



RBK pro

Horizontal fuse switch disconnectors

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

APPLICATIONS

RBK pro 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 pro** fuse switch disconnectors are made of fibre glass strengthened polyamide with halogen free flame retardant added and have highest possible flammability class – VO,
- **RBK pro** 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 chambers with steel deionization plates over top contacts,
- silver plated contacts providing low power loss.

MOUNTING

- on mounting plate
 - RBK 000 pro, RBK 00 pro, RBK 1 pro, RBK 2 pro, RBK 3,
- DIN rail
 - single: RBK 000 pro,
 - double: RBK 00 pro,
- on to busbar systems:
 - 60 mm RBK 000 pro-S, RBK 00 pro-S, RBK 1 pro-S, RBK 2 pro-S, installation on to busbar system with hooked clamps, placed inside fuse,
 - 60 mm RBK 3-S installation on busbar system using adapter with three M10 screws,
 - 100 mm (RBK 2-S, RBK 1 pro-S) installation on to busbar system with hooked clamps placed inside fuse.

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.

Table 80. RBK pro fuse switch disconnectors technical data

Parameter		RBK 000 pro RBK 000 pro-S					RBP 000 pro			RBP 000 pro-S			RBK 00 pro			RBK 00 pro-S						
Rated thermal current $I_{th}^{1)}$	A	160					125			125			160			160						
Rated voltage U_n	V	690					690			690			690			690						
Utilization category	-	AC-23B	AC-22B	AC-22B	AC-21B	DC-21B	AC-23B	AC-21B	DC-22B	AC-23B	AC-22B	DC-22B	AC-23B	DC-22B	DC-21B	AC-23B	AC-22B	DC-22B				
Rated switching current I_e	A	100	100	160	160	160	125	125	100	125	125	100	160	160	160	160	160	160				
Rated switching voltage U_e	V	400	690	400	690	250	400	690	250	400	690	250	690	250	440	400	690	250				
Rated short circuit withstand current	690 V	25				25/ 250V	50		25/ 250V	35		25/ 250V	80		25/250V	100		25/ 250V				
	500 V	80					-			-			-									
	400 V	-					80			80			100									
Rated short circuit making current	690 V	25				25/ 250V	50		25/ 250V	35		25/ 250V	80		25/250V	100		25/ 250V				
	500 V	80					-			-			-									
	400 V	-					80			80			100									
Rated insulation voltage U_i	V	1000					1000			1000			1000			1000						
Rated impulse withstand voltage U_{imp}	kV	8					6			6			8			8						
Rated frequency	Hz	50-60			-		50-60		-		50-60		-		50-60		-		50-60		-	
Mechanical durability	Number of cycles	2000			1600			1600			1600			1600			1600					
Electrical durability		300			200			200			200			200			200					
IP degree of protection	IP	20					20*			20*			20			20						
Weight	kg	~0,6, ~0,9					~0,5			~0,7			~0,7			~0,9						
Size of fuse links	-	000					000			000			00			00						

*from the front IP30

¹⁾ 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)
²⁾ for 60 mm busbar system

- RBK 2 switch disconnector with solid links 400 A
- rated short-time withstand current $I_s I_{cw} = 13$ 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 $I_s I_{cw} = 12,6$ 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

Parameter		RBK 00 pro-V 120			RBK 1 pro		RBK 1 pro-S			RBK 2 pro RBK 2 pro-S			RBK 3 pro			RBK 3 pro-S		
Rated thermal current $I_{th}^{1)}$	A	160			250		250			400			630			630		
Rated voltage U_n	V	690			690		690			690			690			690		
Utilization category	-	AC-23B	AC-22B	DC-22B	AC-23B	DC-22B	AC-23B	AC-22B	DC-22B ²⁾	AC-23B	DC-22B	DC-21B	AC-23B	AC-22B	DC-21B	AC-23B	AC-22B	DC-21B
Rated switching current I_e	A	160	160	160	250	250	250	250	250	400	400	400	630	630	630	630	630	630
Rated switching voltage U_e	V	400	690	250	690	250	400	690	250	690	220	440	400	690	440	400	500	690
Rated short circuit withstand current	690 V	kA	100	25/250V	80	25/250V	80		25/250V	80	20/250V, 15/440V	80		35/440V	80			
	500 V				-		-			-		-						
	400 V				100		100			100		-						
Rated short circuit making current	690 V	kA	100	25/250V	80	25/250V	80		25/250V	80	20/250V, 15/440V	80		35/440V	80			
	500 V				-		-			-		-						
	400 V				100		100-			100		-						
Rated insulation voltage U_i	V	1000			1000		1000			1000			1000					
Rated impulse withstand voltage U_{imp}	kV	8			8		8			12			12					
Rated frequency	Hz	50-60	-	50-60	-	50-60	-	50-60	-	50-60	-	50-60	-	50-60	-	50-60		
Mechanical durability	Number of cycles	1600			1600		1600			1000			1000			1000		
Electrical durability		200			200		200			200			200			200		
IP degree of protection	IP	20			20		20			20			20*			20*		
Weight	kg	~0,9			~2		~2,5			~3, ~4,5			~4,3			~4,9		
Size of fuse links	-	00			1		1			2			3			3		

*from the front IP30

¹⁾ 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)

²⁾ for 60 mm busbar system

RBK 000 pro (160 A, 690 V)



