		RBK 3 pro					RBK 3 pro-S						
Rated thermal current $I_{th}^{1)}$	A	630					630						
Rated voltage $U_n$	V	690					690						
Utilization category	-	AC-23B		AC-22B		DC-21B		AC-23B		AC-22B		AC-21B	
Rated switching current $I_e$	A	630		630		630		630		630		630	
Rated switching voltage $U_e$	V	400		690		440		400		500		690	
Rated short circuit withstand current	690 V	80					80						
	500 V	120					120						
Rated short circuit making current	690 V	80					80						
	500 V	120					120						
Rated insulation voltage $U_i$	V	1000					1000						
Rated impulse withstand voltage $U_{imp}$	kV	12					12						
Rated frequency	Hz	50-60			50-60		50-60						
Mechanical durability	Number of cycles	1000					1000						
Electrical durability		200					200						
IP degree of protection	IP	IP 20					IP 20						
Weight	kg	~5					~5,9						
Size of fuse links	-	3					3						

<sup>1)</sup>  $I_{th}$  - thermal current of fuse switch disconnector without external enclosure, installed outdoors (In case of the installation of fuse switch disconnectors in enclosures then load factor should be considered)

<sup>2)</sup> for 60 mm busbar system

RBK 2 switch disconnector with solid links 400 A  
 rated short-time withstand current 1s  $I_{cw} = 13$  kA  
 rated short-circuit making capacity  $I_{cm} = 8$  kA  
 RBK 1000 - (RBK 3 switch disconnector with solid links 1000 A)  
 rated short-time withstand current 1s  $I_{cw} = 12,6$  kA  
 rated short-circuit making capacity  $I_{cm} = 25,2$  kA  
 rated thermal current  $I_{th} = 1000$  A when connected on to busbars 50x10 mm  
 utilization category AC-21

## RBK 000 pro (160 A, 690 V)

Table 73. TECHNICAL DATA

Parameters		RBK 000 pro / RBK 000 pro-S				
Rated thermal current $I_{th}=I_n$	A	160				
Rated voltage $U_n$	V	690				
Utilization category	-	AC-23B	AC-22B	AC-22B	AC-21B	DC-21B
Rated switching voltage $U_e$	V	400	690	400	690	250
Rated switching current $I_e$	A	100	100	160	160	160
Rated short circuit making current	690 V	25				
	500 V	80				
	400V	80				
Rated short circuit withstand current	kA	100				
Rated insulation voltage $U_i$	V	1000				
Rated impulse withstand voltage $U_{imp}$	kV	8				
Rated power dissipation	W	12				
Rated frequency	Hz	50-60				-
Mechanical durability	Number of cycles	2000				
Electrical durability		300				
IP degree of protection		IP 20				
Size of fuse links		000				

Accessories on page 121

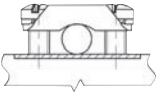
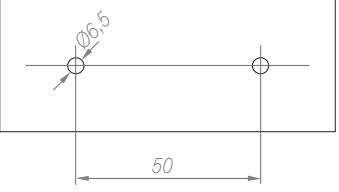
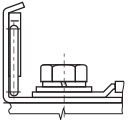


RBK 000 pro  
for installation on mounting plate

Table 74. VERSIONS

RBK 000/160 A		Cable terminal	Article No.
<b>For installation on mounting plate</b>			
RBK 000 pro	for connection of round conductors	S-bridge clamps	63-823191-011
RBK 000 pro-E	for connection of round conductors, possible installation on DIN rail	S-bridge clamps	63-823191-051
RBK 000 pro-M	for connection of round conductors with lug terminals	M8 screws	63-823191-021
RBK 000 pro-M-E	for connection of round conductors with lug terminals, possible installation on DIN rail	M8 screws	63-823191-061
RBK 000 pro-W	for connection of round conductors, lengthened terminal shrouds	S-bridge clamps	63-823191-071
RBK 000 pro-W-M	for connection of round conductors with lug terminals, lengthened terminal shrouds	M8 screws	63-823191-081
<b>For installation on to 60 mm busbar system</b>			
RBK 000 pro-SD	Cable terminal – bottom, for connection of round conductors	S-bridge clamps	63-823234-031
RBK 000 pro-SG	Cable terminal – top, for connection of round conductors	S-bridge clamps	63-823234-011
RBK 000 pro-SD-M	Cable terminal – bottom, for connection of conductors with lug terminals	M8 screws	63-823234-041
RBK 000 pro-SG-M	Cable terminal – top, for connection of conductors with lug terminals	M8 screws	63-823234-021

Table 75. RBK 000 TERMINAL CLAMPS

Description	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 000 on mounting plate
RBK 000 pro	S-bridge clamp 2 x M5 x 16		Cu/Al conductor 1,5 ÷ 35 mm <sup>2</sup>	maximum bar width 15 mm	3 Nm*	
	M8 x 16 screw		conductor with lug terminal up to 70 mm <sup>2</sup>		10 Nm*	

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended



RBK 000 pro-E  
for mounting on DIN rail



RBK 000 pro-O  
for installation on mounting plate  
with additional terminal shrouds



RBK 000 pro-W  
for installation on mounting plate  
with extended terminal shrouds



RBK 000 pro-SG (top cable terminals)  
RBK 000 pro-SD (bottom cable terminals)  
for installation on to 60 mm busbar system

RBK 000 pro

**RBP 000 pro (125 A, 690 V)** for mounting

- on plate
- on double DIN rail

**RBP 000 pro-S (125 A, 690 V)** for installation onto 60 mm busbar system

- system of protective covers provides touch protection
- possible installation of distribution board's protective panel at depth of 32 mm or 70 mm
- built-in hooked clamps provide fast installation onto busbar system
- top/bottom cable terminal

Table 76. TECHNICAL DATA

Parametr		RBP 000 pro, RBP 000 pro-S			
Rated thermal current $I_{th}$		A	125		
Rated voltage $U_n$		V	690		
Utilization category		-	AC-21B*	AC-22B**	AC-23B DC-22B
Rated switching voltage $U_e$		V	690	690	400 250
Rated switching current $I_e$		A	125	125	125 100
Rated short circuit making current	690 V	kA	50*/35**		20
	500 V		50		
	400 V		80		
Rated short circuit withstand current	690 V	kA	80		20
	500 V				
	400 V				
Rated insulation voltage $U_i$		V	1000		
Rated impulse withstand voltage $U_{imp}$		kV	6		
Rated power dissipation		W	9		
Rated frequency		Hz	50-60		-
Mechanical durability		c.p	1600		
Electrical durability		c.t.	200		
IP degree of protection			IP 30		
Size of fuse links			000		

\*- RBP 000 pro, \*\*- RBP 000 pro-S



RBP 000 pro-S

Table 77. VERSIONS

RBP 000 pro		Cable terminal	Article No.
<b>For mounting on plate</b>			
RBP 000 pro	for connection of round conductors	frame clamps	63-823267-001
<b>for mounting on double DIN rail</b>			
RBP 00 pro-E-125 mm	double DIN rail with spacing of 125 mm	frame clamps	63-823267-002
RBP 000 pro-E-150 mm	double DIN rail with spacing of 150 mm	frame clamps	63-823267-003
<b>RBP 000 pro-S</b>			
<b>For installation on to 60 mm busbar system</b>			
RBP 000 pro-SG	cable terminal-top, for connection of conductors with bare ends	frame clamps	63-823427-001
RBP 000 pro-SD	cable terminal-bottom, for connection of conductors with bare ends	frame clamps	63-823427-002

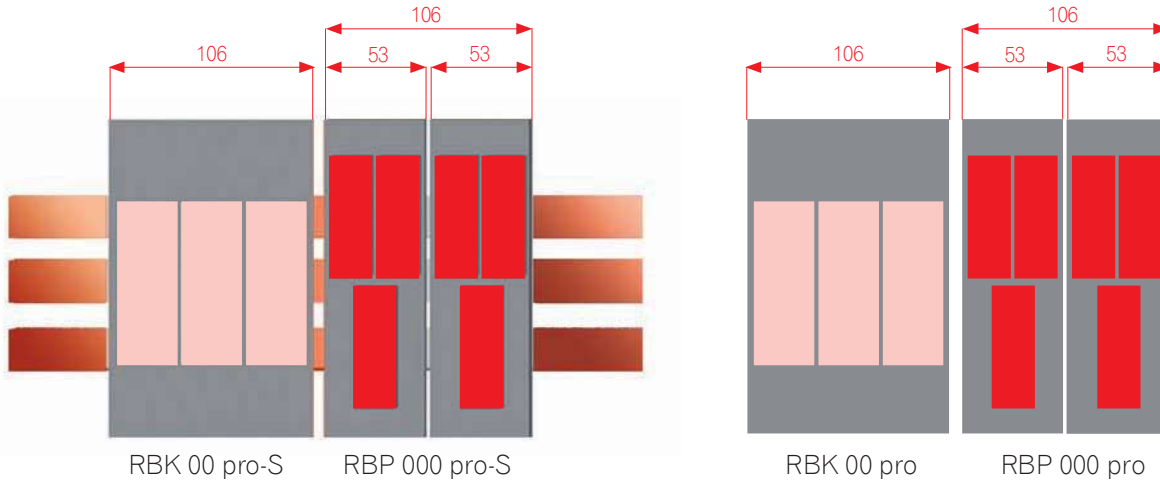
Table 78. RBP 000 pro, RBP 000 pro-S TERMINAL CLAMPS

Description	Cable terminal	Drawing of clamp	Cross-section of conductors	Tightening torque
RBP 000 pro RBP 000 pro-S	frame clamps		2,5 - 50 mm <sup>2</sup>	⊕ 6 Nm* 3 Nm*

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended

**Saves space in the switchboard**

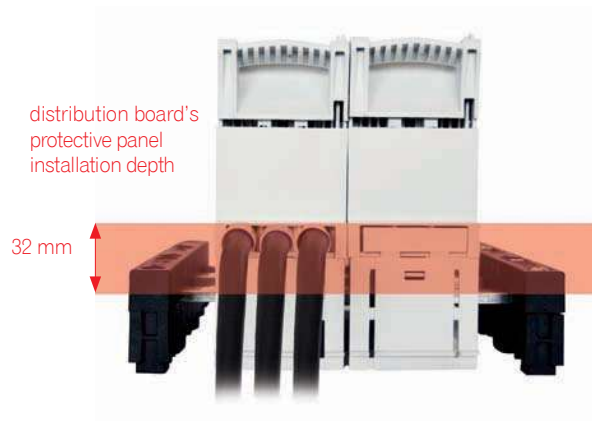
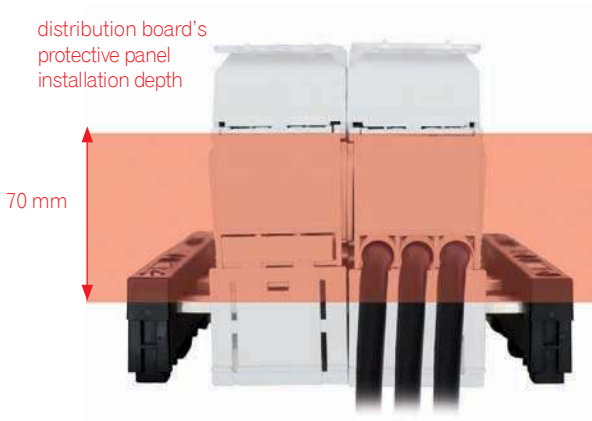
RBP 000 pro-S (RBP 000 pro) width dimensions is equal to half the width of RBK 00 pro-S (RBK 00 pro), so we can install more disconnectors (keeping a certain width of the switchboard) to protect individual circuits in the switchboard.



Fuse switch disconnectors RBP 000 pro-S are designed for installation of distribution board's protective panels at two depths:

covering system at 70 mm depth

covering system at 32 mm depth



with cables connected to the top cable terminal RBP 000 pro -SG



with cables connected to the bottom cable terminal RBP 000 pro- SD

Fuse switch disconnectors RBP 000 pro-S are manufactured in two versions depending on type of cable terminal

RBP 000 pro-SD-with bottom cable terminal

RBP 000 pro-SG-with top cable terminal

RBP 000 pro, RBP 000 pro-S





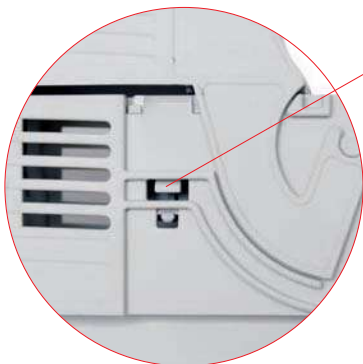
Fuse switch disconnecter RBP 000 pro-S has special cavity in it's main base encasing busbar system's support.



Cavity for busbar system's support



It is possible to install **microswitch indicating** position open/close fuse switch disconnectors.



hole for leading of wires connected to microswitch



RBP 000 pro, RBP 000 pro-S



Fuse switch disconnecter RBP 000 pro - E 125 mm for mounting on double DIN rail



RBP 000 pro mounting on plate

**RBK 00 pro (160 A, 690 V)**

Table 79. TECHNICAL DATA

Parameters		RBK 00 pro		
Rated thermal current $I_{th}$	A	160		
Rated voltage $U_n$	V	690		
Utilization category	-	AC-23B	DC-22B	DC-21B
Rated switching voltage $U_e$	V	690	250	440
Rated switching current $I_e$	A	160	160	160
Rated short circuit making current	690 V	80	20	
	400 V	100		
Rated short circuit withstand current	690 V	80	20	
	400 V	100		
Rated insulation voltage $U_i$	V	1000		
Rated impulse withstand voltage $U_{imp}$	kV	8		
Rated power dissipation	W	12		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1600		
Electrical durability		200		
IP degree of protection	IP 20			
Size of fuse links	00			

Accessories on page 122



RBK 00 pro

RBK 00 pro

Table 80. VERSIONS

RBK 00 pro/160 A		Cable terminal	Article No.
<b>For installation on mounting plate</b>			
RBK 00 pro	for connection of round conductors	S-bridge clamps	63-823256-011
RBK 00 pro-M	for connection of conductors with lug terminals	M8 screws	63-823256-021
RBK 00 pro-V	for connection of sector-shaped conductors	V-shape clamps	63-823256-031
RBK 00 pro-W	for connection of round conductors, lengthened terminal shrouds	S-bridge clamps	63-823256-041
RBK 00 pro-M-W	for connection of conductors with lug terminals, lengthened terminal shrouds	M8 screws	63-823256-051
RBK 00 pro-V-W	for connection of sector-shaped conductors, lengthened terminal shrouds	V-shape clamps	63-823256-061
<b>for mounting on double DIN rail</b>			
RBK 00 pro-E-125mm	double DIN rail with spacing of 125 mm	S-bridge clamps/ M8 screws/ V-shape clamps	On request*
RBK 00 pro-E-150mm	double DIN rail with spacing of 150 mm	S-bridge clamps/ M8 screws/ V-shape clamps	On request*

Table 81. RBK 00 pro TERMINAL CLAMPS

Description	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 00 on mounting plate
RBK 00 pro	S-bridge clamp 2 x M5 x 16		Cu/Al conductor 4+50 mm <sup>2</sup>	maximum bar width 20 mm	3 Nm*	
	M8 x 16 screw		conductor with lug terminal up to 70 mm <sup>2</sup>		10 Nm*	
	V-shape clamp 2 x M5 x 20	 2)  4 mm <sup>2</sup> - 70 mm <sup>2</sup> 4 mm <sup>2</sup> - 95 mm <sup>2</sup> 1)  1,5 mm <sup>2</sup> - 2,5 mm <sup>2</sup>			3 Nm*	

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended



RBK 00 pro-W



Fuse switch disconnecter RBK 00 pro with additional terminal shrouds



Fuse switch disconnecter RBK 00 pro for mounting on double DIN rail

## FUSE SWITCH DISCONNECTORS FOR INSTALLATION ONTO 60 mm BUSBAR SYSTEM RBK 00 pro-S

- system of protective covers provides touch protection
- possible installation of distribution board's protective panel at depth of 32 mm or 70 mm
- built-in hooked clamps provide fast installation onto busbar system
- top/bottom cable terminal

