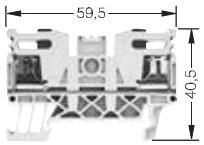
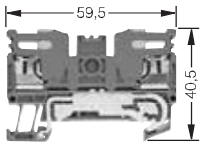
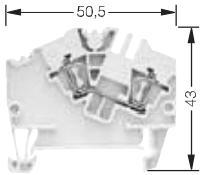
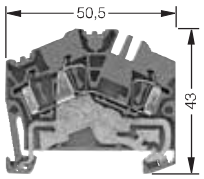
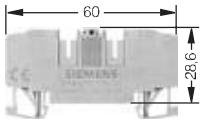
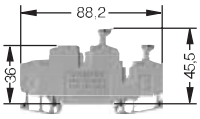
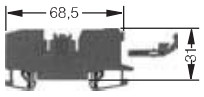
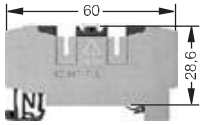
ALPHA FIX
Terminal Blocks

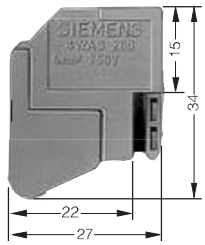
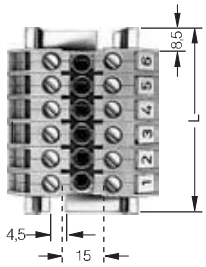
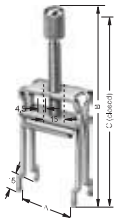
12

Introduction

Overview

		Order No.	Page
ALPHA FIX IDC terminals with insulation displacement connection			
	IDC is the abbreviation for Insulation Displacement Connection and means that the insulation of the conductor is cut on both sides together with the spring by the cutting unit. A secure contact is thus established between the conductor and the interconnecting conductor of the terminal.		
	**Through-type terminals**	8WA3	12/7
	**PE terminals**	8WA3	12/8
ALPHA FIX SL compact terminals, spring loaded			
	The compact version of the terminal blocks, especially designed for distribution boards, saves space and the proven spring-loaded system ensures a secure and permanent connection.		
	**Through-type terminals**	8WA2	12/9
	**PE terminals**	8WA2	12/11
ALPHA FIX SL standard terminals, spring loaded			
	The fast, reliable and modern connection method. Closed design and unique linking system guarantee a minimum of accessories.		
	**Through-type terminals**	8WA2	12/14
	**Two-tier terminals**	8WA2	12/16
	**Neutral isolating terminals**	8WA2	12/17
	**PE terminals**	8WA2	12/18

Introduction

		Order No.	Page
	**Transformer terminals**	8WA9	12/48
	**Customized versions**	8WA1	12/48
	**Shield terminals**	8WA4	12/49

ALPHA FIX IDC Terminals with Insulation Displacement Connection

Introduction

Overview

IDC is the abbreviation for Insulation Displacement Connection and means that the insulation of the conductor is cut on both sides together with the spring by the cutting unit. A secure contact is thus established between the conductor and the inter-connecting conductor of the terminal. The range for a conductor cross-section of 1.5 mm^2 includes through-type and PE terminals for two, three and four connections.

Standards

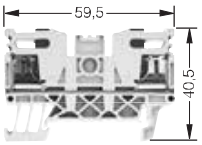
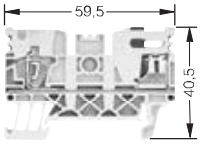
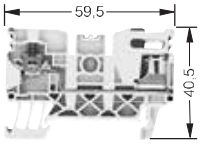
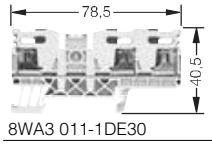
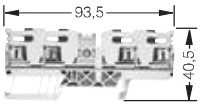
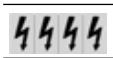
The terminal blocks with insulation displacement connection comply with the requirements of the IEC 60947-7-1 or -2 and EN 60352-4 standards. The rated insulation voltage is 500 V and the rated uninterrupted current is 17.5 A.

Benefits

The advantages of this connection system are quite clear:

- Fast connection
  - No stripping of conductor
  - Conductor is merely cut to length, inserted, and connected by simply pushing a slide
  - End sleeves are no longer required
- Simple handling
  - No special tool required, the screwdriver from the ALPHA FIX SL range can also be used here
- Safe contact
  - Thanks to the reliability of system
  - Thanks to selected materials
  - Thanks to tight fitting of the conductor through latching-in of the slide
- Space savings
  - Thanks to extremely small version, 5 mm wide
  - An assembly area of max. 100 mm is required for terminals with four connections

Selection and ordering data

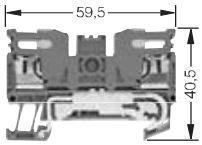
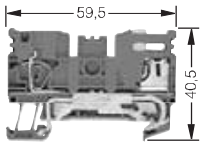
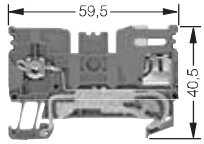
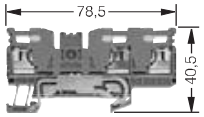
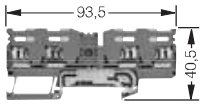
Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Through-type terminals							
		Terminal size 1.5 mm², width 5 mm AWG 24-16					
 8WA3 011-1DE20	17.5 A 500 V	**Through-type terminals, with two clamping points** IDC/IDC	Gray Blue	**8WA3 011-1DE20** **8WA3 011-1BE23**		041 041	50 50
		IDC/spring	Gray Blue	**8WA3 021-1DE20** **8WA3 021-1BE23**		041 041	50 50
		IDC/screw	Gray Blue	**8WA3 031-1DE20** **8WA3 031-1BE23**		041 041	50 50
 8WA3 021-1DE20							
 8WA3 031-1DE20							
 8WA3 011-1DE30	17.5 A 500 V	**Through-type terminals, with three clamping points** IDC/IDC	Gray Blue	**8WA3 011-1DE30** **8WA3 011-1BE33**		041 041	50 50
 8WA3 011-1DE40	17.5 A 500 V	**Through-type terminals, with four clamping points** IDC/IDC	Gray Blue	**8WA3 011-1DE40** **8WA3 011-1BE43**		041 041	50 50
Accessories							
8WA3 522-7WE01		**Cover plates** For through-type terminals with two clamping points	Gray Blue	**8WA3 522-7WE01** **8WA3 522-7WE03**		041 041	50 50
		For through-type terminals with three clamping points	Gray Blue	**8WA3 522-7WE31** **8WA3 522-7WE33**		041 041	50 50
		For through-type terminals with four clamping points	Gray Blue	**8WA3 522-7WE41** **8WA3 522-7WE43**		041 041	50 50
 8WA8 522-7VF02		**Connecting combs** For two terminals For three terminals For four terminals For ten terminals	 Yellow Yellow Yellow Yellow	 **8WA8 522-7VF02** **8WA8 522-7VF03** **8WA8 522-7VF04** **8WA8 522-7VF10**		 041 041 041 041	 60 60 60 20
		**Covers with warning arrow**	Yellow	**8WA3 522-7WE06**		041	20
		**Test adapters**	Black	**8WA3 522-7WE07**		041	25
		**Reduction sleeves**	White	**8WA3 522-7WE00**		041	100

* You can order this quantity or a multiple thereof.

ALPHA FIX IDC Terminals with Insulation Displacement Connection

PE terminals

Selection and ordering data

Dimensions	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
PE terminals with connection to standard mounting rail						
	Terminal size 1.5 mm², width 5 mm AWG 24-16					
 8WA3 011-1PE20	**PE terminals, with two clamping points**					
	IDC/IDC	Green-yellow	**8WA3 011-1PE20**		041	50
	IDC/spring	Green-yellow	**8WA3 021-1PE20**		041	50
	IDC/screw	Green-yellow	**8WA3 031-1PE20**		041	50
 8WA3 021-1PE20						
 8WA3 031-1PE20						
	**PE terminals, with three clamping points**					
	IDC/IDC	Green-yellow	**8WA3 011-1PE30**		041	50
	**PE terminals, with four clamping points**					
	IDC/IDC	Green-yellow	**8WA3 011-1PE40**		041	50
Accessories						
8WA3 522-7WE01	**Cover plates**					
	For PE terminals with two clamping points	Gray	**8WA3 522-7WE01**		041	50
	For PE terminals with three clamping points	Gray	**8WA3 522-7WE31**		041	50
	For PE terminals with four clamping points	Gray	**8WA3 522-7WE41**		041	50
	**Test adapters**	Black	**8WA3 522-7WE07**		041	25
	**Reduction sleeves**	White	**8WA3 522-7WE00**		041	100

* You can order this quantity or a multiple thereof.

Overview

The compact version of the terminal blocks, especially designed for distribution boards, saves space and the proven spring-loaded system ensures a secure and permanent connection. The range for conductor cross-sections of 2.5 mm^2 and 4 mm^2 includes through-type and PE terminals. The clearly defined top contour is retained for two and three connections.

Standards

DIN VDE 0110 Part 1
DIN VDE 0609 and IEC 60947-7-1 or IEC 60947-7-2.
The rated insulation voltage is 800 V and the rated uninterrupted current is 24 A (2.5-mm^2 terminal) or 32 A (4-mm^2 terminal).

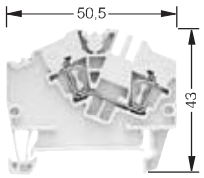
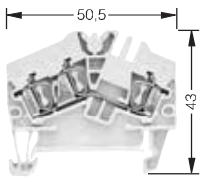
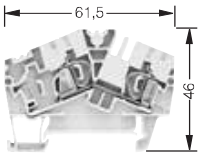
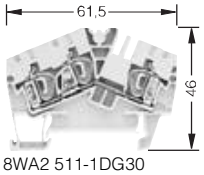
Benefits

The advantages of this range of terminal blocks are:

- Simple connection
  - Front connection
  - No end sleeves required
  - Same screwdriver from the ALPHA FIX SL range
- Space savings
  - Thanks to small version
- Flexible linking
  - Two links
  - Same linking accessories as with the IDC terminal blocks
- Uniform labeling accessories for the complete range of terminals

Through-type terminals

Selection and ordering data

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Through-type terminals							
		Terminal size 2.5 mm^2, width 5 mm AWG 26-12					
 8WA2 511-1DF20	24 A 800 V	**Through-type terminals, with two clamping points**	Gray Blue	**8WA2 511-1DF20** **8WA2 511-1BF23**		041 041	50 50
 8WA2 511-1DF30	24 A 800 V	**Through-type terminals, with three clamping points**	Gray Blue	**8WA2 511-1DF30** **8WA2 511-1BF33**		041 041	50 50
		Terminal size 4 mm^2, width 6 mm AWG 26-10					
 8WA2 511-1DG20	32 A 800 V	**Through-type terminals, with two clamping points**	Gray Blue	**8WA2 511-1DG20** **8WA2 511-1BG23**		041 041	50 50
 8WA2 511-1DG30	32 A 800 V	**Through-type terminals, with three clamping points**	Gray Blue	**8WA2 511-1DG30** **8WA2 511-1BG33**		041 041	50 50

*** You can order this quantity or a multiple thereof.**

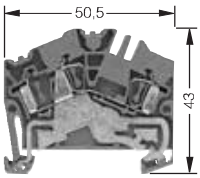
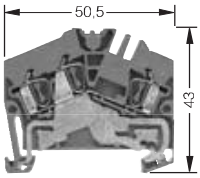
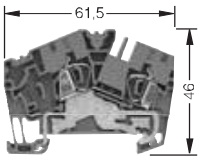
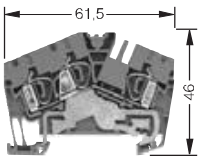
ALPHA FIX SL Compact Terminals, Spring Loaded

Through-type terminals

Dimensions	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Accessories						
8WA8 522-7WG01	**Cover plates**					
	For through-type terminals with terminal size 2.5 mm²	Gray	**8WA8 522-7WF01**		041	50
		Blue	**8WA8 522-7WF03**		041	50
	For through-type terminals with terminal size 4 mm²	Gray	**8WA8 522-7WG01**		041	50
		Blue	**8WA8 522-7WG03**		041	50
 8WA8 522-7VF02	**Connecting combs**					
	For through-type terminals with terminal size 2.5 mm²					
	For two terminals	Yellow	**8WA8 522-7VF02**		041	60
	For three terminals	Yellow	**8WA8 522-7VF03**		041	60
	For four terminals	Yellow	**8WA8 522-7VF04**		041	60
	For ten terminals	Yellow	**8WA8 522-7VF10**		041	20
	For through-type terminals with terminal size 4 mm²					
	For two terminals	Yellow	**8WA8 522-7VG02**		041	60
	For three terminals	Yellow	**8WA8 522-7VG03**		041	60
	For four terminals	Yellow	**8WA8 522-7VG04**		041	60
	For ten terminals	Yellow	**8WA8 522-7VG10**		041	20
 8WA8 522-7WF06	**Covers with warning arrow**					
	For through-type terminals with terminal size 2.5 mm²	Yellow	**8WA8 522-7WF06**		041	20
	For through-type terminals with terminal size 4 mm²	Yellow	**8WA8 522-7WG06**		041	20
	**Test adapters**					
	For through-type terminals with terminal size 2.5 mm²	Black	**8WA8 522-7WF07**		041	25
	For through-type terminals with terminal size 4 mm²	Black	**8WA8 522-7WG07**		041	25

* You can order this quantity or a multiple thereof.

