APATOR


# APASYS 60

## 60 mm busbar system

Product catalogue 2018

energy distribution

# Who are we?

We supply modern equipment as well as measurement and reading systems for all types of media (electricity, water, gas, heat) and solutions in the area of automation and energy distribution.

Apator creates a capital group of several domestic and foreign companies - manufacturers of measuring devices and suppliers of ICT solutions.

We operate on the basis of original solutions developed by our own R&D departments. The result of our engineers' work is over 200 patents, inventions and industrial designs registered in Poland and abroad.

Our companies have more than 2400 employees. We make sure that they can feel safe, comfortable, develop their professional competences, as well as their own interests and passions.

APATOR

APATOR POWOGAZ
- Apator Metra
- Apator Metroteks
- Apator Miitors
- Apator Telemetria
- Teplovodomer

APATOR RECTOR

PAFAL GRUPA APATOR

APATOR ELKOMTECH

APATOR GmbH

APATOR METRIX
- George Wilson Industries
  - Inda

APATOR CONTROL

APATOR MINING

# TABLE OF CONTENTS


1. APASYS 60
- 60 mmbusbar system **04**

**1.1** Busbar supports 05
- For the 60 mm system 05
- For the 100 mm and 185 mm system 07
- For the 60 mm, 100 mm and 185 mm system 08

**1.2** Power adapter 10

**1.3** E18 fuse base 12

**1.4** Adapter for component assembly 13

**1.5** RBD0/60
Fuse-switch disconnectors for D0 fuse links for mounting on a busbar 16

**1.6** Partitions and shrouds 20

2. Fuse switch disconnectors **21**

3. MODULAR EQUIPMENT
- mounted on a DIN 35 mm rail **26**

**3.1** D0 - TYTAN® II fuse switch disconnector 27
- D0 - TYTAN® II fuse links 29

**3.2** D01 - TYTAN® I fuse switch disconnector 31

**3.3** D0 - TYTAN® T fuse switch disconnector 33

**3.4** D0 - CORON® 2 fuse switch disconnector 34

**3.5** D0 - E18 fuse base 35

4. D0 fuse links **36**

# APASYS 60

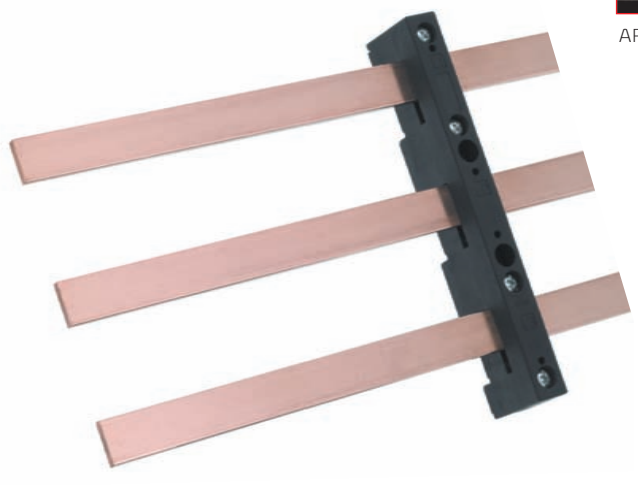
## 60 mm busbar system

APASYS 60 is a modular energy distribution system for currents up to 630 A. The snap-on clip of all components provides great flexibility for the installation and expansion of solutions based on it.

# 1.1 BUSBAR SUPPORTS for the 60 mm system

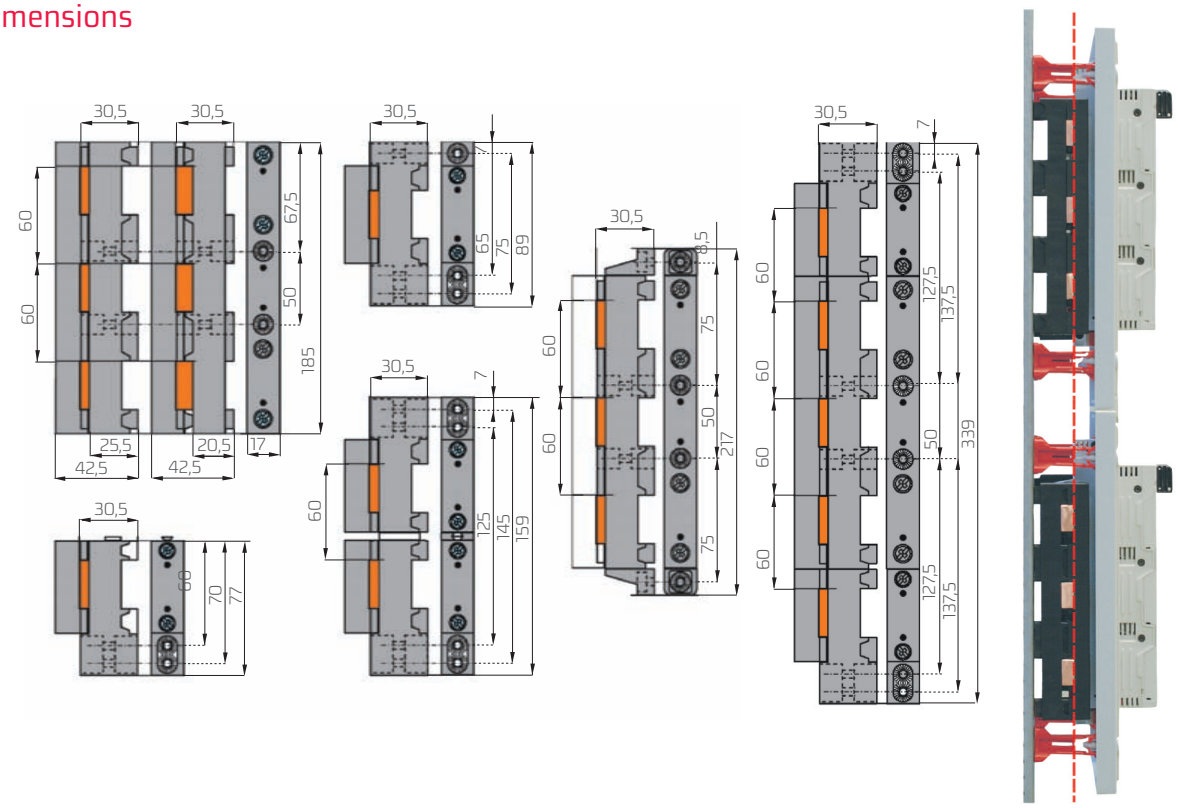
APASYS 60

For busbars 12, 15, 20, 25 and 30 mm wide and 5 or 10 mm thick. Extremely versatile: the minimum number of components makes it possible to achieve a very large number of supporting set combinations.





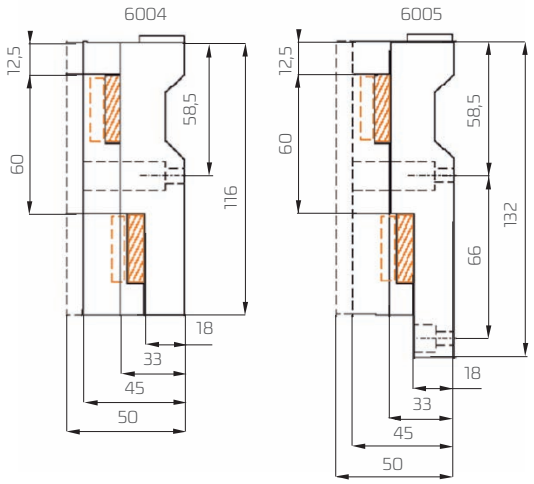
## Dimensions

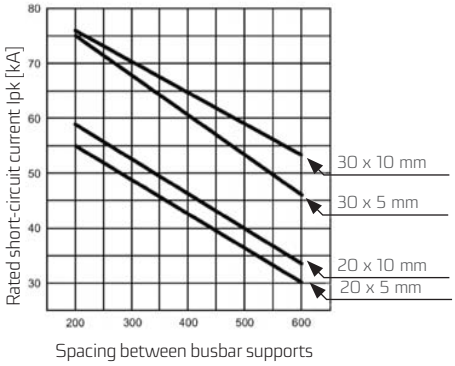


# APASYS 60 ACCESSORIES

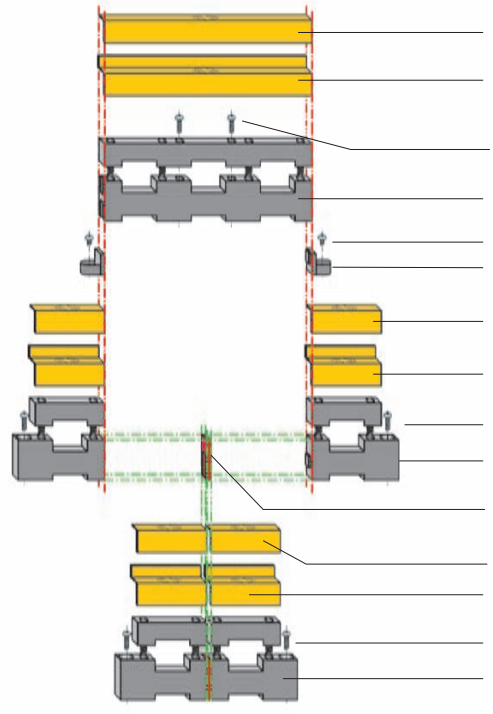
Table 1. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 3-pole, 2 mounting holes inside, washers and screws included | 0000106300T | 0,121 | 20 |
| Component included with 0000106300T, with a mounting hole for devices requiring 4 mounting holes, screws included | 0000106301T | 0,006 | 10 |
| 1-pole, included with 0000106300T or to build a 2-pole support, washers and screws included | 0000106302T | 0,048 | 10 |
| 1-pole for a single device, washers and screws included | 0000106304T | 0,056 | 10 |
| Connector, allows mounting 2 x 0000106302T to receive 2-pole support | 0000106307T | 0,004 | 10 |
| 3-pole terminal cover, yellow with a warning triangle | 0000106303T | 0,019 | 10 |
| 3-pole terminal cover, Z type, yellow with a warning triangle | 0000106308T | 0,024 | 10 |
| 1-pole terminal cover | 0000106310T | 0,006 | 10 |
| 1-pole terminal cover, Z type | 0000106311T | 0,007 | 20 |
| Screw 25 mm | 0000106309T | 0,004 | 20 |
| Screw 10 mm | 0000106312T | 0,002 | 10 |
| 2-pole Busbar support; 1 mounting hole | 0000106004T | 0,08 | 10 |
| 2-pole Busbar support; 2 mounting holes | 0000106005T | 0,09 | 10 |




Short-circuit resistance diagram according to DIN EN 60439
60 mm busbar system
Rated operating voltage: 690 V, Rated frequency: 50 Hz



**0000106303T pole terminal cover**

**0000106308T 3-pole Z type terminal cover**
can also be used as a side cover for the fuse substrcuture
for mounting on a busbar

**0000106309T screw 25 mm**

**0000106300T 3-pole busbar support,**
2 mounting holes inside

**0000106312T screw 10 mm**

**0000106301T component included with the mouting hole**
for devices requiring 4 mounting holes

**0000106310T 1-pole terminal cover**

**0000106311T 1-pole terminal cover, Z type**

**0000106309T screw 25 mm**

**0000106302T busbar support included with the 3-pole support**
for the expansion of a 4-pole or 5-pole support

**0000106307T connector,** allows mounting 2 x 0000106302T
to receive 2-pole support

**0000106310T 1-pole terminal cover**

**0000106311T 1-pole terminal cover Z type**

**0000106309T screw 25 mm**

**2 x 0000106302T 2-pole busbar support,**
for devices with 2 mounting holes



energy distribution

# For the 100 mm and 185 mm system

- Busbar mouting without openings
- Busbar width 30 – 120 mm (185 mm system)
- Busbar width 30 – 60 mm (100 mm system)
- Busbar thickness: 10 mm



Table 2. Technical data

| Classification | |
|---|---|
| Rated operating voltage | 1000 V AC |
| Rated insulation voltage | 2000 V AC |
| Frequency | 50 Hz |
| Flammability | UL 94 V40 |
| Track resistance | CTI 600 |
| Continuous operation | 150° |
| Glowing wire attempt | 960° |