Table 82. TECHNICAL DATA

Parameter		RBK 00 pro-S		
Rated thermal current $I_{th}$	A	160		
Rated voltage $U_n$	V	690		
Utilization category	-	AC-23B	AC-22B	DC-22B
Rated switching voltage $U_e$	V	400	690	250
Rated switching current $I_e$	A	160	160	160
Rated short circuit making current	kA	100		20
Rated short circuit withstand current	kA	100		20
Rated insulation voltage $U_i$	V	1000		
Rated impulse withstand voltage $U_{imp}$	kV	8		
Rated power dissipation	W	12		
Rated frequency	Hz	50-60		-
Mechanical durability	Number of cycles	1600		
Electrical durability		200		
IP degree of protection	IP 20			
Size of fuse links	00			



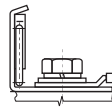
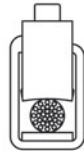
RBK 00 pro-S

RBK 00 pro-S

Table 83. VERSIONS

RBK 00 pro-S		Cable terminal	Article No.
For installation on to 60 mm busbar system			
RBK 00 pro-SG-M	cable terminal – top, for connection of conductors with lug terminals	M8 screws	63-823259-121
RBK 00 pro-SD-M	cable terminal – bottom, for connection of conductors with lug terminals	M8 screws	63-823259-141
RBK 00 pro-SG-R	cable terminal-top, for connection of conductors with bare ends	frame clamps	63-823259-151
RBK 00 pro-SD-R	cable terminal-bottom, for connection of conductors with bare ends	frame clamps	63-823259-161

Table 84. RBK 00 pro-S TERMINAL CLAMPS

Description	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque
RBK 00 pro-SGM RBK 00 pro-SDM	M8 x 16 screw		conductor with lug terminal up to 70 mm <sup>2</sup>	maximum bar width 20 mm	10 Nm*
RBK 00 pro-SGR RBK 00 pro-SDR	frame clamps		4 ÷ 95 mm <sup>2</sup>	-	6 Nm* 3 Nm*

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended

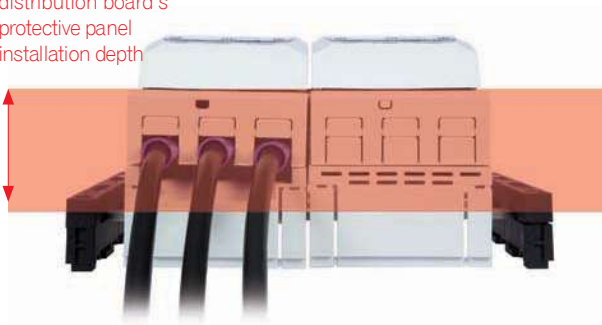


Fuse switch disconnectors RBK 00pro-S are designed for installation of distribution board's protective panels at two depths:

covering system at 70 mm depth

distribution board's protective panel installation depth

70 mm



covering system at 32 mm depth

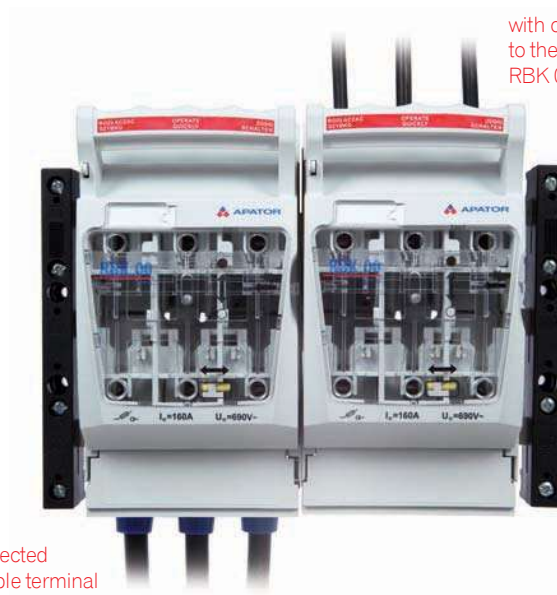
distribution board's protective panel installation depth

32 mm



Fuse switch disconnectors RBK 00 pro-S are manufactured in two versions depending on type of cable terminal RBK 00 pro-SD-with bottom cable terminal RBK 00 pro-SG-with top cable terminal

RBK 00 pro-S



with cables connected to the top cable terminal RBK 00 pro-SG

with cables connected to the bottom cable terminal RBK 00 pro-SD

Fuse switch disconnector RBK 00 pro-S has special cavity in it's main base encasing busbar system's support.



Cavity for busbar system's support



Cable terminals:

M8 screw terminal (RBK 00 pro-SDM, RBK 00 pro-SGM)



Frame clamp (RBK 00 pro-SDR, RBK 00 pro-SGR)



It is possible to install microswitch indicating position in fuse switch disconnectors RBK 00 pro-S



hole for leading  
of wires connected  
to microswitch



## RBK 00 pro-V120 (160 A, 690 V)

Table 85. TECHNICAL DATA

Parameters		RBK 00 pro-V120		
Rated thermal current $I_{th}$	A	160		
Rated voltage $U_n$	V	690		
Utilization category	-	AC-23B	AC-22B	DC-22B
Rated switching voltage $U_e$	V	400	690	250
Rated switching current $I_e$	A	160	160	160
Rated short circuit making current	kA	100	20	
Rated short circuit withstand current	kA	100	20	
Rated insulation voltage $U_i$	V	1000		
Rated impulse withstand voltage $U_{imp}$	kV	8		
Rated power dissipation	W	12		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1600		
Electrical durability		200		
IP degree of protection	IP 20			
Size of fuse links	00			

Accessories on page 122


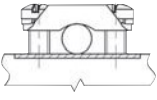

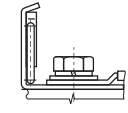

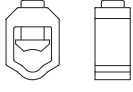







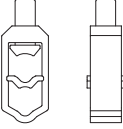



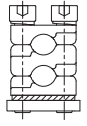




RBK 00 pro-V120

Table 86. VERSIONS

RBK 00 pro-V120		Article No.
For installation on mounting plate		
RBK 00 pro-V120	for connection of conductors with bare ends (top terminals- S-bridge clamps, bottom terminals – V-clamps)	63-823341-011
RBK 00 pro-V120 - M	for connection of conductors with bare ends (top terminals- M8 screws, bottom terminals – V-clamps)	63-823341-021
RBK 00 pro-P	for connection of conductors with bare ends (top terminals- S-bridge clamps, bottom terminals – Prism clamps)	63-823341-031
RBK 00 pro-P-M	for connection of conductors with bare ends (top terminals- M8 screws, bottom terminals – Prism clamps)	63-823341-041
RBK 00 pro 2 x V120	for connection of conductors with bare ends (top terminals- S-bridge clamps, bottom terminals – double V-clamps)	63-823341-051
RBK 00 pro 2 x V120-M	for connection of conductors with bare ends (top terminals- M8 screws, bottom terminals – double V-clamps)	63-823341-061

Table 87. RBK 00 pro-V120 TERMINAL CLAMPS

Clamp	Picture of a clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	
terminals on the consumer side	S-bridge clamp 2 x M5 x 16			Cu/Al conductor 4 ÷ 50 mm <sup>2</sup>	maximum bar width 20 mm	3 Nm*
	M8 x 16 screw			conductor with lug terminal up to 70 mm <sup>2</sup>		10 Nm*
cable terminals	V-clamp			 ** 25 ÷ 120 mm <sup>2</sup>		20 Nm*
				 ** 16 ÷ 95 mm <sup>2</sup>		
	HM 10-120			 10 - 70 mm <sup>2</sup>		15 Nm*
				 25 - 120 mm <sup>2</sup> 25 - 95 mm <sup>2</sup>		
	Double V-clamp			 ** 2 x (25 ÷ 120 mm <sup>2</sup> )		20 Nm*
 ** 2 x (16 ÷ 95 mm <sup>2</sup> )						
Prism clamp			 2 x (10 ÷ 70 mm <sup>2</sup> )	5,5 Nm*		
			 2 x (10 ÷ 50 mm <sup>2</sup> )			

For stranded conductors using cable ferrules is recommended

\*using of tension wrench is recommended

\*\*for stranded conductors using cable ferrules is recommended





### NEW FEATURES OF CABLE TERMINALS

- connection of one or two sector-shaped conductors with cross-section up to 120 mm<sup>2</sup>
- connection of two round conductors with bare ends and cross-section up to 70 mm<sup>2</sup>

### SPACE SAVING

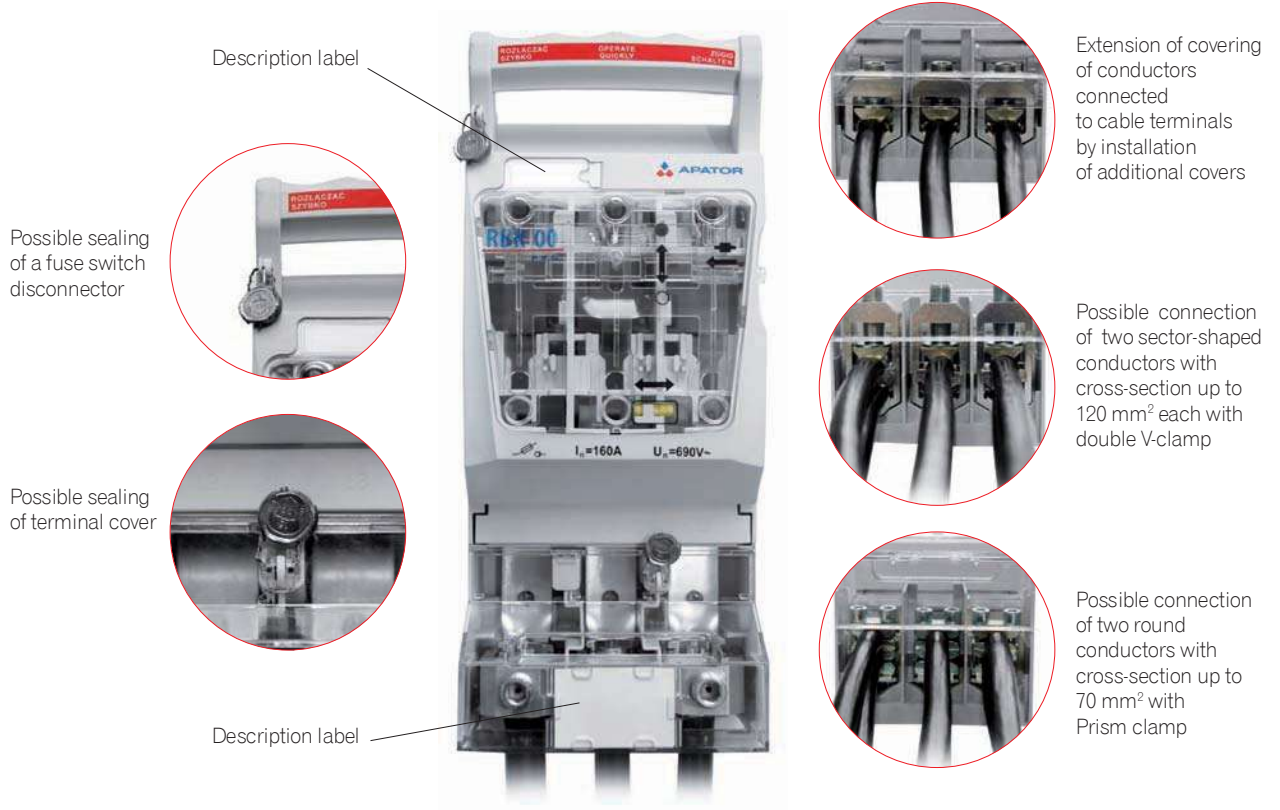
- possible reduction of external width of cable distribution cabinet to width of a fuse switch disconnecter

### EFFICIENT CURRENT CIRCUIT

- no screw or riveted connection between contact and cable terminal (uniform design of current circuit ensures lower power loss and operating temperature)

### SAFETY

- fuse cover and cable terminal cover sealing
- extension of covering of conductors connected to cable terminals by installation of additional covers



Description label

Possible sealing of a fuse switch disconnector

Possible sealing of terminal cover

Description label

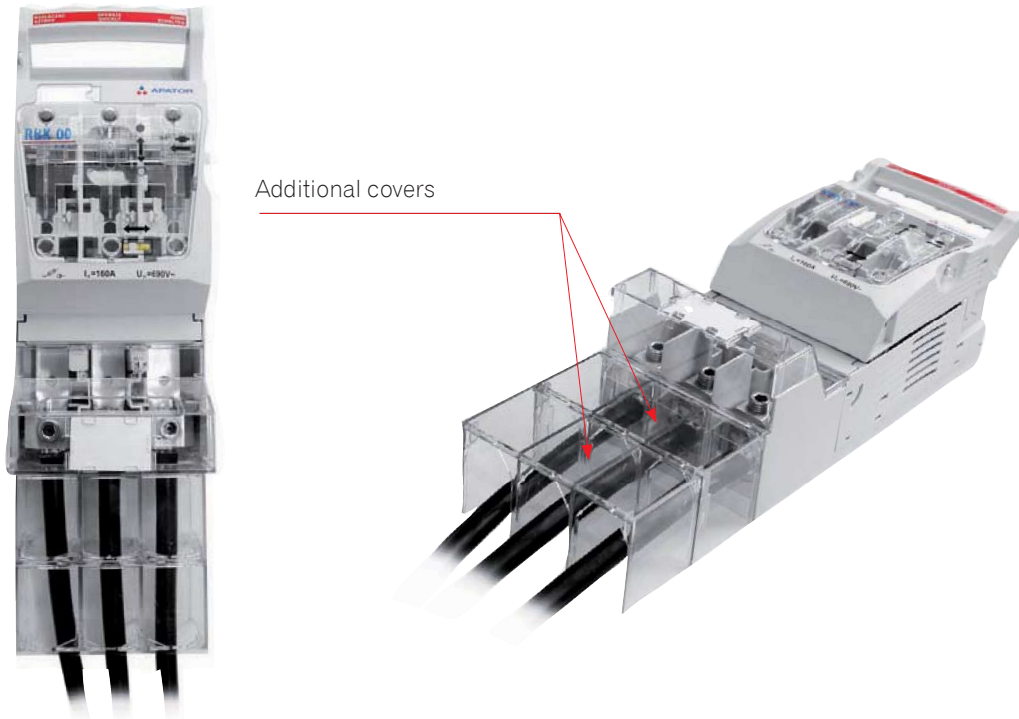
Extension of covering of conductors connected to cable terminals by installation of additional covers

Possible connection of two sector-shaped conductors with cross-section up to 120 mm<sup>2</sup> each with double V-clamp

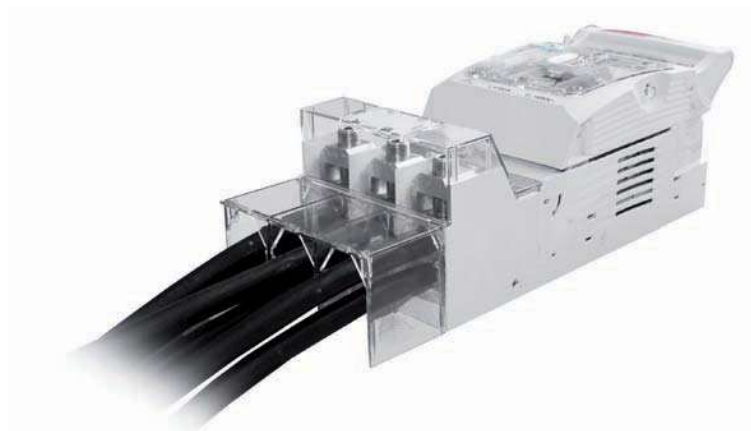
Possible connection of two round conductors with cross-section up to 70 mm<sup>2</sup> with Prism clamp

## EXTENDED COVERING OF CONDUCTORS CONNECTED TO CABLE TERMINAL

For extension of covering of conductors connected to cable terminals, for example: to fully cover cables in cable distribution cabinet, any required number of additional covers could be installed (article number of additional extending cover: 51-930849-011) . Cover length - 50 mm.