Selection and ordering data

Dimensions	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
PE terminals with connection to standard mounting rail						
	Terminal size 2.5 mm², width 5 mm AWG 26-12					
	**PE terminals, with two clamping points**	Green-yellow	**8WA2 511-1PF20**		041	50
	**PE terminals, with three clamping points**	Green-yellow	**8WA2 511-1PF30**		041	50
	Terminal size 4 mm², width 6 mm AWG 26-10					
	**PE terminals, with two clamping points**	Green-yellow	**8WA2 511-1PG20**		041	50
	**PE terminals, with three clamping points**	Green-yellow	**8WA2 511-1PG30**		041	50
Accessories						
8WA8 522-7WG01	**Cover plates**					
	For PE terminals with terminal size 2.5 mm²	Gray	**8WA8 522-7WF01**		041	50
	For PE terminals with terminal size 4 mm²	Gray	**8WA8 522-7WG01**		041	50
	**Covers with warning arrow**					
	For PE terminals with terminal size 2.5 mm²	Yellow	**8WA8 522-7WF06**		041	20
	For PE terminals with terminal size 4 mm²	Yellow	**8WA8 522-7WG06**		041	20

*** You can order this quantity or a multiple thereof.**

ALPHA FIX SL Standard Terminals, Spring Loaded

Introduction

Overview

Terminal blocks are used for the space-saving connection of incoming and outgoing lines in switchgear and distribution boards.

Advantages

- Fast mounting
  - Easy to snap on
  - Insulated on both sides, no end plates required
- Simple connection
  - Front connection, no end sleeves required
  - 15° angle between screwdriver and conductor
  - Same screwdriver for terminal sizes 1.5, 2.5, 4 and 6 mm^2
  - Screwless connection of neutral isolating terminal to neutral busbar
- Small number of linking accessories
  - Screwless cross connection system consisting of only 3 accessories: two-pole bridge, link rail with one-pin plugs for terminal sizes 2.5, 4 and 6 mm^2.
- Uniform labels on cards for the entire terminal range up to 70 mm^2.

Standards

EN 60664-1, EN 60999 and IEC 60947-7-1 or IEC 60947-7-2.

For 8WA2 the size of the connecting holes corresponds to the rated cross-sections of the conductors.

The terminals are finger-safe according to IEC 60529 and EN 50274 (except for bare terminals and solder terminations). Through-type terminals are resistant to earthquakes according to IEC 60068-2-6.

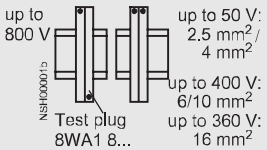
Colored terminal blocks

With colored wiring according to EN 60204-1, the connecting level can also be included in the colored markings:

- Red for control circuits with AC current
- Blue for control circuits with DC current or neutral conductor
- Orange for interlock circuits with AC or DC current which are fed from outside and are live when the main control switch is turned off
- Green-yellow through-type terminals for protective conductors (without a link to the mounting rail).

Testing

Testing is possible without interrupting operation by inserting the test plug into the provided opening, whereby the following test plug arrangement must be observed:

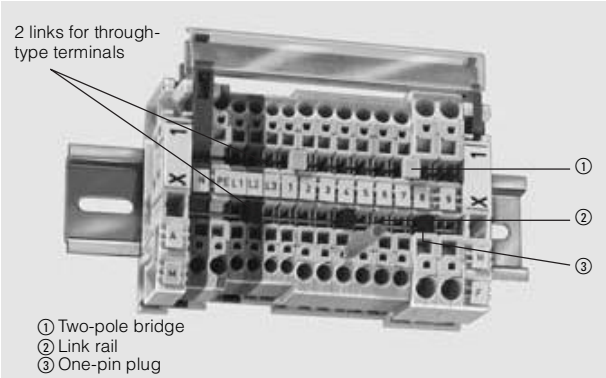


Design

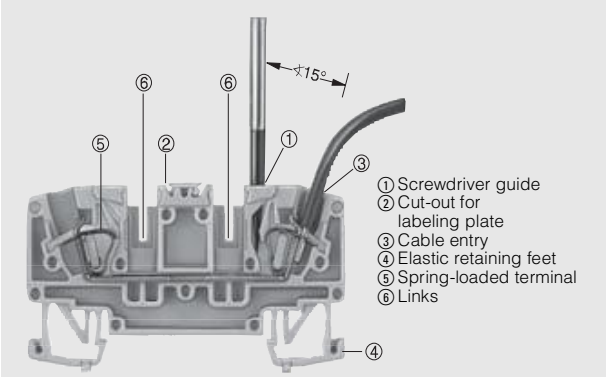
The terminal blocks are insulated on both sides. End plates are therefore not required. The symmetrical design of the standard terminals prevents them from being snapped on the wrong way round. The insulating bodies up to and including terminal size 16 are made of thermoplastic, polyamide 6.6 with a tracking resistance of CTI 600 according to DIN VDE 0303 Part 1.

The materials used are ecologically harmless: e.g. cadmium-free, and without halogens or silicone.

The plastics used are flame-retardant and self-extinguishing according to EN 60695-2-2, VDE 0471, Part 2-2 and UL 94 V-2.



Equipped terminal strip



8WA2 through-type terminal without screws, sectional view

Terminal size

The terminal size corresponds to the rated cross-section. According to IEC 60947-1, one finely stranded copper conductor without end sleeve can be connected to each clamping point. If the rated cross-section is connected with an end sleeve, the next larger terminal size has to be used. End sleeves should only be used in particularly corrosive ambient atmospheric conditions.

Clamping methods

The clamping point is opened by insertion of the operating device, the conductor is inserted to the stop and is clamped tight after the screwdriver is removed. This method guarantees observation of all national and international tensile requirements. The spring steel of the spring-loaded terminal is of nickel-chromium, ensuring that the contacting between the conductor and the terminal will be corrosion-proof and vibration-resistant.

Assembly

The terminals are snapped onto 35 mm mounting rails according to IEC 60715 TH35 and secured against movement using end retainers. A lateral mounting tolerance of 0.2 mm has to be observed.

Connection of conductors

Due to the spring-loaded terminal system solid, stranded or finely stranded conductors can be clamped safely and permanently by front insertion and without the use of end sleeves. It is recommended to connect only one conductor per clamping point. The cable entries are designed in such a way that the insulation of the rated conductor cross-section as well as that of the next smaller cross-section cannot be clamped in this opening (the length of insulation to be stripped is printed on the terminal). As a splice protection measure when using finely stranded and very finely stranded conductors, the ends can be tin-coated or compacted by means of ultrasound.

Connection of aluminum conductors

Spring-loaded terminals are also suitable for solid aluminum conductors of up to 4 mm^2 if the generally applicable preparation techniques, e.g. brushing and greasing, are used.

Also it has to be taken into account that due to the lower conductivity of aluminum, the rated uninterrupted currents will be lower:

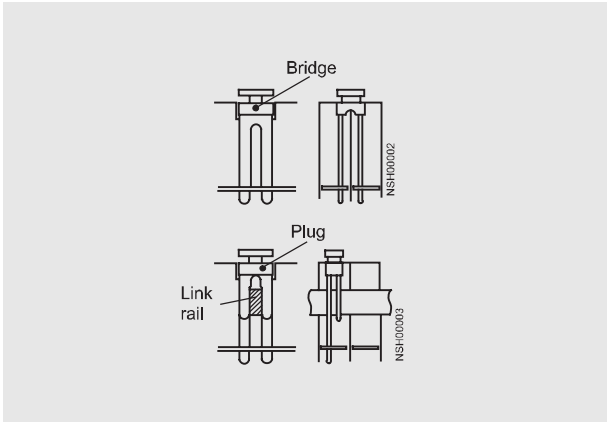
- 1.5 mm^2 = 10 A
- 2.5 mm^2 = 16 A
- 4 mm^2 = 22 A

Accessories

Linking system

The two-pole bridge is used for the linking of adjoining terminals. To connect non-adjacent terminal the link rail, which can be cut to any required length, is inserted into the links and the terminals are connected with the one-pin plugs.

Bridges and plugs



No linking accessories are necessary for initiator-actuator terminals.

Insulation plates

8WA2 836 or 8WA2 845 insulation plates are used for isolation of the link rails.

Barriers

The yellow barriers protrude from the terminal line and are used as visual separation as well as to increase the rated insulation voltage.

End retainers and accessories

The 8WA2 808 end retainers are snapped onto the standard mounting rails to prevent the terminals from sliding out of place. For insulation of the 8WA2 842 neutral busbar, the 8WA2 837 busbar end (8WA2 826 for Insta terminals) is inserted in the end retainer.

There are several options for labeling the end retainers: the 8WA1 806 end label, the 8WA8 826-0A. terminal strip label and 4 labeling plates. The end retainers can also be used for the 8WA1 terminals with the 6 x 6 mm neutral busbar.

Screwdrivers

The 8WA2 803 and 8WA2 804 screwdrivers are used for opening the clamping points with conductor cross-sections from 1.5 to 6 mm^2; for 10 and 16 mm^2 the 8WA2 806 is used.

Retaining plates

The 8WA2 835 and 8WA2 844 retaining plates are used for fixing the 8WA2 830 link rail in position and for removing it from the linking duct.

Labeling accessories

To allow easier handling, the 8WA8 84. and 8WA8 86. labels are provided in card form with horizontal or vertical inscription, suitable for all terminals from 1.5 to 70 mm^2.

The 8WA2 850 label holders are included in the scope of supply of the two-tier terminals. They can also be snapped into the sockets for test plugs on the standard terminals.

The 8WA2 838 group identification label is snapped onto retaining plates or insulation plates.

Lockouts

The 8WA2 848 lockout prevents impermissible switching of the neutral disconnector on terminals with a neutral isolating function.

Insulation stops

The 8WA2 82. insulation stops ensure reliable retention of the conductor insulation for thin conductors.

10 × 3 mm neutral busbars and accessories

The 8WA2 805 cover is available for the neutral busbar in order to ensure finger-safety.

The 8WA2 843 busbar support is included in the scope of supply of the 8WA2 011-1NK23 and -3JG11 feeder terminals. The busbar support can be inserted into the neutral isolating terminals or the Insta terminals with neutral isolating function in order to fix the 8WA2 842 neutral busbar in position.

Test plugs

The terminals have openings for 8WA1 867 test plugs.

