



SWITCHGEAR



APASYS 60

BUSBAR SYSTEM 60 mm



smart thinking

About Grupa Apator

Who we are?

Grupa Apator is a dynamic Polish capital group, it currently includes 14 companies – 8 Polish and 6 foreign. Grupa Apator is a pioneer in the implementation of innovative technical solutions and its sales income grows every year. Thanks to the application of modern technologies our products have the highest quality and win the recognition of our Clients.

Offer

Grupa Apator focuses its activity in two segments of the electromechanical industry: metering and switchgear. Offer of the companies of Grupa includes metering equipment for all utilities (prepayment and post-payment electrical energy meters, heat meters, gas meters, water meters, temperature sensors).

The above offer is a base for the development of systems enabling energy usage metering, remote reading, teletransmission and visualisation of data.

Grupa Apator has a strong position and years of experience concerning safe making and breaking of electrical circuits.

Apator

■ ESTABLISHED SINCE:

1949.

■ BUSINESS ACTIVITY:

The business activity covers: design, production, sales of metering equipment and systems and switchgear equipment. Standard product of company are as follows: LEWsystem APATOR, AMRsystem APATOR, prepaymet electricity meters, surge arresters, ARS, PBS, RBK type apparatuses and 4G series rotary cam switchers.

■ CERTIFICATES:

The Integrated Management System including the Quality Management System, Environmental Management System and Occupational Health and Safety Management System has been assessed and found to be in accordance with the requirements of: ISO 9001: 2008, ISO 14001:2004, PN-N-18001: 2004.

■ DID YOU KNOW THAT:

Lightning strikes somewhere on the Earth six thousand times per minute, mostly in tropical areas. The average lightning bolt is 1 km long, but some can reach more than 10 km. The longest recorded lightning bolt was 150 km!

1. APASYS 60 - BUSBAR SYSTEM 60 mm 04

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SWITCHGEAR

APASYS 60 - BUSBAR SYSTEM 60 mm

APASYS 60 - BUSBAR SYSTEM 60 mm is a modular designed current distribution system up to 630 A.

Snap on mounting of all components provides extreme flexibility in assembly and add on design.





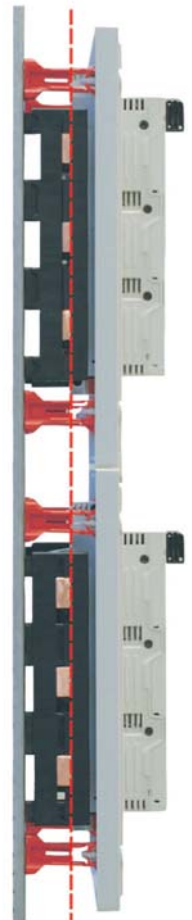
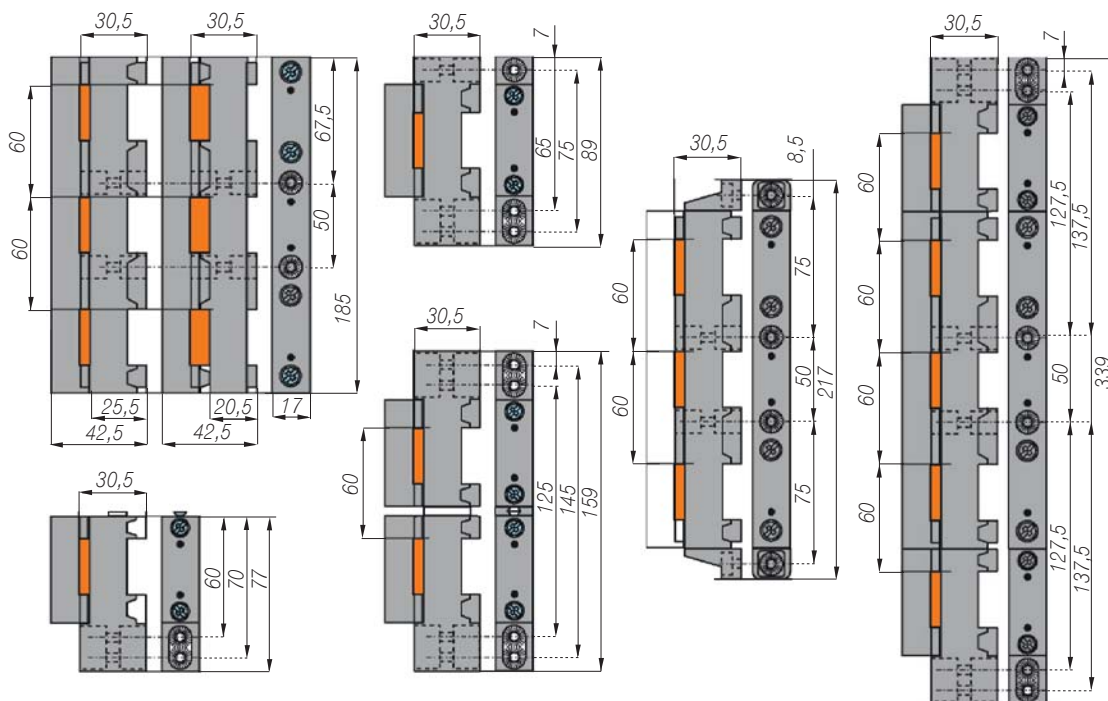


1.1 APASYS 60

APASYS 60

**BUSBAR SUPPORT**

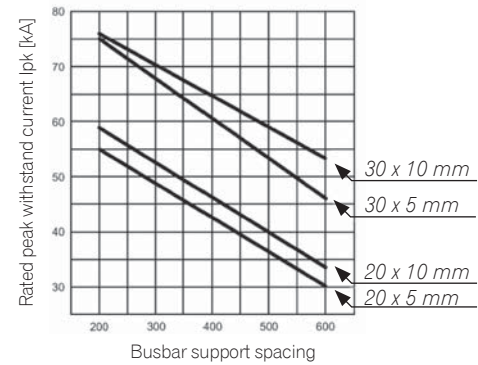
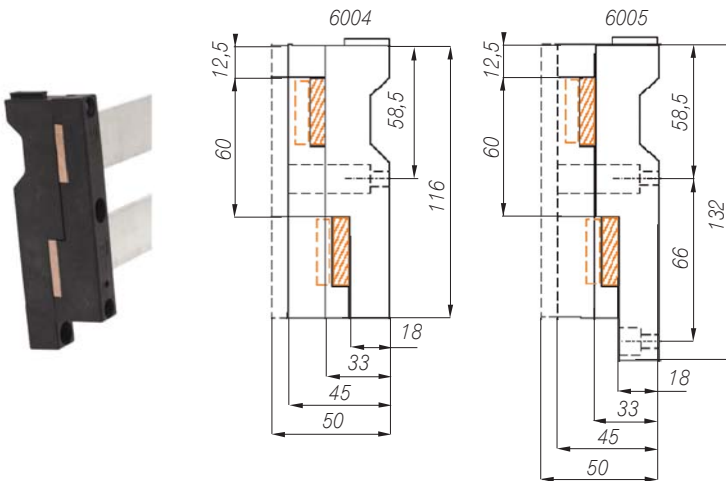
- For busbars of 12, 15, 20, 25 and 30 mm width
- Suitable for busbars 5 and 10 mm thickness
- Very versatile: min.number of components provide for a max.support assembly combination