RBK 000 pro
for installation on mounting plate

Table 81. Technical data

Parameter		RBK 000 pro / RBK 000 pro-S				
Rated thermal current $I_{th}^{1)}$	A	160				
Rated voltage U_n	V	690				
Utilization category	-	AC-23B	AC-22B	AC-22B	AC-21B	DC-21B
Rated switching current I_e	A	100	100	160	160	160
Rated switching voltage U_e	V	400	690	400	690	250
Rated short circuit making current	690 V	kA	25			25/250V
	500 V		80			
	400 V		-			
Rated short circuit withstand current	690 V	kA	25			25/250V
	500 V		80			
	400 V		-			
Rated insulation voltage U_i	V	1000				
Rated impulse withstand voltage U_{imp}	kV	8				
Rated frequency	Hz	50-60				-
Mechanical durability	Number of cycles	2000			1600	
Electrical durability		300			200	
IP degree of protection	IP	20				
Weight	kg	~0,6, ~0,9				
Size of fuse links	-	000				

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

Table 82. Versions

RBK 000 pro/160 A		Cable terminal	Article No.	
For installation on mounting plate				
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	
For installation on to 60 mm busbar system				
APASYS 60	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 83. RBK 000 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 000 on mounting plate
RBK 000 pro	S-bridge clamp 2 x M5 x 16		Cu/Al conductor 1,5 ÷ 35 mm ²	maximum bar width 15 mm	3 Nm*	
	M8 x 16 screw		conductor with lug terminal up to 70 mm ²		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
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

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



RBP 000 pro-S

Table 84. Technical data

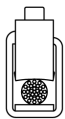

Parameter		RBP 000 pro			RBP 000 pro-S		
Rated thermal current $I_{th}^{1)}$	A	125			125		
Rated voltage U_n	V	690			690		
Utilization category	-	AC-23B	AC-21B	DC-22B	AC-23B	AC-22B	DC-22B
Rated switching current I_e	A	125	125	100	125	125	100
Rated switching voltage U_e	V	400	690	250	400	690	250
Rated short circuit making current	690 V	50			35		
	500 V	-			-		
	400 V	80			80		
Rated short circuit withstand current	690 V	50			35		
	500 V	-			-		
	400 V	80			80		
Rated insulation voltage U_i	V	1000			1000		
Rated impulse withstand voltage U_{imp}	kV	6			6		
Rated frequency	Hz	50-60	-		50-60	-	
Mechanical durability	Number of cycles	1600			1600		
Electrical durability	Number of cycles	200			200		
IP degree of protection	IP	20*			20*		
Weight	kg	~0,5			~0,7		
Size of fuse links	-	000			000		

¹⁾ 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)

Table 85. Versions

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

Table 86. RBP 000 pro, RBP 000 pro-S terminal clamps

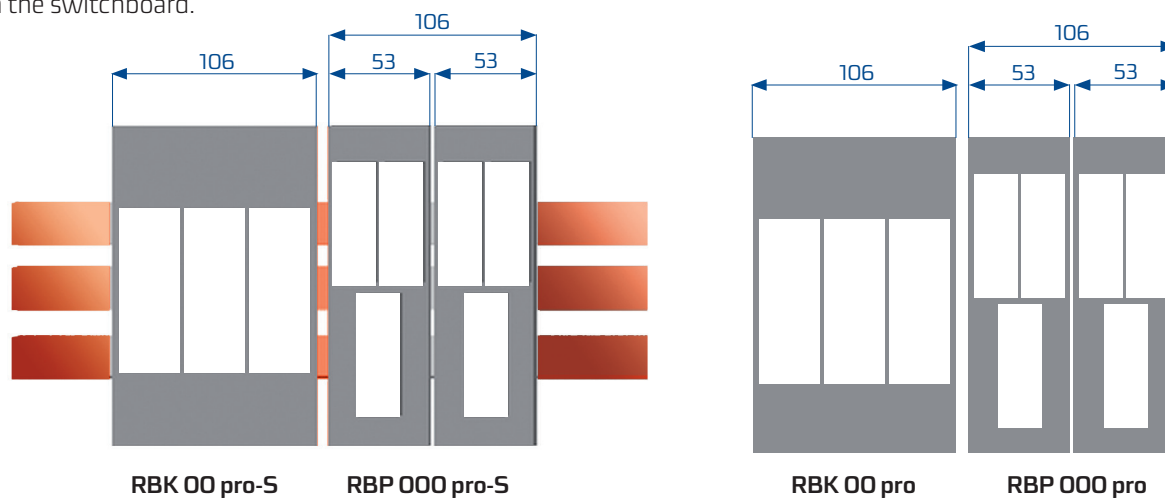
Description	Cable terminal	Drawing of clamp	Cross-section of conductors	Tightening torque
RBP 000 pro RBP 000 pro-S	frame clamps		2,5 - 50 mm ²	 6 Nm*

