

Accessories for Ex9B



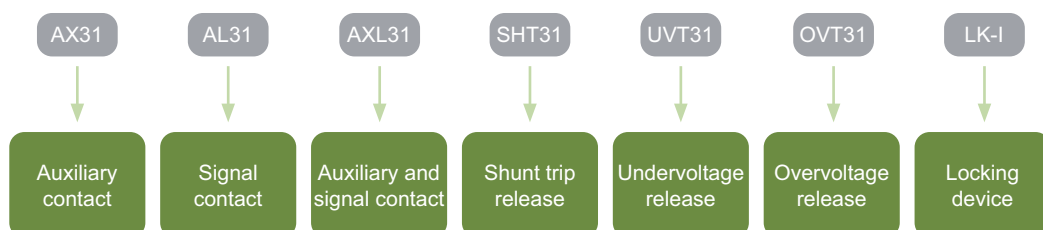
- Accessories for installation devices Ex9B (Ex9BH, Ex9BN, Ex9B125, Ex9BL)
- Auxiliary contacts synchronous with main contacts of the device
- Signal contacts active on electrical tripping of the circuit breaker
- Shunt trip releases
- Locking devices
- Undervoltage releases
- Overvoltage release
- According to IEC/EN 60947-1 and IEC/EN 60947-5-1

Accessories are designed in the way to be possible to combine different types with one installation device. It can be used up to two releases plus up to three units of auxiliary or signal contacts (two units in case of AX3122 with two pairs of contacts) plus one unit of RCD-block (only for Ex9B MCBs).

Release units are mounted from the left to the installation device.

Auxiliary and signal contact units must be mounted from the left to the device or to the release unit(s) when installed. Contact units are equipped with changeover (CO) combination(s) of contacts.

Type Key



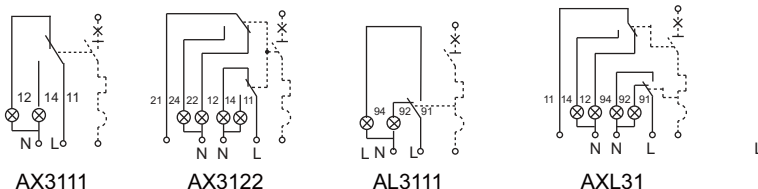
Accessories for Ex9B

Auxiliary and signal contact units



Function	Contacts	Article No.	Type	Packing
Auxiliary	1 CO	100540	AX3111	1/96
Auxiliary	2 CO	100542	AX3122	1/96
Signal	1 CO	100541	AL3111	1/96
Auxiliary + signal	1 CO + 1 CO	100543	AXL31	1/96

Wiring diagrams

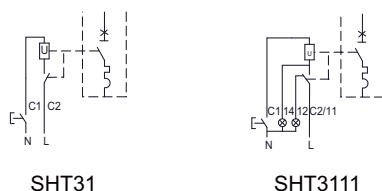


Shunt trip releases



Aux. cont.	AC Op. Volt.	DC Op. Volt.	Article No.	Type	Packing
-	110 — 415	110 — 130	100544	SHT31 110V-415V AC/110V-130V DC	1/96
-	48	48	100545	SHT31 48V AC/DC	1/96
-	12 — 24	12 — 24	100546	SHT31 12-24V AC/DC	1/96
1 CO	110 — 415	110 — 130	100547	SHT3111 110V-415V AC/110V-130V DC	1/96
1 CO	48	48	100548	SHT3111 48V AC/DC	1/96
1 CO	12 — 24	12 — 24	100549	SHT3111 12-24V AC/DC	1/96

Wiring diagrams



Locking devices

- Possibility of locking installation devices in ON or OFF position
- Suitable for devices - Ex9BH, Ex9BN, Ex9BD, Ex9BP, Ex9BL, Ex9BI, Ex9PN, Ex9IP, Ex9I125, Ex9I40, Ex9BT, SHT31, UVT31, OVT31
- Padlock is not included