## Dimensions

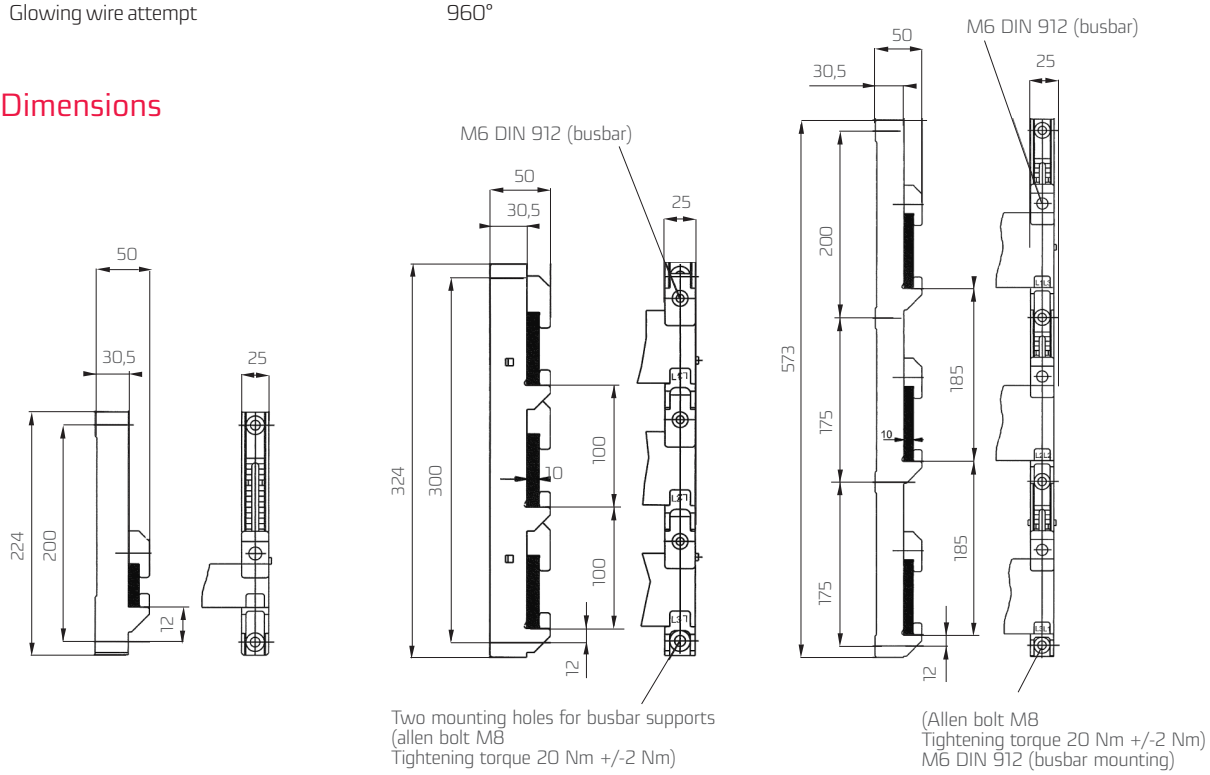



Table 3. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 3-pole busbar support, spacing 100 mm | 0000188100T | 0,36 | 1 |
| 3-pole busbar support, spacing 185 mm | 0000188101T | 0,54 | 1 |
| 1-pole busbar support | 0000188102T | 0,20 | 1 |
| 3-pole terminal cover, spacing 100 mm | 0000188103T | 0,07 | 1 |
| 3-pole terminal cover, spacing 185 mm | 0000188104T | 0,12 | 1 |

# For the 60 mm, 100 mm and 185 mm system

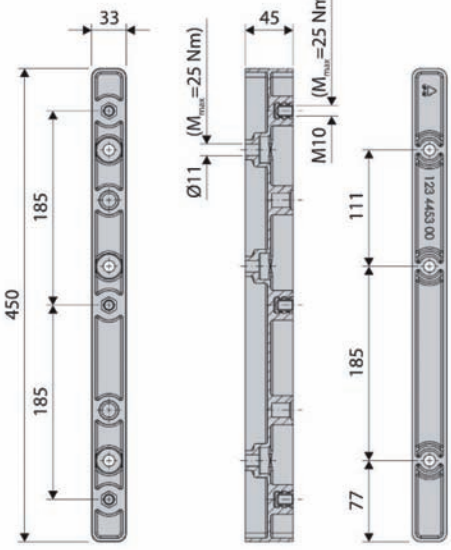
APASYS 60

- The supports are characterised by a robust construction and insulating properties, thanks to which they are used in electrical switchboards as support elements for current busbars.
- The supports allow you to mount a busbar with spacing of 60, 100, 185 mm.
- The body is made of insulating material (polyester reinforced with glass fibre), in which M10 threads are embedded (maximum tightening torque: 25 Nm).

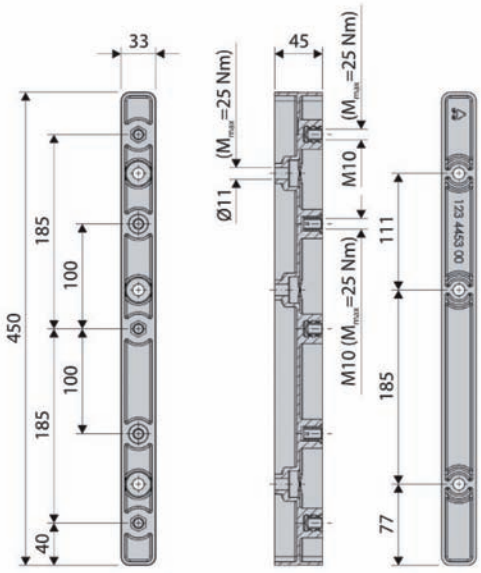
Table 4. Technical data

| Classification | |
|---|---|
| Flammability class | V0 |
| Track resistance | CTI 600 |
| Heat resistance | 960°C |

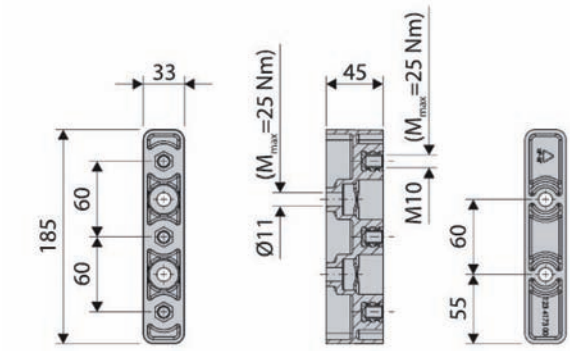
## Dimensions




M10 185
0000188105T




M10 185/100
0000188106T




M10 60
0000188107T

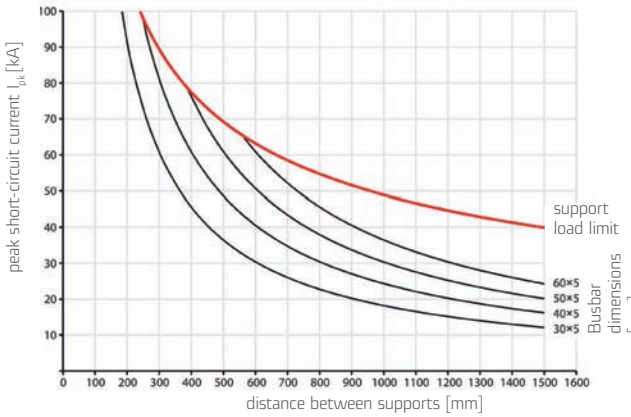


energy distribution

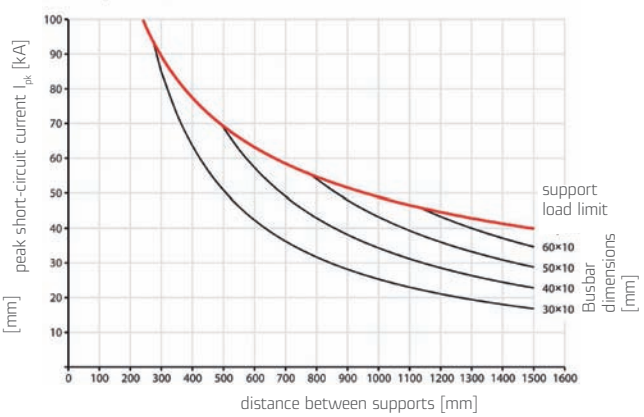
Table 5. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Busbar spacing 60 mm, 3-pole busbar support, with seated M10 nuts (M10 60) | 0000188107T | 0,23 | 1 |
| Busbar spacing 100 mm, 3-pole busbar support, with seated M10 nuts (M10 185/100 mm) | 0000188106T | 0,48 | 1 |
| Busbar spacing 185 mm, 3-pole busbar support, with seated M10 nuts (M10 185 mm) | 0000188105T | 0,46 | 1 |

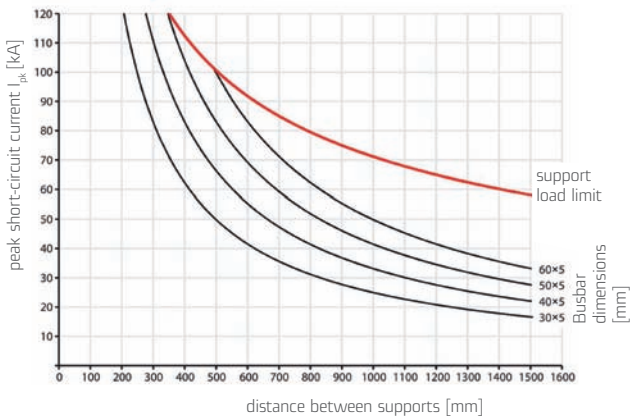
Short-circuit resistance of 5 mm thick busbar depending on the distance between supports (busbar spacing 100 mm)



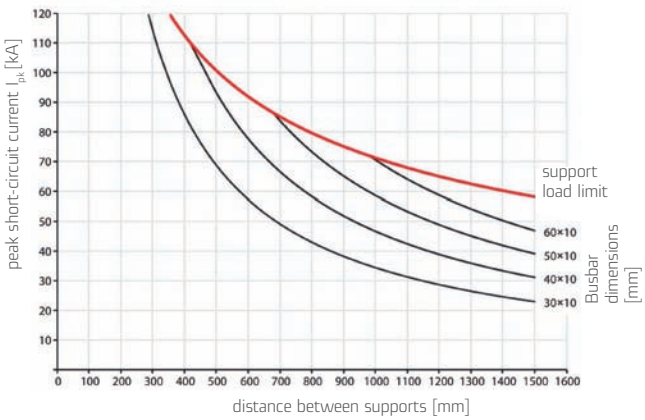

Short-circuit resistance of 10 mm thick busbar depending on the distance between supports (busbar spacing 100 mm)




Short-circuit resistance of 5 mm thick busbar depending on the distance between supports (busbar spacing 185 mm)



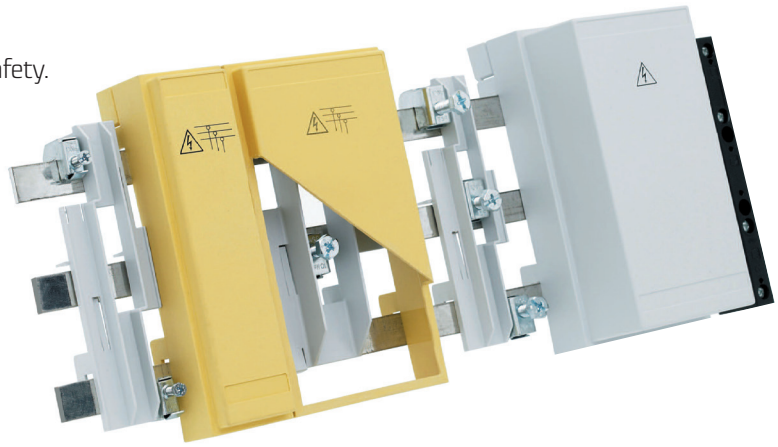

Short-circuit resistance of 10 mm thick busbar depending on the distance between supports (busbar spacing 185 mm)



