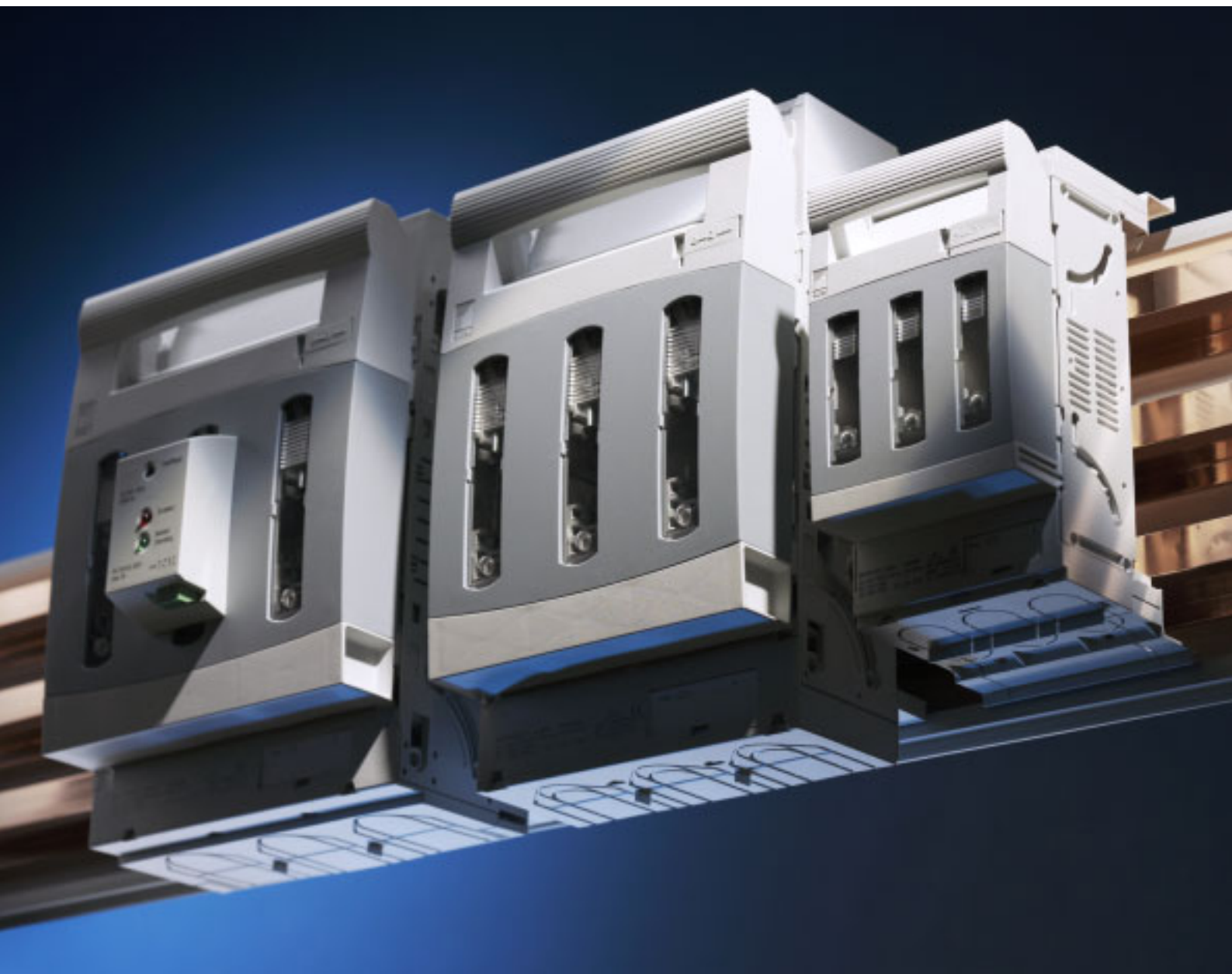


Rittal – RiLine NH

The new generation of isolators



Functional and reliable

Easy to use, with added benefits



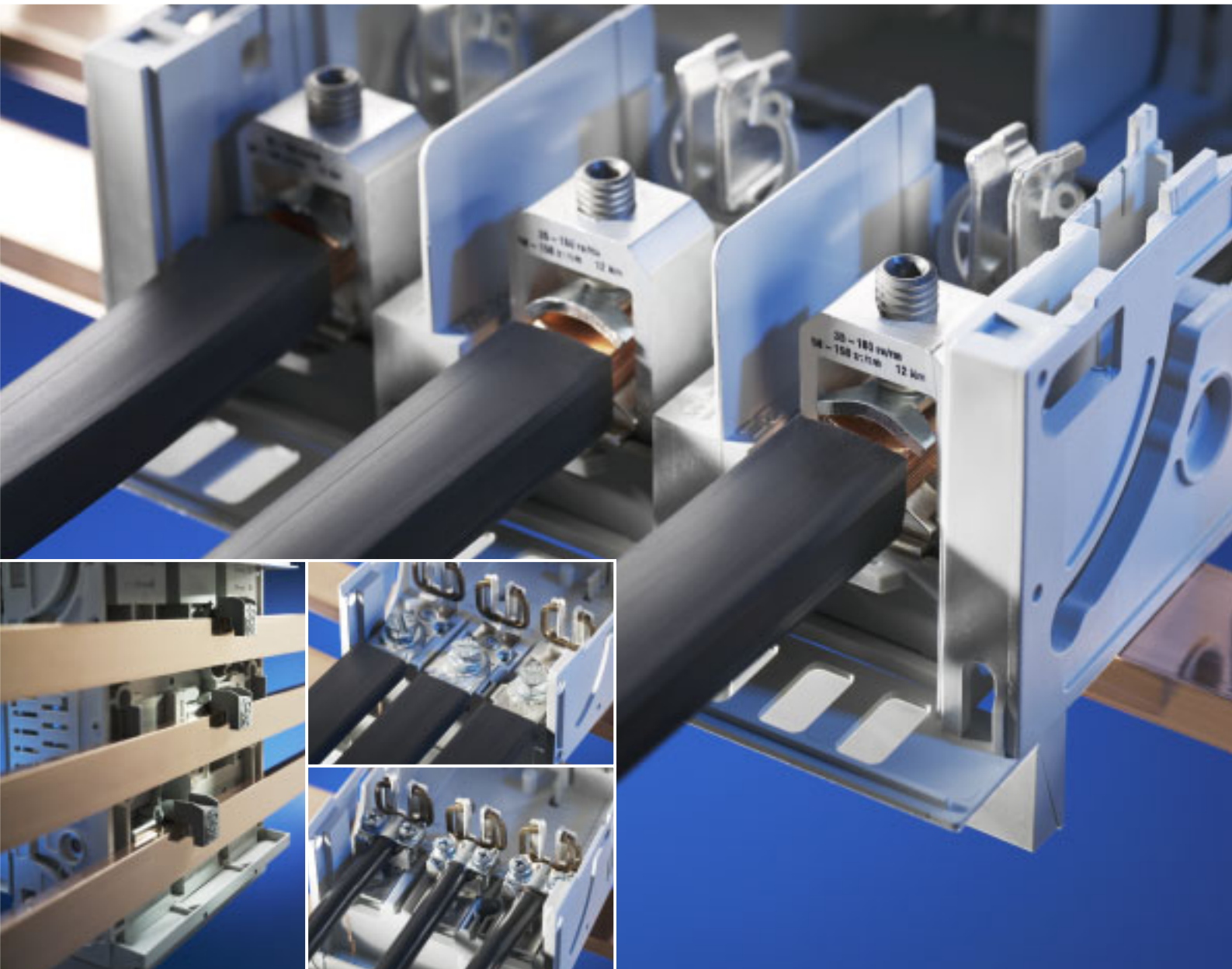
Contents

NH bus-mounting on-load isolator for Rittal RiLine60 busbar systems.....	6 – 9
NH on-load isolators for mounting plate assembly.....	10 – 13
Accessories	14
Busbar adaptor	15
Technical information	16 – 22
List of model numbers/Index	23

One isolator for top or bottom entry

In just a few seconds, you can swap the cable outlet from the top to the bottom using the same device: Simply rotate the mounting hook, and it's done!
This function offers a clear benefit for customers, because warehousing costs can be slashed by 50 %.