Function	Article No.	Type	Packing
Locking by padlock	110193	LK-I	1/16/240

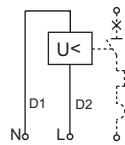
Accessories for Ex9B

Undervoltage releases

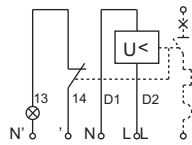


Aux. cont.	AC Op. Volt.	DC Op. Volt.	Article No.	Type	Packing
-	220 — 240	-	100550	UVT31 220-240V AC	1/96
-	48	48	100551	UVT31 48V AC/DC	1/96
1 NC	220 — 240	-	100552	UVT3101 220-240V AC	1/96
1 NC	48	48	100553	UVT3101 48V AC/DC	1/96
1 NO	220 — 240	-	100554	UVT3110 220-240V AC	1/96
1 NO	48	48	100555	UVT3110 48V AC/DC	1/96

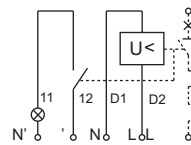
Wiring diagrams



UVT31



UVT3101



UVT3110

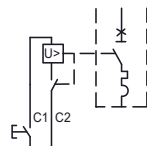
Overvoltage releases

- Overvoltage release is not a protection against transient overvoltage and does not supersede surge protection devices



Aux. cont.	AC Op. Volt.	DC Op. Volt.	Article No.	Type	Packing
-	280V AC±5%	-	100556	OVT31 280V AC±5%	1/96

Wiring diagram



OVT31

Modular DIN Rail Products Busbars

Busbars for simple and reliable interconnection of installation devices. Shortened versions for 12 modules are equipped with end caps.



Part no.	Description
101447	BBU 1L 16 M12(54)
101451	BBU 3L 16 M12

Technical Data Accessories

Accessories for Ex9B

Auxiliary and signal contact units AX31, AL31, AXL31

General parameters

With one device, there can be used up to three contact units with single CO contact or up to two contact units with 2 CO
Contact units can be combined in an arbitrary way
Contact units are mounted to the device from the left
In case of installed release unit(s), contact modules are mounted left to the release(s)
Auxiliary contacts synchronous with main contacts of the device
Signal contacts active on electrical tripping of the circuit breaker (tripping signal contacts)

Electrical parameters

	AX3111	AX3122	AL3111	AXL31
Contacts	1 changeover (CO)	2 changeover (CO)	1 changeover (CO)	1 CO + 1 CO
Contact function	auxiliary	auxiliary	signal	auxiliary + signal
Tested according to	IEC/EN 60947-1, IEC/EN 60947-5-1			
Rated op. voltage	240/415 V AC, 24/48/130 V DC			
Min. op. voltage per contact U_{min}	24 V AC/DC			
Rated frequency	50/60 Hz			
Rated op. current I_e AC	6 A (240 V), 3 A (415 V)			
Rated op. current I_e DC	6 A (24 V), 2 A (48 V), 1 A (130 V)			
Rated thermal current I_{th}	6 A			
Rated op. current I_e , ut. cat. AC-12	6 A (240 V), 3 A (415 V)			
Rated op. current I_e , ut. cat. DC-12	6 A (24 V), 2 A (48 V), 1 A (130 V)			
Rated impulse withstand voltage U_{imp}	4 kV (1.2/50 μ s)			
Rated insulation voltage U_i	500 V			
Max. back-up fuse	10 A gG			
Conditional short circuit current I_k with max. back-up fuse	1 kA			

Mechanical parameters

	AX3111	AX3122	AL3111	AXL31
Tripping indicator	ON-OFF-RESET	ON-OFF-RESET	ON-OFF-RESET	ON-OFF-RESET
Device width	9 mm			
Device height	89 mm			
Frame size	45 mm			
Mounting	easy fastening onto 35 mm device rail (DIN)			
Degree of protection	IP20			
Terminals	lift			
Terminal capacity	1 — 6 mm ²			
Fastening torque of terminals	0.8 — 1 Nm			