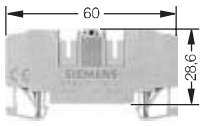
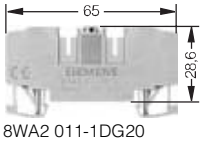
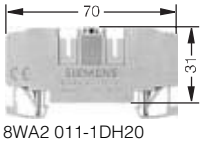
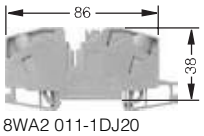
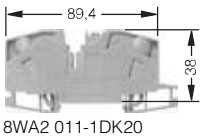
ALPHA FIX SL Standard Terminals, Spring Loaded

Through-type terminals

12

Selection and ordering data

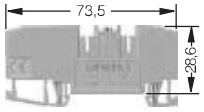
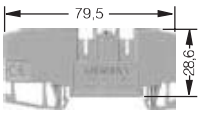
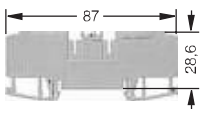
With thermoplastic insulating body · Front connection with spring-loaded terminals · 1-pole

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No. (see page 12/15)	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Through-type terminals with two clamping points								
 8WA2 011-1DF20	***Terminal size 2.5 mm² · Width 5.2 mm AWG 28-14 AWG 26-14***							
	24 A / 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DF20**		041	50
			Red		**8WA2 011-1BF21**		041	50
			Blue		**8WA2 011-1BF23**		041	50
		Barriers	Yellow	①	**8WA2 811**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
 8WA2 011-1DG20	***Terminal size 4 mm² · Width 6.2 mm AWG 28-12 AWG 26-12***							
	32 A / 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DG20**		041	50
			Red		**8WA2 011-1BG21**		041	50
			Blue		**8WA2 011-1BG23**		041	50
		Barriers	Yellow	①	**8WA2 811**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
 8WA2 011-1DH20	***Terminal size 6 mm² · Width 8.2 mm AWG 24-10 AWG 24-10***							
	41 A / 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DH20**		041	50
			Blue		**8WA2 011-1BH23**		041	50
		Barriers	Yellow	①	**8WA2 811**		041	50
		Insulation plates	Yellow	④	**8WA2 845**		041	50
		Retaining plates for link rail	Light gray	⑥	**8WA2 844**		041	50
	32 A	**Two-pole bridges**[1)]	Light gray		**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black		**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long			**8WA2 830**		041	20
 8WA2 011-1DJ20	***Terminal size 10 mm² · Width 10 mm AWG 24-8***							
	57 A / 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DJ20**		041	20
			Blue		**8WA2 011-1BJ23**		041	20
		Barriers	Yellow		**8WA2 817**		041	50
		Finger protection covers	Yellow	⑨	**8WA2 856**		041	100
 8WA2 011-1DK20	***Terminal size 16 mm² · Width 12 mm AWG 24-6***							
	76 A / 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DK20**		041	20
			Blue		**8WA2 011-1BK23**		041	20
		Barriers	Yellow		**8WA2 817**		041	50
		Finger protection covers	Yellow	⑨	**8WA2 857**		041	100
	32 A	**Two-pole bridges**[1)]	Light gray		**8WA2 851**		041	50
	32 A	**One-pin plugs**	Black		**8WA2 852**		041	50
	32 A	**Link rails** 500 mm long			**8WA2 853**		041	5

1) For use without link rail.

* You can order this quantity or a multiple thereof.

With thermoplastic insulating body · Front connection with spring-loaded terminals

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Through-type terminals with three clamping points								
 8WA2 011-1DF30	*Terminal size 2.5 mm² · Width 5.2 mm AWG 28-14 AWG 26-14*							
	24 A 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DF30**		041	10
			Blue		**8WA2 011-1BF33**		041	10
		Barriers	Yellow	②	**8WA2 813**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
 8WA2 011-1DG30	*Terminal size 4 mm² · Width 6.2 mm AWG 28-12 AWG 26-12*							
	32 A 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DG30**		041	10
			Blue		**8WA2 011-1BG33**		041	10
		Barriers	Yellow	②	**8WA2 813**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
1-pole through-type terminals with four clamping points								
 8WA2 011-1DF40	*Terminal size 2.5 mm² · Width 5.2 mm AWG 28-14 AWG 26-14*							
	24 A 800 V	**Through-type terminals**	Light gray		**8WA2 011-1DF40**		041	10
			Blue		**8WA2 011-1BF43**		041	10
		Barriers	Yellow	⑦	**8WA2 813**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
	32 A	**Two-pole bridges**[1]	Light gray		**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black		**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long			**8WA2 830**		041	20

1) For use without link rail.

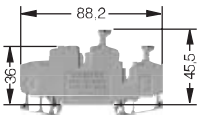
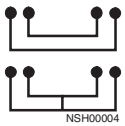
*** You can order this quantity or a multiple thereof.**

ALPHA FIX SL Standard Terminals, Spring Loaded

Two-tier terminals

12

Selection and ordering data

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No. (see page 12/15)	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
1/2-pole two-tier terminals with four clamping points								
	Terminal size 4 mm² · Width 6.2 mm AWG 28-12 AWG 26-12							
 8WA2 011-2DG20	32 A 690 V	**2-pole** with 2 × 2 clamping points	Light gray[1]		**8WA2 011-2DG20**		041	50
			Blue		**8WA2 011-2BG23**		041	50
	32 A 800 V	**1-pole** with 1 × 4 clamping points	Light gray		**8WA2 011-2DG40**		041	50
			Blue		**8WA2 011-2BG43**		041	50
		Barriers	Yellow	⑦	**8WA2 812**		041	50
		Insulation plates	Yellow	③	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑤	**8WA2 835**		041	50
Version: 2-pole 1-pole 		**Label holders** (included in scope of delivery of two-tier terminals, can also be used for through-type terminals)	Light gray	⑧	**8WA2 850**		041	50
	32 A	**Two-pole bridges**[2]	Light gray		**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black		**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long			**8WA2 830**		041	20

For miscellaneous accessories, see page 12/25.
For labeling accessories, see page 12/50.

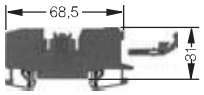
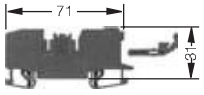
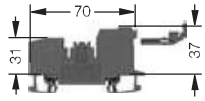
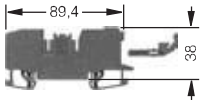
1) Delivery includes 2 label holders, a further 2 can be fitted.

2) For use without link rail.

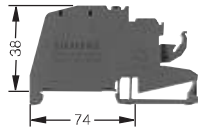
* You can order this quantity or a multiple thereof.

Selection and ordering data

With thermoplastic insulating body · Front connection with spring-loaded terminals · 1-pole with one clamping point

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal size 4 mm² · Width 6.2 mm AWG 28-12 AWG 26-12					
 8WA2 011-1NG23	32 A Isolating distance 400 V	**Neutral isolating terminals**	Blue	**8WA2 011-1NG23**		041	50
		Terminal size 6 mm² · Width 8.2 mm AWG 24-10 AWG 24-10					
 8WA2 011-1NH23	41 A Isolating distance 400 V	**Neutral isolating terminals**	Blue	**8WA2 011-1NH23**		041	50
 8WA2 011-3JH10	41 A	**Neutral isolating terminals** High Insta terminal level, for mixing standard and Insta terminals on the standard mounting rail	Blue	**8WA2 011-3JH10**		041	10
		Terminal size 16 mm² · Width 12 mm AWG 24-6					
 8WA2 011-1NK20	76 A Isolating distance 400 V	**Neutral isolating terminals**	Blue	**8WA2 011-1NK20**		041	20

Accessories

		**Neutral busbar supports**	Blue	**8WA2 843**		041	50
		**Lockouts**	Yellow	**8WA2 848**		041	50
		**Neutral busbar ends** For insertion into 8WA2 808 end retainer	Blue	**8WA2 837**		041	50
	135 A	**Neutral busbars** 10 × 3 mm; tin-coated 1000 mm long		**8WA2 842**		041	1
		**Covers** For neutral busbar 500 mm long	Trans-parent	**8WA2 805**		041	2
	68 A 800 V	**Feed-in terminals 16 mm²** Width 10 mm With screw connection (delivery includes the 8WA2 843 neutral busbar support)	Blue	**8WA2 011–1NK23**		041	20
		**Feed-in terminals for 10 × 3 mm and 6 × 6 mm neutral busbars** Up to 4 mm² Up to 25 mm² Up to 35 mm²	Bare	**8WA2 867** **8WA2 868** **8WA2 870**		041 041 041	50 50 50

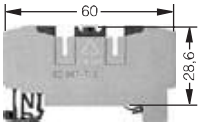
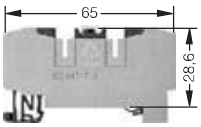
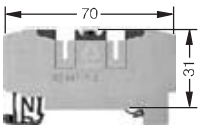
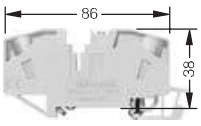
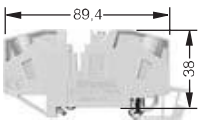
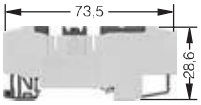
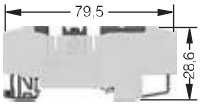
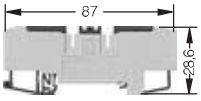
For linking accessories, see page 12/24.
For labeling accessories, see page 12/50.

*** You can order this quantity or a multiple thereof.**

12

PE terminals

Selection and ordering data

Dimensions	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
PE terminals with 2 clamping points and connection to standard mounting rail						
	***Terminal size 2.5 mm² · Width 5.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PF20**		041	50
	***Terminal size 4 mm² · Width 6.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PG20**		041	50
	***Terminal size 6 mm² · Width 8.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PH20**		041	50
	***Terminal size 10 mm² · Width 10 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PJ20**		041	20
	***Terminal size 16 mm² · Width 12 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PK20**		041	20
	**Two-pole bridges** PE/ground/N function: 10/16 mm² Bridge blue through-type terminal to PE terminal 10/16 mm²	Yellow	**8WA2 854**		041	20
PE terminals with 3 clamping points and connection to standard mounting rail						
	***Terminal size 2.5 mm² · Width 5.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PF30**		041	10
	***Terminal size 4 mm² · Width 6.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PG30**		041	10
PE terminals with 4 clamping points and connection to standard mounting rail						
	***Terminal size 2.5 mm² · Width 5.2 mm*** **PE/ground terminals**	Green-yellow	**8WA2 011-1PF40**		041	20

* You can order this quantity or a multiple thereof.

Overview

Fuse terminals are used to protect control circuits from short-circuit.

The fuse terminals are intended for G fuse links 5 × 20 mm and 5 × 25 mm up to 6.3 A and 250 V and for bridging links up to 16 A and 800 V and have a mounting for a replacement fuse link.

Fuse terminals are positive opening fuse-disconnectors.

The fuse links must be replaced at zero voltage.

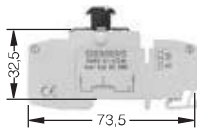
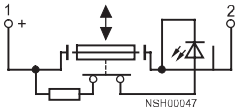
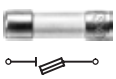
Finger-safety is provided in both closed and open positions.

The LED indicates the status of the disconnected fuse (residual current from 2 to 5 mA), but not if the plug is removed (floating).

The fixing base of the terminal allows both centered and recessed mounting, allowing the unhindered routing of a 10 x 3 mm copper busbar. The fuse terminal can therefore be joined into a single group with the other terminals of a branch.