The continual advancement of the Rittal NH isolator family combines optimum functionality with outstanding looks. These design properties support system-compatible **integration into the RiLine60 contact hazard protection concept** with base tray. Rittal has continued its strategy of maximising user benefits in the power distribution segment with the RiLine NH. Innovations with outstanding user benefits!



Reliable contact

The tried-and-trusted screw terminal system allows simple alignment of the NH units from the side, as well as reliable, low heat-loss contact on the busbars.

Connection systems to suit your requirements

Customers can choose between user-friendly

- Box terminals or
- Screw terminals.

All NH isolators with screw terminals may be retro-fitted with prism clamps.

Added value with protective functions



Ultra-reliable

In two variants:
Fuse monitoring, optionally available as an

- electronic or
- electromechanical version.

This helps to increase plant availability and process reliability.

Simply latch and seal

Operational safety is further enhanced by the easy-to-use lid lock, which prevents unintentional opening of the isolator lid and is also sealable.

Service-friendly monitoring

Voltage test holes are automatically covered once testing is complete.

Hands-on safety

Comprehensive contact hazard protection and the ultimate in user comfort, thanks to an ergonomically designed isolator lid with a convenient actuator handle.

As everyone knows, it is often the **“little things” which truly add value.** For example, the new RiLine NH isolators offer decisive assembly advantages in terms of time, cost, reliability and user-friendliness. Exceptional user benefits in a practical yet stylish design.



Top-mounting means efficiency

Space-saving configuration of all RiLine NH isolators because all RiLine60 busbar supports are suitable for top mounting – even the flat bar support! The super-slimline design offers additional space efficiency.

Clear labelling

Visible, generously proportioned labelling space on all NH isolators.

Signals to the control centre

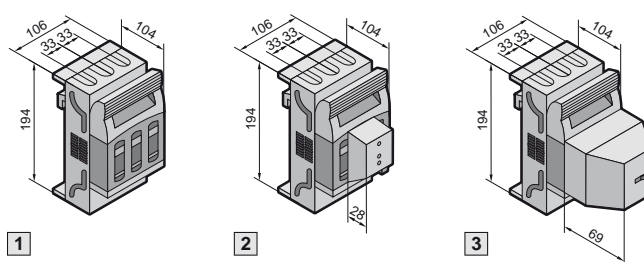
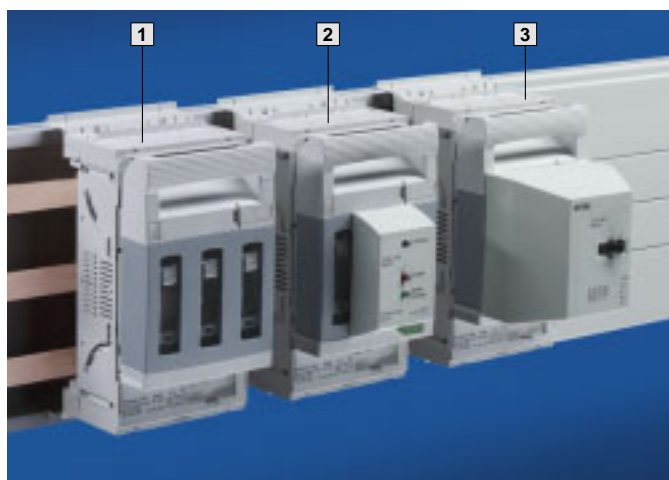
Micro-switches indicate the switching position of the isolator lid to the control desk. Convenient routing of the control cables is another key feature.

Outstanding design

Assembly, installation, control and monitoring – each function has been carefully designed to offer maximum user benefits. This combination of practicality and style is reflected in all model sizes.

Rittal RiLine NH

NH bus-mounting on-load isolator, size 00



For direct mounting on RiLine60 busbar systems (60 mm bar centre distance).

Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Supply includes:

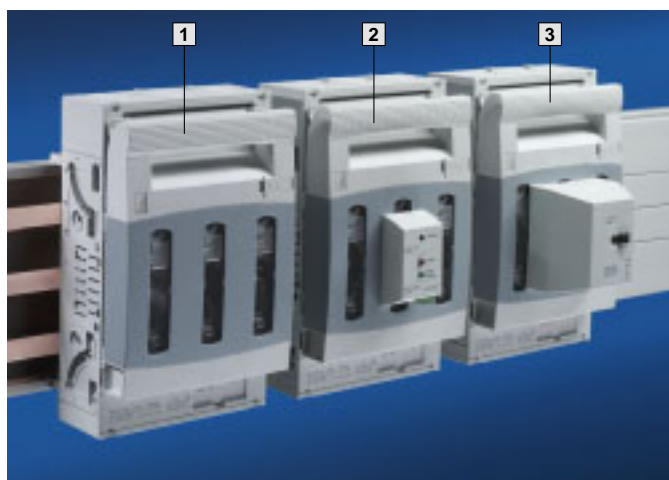
Top and bottom covers.

Technical information,
see page 16 – 21.

Size	Packs of	Size 00		Page
Rated current		160 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M8	
Connection of round conductors		4 – 70 mm ²	up to 95 mm ²	
Clamping area for laminated copper bars		13 x 13 mm	20 x 5 mm	
Tightening torque				
● Assembly screw		6 Nm	6 Nm	
● Terminal screw		4.5 Nm	12 Nm	
For bar thickness		5/10 mm	5/10 mm	
1 Model No. SV		9343.000	9343.010	
2 with electronic fuse monitoring¹⁾	1	9343.020	9343.030	
Model No. SV				
3 with electromechanical fuse monitoring	1	9343.040	9343.050	
Model No. SV				
Accessories				
Micro-switch	5	3071.000	3071.000	14
Connection space cover	2	9344.520	9344.520	14
Prism terminal	3	–	9344.600	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

NH bus-mounting on-load isolators, size 1



For mounting on RiLine60 busbar systems (60 mm bar centre distance).