RBK 00 pro-V120 with V-clamp for connection of sector-shaped conductors with cross-section up to 120 mm<sup>2</sup>



RBK 00 pro-V120 with double V-clamp for connection of two sector-shaped conductors with cross-section up to 120 mm<sup>2</sup> each

## RBK 1 pro (250 A, 690 V)

Table 88. TECHNICAL DATA

Parameters		RBK 1 pro		RBK 1 pro -S		
Rated thermal current $I_{th}=I_n$	A	250		250		
Rated voltage $U_n$	V	690		690		
Utilization category	-	AC-23B	DC-22B	AC-23B	AC-22B	DC-22B*
Rated switching voltage $U_e$	V	690	250	400	690	250*
Rated switching current $I_e$	A	250	250	250		
Rated short circuit making current	690 V	80	25	80		25*
	400 V	100		100		
Rated short circuit withstand current	690 V	80	25	80		25*
	400 V	100		100		
Rated insulation voltage $U_i$	V	1000		1000		
Rated impulse withstand voltage $U_{imp}$	kV	8		8		
Rated power dissipation	W	32		32		
Rated frequency	Hz	50-60	-	50-60	-	
Mechanical durability	Number of cycles	1600		1600		
Electrical durability		200		200		
IP degree of protection	-	30		30		
Size of fuse links	-	1		1		
Weight	kg	~2		~2,5		

Accessories on page 123

\* for 60 mm busbar system






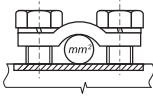

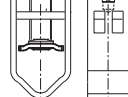




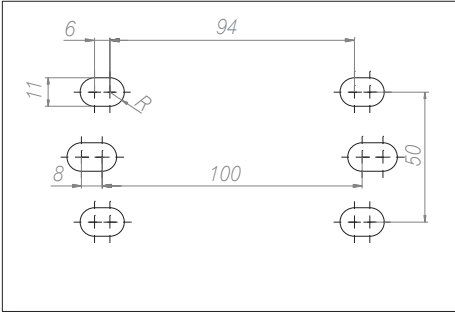
RBK 1 pro  
for installation  
on mounting plate

Table 89. VERSIONS

RBK 1 pro/250 A			
For installation on mounting plate	Cable terminals	Version	Article No..
For connection of round conductors	S-bridge clamps	RBK 1 pro	63-811748-011
For connection of conductors with lug terminals	Screws	RBK 1 pro-M	63-811748-021
For connection of sector-shaped conductors	V-clamps	RBK 1 pro-V	63-811748-031
For connection of round conductors, top terminals - V-terminals, bottom terminals - S-bridge terminals	V- clamps / S-bridge clamps	RBK 1 pro VG	63-811784-011
For connection of round conductors, top terminals - V-terminals, bottom terminals - screw terminals	V- clamps /screws	RBK 1 pro VG-M	63-811784-021
For connection of round conductors, top terminals - S-bridge terminals, bottom terminals - V-terminals	S-bridge clamps / V- clamps	RBK 1 pro VD	63-811784-031
For connection of round conductors, top terminals - screw terminals, bottom terminals - V-terminals	screw terminals / V- clamps	RBK 1 pro VD-M	63-811784-041
RBK 1 pro-S			
For installation on to busbar system	Cable terminals	Version	Article No..
60 mm busbar system			
Top cable terminals, for connection of round conductors	S-bridge clamps	RBK 1 pro-SG 60	63-811750-011
Bottom cable terminals, for connection of round conductors	S-bridge clamps	RBK 1 pro-SD 60	63-811750-021
Bottom cable terminals, for connection of sector-shaped conductors	V- clamps	RBK 1 pro-SD-V 100	63-811750-121
Bottom cable terminals, for connection of conductors withlug terminals	Screws	RBK 1 pro-SD-M 60	63-811750-061
Top cable terminals, for connection of sector-shaped conductors	V- clamps	RBK 1 pro-SG-V 60	63-811750-091
Bottom cable terminals, for connection of sector-shaped conductors	V- clamps	RBK 1 pro-SD-V 60	63-811750-101

RBK 1 pro-S			
For installation on to busbar system	Cable terminals	Version	Article No.
<b>100 mm busbar system</b>			
Top cable terminals, for connection of round conductors	S-bridge clamps	RBK 1 pro-SG 100	63-811750-031
Bottom cable terminals, for connection of round conductors	S-bridge clamps	RBK 1 pro-SD 100	63-811750-041
Top cable terminals, for connection of conductors with lug terminals	Screws	RBK 1 pro-SG-M 100	63-811750-071
Bottom cable terminals, for connection of conductors with lug terminals	Screws	RBK 1 pro-SD-M 100	63-811750-081
Top cable terminals, for connection of sector-shaped conductors	V-clamps	RBK 1 pro-SG-V 100	63-811750-111
Bottom cable terminals, for connection of sector-shaped conductors	V-clamps	RBK 1 pro-SD-V 100	63-811750-121

Table 90. RBK 1 pro TERMINAL CLAMPS

Description	RBK 1 pro	RBK 1 pro-M	RBK 1 pro-V
Clamp	S-bridge clamp 2xM8x30	M10x25 screw	V-clamp HS 35-300-C
Picture of a clamp			
Drawing of a clamp			
Cross-section of conductors	Cu/Al conductor 35 ÷ 120 mm <sup>2</sup>	conductor with lug terminal up to 120 mm <sup>2</sup>	V-clamp for direct fixing of conductor with bare end with cross-section of: 35 - 185 mm <sup>2</sup>  35 - 240 mm <sup>2</sup>  35 - 240mm <sup>2</sup>  35 - 300 mm <sup>2</sup> 
Cu bar	maximum bar width 35 mm		
Tightening torque	10 Nm*	20 Nm*	40 Nm*
Dimensions and spacing of holes for installation of RBK 1 pro on mounting plate			

For stranded conductors using cable ferrules is recommended

\*using of tension wrench is recommended

\*\*for stranded conductors using cable ferrules is recommended



RBK 1 pro  
for installation on mounting plate



RBK 1 pro-SG  
RBK 1 pro-SD  
for installation on to busbar system



RBK 1 pro  
for installation on mounting plate,  
with additional terminal shrouds



RBK 1 pro VD-M  
for installation on mounting plate,  
picture of fuse switch disconnect  
without fuse links cover and terminal shrouds,  
top cable terminal - M screws,  
bottom cable terminal - V-clamps,  
(RBK 1 pro VG-M - bottom cable terminal - M screws,  
top cable terminal - V-clamps)

**RBK 2 pro (400 A, 690 V)**

Table 91. TECHNICAL DATA

Parameters		RBK 2 pro			
Rated thermal current $I_{th}$	A	400			
Napięcie znamionowe $U_n$	V	690			
Utilization category	-	AC-23B	DC-21B	DC-22B	
Rated switching voltage $U_e$	V	690	440	220	
Rated switching current $I_e$	A	400	400	400	
Rated short circuit making current	690 V	kA	80	15	20
	400 V		100		
Rated short circuit withstand current	690 V	kA	80	15	20
	400 V		100		
Rated insulation voltage $U_i$	V	1000			
Rated impulse withstand voltage $U_{imp}$	kV	12			
Rated power dissipation	W	45			
Rated frequency	Hz	50-60	-		
Mechanical durability	Number of cycles	100			
Electrical durability		200			
IP degree of protection		IP20			
Size of fuse links		2			

Accessories on page 123

RBK 2-V pro  
for installation on mounting plate

Table 92. VERSIONS

RBK 2 pro/400 A		Cable terminal	Article No.
<b>For installation on mounting plate</b>			
RBK 2 pro	for connection of round conductors	S-bridge clamps	63-811685-011
RBK 2 pro-V	for connection of sector-shaped conductors	V-clamps	63-811685-071
RBK 2 pro-2V	for connection of sector-shaped conductors	double V- clamps	63-811685-081
RBK 2 pro-M	or connection of conductors with lug terminals	M10 screws	63-811685-061
RBK 2 pro-VG	for connection of sector-shaped / round conductors top terminals - V-clamps, bottom terminals - S-bridge clamps	V-clamps / S-bridge clamps	63-811685-201
RBK 2 pro-VG-M	for connection of sector-shaped conductors / conductors with lug terminals top terminals - V-clamps, bottom terminals - screw terminals	V-clamps / screws	63-811685-202
RBK 2 pro-VD	for connection of round / sector-shaped conductors top terminals - S-bridge clamps, bottom terminals - V-clamps	S-bridge clamps / V-clamps	63-811685-203
RBK 2 pro-VD-M	for connection of conductors with lug terminals / sector-shaped conductors top terminals - screw terminals , bottom terminals - V-clamps	screws / V-clamps	63-811685-204
<b>For installation on to 60 mm busbar system</b>			
RBK 2 pro-M-SD 60	Bottom cable terminals, for connection of conductors with lug terminals	M10 screws	63-811686-061
RBK 2 pro-M-SG 60	Top cable terminals, for connection of conductors with lug terminals	M10 screws	63-811686-051
RBK 2 pro-V-SD 60	Bottom cable terminals, for connection of sector-shaped conductors	V-clamps	63-811686-101
RBK 2 pro-V-SG 60	Top cable terminals, for connection of sector-shaped conductors	V-clamps	63-811686-091
RBK 2 pro-2V-SD 60	Bottom cable terminals, for connection of sector-shaped conductors	double V- clamps	63-811686-141
RBK 2 pro-2V-SG 60	Top cable terminals, for connection of sector-shaped conductors	double V- clamps	63-811686-131
<b>For installation on to 100 mm busbar system</b>			
RBK 2 pro-M-SD 100	Bottom cable terminals, for connection of conductors withlug terminals	M10 screws	63-811686-081
RBK 2 pro-M-SG 100	Top cable terminals, for connection of conductors with lug terminals	M10 screws	63-811686-071
RBK 2 pro-V-SD 100	Bottom cable terminals, for connection of sector-shaped conductors	V-clamps	63-811686-121
RBK 2 pro-V-SG 100	Top cable terminals, for connection of sector-shaped conductors	V-clamps	63-811686-111
RBK 2 pro-2V-SD 100	Bottom cable terminals, for connection of sector-shaped conductors	double V-clamps	63-811686-161
RBK 2 pro-2V-SG 100	Top cable terminals, for connection of sector-shaped conductors	double V-clamps	63-811686-151

Table 93. RBK 2 pro TERMINAL CLAMPS

Description	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 2 on mounting plate
RBK 2 pro	S-bridge clamp 2 x M8 x 30		Cu/Al conductor 50±185 mm <sup>2</sup>	maximum bar width 35 mm	10 Nm*	
	M10 x 30 screw		conductor with lug terminal up to 240 mm <sup>2</sup>		20 Nm*	
	V-clamp 35-300SW-B		V-clamp for direct fixing of conductor with bare end with cross-section: 35 - 185 mm <sup>2</sup> 35 - 240 mm <sup>2</sup> 35 - 240 mm <sup>2</sup> 35 - 300 mm <sup>2</sup>		30 Nm*	
	double V-clamp HS2/ 35-240-C		V-clamp for direct fixing of conductor with bare end with cross-section: 35 - 185 mm <sup>2</sup> 35 - 240 mm <sup>2</sup> 35 - 240 mm <sup>2</sup> 35 - 300 mm <sup>2</sup>		40 Nm*	

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended



RBK 2 pro-V  
for installation  
on mounting plate,  
cable terminals: V-clamps



RBK 2 pro-2V  
for installation  
on mounting plate,  
cable terminals: double V-clamps



RBK 2 pro-SG\*  
(top cable terminal: M10 screws)  
RBK 2 pro-SD\*  
(bottom cable terminal: M10 screws)  
for installation on to busbar systems



RBK 2 pro-2V-SG (top cable terminal: double V-clamp)  
RBK 2 pro-2V-SD (bottom cable terminal: double V-clamp)  
for installation on to busbar systems



RBK 2 pro-V-SG (top cable terminal: V-clamp)  
RBK 2 pro-V-SD (bottom cable terminal: V-clamp)  
for installation on to busbar systems

**RBK 3 pro (630 A, 690 V)**

Table 94. TECHNICAL DATA

Parametr	RBK 3 pro						
	for installation on mounting plate			for installation on busbar system			
Rated thermal current $I_{th}$	A	630					
Rated voltage $U_n$	V	690					
Utilization category	-	AC-23B	AC-22B	DC-21B	AC-23B	AC-22B	AC-21B
Rated switching voltage $U_e$	V	400	690	440	400	500	690
Rated switching current $I_e$	A	630	630	630	630	630	630
Rated short circuit making current	$U_e=690$ V	80					
	$U_e=500$ V	120					
Rated short circuit withstand current	$U_e=690$ V	80					
	$U_e=500$ V	120					
Rated insulation voltage $U_i$	V	1000					
Rated impulse withstand voltage $U_{imp}$	kV	12					
Rated frequency	Hz	50-60	-	50-60			
Mechanical durability	Number of cycles	1000					
Electrical durability		200					
IP degree of protection	IP 20						
Size of fuse links	3						

Accessories on page 123

RBK 3 pro  
main version  
for installation  
on mounting plate

RBK 3 pro

Table 95. VERSIONS

RBK 3 pro, RBK 3 pro-S for installation on 60 mm busbar system		Cable terminal	Article No.
RBK 3 pro	for connection of round conductors	S-bridge clamps	63-811761-011
RBK 3 pro-M	for connection of conductors with lug terminals	M12 screws	63-811761-021
RBK 3 pro-2xV	for connection of sector-shaped conductors	ingoings terminals two single V-clamps per phase	63-811761-031
RBK 3 pro-SD	bottom cable terminals, for connection of round conductors	S-bridge clamps	63-028802-001
RBK 3 pro-SG	top cable terminals, for connection of round conductors	S-bridge clamps	63-028802-002
RBK 3 pro-SD-M	bottom cable terminals, for connection of conductors with lug terminals	M12 screws	63-028802-003
RBK 3 pro-SG-M	top cable terminals, for connection of conductors with lug terminals	M12 screws	63-028802-004

Tabela 96. RBK 3 pro TERMINAL CLAMPS

Version	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 3 on mounting plate
RBK 3 pro	S-bridge clamp 2 x M8 x 35		Cu/Al conductor 50 ÷ 185 mm <sup>2</sup>	maximum bar width 35 mm	10 Nm*	
	M12 x 30 screw		conductor with lug terminal up to 240 mm <sup>2</sup>		20 Nm*	
	V-clamp 35-300SW-B		V-clamp for direct fixing of two conductors with bare ends with cross-section of: 35 - 185 mm <sup>2</sup> ● 35 - 240 mm <sup>2</sup> ● 35 - 240 mm <sup>2</sup> ● 35 - 300 mm <sup>2</sup> ●		30 Nm*	

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended



## RBK 4a (1250 A, 500 V; 1600 A, 400 V)

Table 97. TECHNICAL DATA

Parametr	RBK 4a		
Rated thermal current $I_{th}=I_n$	A	1250	1600
Utilization category	-	AC-22B	AC-21B
Rated switching voltage $U_e$	V	500	400
Rated switching current $I_e$	A	1250	1600
Rated short circuit withstand current	kA	50	
Rated insulation voltage $U_i$	V	800	
Rated impulse withstand voltage $U_{imp}$	kV	8	
Rated frequency	Hz	50-60	
Mechanical durability	c.p	600	
Electrical durability	c.t.	100	
IP degree of protection		IP 20	
Size of fuse links		4a	


 RBK 4a  
for installation on mounting plate

Table 98. VERSIONS

RBK 4a		Weight	Cable terminal	Article No..
RBK 4a/1250/1	ONE POLE SWITCHING - each phase independently, for connection of conductors with lug terminals	4,2 kg	screws	63-946868-001
RBK 4a/1250/3	THREE POLE SWITCHING - all phases simultaneously, for connection of conductors with lug terminals	13,0 kg	screws	63-946868-002
RBK 4a/1600/1	ONE POLE SWITCHING - each phase independently, for connection of conductors with lug terminals	5,0 kg	screws	63-946869-001
RBK 4a/1600/3	THREE POLE SWITCHING - all phases simultaneously, for connection of conductors with lug terminals	14,0 kg	screws	63-946869-002

Tabela 99. RBK 4a TERMINAL CLAMPS

Version	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 4a on mounting plate
RBK 4a 1250	M16 x 50 screw		conductor with lug terminal up to 800 mm <sup>2</sup>	2 x 80 x 10	56 Nm*	
RBK 4a 1600	2 x M12 x 60 screw		conductor with lug terminal up to 800 mm <sup>2</sup>			

\*using of tension wrench is recommended

## ELECTRONIC FUSE MONITORING MODULE - DESCRIPTION

- L1, L2, L3 diodes are flashing - all three phases are supplied, all fuse links are operational.  
Relay contacts: [21..22] - closed; [13..14] - opened
- L1, L2, L3 diodes are blinking - all three phases are supplied, fuse links operated  
Relay contacts: [21..22] - opened; [13..14] - closed
- L1, L2, L3 diodes are off - two or more phases are not supplied or fuse links are removed.  
Relay contacts: [21..22] - opened; [13..14] - closed

## PARAMETERS

- operating voltage AC - 400÷ 690 V, 40÷ 60 Hz;
- relay parameters 5 A , 250 V~

### CAUTION!

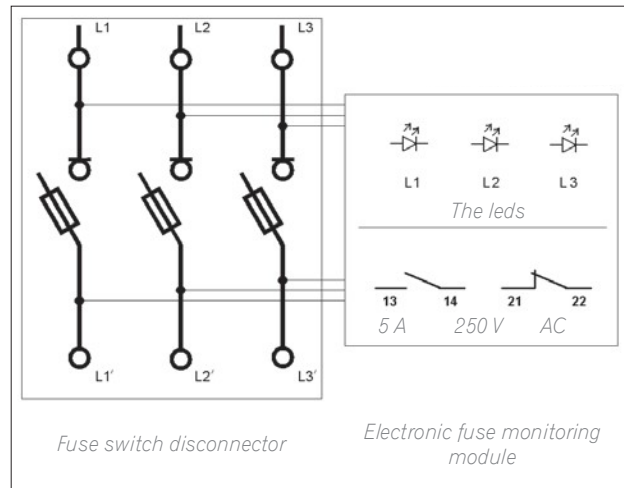
For use only with fuse-links with non-isolated gripping lugs!