Selection and ordering data

With thermoplastic insulating body · Front connection with spring-loaded terminals

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 4 mm² · Width 10 mm						
	6.3 A[1] 800 V	**Fuse terminals**	Light gray	**8WA2 011-1SG20**		041	10
	16 A[2] 800 V	**Bridging links** (5 mm × 25 mm)		**8WA1 891**		041	10
	6.3 A 24/250 V	**Fuse terminals** With LED, 24 V AC/DC	Light gray	**8WA2 011-1SG21**		041	10
	6.3 A 48/250 V	**Fuse terminals** With LED, 48 V AC/DC	Light gray	**8WA2 011-1SG22**		041	10
8WA2 011-1SG20	6.3 A 230/250 V	**Fuse terminals** With LED, 230 V AC/DC	Light gray	**8WA2 011-1SG23**		041	10
 8WA1 891	1 A 1.6 A 2.5 A 4 A 6.3 A 250 V	**G fuse links** (5 mm × 20 mm) IEC 60127-2, DIN VDE 0820 Part 22, quick, high breaking capacity: 1.5 kA		**8WA1 822-7EF16** **8WA1 822-7EF18** **8WA1 822-7EF21** **8WA1 822-7EF23** **8WA1 822-7EF25**		041 041 041 041 041	10 10 10 10 10
 8WA1 822-7EF16	1 A 1.6 A 2.5 A 4 A 6.3 A 250 V	**G fuse links** (5 mm × 20 mm) IEC 60127-2, DIN VDE 0820 Part 22, slow, low breaking capacity: 35 A at $I_n \leq 2.5$ A 10 × I_n at $I_n > 2.5$ A		**8WA1 822-7EF76** **8WA1 822-7EF78** **8WA1 822-7EF81** **8WA1 822-7EF83** **8WA1 822-7EF85**		041 041 041 041 041	10 10 10 10 10

1) When using fuses.

2) When using the bridging link.

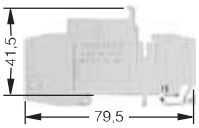
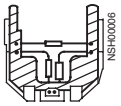
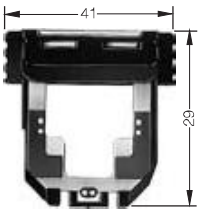
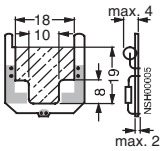
* You can order this quantity or a multiple thereof.

ALPHA FIX SL Standard Terminals, Spring Loaded

Terminals for components

12

Selection and ordering data

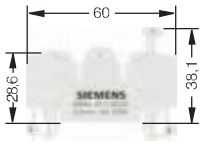
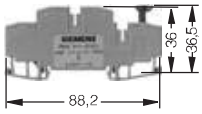
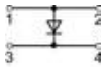
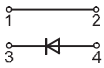
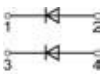
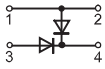
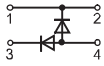
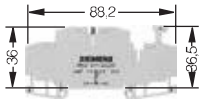
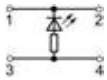
Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 4 mm² · Width 10 mm						
 8WA2 011-1SG28	6.3 A 500 V To next terminal	**Basic enclosure terminals** For self-fitting with components	Light gray	**8WA2 011-1SG28**		041	5
	6.3 A/0.65 W	**Plugs with PCB** For components and label (20 mm x 9 mm)	Light gray	**8WA1 822-7EE00**		041	1
 Completely equipped plug, example	32 A	**Two-pole bridges**[1]	Light gray	**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black	**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long		**8WA2 830**		041	20
 8WA1 822-7EE00							
 Space for components							

1) For use without link rail.

* You can order this quantity or a multiple thereof.

Selection and ordering data

With thermoplastic insulating body · Front connection with spring-loaded terminals

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Arrangement of components	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 2.5 mm² · Width 5.2 mm							
	1 A	**Diode terminals**[1]	Light gray		**8WA2 011-1EF20**		041	50
	Terminal size 4 mm² · Width 6.2 mm							
 8WA2 011-6EG20	32/1 A 250 V	**Diode terminals**[2]	Light gray		**8WA2 011-6EG20**		041	10
					**8WA2 011-6EG21**		041	10
	1 A 250 V	**Diode terminals**[2]	Light gray		**8WA2 011-6EG22**		041	10
	32/1 A 250 V	**Diode terminals**[2]	Light gray		**8WA2 011-6EG23**		041	10
					**8WA2 011-6EG24**		041	10
 8WA2 011-6EG25	32 A 24 V	**Diode terminals, with red LED**	Light gray		**8WA2 011-6EG25**		041	10
	32 A	**Two-pole bridges**[3]	Light gray		**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black		**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long			**8WA2 830**		041	20

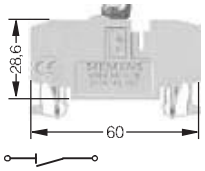
1) Peak off-state voltage 1000 V.
2) Peak off-state voltage U_{RRM} 1000 V.
3) For use without link rail.

*** You can order this quantity or a multiple thereof.**

ALPHA FIX SL Standard Terminals, Spring Loaded

Sliding-link terminals

Selection and ordering data

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 2.5 mm² · Width 5.2 mm						
 8WA2 011-1LF20	16 A 400 V	**Isolating terminals** For isolation of current path without disconnecting the conductors	Light gray	**8WA2 011-1LF20**		041	10
	32 A	**Two-pole bridges**[1]	Light gray	**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black	**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long		**8WA2 830**		041	20

1) For use without link rail.

Insta or three-tier terminals

Overview

The Insta terminals incorporate up to 3 different terminal functions in one insulating body of 6.2 mm width. With only two terminals a complete three-phase feeder (L_1, L_2, L_3, PE/ground, N) can be set up and each phase can be bridged and multiplied by the 3 cross connection links. The dimensions comply with the requirements for mounting distribution boards in public buildings. The neutral busbar has a different height than the neutral isolating terminals; for the infeed, the 16 mm² feed-in terminal 8WA2 011-3JG11 or 8WA2 846 is used.

L, L, L Insta terminals

The 8WA2 011-3JG30 terminal includes three through-type connections for phase conductors, i.e. three potentials can be multiplied with one terminal.

PE/ground, L, NT Insta terminals

The 8WA2 011-3JG10 terminal is the basic model for AC circuits. It comprises:

- PE/ground connection
- Through-type connection for one phase conductor (L_1)
- Neutral conductor connection which can be isolated from the 10 mm × 3 mm neutral busbar by means of a slide.

A complete three-phase feeder requires an additional 8WA2 011-3JG12 (L_2, L_3) terminal. The three-phase feeder can be multiplied by means of the linking system described below.

PE/ground, L, N Insta terminals

If no neutral isolation is required, the 8WA2 011-3JG17 terminal is used:

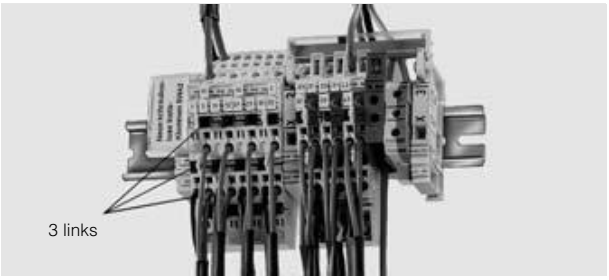
- PE/ground connection
- Through-type connection for one phase conductor
- Through-type connection for the neutral conductor

PE/ground, L, L Insta terminals

The design of the 8WA2 011-3JG16 terminal is similar to that of the 8WA2 011-3JG17 terminal; instead of a through-type connection for the N-conductor, a through-type connection for a second phase conductor has been provided.

L and L, L Insta terminals

The
8WA2 011-3JG15 and
8WA2 011-3JG18 terminals
respectively include one and two through-type connections for phase conductors.



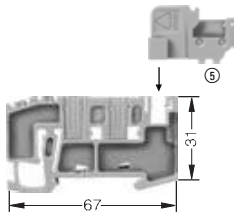
Example strip fitted with Insta terminals

* You can order this quantity or a multiple thereof.

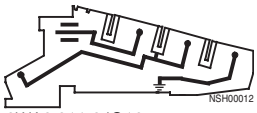
Selection and ordering data

With thermoplastic insulating body · Front connection with spring-loaded terminals

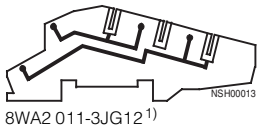
Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 4 mm² · Width 6.2 mm AWG 28-12							
① ⑥ 116,7 25	32 A 400 V between phase conductors 250 V between phase conductors, PE terminal and neutral isolating terminal	**Insta terminals**	PE, L, L, L[1]	①	**8WA2 011-3JG10**		041	20
			L		**8WA2 011-3JG12**		041	20
			PE, L,		**8WA2 011-3JG15**		041	20
			PE, L,		**8WA2 011-3JG16**		041	20
			L, L		**8WA2 011-3JG17**		041	20
					8WA2 011-3JG18		041	20
② 73,9 42,1		**Three-phase outgoing terminals**	L, L, L		**8WA2 011-3JG30**		041	50
	Accessories							
	68 A 800 V	**Feed-in terminals,** width 10 mm 16 mm² (the 8WA2 843 neutral busbar rail is included in the scope of supply)	Blue	②	**8WA2 011-3JG11**		041	20
③ 70 31 37 ⑥	41 A	**Neutral isolating terminals,** high Insta terminal level, for mixing standard and Insta terminals on the standard mounting rail	Blue	③	**8WA2 011-3JH10**		041	10
④		**Barriers**	Yellow	④	**8WA2 816**		041	50
		Neutral busbar ends For neutral busbar 10 × 3 mm for insertion in end retainer	Gray	⑤	**8WA2 826**		041	50
		Neutral busbar supports	Blue	⑥	**8WA2 843**		041	50
		Lockouts	Yellow	--	**8WA2 848**		041	50



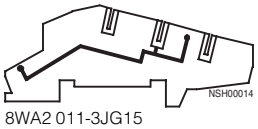
8WA2 808 end retainer with 8WA2 826 busbar end



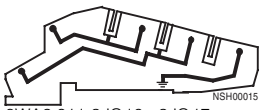
8WA2 011-3JG10



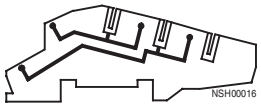
8WA2 011-3JG12[1]



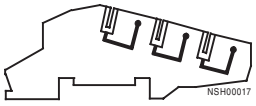
8WA2 011-3JG15



8WA2 011-3JG16, -3JG17



8WA2 011-3JG18



8WA2 011-3JG30

Three-phase outgoing lines (L_1, L_2, L_3) can be multiplied using this terminal.

For labeling accessories, see page 12/50.

1) For three-phase outgoing line.

* You can order this quantity or a multiple thereof.

Linking accessories

Overview

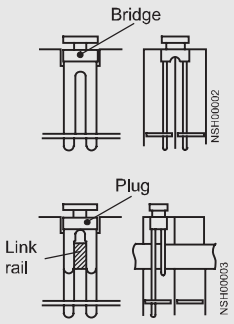
The 8WA2 831 (8WA2 851)[2] two-pole bridge is used for linking adjoining terminals. To connect non-adjacent terminals, the 8WA2 830 (8WA2 853)[2] link rail, which can be cut to any required length, is inserted into the links and the terminals are connected with the 8WA2 832 (8WA2 852)[2] one-pin plugs.

Bridges and plugs

With 8WA2 831, the 10 mm^2 and 16 mm^2 through-type terminals can be linked to 6 mm^2 terminals.

With the yellow 8WA2 584 2-pole bridge, the PE terminal (10 or 16 mm^2) can be connected to the PE/ground/N function with a blue through-type terminal (10 or 16 mm^2). For individual mounting, use end retainers on both sides.

No linking accessories are necessary for initiator-actuator terminals.



Selection and ordering data

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
⑦ 	***Terminal sizes 2.5 mm^2 to 6 mm^2***							
	32 A	**Two-pole bridges**[1]	Light gray	⑦	**8WA2 831**		041	50
	32 A	**One-pin plugs**	Black	⑧	**8WA2 832**		041	50
	32 A	**Link rails** 500 mm long		⑨	**8WA2 830**		041	20
⑧ ⑨ 	***Terminal sizes 10 mm^2 to 16 mm^2***							
	76 A	**Two-pole bridges**[1]	Light gray	⑦	**8WA2 851**		041	50
	76 A	**Two-pole bridges**[1] PE/ground/N function	Yellow	⑦	**8WA2 854**		041	20
	76 A	**One-pin plugs**	Black	⑧	**8WA2 852**		041	50
	76 A	**Link rails** 500 mm long		⑨	**8WA2 853**		041	5

1) For use without link rail.