DIMENSIONS

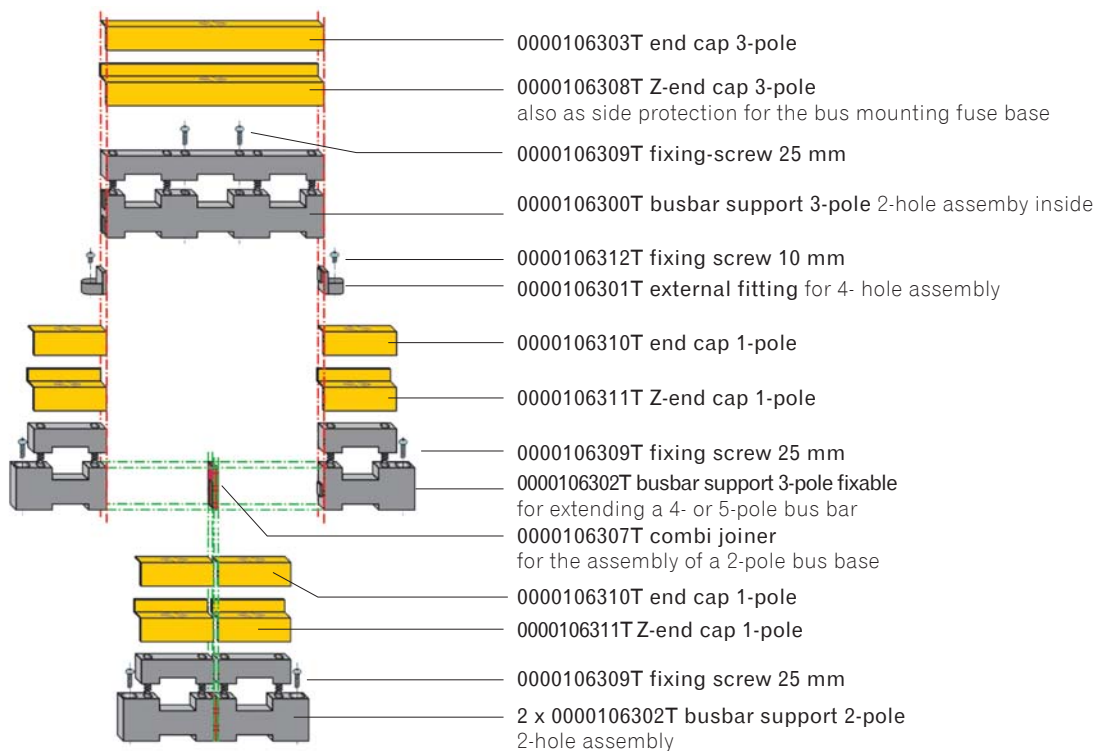
ACCESSORIES FOR APASYS 60

Table 1. VERSIONS

Item	Item No.	Weight [kg]	Packaging [pc.]
Busbar support 3-pole, 2-hole mounting inside; incl. spacer and fixing screws	0000106300T	0,121	20
External fixing with item 10 6300 incl. fixing screws for 4-hole assembly	0000106301T	0,006	10
Busbar support 1-pole, fixed to 10 6300 or for 2-pole; incl. spacer and fixing screws	0000106302T	0,048	10
Busbar support 1-pole, for single assembly; incl. spacer and fixing screws	0000106304T	0,056	10
Combi joiner; for the assembly of a 2-pole busbar with 2 X 0000106302T	0000106307T	0,004	10
End cap 3-pole; yellow with warning triangle	0000106303T	0,019	10
Z-end cap 3-pole; yellow with warning triangle	0000106308T	0,024	10
End cap 1-pole	0000106310T	0,006	10
Z-end cap 1-pole	0000106311T	0,007	20
Fixing screw 25 mm	0000106309T	0,004	20
Fixing screw 10 mm	0000106312T	0,002	10
Busbar support 2-pole; 1-hole mounting assembly	0000106004T	0,08	10
Busbar support 2-pole; 2-hole mounting assembly	0000106005T	0,09	10



Short-circuit rating diagram according to DIN EN 60439
System 60 mm
Rated operational voltage: 690 V, Rated frequency: 50 Hz





1.2 BUSBAR SUPPORT SYSTEM

BUSBAR SUPPORT FOR 100 mm and 185 mm system

- Without drilling mounting of busbar
- Busbar width 30 – 120 mm
(System 185 mm)
- Busbar width 30 – 60 mm
(System 100 mm)
- Busbar thickness: 10 mm



Table 2. TECHNICAL DATA

Item	
Rated operational voltage	1000 V AC
Rated insulation voltage	2000 V AC
Rated frequency	50 Hz
Fire classification	UL 94 V40
Creep resistance	CTI 600
Temperature withstand	150°
Glow wire	960°

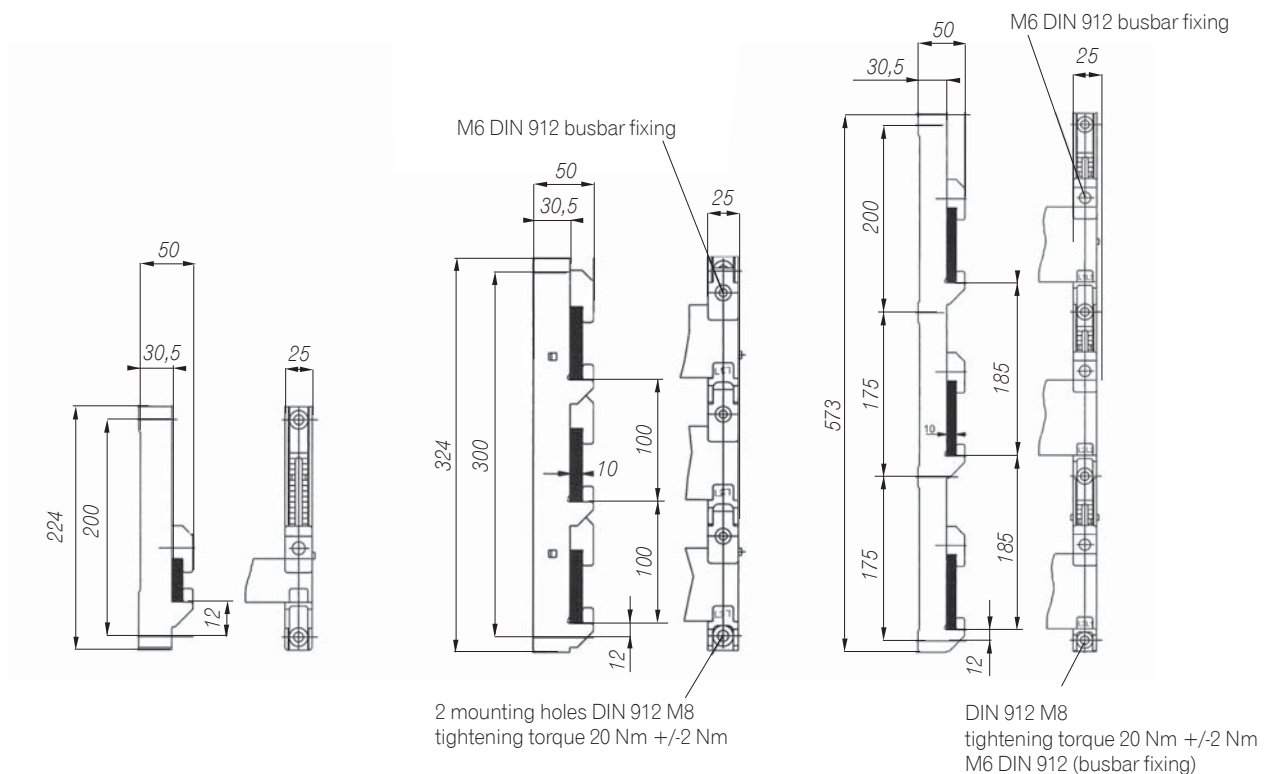


Table 3. VERSIONS

Item	Item-No.	Weight [kg]	Packaging [pc.]
3-pole busbar support system 100 mm	0000188100T	0,36	1
3-pole busbar support system 185 mm	0000188101T	0,54	1
1-pole busbar support	0000188102T	0,20	1
end cup 3-pole system 100 mm	0000188103T	0,07	1
end cup 3-pole system 185 mm	0000188104T	0,12	1