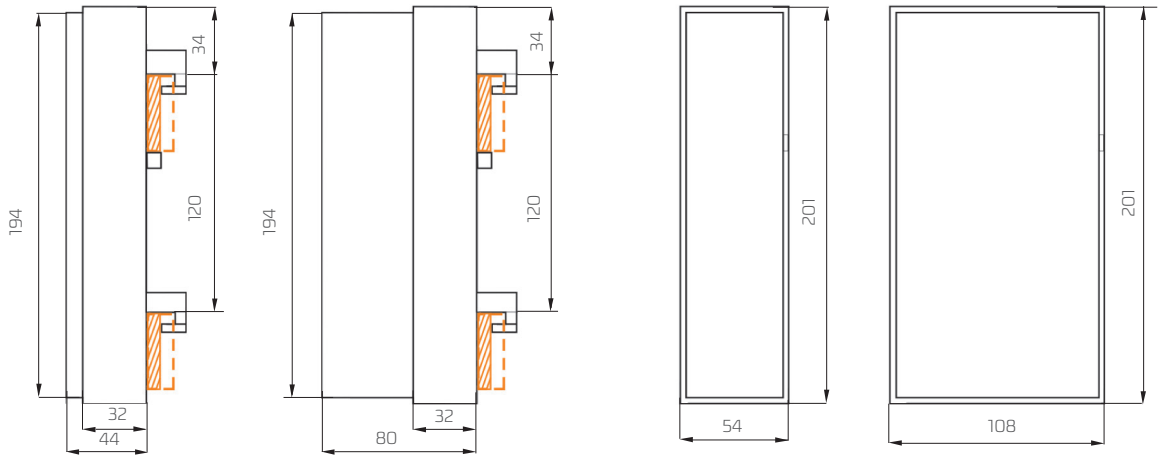
# 1.2 POWER ADAPTER

APASYS 60

The APASYS 60 power supply connections
are implemented using a universal hook terminal
that adapts to the busbar section.
Protective covers provide the required level of safety.



## Dimensions






energy distribution

# APASYS 60 ACCESSORIES



Table 6. Power adapters (without hook terminals) with warning triangle for busbar and cable protection

| Versions (yellow colour) | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Width 54 mm, internal height 42 mm, for terminals 16..50 mm² | 0000106090T | 0,11 | 2 |
| Width 108 mm, internal height 42 mm, for terminals 16..70 mm² | 0000106091T | 0,17 | 1 |
| Width 108 mm, internal height 78 mm, for terminals 16..185 mm² | 0000106092T | 0,22 | 1 |
| **Versions (gray colour)** | **Index no.** | **Weight [kg]** | **Package [pcs.]** |
| Width 54 mm, internal height 42 mm, for terminals 16..50 mm² | 0000106096T | 0,11 | 2 |
| Width 108 mm, internal height 42 mm, for terminals 16..70 mm² | 0000106097T | 0,17 | 1 |
| Width 108 mm, internal height 78 mm, for terminals 16..185 mm² | 0000106098T | 0,22 | 1 |

Table 7. Busbar bridge cover, grey colour

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Width 54 mm, internal height 42 mm | 0000106033T | 0,09 | 2 |
| Width 108 mm, internal height 42 mm | 0000106034T | 0,12 | 1 |
| Width 108 mm, internal height 78 mm | 0000106035T | 0,12 | 1 |

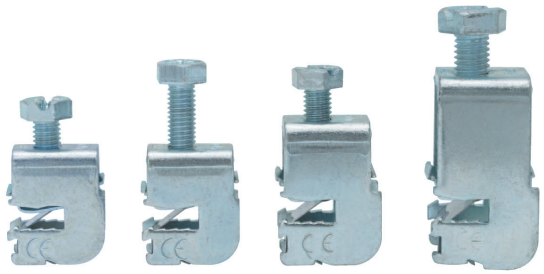


Table 8. Hook terminals

| Versions for 5 mm thick busbars | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 1,5...16 mm² | 0000116051T | 0,03 | 100 |
| 1,5...35 mm² | 0000116052T | 0,04 | 50 |
| 1,5...50 mm² | 0000116053T | 0,05 | 50 |
| 16...70 mm² | 0000116054T | 0,06 | 10 |
| 16...120 mm² | 0000116055T | 0,09 | 10 |
| 16...185 mm² | 0000116056T | 0,10 | 10 |
| **Versions for 10 mm thick busbars** | | | |
| 1,5...16 mm² | 0000116061T | 0,03 | 100 |
| 1,5...35 mm² | 0000116062T | 0,04 | 50 |
| 1,5...50 mm² | 0000116063T | 0,05 | 50 |
| 16...70 mm² | 0000116064T | 0,06 | 10 |
| 16...120 mm² | 0000116065T | 0,09 | 10 |
| 16...185 mm² | 0000116066T | 0,10 | 10 |

# 1.3 E18 FUSE BASE
## for mounting on a busbar

APASYS 60

- Ability to add a description of each phase.
- Stainless steel connection terminals with low power loss.
- Side insulation covers to protect against accidental contact.
- Snap-on rear insulation cover.

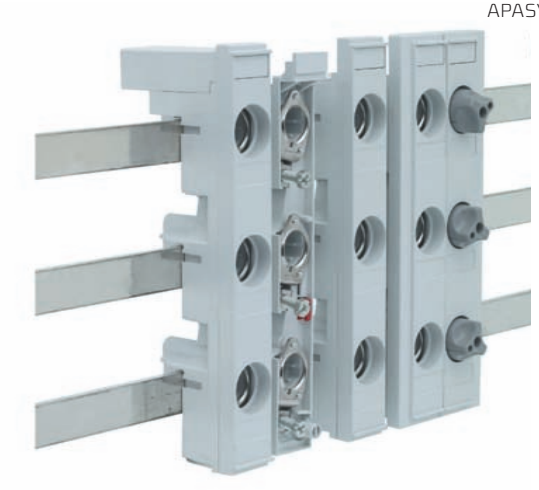


Table 9. Technical data

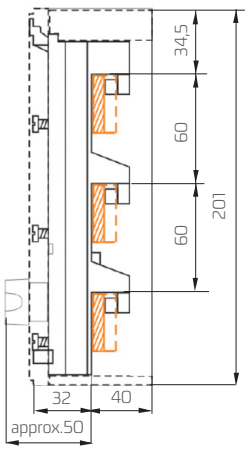
| 3-POLE ; DIN 49524 | |
|---|---|
| For DO fuse links | 2...63A DIN 49522 |
| Adapter - holder | DO2 DIN 49523 400 V AC/250 DC 50 $kA_{eff}$ |
| Steel frame terminal | 1,5...25 $mm^2$, 3-4 Nm |
| Track resistance | CTI 600 |
| Flammability class | UL 94-V0 |
| Heat resistance | 200 °C |
| Glowing wire attempt | 960 °C |

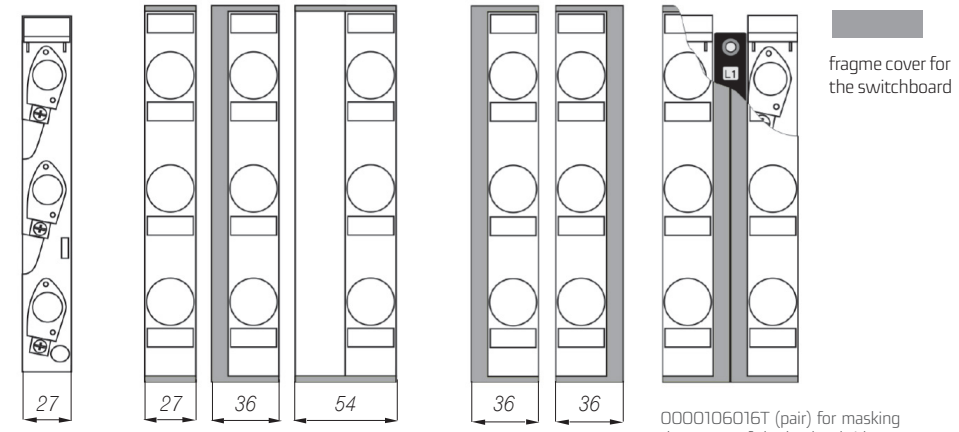
Table 10. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Fuse substructure for mounting on a busbar 27 mm, without cover | 0000106022T | 0,15 | 10 |
| Fuse substructure for mounting on a busbar 27 mm, with cover | 0000106023T | 0,17 | 10 |
| Fuse substructure for mounting on a busbar 36 mm, with cover and side widener | 0000106028T | 0,19 | 10 |
| Fuse substructure for mounting on a busbar 54 mm, with coverandside widener | 0000106029T | 0,21 | 10 |
| Cover 27 mm | 0000106011T | 0,02 | 10 |
| Cover 36 mm, includes side widener | 0000106012T | 0,03 | 10 |
| Cover 54 mm, includes side widener | 0000106013T | 0,05 | 10 |
| Pair of covers | 0000106016T | 0,05 | 10 |
| single cover left | 0000106017T | 0,02 | 10 |
| single cover right | 0000106018T | 0,02 | 10 |
| Snap-on cover providing protection against contact | 0000106026T | 0,01 | 10 |

Fuse substructure should be equipped with fuse carriers (see Table 44. Accessories)

## Dimensions




0000106022T 0000106011T 0000106012T 0000106013T 0000106017T 0000106018T
0000106016T (pair)

fragme cover for the switchboard

0000106016T (pair) for masking the centre of the busbar bridge supports or as a frame cover for the supports at the end or the beginning of the busbar



energy distribution

# 1.4 ADAPTER FOR COMPONENT ASSEMBLY



APASYS 60 component adapter with infinitely adjustable mounting support and double terminals with low power loss

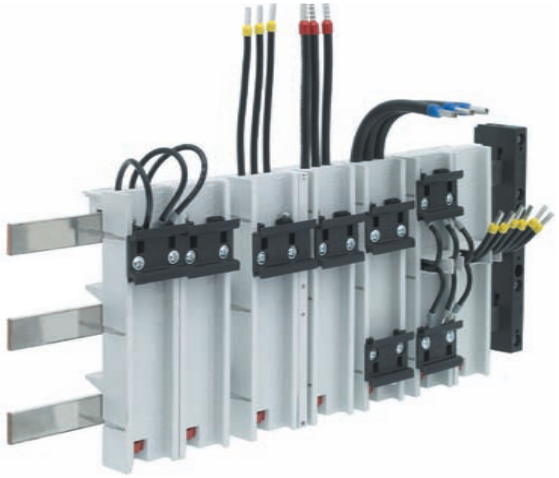
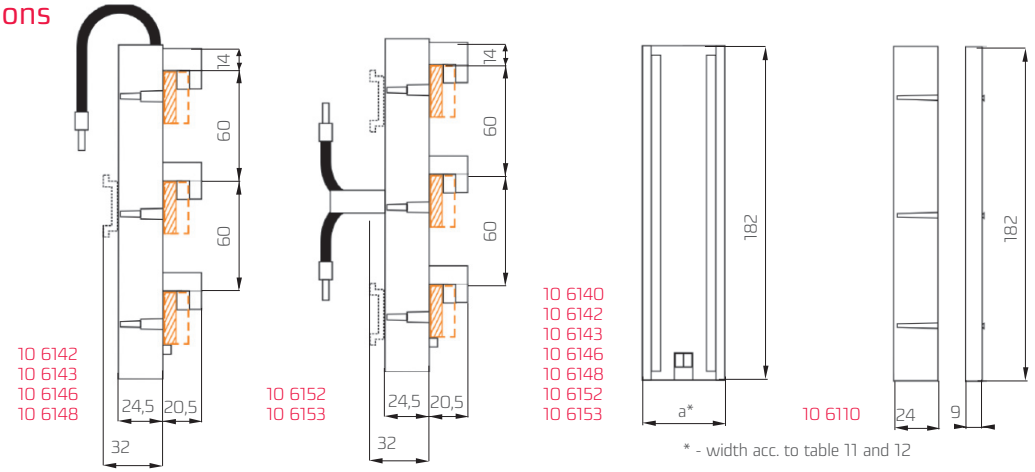


Table 11. Versions

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

## Dimensions




* - width acc. to table 11 and 12

# COMPONENTS MOUNTING ADAPTER

Table 12. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| $I_e$ = 25 A; 4 mm² section of the connection cable, AWG 12 width 45 mm | 0000106142T | 0,19 | 4 |
| $I_e$ = 35 A; 6 mm² section of the connection cable, AWG 10 width 45 mm | 0000106143T | 0,20 | 4 |
| $I_e$ = 63 A; 10 mm² section of the connection cable, AWG 8 width 45 mm | 0000106146T | 0,23 | 4 |
| $I_e$ = 80 A; 16 mm² section of the connection cable, AWG 6 width 45 mm | 0000106148T | 0,26 | 4 |
| $I_e$ = 25A; double central terminal 4 mm², AWG 12 width 45 mm | 0000106152T | 0,20 | 4 |
| $I_e$ = 35A; double central terminal 6 mm², AWG 10 width 45 mm | 0000106153T | 0,25 | 4 |
| Without terminals, contains connector X forsideextension or single mounting | 0000106140T | 0,15 | 4 |

## ACCESSORIES

Table 13. Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Side element for adapter expansion, width 9 mm | 0000106110T | 0,02 | 10 |
| Universal mounting rail, width 45 mm, stepless adjustment | 0000106104T | 0,02 | 10 |
| Universal mounting rail, width 54 mm, stepless adjustment | 0000106105T | 0,02 | 10 |
| Universal mounting rail, width 63 mm, stepless adjustment | 0000106106T | 0,02 | 10 |
| Universal mounting rail, width 72 mm, stepless adjustment | 0000106107T | 0,02 | 10 |
| Universal mounting rail, width 81 mm, stepless adjustment | 0000106108T | 0,02 | 10 |

The mounting rails are steplessly adjustable.