2) Values in brackets for terminal sizes 10 and 16 mm^2.

* You can order this quantity or a multiple thereof.

Selection and ordering data

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal sizes 2.5 mm² to 16 mm²						
①		**Barriers** Width 1 mm						
		For two clamping points	Yellow	①	**8WA2 811**		041	50
		For three terminals	Yellow	②	**8WA2 813**		041	50
		For two clamping points	Yellow	①	**8WA2 817**		041	50
		Two-tier	Yellow	③	**8WA2 812**		041	50
②		**End retainers, width 9 mm** Sutiable for 8WA1 806 end label or 8WA8 826-0A terminal strip label or -0H device label or four 8WA8 ... labels, (can also be used for neutral busbar 6 × 6 mm as retainer)	Light gray	④	**8WA2 808**		041	50
③		**Neutral busbar ends** For neutral busbar 10 × 3 mm For insertion into end retainer	Blue	⑤	**8WA2 837**		041	50
		Group identification labels l = 100 mm	White	⑥	**8WA2 838**		041	50
		Label holders	Light gray	⑦	**8WA2 850**		041	50
⑤		**Screwdrivers up to 6 mm²** Length: approx. 175 mm; 3.5 × 0.5	Green	⑨	**8WA2 803**		041	1
		Length: approx. 175 mm; 3.5 × 0.5 partially insulated	Green	⑨	**8WA2 880**		041	1
④		**Screwdrivers up to 16 mm²** Length: approx. 175 mm; 5.5 × 0.8	Green	⑨	**8WA2 806**		041	1
		Terminal sizes 2.5 mm² and 4 mm²						
		Insulation stops for conductors						
		0.08 ... 0.2 mm² (200 quintuple strands)	White	⑩	**8WA2 820**		041	1000
		0.25 ... 0.5 mm² (200 quintuple strands)	Light gray		**8WA2 821**		041	1000
		0.75 ... 1.5 mm² (200 quintuple strands)	Dark gray		**8WA2 822**		041	1000
⑥		**Insulation plates**	Yellow	⑪	**8WA2 836**		041	50
		Retaining plates for link rail	Light gray	⑫	**8WA2 835**		041	50
		Terminal sizes 4 mm² and 6 mm²						
⑦		**Neutral busbar supports** (separate) For neutral isolating terminals	Blue	⑬	**8WA2 843**		041	50
		Lockouts for neutral isolating terminals	Yellow	⑭	**8WA2 848**		041	50
	135 A	**Neutral busbars** 10 × 3 mm, tin-coated, 1000 mm long		⑮	**8WA2 842**		041	1
⑨		**Covers** for neutral busbar, 500 mm long	Trans-parent	⑯	**8WA2 805**		041	2
		Terminal sizes 6 mm²						
		Insulation plates	Yellow	⑰	**8WA2 845**		041	50
		Retaining plates for link rail	Light gray	⑱	**8WA2 844**		041	50
		Terminal sizes 4 mm² to 16 mm²						
⑩	68 A 800 V	**Feed-in terminals** 4 to 16 mm², with screw connection for neutral isolating terminals (8WA2 843 is included in the scope of delivery)	Blue	⑲	**8WA2 011-1NK23**		041	20
⑪ ⑫		**Feed-in terminals** for 10 × 3 mm and 6 × 6 mm neutral busbars						
	32 A	up to 4 mm²	Bare	⑳	**8WA2 867**		041	50
	76 A	up to 25 mm²	Bare		**8WA2 868**		041	50
	125 A	up to 35 mm²	Bare		**8WA2 870**		041	50
⑬ ⑭								
⑮								
⑯								
⑰								
⑱								
⑲								
⑳								

For linking accessories, see page 12/24.

For labeling accessories, see page 12/50.

* You can order this quantity or a multiple thereof.

ALPHA FIX SL Standard Terminals, Spring Loaded

Initiator/actuator terminals

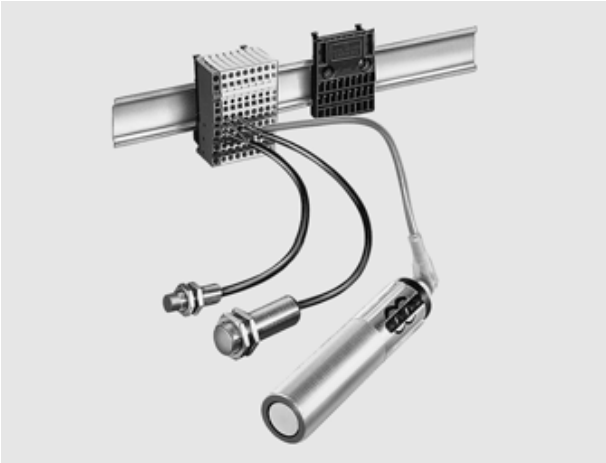
Overview

- Fast and inexpensive connection from signal transmitters to the PLC
- Only 5 mm wide and still a connection possibility for proximity switches with up to three conductors plus shielding
- Connecting is clear, simple and safe because:
  - It is done from the front
  - The connections are colored
  - The conductors of only 0.08 to 1.5 mm^2 without end sleeves are secured using spring-loaded terminals
- LEDs make the switch states or the application of voltage visible; it is no longer necessary to test with measuring instruments
- Connection modules save time and wiring overhead since the potentials of the terminals (L+, L– and S) are automatically connected; linking accessories are superfluous
- The modules contain a feeder terminal and 8 or 17 initiator/actuator terminals and can be snapped or screwed onto 35 mm standard mounting rails

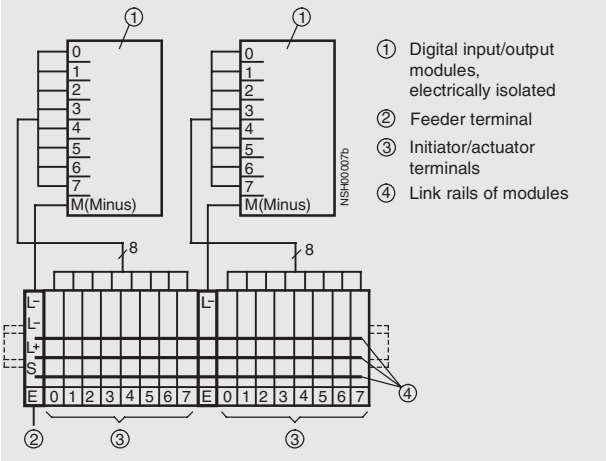
The feeder terminals are fitted with an additional negative outgoing feeder which can be used to supply isolated digital input/output modules. The frame (M) can thus be bridged by means of the terminals.

A PE/ground connection can be established by inserting the 8WA2 827 yellow PE/ground sleeve into the green shield connection S.

The 8WA2 86. socket connectors provide the option of a plug-in 8-pole group output for the signal circuit. Unused positions on the connecting module can be covered with the separable 8-pole 8WA2 847 cover.



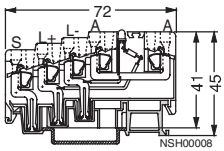
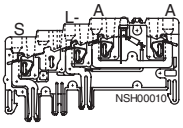
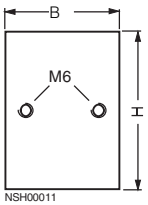
Terminals and connection modules (always order as combined unit)



Initiator/actuator terminals with electrically isolated digital input/output modules

Selection and ordering data

With thermoplastic insulating body · Front connection with spring-loaded terminals

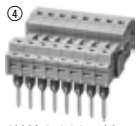
Dimensions	Rated uninterrupted current / Rated insulation voltage	Version[2]	Color	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal size 1.5 mm² · Width 5 mm						
		PNP						
 8WA2 011-3KE00		**Feed-in terminals**						
	10 A 65 V[1]	(L+, L–, S) without LED	Orange		**8WA2 011-3KE00**		041	25
		(L+, L–) without LED	Orange		**8WA2 011-3KE01**		041	20
		(L+, L–, S) with green LED, 15 ... 30 V	Orange		**8WA2 011-3KE02**		041	25
		(L+, L–, S) with green LED, 30 ... 65 V	Orange		**8WA2 011-3KE03**		041	25
 8WA2 011-3KE13 initiator terminal with connection module		**Initiator terminals** (current consumption with LED 4.8 mA)						
	10 A 65 V[1]	(L+, L–, A) without LED	Light gray		**8WA2 011-3KE10**		041	25
		(L+, L–, S, A) without LED	Light gray		**8WA2 011-3KE11**		041	25
		(L+, L–, A) with yellow LED, 15 ... 30 V	Light gray		**8WA2 011-3KE12**		041	25
		(L+, L–, S, A) with yellow LED, 15 ... 30 V	Light gray		**8WA2 011-3KE13**		041	25
		(L+, L–, S, A) with yellow LED, 30 ... 65 V	Light gray		**8WA2 011-3KE15**		041	25
		Actuator terminals (current consumption with LED 4.8 mA)						
	10 A 65 V[1]	(L–, S, A) without LED	Light gray		**8WA2 011-3KE31**		041	25
		(L–, S, A) with yellow LED, 15 ... 30 V	Light gray		**8WA2 011-3KE33**		041	25
		(L–, S, A) with yellow LED, 30 ... 65 V	Light gray		**8WA2 011-3KE35**		041	25
		NPN						
 8WA2 011-3KE33 actuator terminal with LED		**Feed-in terminals**						
	10 A 65 V[1]	(L+, L–, S) without LED	Orange		**8WA2 011-3KE00**		041	25
		(L+, L–) without LED or ground connection	Orange		**8WA2 011-3KE01**		041	20
		Initiator terminals						
	10 A 65 V[1]	(L+, L–, A) with yellow LED, 15 ... 30 V	Light gray		**8WA2 011-3KE22**		041	25
		Actuator terminals						
	10 A 65 V[1]	(L+, S, A) without LED	Light gray		**8WA2 011-3KE30**		041	25
		Connection modules for all PNP and NPN terminals						
 8WA2 011-3KE50, -3KE51	10 A 65 V[1]	(L+, L–, S integrated) for 8 initiator/actuator terminals and one feed-in terminal	Black	①	**8WA2 011-3KE50**		041	10
		(L+, L–, S integrated) for 16 initiator/actuator terminals, one feed-in terminal and space for one terminal for further linking for subsequent module	Black		**8WA2 011-3KE51**		041	5
		Accessories						
		Covers for connection module, 8-pole, separable	Black	②	**8WA2 847**		041	10
		Female multipoint connectors, 8-pole, straight	Gray	③	**8WA2 865**		041	1
		angled	Gray		**8WA2 866**		041	1
		Plug connectors, 8-pole	Gray	④	**8WA2 862**		041	1
		Coding elements, latching	White	⑤	**8WA2 863**		041	1
		Operating devices	White	⑥	**8WA2 864**		041	1
		Screwdrivers Length: approx. 175 mm; 3.5 × 0.5	Green	⑦	**8WA2 803**		041	1
		PE/ground identifications Sleeve for insertion into shield connection (10 strands 9-fold)	Yellow	⑧	**8WA2 827**		041	90
		Insulation stops For insertion into conductor guide, provides secure holding of conductor insulation with thin initiator conductors						
		0.08 ... 0.2 mm² (200 quintuple strands)	White	⑨	**8WA2 820**		041	1000
		0.25 ... 0.5 mm² (200 quintuple strands)	Light gray		**8WA2 821**		041	1000
		0.75 ... 1.0 mm² (200 quintuple strands)	Dark gray		**8WA2 822**		041	1000

Dimension	-3KE50	-3KE51
B	47	93
H	65	65

① 

② 

③ 
8WA2 862 with 8WA2 865

④ 
8WA2 862 with 8WA2 866

⑤ 

⑥ 

⑦ 

⑧ 

⑨ 

For labeling accessories, see page 12/50.