For stranded conductors using cable ferrules is recommended

*using of tension wrench is recommended

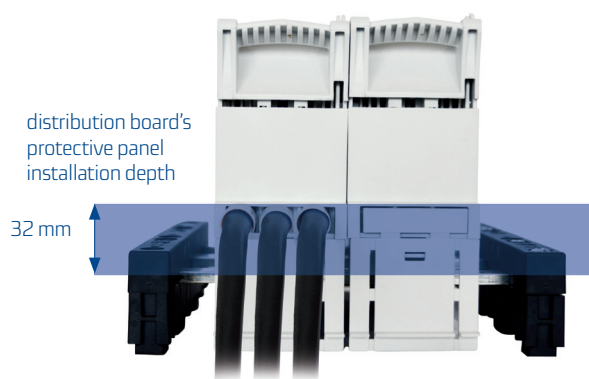
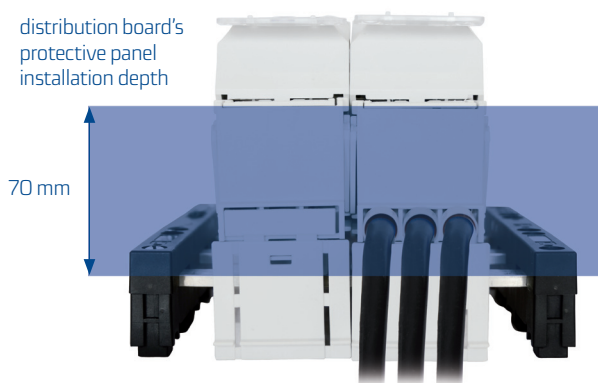
Saves space in the switchboard

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



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

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

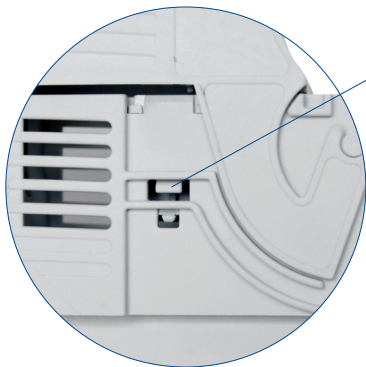


with cables connected to the top cable terminal
RBP 000 pro-SG

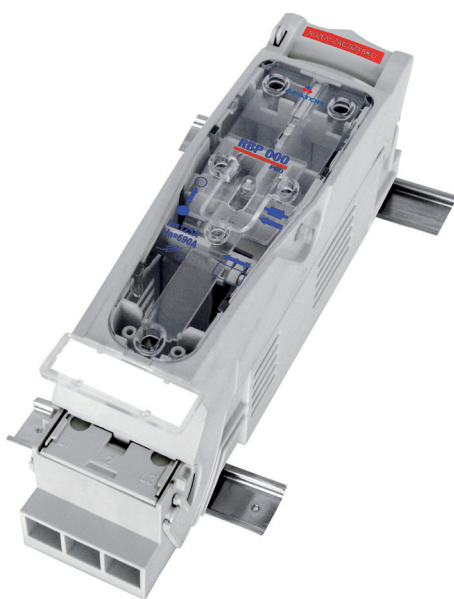
Fuse switch disconnector **RBP 000 pro-S** has special cavity in it's main base encasing busbar system's support.



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



hole for leading of wires connected to microswitch



Fuse switch disconnector **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 87. Technical data

Parameter		RBK 00 pro		
Rated thermal current $I_{th}^{1)}$	A	160		
Rated voltage U_n	V	690		
Utilization category	-	AC-23B	DC-22B	DC-21B
Rated switching current I_e	A	160	160	160
Rated switching voltage U_e	V	690	250	440
Rated short circuit making current	690 V	kA	80	25/250V
	500 V		-	
	400 V		100	
Rated short circuit withstand current	690 V	kA	80	25/250V
	500 V		-	
	400 V		100	
Rated insulation voltage U_i	V	1000		
Rated impulse withstand voltage U_{imp}	kV	8		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1600		
Electrical durability	Number of cycles	200		
IP degree of protection	IP	20		
Weight	kg	~0,7		
Size of fuse links	-	00		

¹⁾ 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)

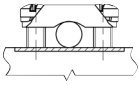
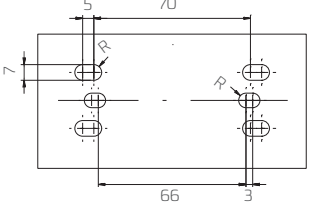
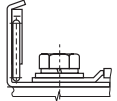
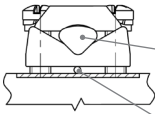





RBK 00 pro

Table 88. Versions

RBK 00 pro/160 A		Cable terminal	Article No.
For installation on mounting plate			
RBK 00 pro	for connection of round conductors	S-bridge clamps	63-823256-111
RBK 00 pro-M	for connection of conductors with lug terminals	M8 screws	63-823256-121
RBK 00 pro-V	for connection of sector-shaped conductors	V-shape clamps	63-823256-131
RBK 00 pro-W	for connection of round conductors lengthened terminal shrouds	S-bridge clamps	63-823256-141
RBK 00 pro-M-W	for connection of conductors with lug terminals, lengthened terminal shrouds	M8 screws	63-823256-151
RBK 00 pro-V-W	for connection of sector-shaped conductors, lengthened terminal shrouds	V-shape clamps	63-823256-161
for mounting on double DIN rail			
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 89. 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 pro on mounting plate
RBK 00 pro	S-bridge clamp 2 x M5 x 16		Cu/Al conductor 4÷50 mm ²	maximum bar width 20 mm	3 Nm*	
	M8 x 16 screw		conductor with lug terminal up to 70 mm ²		10 Nm*	
	V-shape clamp 2 x M5 x 20		2)  4 mm ² - 70 mm ²  4 mm ² - 95 mm ² 1)  1,5 mm ² - 2,5 mm ²		3 Nm*	