Adapter base

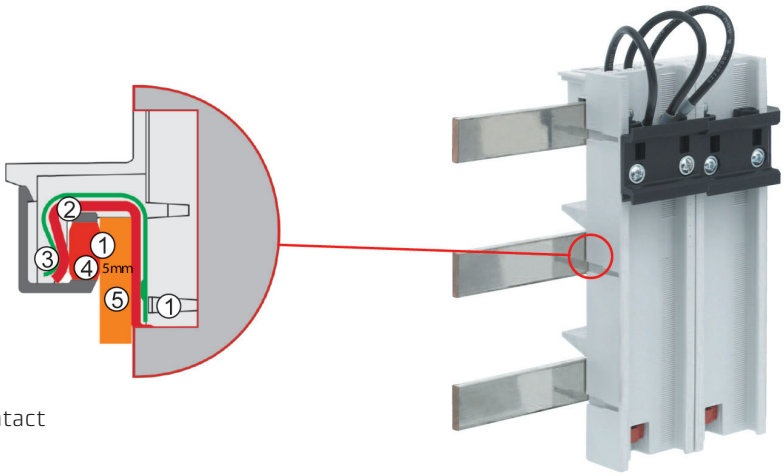
Side element, width 9 mm allows to expand adapter base by 9 mm

Mounting rail installed on the base by means of a double wedge element

Set up the mounting rail in the correct position and tighten the screws

1. Place the APASYS 60 component on the top mounting rail and connect the power supply
2. Place the second component on the bottom mounting rail. Adjust the mounting rail to match the position of the component and connect it

Tighten the bottom mounting rail




## Double contact area

1. Double contact area
2. Terminal
3. Steel spring loaded terminal block
4. 5 mm connection terminal with CuAg contact
5. Busbar

Double contact area design provides low power loss.
The pressure is applied only by the metal parts and not the plastic.

# 1.5 RBDO/60

## Fuse switch disconnector for DO fuse links for busbar mounting

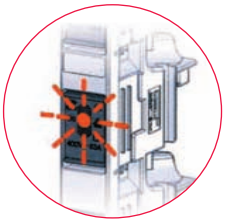
APASYS 60

### RBDO/60

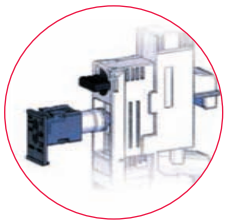
Disconnector with DO2 fuse switches for installation on a busbar with fuse switches holders with an optoelectrical light indicator

### RBDO/60 primary security

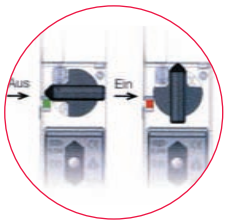
with relay for monitoring fuse link condition and temperature



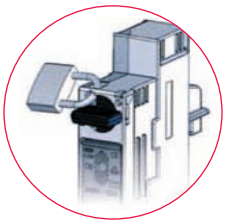
**Light indicator**
Damage to the fuse link is reliably detected and indicated by an optoelectrical indicator



**Quick and easy replacement of the fuse link**
Fuse switch holder allows for quick and easy replacement of the DO fuse link




**Operating status indicator**
The colour of the operating status indicator enables an immediate evaluation of the operating status of the connector



**Padlock**
The padlock prevents unauthorized change of the disconnector switch-on status

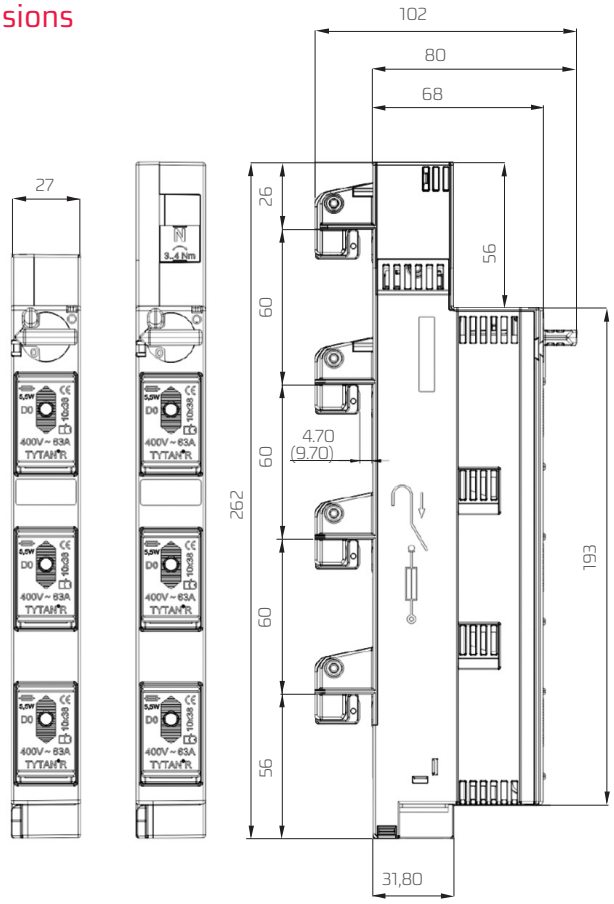
Table 14. Technical data

| Classification | Fuse switch disconnector |
|---|---|
| Standard | IEC 947-3 |
| Adapted to DO fuse links DIN 49522 | DO1: 2, 4, 6, 10, 16 AgL, gG, aM<br>DO2: 20, 25, 32, 35, 40, 50, 63 AgL, gG, aM |
| Adapted to cylindrical fuse links IEC 60269-1 | 10 x 38 mm: 2, 4, 6, 8, 10, 12, 16, 20, 25, 32A |
| Flammability class/track resistance | UL94 / V0, glowing wire attempt 960 °C / CTI 600 |
| Degree of protection/touch protection | IP 20 / protection against finger and palm touch |
| Rated switching voltage $U_e$ | |
| -DO | 400 V AC |
| -10 x 38 | 500 V AC |
| Rated switching current $I_e$ | DO: 63A; 10 x 38: 32 A |
| Overvoltage category/pollution degree | IV/3 (DIN VDE 0110) |
| Rated impulse withstand voltage $U_{imp}$ | 6000 V |
| Terminal type | stainless steel frame terminal 1,5...25 $mm^2$;<br>$M_D$ 3,5 Nm, cross recess |
| Rated short-circuit switch-on capability $I_{cm}$ | 50 $kA_{eff}$ |
| Utilization category | AC 22B |
| Busbar dimensions | width: 12 mm-30 mm; thickness: 5 mm and 10 mm |

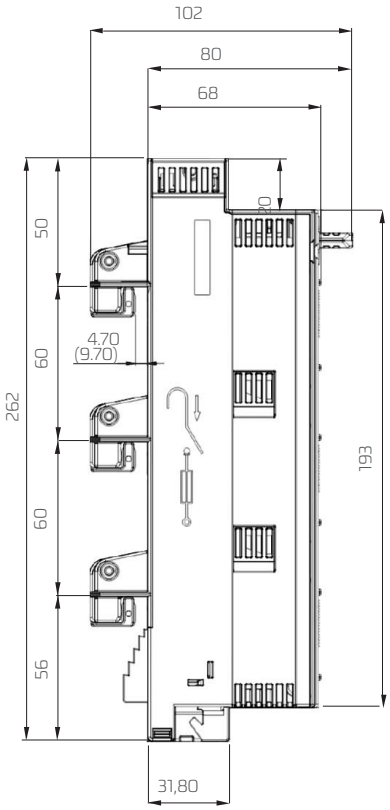
Table 15. RBDO - Versions

| Position | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| **400 V~, DO:2...63 A; 10x38: 2...32 A 400 V~,** | | | |
| 3-pole | 0000106601T | 0,40 | 3 |
| 3-pole + neutral pole N | 0000106602T | 0,40 | 3 |
| 3-pole with microswitch for switching status signalising | 0000106603T | 0,40 | 3 |
| 3-pole + neutral pole N with microswitch for switching status signalising | 0000106604T | 0,40 | 3 |
| **500 V~, 10x38: 2...25 A** | | | |
| 3-pole | 0000106631T | 0,40 | 3 |
| 3-pole + neutral pole N | 0000106632T | 0,40 | 3 |
| 3-pole with microswitch for switching status signalising | 0000106633T | 0,40 | 3 |
| 3-pole + neutral pole N with microswitch for switching status signalising | 0000106634T | 0,40 | 3 |
| Rear contact guard, top and bottom | 0000106626T | 0,01 | 10 |
| Adapter reducing spring for the DO1 and DO2 fuse link | 0000101774T | 0,01 | 12 |
| Padlock in busbar snap-on container | 0000104664T | 0,05 | 1 |
| Pin used as a solid link | 0000101780T | 0,01 | 3 |

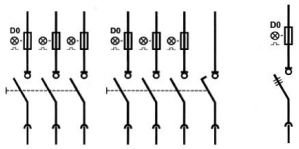
## Dimensions




3-pole+N




3-pole



# RBDO/60

## Primary security

APASYS 60

RBDO - 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 16. RBDO/60 - main protection with control of the fuse link status and temperature

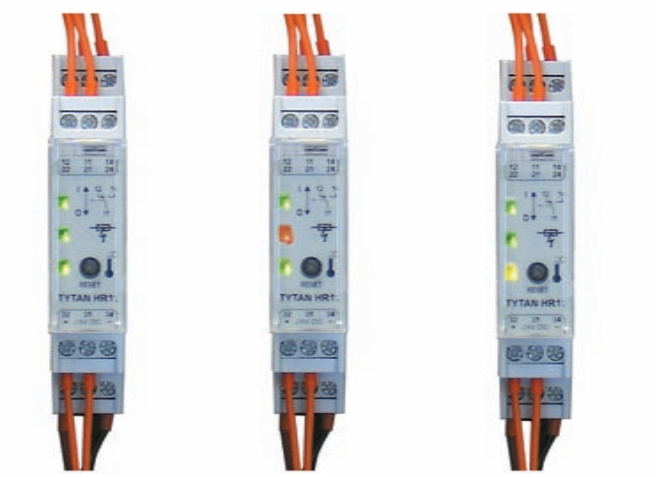
| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| **400 V~, D0:2...63A; 10x38: 2...32A** | | | |
| RBDO/60 H1 3-pole | 0000106701T | 0,40 | 3 |
| RBDO/60 H1 3-pole + neutral pole N | 0000106702T | 0,40 | 3 |
| **500 V~, 10x38: 2...25A** | | | |
| RBDO/60 H1 3-pole | 0000106731T | 0,40 | 3 |
| RBDO/60 H1 3-pole + neutral pole N | 0000106732T | 0,40 | 3 |
| Relay module of the primary security HR11; 3 -terminals (indicates fuse link burnout, overtemperature, turning on/off) | 0000103711T | 0,12 | 1 |
| Relay module of the primary security HR12; 2 -terminals (indicates fuse link burnout, overtemperature) | 0000103712T | 0,12 | 1 |
| Relay module of the primary security HR13; 1 -terminal (indicates fuse link burnout, overtemperature) | 0000103713T | 0,12 | 1 |
| RJ cable, length 200 mm | 0000103730T | 0,01 | 1 |
| RJ cable, length 500 mm | 0000103731T | 0,01 | 1 |
| RJ cable, length 1000 mm | 0000103732T | 0,01 | 1 |
| Network adapter 100-240 V AC/24 V DC 10 W | 0000103700T | 0,10 | 1 |
| Network adapter 100-240 V AC/24 V DC 30 W | 0000103701T | 0,25 | 1 |

**RBDO/60** main protection signalises the fuse activation and transmits information by means of an RJ cable to externally placed safety automatics devices.
At the same time, unsafe overheating of the device is shown and reported.