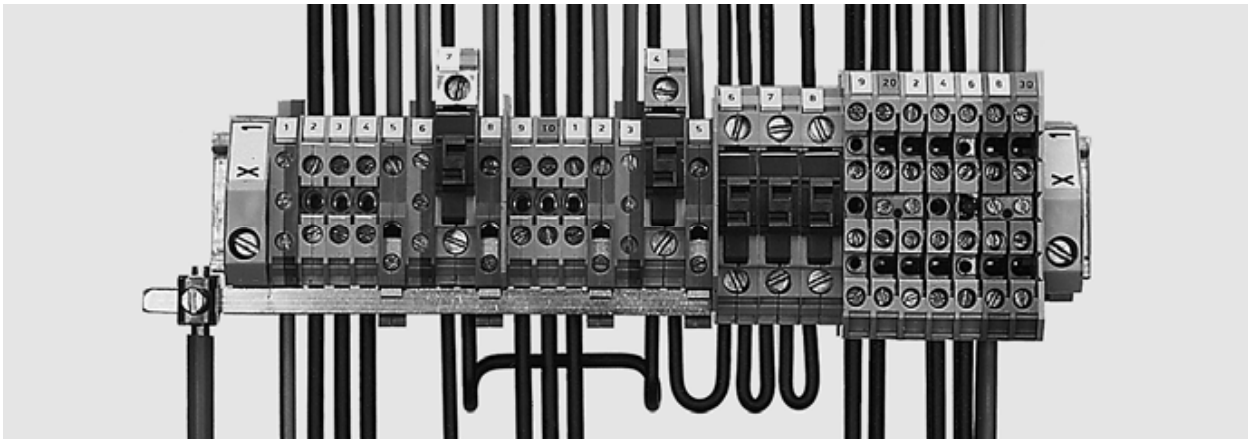
1) The terminals are suitable for 250 V, pollution severity 2.

2) L+ = brown S (shield) = green
L– = blue A (output), connection not colored.

*** You can order this quantity or a multiple thereof.**

Introduction

Overview



Terminal strip with different terminal blocks: 8WA1 011-1DG11 terminal blocks, 8WA1 011-1NG31 neutral isolating terminals with feeder terminal for neutral busbar 6 × 6 mm, 8WA1 011-1PG00 PE conductor terminals, 8WA1 011-1SF12 fuse terminals and various two-tier terminals. The standard mounting rail according to EN 50022-35 serves as the PE bar.

Terminal blocks are used for the space-saving connection of incoming and outgoing lines in switchgear and distribution boards.

Standards

EN 60664-1,
EN 60999 and
IEC 60 947-7-1 or
IEC 60 947-7-2.

The terminals are finger-safe according to IEC 60529 and EN 50274 (except for bare terminals and solder terminations). Through-type terminals are resistant to earthquakes according to IEC 60068-2-6.

Colored terminal blocks

With colored wiring according to EN 60204-1, the connecting level can also be included in the colored markings:

- Red for control circuits with AC current
- Blue for control circuits with DC current or neutral conductor
- Orange for interlock circuits with AC or DC current which are fed from outside and are live when the main control switch is turned off
- Green-yellow through-type terminals for protective conductors (without a link to the mounting rail).

Design

The terminals are insulated on both sides, with the exception of two-tier, flat-type and bolt-type terminals, which are insulated on one side only.

The insulating material for terminal sizes up to 240 is made of thermoplastic, polyamide 6.6, and for the flat-type and bolt-type terminals of duroplastic; with a resistance to creepage CTI according to IEC 112 and EN 60112.

The materials used are ecologically harmless: e.g. cadmium-free, and without halogens or silicone.

The plastics used are flame-retardant and self-extinguishing according to EN 60695-2-2, VDE 0471, Part 2-2 and UL 94 V-2.

Clamping methods

The terminals are designed so that, when the terminal screws are tightened, any tensile stress which occurs causes elastic deformation of the terminal bodies. Possible creeping of the clamped conductor is thus compensated. Deformation of the thread part prevents loosening of the clamping screw, even in the event of heavy mechanical and thermal strain (e.g. vibration stress of 10 g or thermal cycles).

The following clamping methods are used: terminal body with pressure plate for terminal sizes 16, 35 and 70. Strain-relief clamps for terminal sizes 2.5, 4 and 6. Screw with connection disk for fuse terminals, circuit-breaker terminals and component terminals.

Terminal size

The terminal size corresponds to the rated cross-section. According to EN 60947-7-1 one finely stranded copper conductor of nominal cross-section with or without connector sleeve can be connected to each clamping point.

Assembly

The terminals are snapped onto 35 mm mounting rails according to IEC 60715 TH35 and secured against movement using end retainers.

A lateral mounting tolerance of 0.2 mm has to be observed between the terminals.

Screw fixing – in particular of the terminal blocks – is possible with the 8WA1 815 fastening accessory.

Connection of conductors

Except for flat- and bolt-type versions, all terminals are designed so that solid, stranded and finely stranded conductors with or without end sleeves (according to DIN 46228) can be securely clamped (please observe cross-section).

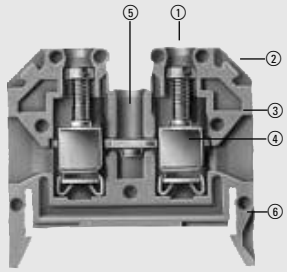
Damage to the clamped conductors is prevented by pressure plates or strain-relief clamps. For the connecting cross-sections when 1 or 2 conductors are connected, see "Technical Specifications".

Connection of aluminum conductors

Siemens screw terminals are suitable for connecting aluminum conductors when the normal processing guidelines, for example brushing and greasing of the conductors before connection, are complied with.

After a few days, the connection should be tightened again for safety reasons.

Stranded conductors must be crimped in prepared plug connectors immediately after being stripped of their insulation (the shaft of the pin-end connector is made of pure aluminum, the pin of copper).



8WA1 through-type terminal with screw connection on both sides, sectional view

① Screwdriver guide
② Cut-out for labeling plate
③ Cable entry
④ Terminal body
⑤ Thread for parallel link rail
⑥ Elastic retaining feet

Accessories

Parallel link rails

The link rails are screwed into the terminals from above and allow parallel connection of max. 10 terminals up to terminal size 35. The 10-pole link rails can be shortened as required. On 70 mm^2 terminals the link rails are two-pole. On the 95 mm^2 to 240 mm^2 terminals they are inserted in the connection points. Link rails for flat-type and bolt-type terminals are not included in the scope of delivery.

Barriers

Barriers are yellow in color and project beyond the contours of the terminals. Their functions are the visual separation of groups of terminals, the electrical isolation of adjacent link rails and improving the insulation rating for solder and push-on terminals.

Insulation plates

8WA1 825 and 8WA1 022-7TK00 insulation plates can be used with different terminals for providing electrical insulation between link rails.

Test sockets and plugs

The 8WA1 854 test sockets for 2.3 mm diameter test plugs and reduction plugs with a 4 mm diameter can be screwed into some terminals in place of the link rails.

Disconnecting links

The 8WA1 865 disconnecting links provide a detachable connection between two adjacent terminals sizes 2.5 to 6.

Covers with warning arrow

The purpose of these covers is to identify the power input terminals. Additional touch protection is achieved simultaneously.

End retainers and marking tags

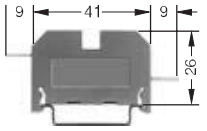
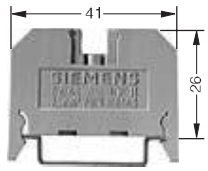
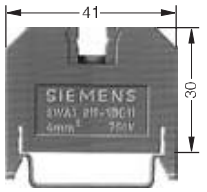
End retainers are available in thermoplastic or galvanized and chromized steel. The marking tag can be fitted in an 8WA1 808 end retainer or, in any of three positions, in an 8WA1 805 end retainer.

ALPHA FIX S Terminals with Screw Connection

Through-type terminals

Selection and ordering data

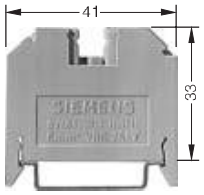
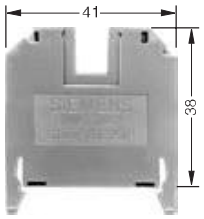
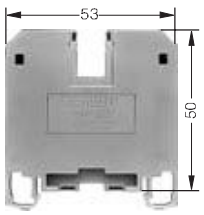
With thermoplastic insulating body · Screw connection on both sides

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No. (see page 12/32)	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
 8WA1 221		***Terminal size 1.5 · Width 5.5 mm · Soldered connection on both sides***						
	18 A, 380 V AC, 450 V DC with alternately positioned terminals; when using barriers up to 800 V	**Single terminals**	Beige		**8WA1 221**		041	50
		Barriers	Width 1 mm	①	**8WA1 820**		041	50
		Covers	With warning arrow	②	**8WA1 810**		041	50
			White, inscription possible	③	**8WA1 860**		041	50
 8WA1 011-1DF11	24 A, 800 V	***Terminal size 2.5 · Width 6 mm · AWG 22-12 AWG 18-12***						
		Single terminals	Beige		**8WA1 011-1DF11**		041	100
			Blue		**8WA1 011-1BF23**		041	50
			Red		**8WA1 011-1BF21**		041	50
			Orange		**8WA1 011-1BF22**		041	50
			Yellow		**8WA1 011-1BF26**		041	50
			Green-yellow		**8WA1 011-1PF11**		041	50
			Black		**8WA1 011-1BF24**		041	50
			Green		**8WA1 011-1BF25**		041	50
 8WA1 011-3DF21		**Terminal blocks**	Beige, 3-pole, width 18 mm		**8WA1 011-3DF21**		041	10
			Beige, 10-pole, width 61 mm					
			With labeling 1 ... 10		**8WA1 011-0DF22**		041	20
			Without labeling		**8WA1 011-0DF21**		041	20
		Barriers	Width 1 mm	①	**8WA1 820**		041	50
 8WA1 011-0DF21		**Insulation plates**[6]		④	**8WA1 825**		041	50
	24 A	**Link rails** for						
			2 terminals		**8WA1 895**		041	50
			3 terminals	⑤	**8WA1 896**		041	50
			4 terminals		**8WA1 897**		041	20
			10 terminals	⑥	**8WA1 898**		041	10
 8WA1 011-1DG11		**Bridges**	For link rails	⑦	**8WA1 822-7VF01**		041	50
	32 A	**Disconnecting links**[1]		⑧	**8WA1 865**		041	50
		Covers	With warning arrow	②	**8WA1 810**		041	50
			White, inscription possible	③	**8WA1 860**		041	50
		For link rails, length 80 mm	Transparent	⑨	**8WA1 822-7AX01**		041	10
			White, inscription possible		**8WA1 822-7AX03**		041	10
	10 A	**Test sockets** Ø 2.3 mm		⑩	**8WA1 854**		041	100
	18 A	**Flat connectors** 6.3–0.8	Slotted[2]	⑪	**8WA1 890**		041	100
 8WA1 011-0DG21		***Terminal size 4 · Width 6.5 mm · AWG 18-10 AWG 18-10***						
	32 A, 800 V	**Single terminals**	Beige		**8WA1 011-1DG11**		041	100
			Blue		**8WA1 011-1BG11**		041	50
			Red		**8WA1 011-1BG21**		041	50
			Orange		**8WA1 011-1BG22**		041	50
			Green-yellow		**8WA1 011-1PG11**		041	50
			Black		**8WA1 011-1BG24**		041	50
 8WA1 741-2X		**Terminal blocks**	Beige, 3-pole, width 19.5 mm		**8WA1 011-3DG21**		041	10
			Beige, 10-pole, width 65.5 mm					
			With labeling 1 ... 10		**8WA1 011-0DG22**		041	20
			Without labeling		**8WA1 011-0DG21**		041	20
		Terminal strips	6-pole		**8WA1 741-2X**		041	5
		Barriers	Width 1 mm	①	**8WA1 820**		041	50
		Insulation plates up to 400 V		④	**8WA1 825**		041	50
	32 A	**Link rails** for						
			2 terminals		**8WA1 850**		041	50
			3 terminals	⑤	**8WA1 851**		041	50
			4 terminals		**8WA1 852**		041	20
			10 terminals	⑥	**8WA1 853**		041	10
		Bridges	For link rails	⑦	**8WA1 822-7VG00**		041	50
		Disconnecting links[3]		⑧	**8WA1 865**		041	50

For labeling accessories, see page 12/50.