## ELECTRONIC FUSE MONITORING MODULE VERSIONS ACCORDING TO POWER SUPPLY CONNECTION

RBK 00-XT - for RBK 00 installed on mounting plate, with power supply connected to top cable terminals  
 RBK 00-X - for RBK 00 installed on mounting plate, with power supply connected to bottom cable terminals  
 RBK 00S-X - for RBK 00 installed on to 60 mm busbar system



RBK 00-X  
with electronic fuse monitoring module



disconnector contact position during normal operation

Table 100. VERSIONS

Versions with electronic fuse monitoring module, cable terminals - S-bridge clamps		
RBK 00 pro-XT	For installation on mounting plate, power supply connected to top cable terminals	63-823304-011
RBK 00 pro-X	For installation on mounting plate, power supply connected to top bottom terminals	63-823304-021
RBK 00 pro-SG -X	For installation on to 60 mm busbar system, top cable terminals	63-823345-011
RBK 00 pro-SD-X	For installation on to 60 mm busbar system, bottom cable terminals	63-823345-021
RBK 1 pro-XT	For installation on mounting plate, power supply connected to top cable terminals	63-811785-011
RBK 1 pro-X	For installation on mounting plate, power supply connected to top bottom terminals	63-811785-021
RBK 1 pro-SG 60-X	For installation on to 60 mm busbar system, top cable terminals	63-811787-011
RBK 1 pro-SD 60-X	For installation on to 60 mm busbar system, bottom cable terminals	63-811787-021
RBK 1 pro-SG 100-X	For installation on to 100 mm busbar system, top cable terminals	63-811787-031
RBK 1 pro-SD 100-X	For installation on to 100 mm busbar system, bottom cable terminals	63-811787-041
RBK 2 pro-XT	For installation on mounting plate, power supply connected to top cable terminals	63-811786-011
RBK 2 pro-X	For installation on mounting plate, power supply connected to top bottom terminals	63-811786-021
RBK 2 pro-SG 60-X	For installation on to 60 mm busbar system, top cable terminals	63-811788-011
RBK 2 pro-SD 60-X	For installation on to 60 mm busbar system, bottom cable terminals	63-811788-021
RBK 2 pro-SG 100-X	For installation on to 100 mm busbar system, top cable terminals	63-811788-031
RBK 2 pro-SD 100-X	For installation on to 100 mm busbar system, bottom cable terminals	63-811788-041



SWITCHGEAR

# RBK

## Fuse switch disconnectors

intended for distribution of electricity and protection of electrical equipment against short-circuits and overloads, with industrial fuse links







## APPLICATIONS

RBK fuse switch disconnectors are designed for distribution of electricity and protection of electrical equipment against short-circuits and overloads with industrial fuse links. They are conforming to EN 60947-1, EN 60947-3, IEC 60947-1, IEC 60947-3 standards. They are intended for installation in low voltage distribution boards, cable and metering cabinets.

## CONSTRUCTION

- thermoplastic parts of RBK fuse switch disconnectors are made of fibre glass strengthened polyamide with halogen free flame retardant added and flammability class V2
- RBK fuse switch disconnectors consist of following parts:
  - three pole main base with spring-loaded contacts designed for connection of circular or sector-shaped conductors, conductors with lug terminals or bars
  - removable cover with fuse links
- arc chutes with steel deionization plates over top contacts
- silver plated contacts providing low power loss

## MOUNTING

- on mounting plate
  - RBK 000, RBK 00, RBK 1
- on to busbar systems
  - 60 mm busbar system
  - RBK 000-S – installation on to busbar system with hooked clamps

## OPERATING CONDITIONS

- to be installed in the room free of any dust, aggressive or explosive gases,
- altitude up to 2000 meters above sea level,
- outdoor – in cabinets with protection degree > IP 34,
- ambient temperature from -25 °C to +55 °C,
- relative humidity of the air should not be higher than 50% at temperature of +40°.

## FUNCTIONALITY:

- making and breaking operations should be done with determined movement
- possible connection of circular or sector-shaped conductors with bare ends (V-terminals, 2V-terminals) or conductors with lug terminals (screw terminals)
- voltage test is performed through test holes in fuse link cover

## CONFORMITY WITH STANDARDS

EN 60947-1 EN 60947-3 HD 60269-2

Table 101. RBK FUSE SWITCH DISCONNECTORS TECHNICAL DATA

Parameters			RBK 00	RBK 1
Rated thermal current $I_{th}^{1)}$	A		160	250
Rated voltage $U_n$	V		690	690
Utilization category	-		AC-22B	AC-22B
Rated switching current $I_e$	A		160	250
Rated switching voltage $U_e$	V		690	690
Rated short circuit making current	690 V	kA	80	80
	400 V		100	100
Rated short circuit withstand current	690 V	kA	80	80
	400 V		100	100
Rated insulation voltage $U_i$	V		1000	1000
Rated power dissipation	W		12	32
Rated impulse withstand voltage $U_{imp}$	kV		8	8
Rated frequency	Hz		50-60	50-60
Mechanical durability	Number of cycles		1600	1600
Electrical durability			200	200
IP degree of protection	IP		20	30 <sup>3)</sup>
Weight	kg		~0,65	~2
size of fuse links PN/IEC	-		00	1

<sup>1)</sup>  $I_{th}$  - thermal current of fuse switch disconnecter without external enclosure, installed outdoors (In case of the installation of fuse switch disconnectors in enclosures then load factor should be considered)

## RBK 00 (160 A, 690 V)

Table 102. TECHNICAL DATA

Parameters		RBK 00	
Rated thermal current $I_{th}=I_n$	A		160
Rated voltage $U_n$	V		690
Utilization category	-		AC-22B
Rated switching voltage $U_e$	V		690
Rated switching current $I_e$	A		160
Rated short circuit making current	690 V	kA	80
	400 V		100
Rated short circuit withstand current	690 V	kA	80
	400 V		100
Rated insulation voltage $U_i$	V		1000
Rated impulse withstand voltage $U_{imp}$	kV		8
Rated power dissipation	W		12
Rated frequency	Hz		50-60
Mechanical durability	Number of cycles		1600
Electrical durability			200
IP degree of protection			IP 20
Size of fuse links			00

Accessories on page 122



RBK 00  
for installation on mounting plate

Table 103. VERSIONS

RBK 00/160 A		Cable terminal	Article No.
RBK 00	for connection of round conductors	S-bridge clamps	63-823333-011
RBK 00-M	for connection of conductors with lug terminals	M8 screws	63-823333-021
RBK 00-V	for connection of sectorshaped conductors	V-shape clamps	63-823333-031
RBK 00-W	for connection of round conductors, lengthened terminal shrouds	S-bridge clamps	63-823333-041
RBK 00-M-W	for connection of conductors with lug terminals, lengthened terminal shrouds	M8 screws	63-823333-051
RBK 00-V-W	for connection of sectorshaped conductors, lengthened terminal shrouds	V-shape clamps	63-823333-061

Table 104. RBK 00 TERMINAL CLAMPS

Description	Clamp	Drawing of clamp	Cross-section of conductors	Cu bar	Tightening torque	Dimensions and spacing of holes for installation of RBK 00 on mounting plate
RBK 00	S-bridge clamp 2 x M5 x 16		Cu/Al conductor 4 ÷ 50 mm <sup>2</sup>	maximum bar width 20 mm	3 Nm*	
	M8 x 16 screw		conductor with lug terminal up to 70 mm <sup>2</sup>		10 Nm*	
	V-shape clamp 2 x M5 x 20		2) ● 4 mm <sup>2</sup> - 70 mm <sup>2</sup> ● 4 mm <sup>2</sup> - 95 mm <sup>2</sup> 1) ● 1,5 mm <sup>2</sup> - 2,5 mm <sup>2</sup>		3 Nm*	

For stranded conductors using cable ferrules is recommended

\*using of tension wrench is recommended

**RBK 1 (250 A, 690 V)**

Table 105. TECHNICAL DATA

Parameters		RBK 1	
Rated thermal current $I_{th}=I_n$	A	250	
Rated voltage $U_n$	V	690	
Utilization category	-	AC-22B	
Rated switching voltage $U_e$	V	690	
Rated switching current $I_e$	A	250	
Rated short circuit making current	690 V	kA	80
	400 V		100
Rated short circuit withstand current	690 V	kA	80
	400 V		100
Rated insulation voltage $U_i$	V	1000	
Rated impulse withstand voltage $U_{imp}$	kV	8	
Rated power dissipation	W	32	
Rated frequency	Hz	50-60	
Mechanical durability	Number of cycles	1600	
Electrical durability		200	
IP degree of protection	-	30	
Size of fuse links	-	1	
Weight	kg	~2	

[Accessories on page 123](#)




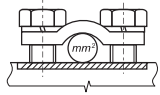
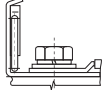
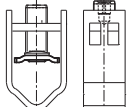




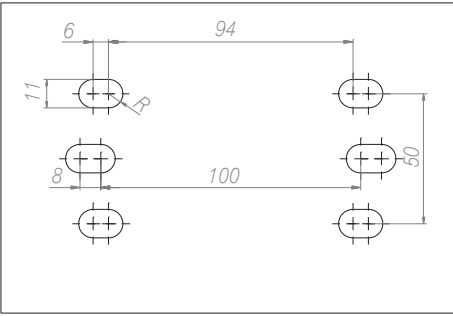
RBK 1  
for installation on mounting plate

Table 106. VERSIONS

RBK 1/250 A			
For installation on mounting plate	Cable terminals	Version	Article No.
For connection of round conductors	S-bridge clamps	RBK 1	63-811779-011
For connection of conductors with lug terminals	Screws	RBK 1-M	63-811779-021
For connection of sector-shaped conductors	V-clamps	RBK 1-V	63-811779-031
For connection of round conductors, top terminals -V-terminals, bottom terminals - S-bridge terminals	V-clamps / S-bridge clamps	RBK 1 VG	63-811784-051
For connection of round conductors, top terminals -V-terminals, bottom terminals - screw terminals	V-clamps / screws	RBK 1 VG-M	63-811784-061
For connection of round conductors, top terminals -S-bridge terminals, bottom terminals - V-terminals	S-bridge clamps / V-clamps	RBK 1 VD	63-811784-071
For connection of round conductors, top terminals-screw terminals, bottom terminals - V-terminals	screw terminals / V-clamps	RBK 1 VD-M	63-811784-081



Table 107. RBK 1 TERMINAL CLAMPS

Description	RBK 1	RBK 1-M	RBK 1-V
Clamp	S-bridge clamp 2 x M8 x 30	M10x25 screw	V-clamp HS 35-300-C
Picture of a clamp			
Drawing of a clamp			
Cross-section of conductors	Cu/Al conductor 35 ÷ 120 mm <sup>2</sup>	conductor with lug terminal up to 120 mm <sup>2</sup>	V-clamp for direct fixing of conductor with bare end with cross-section of: 35 - 185 mm <sup>2</sup>  35 - 240 mm <sup>2</sup>  35 - 240 mm <sup>2</sup>  35 - 300 mm <sup>2</sup> 
Cu bar	maximum bar width 35 mm		
Tightening torque	10 Nm*	20 Nm*	30 Nm*
Dimensions and spacing of holes for installation of RBK 1 pro on mounting plate			

For stranded conductors using cable ferrules is recommended  
\*using of tension wrench is recommended



RBK 1  
for installation on mounting  
plate

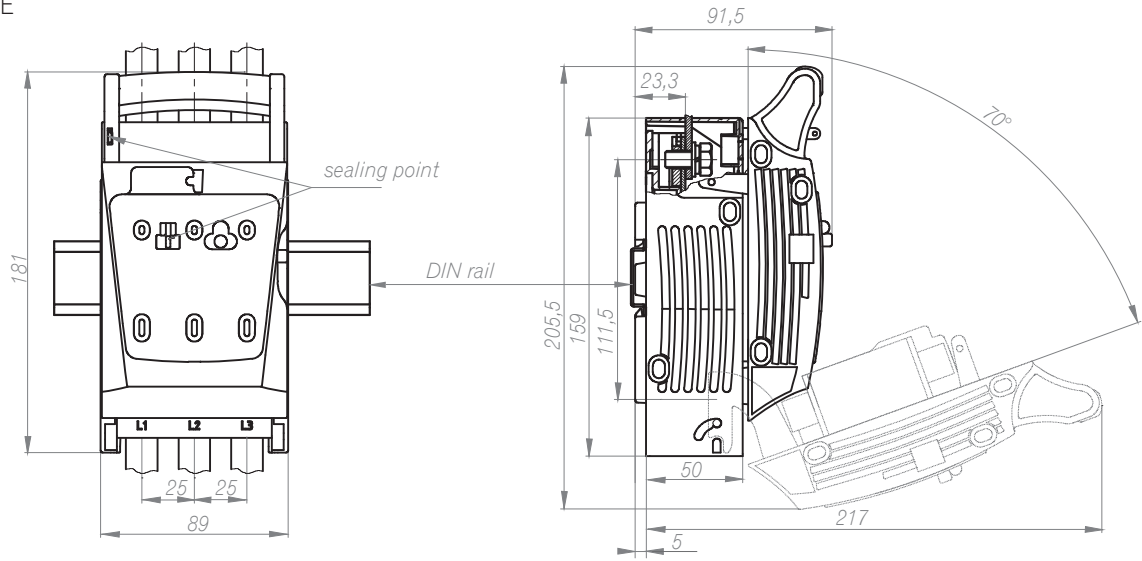


RBK 1  
for installation on mounting plate,  
with additional terminal shrouds

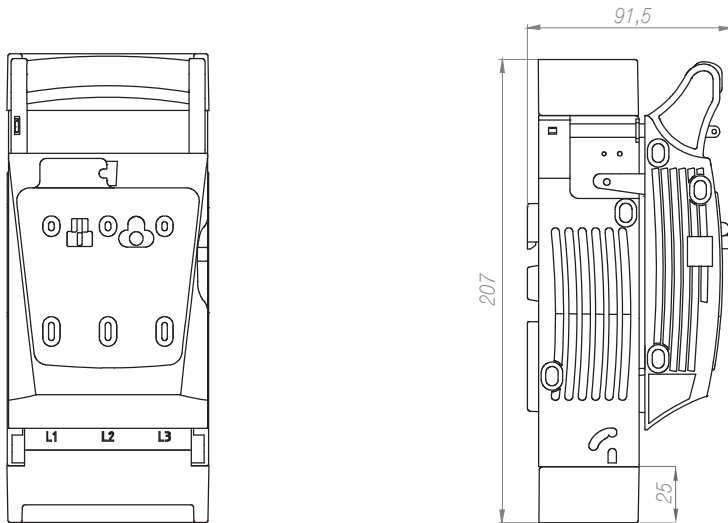


RBK 1 VD-M  
for installation on mounting plate,  
picture of fuse switch disconnecter  
without fuse links cover and terminal  
shrouds, top cable terminal - M screws,  
bottom cable terminal - V-clamps,  
(RBK 1 VG-M - bottom cable terminal -  
M screws, top cable terminal - V-clamps)