For stranded conductors using cable ferrules is recommended

*using of tension wrench is recommended

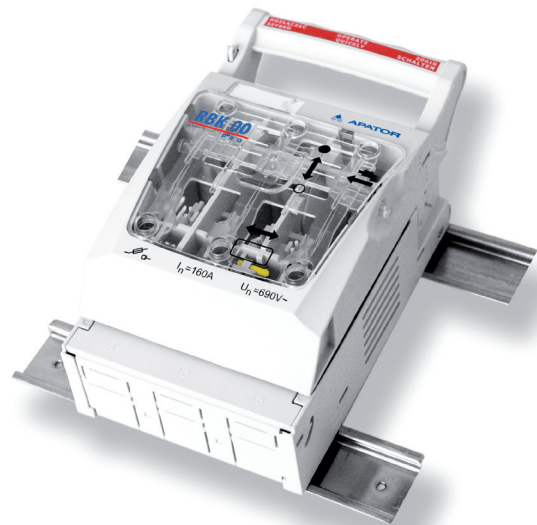
RBK 00 pro



RBK 00 pro-W



Fuse switch disconnecter **RBK 00 pro-W**
with additional terminal shrouds



Fuse switch disconnecter **RBK 00 pro-E**
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 90. Technical data

Parameter		RBK 00 pro-S		
Rated thermal current $I_{th}^{1)}$	A	160		
Rated voltage U_n	V	690		
Utilization category	-	AC-23B	AC-22B	DC-22B
Rated switching current I_e	A	160	160	160
Rated switching voltage U_e	V	400	690	250
Rated short circuit making current	690 V	kA	100	25/ 250V
	500 V			
	400 V			
Rated short circuit withstand current	690 V	kA	100	25/ 250V
	500 V			
	400 V			
Rated insulation voltage U_i	V	1000		
Rated impulse withstand voltage U_{imp}	kV	8		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1600		
Electrical durability	Number of cycles	200		
IP degree of protection	IP	20		
Weight	kg	~0,9		
Size of fuse links	-	00		

¹⁾ 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 pro-S

RBK 00 pro-S

Table 91. Versions

	RBK 00 pro-S	Cable terminal	Article No.
APASYS 60	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

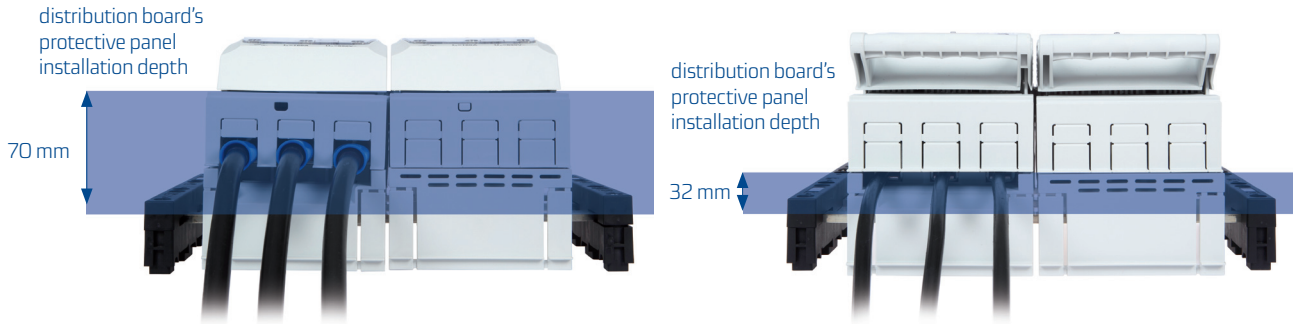
Table 92. RBK 00 pro-S terminal clamps

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 ²	maximum bar width 20 mm	10 Nm*
RBK 00 pro-SGR RBK 00 pro-SDR	frame clamps		4 ÷ 95 mm ²	-	6 Nm* 3 Nm*

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

Fuse switch disconnectors **RBK 00 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



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

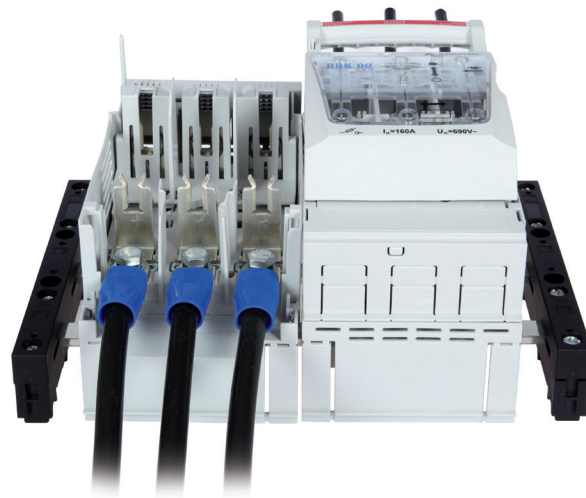


Fuse switch disconnecter **RBK 00 pro-S** has special cavity in it's main base encasing busbar system's support.