1.3 APASYS 60

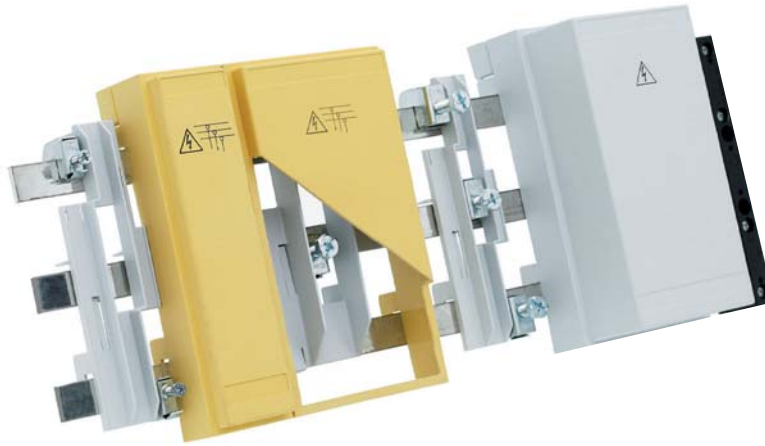
INPUT CLAMPS

APASYS 60



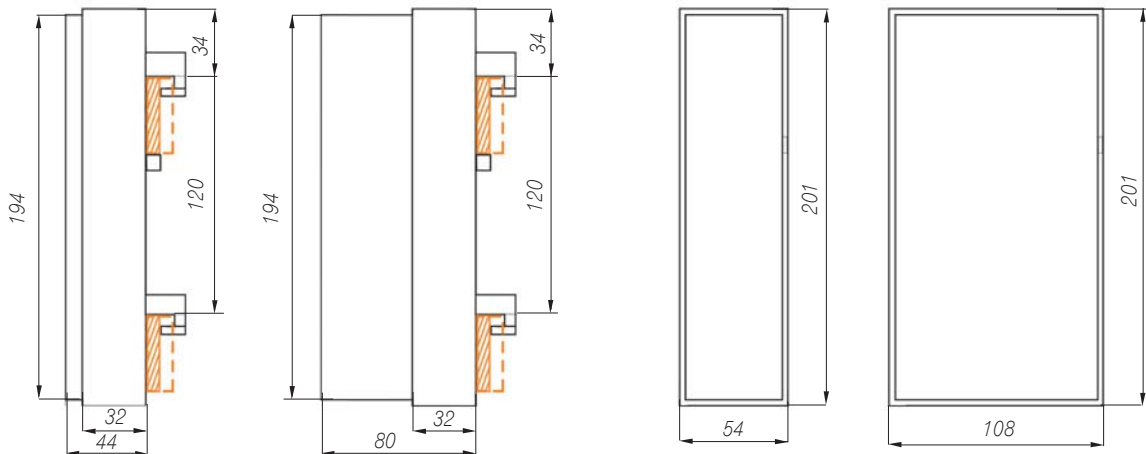
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INPUT CLAMPS



The input connections of the APASYS 60 are carried out using a universal connection clamp that matches with the cross section of the busbar protective covers provide for required safety

DIMENSIONS





ACCESSORIES FOR APASYS 60

Table 4. Connection clamps and protection covers with yellow warning triangle including conductor and busbar protection cover

Item (yellow)	Item-No.	Weight [kg]	Packaging [pc.]
54 mm wide, internal height 42 mm, for clamps 16...50 mm ²	0000106090T	0,11	2
108 mm wide, internal height 42 mm, for clamps 16...70 mm ²	0000106091T	0,17	1
108 mm wide, internal height 78 mm, for clamps 16...185 mm ²	0000106092T	0,22	1
Item (grey)	Item-No.	Weight [kg]	Packaging [pc.]
54 mm wide, internal height 42 mm, for clamps 16...50 mm ²	0000106096T	0,11	2
108 mm wide, internal height 42 mm, for clamps 16...70 mm ²	0000106097T	0,17	1
108 mm wide, internal height 78 mm, for clamps 16...185 mm ²	0000106098T	0,22	1

Table 5. Busbar protection cover, grey

Item	Item-No.	Weight [kg]	Packaging [pc.]
54 mm wide, internal height 42 mm ²	0000106033T	0,09	2
108 mm wide, internal height 42 mm ²	0000106034T	0,12	1
108 mm wide, internal height 78 mm ²	0000106035T	0,12	1



Table 6. Pressure clamps

for 5 mm busbars thickness	Item-No.	Weight [kg]	Packaging [pc.]
1,5...16 mm ²	0000116051T	0,03	100
1,5...35 mm ²	0000116052T	0,04	50
1,5...50 mm ²	0000116053T	0,05	50
16...70 mm ²	0000116054T	0,06	10
16...120 mm ²	0000116055T	0,09	10
16...185 mm ²	0000116056T	0,10	10
for 10 mm busbars thickness			
1,5...16 mm ²	0000116061T	0,03	100
1,5...35 mm ²	0000116062T	0,04	50
1,5...50 mm ²	0000116063T	0,05	50
16...70 mm ²	0000116064T	0,06	10
16...120 mm ²	0000116065T	0,09	10
16...185 mm ²	0000116066T	0,10	10

1.4 APASYS 60

BUS MOUNTING FUSE BASE E18

APASYS 60



- Distinctive labeling on the base
- Low loss stainless steel terminal clamps
- Contact protection shroud on the sides
- Clip on rear touch protection shroud

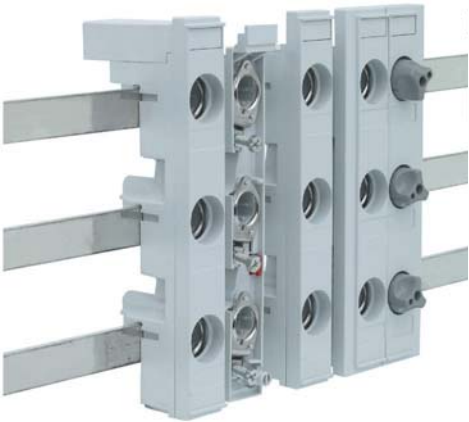


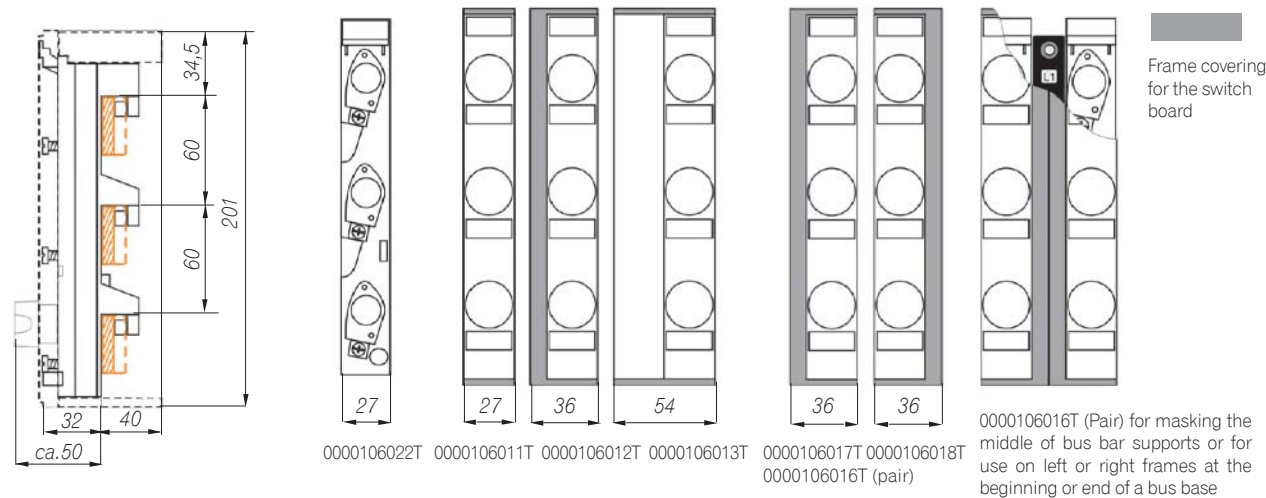
Table 7. TECHNICAL DATA

3-pole ; DIN 49524	
For D0-fuse links	2...63A DIN 49522
Cartridge ring adaptor	D02 DIN 49523 400 V AC/250 DC 50 kA _{eff}
Cage clamps steel	1,5...25 mm ² , 3-4 Nm
Creep resistance	CTI 600
Fire classification	UL 94-V0
Temperature withstand	200 °C
Glow wire	960 °C

Table 8. VERSIONS

Item	Item-No.	Weight [kg]	Packaging [pc.]
Bus mounting fuse base 27 mm, without cover	0000106022T	0,15	10
Bus mounting fuse base 27 mm, with cover	0000106023T	0,17	10
Bus mounting fuse base 36 mm, with cover and lateral extension	0000106028T	0,19	10
Bus mounting fuse base 54 mm, with cover and lateral extension	0000106029T	0,21	10
Cover shroud 27 mm	0000106011T	0,02	10
Cover shroud 36 mm, incl. extension	0000106012T	0,03	10
Cover shroud 54 mm, incl. extension	0000106013T	0,05	10
Shroud pair	0000106016T	0,05	10
Single left	0000106017T	0,02	10
Single right	0000106018T	0,02	10
Clip on touch protection shroud with back of hand protection	0000106026T	0,01	10