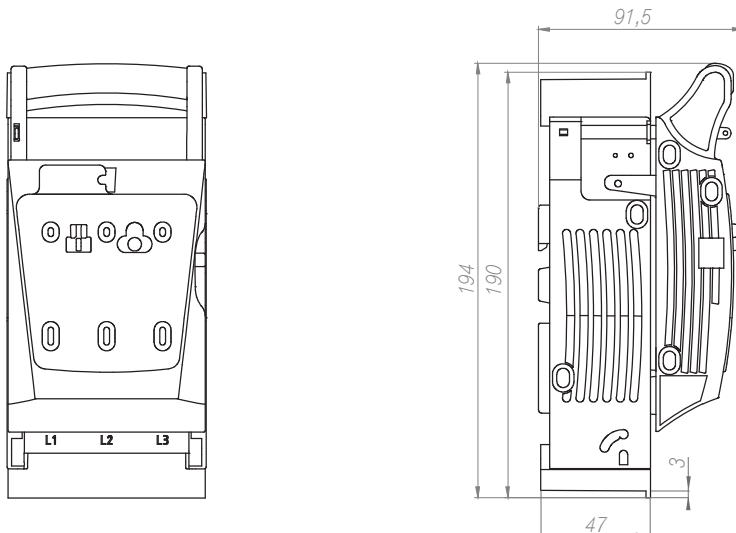
RBK 000  
RBK 000-E



RBK 000-O

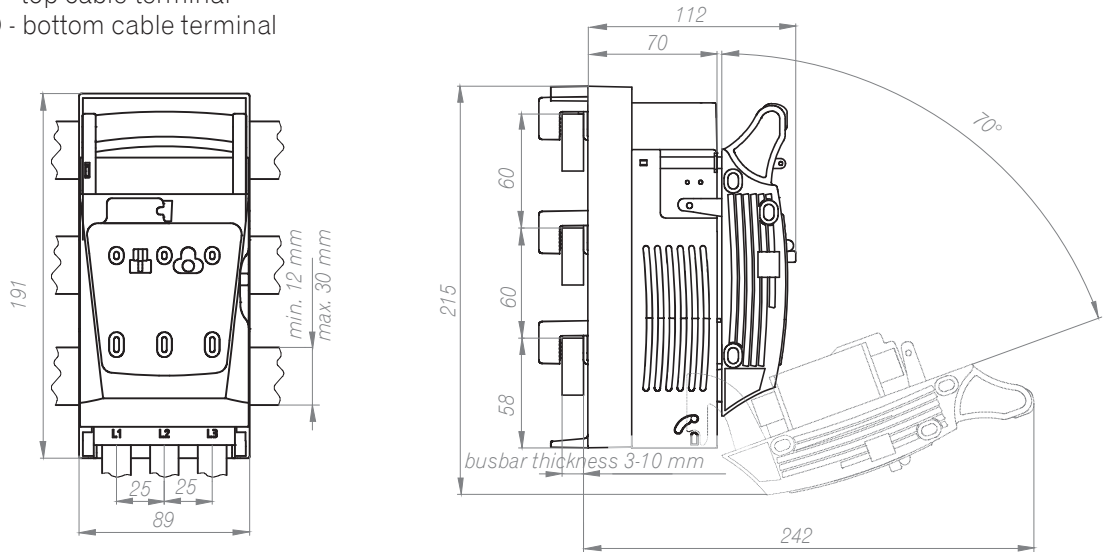


RBK 000-W

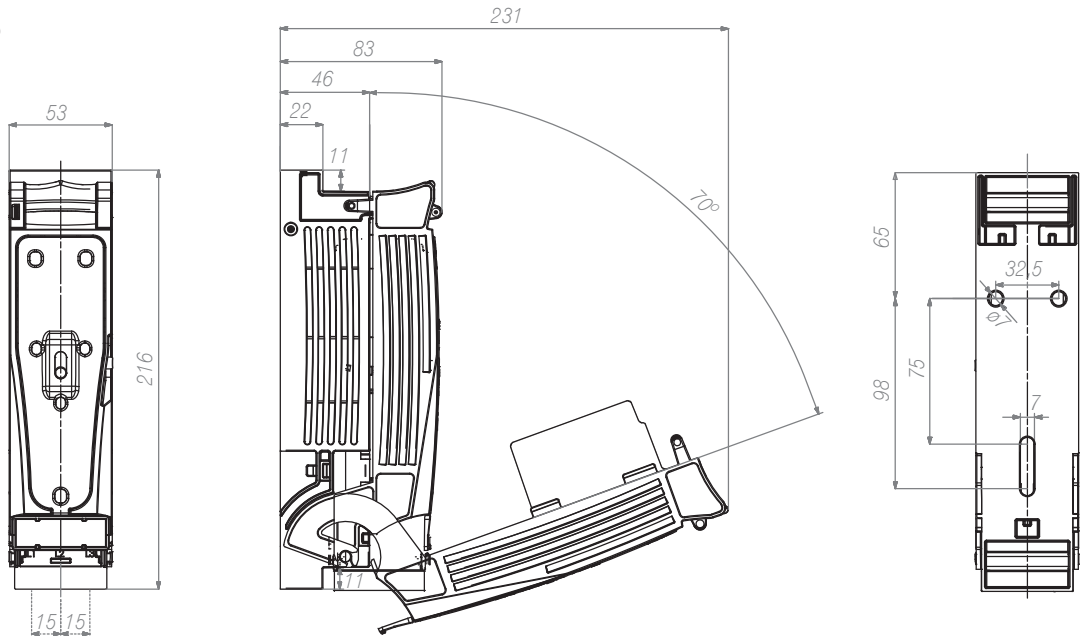




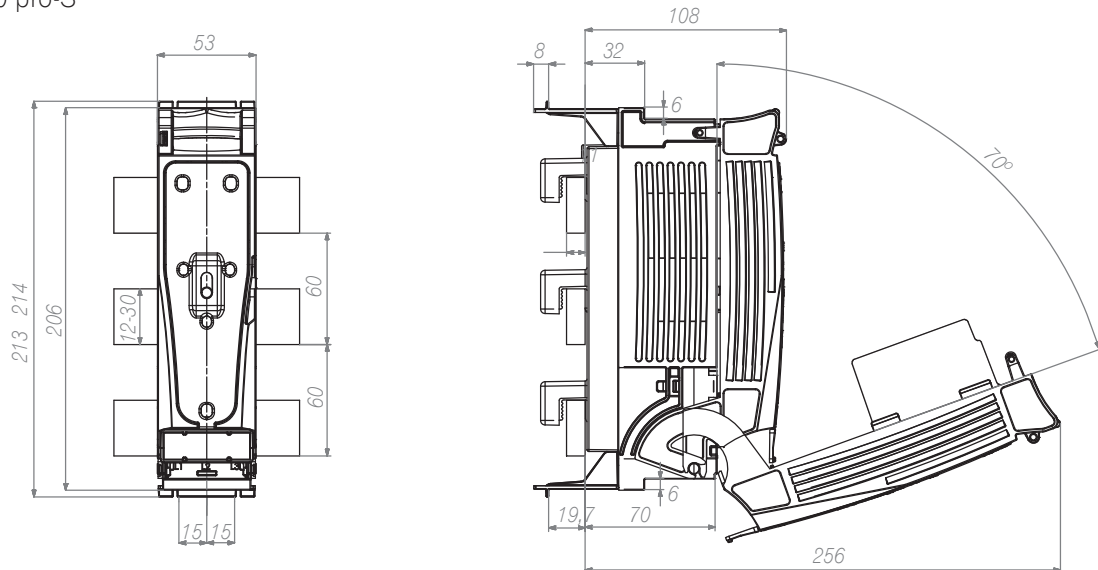
RBK 000-SG - top cable terminal  
RBK 000-SD - bottom cable terminal



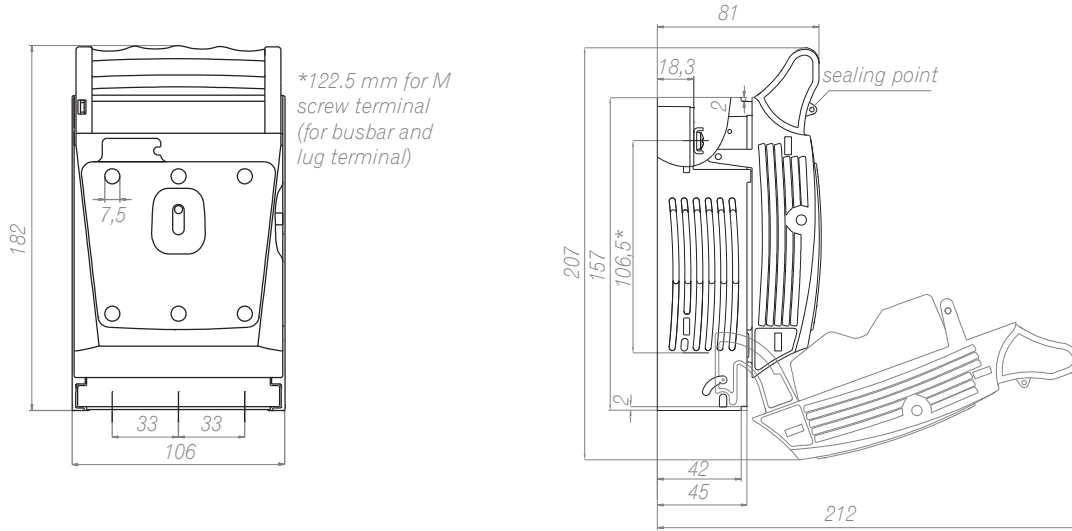
RBP 000 pro



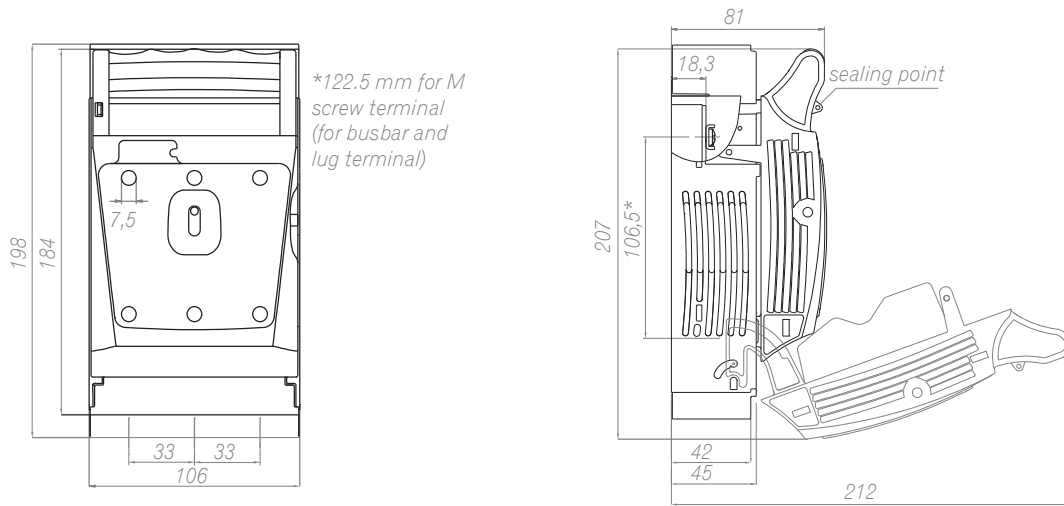
RBP 000 pro-S



RBK 00 / RBK 00 pro

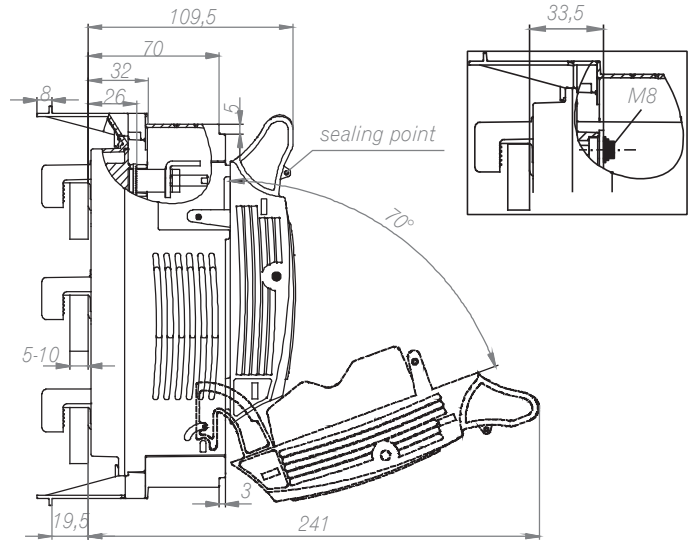
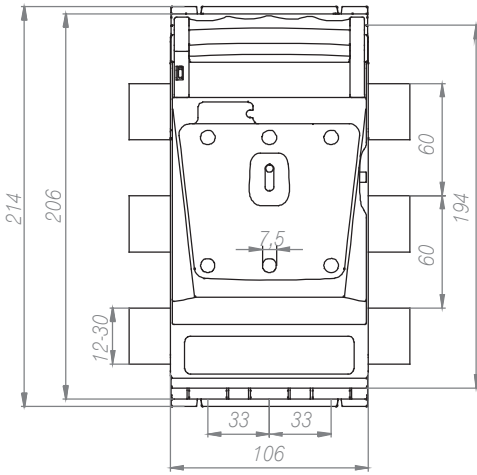


RBK 00-W / RBK 00 pro-W,

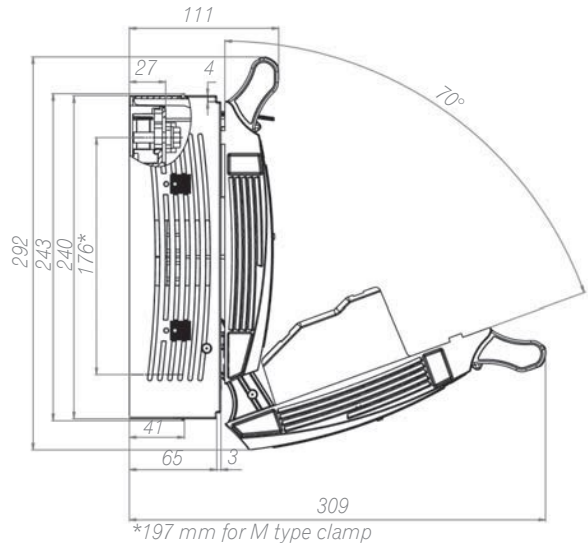
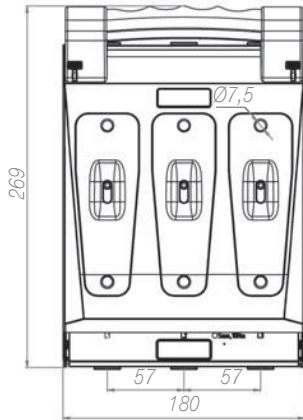