Technical Data Accessories

Accessories for Ex9B

Auxiliary and signal contact units AX31, AL31, AXL31

General parameters

With one device, there can be used up to three contact units with single CO contact or up to two contact units with 2 CO
Contact units can be combined in an arbitrary way
Contact units are mounted to the device from the left
In case of installed release unit(s), contact modules are mounted left to the release(s)
Auxiliary contacts synchronous with main contacts of the device
Signal contacts active on electrical tripping of the circuit breaker (tripping signal contacts)

Electrical parameters

	AX3111	AX3122	AL3111	AXL31
Contacts	1 changeover (CO)	2 changeover (CO)	1 changeover (CO)	1 CO + 1 CO
Contact function	auxiliary	auxiliary	signal	auxiliary + signal
Tested according to	IEC/EN 60947-1, IEC/EN 60947-5-1			
Rated op. voltage	240/415 V AC, 24/48/130 V DC			
Min. op. voltage per contact U_{min}	24 V AC/DC			
Rated frequency	50/60 Hz			
Rated op. current I_e AC	6 A (240 V), 3 A (415 V)			
Rated op. current I_e DC	6 A (24 V), 2 A (48 V), 1 A (130 V)			
Rated thermal current I_{th}	6 A			
Rated op. current I_e , ut. cat. AC-12	6 A (240 V), 3 A (415 V)			
Rated op. current I_e , ut. cat. DC-12	6 A (24 V), 2 A (48 V), 1 A (130 V)			
Rated impulse withstand voltage U_{imp}	4 kV (1.2/50 μ s)			
Rated insulation voltage U_i	500 V			
Max. back-up fuse	10 A gG			
Conditional short circuit current I_k with max. back-up fuse	1 kA			

Mechanical parameters

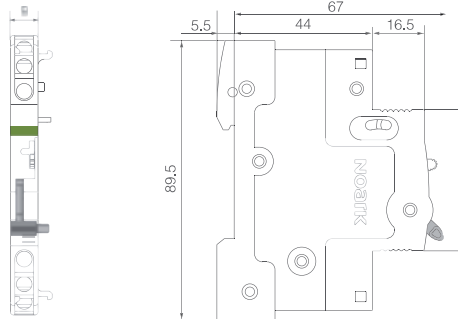
	AX3111	AX3122	AL3111	AXL31
Tripping indicator	ON-OFF-RESET	ON-OFF-RESET	ON-OFF-RESET	ON-OFF-RESET
Device width	9 mm			
Device height	89 mm			
Frame size	45 mm			
Mounting	easy fastening onto 35 mm device rail (DIN)			
Degree of protection	IP20			
Terminals	lift			
Terminal capacity	1 — 6 mm ²			
Fastening torque of terminals	0.8 — 1 Nm			

Technical Data Accessories

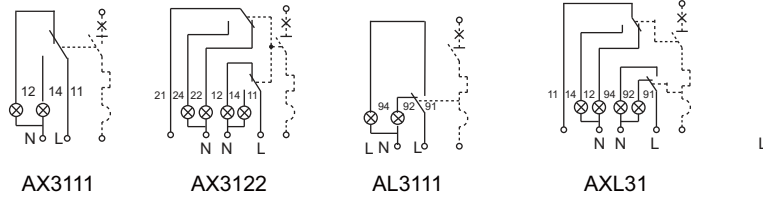
Accessories for Ex9B

Auxiliary and signal contact units AX31, AL31, AXL31

Dimensions



Wiring diagrams



Technical Data Accessories

Accessories for Ex9B

Shunt trip releases SHT31

General parameters

With one device, there can be used up to two units of release (shunt trip, undervoltage, overvoltage)
Release units can be combined in an arbitrary way
Release units are mounted to the device from the left
In case of installed contact module(s), release units are mounted left to the device, right to the contact unit(s)
Can be used for remote switch off