**Interface** - a voltage-free connection terminal is available in the relay section.
There is a possibility of collective signalling of any irregularities through serial connection of devices.
The collective signal can handle up to 12 devices.

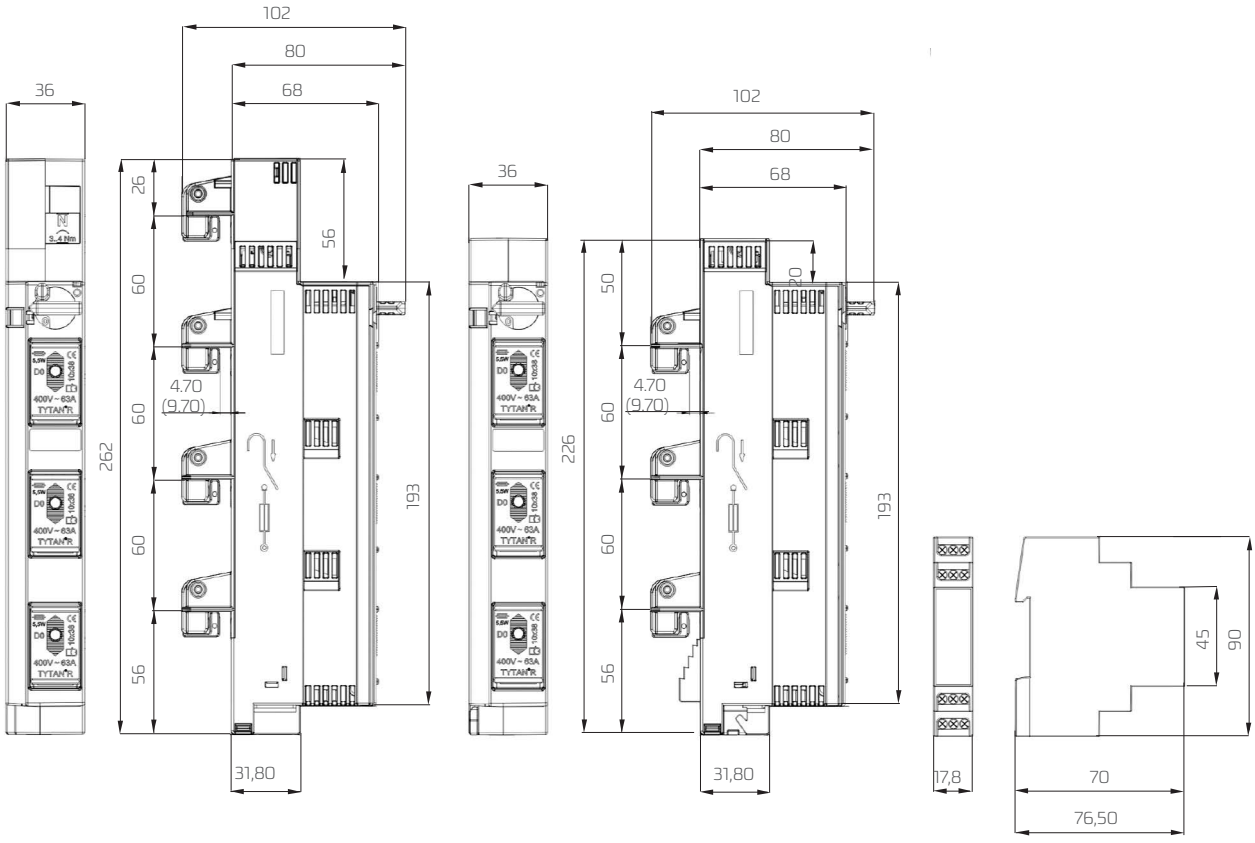
Power supply for the relay part: 24 V DC

Outputs of the relay part:
- 1 terminal for the fuse link burnout
- 1 terminal for overtemperature
- 1 terminal for the on/off position



Correct operating status | Fuse link burnout | Overtemperature in the device

## Dimensions



# 1.6 PARTITIONS AND SHROUDS

APASYS 60

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

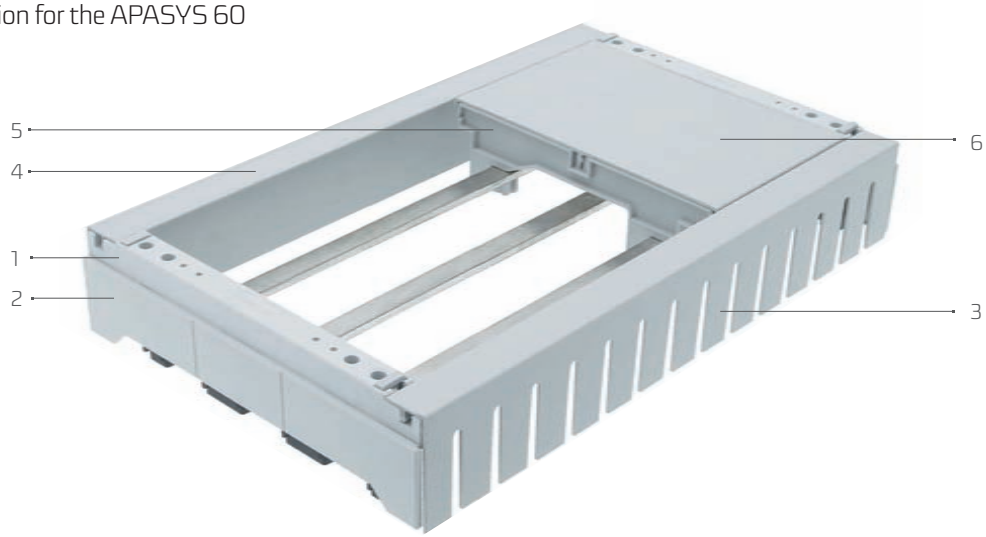



Table 17. Cover system

| Versions | | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|---|
| 1. Cover shroud for the busbar support 00001063007 | | 0000126070T | 0,06 | 10 |
| 2. Side cover for the busbar support 00001063007 | | 0000126071T | 0,03 | 10 |
| 3. Slitted shroud | length 2000 mm | 0000126072T | 0,47 | 5 |
| | length 1000 mm | 0000126076T | 0,24 | |
| 4. Closed shroud | length 2000 mm | 0000126073T | 0,53 | 5 |
| | length 1000 mm | 0000126077T | 0,26 | |
| 5. Panel mount, support edge 32 mm | | 0000126074T | 0,04 | 10 |
| 6. Panel cover, length 1000 mm | | 0000126075T | 0,64 | 2 |

Table 18. Busbar covers length 1000 mm, for copper rails up to 30 mm wide

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Covers for busbar 5 mm thick, 1000 mm long | 0000156076T | 0,07 | 10 |
| Covers for busbar 10 mm thick, 1000 mm long | 0000156077T | 0,09 | 10 |

# 2. 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
- installation of distribution board's protective panel at depth of 32 mm or 70 mm
- built-in hooked terminals provide fast installation onto busbar system
- top/bottom cable terminal



Table 19. Technical data

| Parameter | | | 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 | | 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 | no. of cycles | | 1600 | | | |
| Electrical durability | | | 200 | | | |
| IP degree of protection | | | IP 30 | | | |
| Size of fuse links | | | 000 | | | |

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

RBP 000 pro-S

Table 20. Versions

| RBP 000 pro-S | | Cable terminal type | Article no. |
|---|---|---|---|
| **Disconnectors for installation on to 60 mmbusbar system** | | | |
| RBP 000 pro-SG | cable terminal-top, for connection of conductors with bare ends | frame | 63-823427-001 |
| RBP 000 pro-SD | cable terminal-bottom, for connection of conductors with bare ends | frame | 63-823427-002 |

Table 21. RBP 000 pro, RBP 000 pro-S terminal connection types

| Description | Terminal | Terminal drawing | Cross-section of conductors | Tightening torque |
|---|---|---|---|---|
| RBP 000 pro<br>RBP 000 pro-S | frame |  | 2,5 - 50 mm² | 6 Nm* |

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

# FUSE SWITCH DISCONNECTORS

RBK 000 pro-S

RBK 00 pro-S

RBK 1 pro-SG
RBK 1 pro-SD

RBK 2 pro-SG
RBK 2 pro-SD

RBK 3 pro-SG
RBK 3 pro-SD

Table 22. Basic parameters of the RBK disconnectors

| Parameter | | | RBK 000 pro-S | | | | RBK 00 pro-S | RBK 1 pro-S | | RBK 2 pro-S | RBK 3 pro-S | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rated thermal current $I_{th}$ [1)] | | A | 160 | | | | 160 | 250 | | 400 | 630 | | |
| Rated voltage $U_n$ | | V | 690 | | | | 690 | 690 | | 690 | 690 | | |
| Utilization category | | - | AC-23B | AC-22B | AC-22B | AC-21B | AC-23B | AC-23B | AC-22B | AC-23B | AC-23B | AC-22B | AC-21B |
| Rated switching current $I_e$ | | A | 100 | 100 | 160 | 160 | 160 | 250 | 250 | 400 | 630 | 630 | 630 |
| Rated switching voltage $U_e$ | | V | 400 | 690 | 400 | 690 | 690 | 400 | 690 | 690 | 400 | 500 | 690 |
| Rated short-circuit making current | 690 V | kA | 25 | | | | 80 | 80 | | 80 | 80 | | |
| | 400 V | | | | | | 100 | 100 | | 100 | - | | |
| Rated short-circuit withstand current | 690 V | kA | 100 | | | | 80 | 80 | | 80 | 80 | | |
| | 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 | | |
| Mechanical durability | | no. of cycles | 2000 | | | | 1600 | 1600 | | 1000 | 1000 | | |
| Electrical durability | | | 300 | | | | 200 | 200 | | 200 | 200 | | |
| IP degree of protection | | IP | 20 | | | | 20 | 20 | | 20 | 20 | | |
| Weight | | kg | ~0,9 | | | | ~1,0 | ~3,0 | | ~4,50 | ~5,0 | | |
| Size of PN/IEC fuse links | | - | 000 | | | | 00 | 1 | | 2 | 3 | | |