For footnotes, see page 12/32.

* You can order this quantity or a multiple thereof.

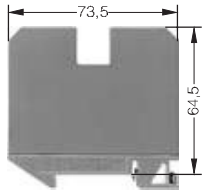
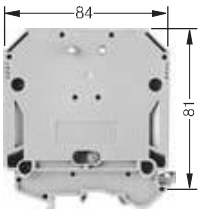
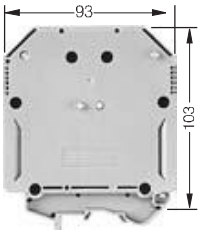
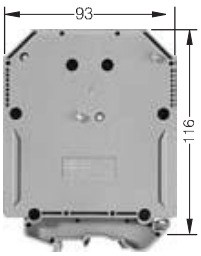
Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No. (see page 12/32)	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
 8WA1 011–1DH11		**Covers**	With warning arrow	②	**8WA1 811**		041	50
			White, inscription possible	③	**8WA1 862**		041	50
		For link rails, length 80 mm	Transparent	⑨	**8WA1 822-7AX01**		041	10
			White, inscription possible		**8WA1 822-7AX03**		041	10
	10 A	**Test sockets**	Ø 2.3 mm	⑩	**8WA1 854**		041	100
	18 A	**Soldering tags**		⑫	**8WA7 41**		041	100
		Flat connectors	6.3 ... 0.8 slotted[4]	⑪	**8WA1 890**		041	100
		Mounting parts for 6 single terminals, 3 terminal blocks 3-pole and 1 terminal block 10-pole (for dimensions, see page 12/60)			**8WA1 815**		041	1
	Terminal size 6 · Width 8 mm · AWG 14-8 AWG 16-8							
 8WA1 011–3DH21	41 A 800 V	**Single terminals**	Beige		**8WA1 011-1DH11**		041	50
			Blue		**8WA1 011-1BH23**		041	50
			Green-yellow		**8WA1 011-1PH11**		041	50
			Black		**8WA1 011-1BH24**		041	50
		Terminal blocks	Beige, 3-pole, width 24.5 mm		**8WA1 011-3DH21**		041	20
		Barriers	Width 1 mm	①	**8WA1 821**		041	50
		Insulation plates	Up to 400 V	④	**8WA1 825**		041	50
 8WA1 204	41 A	**Link rails** for	2 terminals		**8WA1 885**		041	50
			3 terminals	⑤	**8WA1 886**		041	50
			4 terminals		**8WA1 887**		041	20
			10 terminals	⑥	**8WA1 888**		041	10
		Bridges	For link rails	⑦	**8WA1 822-7VH00**		041	50
	32 A	**Disconnecting links**[1]		⑧	**8WA1 865**		041	50
		Covers	With warning arrow	②	**8WA1 811**		041	50
			White, inscription possible	③	**8WA1 862**		041	50
		For link rails, length 80 mm	Transparent	⑨	**8WA1 822-7AX01**		041	10
			White, inscription possible		**8WA1 822-7AX03**		041	10
	10 A	**Test sockets** Ø 2.3 mm		⑩	**8WA1 854**		041	100
	18 A	**Soldering tags**		⑪	**8WA7 41**		041	100
		Flat connectors 6.3 ... 0.8	Slotted[4]	⑫	**8WA1 890**		041	100
	Terminal size 16 · Width 10 mm · AWG 12-4 AWG 14-6							
 8WA1 304	76 A 800 V	**Single terminals**	Beige		**8WA1 204**		041	20
			Blue		**8WA1 011-1BK11**		041	10
		Terminal blocks	3-pole, width 30 mm		**8WA1 304**		041	20
		Barriers	Width 1 mm	①	**8WA1 821**		041	50
		Insulation plates	For single terminal up to 500 V	⑬	**8WA1 822-7TK00**		041	50
 8WA1 205	76 A	**Link rails** for	2 terminals		**8WA1 842**		041	20
			3 terminals	⑤	**8WA1 845**		041	20
			4 terminals		**8WA1 848**		041	10
			10 terminals	⑥	**8WA1 802**		041	10
		Covers	With warning arrow	⑤	**8WA1 812**		041	50
			White, inscription possible	③	**8WA1 892**		041	50
		For link rails[5], length 100 mm	Transparent	⑨	**8WA1 822-7AX02**		041	10
			White, inscription possible		**8WA1 822-7AX04**		041	10
	Terminal size 35 · Width 16 mm · AWG 10-1 AWG 12-2							
 8WA1 305	125 A 800 V	**Single terminals**	Beige		**8WA1 205**		041	20
			Blue		**8WA1 011-1BM11**		041	10
		Terminal blocks	3-pole, width 48 mm		**8WA1 305**		041	20
		Barriers	Width 1.5 mm	⑭	**8WA1 823**		041	25
		Insulation plates	For single terminal up to 500 V	⑮	**8WA1 822-7TK00**		041	50
	125 A	**Link rails** for	2 terminals		**8WA1 828**		041	20
			3 terminals	⑤	**8WA1 803**		041	20
			10 terminals	⑥	**8WA1 804**		041	10
		Covers	With warning arrow	②	**8WA1 813**		041	50
			White, inscription possible	③	**8WA1 893**		041	50
		For link rails[5], length 100 mm	Transparent	⑨	**8WA1 822-7AX02**		041	10
			White, inscription possible		**8WA1 822-7AX04**		041	10

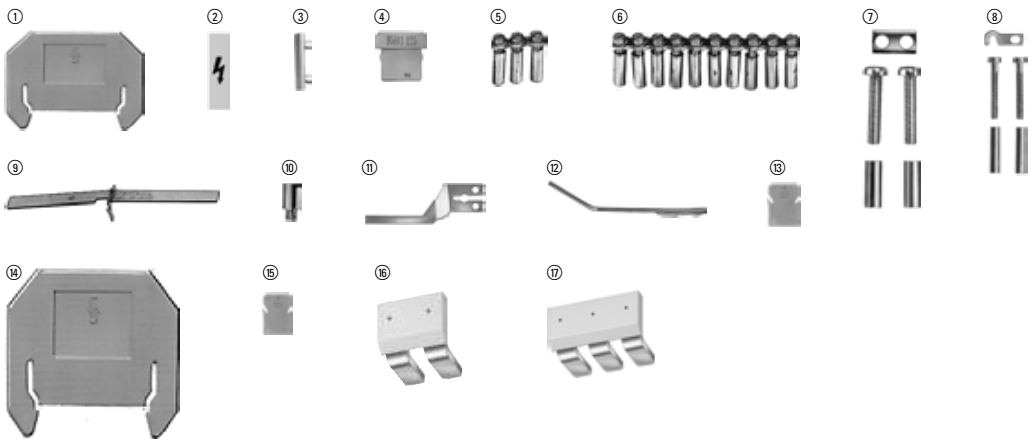
For labeling accessories, see page 12/50.
For footnotes, see page 12/32.

*** You can order this quantity or a multiple thereof.**

ALPHA FIX S Terminals with Screw Connection

Through-type terminals

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
 8WA1 206	***Terminal size 70 · Width 25 mm · AWG 8-3/0 AWG 8-1/0***							
	192 A 800 V	**Single terminals**	Beige		**8WA1 206**		041	10
			Blue		**8WA1 011-1BP11**		041	10
		Barriers	Width 1.5 mm	⑭	**8WA1 824**		041	25
	192 A	**Link rails**	For 2 terminals		**8WA1 216**		041	20
		Covers	With warning arrow	②	**8WA1 814**		041	50
 8WA1 011-1DQ10	***Terminal size 95 · Width 25 mm · AWG 4/0-2 AWG 4/0-2***							
	232 A 1000 V	**Single terminals**	Beige		**8WA1 011-1DQ10**		041	10
		Covers	With warning arrow	②	**8WA1 822-7AQ00**		041	50
		Links	For 2 terminals	⑯	**8WA1 822-7VQ12**		041	5
			For 3 terminals	⑰	**8WA1 822-7VQ13**		041	5
 8WA1 011-1DS10	***Terminal size 150 · Width 31 mm · AWG 300-2 AWG 300-2***							
	309 A 1000 V	**Single terminals**	Beige		**8WA1 011-1DS10**		041	5
		Covers	With warning arrow	②	**8WA1 822-7AS00**		041	50
		Links	For 2 terminals	⑯	**8WA1 822-7VS12**		041	5
			For 3 terminals	⑰	**8WA1 822-7VS13**		041	5
 8WA1 011-1DU10	***Terminal size 240 · Width 36 mm · AWG 500/2-0 AWG 500/2-0***							
	380 A 1000 V	**Single terminals**	Beige		**8WA1 011-1DU10**		041	5
		Covers with warning arrows	Yellow	②	**8WA1 822-7AU00**		041	50
		Links	For 2 terminals	⑯	**8WA1 822-7VU12**		041	5
			For 3 terminals	⑰	**8WA1 822-7VU13**		041	5



For labeling accessories, see page 12/50.

Footnotes for pages 12/30 and 12/31:

1) Two 8WA1 820 barriers (spacers) are required between the terminals of sizes 2.5 and 6.
2) For voltages up to 250 V.
3) Three 8WA1 820 barriers (spacers) are required between the terminals of size 4.
4) For voltages up to 250 V. One or two flat connectors can be fitted with terminal sizes 4 and 6.
5) Can only be used for single terminals.
6) 400 V between link rails with insulation plates.

* You can order this quantity or a multiple thereof.

Overview

Neutral isolating terminals allow an insulation test to be performed without disconnecting the neutral conductor according to DIN VDE 0108 and DIN VDE 0100 (Standards for the installation of electric power equipment).

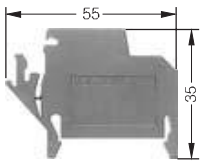
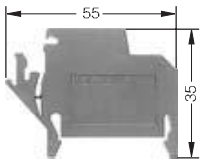
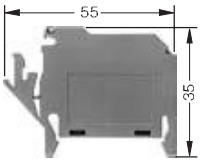
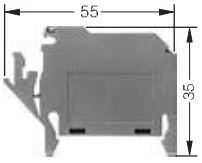
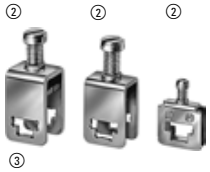
The branch terminals are used for the connection of lines (L), e.g. for power supplies, to the busbar 6 mm x 6 mm.

The rated voltage between two branch terminals (1 slide open) is 289 V.

When they are used as shield terminals according to DIN VDE 0160, they provide isolation between the central reference point (shield connection conductor) and PE/ground conductor.