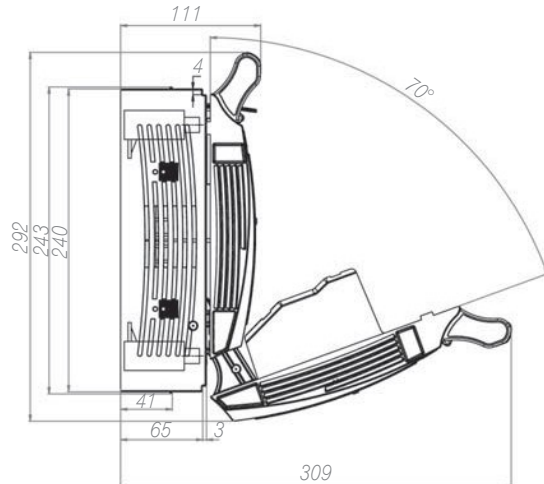
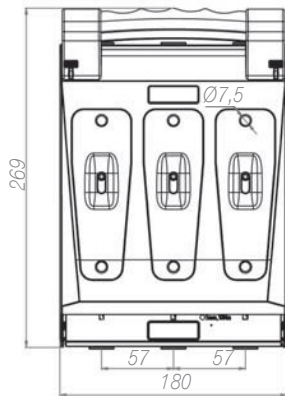
RBK 00 pro-S



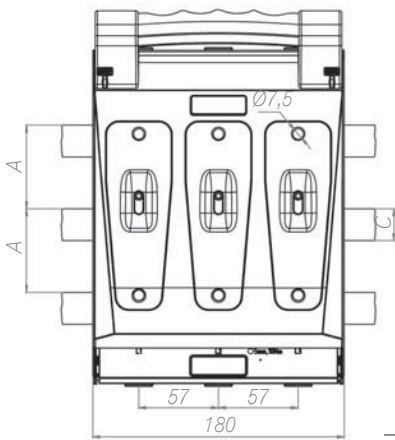
RBK 1, RBK 1 pro



RBK 1 pro-V

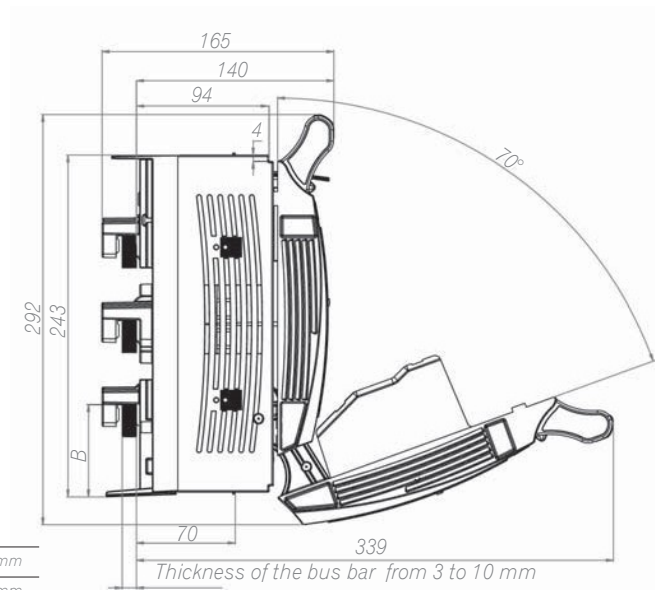


RBK 1 pro-SD, RBK 1 pro-SG

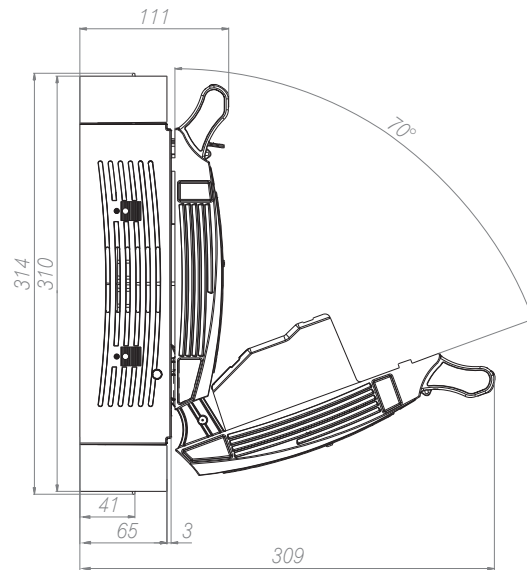
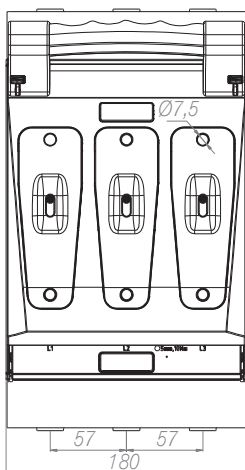


A	B	C
60 mm	66 mm	max 30 mm
100 mm	27-66 mm	max 60 mm

M,S,V types of clamps

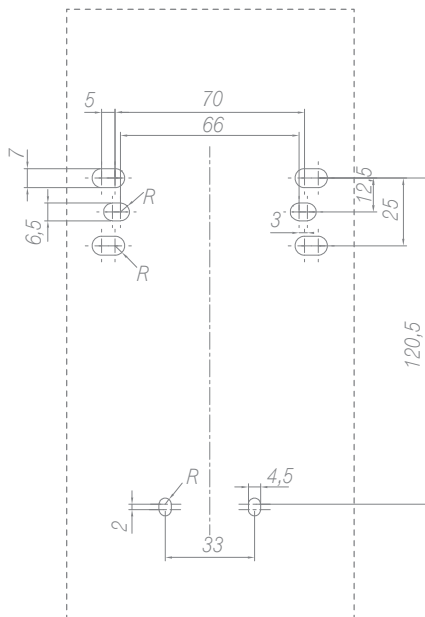
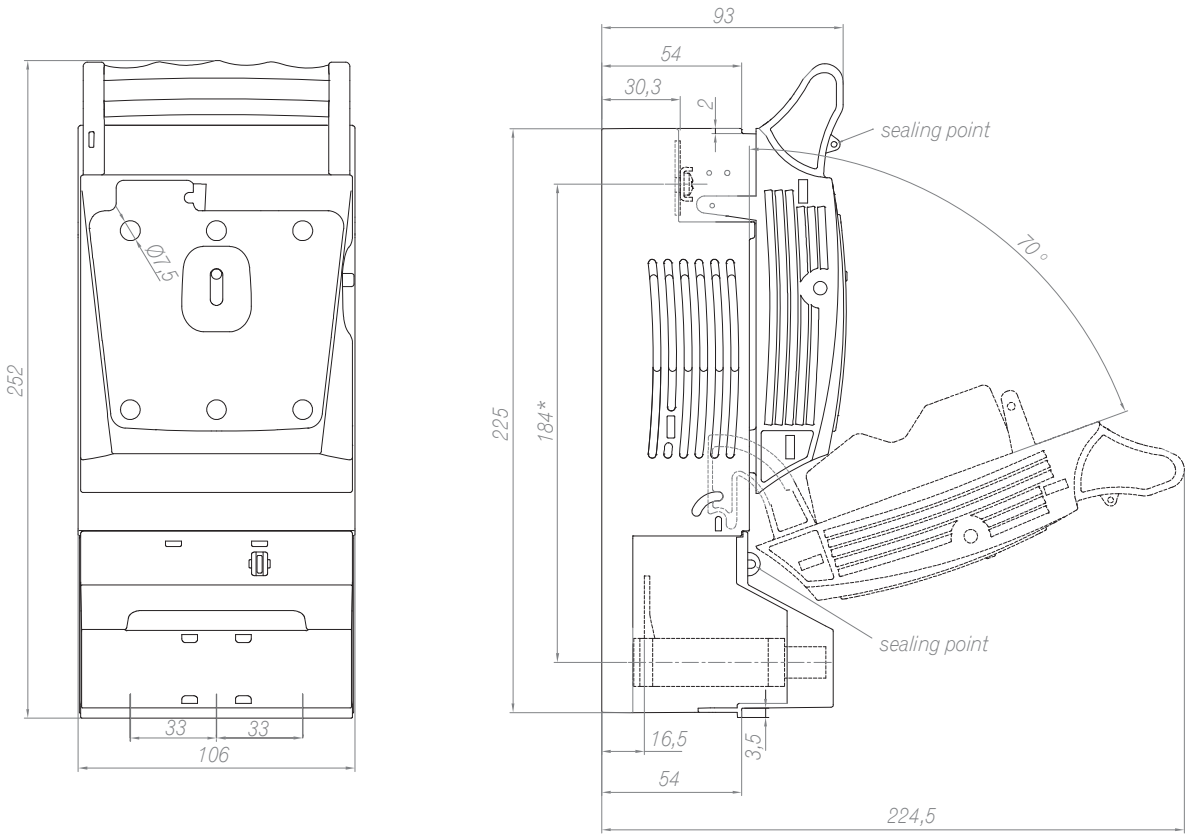