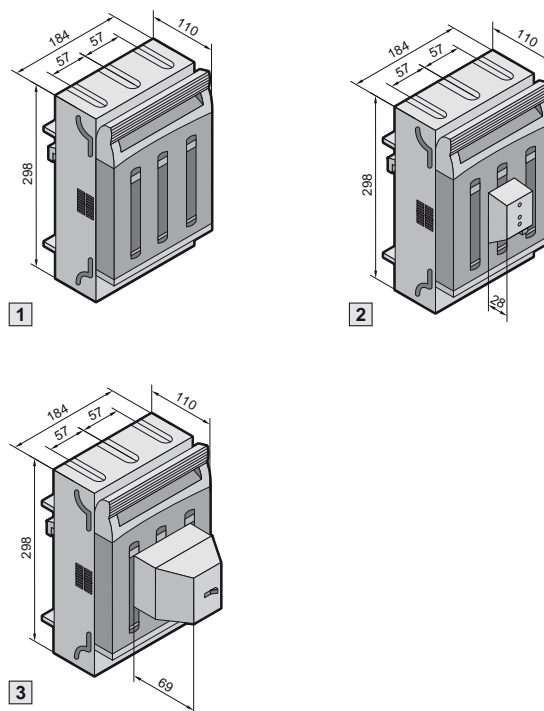
Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Supply includes:

Top and bottom covers.

Technical information,
see page 16 – 21.



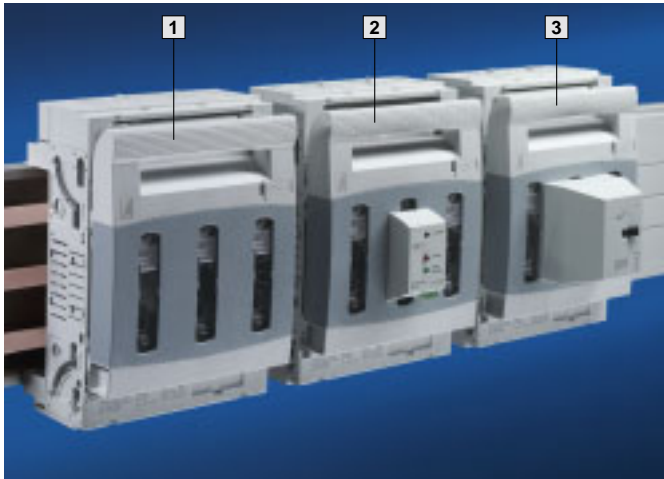
Size	Packs of	Size 1		Page
Rated current		250 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		35 – 150 mm ² ²⁾	up to 150 mm ²	
Clamping area for laminated copper bars		20 x 14 mm	32 x 10 mm	
Tightening torque				
● Assembly screw		6 Nm	6 Nm	
● Terminal screw		12 Nm	20 Nm	
For bar thickness		5/10 mm	5/10 mm	
1 Model No. SV		9343.100	9343.110	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9343.120	9343.130	
3 with electromechanical fuse monitoring Model No. SV	1	9343.140	9343.150	
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.530	9344.530	14
Box terminal	3	–	9344.610	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 50 – 150 mm².

Rittal RiLine NH

NH bus-mounting on-load isolators, size 2



For direct mounting on RiLine60 busbar systems (60 mm bar centre distance).

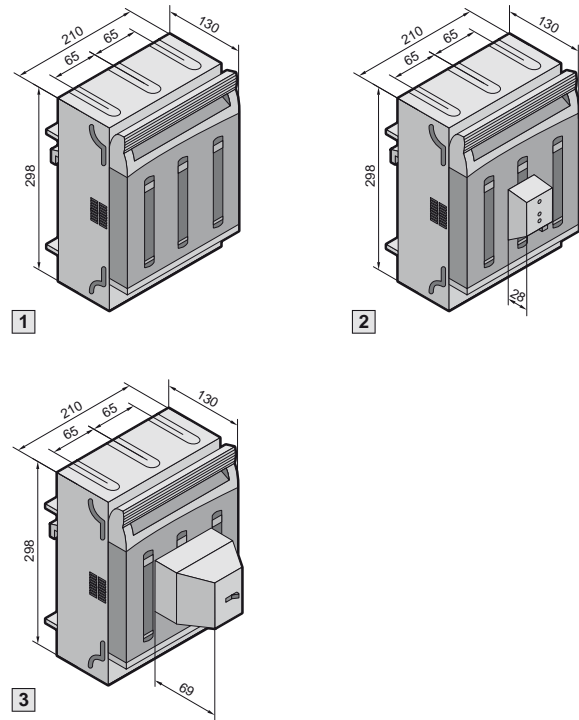
Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Supply includes:

Top and bottom covers.

Technical information,
see page 16 – 21.

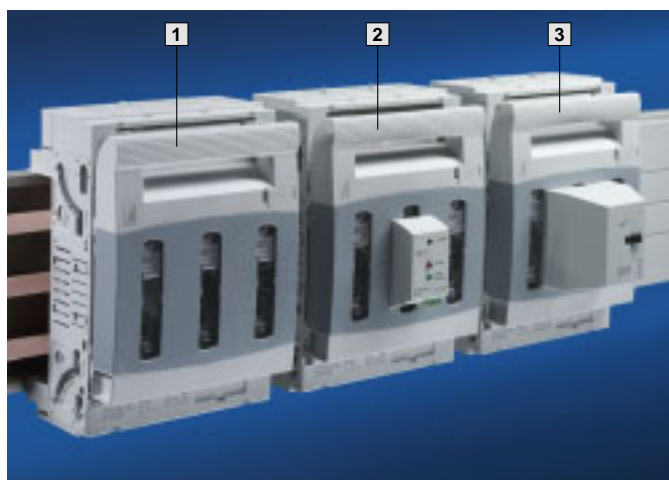


Size	Packs of	Size 2		Page
Rated current		400 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		95 – 300 mm ² ²⁾	up to 240 mm ²	
Clamping area for laminated copper bars		32 x 20 mm	50 x 10 mm	
Tightening torque				
● Assembly screw		8 Nm	8 Nm	
● Terminal screw		20 Nm	20 Nm	
For bar thickness		5/10 mm	5/10 mm	
1 Model No. SV		9343.200	9343.210	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9343.220	9343.230	
3 with electromechanical fuse monitoring Model No. SV	1	9343.240	9343.250	
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.540	9344.540	14
Box terminal	3	–	9344.620	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 120 – 300 mm².

NH bus-mounting on-load isolator, size 3



For mounting on RiLine60 busbar systems (60 mm bar centre distance).

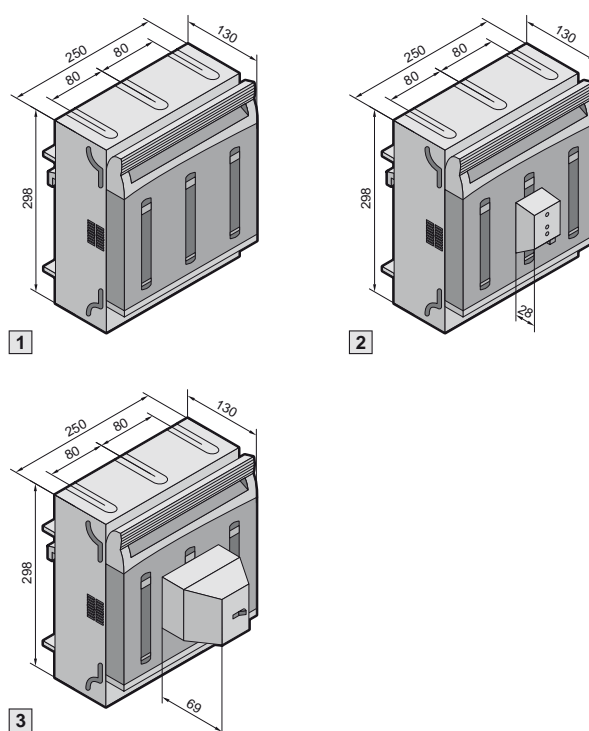
Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Supply includes:

Top and bottom covers.