[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 23. Versions

| Description | Disconnectors for installation on to 60 mm busbar system | Cable terminal types | Article no. |
|---|---|---|---|
| **RBK 000-S** | | | |
| RBK 000-SD | Cable terminal-bottom, for connection of conductors with bare ends | bridge | 63-823234-031 |
| RBK 000-SG | Cable terminal-top, for connection of conductors with bare ends | bridge | 63-823234-011 |
| RBK 000-SD-M | Cable terminal-bottom, for connection of conductors with pressed ends | screw | 63-823234-041 |
| RBK 000-SG-M | Cable terminal-top, for connection of conductors with pressed ends | screw | 63-823234-021 |
| **RBK 00 pro-S** | | | |
| RBK 00 pro-SG-M | Cable terminal-top, for connection of conductors with pressed ends | screw | 63-823259-121 |
| RBK 00 pro-SD-M | Cable terminal-bottom, for connection of conductors with pressed ends | screw | 63-823259-141 |
| RBK 00 pro-SG-R | Cable terminal-top, for connection of conductors with bare ends | frame | 63-823259-151 |
| RBK 00 pro-SD-R | Cable terminal-bottom, for connection of conductors with bare ends | frame | 63-823259-161 |
| **RBK 1 pro-S** | | | |
| RBK 1 pro-SG 60 | Cable terminal-top, for connection of conductors with bare ends | bridge | 63-811750-011 |
| RBK 1 pro-SD 60 | Cable terminal-bottom, for connection of conductors with bare ends | bridge | 63-811750-021 |
| RBK 1 pro-SG-M 60 | Cable terminal-top, for connection of conductors with pressed ends | screw | 63-811750-051 |
| RBK 1 pro-SD-M 60 | Cable terminal-bottom, for connection of conductors with pressed ends | screw | 63-811750-061 |
| RBK 1 pro-SG-V 60 | Cable terminal-top, for connection of conductors with bare ends | V-type terminal | 63-811750-091 |
| RBK 1 pro-SD-V 60 | Cable terminal-bottom, for connection of conductors with bare ends | V-type terminal | 63-811750-101 |
| **RBK 2 pro-S** | | | |
| RBK 2 pro-SD-M 60 | Cable terminal-bottom, for connection of conductors with pressed ends | screw | 63-811686-061 |
| RBK 2 pro-SG-M 60 | Cable terminal-top, for connection of conductors with pressed ends | screw | 63-811686-051 |
| RBK 2 pro-SD-V 60 | Cable terminal-bottom, for connection of conductors with bare ends | V-type terminal | 63-811686-101 |
| RBK 2 pro-SG-V 60 | Cable terminal-top, for connection of conductors with bare ends | V-type terminal | 63-811686-091 |
| RBK 2 pro-SD-2V 60 | Cable terminal-bottom, for connection of conductors with bare ends | V2-type terminal | 63-811686-141 |
| RBK 2 pro-SG-2V 60 | Cable terminal-top, for connection of conductors with bare ends | V2-type terminal | 63-811686-131 |
| **RBK 3 pro-S** | | | |
| RBK 3 pro-SD | Cable terminal-bottom, for connection of conductors with bare ends | bridge | 63-028802-001 |
| RBK 3 pro-SG | Cable terminal-top, for connection of conductors with bare ends | bridge | 63-028802-002 |
| RBK 3 pro-SD-M | Cable terminal-bottom, for connection of conductors with pressed ends | screw | 63-028802-003 |
| RBK 3 pro-SG-M | Cable terminal-top, for connection of conductors with pressed ends | screw | 63-028802-004 |

Fuse switch electronic module monitoring status design is possible.
Detailed information and dimensions of disconnectors are available in the „Switchgear catalogue".

# FUSE SWITCH DISCONNECTORS
# ARS 00/60 mm pro (160 A, 690 V)

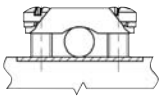
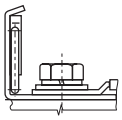

Table 24. Technical data

| Parameter | | | ARS 00/60 mm pro | |
|---|---|---|---|---|
| Rated thermal current $I_{th}=I_n$ | | A | 160 | |
| Rated voltage $U_n$ | | V | 690 | |
| Utilization category | | - | AC-22B | AC-23B |
| Rated switching voltage $U_e$ | | V | 690 | 400 |
| Rated switching current $I_e$ | | A | 160 | |
| Rated short-circuit making current | 690 V | kA | 80 | |
| | 500 V | | 120 | |
| Rated short-circuit withstand current | 690 V | kA | 80 | |
| | 500 V | | 120 | |
| Rated insulation voltage $U_i$ | | V | 1000 | |
| Rated impulse withstand voltage $U_{imp.}$ | | kV | 8 | |
| Rated frequency | | Hz | 50-60 | |
| Mechanical durability | no. of cycles | | 1600 | |
| Electrical durability | | | 200 | |
| IP degree of protection | | IP | 30 | |
| Size of fuse links | | - | 00 | |

Table 25. Versions

| Versions ARS 00/60 mm pro | | Nr artykułu |
|---|---|---|
| **Simultaneous 3 phases switch on (for busbar spacing 60 mm)** | | |
| ARS 00/60 mm pro | cable connection: bridge (S) 4 - 70 mm² and screw M8 terminals | 63-002354-001 |
| ARS 00/60 mm-T pro | cable connection: frame terminals 2.5-70 mm² | 63-002354-002 |

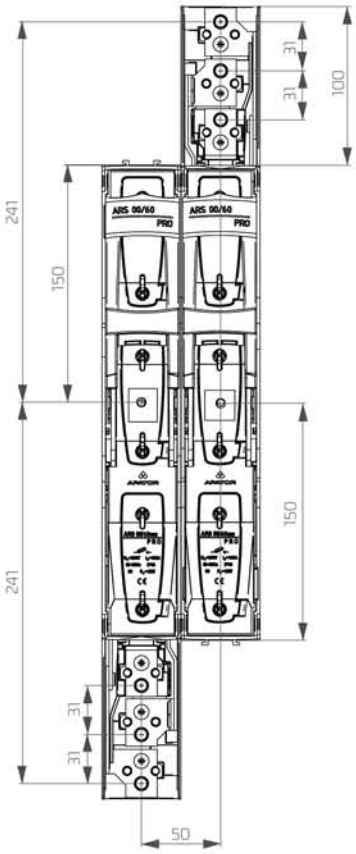
Table 26. ARS 00/60 mm pro terminal connection types

| Description | ARS 00/60 mm pro | | |
|---|---|---|---|
| Terminal | bridge 2 x M5 x 20 | screw M8* | frame |
| Terminal photo |  |  |  |
| Terminal drawing |  |  |  |
| Cross-section of conductors | 4 - 70 mm² | Cable ends max 95 mm² | 2,5 - 70 mm² |
| Tightening torque | 3 Nm** | 10 Nm** | 6 Nm** |

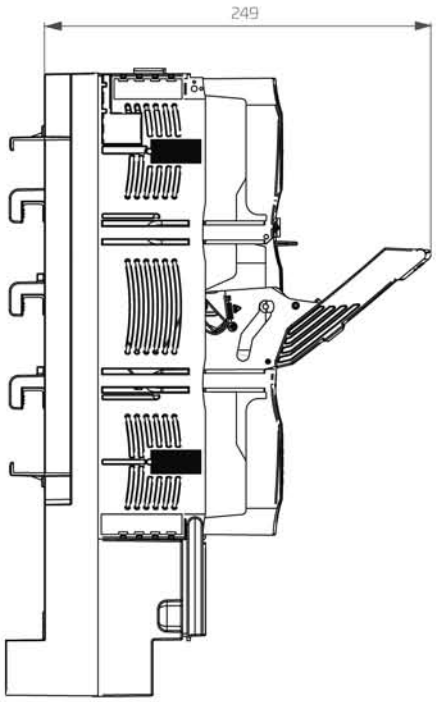
For stranded conductors using cable ferrules is recommended
*) busbars with a maximum width of 20 mm and a maximum thickness of 5 mm can be connected to the M type terminals
**) using a tension wrench is recommended
Tighten the allen bolt with 6 Nm.



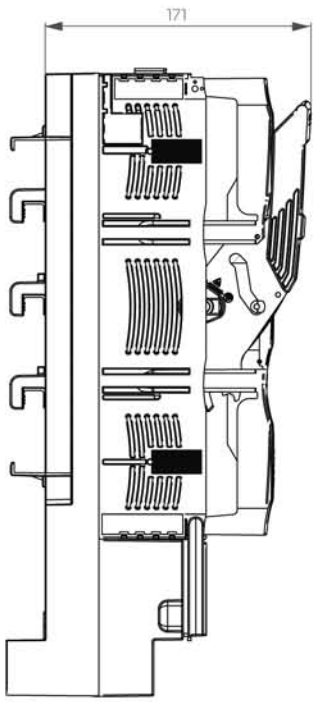
energy distribution

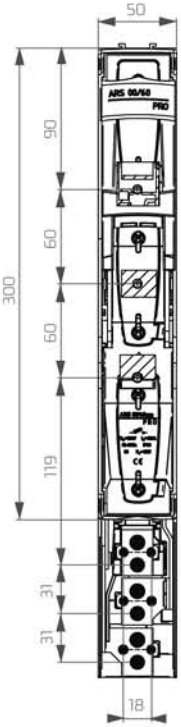


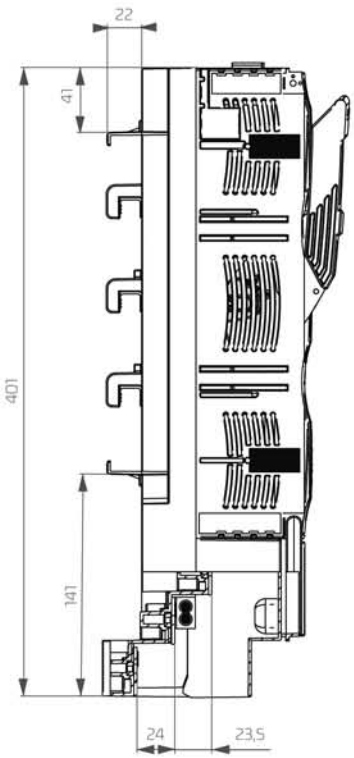

OPEN

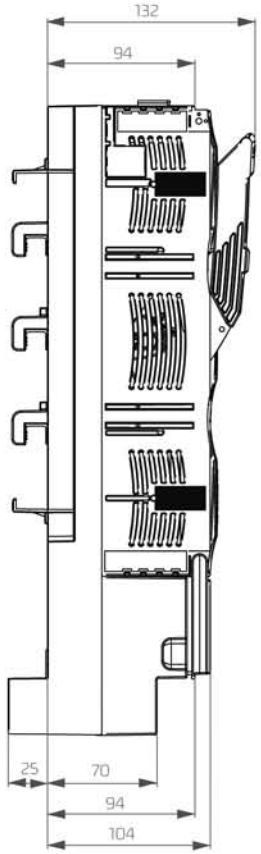



PARKING



# Modular equipment

## Mounted on DIN 35 mm rail

# 3.1 DO - TYTAN® II FUSE SWITCH DISCONNECTOR

35 mm DIN rail



- flashing response indicator (in the fuse sleeve)
- full coding for all current values of the fuse link
- possibility of sealing
- possibility of blocking

Table 27. Technical data

| Classification | Fuse switch disconnector |
|---|---|
| Standard | IEC/EN 60947-3 |
| Adapted to fuse switch disconnectors | DO1: 1, 2, 4, 6, 10, 13, 16 A<br>DO2: 20, 25, 32, 35, 40, 50, 63 A<br>gL, gG, aM class |
| flammability class/track resistance | V0, glowing wire testing 960°C / CTI 600 |
| Degree of protection/touch protection | IP 20 / protection against finger and palm touch |
| Rated operating voltage $U_e$ | |
| -AC | 400 V |
| -DC | 1-pole 110 V, 2-pole 220 V |
| Rated switching current $I_e$ | 63 A |
| Rated impulse withstand voltage $U_{imp}$ | 6 kA |
| Rated short-circuit current $I_{cm}$ | 50 $kA_{eff}$ |
| Utilization category | AC 22B, DC 21 B |
| Overvoltage category/pollution degree | IV/3 (DIN VDE 0110) |
| Terminal type | stainless steel cage terminals 1.5...35 $mm^2$; MD 4 Nm |

TYTAN II fuse switch disconnector should be equipped with a fuse sleeve (see Table 30)

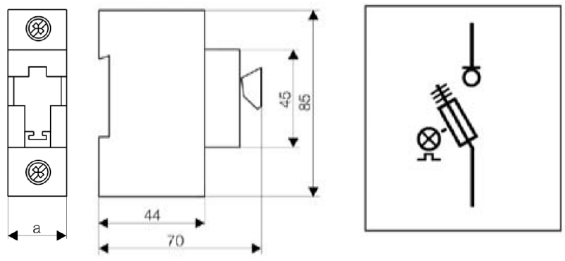



Table 28. Construction width

| Article no. | Construction width a [mm] |
|---|---|
| 0000102651T | 27 |
| 0000102652T | 54 |
| 0000102653T | 81 |
| 0000102641T | 54 |
| 0000102643T | 108 |