RBK 1 pro-O



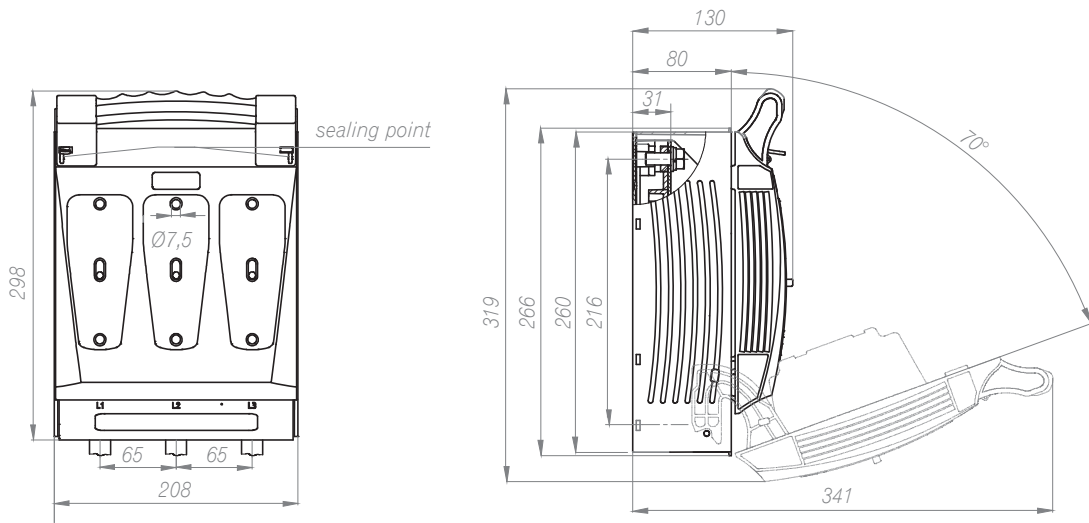


RBK 00 pro-V 120

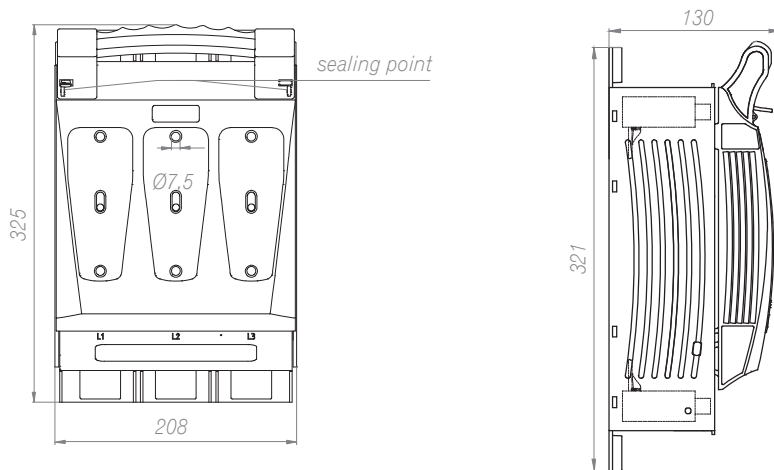


spacing of holes for installation of RBK 00 pro-V120 on mounting plate

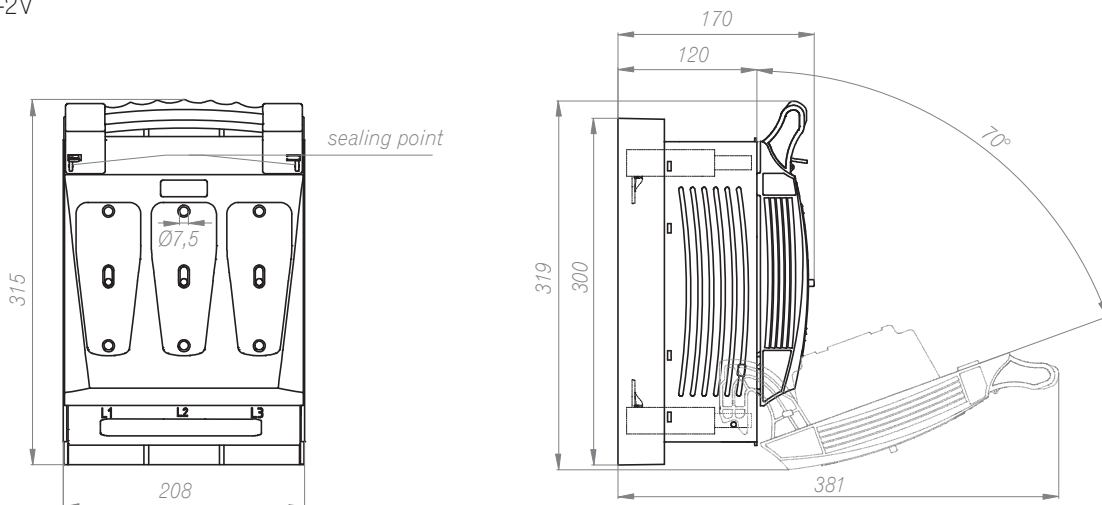
RBK 2 pro



RBK 2 pro-V



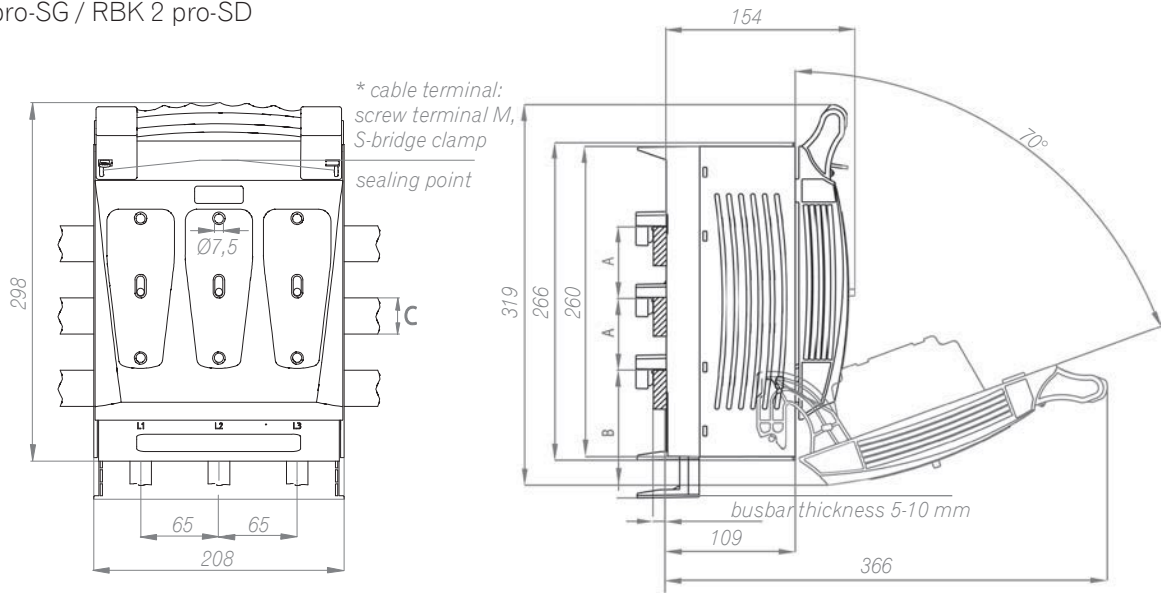
RBK 2 pro-2V



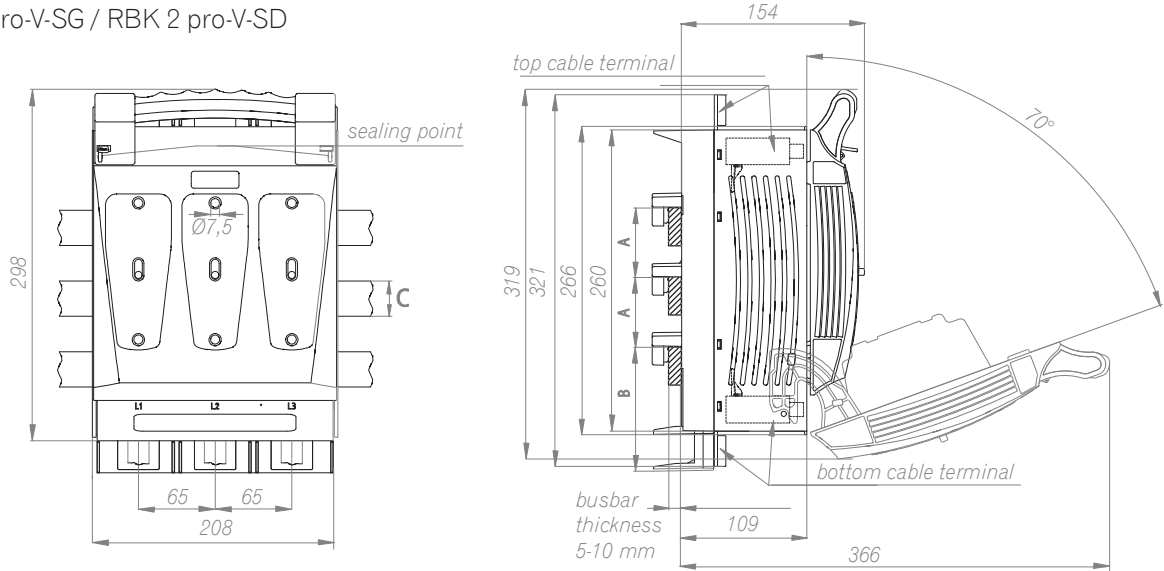




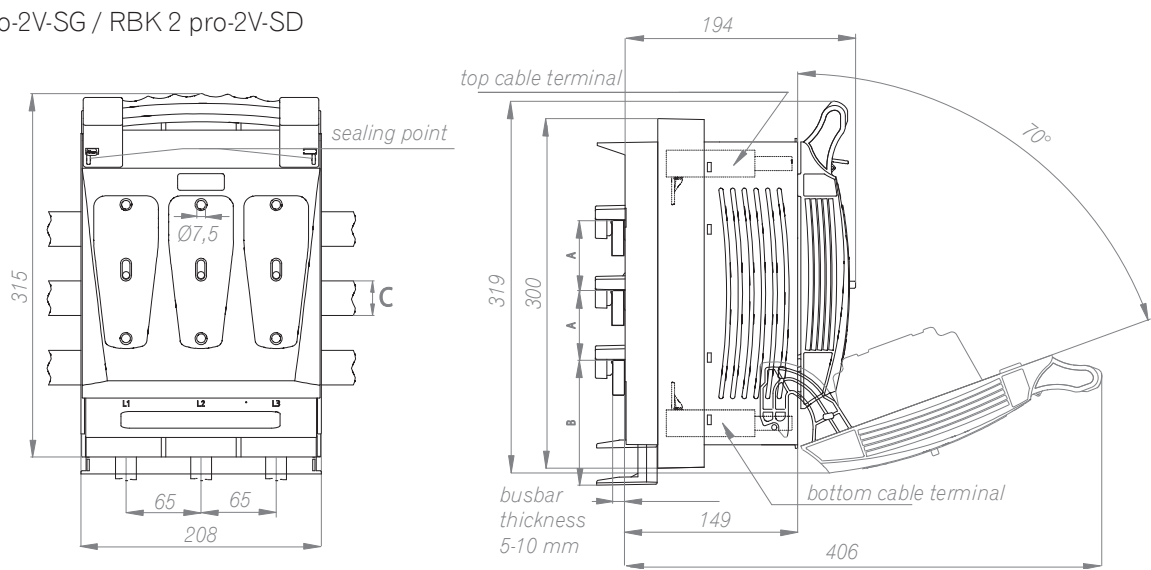
RBK 2 pro-SG / RBK 2 pro-SD



RBK 2 pro-V-SG / RBK 2 pro-V-SD

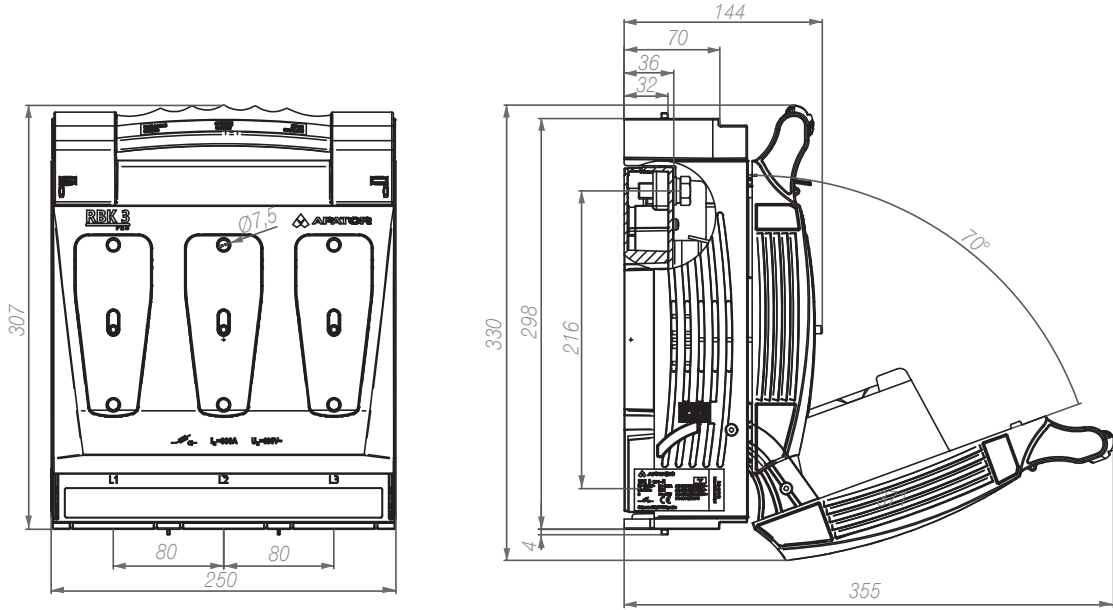


RBK 2 pro-2V-SG / RBK 2 pro-2V-SD

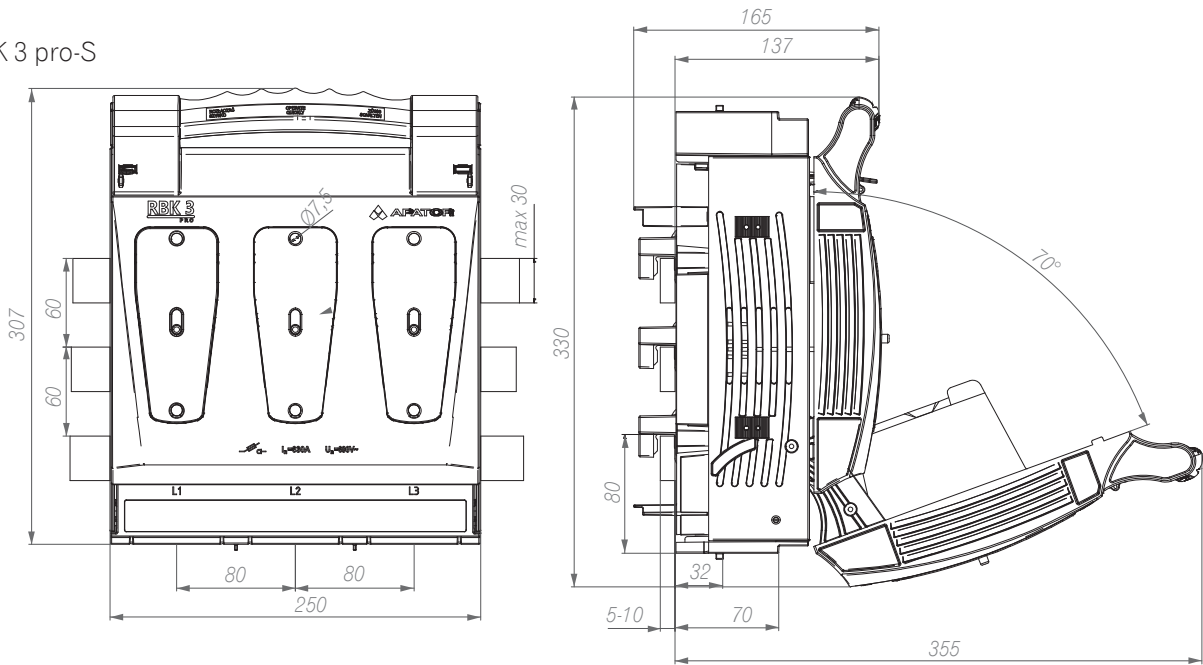


A	B	C
60 mm	75 mm	maks. 30 mm
100 mm	35-67 mm	maks. 60 mm

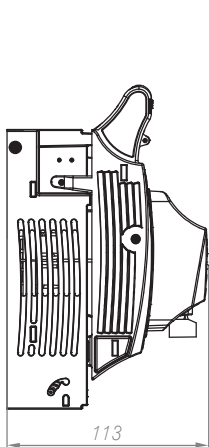
RBK 3 pro



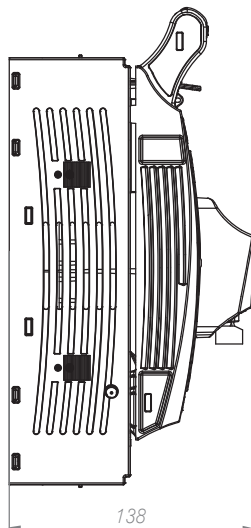
RBK 3 pro-S



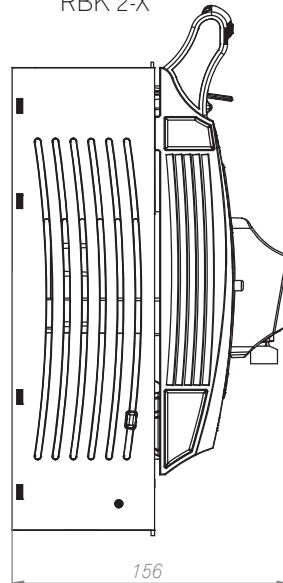
RBK 00-X



RBK 1-X



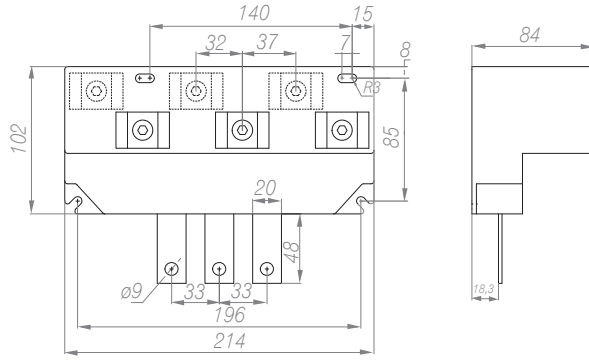
RBK 2-X



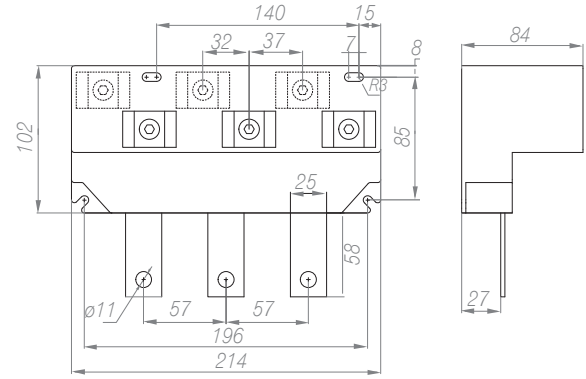


Terminal adapters:

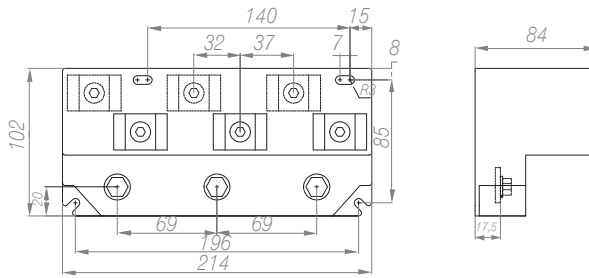
RBK 00



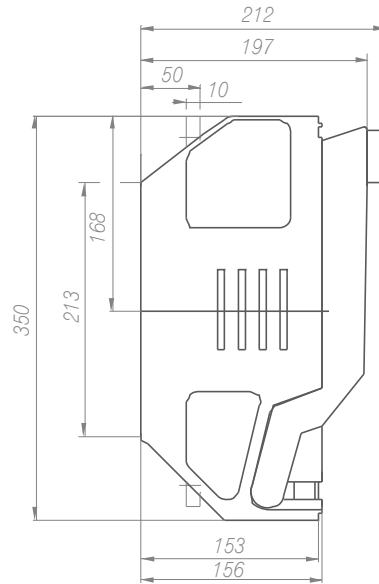
RBK 1



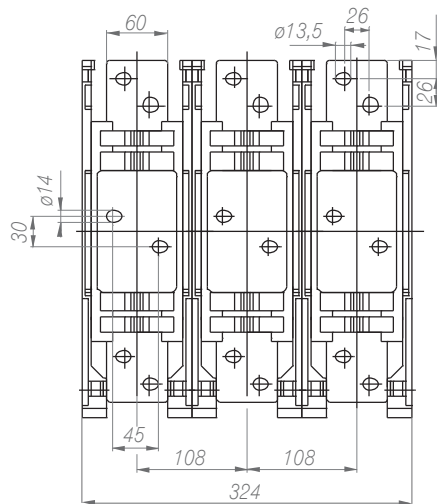
RBK 2



RBK 4a



RBK 4a 1600



RBK 4a 1250

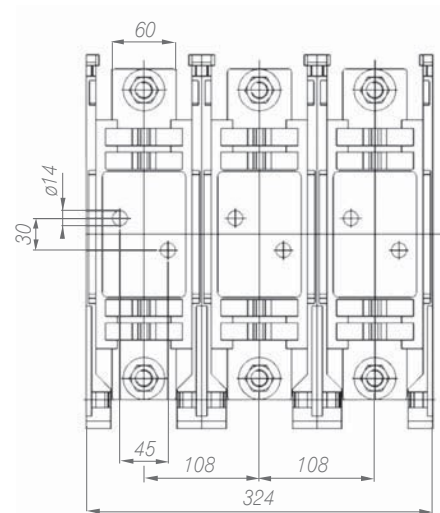


Table 108. RBK 000 - ACCESSORIES

Description	Size	Article No.	Picture
Feeding bridge 2 x RBK 000, 35 mm <sup>2</sup>	000	1119510055T	
Feeding bridge 3 x RBK 000, 35 mm <sup>2</sup>	000	1119510056T	
Feeding bridge 4 x RBK 000, 35 mm <sup>2</sup>	000	1119510057T	
Feeding bridge 5 x RBK 000, 35 mm <sup>2</sup>	000	1119510058T	
Feeding bridge 2 x RBK 000, 50 mm <sup>2</sup>	000	1119510059T	
Feeding bridge 3 x RBK 000, 50 mm <sup>2</sup>	000	1119510060T	
Feeding bridge 4 x RBK 000, 50 mm <sup>2</sup>	000	1119510061T	
Feeding bridge 5 x RBK 000, 50 mm <sup>2</sup>	000	1119510062T	
Feeding bridge RBK 000 25-95 mm <sup>2</sup> (1 set - 3 pcs.) for connection of conductor of cross-section	000	1119510071T	
25 - 70 mm <sup>2</sup>  25 - 95 mm <sup>2</sup> 			
Auxiliary contacts (microswitch) AC-15 U <sub>e</sub> 230 V~ I <sub>e</sub> 2,5 A DC-13 U <sub>e</sub> 230 V~ I <sub>e</sub> 0,3 A	000	1115296311T	
Additional terminal shroud „O” extends shroud length of 25 mm	000	51-930160-011	