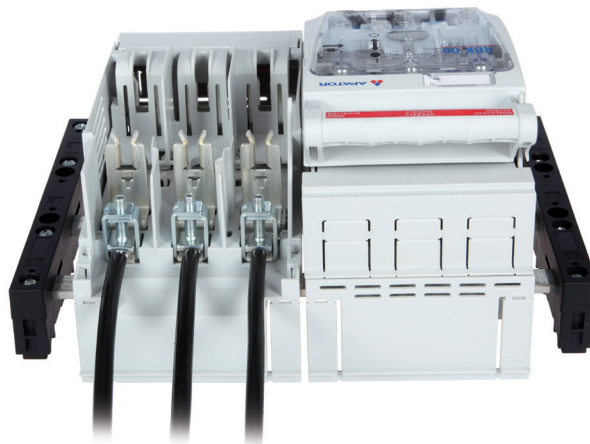


Cable terminals:

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



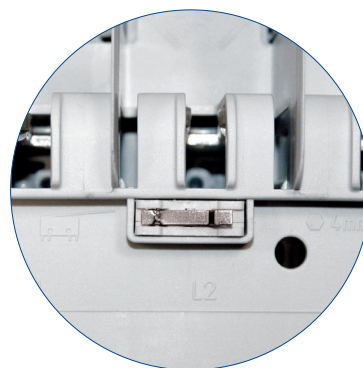
Frame clamp (RBK 00 pro-SDR, RBK 00 pro-SGR)



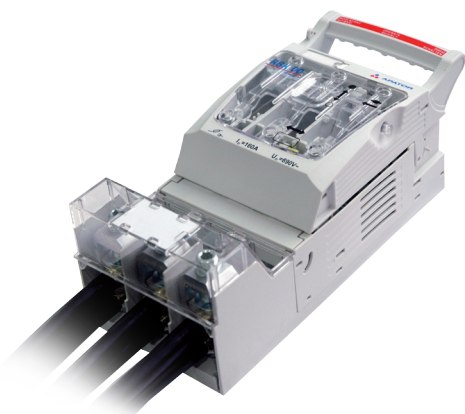
It is possible to install **microswitch indicating** position in fuse switch disconnectors **RBK 00 pro-S**.



hole for leading
of wires connected
to microswitch



RBK 00 pro V 120 (160 A, 690 V)



RBK 00 pro V 120

Table 93. Technical data


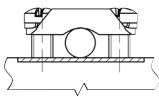

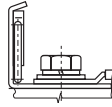

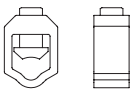











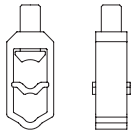




Parameter		RBK 00 pro-V 120		
Rated thermal current $I_{th}^{1)}$	A	160		
Rated voltage U_n	V	690		
Utilization category	-	AC-23B	AC-22B	DC-22B
Rated switching current I_e	A	160	160	160
Rated switching voltage U_e	V	400	690	250
Rated short circuit making current	690 V	kA	100	25/ 250V
	500 V			
	400 V			
Rated short circuit withstand current	690 V	kA	100	25/ 250V
	500 V			
	400 V			
Rated insulation voltage U_i	V	1000		
Rated impulse withstand voltage U_{imp}	kV	8		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1600		
Electrical durability	Number of cycles	200		
IP degree of protection	IP	IP20		
Weight	kg	~0,9		
Size of fuse links	-	00		

¹⁾ 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)

Table 94. Versions

RBK 00 pro V 120		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 95. 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 ²	maximum bar width 20 mm	3 Nm*
	M8 x 16 screw			conductor with lug terminal up to 70 mm ²		10 Nm*
cable terminals	V-clamp			 25 ÷ 150 mm ²  **	-	20 Nm*
				 16 ÷ 95 mm ²  **		
	HM 10-120			 10 - 70 mm ²  **		15 Nm*
				 25 - 120 mm ²  ** 25 - 95 mm ²		
	double V-clamp			 2 x (25 ÷ 120 mm ²)  **		20 Nm*
				 2 x (16 ÷ 95 mm ²)  **		

*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 mm²
- connection of two round conductors with bare ends and cross-section up to 70 mm²