Technical information,
see page 16 – 21.



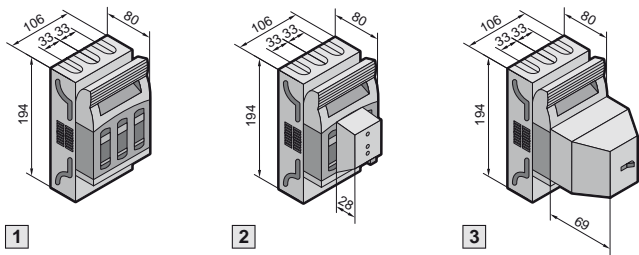
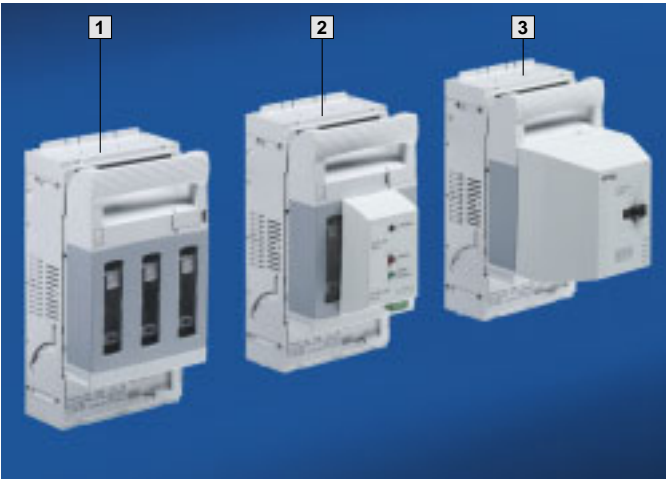
Size	Packs of	Size 3		Page
Rated current		630 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		95 – 300 mm ² ²⁾	up to 300 mm ²	
Clamping area for laminated copper bars		32 x 20 mm	50 x 10 mm	
Tightening torque				
● Assembly screw		8 Nm	8 Nm	
● Terminal screw		20 Nm	20 Nm	
For bar thickness		5/10 mm	5/10 mm	
1 Model No. SV		9343.300	9343.310	
2 with electronic fuse monitoring¹⁾	1	9343.320	9343.330	
Model No. SV				
3 with electromechanical fuse monitoring	1	9343.340	9343.350	
Model No. SV				
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.550	9344.550	14
Box terminal	3	–	9344.620	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 120 – 300 mm².

Rittal RiLine NH

NH on-load isolators size 00



For mounting plate assembly.

Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

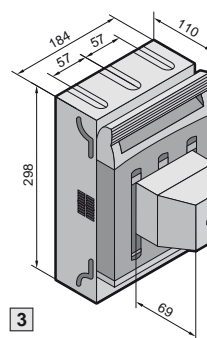
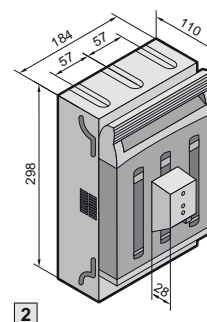
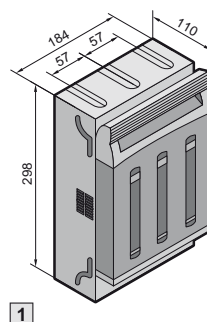
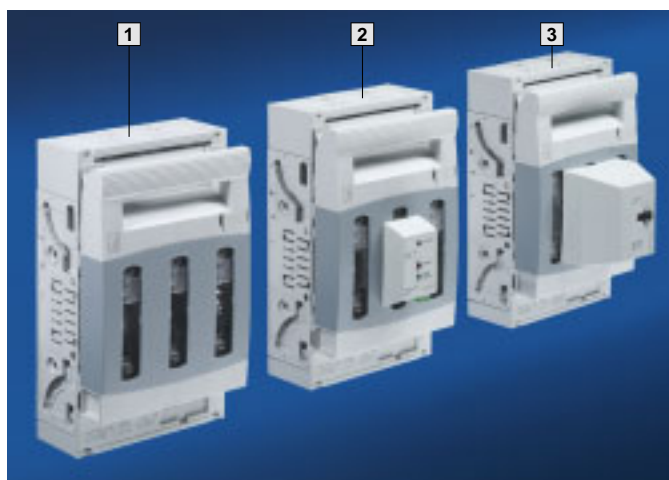
Technical information,
see page 16 – 21.

Hole sizes,
see page 22.

Size	Packs of	Size 00		Page
Rated current		160 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M8	
Connection of round conductors		4 – 70 mm ²	up to 95 mm ²	
Clamping area for laminated copper bars		13 x 13 mm	20 x 5 mm	
Tightening torque		4.5 Nm	12 Nm	
Terminal screw				
1 Model No. SV		9344.000	9344.010	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9344.020	9344.030	
3 with electromechanical fuse monitoring Model No. SV	1	9344.040	9344.050	
Accessories				
Micro-switch	5	3071.000	3071.000	14
Connection space cover	2	9344.520	9344.520	14
Prism terminal	3	–	9344.600	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

NH on-load isolator, size 1



For mounting plate assembly.

Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Technical information,
see page 16 – 21.

Hole sizes,
see page 22.

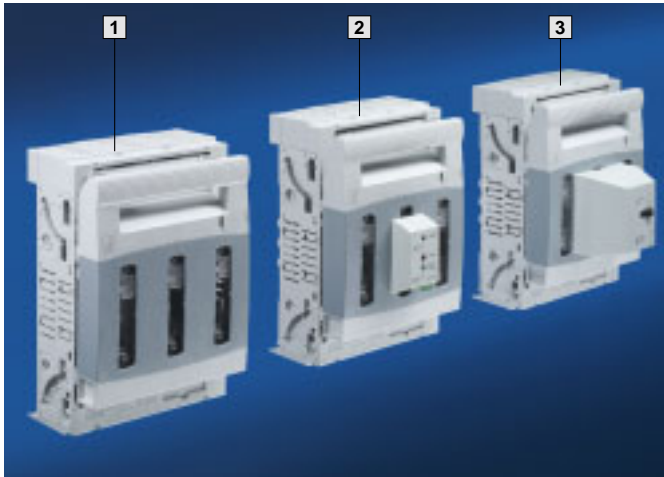
Size	Packs of	Size 1		Page
Rated current		250 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		35 – 150 mm ² ²⁾	up to 150 mm ²	
Clamping area for laminated copper bars		20 x 14 mm	32 x 10 mm	
Tightening torque		12 Nm	20 Nm	
Terminal screw				
1 Model No. SV		9344.100	9344.110	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9344.120	9344.130	
3 with electromechanical fuse monitoring Model No. SV	1	9344.140	9344.150	
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.530	9344.530	14
Box terminal	3	–	9344.610	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 50 – 150 mm².