Electrical parameters

	SHT31 110V-415V AC/110V-130V DC SHT3111 110V-415V AC/110V-130V DC	SHT31 48V AC/DC SHT3111 48V AC/DC	SHT31 12-24V AC/DC SHT3111 12-24V AC/DC
Contacts	- 1 changeover (CO)	- 1 changeover (CO)	- 1 changeover (CO)
Contact function	auxiliary	auxiliary	auxiliary
Tested according to	IEC/EN 60947-1, IEC/EN 60947-5-1		
Rated operating voltage	110-415 V AC, 110-130 V DC	48 V AC/DC	12-24 V AC/DC
Rated frequency	50/60 Hz		
Rated impulse withstand voltage U_{imp}	4 kV (1.2/50 μ s)		
Rated insulation voltage	500 V		
Tripping time	< 10 ms	< 10 ms	< 10 ms
Min. duration of control pulse	8 ms	8 ms	8 ms
Max. back-up fuse	10 A gG	10 A gG	10 A gG
Min. op. voltage per AX contact U_{min}	24 V AC/DC		
Rated op. current I_e AC of AX contact	6 A (240 V), 3 A (415 V)		
Rated op. current I_e DC of AX contact	6 A (24 V), 2 A (48 V), 1 A (130 V)		
Rated thermal current I_{th} of AX cont.	6 A		
Rated op. current I_e AC-12 of AX	6 A (240 V), 3 A (415 V)		
Rated op. current I_e DC-12 of AX	6 A (24 V), 2 A (48 V), 1 A (130 V)		
Max. back-up fuse of AX	10 A gG		
Conditional short circuit current I_k with max. back-up fuse of AX	1 kA		

Mechanical parameters

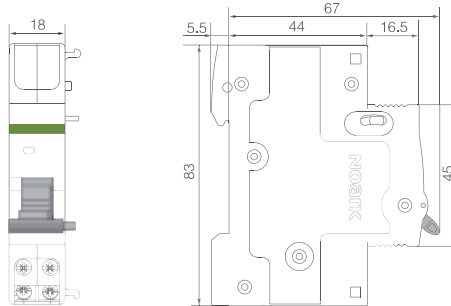
	SHT31 110V-415V AC/110V-130V DC SHT3111 110V-415V AC/110V-130V DC	SHT31 48V AC/DC SHT3111 48V AC/DC	SHT31 12-24V AC/DC SHT3111 12-24V AC/DC
Tripping indicator	red-white	red-white	red-white
Device width	18 mm		
Device height	83 mm		
Frame size	45 mm		
Mounting	easy fastening onto 35 mm device rail (DIN)		
Degree of protection	IP20		
Terminals	lift		
Terminal capacity	1 — 6 mm ²		
Fastening torque of terminals	0.8 — 1 Nm		

Technical Data Accessories

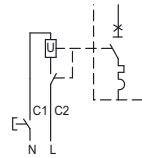
Accessories for Ex9B

Shunt trip releases SHT31

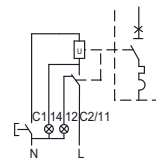
Dimensions



Wiring diagrams



SHT31



SHT3111

Technical Data Accessories

Accessories for Ex9B

Undervoltage releases UVT31

General parameters

With one device, there can be used up to two units of release (shunt trip, undervoltage, overvoltage)
Release units can be combined in an arbitrary way
Release units are mounted to the device from the left
In case of installed contact module(s), release units are mounted left to the device, right to the contact unit(s)
To switch connected device off in case of voltage drop

Electrical parameters

	UVT31 220-240V AC UVT3101 220-240V AC UVT3110 220-240V AC	UVT31 48V AC/DC UVT3101 48V AC/DC UVT3110 48V AC/DC
Contacts	- 1 normally closed (NC) 1 normally open (NO)	- 1 normally closed (NC) 1 normally open (NO)
Contact function	auxiliary	auxiliary
Tested according to	IEC/EN 60947-1, IEC/EN 60947-5-1	
Rated operating voltage U_n	220-240 V AC	48 V AC/DC
Rated frequency	50/60 Hz	
Rated impulse withstand voltage U_{imp}	4 kV (1.2/50 μ s)	
Rated insulation voltage	500 V	
Tripping time	< 10 ms	< 10 ms
Making threshold	85 % U_n	85 % U_n
Tripping threshold	35 % U_n	35 % U_n
Min. op. voltage per AX contact U_{min}	24 V AC/DC	
Rated op. current I_e AC of AX contact	6 A (240 V), 3 A (415 V)	
Rated op. current I_e DC of AX contact	6 A (24 V), 2 A (48 V), 1 A (130 V)	
Rated thermal current I_{th} of AX cont.	6 A	
Rated op. current I_e AC-12 of AX	6 A (240 V), 3 A (415 V)	
Rated op. current I_e DC-12 of AX	6 A (24 V), 2 A (48 V), 1 A (130 V)	
Max. back-up fuse of AX	10 A gG/gL	
Conditional short circuit current I_k with max. back-up fuse of AX	1 kA	