Space saving

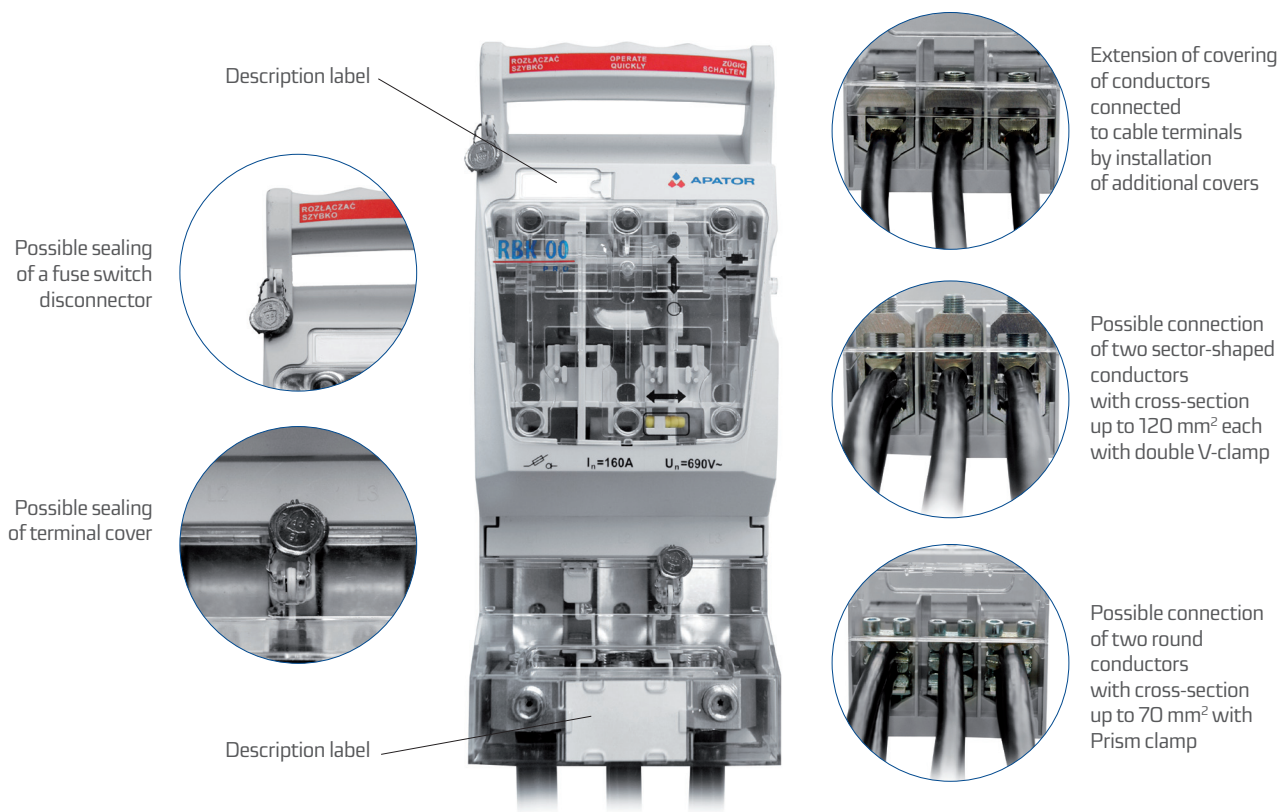
- possible reduction of external width of cable distribution cabinet to width of a fuse switch disconnecter

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)