Rittal RiLine NH

NH on-load isolator size 2



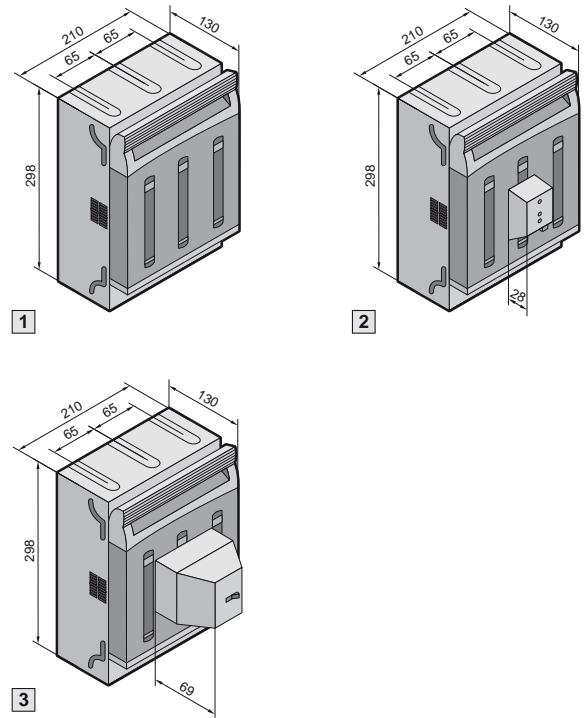
For mounting plate assembly.

Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Technical information,
see page 16 – 21.

Hole sizes,
see page 22.

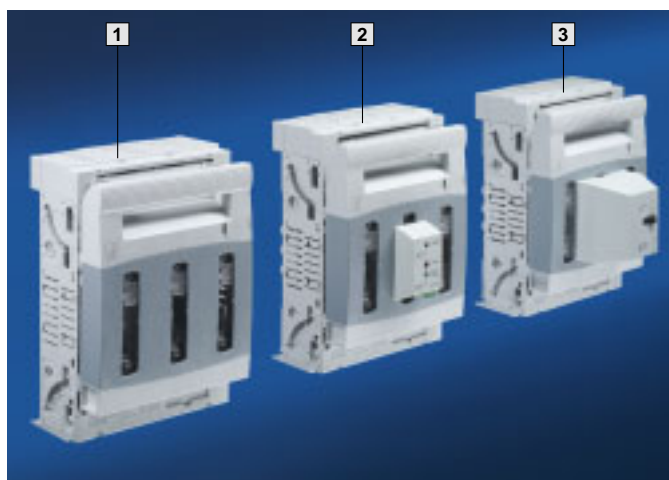


Size	Packs of	Size 2		Page
Rated current		400 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		95 – 300 mm ² ²⁾	up to 240 mm ²	
Clamping area for laminated copper bars		32 x 20 mm	50 x 10 mm	
Tightening torque		20 Nm	20 Nm	
Terminal screw				
1 Model No. SV		9344.200	9344.210	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9344.220	9344.230	
3 with electromechanical fuse monitoring Model No. SV	1	9344.240	9344.250	
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.540	9344.540	14
Box terminal	3	–	9344.620	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 120 – 300 mm².

NH on-load isolator, size 3



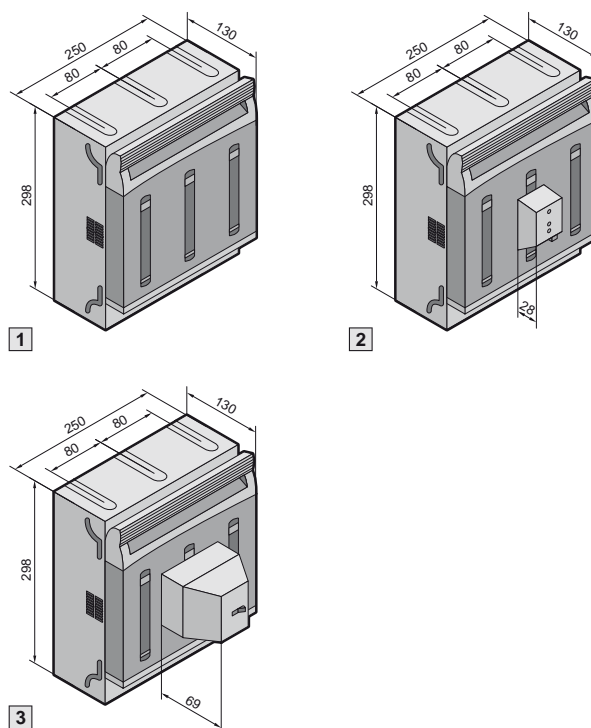
For mounting plate assembly.

Material:

Chassis, lid, contact hazard protection: Polyamide PA6
Contact tracks:
Electrolytic copper, silver-plated

Technical information,
see page 16 – 21.

Hole sizes,
see page 22.



Size	Packs of	Size 3		Page
Rated current		630 A		
Rated operating voltage		690 V~/500 V~ ¹⁾		
Cable outlet		top/bottom		
Type of connection		Box terminal	Screw M10	
Connection of round conductors		95 – 300 mm ² ²⁾	up to 300 mm ²	
Clamping area for laminated copper bars		32 x 20 mm	50 x 10 mm	
Tightening torque		20 Nm	20 Nm	
Terminal screw				
1 Model No. SV		9344.300	9344.310	
2 with electronic fuse monitoring¹⁾ Model No. SV	1	9344.320	9344.330	
3 with electromechanical fuse monitoring Model No. SV	1	9344.340	9344.350	
Accessories				
Micro-switch	2	9344.510	9344.510	14
Connection space cover	2	9344.550	9344.550	14
Box terminal	3	–	9344.620	14
Arcing chamber	3	9344.680	9344.680	14

¹⁾ Rated operating voltage 500 V~ for NH isolators with electronic fuse monitoring.

²⁾ Connection of sector-shaped conductors 120 – 300 mm².

Accessories for NH isolators, size 00 to 3



1



2

Micro-switch

To indicate the position of the NH cover.

For NH isolators	Packs of	Model No. SV
1 Size 00	5	3071.000
2 Size 1 – 3	2	9344.510 ¹⁾

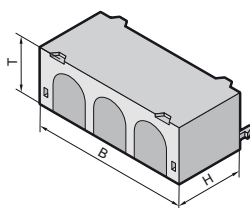
¹⁾ Including plastic lug for attaching the microswitch to the isolator chassis.



Connection space cover

- For extending the contact hazard protection cover plate, e.g. when using ring terminals with a long collar.
- Bayable as required at the top and bottom.

Material:
Polyamide PA6



B = Width
T = Depth

For NH isolators	Packs of	Model No. SV
Size 00	2	9344.520
Size 1	2	9344.530
Size 2	2	9344.540
Size 3	2	9344.550

Model No. SV	B mm	H mm	T mm
9344.520	106	46	37
9344.530	184	70	42
9344.540	210	70	42
9344.550	250	70	42



1



2

Prism terminals/ box terminals

for NH isolators, sizes 00 to 3
with screw terminal

For direct connection of round and sector-shaped conductors.

Design	For NH isolators	Connection		Tightening torque	Packs of	Model No. SV
		Round conductors	Sector-shaped conductors			
1 Prism terminals	Size 00	10 – 70 mm ²	10 – 70 mm ²	3 Nm	3	9344.600
2 Box terminals	Size 1	35 – 150 mm ²	50 – 150 mm ²	20 Nm	3	9344.610
	Size 2/3	95 – 300 mm ²	120 – 300 mm ²	20 Nm	3	9344.620



Arc chambers

for NH isolators, sizes 1 to 3
To increase switching capacity.