DIMENSIONS





1.5 APASYS 60

COMPONENT ADAPTOR

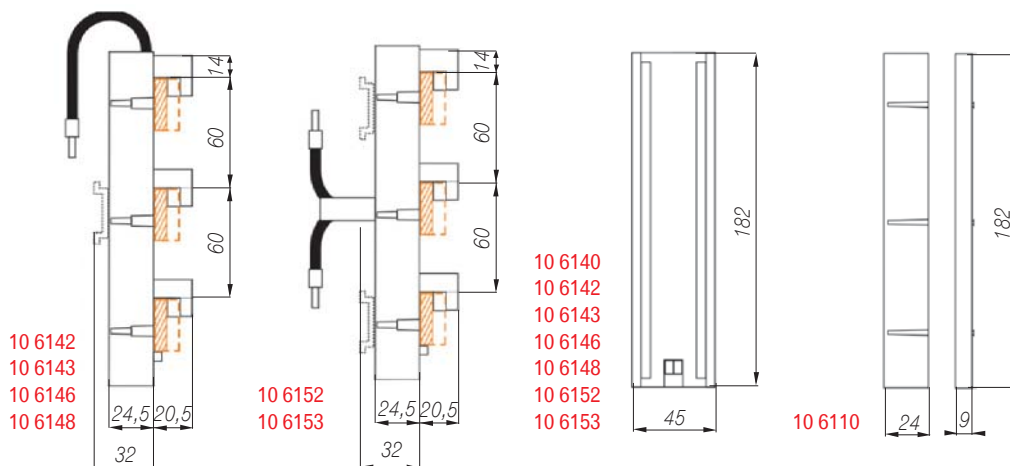
Component adaptor with steplessly adjustable mounting support and low loss dual contact



Table 9. TECHNICAL DATA

Item	Item-No.	Weight [kg]	Packaging [pc.]
$I_e = 25$ A connection cable cross section AWG 12 / 4 mm²			
1 universal mounting rail, 45 mm wide	0106142451T	0,21	2
2 universal mounting rail, 45 mm wide	0106142452T	0,23	2
1 universal mounting rail, 54 mm wide	0106142541T	0,22	2
2 universal mounting rail, 54 mm wide	0106142542T	0,24	2
$I_e = 35$ A connection cable cross section AWG 10 / 6 mm²			
1 universal mounting rail, 45 mm wide	0106143451T	0,22	2
2 universal mounting rail, 45 mm wide	0106143452T	0,24	2
1 universal mounting rail, 54 mm wide	0106143541T	0,23	2
2 universal mounting rail, 54 mm wide	0106143542T	0,25	2
1 universal mounting rail, 63 mm wide	0106143631T	0,27	2
1 universal mounting rail, 72 mm wide	0106143721T	0,29	2
2 universal mounting rail, 81 mm wide	0106143812T	0,31	2
$I_e = 63$ A connection cable cross section AWG 8 / 10 mm²			
1 universal mounting rail, 54 mm wide	0106146541T	0,26	2
2 universal mounting rail, 54 mm wide	0106146542T	0,28	2
1 universal mounting rail, 63 mm wide	0106146631T	0,30	2
1 universal mounting rail, 72 mm wide	0106146721T	0,32	2
2 universal mounting rail, 81 mm wide	0106146812T	0,34	2
$I_e = 63$ A connection cable cross section AWG 6 / 16 mm²			
1 universal mounting rail, 54 mm wide	0106148541T	0,29	2
2 universal mounting rail, 54 mm wide	0106148542T	0,31	2
1 universal mounting rail, 63 mm wide	0106148631T	0,33	2
1 universal mounting rail, 72 mm wide	0106148721T	0,35	2
2 universal mounting rail, 81 mm wide	0106148812T	0,37	2

DIMENSIONS



1.5 APASYS 60

COMPONENT ADAPTOR

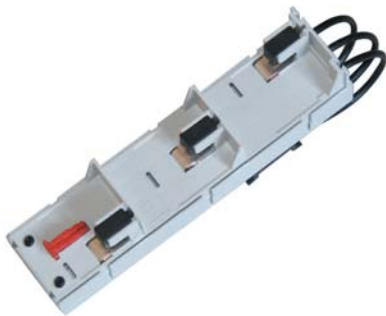


Table 10. VERSIONS

Item	Item-No.	Weight [kg]	Packaging [pc.]
I _e = 25 A; 4 mm ² connection cable cross section, AWG 12 wide 45 mm	0000106142T	0,19	4
I _e = 35 A; 6 mm ² connection cable cross section, AWG 10 wide 45 mm	0000106143T	0,20	4
I _e = 63 A; 10 mm ² connection cable cross section, AWG 8 wide 45 mm	0000106146T	0,23	4
I _e = 80 A; 16 mm ² connection cable cross section, AWG 6 wide 45 mm	0000106148T	0,26	4
I _e = 25A; Double central terminal 4 mm ² , AWG 12, 45 mm wide	0000106152T	0,20	4
I _e = 35A; Double central terminal 6 mm ² , AWG 10, 45 mm wide	0000106153T	0,25	4
Without contacts; incl. X connector for lateral extension or single mounting	0000106140T	0,15	4

ACCESSORIES

Table 11. VERSIONS

Item	Item-No.	Weight [kg]	Packaging [pc.]
Lateral extension piece for the adaptor in 9 mm steps	0000106110T	0,02	10
Universal mounting rail 45 mm wide; steplessly adjustable	0000106104T	0,02	10
Universal mounting rail 54 mm wide; steplessly adjustable	0000106105T	0,02	10
Universal mounting rail 63 mm wide; steplessly adjustable	0000106106T	0,02	10
Universal mounting rail 72 mm wide; steplessly adjustable	0000106107T	0,02	10
Universal mounting rail 81 mm wide; steplessly adjustable	0000106108T	0,02	10

Mounting rails are steplessly adjustable with dual wedge fastening



Adapter Base



9 mm side part enables an individuall extension of the base in steps of 9 mm



Mounting rail with dual wedge fastening



Position the upper mounting rail and fasten from the front.



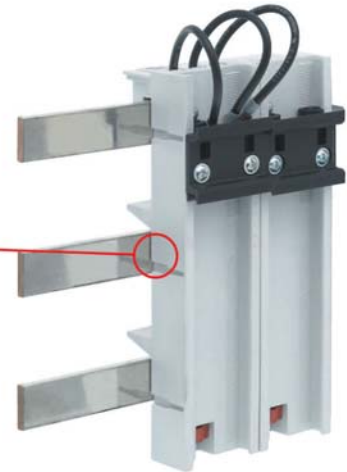
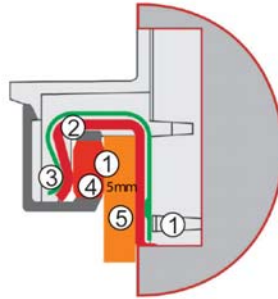
1. Place the component on the top mounting rail and connect
2. Place the component on the lower mounting rail. Position the lower mounting rail to suit component and then connect.



Fasten lower mounting rail from below

APASYS 60**Contacting**

1. Dual contacting
2. Contact clamp
3. Spring loaded steel clamp
4. 5 mm spacer clip with
5. CuAg contact
6. Busbar



The dual contacting design has low losses. Contact pressure exclusively via the metal clamp and not via plastic parts.

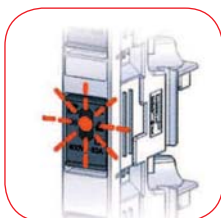
1.6 APASYS 60

RBD0/60**D0-BUS MOUNTING****SWITCH DISCONNECTOR FUSE****RBD0/60**

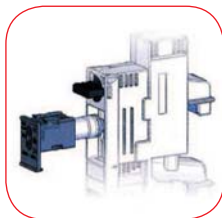
D02 – Bus mounting switch disconnecter fuse incl. fuse plug with opto electronic flashing indicator

RBD0/60 MAIN PROTECTION

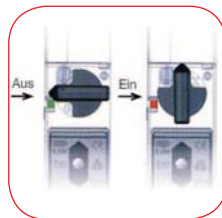
incl. monitoring relay for fuse and temperature surveillance

**Flashing indicator**

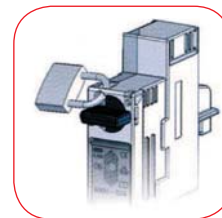
Fuse failure can be reliably identified and reported through the opto- electronic flashing indicator.

**Quick and easy fuse swap**

The fuse holder enables an easy and safe swap of the D0-fuse plug.

**Operating status display**

With the optical display on / off the operating condition can be constantly checked.