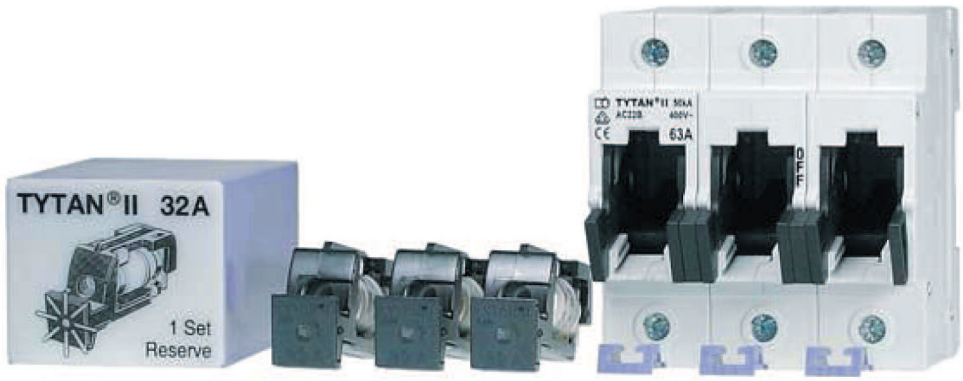



Table 29. TYTAN II Fuse switch disconnector

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 1-pole | 0000102651T | 0,12 | 12 |
| 2-pole | 0000102652T | 0,23 | 6 |
| 3-pole | 0000102653T | 0,35 | 4 |
| 1-pole + N | 0000102641T | 0,25 | 6 |
| 3-pole + N | 0000102643T | 0,48 | 3 |

TYTAN II fuse switch disconnector should be equipped with a fuse sleeve (see Table 30)

## Flawless differentiation of rated current due to full coding

The TYTAN® system codes the nominal current with coloured fuse links for each current stage.

e.g.: 13 A diameter 1,5 mm² e.g.: 32 A CEE connector e.g.: 40A for the ground-fault circuit

# TYTAN® II FUSE LINKS

35 mm DIN rail



**D0** - Fuse link with an integrated flashing response indicator for use with the **TYTAN® II** fuse sleeve disconnector


## Low loss due to the fuse sleeve

1. Independent constant terminal pressure
2. Spring loaded terminal
3. Double contact saves 0.8 W per pole
4. Ceramic tube
5. Quartz sand
6. Fuse wire
7. Base contact
8. Cover for closing sand


The set for TYTAN II fuse switch disconnector consists of:

- 3 x D0 fuse link
- 3 x fuse sleeve
- box for reserve fuse links


Table 30. TYTAN II fuse sleeves

| Versions | colour | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|---|
| 1A set | orange | 0000102601T | 0,13 | 1/12 |
| 2A set | pink | 0000102602T | 0,13 | 1/12 |
| 4A set | brown | 0000102604T | 0,13 | 1/12 |
| 6A set | green | 0000102606T | 0,13 | 1/12 |
| 10A set | red | 0000102610T | 0,13 | 1/12 |
| 13A set | ochre | 0000102613T | 0,13 | 1/12 |
| 16A set | grey | 0000102616T | 0,13 | 1/12 |
| 20A set | blue | 0000102620T | 0,13 | 1/12 |
| 25A set | yellow | 0000102625T | 0,13 | 1/12 |
| 32A set | lilac | 0000102632T | 0,13 | 1/12 |
| 35A set | black | 0000102635T | 0,13 | 1/12 |
| 40A set | purple | 0000102640T | 0,13 | 1/12 |
| 50A set | white | 0000102650T | 0,13 | 1/12 |
| 63A set | copper | 000010 2663T | 0,13 | 1/12 |

# TYTAN II ACCESSORIES

Set of three jumpers in sleeves in a box for mounting on a mounting rail

Table 31. TYTAN II fuse sleeves with jumpers

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Jumper set | 0002102300T | 0,2 | 1/12 |

After installation in the device, the set transforms it into a switch disconnector

Lock against restarting in the mounting rail box

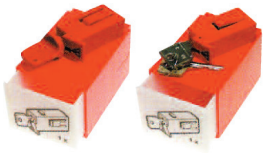


Table 32. TYTAN II fuse sleeves with jumpers

| Versions | colour | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|---|
| 5A5 cylindrical lock | black | 0001020071T | 0,09 | 1/12 |
| 5A4 cylindrical lock | blue | 0001020072T | 0,09 | 1/12 |
| 5A3 cylindrical lock | green | 0001020073T | 0,09 | 1/12 |
| 5A1 cylindrical lock | yellow | 0001020074T | 0,09 | 1/12 |
| 5A2 cylindrical lock | red | 0001020075T | 0,09 | 1/12 |
| Plastic lock | black | 0001020081T | 0,06 | 1/12 |
| Plastic lock | blue | 0001020082T | 0,06 | 1/12 |
| Plastic lock | green | 0001020083T | 0,06 | 1/12 |
| Plastic lock | yellow | 0001020084T | 0,06 | 1/12 |
| Plastic lock | red | 0001020085T | 0,06 | 1/12 |

# 3.2 D01 - TYTAN® I FUSE SWITCH DISCONNECTOR

35 mm DIN rail



- flashing response indicator
- automatic coding for current values of the fuse link
- possibility of sealing

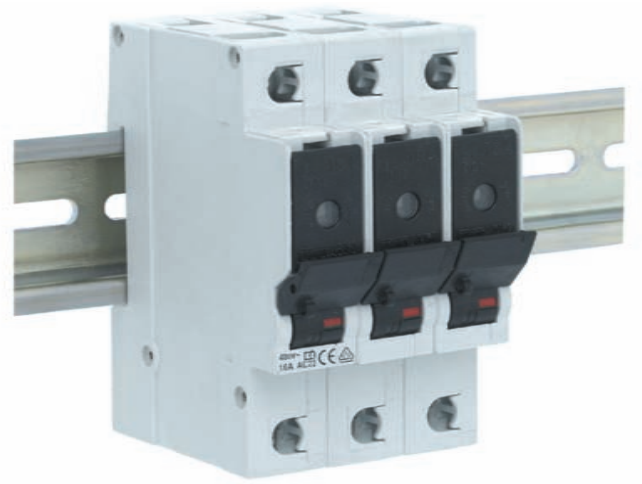
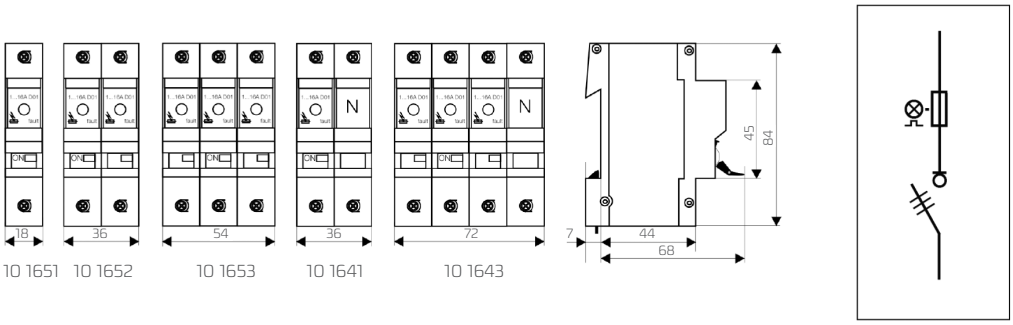


Table 33. Technical data

| Classification | Fuse switch disconnector |
|---|---|
| Standard | IEC/EN 60947-3 |
| Adapted to fuse switch disconnectors | D01: 1, 2, 4, 6, 10, 13, 16; gL, gG, aM classes |
| flammability class/track resistance | V0, glowing wire testing 960 °C / CTI 600 |
| Degree of protection/touch protection | IP 20 / protection against finger and palm touch |
| Rated operating voltage $U_e$<br>-AC<br>-DC | <br>400 V<br>1-pole 110 V, 2-pole 220 V |
| Rated switching current $I_e$ | 16A |
| Rated impulse withstand voltage $U_{imp}$ | 6kA |
| Rated short-circuit current $I_{cm}$ | 50 $kA_{eff}$ |
| Utilization category AC | 22B |
| Overvoltage category/pollution degree | IV/3 (DIN VDE 0110) |
| Terminal type | stainless steel cage terminals 1.5...25 $mm^2$; MD 2.5 Nm |

## Dimensions




Fuse sleeve

- it has a built-in optoelectrical flashing signalling device of the fuse response
- flashing error light replaces the unreliable mechanical indicators. As a result, a control opening is not usually required, the protective insulation remains intact
- protects the operator. When heated up to 100°C, the fuse is not directly touched by fingers during replacement

Table 34. TYTAN I Fuse switch disconnector

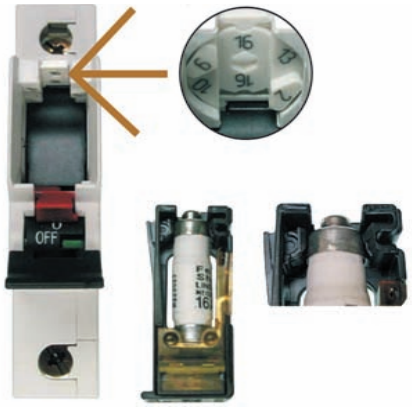
| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 1-pole | 0000101651T | 0,09 | 12 |
| 2-pole | 0000101652T | 0,18 | 6 |
| 3-pole | 0000101653T | 0,27 | 4 |
| 1-pole + N | 0000101641T | 0,17 | 6 |
| 3-pole + N | 0000101643T | 0,35 | 3 |

## Automatic coding

TYTAN® I structurally codes the power of the rated fuse current. The system is operated with one fuse sleeve for all current powers.

The coding of the maximum applicable rated fuse current in the fuse disconnector is done by setting the appropriate value on the belt pulley.

By inserting the fuse in the fuse sleeve, the coding spring is ejected depending on its rated current value.



# 3.3 DO - TYTAN® T FUSE SWITCH DISCONNECTOR

35 mm DIN rail



- flashing response indicator
- for DO and cylindrical 10x38 mm fuse switches
- universal fuse sleeve
- only 4TE width
- possibility of sealing

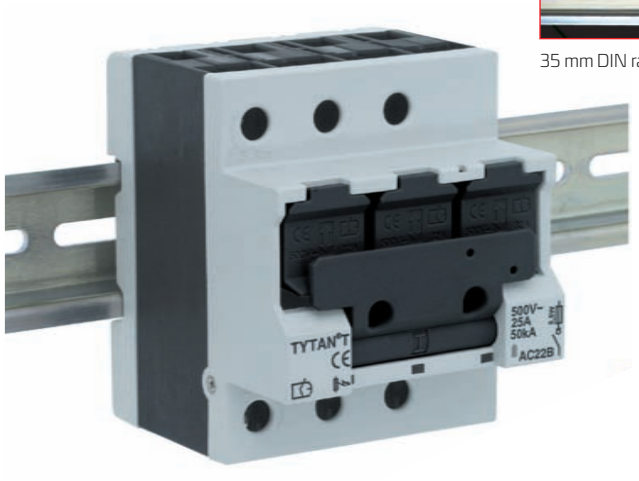



Table 35. Technical data

| Classification | Fuse switch disconnector |
|---|---|
| Standard | IEC/EN 60947-3 |
| Adapted to fuse switch disconnectors | DO1: 1, 2, 4, 6, 10, 13, 16 A<br>DO2: 20, 25, 32, 35, 40, 50, 63 A<br>gL, gG, aM class |
| Adapted to fuse switch disconnectors | Cylindrical 10x38 mm 2, 4 ,6, 8, 10, 12, 16, 20, 25, 32A |
| flammability class/track resistance | V0, glowing wire testing 960°C / CTI 600 |
| Degree of protection/touch protection | IP 20 / protection against finger and palm touch |
| Rated operating voltage $U_e$ | 400 V AC |
| Rated switching current $I_e$ | DO: 63A; 10x38: 32A |
| Rated impulse withstand voltage $U_{imp}$ | 6 kA |
| Rated short-circuit current $I_{cm}$ | 50 $kA_{eff}$ |
| Utilization category AC | 22B |
| Overvoltage category/pollution degree | IV/3 (DIN VDE 0110) |
| Terminal type | stainless steel cage terminals 1.5...25 $mm^2$; MD 3.5 Nm |