Technical specifications:
See table "NH isolators
(utilisation category)",
page 16.

Packs of	Model No. SV
3	9344.680

Busbar adaptor/NH fused isolator, size 00 (100 mm)



Busbar adaptor

for NH on-load isolators

For mounting NH isolators for mounting plate assembly (see page 11 – 13) on 100 mm busbar systems.

Outlet top/bottom.

Technical information

For assembly instructions, see page 22.

For NH isolators	Packs of	Model No. SV
Size 1 (SV 9344.1XX)	1	9344.810
Size 2 (SV 9344.2XX)	1	9344.820
Size 3 (SV 9344.3XX)	1	9344.830



NH fused isolator, size 00

For direct mounting on 100 mm busbar systems, no drilling required.

Note:

For further information and technical specifications, see Catalogue 31, pages 349, 1134.

Size	00
Rated current	160 A
Rated operating voltage	690 V~
Cable outlet	top/bottom
Type of connection	Screw M8
Tightening torque	6 Nm
● Assembly screw	14 Nm
● Terminal screw	
Packs of	1
Model No. SV	3591.010

Technical information

NH isolator, sizes 00 to 3

Technical specifications IEC 60 947-3					
Size (NH fuse inserts to VDE 0636-201)		Size 00	Size 1	Size 2	Size 3
Rated operating current I_e		160 A	250 A	400 A	630 A
Rated operating voltage U_e		690 V AC ¹⁾	690 V AC ¹⁾	690 V AC ¹⁾	690 V AC ¹⁾
Rated insulation voltage U_i		1000 V	1000 V	1000 V	1000 V
Rated surge voltage resistance U_{imp}		8 kV ¹⁾	8 kV ¹⁾	8 kV ¹⁾	8 kV ¹⁾
Rated frequency		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Conditional rated short-circuit current (when protected with fuses)	at 690 V AC	80 kA	80 kA	50 kA	80 kA
	at 500 V AC	80 kA	80 kA	80 kA	80 kA
Utilisation category	400 V AC	AC-23B	AC-23B (AC-23B ²⁾)	AC-23B (AC-23B ²⁾)	AC-23B (AC-23B ²⁾)
	500 V AC	AC-22B	AC-23B (AC-23B ²⁾)	AC-22B (AC-23B ²⁾)	AC-22B (AC-23B ²⁾)
	690 V AC	AC-21B	AC-22B (AC-23B ²⁾)	AC-21B (AC-23B ²⁾)	AC-21B (AC-23B ²⁾)
	220 V DC ³⁾	DC-22B ²⁾	DC-21B (DC-22B ²⁾)	DC-21B (DC-22B ²⁾)	DC-21B (DC-22B ²⁾)
	440 V DC ³⁾	–	DC-22B ²⁾	DC-22B ²⁾	DC-22B ²⁾
Mechanical life (switching cycles)		1400	1400	800	800
Electrical life (switching cycles)		200	200	200	200
Permissible ambient temperature		–20°C to +60°C	–20°C to +60°C	–20°C to +60°C	–20°C to +60°C
$P_{V \max.}$ / fuse insert		12 W	23 W	34 W	48 W

¹⁾ When using NH isolators with electronic or electromechanical fuse monitoring, the rating data in the following table will apply.

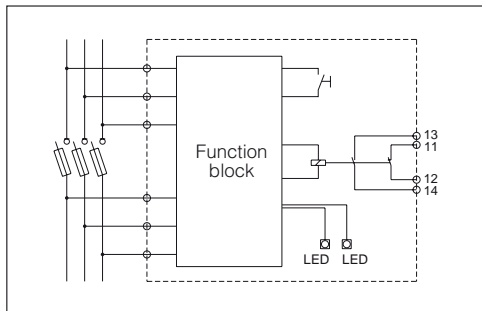
²⁾ With arcing chambers (Model No. SV 9344.680) for increased switching capacity.

³⁾ DC application with population of phase L₁ and L₃.

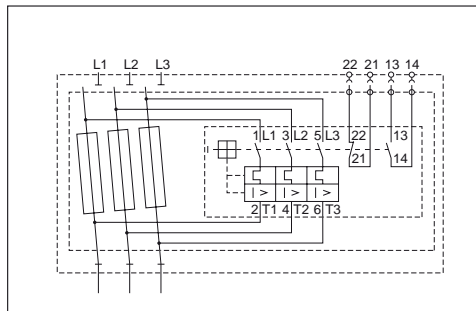
Electronic and electromechanical fuse monitoring

Technical specifications	Electronic fuse monitoring	Electromechanical fuse monitoring
Rated operating voltage U_e	AC 400 V to AC 500 V (50/60 Hz)	AC 24 V to AC 690 V (50/60 Hz) DC 24 V to DC 250 V
Rated surge voltage resistance U_{imp}	3.5 kV	6 kV
Response time	< 0.5 s	< 2 s
Auxiliary contacts	1 NO, 1 NC	1 NO, 1 NC
Load capacity of auxiliary contacts	5 A	4 A
Permissible ambient temperature	–20°C to +60°C	–20°C to +60°C
Display	LED constantly green (operational) 13/14: open 11/12: closed	Rocker switch position "1" (operational) 13/14: closed 21/22: open
	LED flashing red (error message) 13/14: closed 11/12: open	Rocker switch position "0" (error message) 13/14: open 21/22: closed
Connection of auxiliary contacts	Terminal up to 1.5 mm ²	Terminal up to 1.5 mm ²
NH fuse inserts	With contacted, live puller lugs	

Wiring diagram



Electronic fuse monitoring

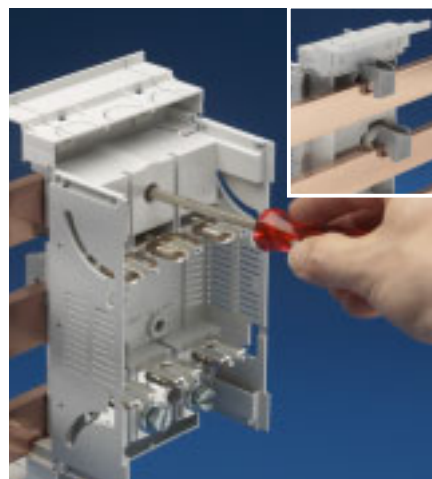


Electromechanical fuse monitoring

Simple busbar assembly

For all sizes of RiLine NH bus-mounting on-load isolators, the inner contact hazard protection cover plates are easily removed with just one release unit for device installation.

There is one uniform tool size for mounting the NH units on the busbar system. All the required torque information is shown directly on the unit chassis.



Easy changeover of the cable outlet

The uniform design of the RiLine NH generation of isolators combines optimum functionality with an attractive design. This feature supports system-compatible integration into the RiLine60 contact hazard protection concept with base tray.

In just 3 seconds, the same device may be used to swap the cable outlet from top to bottom for all RiLine NH bus-mounting on-load isolators by simply rotating the mounting hook.