**Lock**

A simple lock to prevent unauthorized switching.

Table 12. TECHNICAL DATA

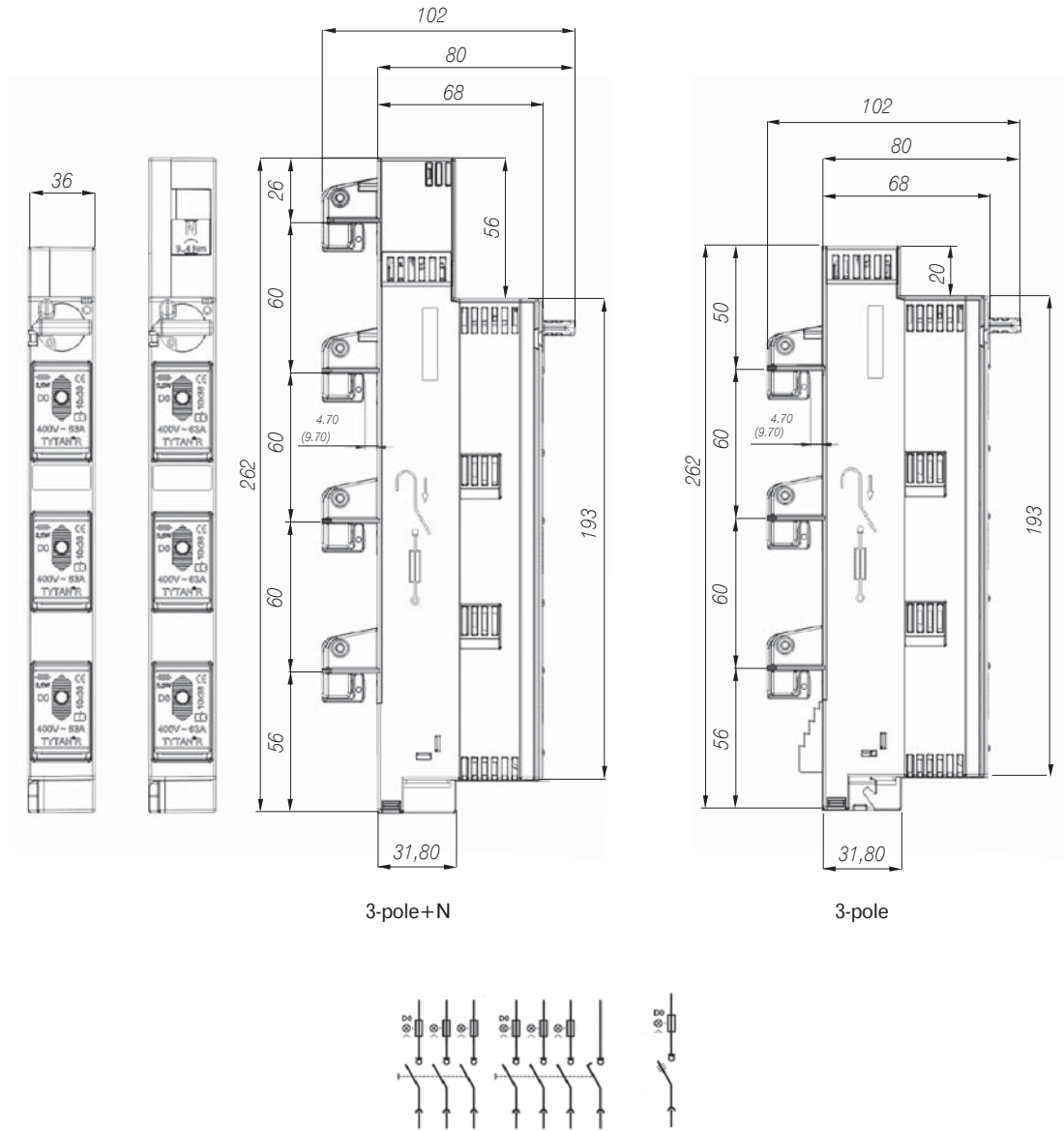
Classification	Switch disconnecter fuse
Norm	IEC 947-3
Suitable for D0 fuses DIN 49522	D01: 2, 4, 6, 10, 16; D02: 20, 25, 32, 35, 40, 50, 63AgL, gG, aM
Suitable for cylinder fuses IEC 60269-1	10 x 38 mm: 2, 4, 6, 8, 10, 12, 16, 20, 25, 32A
Fire classification / Track resistance	UL94 / V0, heating wire resistance 960 °C / CTI 600
Protection / Voltage contact protection	IP 20 / finger and back of hand proof
Rated operational voltage U_e	
-D0	400 V AC
-10 x 38	500 V AC
Rated operational current I_e	D0: 63A; 10 x 38: 32 A
Over voltage category / degree of pollution	IV/3 (DIN VDE 0110)
Rated impulse withstand voltage U_{imp}	6000 V
Type of terminations	stain cage width 1,5...25 mm ² ; M_D 3,5 Nm
Rated short circuit making capacity I_{cm}	50 kA _{eff}
Utilization category	AC 22B
Dimension of busbar	width: 12 mm-30 mm; 5 or 10 mm thickness



Table 13. RBD0-VERSIONS

Item	Item-No.	Weight [kg]	Packaging [pc.]
400 V~, D0:2...63 A; 10x38: 2...32 A 400 V~,			
3-pole	0000106601T	0,40	3
3-pole+N	0000106602T	0,40	3
3-pole; with aux switch for switching status	0000106603T	0,40	3
3-pole+N; with aux switch for switching status	0000106604T	0,40	3
500 V~, 10x38: 2...25 A			
3-pole	0000106631T	0,40	3
3-pole+N	0000106632T	0,40	3
3-pole with aux switch for switching status	0000106633T	0,40	3
3-pole+N; with aux switch for switching status	0000106634T	0,40	3
Rear touch protection shroud, top and bottom	0000106626T	0,01	10
Reduction adaptor spring D0 2 to D0 1	0000101774T	0,01	12
Pad lock in clip (click) box	0000104664T	0,05	1
Short circuit plug as a disconnecter	0000101780T	0,01	3

DIMENSIONS



RBD0/60

MAIN PROTECTION

RBD0 - Main protection switch indicates fuse breaks and has the capability of transmitting a floating signal via an RJ-connection cable on the external relay. A dangerous overheating of the fuse switch can be reliably identified and reported. The serial interface on each relay has a floating signal via a relay contact. For collective disturbance monitoring it is possible to put 12 fuse switches together.



Table 14. RBD0/60 - Main protection with temperature and fuse monitoring

Item	Item-No.	Weight [kg]	Packaging [pc.]
400 V~, D0:2...63A; 10x38: 2...32A			
RBD0/60 H1 3-pole	0000106701T	0,40	3
RBD0/60 H1 3-pole+N	0000106702T	0,40	3
500 V~, 10x38: 2...25A			
RBD0/60 H1 3-pole	0000106731T	0,40	3
RBD0/60 H1 3-pole+N	0000106732T	0,40	3
Mains protection – relay module HR11; 3 switch contacts (reports: blown fuse, excess temperature, on/off)	0000103711T	0,12	1
Mains protection – relay module HR12; 2 switch contacts (reports: blown fuse, excess temperature)	0000103712T	0,12	1
Mains protection – relay module HR13; 1 switch contact (reports: blown fuse, excess temperature)	0000103713T	0,12	1
RJ-connection cable 200 mm	0000103730T	0,01	1
RJ-connection cable 500 mm	0000103731T	0,01	1
RJ-connection cable 1000 mm	0000103732T	0,01	1
Power Supply 100-240 V AC/24 V DC 10 W	0000103700T	0,10	1
Power Supply 100-240 V AC/24 V DC 30 W	0000103701T	0,25	1



RBD0/60 main protection device indicating operation of the fuse, transmitting information about it's status to external automation devices with RJ cable.
Indication and transmission of device status when overheating.