Mechanical parameters

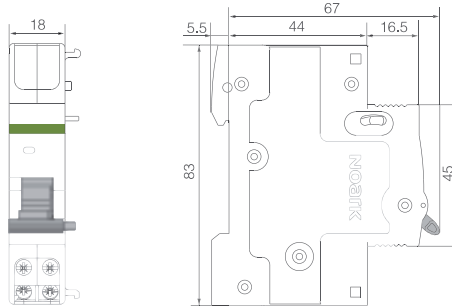
	UVT31 220-240V AC UVT3101 220-240V AC UVT3110 220-240V AC	UVT31 48V AC/DC UVT3101 48V AC/DC UVT3110 48V AC/DC
Tripping indicator	red-white	red-white
Device width	18 mm	
Device height	83 mm	
Frame size	45 mm	
Mounting	easy fastening onto 35 mm device rail (DIN)	
Degree of protection	IP20	
Terminals	lift	
Terminal capacity	1 — 6 mm ²	
Fastening torque of terminals	0.8 — 1 Nm	

Technical Data Accessories

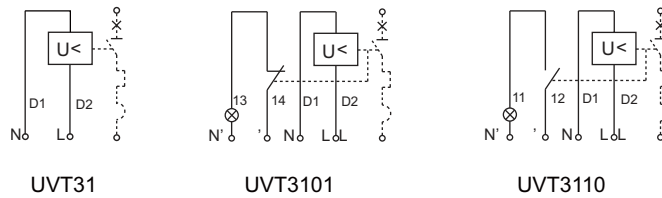
Accessories for Ex9B

Undervoltage releases UVT31

Dimensions



Wiring diagrams



Technical Data Accessories

Accessories for Ex9B

Overvoltage releases OVT31

General parameters

With one device, there can be used up to two units of release (shunt trip, undervoltage, overvoltage)
Release units can be combined in an arbitrary way
Release units are mounted to the device from the left
In case of installed contact module(s), release units are mounted left to the device, right to the contact unit(s)
Overvoltage release is not a protection against transient overvoltage and does not supersede surge protection devices
To switch connected device off in case of increased voltage

Electrical parameters

	OVT31 280V AC±5%
Contacts	-
Tested according to	IEC/EN 60947-1, IEC/EN 60947-5-1
Rated operating voltage U_n	280 V AC ±5 %
Rated frequency	50/60 Hz
Rated impulse withstand voltage U_{imp}	4 kV (1.2/50 μs)
Rated insulation voltage	500 V
Tripping time	< 1 s (290 V), < 0,1 s (380 V)

Mechanical parameters

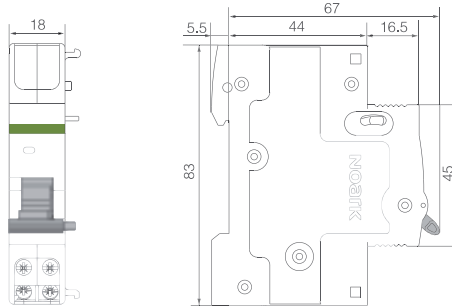
	OVT31 280V AC±5%
Tripping indicator	red-white
Device width	18 mm
Device height	83 mm
Frame size	45 mm
Mounting	easy fastening onto 35 mm device rail (DIN)
Degree of protection	IP20
Terminals	lift
Terminal capacity	1 — 6 mm ²
Fastening torque of terminals	0.8 — 1 Nm

Technical Data Accessories

Accessories for Ex9B

Overvoltage releases OVT31

Dimensions



Wiring diagram