## Dimensions

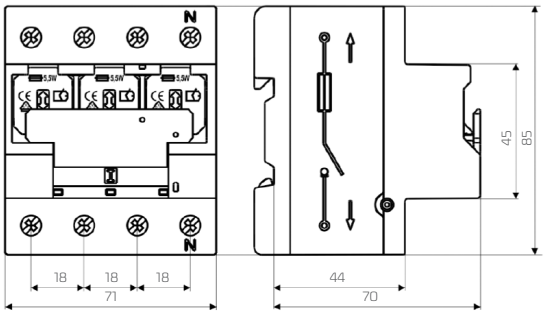



Table 36. TYTAN T Fuse switch disconnector

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 3-pole | 0000104213T | 0,40 | 3 |
| 3-pole + N | 0000104215T | 0,40 | 3 |
| Reducing spring of the DO2 fuse sleeve to DO1 and for 10x38 mm | 0000101774T | 0,01 | 12 |

# 3.4 DO - CORON® 2 FUSE SWITCH DISCONNECTOR

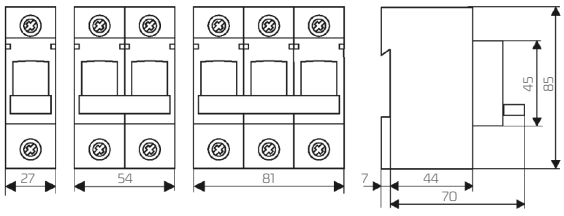
35 mm DIN rail

- flashing response indicator
- universal fuse sleeve
- possibility of sealing
- possibility of padlocking (padlock handle up to Ø 5mm)

Table 37. Technical data

| Classification | Fuse switch disconnector |
|---|---|
| Standard | IEC/EN 60947-3 |
| Adapted to fuse switch disconnectors | DO1: 1, 2, 4, 6, 10, 13, 16 A<br>DO2: 20, 25, 32, 35, 40, 50, 63 A<br>gL, gG, aM class |
| flammability class/track resistance | V0, glowing wire testing 960 °C / CTI 600 |
| Degree of protection/touch protection | IP 20 / protection against finger and palm touch |
| Rated operating voltage $U_e$<br>-AC<br>-DC | 400 V<br>1-pole 110 V, 2-pole 220 V |
| Rated switching current $I_e$ | 63 A |
| Rated impulse withstand voltage $U_{imp}$ | 6 kA |
| Rated short-circuit current $I_{cm}$ | 50 $kA_{eff}$ |
| Utilization category | AC 22B |
| Overvoltage category/pollution degree | IV/3 (DIN VDE 0110) |
| Terminal type | stainless steel cage terminals 1.5...35 $mm^2$; MD 4 Nm |

## Dimensions



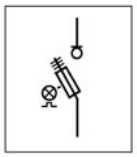




Table 38. CORON 2 Fuse switch disconnector

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 1-pole | 0000104651T | 0,13 | 12 |
| 2-pole | 0000104652T | 0,26 | 6 |
| 3-pole | 0000104653T | 0,40 | 4 |
| 1-pole + N | 0000104641T | 0,26 | 6 |
| 3-pole + N | 0000104643T | 0,53 | 3 |
| Reducing spring of the DO2 fuse sleeve to DO1 | 0000104601T | 0,01 | 12 |

# 3.5 DO-E18 FUSE SUBSTRUCTURE

35 mm DIN rail



Technical data

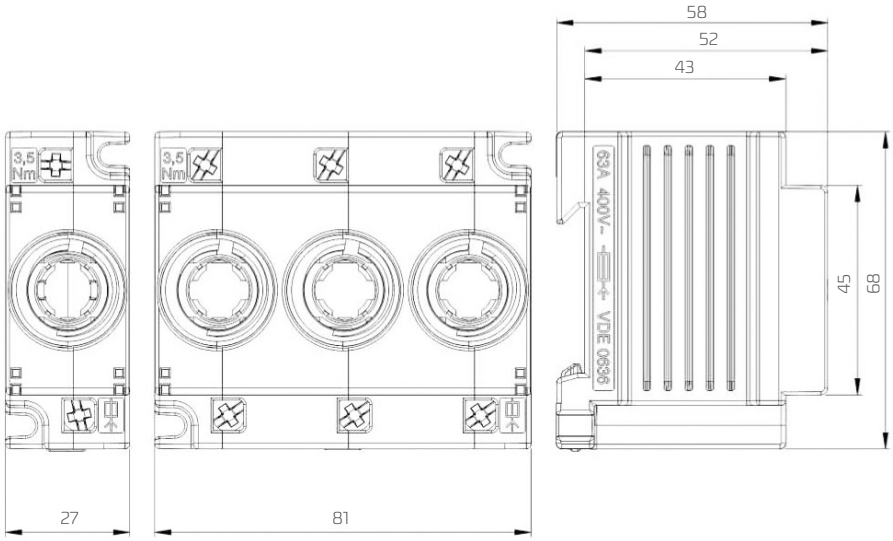
- 1 - 3 pole; DIN 49524
- for DO2 fuses 63 A
- 400 V AC/250 V/DC
- mounting: DIN busbar - snap-on or board with screws
- connection terminals: stainless steel frame terminal 1.5-35 mm$^2$

Table 39. Versions

| Versions | Index no. | Package |
|---|---|---|
| 1-pole | 0000104011T | 20 |
| 3-pole | 0000104013T | 6 |

Fuse head: Table 44. Accessories
For DO1-size fuse, the reduction insert no. 0000121401T must be used

## Dimensions



# 4. DO FUSE LINKS

## 400 V~/250 V-; DIN 49522 DIN VDE 0636 IEC 60269

A snap-on spare parts container installed in the switchboard allows for immediate replacement of inserts and re-connection of the circuit.


Table 40. Fuse links in the snap-on container for the TH busbar

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 12X 2A D01 in the 1.5TE container | 0000101202T | 0,10 | 1/24 |
| 12X 4A D01 in the 1.5TE container | 0000101204T | 0,10 | 1/24 |
| 12X 6A D01 in the 1.5TE container | 0000101206T | 0,10 | 1/24 |
| 12X 10A D01 in the 1.5TE container | 0000101210T | 0,11 | 1/24 |
| 12X 13A D01 in the 1.5TE container | 0000101213T | 0,11 | 1/24 |
| 12X 16A D01 in the 1.5TE container | 0000101216T | 0,11 | 1/24 |
| 12X 20A D02 in the 3TE container | 0000101220T | 0,18 | 1/12 |
| 12X 25A D02 in the 3TE container | 0000101225T | 0,18 | 1/12 |
| 12X 32A D02 in the 3TE container | 0000101232T | 0,19 | 1/12 |
| 12X 35A D02 in the 3TE container | 0000101235T | 0,21 | 1/12 |
| 12X 40A D02 in the 3TE container | 0000101240T | 0,21 | 1/12 |
| 12X 50A D02 in the 3TE container | 0000101250T | 0,22 | 1/12 |
| 12X 63A D02 in the 3TE container | 0000101263T | 0,22 | 1/12 |
| 13x set of 12 fuse switch disconnectors The set contains all fuse switch disconnectors from the range 2..63 | 0000101200T | 2,10 | 1 |

Table 41. Fuse links

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 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 |

# CALIBRE INSERT

## DIN 49523 DIN VDE 0636 IEC 60269

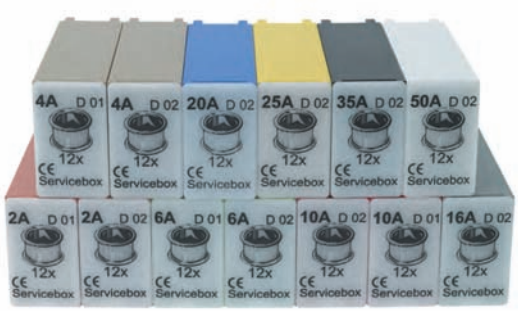





Table 42. Calibre insert in the snap-on container for the TH rail

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 12X 2A D01 in the 1.5TE container | 0000101302T | 0,03 | 1/24 |
| 12X 4A D01 in the 1.5TE container | 0000101304T | 0,03 | 1/24 |
| 12X 6A D01 in the 1.5TE container | 0000101306T | 0,03 | 1/24 |
| 12X 10A D01 in the 1.5TE container | 0000101310T | 0,03 | 1/24 |
| 12X 2A D02 in the 3TE container | 0000101402T | 0,03 | 1/24 |
| 12X 4A D02 in the 3TE container | 0000101404T | 0,03 | 1/24 |
| 12X 6A D02 in the 3TE container | 0000101406T | 0,03 | 1/24 |
| 12X 10A D02 in the 3TE container | 0000101410T | 0,03 | 1/24 |
| 12X 16A D02 in the 3TE container | 0000101416T | 0,03 | 1/24 |
| 12X 20A D02 in the 3TE container | 0000101420T | 0,03 | 1/24 |
| 12X 25A D02 in the 3TE container | 0000101425T | 0,03 | 1/24 |
| 12X 35A D02 in the 3TE container | 0000101435T | 0,03 | 1/24 |
| 12X 50A D02 in the 3TE container | 0000101450T | 0,03 | 1/24 |
| Full set of 13x12 calibre inserts from the range 2-50 A | 0000101300T | 0,39 | 1 |

Table 43. Calibre insert

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| 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 44. Accessories

| Versions | Index no. | Weight [kg] | Package [pcs.] |
|---|---|---|---|
| Key for mounting the calibre insert | 0000101400T | 0,02 | 1/12 |
| Plastic D02 fuse head with a measuring hole | 0000126024T | 0,01 | 20 |
| Reduction insert for fuse switch disconnectors D01 | 0000121401T | 0,01 | 20 |
| Porcelain D02 fuse head with a measuring hole | 0000127024T | 0,01 | 20 |
| Porcelain D01 fuse head with a measuring hole | 0000127025T | 0,01 | 20 |

0000121401T

# NOTES

# NOTES

| | | |
|---|---|---|
| **LOGISTICS** | | |
| Joanna Więckowicz (English) | joanna.wieckowicz@apator.com | +48 56 6191304 |
| Ilona Jasińska (English) | ilona.jasinska@apator.com | +48 56 6191235 |
| Grzegorz Błaszkiewicz (Russian) | grzegorz.blaszkiewicz@apator.com | +48 56 6191316 |
| **DIRECTOR OF EXPORT SWITCHGEAR** | | |
| Rafał Kamiński (English, Russian)<br>Central Europe, South East Europe | rafal.kaminski@apator.com | +48 506 009 338 |
| **SALES MANAGERS** | | |
| Michael Roclawski (German, English)<br>Germany, Austria, Switzerland | michael.roclawski@apator.com | +48 506 009 339 |
| Krzysztof Zdrojewski (English)<br>Middle East,South America, Asia, Africa | krzysztof.zdrojewski@apator.com | +48 506 009 309 |
| Jevgenijus Samuchovas<br>(Lithuanian, Russian)<br>Eastern Europe, Baltic Countries | jevgenijus.samuchovas@apator.com | +370 62 842709 |
| Josef Kalleder (Romanian, English)<br>Romania, Rep. of Moldova | josef.kalleder@apator.com | +40 74 5267192 |
| **TECHNICAL SUPPORT** | | |
| **Director of Switchgear Business Development** | | |
| Robert Łuczak (English, Russian) | robert.luczak@apator.com | +48 506 009 964 |
| **Business Development Manager** | | |
| Łukasz Melkowski (English) | lukasz.melkowski@apator.com | +48 506 009 334 |
| **Product Marketing Manager** | | |
| Jakub Szczepkowski (English) | jakub.szczepkowski@apator.com | +48 506 009 395 |

APATOR

**APATOR SA**
ul. Gdańska 4a, lok C4, 87-100 Toruń, Poland

Correspondence address:
Apator S.A. Centrum
Ostaszewo 57C, 87-148 Łysomice, Poland

e-mail apator@apator.com
head office tel. +48 56 61 91 111, fax +48 56 61 91 295