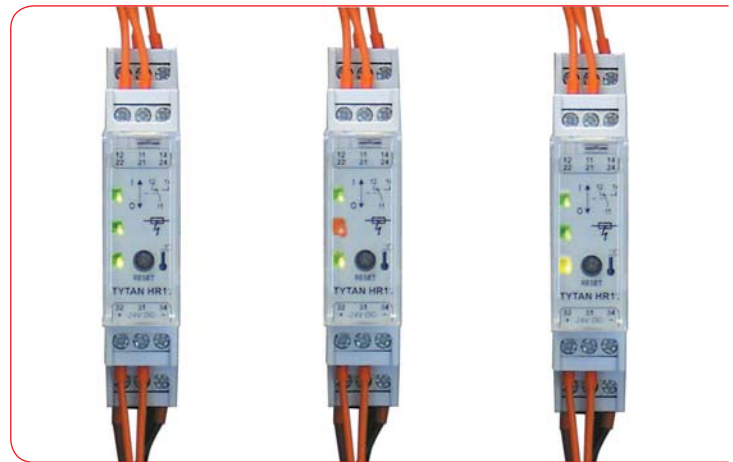
Voltage free relay contact in relay interface.

Possibility of summary indication of errors when devices are connected in series. Summary signal may contain data about status of up to 12 devices.

Relay supply voltage: 24 V DC

Relay output terminals:

- fuse-link blown signalisation-1 terminal
- excess temperature-1 terminal
- on/off status-1 terminal

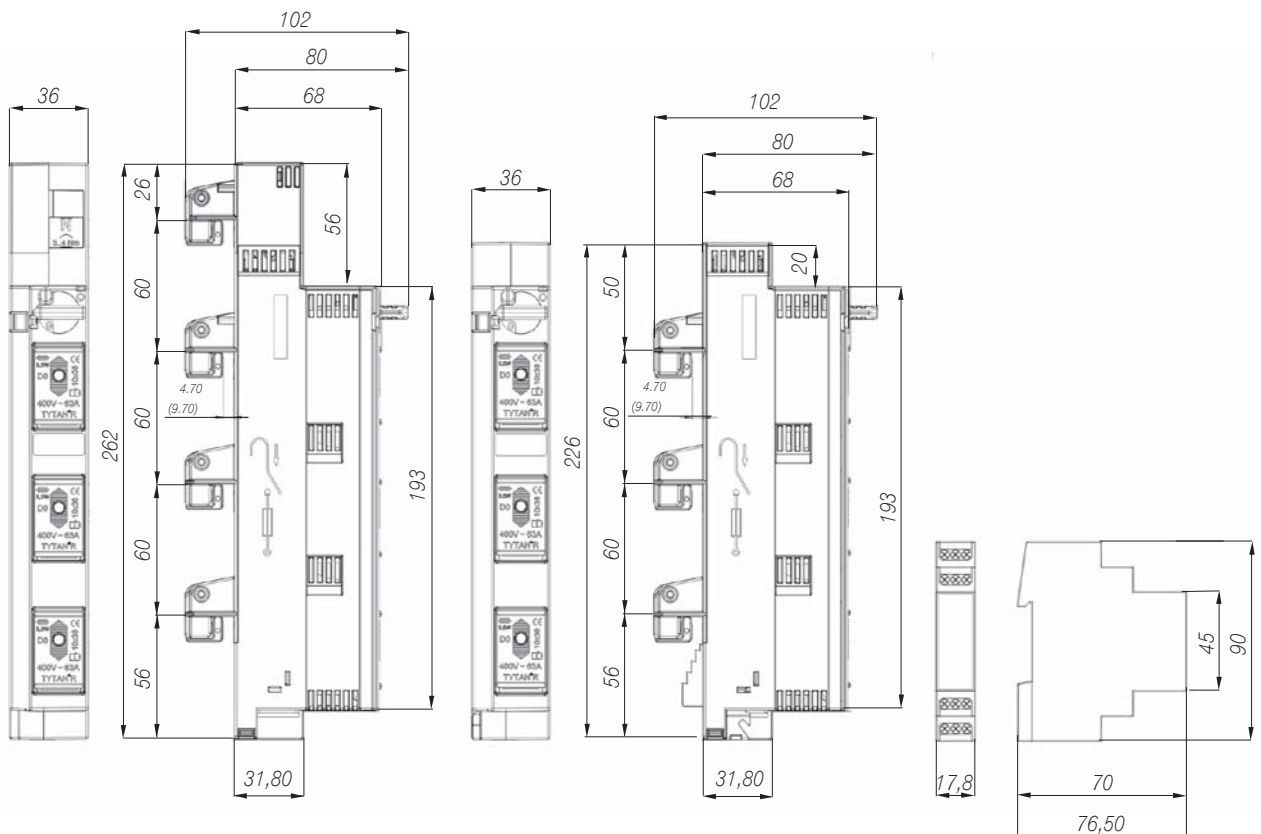


no errors

fuse blown

temperature
exceeded

DIMENSIONS



1.7 APASYS 60

PARTITIONS AND SHROUDS

APASYS 60



The partition and shroud system offers comprehensive contact protection for the APASYS 60

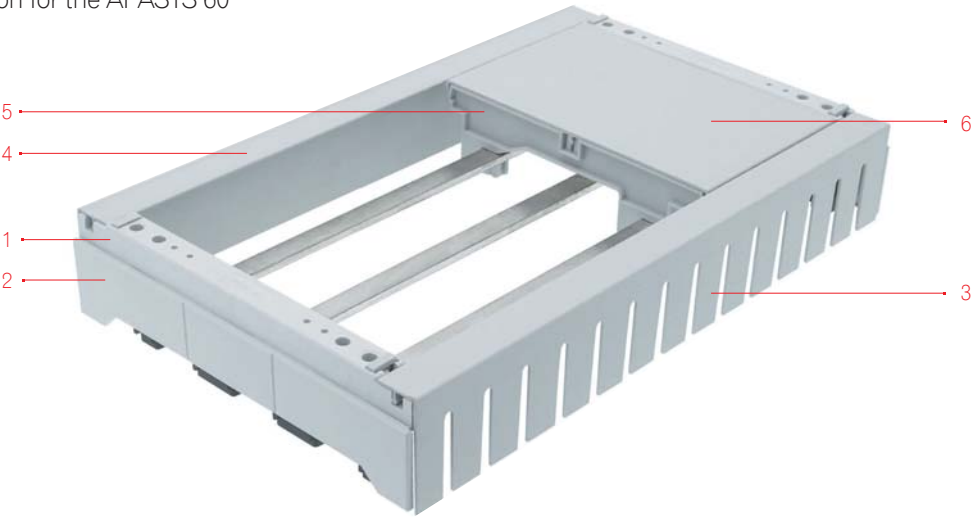


Table 15. Covering systems

Item		Item-No.	Weight [kg]	Packaging [pc.]
1. Cover shroud for bus bar support	0000106300T	0000126070T	0,06	10
2. Side cover for partition and shroud system		0000126071T	0,03	10
3. Slitted shroud	2000 mm long	0000126072T	0,47	5
	1000 mm long	0000126076T	0,24	
4. Closed shroud	2000 mm long	0000126073T	0,53	5
	1000 mm long	0000126077T	0,26	
5. Panel mount; support edge 32 mm		0000126074T	0,04	10
6. Panel cover 1000 mm long		0000126075T	0,64	2

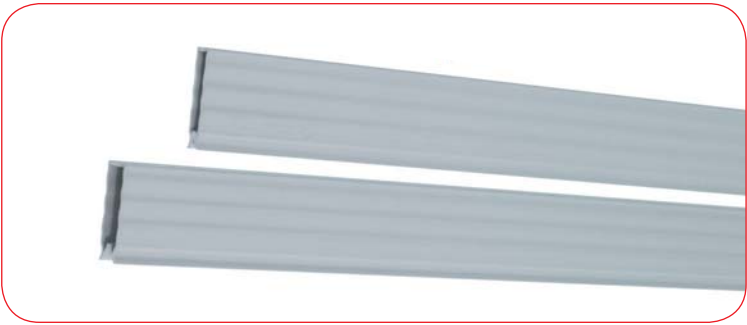


Table 16. Busbar covering

Item	Item-No.	Weight [kg]	Packaging [pc.]
Cover strips for 5 mm busbar 1 m long	0000156076T	0,07	10
Cover strips for 10 mm busbar 1 m long	0000156077T	0,09	10



1.8 FUSE BASE

D0-FUSE BASE E18

TECHNICAL DATA:

1 – 3-pole; DIN 49524
for D0-fuses 2...63 A
400 V AC/250 V DC
With snap on or screw on mounting
Terminations:
Stainless steel cage clamp 1,5-35 mm