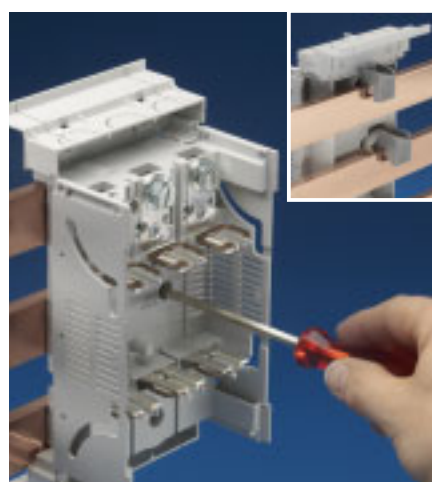
In this way, there is no need to decide whether the cable outlet will go at the top or bottom until immediately prior to assembly. This function offers a clear benefit for customers, by halving the required warehousing and associated costs.



Cable outlet at the bottom



Rotating the mounting hook



Cable outlet at the top

Technical information

Tried-and-tested clamping screw system for contact

The tried-and-trusted clamping screw system, as well as providing low-loss contact, is also much easier to assemble and dismantle than the snap-mounting system,

particularly in the higher current range. Prior to attachment, the NH isolators are easily aligned at the sides.

User-friendly box terminal for all sizes as standard

In addition to the current market standard connection using screws or bolts, the new Rittal RiLine NH isolator range alternatively offers all sizes as standard with a user-friendly box terminal for inexpensive, time-saving connection of round and sector-shaped conductors. This saves the expensive labour costs for preparing the wire ends as well as the material costs of ring terminals.

All RiLine NH isolators with screw connection may optionally be retro-fitted with box or prism terminals. Here too, all torques are directly visible either on the unit itself or on the terminals. All RiLine NH isolators size 1 or above and all box and prism terminals from the accessory range still support the connection of round and sector-shape conductors made from Cu or Al (aluminium conductor connections must be checked at regular intervals).

Conductor version	Code	Standard designation
Single-wire	e	sol (solid)
Multi-wire	m	s (stranded)
Round Single-wire	re	sol
Round Multi-wire	rm	s
Sector Single-wire	enclosures	sol
Sector Multi-wire	sm	s
Fine-wire	f	f (flexible)

Lid lock and seal

All designs have a screwdriver-operated lock as standard, to prevent unintentional opening of the isolator lid. In addition, the lock position may also be sealed with sealing wire.



Lid lock

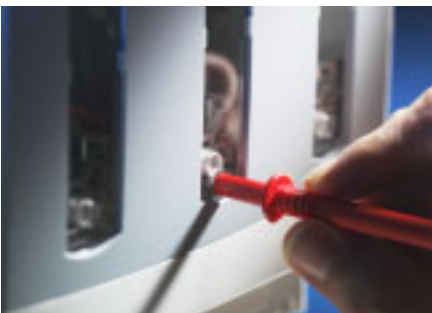


Lid seal

Service-friendly sliding windows with reclosable voltage testing holes

The sliding windows integrated into the isolator lid have a special spring mechanism which automatically closes the holes after voltage testing.

Safe voltage testing with a meter is also possible on the input side at the puller lug.



NH isolator with fuse monitoring

As an alternative to the isolator version without fuse monitoring, all sizes are also optionally available with electronic fuse monitoring and electromechanical fuse monitoring. Both versions serve to increase plant availability and process reliability. Thanks to the floating contacts, the current device status may be readily forwarded to a superordinate control system. Outgoing signal tracks are conveniently connected using connectors.

The fuses used MUST be designed with live puller lugs, otherwise no alerts will be given by the electromechanical fuse monitoring in the event of a malfunction. By contrast, electronic fuse monitoring will emit a continuous error message in such cases.

Technical specifications:

See page 16.



NH isolator with electronic fuse monitoring



NH isolator with electromechanical fuse monitoring

Electronic fuse monitoring

Electronic fuse monitoring has a test button for easy simulation of a defective fuse during commissioning. The auxiliary power for the electronics is generated from the input side of the three-phase network. For technical reasons, the rated frequency of the supplying network (see technical specifications on page 16) must not be exceeded, otherwise the electronic fuse monitor will be damaged.

Use in conjunction with motors in frequency converter mode is one such example. In such cases, electronic fuse monitoring must only be used as rotary current fusing for the frequency converter on the input side, and not in the frequency-modulated motor supply leads.

A green and a red LED display indicate the operating status of the electronic fuse monitor.

Details of how to evaluate the LEDs and the floating alarm contacts may be found in the technical specifications. In the event of a mains failure or if the isolator lid is opened, the current operating status of the alarm contacts is retained.

Note:

In order to ensure fault-free operation, all fuses must be properly installed in accordance with the above conditions, since all the required measuring signals are measured from the puller lugs.

Electromechanical fuse monitoring

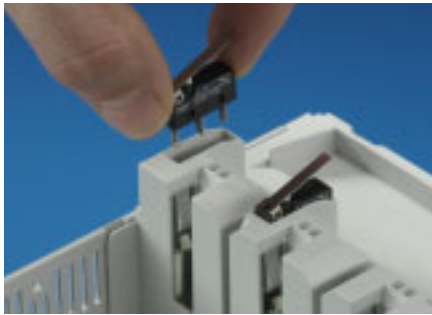
The isolator lids may be removed by simply loosening the connection. Unlike electronic monitoring, this system operates without auxiliary power, yet still performs the same functions. The rocker switch on the operating housing additionally provides a visual display of the operating status.

Technical information

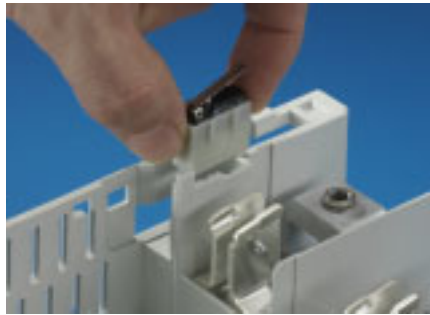
Simple signalling of the switching position with micro-switches

All sizes have the option of accommodating micro-switches to indicate the switching position. The micro-switch simply clips into the relevant position in the isolator chassis. Two microswitch locators are available as standard for each device. This allows the switching position of the isolator lid to be communicated to a PLC, while using the

second micro-switch to operate the load contactor at the same time. The microswitch wiring is routed through the device to the rear or through the pre-punched knock-out of the contact hazard protection cover plates.



Size 00



Sizes 1 to 3



Cable gland

Optimum labelling options

Readily accessible and highly visible, the new generation of isolators offers the option of labelling the units individually according to the wiring plan designation. The inter-

changeable label is protected from dirt by a transparent film.



Arc chambers to increase switching capacity

for NH isolators, size 1 – 3

Technical specifications:

See table "NH isolators (utilisation category)", page 16.



1. Removing the plastic bar



2. Clipping the arc chambers into position



Compact dimensions and ergonomic design

- Same frame size from 00 to NH3.
- Ergonomic isolator lid with user-friendly actuator handle, even for size 00 with an overall width of just 106 mm.
- All versions offer 3 defined positions for:
 1. Lid open (removal position)
 2. Lid switch-ready
 3. Lid closed



Comprehensive contact hazard protection

Comprehensive contact hazard protection ensures the highest standards of safety, coupled with superior user-friendliness.