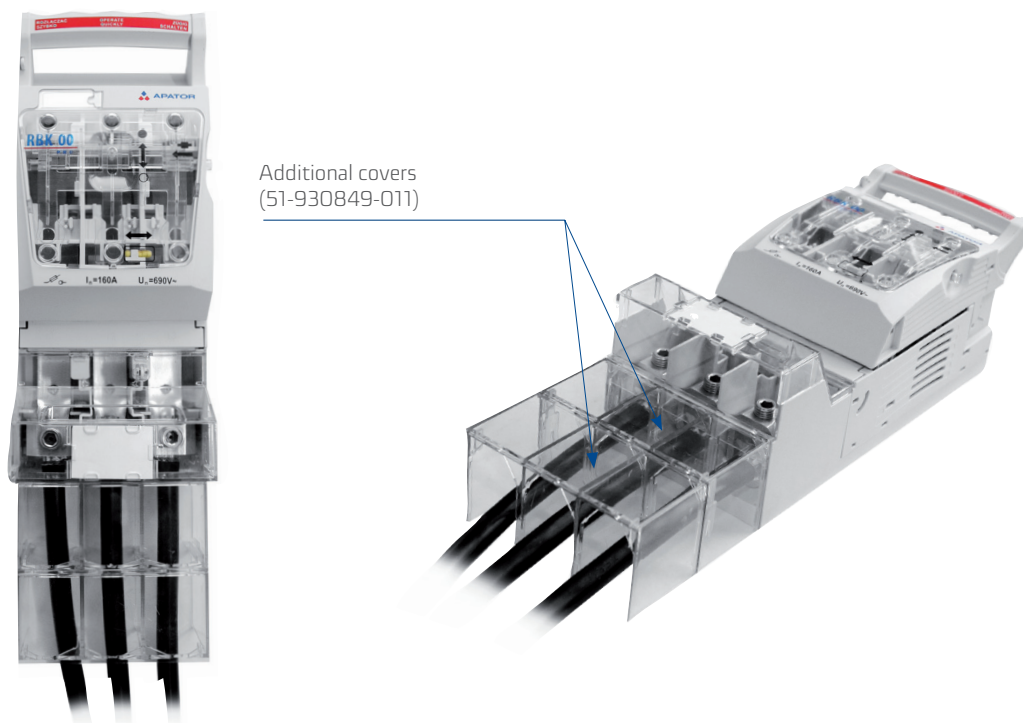
Safety

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

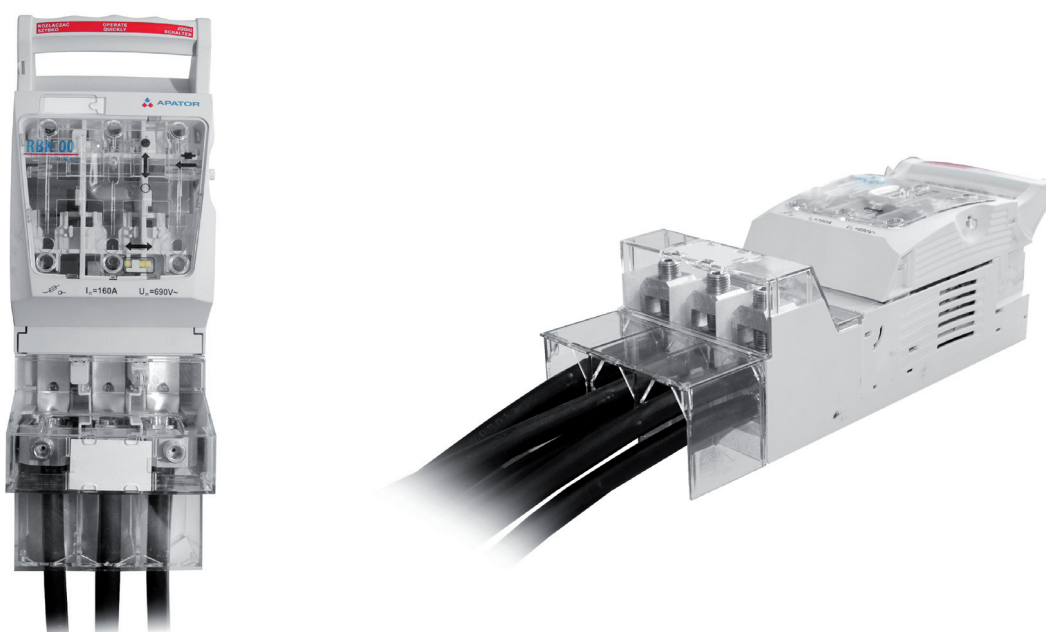


Extended covering of conductors connected to cable terminal

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 mm²



RBK 00 pro 2 x V120 with double V-clamp for connection of two sector-shaped conductors with cross-section up to 120 mm² each

RBK 1 pro (250 A, 690 V)



RBK 1 pro
for installation
on mounting plate

Table 96. Technical data

Parameter		RBK 1 pro		RBK 1 pro-S		
Rated thermal current $I_{th}^{1)}$	A	250		250		
Rated voltage U_n	V	690		690		
Utilization category	-	AC-23B	DC-22B	AC-23B	AC-22B	DC-22B ²⁾
Rated switching current I_e	A	250	250	250	250	250
Rated switching voltage U_e	V	690	250	400	690	250
Rated short circuit making current	690 V	80		80		25/ 250V
	500 V	-		-		
	400 V	100		100		
Rated short circuit withstand current	690 V	80		80		25/ 250V
	500 V	-		-		
	400 V	100		100-		
Rated insulation voltage U_i	V	1000		1000		
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	IP20		IP20		
Weight	kg	~2		~2,5		
Size of fuse links	-	1		1		

¹⁾ 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)

Table 97. Versions

RBK 1 pro/250 A				
For installation on mounting plate		Cable terminals	Article No.	
RBK 1 pro	For connection of round conductors	S-bridge clamps	63-811748-011	
RBK 1 pro-M	For connection of conductors with lug terminals	Screws	63-811748-021	
RBK 1 pro-V	For connection of sector-shaped conductors	V-clamps	63-811748-031	
RBK 1 pro VG	For connection of round conductors, top terminals - V-terminals, bottom terminals - S-bridge terminals	V- clamps / S-bridge clamps	63-811784-011	
RBK 1 pro VG-M	For connection of round conductors, top terminals - V-terminals, bottom terminals - screw terminals	V- clamps /screws	63-811784-021	
RBK 1 pro VD	For connection of round conductors, top terminals - S-bridge terminals, bottom terminals - V-terminals	S-bridge clamps / V- clamps	63-811784-031	
RBK 1 pro VD-M	For connection of round conductors, top terminals - screw terminals, bottom terminals - V-terminals	Screws / V-clamps	63-811784-041	
RBK 1 pro-S				
For installation on to busbar system		Cable terminals	Article No.	
60 mm busbar system				
APASYS 60	RBK 1 pro-SG 60	Top cable terminals, for connection of round conductors	S-bridge clamps	63-811750-011
	RBK 1 pro-SD 60	Bottom cable terminals, for connection of round conductors	S-bridge clamps	63-811750-021
	RBK 1 pro-SG-M 60	Top cable terminals, for connection of sector-shaped conductors	Screws	63-811750-051
	RBK 1 pro-SD-M 60	Bottom cable terminals, for connection of conductors withlug terminals	Screws	63-811750-061
	RBK 1 pro-SG-V 60	Top cable terminals, for connection of sector-shaped conductors	V-clamps	63-811750-091
	RBK 1 pro-SD-V 60	Bottom cable terminals, for connection of sector-shaped conductors	V-clamps	63-811750-101

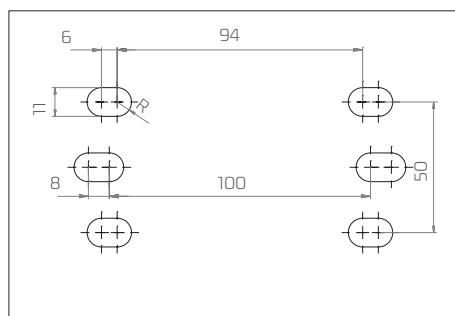
Table 98. Versions

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

Table 99. RBK 1 pro terminal clamps

Description	RBK 1 pro	RBK 1 pro-M	RBK 1 pro-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 ²	conductor with lug terminal up to 120 mm ²	V-clamp for direct fixing of conductor with bare end with cross-section of: 35 - 150 mm ² 50 - 240 mm ² ** 50 - 300 mm ²
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