Table 109. RBK 00 - ACCESSORIES

Description	Size	Article No.	Picture
Feeding bridge 2 x RBK 00, 35 mm <sup>2</sup>	00	1119510063T	
Feeding bridge 3 x RBK 00, 35 mm <sup>2</sup>	00	1119510064T	
Feeding bridge 4 x RBK 00, 35 mm <sup>2</sup>	00	1119510065T	
Feeding bridge 5 x RBK 00, 35 mm <sup>2</sup>	00	1119510066T	
Feeding bridge 2 x RBK 00, 50 mm <sup>2</sup>	00	1119510067T	
Feeding bridge 3 x RBK 00, 50 mm <sup>2</sup>	00	1119510068T	
Feeding bridge 4 x RBK 00, 50 mm <sup>2</sup>	00	1119510069T	
Feeding bridge 5 x RBK 00, 50 mm <sup>2</sup>	00	1119510070T	
Feeding bridge clamp RBK 00 25-95 mm <sup>2</sup> (1 set - 3 pcs.) for connection of conductor of cross-section	00	1119510072T	
25 - 70 mm <sup>2</sup>  25 - 95 mm <sup>2</sup> 			
Clamp for RBK 00 2x25 mm <sup>2</sup> 1x16 mm <sup>2</sup>	00	1119510073T	
Clamp for RBK 00 4x10 mm <sup>2</sup>	00	1119510074T	





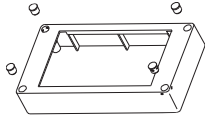

Description	Size/Version	Article No.	Picture
Auxiliary contacts (microswitch) AC-15 $U_e$ 230 V~ $I_e$ 2,5 A DC-13 $U_e$ 230 V~ $I_e$ 0,3 A	00	1115296311T	
Additional terminal shroud „O” extends shroud length of 25 mm	00	51-930499-011	
Full cover (matt)	00	1361399021T	
Terminal adapter + 3 x V-clamp + terminal shroud	RBK 00	1119510048T	
	RBK 00 W	1119510043T	

Table 110. RBK 1, RBK 2, RBK 3 - ACCESSORIES







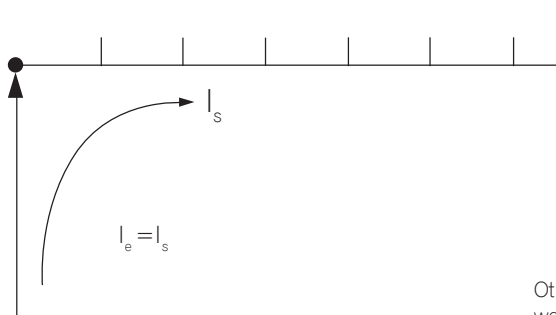
Description	Version	Article No.	Picture
Auxiliary contacts (microswitch) AC-15 $U_e$ 230 V~ $I_e$ = 2,5 A DC-13 $U_e$ 230 V~ $I_e$ = 0,3 A	RBK 1 RBK 1 pro RBK 2	1115296316	
Auxiliary contacts (microswitch) AC-15 $U_e$ 110/230/400 V~ $I_e$ = 1 A DC-13 $U_e$ 48/110/220 V~ $I_e$ = 0,5 A screw terminals conductors cross-section: – solid – 1 x 0,5 = 1,0 mm <sup>2</sup> – stranded – 1 x 0,5 = 0,75 mm <sup>2</sup>	RBK 3	1115296037	
Additional terminal shroud „O” extends shroud length of 35 mm	RBK 1 pro-O	51-823278-011	
Additional terminal shroud „O” extends shroud length of 60 mm	RBK 2-O	51-822405-011	
Terminal adapter RBK 1 + 3 x V-clamp + terminal shroud	RBK 1	1119510046T	
Terminal adapter RBK 2 + 3 x V-clamp + terminal shroud	RBK 2	1119510047T	

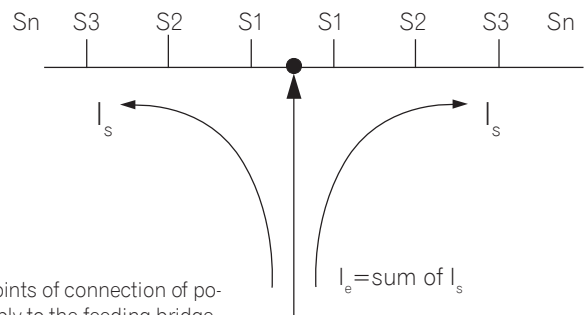
Table 111. RBK 00, RBK 000 FEEDING BRIDGES TECHNICAL DATA

Materials	Cu busbar
	Insulating parts, pressed PC/ABS RAL7035
	Cover, injection molded PC/ABS RAL7035
	Shroud, injection molded PC/ABS RAL7035
Temperature range	>80 °C UL94V0
Glow wire flammability index	pressed PC/ABS
	960 °C / 3.2 mm
	850 °C / 1 mm
	injection molded PC/ABS 960 °C / 1 mm
Insulation properties	Overvoltage category III/Pollution degree rating II
CTI	pressed PC/ABS 600 V
	injection molded PC/ABS 250 V
Short-circuit strength	25 kA/0.1 s
Dielectric strength	>32 kV / mm
Rated impulse withstand voltage 35 mm <sup>2</sup> / 50 mm <sup>2</sup>	>6.5 kV / >8.5 kV
Minimal insulating distance in air 35 mm <sup>2</sup> / 50 mm <sup>2</sup>	>6 mm / >8 mm
Minimal creepage distance 35 mm <sup>2</sup> / 50 mm <sup>2</sup>	>8.5 mm / >9 mm
Rated switching voltage	690 V

Feeding bridge length	Max. 1000 mm	Max. 300 mm	Max. 1000 mm	Max. 300 mm
Cross-section	35 mm <sup>2</sup>	35 mm <sup>2</sup>	50 mm <sup>2</sup>	50 mm <sup>2</sup>
Power supply connection point at the end or at the beginning of feeding bridge				
Maximum $I_s$ current / phase	125 A	200 A	160 A	250 A
Feeding conductors crosssection	35 mm <sup>2</sup>	70 mm <sup>2</sup>	50 mm <sup>2</sup>	95 mm <sup>2</sup>
Other points of connection of power supply to the feeding bridge				
Maximum feeding current $I_e$	160 A	250 A	160 A	250 A
Feeding conductors crosssection	70 mm <sup>2</sup>	95 mm <sup>2</sup>	70 mm <sup>2</sup>	95 mm <sup>2</sup>



Power supply connection point at the end or at the beginning of bridge



Other points of connection of power supply to the feeding bridge

In case of connection of power supply in the middle of feeding bridge sum of output currents  $S_1, \dots, S_n$  cannot be greater than corresponding maximum current  $I_s$ .

APPLICATION EXAMPLES

Fuse switch disconnectors RBK 00 connected with feeding bridge , power supply cables connected to feeding bridge clamps

APPLICATION EXAMPLES



Article No. 1119510070T

Article No. 1119510072T



Article No. 1119510065T

Article No. 1119510072T



Article No. 1119510064T

Article No. 1119510072T



Article No. 1119510063T

Article No. 1119510072T






Article No.  
1119510048T

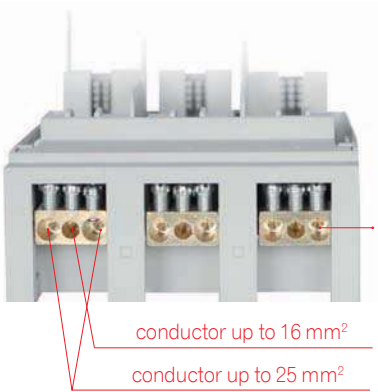


Article No.  
1119510073T

RBK 00-W with terminal adapter for connection of sector-shaped conductors with cross-section up to 240 mm<sup>2</sup>

RBK 00-W with terminal clamp 1x16 mm<sup>2</sup>, 2x25 mm<sup>2</sup> (view of fuse switch with disconnecter without fuse-link cover and terminal shrouds)

35 - 95 mm <sup>2</sup> 	35 - 120 mm <sup>2</sup> 
50 - 185 mm <sup>2</sup> 	50 - 240 mm <sup>2</sup> 



Article No.  
1119510073T

conductor up to 16 mm<sup>2</sup>  
conductor up to 25 mm<sup>2</sup>

RBK 00-W with terminal clamp 1x16 mm<sup>2</sup>, 2x25 mm<sup>2</sup> (view of fuse switch with disconnecter without fuse-link cover)



Article No.  
51-930499-011

Article No.  
51-930499-011

RBK 00-O for installation on mounting plate, version with additional terminal shrouds „O”



Article No.  
51-930160-011

Article No.  
51-930160-011

RBK 000-O for installation on mounting plate, version with additional terminal shrouds „O”

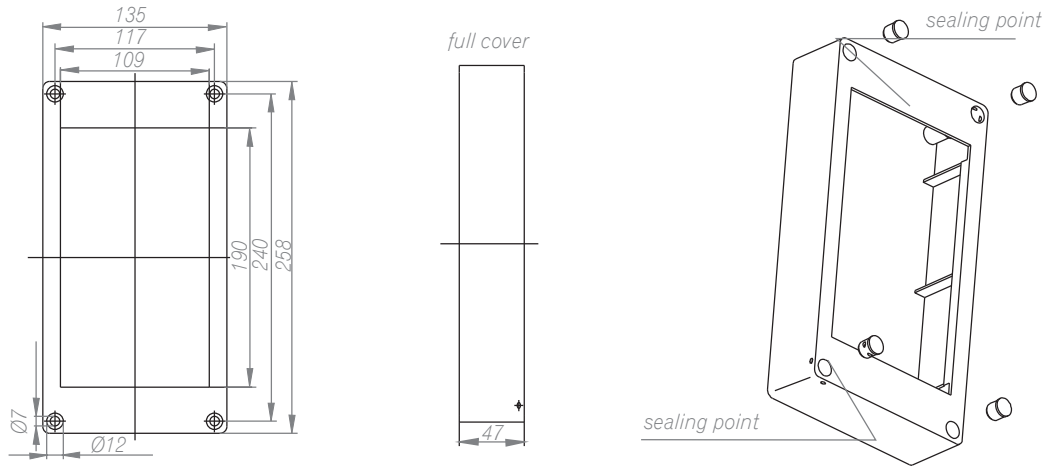


Article No.  
51-823278-011

Article No.  
51-823278-011

RBK 1-O for installation on mounting plate, version with additional terminal shrouds „O”

## FULL COVER FOR RBK 00



## TERMINAL ADAPTER FOR RBK 00 / RBK 1



CONFORMING TO STANDARDS:

1. PN-EN 60947-7-1: 2010
2. EN 60947-7-1: 2009



COVERING OF RBK FUSE SWITCH DISCONNECTORS (REAR INSTALLATION)

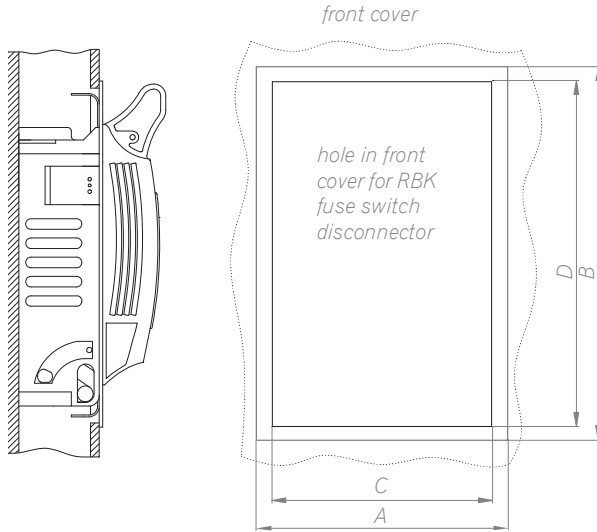
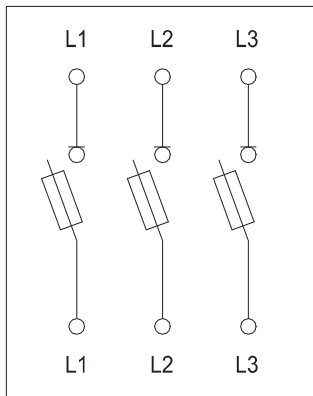


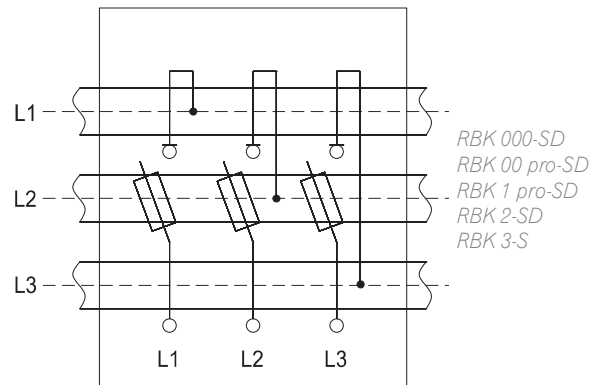
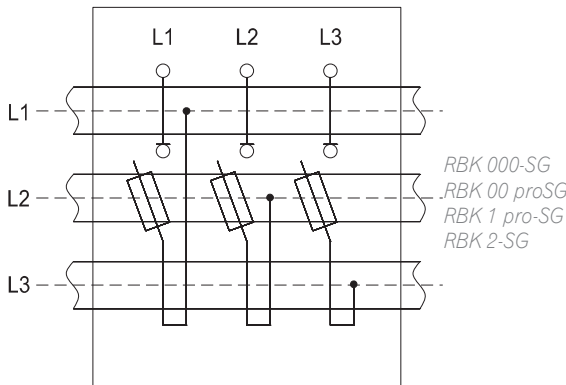
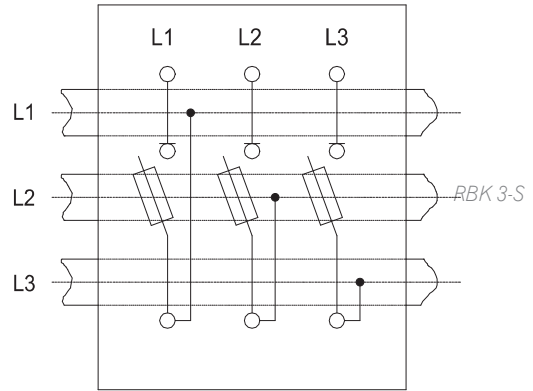
TABLE 112. FRONT COVER DIMENSIONS

Typ	A	B	C	D
RBK 000	104	166	94	156
RBK 000-S, RBK 000-W	104	205	94	195
RBK 00, RBK 00 pro, RBK 00 pro-S	120	207	110	197
RBK 00-W	120	207	110	182
RBK 1, RBK 1-S	198	262	186	250
RBK 2, RBK 2-S	230	285	209	255
RBK 2-V, RBK 2-2V	230	340	209	255
RBK 3, RBK 3-S	272	328	258	316

ELECTRICAL DIAGRAMS (RBK 1-S, RBK 3-S - POSSIBLE BOTTOM CABLE TERMINAL CONNECTION)



RBK 000  
 RBK 00  
 RBK 00 pro  
 RBK 1  
 RBK 2  
 RBK 3



UNIVERSAL EARTHING DEVICE FOR RBK 000, 00, 1, 2, 3

Catalogue Nr 1119510032T



## DESCRIPTION

1. short-circuiting links
2. working pole
3. earth terminal
4. short-circuiting cable
5. earthing cable
6. cable connection point
7. case

## EXAMPLE OF THE ORDER OF RBK 2 - V - SD - 100

Fuse switch disconnecter	160 A	RBK 000, RBK 00, RBK 00 pro	
	250 A	RBK 1	
	400 A	RBK 2	RBK 2
	630 A	RBK 3	
Terminal clamps	V	Typ V	V
	2V	Typ 2V	
	M	screw terminal	
	S	S-bridge clamps	
For installation on to busbar system	S		S
Cable terminal	D	bottom	D
	G	top	
Busbar system	60 mm	60	
	100 mm	100	100