35 mm
DIN rail unit

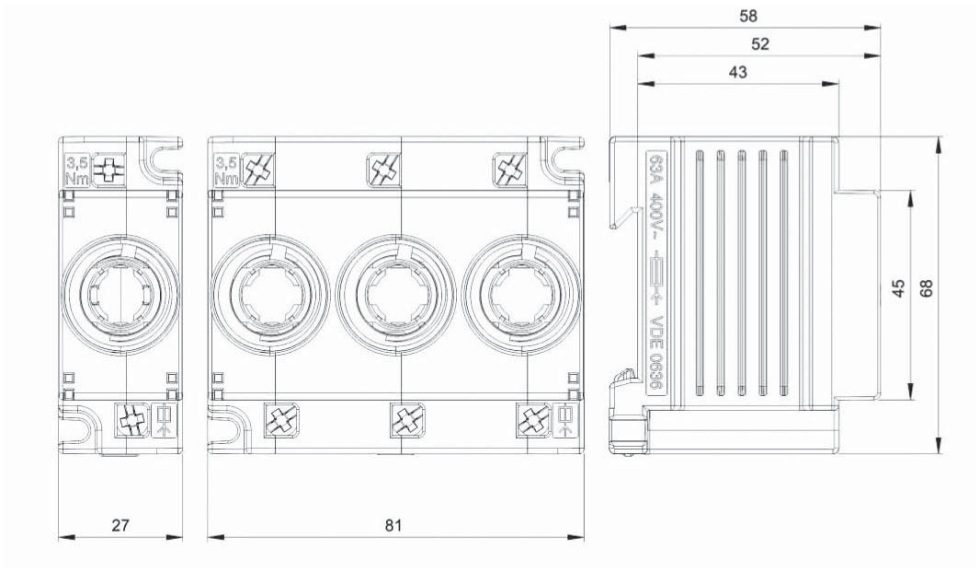


Table 17.

Item	Item-No.	Packaging
1-pole	0000104011T	20
3-pole	0000104013T	6

Screw caps: Table 21. Accessories
For use D01 fuse, you need use the adaptor ring 0000121401T

DIMENSIONS



2. FUSES

D02-FUSE LINKS

The handy spare click box mounted in the distribution rack provides immediate swapping of fuses and reswitching



Table 18. D0 Fuse links in snap box for DIN rail

Item	Item-No.	Weight [kg]	Packaging [pc.]
12X 2A D01 in a box 1,5TE	0000101202T	0,10	1/24
12X 4A D01 in a box 1,5TE	0000101204T	0,10	1/24
12X 6A D01 in a box 1,5TE	0000101206T	0,10	1/24
12X 10A D01 in a box 1,5TE	0000101210T	0,11	1/24
12X 13A D01 in a box 1,5TE	0000101213T	0,11	1/24
12X 16A D01 in a box 1,5TE	0000101216T	0,11	1/24
12X 20A D02 in a box 3TE	0000101220T	0,18	1/12
12X 25A D02 in a box 3TE	0000101225T	0,18	1/12
12X 32A D02 in a box 3TE	0000101232T	0,19	1/12
12X 35A D02 in a box 3TE	0000101235T	0,21	1/12
12X 40A D02 in a box 3TE	0000101240T	0,21	1/12
12X 50A D02 in a box 3TE	0000101250T	0,22	1/12
12X 63A D02 in a box 3TE	0000101263T	0,22	1/12
Complete range 13X12 fuse link sets 2-63A	0000101200T	2,10	1



Table 19. D0 Fuse links

Item	Item-No.	Weight [kg]	Packaging [pc.]
D01 2A	0000100202T	0,10	50
D01 4A	0000100204T	0,10	50
D01 6A	0000100206T	0,10	50
D01 10A	0000100210T	0,11	50
D01 13A	0000100213T	0,11	50
D01 16A	0000100216T	0,11	50
D02 20A	0000100220T	0,18	50
D02 25A	0000100225T	0,18	50
D02 32A	0000100232T	0,19	50
D02 35A	0000100235T	0,21	50
D02 40A	0000100240T	0,21	50
D02 50A	0000100250T	0,22	50
D02 63A	0000100263T	0,22	50





D0-CARTRIDGE RING ADAPTOR INSERT

DIN 49523 DIN VDE 0636 IEC 60269



Table 20. Cartridge ring adaptor in snap box for DIN rail

Item	Item-No.	Weight [kg]	Packaging [pc.]
12X 2A D01 in a box 1,5TE	0000101302T	0,03	1/24
12X 4A D01 in a box 1,5TE	0000101304T	0,03	1/24
12X 6A D01 in a box 1,5TE	0000101306T	0,03	1/24
12X 10A D01 in a box 1,5TE	0000101310T	0,03	1/24
12X 2A D02 in a box 3TE	0000101402T	0,03	1/24
12X 4A D02 in a box 3TE	0000101404T	0,03	1/24
12X 6A D02 in a box 3TE	0000101406T	0,03	1/24
12X 10A D02 in Box 3TE	0000101410T	0,03	1/24
12X 16A D02 in a box 3TE	0000101416T	0,03	1/24
12X 20A D02 in a box 3TE	0000101420T	0,03	1/24
12X 25A D02 in a box 3TE	0000101425T	0,03	1/24
12X 35A D02 in a box 3TE	0000101435T	0,03	1/24
12X 50A D02 in a box 3TE	0000101450T	0,03	1/24
Complete range 13X12 cartridge ring adaptors 2-50A	0000101300T	0,39	1

Table 21. Cartridge ring adaptor

Item	Item-No.	Weight [kg]	Packaging [pc.]
D01 E14 2A	0000100302T	0,001	50
D01 E14 4A	0000100304T	0,001	50
D01 E14 6A	0000100306T	0,001	50
D01 E14 10A	0000100310T	0,001	50
D02 E18 2A	0000100402T	0,001	50
D02 E18 4A	0000100404T	0,001	50
D01 E18 6A	0000100406T	0,001	50
D01 E18 10A	0000100410T	0,001	50
D01 E18 16A	0000100416T	0,001	50
D01 E18 20A	0000100420T	0,001	50
D01 E18 25A	0000100425T	0,001	50
D01 E18 35A	0000100435T	0,001	50
D01 E18 50A	0000100450T	0,001	50



Table 22. Accessories

Item	Item-No.	Weight [kg]	Packaging [pc.]
Cartridge ring adaptor wrench	0000101400T	0,02	1/12
Screw cap D02 plastic with testing hole	0000126024T	0,01	20
Adapter ring for D01 fuse links	0000121401T	0,01	20
Screw cap D02 porcelain with testing hole	0000127024T	0,01	20
Screw cap D01 porcelain with testing hole	0000127025T	0,01	20



0000121401T



3. FUSE SWITCH DISCONNECTORS

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 23. TECHNICAL DATA

Parameters			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	7,5			
Rated frequency		Hz	50-60			-
Mechanical durability		Number of cycles	1600			
Electrical durability			200			
IP degree of protection			IP 20			
Size of fuse links			000			

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



RBP 000 pro-S

Table 24. 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
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	63-823427-001
RBP 000 pro-SD	cable terminal-bottom, for connection of conductors with bare ends	frame clamps	63-823427-002

Table 25. 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* 3 Nm*

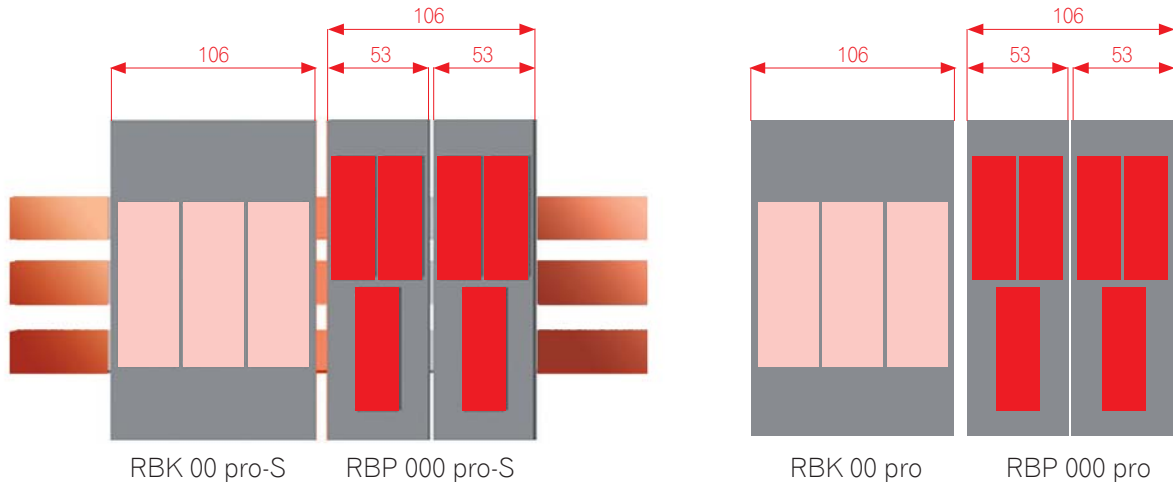
For stranded conductors using cable ferrules is recommended