*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 100. Technical data

Parameter		RBK 2 pro / RBK 2 pro-S		
Rated thermal current I_{th}	A	400		
Napięcie znamionowe U_n	V	690		
Utilization category	-	AC-23B	DC-22B	DC-21B
Rated switching current I_e	A	400	400	400
Rated switching voltage U_e	V	690	220	440
Rated short circuit making current	690 V	kA	80	20/250V, 15/440V
	500 V			
	400 V		100	
Rated short circuit withstand current	690 V	kA	80	20/250V, 15/440V
	500 V		-	
	400 V		100	
Rated insulation voltage U_i	V	1000		
Rated impulse withstand voltage U_{imp}	kV	12		
Rated frequency	Hz	50-60	-	
Mechanical durability	Number of cycles	1000		
Electrical durability		200		
IP degree of protection	IP	20		
Weight	kg	~3, ~4,5		
Size of fuse links	-	2		

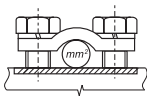
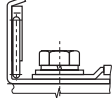
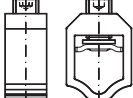
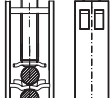








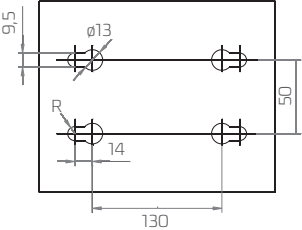


RBK 2-V pro
for installation on mounting plate

Table 101. Versions

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

Table 94. RBK 2 pro terminal clamps

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

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



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

RBK 3 pro (630 A, 690 V)

Table 95. Technical data

Parameter		RBK 3 pro			RBK 3 pro-S		
		AC-23B	AC-22B	DC-21B	AC-23B	AC-22B	DC-21B
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	DC-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 making current	690 V	kA	80	35/ 440V	80	-	
	500 V		-			-	
	400 V		-			-	
Rated short circuit withstand current	690 V	kA	80	35/ 440V	80	-	
	500 V		-			-	
	400 V		-			-	
Rated insulation voltage U_i	V	1000			1000		
Rated impulse withstand voltage U_{imp}	kV	12			12		
Rated frequency	Hz	50-60	-		50-60		
Mechanical durability	Number	1000			1000		
Electrical durability	of cycles	200			200		
IP degree of protection	IP	20			20		
Weight	kg	~4,3			~4,9		
Size of fuse links	-	3			3		

¹⁾ 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 3 pro
main version
for installation
on mounting plate

RBK 3 pro

Table 96. Versions

RBK 3 pro		Cable terminal	Article No.
For installation on mounting plate			
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-M-2xVD	cable terminals: for connection of conductors with lug terminals - top M screws, for connection of sector-shaped conductors - bottom V-clamps	M12 screws/V-shape terminals	63-811761-031
APASYS 60 RBK 3 pro, RBK 3 pro-S for installation on 60 mm busbar system			
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

Table 97. RBK 3 pro terminal clamps

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



RBK 4a
for installation on mounting plate

Table 98. Technical data

Parameter	RBK 4a	
	1250	1600
Rated thermal current I_{th}	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		600
Electrical durability		100
IP degree of protection		IP20
Size of fuse links		4a

Table 99. 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

Table 100. RBK 4a terminal clamps

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

*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



RBK 00-X
with electronic fuse monitoring module

Parameters

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

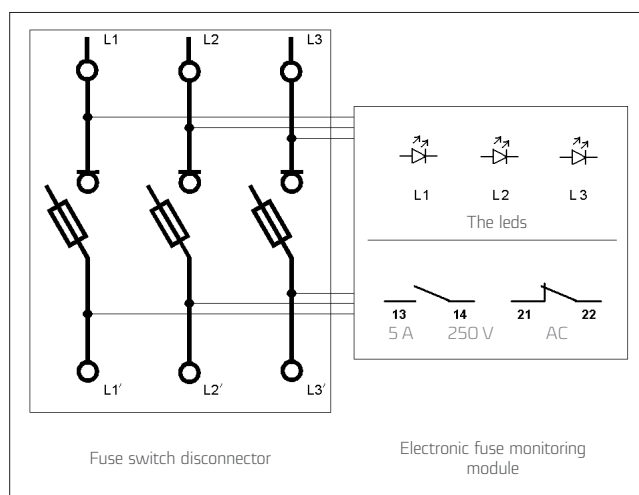
with power supply connected to top cable terminals

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



disconnecter contact position during normal operation

Table 101. 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, busbar power supply	63-823345-011
RBK 00 pro-SD-XT	For installation on to 60 mm busbar system, bottom cable terminals, busbar power supply	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, busbar power supply	63-811787-011
RBK 1 pro-SD 60-XT	For installation on to 60 mm busbar system, bottom cable terminals, busbar power supply	63-811787-021
RBK 1 pro-SG 100-X	For installation on to 100 mm busbar system, top cable terminals, busbar power supply	63-811787-031
RBK 1 pro-SD 100-XT	For installation on to 100 mm busbar system, bottom cable terminals, busbar power supply	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, busbar power supply	63-811788-011
RBK 2 pro-SD 60-XT	For installation on to 60 mm busbar system, bottom cable terminals, busbar power supply	63-811788-021
RBK 2 pro-SG 100-X	For installation on to 100 mm busbar system, top cable terminals, busbar power supply	63-811788-031
RBK 2 pro-SD 100-XT	For installation on to 100 mm busbar system, bottom cable terminals, busbar power supply	63-811788-041