- Safe switching with integral hand protection.
- Optional plug-in connection space covers (see accessories) to enlarge the connection space e.g. when using ring terminals with a long press sleeve.
- Versatile cut-out options in the cable entry area.

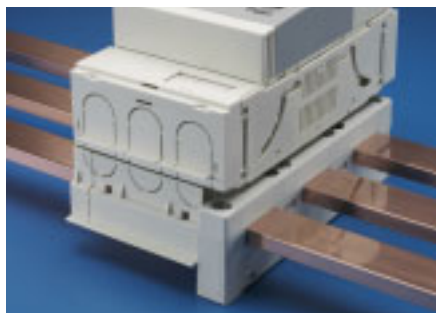
- Perfect all-round protection in conjunction with the Rittal RiLine60 base tray.

Design	IP protection category
Front with lid closed	IP 20
Front with lid open	IP 10

Top-mounting of supports even with flat bars

The panels (removable at the side) allow top-mounting of Rittal RiLine60 busbar supports for all flat bars, enabling very compact configuration of the units. In conjunction with

the super-slimline design, this allows a space-saving configuration.



Technical information

NH on-load isolator

Page 10 – 13

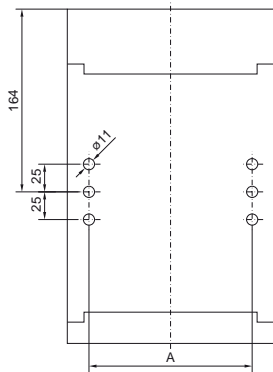
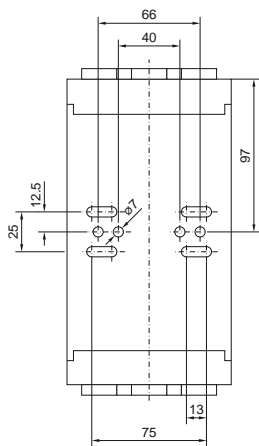
Hole size

Size 00 (SV 9344.000 – 9344.050)

Size 1 (SV 9344.100 – 9344.150)

Size 2 (SV 9344.200 – 9344.250)

Size 3 (SV 9344.300 – 9344.350)



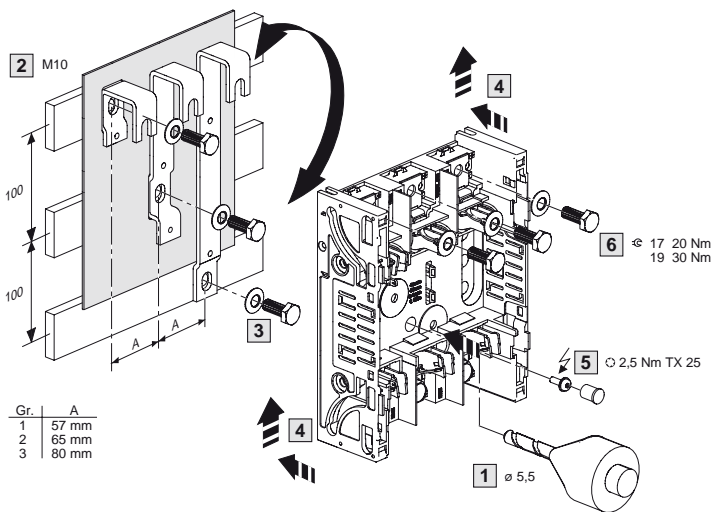
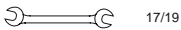
Size	A
1	150
2	166
3	195

Busbar adaptor 100 mm

for NH on-load isolator sizes 1 to 3, for mounting plate assembly

Page 15

Assembly instructions



Note:

For mounting NH on-load isolators size 1 to 3 (see page 11 – 13) on busbar systems with 100 mm bar centre distance, an additional mounting hole (d = 5.5 mm) must be drilled in the respective isolator chassis as shown in the assembly instructions, stage 1 opposite. The busbar adaptor is then mounted on the busbar using M10 screws, see stages 2 and 3, and the isolator is secured onto the adaptor as shown in stages 4 to 6.

List of model numbers, Index

Model No.	Page	Model No.	Page	Model No.	Page	Model No.	Page	Model No.	Page
3071.000	14	9343.200	8	9344.020	10	9344.240	12	9344.610	14
3591.010	15	9343.210	8	9344.030	10	9344.250	12	9344.620	14
9343.000	6	9343.220	8	9344.040	10	9344.300	13	9344.680	14
9343.010	6	9343.230	8	9344.050	10	9344.310	13	9344.810	15
9343.020	6	9343.240	8	9344.100	11	9344.320	13	9344.820	15
9343.030	6	9343.250	8	9344.110	11	9344.330	13	9344.830	15
9343.040	6	9343.300	9	9344.120	11	9344.340	13		
9343.050	6	9343.310	9	9344.130	11	9344.350	13		
9343.100	7	9343.320	9	9344.140	11	9344.510	14		
9343.110	7	9343.330	9	9344.150	11	9344.520	14		
9343.120	7	9343.340	9	9344.200	12	9344.530	14		
9343.130	7	9343.350	9	9344.210	12	9344.540	14		
9343.140	7	9344.000	10	9344.220	12	9344.550	14		
9343.150	7	9344.010	10	9344.230	12	9344.600	14		

A

Adaptor 100 mm
– for NH on-load isolator, size 1 – 3
Arc chambers

15
14

I

Isolators
– Size 00
– Size 1
– Size 2
– Size 3

14

O

On-load isolators
6, 10 – Size 00
7, 11 – Size 1
8, 12 – Size 2
9, 13 – Size 3

6, 10
7, 11
8, 12
9, 13

B

Box terminals
Busbar adaptor 100 mm
– for NH on-load isolator, size 1 – 3

14
15

M

Micro-switch

P

14 Prism terminals

14

C

Connection space cover

14

N

NH bus-mounting on-load isolator
– Size 00
– Size 1
– Size 2
– Size 3
NH fused isolator, size 00
NH on-load isolators
– Size 00
– Size 1
– Size 2
– Size 3

15

T

Technical information
Terminals

16 – 22
14

F

Fused isolator, size 00

15

H

Hole sizes for NH on-load isolators

22

All in all – solutions from Rittal

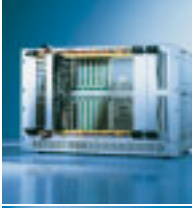


Industrial Enclosures



Power Distribution

Mini-PLS/PLS busbar systems
Busbar systems 40/60/100/150/185 mm
Components for mounting plate installation
Rittal Maxi-PLS low voltage distributors
ISV installation distribution enclosures



Electronic Packaging



System Climate Control



IT Solutions



Communication Systems

Rittal has one of the largest ranges of enclosures available for immediate delivery. However, Rittal also supplies integrated solutions – up to Level 4. This comprises mechanical installation, power supply, electronic components, climate control and central monitoring. For all of your requirements.

Fully assembled and functional. Wherever in the world you develop and implement solutions for yourself and your customers, we are close at hand. The global alliance between production, distribution and service guarantees closeness to the customer. Worldwide!

03/07 • E462

Rittal GmbH & Co. KG · Postfach 1662 · D-35726 Herborn
Telephone: +49(0)2772 505-0 · Telefax: +49(0)2772 505-2319 · eMail: info@rittal.de · www.rittal.com



Switch to perfection **RITTAL**