*using of tension wrench is recommended



Saves space in the switchboard

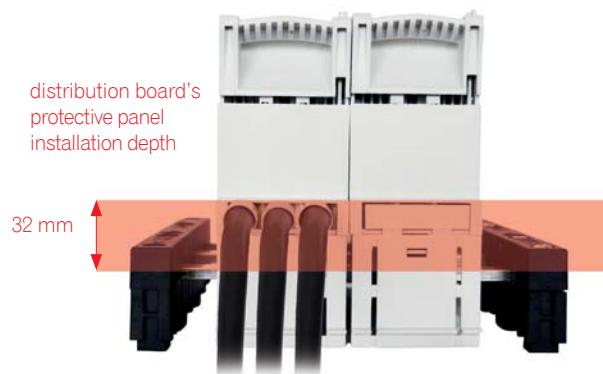
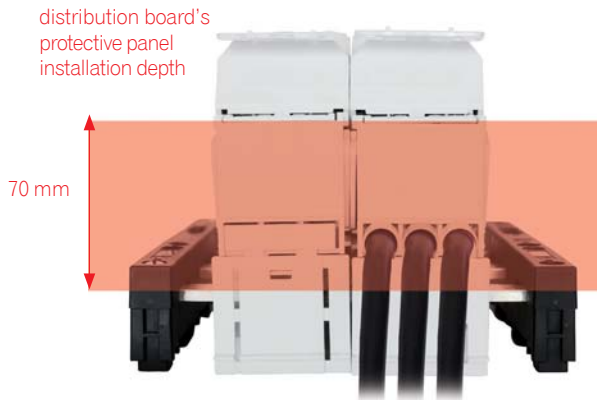
RBP 000 pro-S (RBP 000 pro) width dimensions is equal to half the width of RBK 00 pro-S (RBK 00 pro), so we can install more disconnectors (keeping a certain width of the switchboard) to protect individual circuits in the switchboard.



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

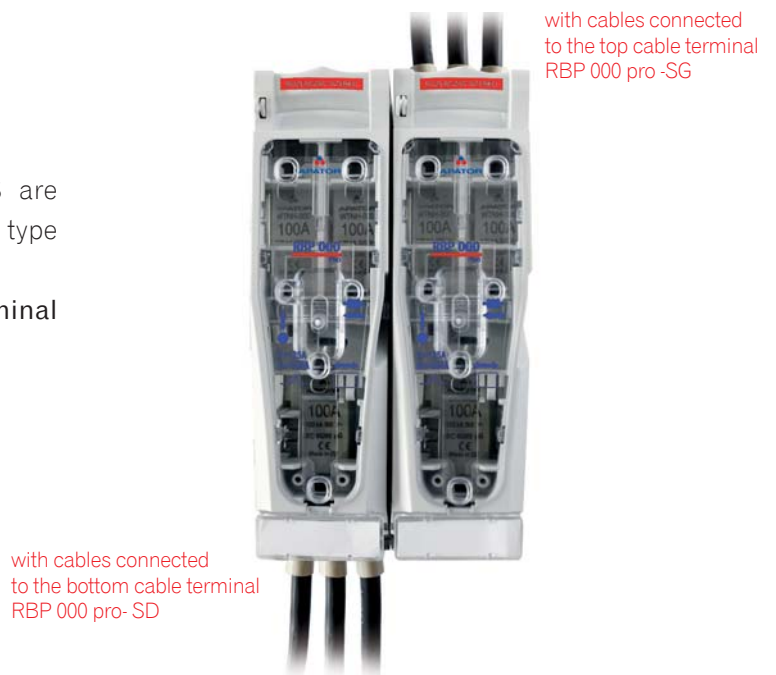
covering system at 32 mm depth



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

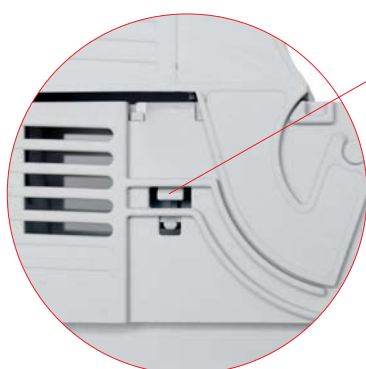
RBP 000 pro-SG-with top cable terminal



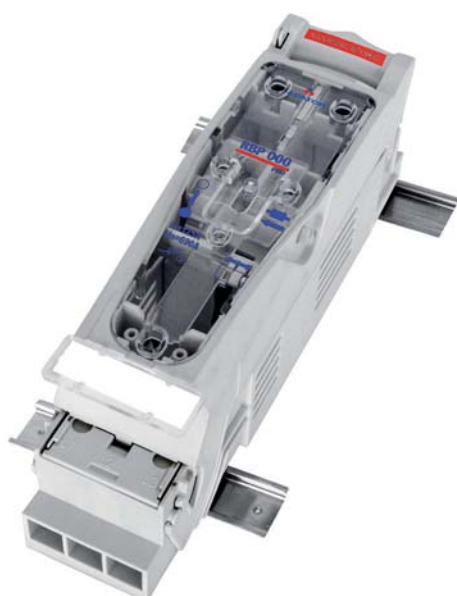
Fuse switch disconnecter RBP 000 pro-S has special cavity in it's main base encasing busbar system's support.



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



hole for leading of wires connected to microswitch



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



RBP 000 pro
mounting on plate



FUSE SWITCH DISCONNECTORS



RBK 000 pro-S



RBK 00 pro-S

RBK 1 pro-SG
RBK 1 pro-SDRBK 2 pro-SG
RBK 2 pro-SD

Table 26. RBK FUSE SWITCH DISCONNECTORS TECHNICAL DATA

Parameters		RBK 000 pro-S					RBK 00 pro-S			RBK 1 pro-S			RBK 2 pro-S			
Rated thermal current I _{th} ¹⁾		A	160					160			250			400		
Rated voltage U _n		V	690					690			690			690		
Utilization category		-	AC-23B	AC-22B	AC-22B	AC-21B	DC-21B	AC-23B	DC-21B	DC-22B	AC-23B	AC-22B	DC-22B	AC-23B	DC-21B	DC-22B
Rated switching current I _e		A	100	100	160	160	160	160	160	160	250	250	250	400	400	400
Rated switching voltage U _e		V	400	690	400	690	250	690	440	250	400	690	250	690	440	220
Rated short circuit making current	690 V	kA	25				15	80	20		80		25	80	15	20
	400 V							100			100					
Rated short circuit withstand current	690 V	kA	100				15	80	20		80		25	80		
	400 V							100			100					
Rated insulation voltage U _i		V	1000					1000			1000			1000		
Rated power dissipation		W	12					12			32			45		
Rated impulse withstand voltage U _{imp}		kV	8					8			8			12		
Rated frequency		Hz	50-60				-	50-60	-		50-60		-	50-60	-	
Mechanical durability	Number of cycles		2000					1600			1600			1000		
Electrical durability			300					200			200			200		
IP degree of protection		IP	20					20			30			20		
Weight		kg	~0,6 ~0,9					~0,7 ~0,90			~2,5			~3 ~4,50		
Size of fuse links		-	000					00			1			2		

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

Tabela 27. VERSIONS

Item	For installation on to 60 mm busbar system	Cable terminal	Article No.
RBK 000 pro-S			
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
RBK 00 pro-S			
RBK 00 pro-SG-M	cable terminal – bottom, for connection of conductors with lug terminals	M8 screws	63-823259-121
RBK 00 pro-SD-M	cable terminal – top, 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
RBK 1 pro-S			
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	Bottom cable terminals, for connection of sector-shaped conductors	V- clamps	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
RBK 2 pro-S			
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

RBK can be made with electronic fuse monitoring module.

Details and dimensions of RBK are contained in SWITCHGEAR PRODUCT CATALOGUE.

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SWITCHGEAR



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