Selection and ordering data

With 1 screw connection as well as connection to the neutral conductor bar or busbar 6 mm × 6 mm to DIN 1761 with insulating body made of blue or beige thermoplastic

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 2.5 · Width 6 mm · With integral test socket in solid part of terminal AWG 22-12 AWG 22-12							
 8WA1 011-1NF01	24 A 500 V	**Neutral isolating terminals**	Blue		**8WA1 011-1NF01**		041	50
	Isolating distance 400 V	**Branch terminals**	Beige		**8WA1 011-1NF02**		041	50
	Terminal size 4 · Width 6.5 mm · With integral test socket in solid part of terminal AWG 18-10 AWG 18-10							
 8WA1 011-1NG31	32 A 500 V	**Neutral isolating terminals**	Blue		**8WA1 011-1NG31**		041	50
	Isolating distance 400 V	**Branch terminals**	Beige		**8WA1 011-1NG32**		041	50
	Terminal size 6 · Width 8 mm · With integral test socket in solid part of terminal AWG 14-8 AWG 14-8							
 8WA1 011-1NH01	41 A 500 V	**Neutral isolating terminals**	Blue		**8WA1 011-1NH01**		041	50
	Isolating distance 400 V	**Branch terminals**	Beige		**8WA1 011-1NH02**		041	50
	Terminal size 16 · Width 10 mm AWG 12-4							
 8WA1 604	76 A 500 V	**Neutral isolating terminals**	Blue		**8WA1 604**		041	50
	Isolating distance 400 V	**Branch terminals**	Beige		**8WA1 011-1NK02**		041	50
Accessories								
① 	125 A	**Neutral busbars 6 × 6 mm**	1104 mm long	①	**8GF9 324-2**		042	1/10
			2000 mm long		**8WC5 020**		103	1
		Feed-in terminals for neutral busbar 6 × 6 mm and 10 × 3 mm, bare						
② ② ② 	32 A		Connection up to 4 mm²	②	**8WA2 867**		041	50
	76 A		Connection up to 25 mm²	②	**8WA2 868**		041	50
	125 A		Connection up to 35 mm²	②	**8WA2 870**		041	50
		Covers[1] for neutral busbar	Length 155 mm	③	**8WA1 822-7AX00**		041	10
③ 		**Label holders**			**3TX4 210-0J**		101	100

For labeling accessories, see page 12/50.

1) Not for 8WA1 604 and 8WA1 011-1NK02.

*** You can order this quantity or a multiple thereof.**

PE and PEN terminals

Overview

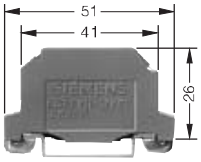
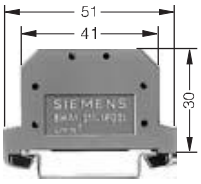
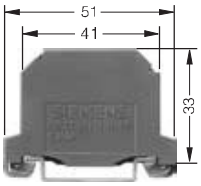
In switchgear and controlgear systems the mounting rails for the terminal blocks are frequently used as protective ground busbars. The PE (protective ground) terminals provide the connection to the mounting rail.

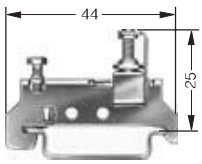
The elimination of a separate PE busbar allows the PE terminals to be lined up with the insulated main conductor terminals and neutral isolating terminals in any required arrangement. This results in a clear relationship to the individual circuits.

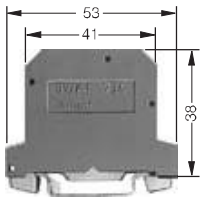
The bare 8WA1 010-1PH01 PE terminals should preferably be used for connecting the shields of screened cables. They are normally mounted on a standard mounting rail, which is installed by means of an 8WA1 857 insulation carrier. The rail is connected to the PE conductor only by one PE terminal.

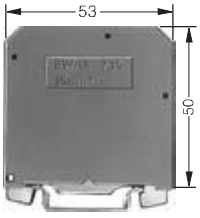
Selection and ordering data

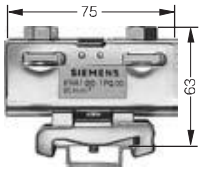
With connection to standard mounting rail · With thermoplastic insulating body

Dimensions	Version	Color	Number of screw connections	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
① 	***Terminal size 2.5 · Width 6 mm***							
	PE/ground terminals	Green-yellow	1	①	**8WA1 011-1PF01**		041	50
		Green-yellow	2		**8WA1 011-1PF00**		041	50
	Terminal size 4 · Width 7.2 mm							
	PE/ground terminals	Green-yellow	1	②	**8WA1 011-1PG01**		041	50
		Green-yellow	2		**8WA1 011-1PG00**		041	50
	Terminal size 6 · Width 8 mm							
	PE/ground terminals	Green-yellow	2	③	**8WA1 011-1PH00**		041	50
② 	***Terminal size 6 · Width 6 mm***							
	PE/ground terminals (also for use as shield terminal)	Bare	1	④	**8WA1 010-1PH01**		041	50
	Terminal size 16 · Width 12 mm							
	PE terminals and PEN terminals for I = 76 A	Green-yellow	2	⑤	**8WA1 011-1PK00**		041	25
	Terminal size 35 · Width 16 mm							
	PE terminals and PEN terminals for I = 125 A	Green-yellow	2	⑥	**8WA1 011-1PM00**		041	25
③ 	***Terminal size 95 · Width 26 mm***							
	PE terminals and PEN terminals for I = 232 A Only for standard mounting rail 35 mm × 15 mm	Bare	2	⑦	**8WA1 010-1PQ00**		041	5
	Marking tags			⑧	**8WA8 07**		041	50

④ 

⑤ 

⑥ 

⑦ 

⑧ 

For labeling accessories, see page 12/50.

* You can order this quantity or a multiple thereof.

Overview

The Insta or three-tier terminals incorporate up to three different functions of a terminal in one insulating body of 6 mm width. The width of 3 Insta terminals corresponds to the standard spacing of 18 mm used in distributor panels. Terminals can only be removed from the rail using a tool.

All connection points for incoming and outgoing conductors have a cut-out for a 8WA8 8.. label. The PE/ground conductor connections are already green-yellow, and the neutral conductor connections are already blue.

The neutral busbar has the same position on Insta terminals and neutral isolating terminals. For example, a 16 mm^2 neutral isolating terminal can be used as the incoming terminal to the neutral busbar.

The neutral busbar can be by-passed in the case of the 8WA1 011-3JF16, -3JF17 and -3JF18 with a mounting depth of 42.5 mm.

PE/ground, L, NT Insta terminals

The 8WA1 011-3JF20 terminal is the basic version for AC circuits. It comprises:

- PE/ground connection
- Through-type connection for one phase conductor
- Neutral conductor connection, which can be isolated from the 6 mm × 6 mm neutral busbar.

PE/ground, L, N Insta terminals

If no neutral isolation is required, the 8WA1 011-3JF17 terminal is used:

- PE/ground connection
- Through-type connection for one phase conductor
- Through-type connection for the neutral conductor.

PE/ground, L, L Insta terminals

The design of the 8WA1 011-3JF16 terminal corresponds to the aforementioned version. Instead of the through-type connection for the neutral conductor, a through-type connection for a second phase conductor has been provided.

L, L Insta terminals

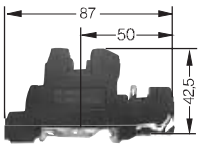
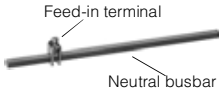
The 8WA1 011-3JF18 terminal includes two through-type connections for two phase conductors. It is generally used for three-phase AC outgoing circuits.

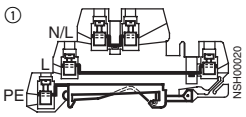
ALPHA FIX S Terminals with Screw Connection

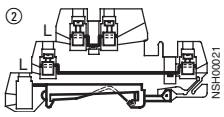
Insta or three-tier terminals

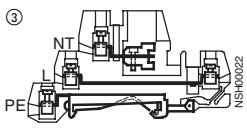
Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Width mm	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal size 2.5 mm² · Width 6 mm · Screw connection on both sides AWG 22-12							
 8WA1 011-3JF16 to -3JF18, -3JF20 Between link rails with insulation plates: Rated insulation voltage 400 V/160 V (with barrier/with insulation plate).	24 A 400 V between phase conductors, 250 V between phase and PE conductors and neutral isolating distance	**Insta terminals**	PE, L, L		①	**8WA1 011-3JF16**		041	50
			PE, L, N		①	**8WA1 011-3JF17**		041	50
			L, L		②	**8WA1 011-3JF18**		041	50
			PE, L, NT		③	**8WA1 011-3JF20**		041	50
		Barriers	Up to 400 V	1.5		**8WA1 822-7TH00**		041	50
		Insulation plates	Up to 160 V			**8WA1 825**		041	50
Accessories									
 8WA2 867/868/870	24 A	**Link rails** for	2 terminals			**8WA1 822-7VF02**		041	50
			3 terminals			**8WA1 822-7VF03**		041	50
			4 terminals			**8WA1 822-7VF04**		041	20
			10 terminals			**8WA1 822-7VF10**		041	10
		Covers[1]	With warning arrow	6.5		**8WA1 811**		041	50
			White, inscription possible	6.5		**8WA1 862**		041	50
 8WA1 808		For link rails, length 80 mm	Transparent			**8WA1 822-7AX01**		041	10
			White, inscription possible			**8WA1 822-7AX03**		041	10
	125 A	**Neutral busbars** 6 mm × 6 mm	1104 mm long[2]			**8GF9 324-2**		042	10
			2000 mm long[2]			**8WC5 020**		103	1
 8WA1 857		**Feed-in terminals for neutral busbar 6 × 6 mm and 10 × 3 mm, bare**							
	32 A		Connection up to 4 mm²			**8WA2 867**		041	50
	76 A		Connection up to 25 mm²			**8WA2 868**		041	50
	125 A		Connection up to 35 mm²			**8WA2 870**		041	50
 Feed-in terminal Neutral busbar 8GF9 324-2/8WC5 020		**End retainers**		10		**8WA1 808**		041	50
		Insulation carriers				**8WA1 857**		041	20
		Device identification labels For end retainer (blank label)				**3TX4 210-0H**		101	100
		Blank labeling plates For identification of terminals				**8WA8 848-2AY**		041	100







For labeling accessories, see page 12/50.

1) Up to 3 terminals next to one another.

2) Prices apply to orders above € XX. For orders less than € XX, a processing fee of € XX will be added. Please contact your local Siemens representative.

* You can order this quantity or a multiple thereof.

Overview

They can be used for current rails and – by means of cable lugs – for all conductor types. The additional space and mounting requirements for the cable lugs must be taken into consideration.

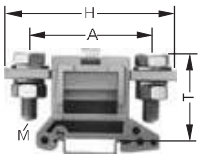
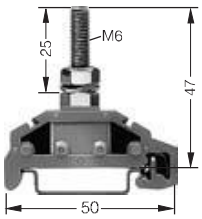
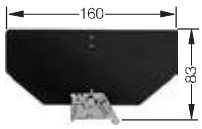
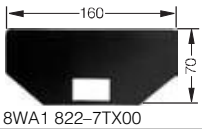
The flat-type terminals have through-holes. A second wrench must be used for backing up when tightening the screws. This prevents high forces from affecting the standard mounting rail.

It is recommended, though, to use 15 mm high standard mounting rails.

The flat-type terminals have a label holder for up to four 8WA8 8.. labeling plates or one 3TX4 210-0H device identification label.

The bolt-type terminals have two label holders for two 8WA8 8..-... labeling plates each.

Through-type terminals · With insulating body made of duroplastic

Dimensions	Rated uninterrupted current Rated insulation voltage	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Flat-type terminals · Screw connection on both sides						
 8WA1 012-1DP14		***Terminal size 70 · Width 32 mm AWG 6-3/0 AWG 2/0-1***				
	168 A 1000 V AC, 1200 V DC	**Flat-type terminals**	**8WA1 012-1DP14**		041	10
		Terminal size 95 · Width 46 mm AWG 1-4/0 AWG 4/0-2/0				
	250 A 1000 V AC, 1200 V DC	**Flat-type terminals**	**8WA1 012-1DQ14**		041	5
		Terminal size 150 · Width 46 mm 4/0 AWG-300 MCM max. 300 MCM				
	335 A 1000 V AC, 1200 V DC	**Flat-type terminals**	**8WA1 012-1DS14**		041	5
		Terminal size 240 · Width 54 mm				
	435 A 1000 V AC, 1200 V DC	**Flat-type terminals**	**8WA1 012-1DU14**		041	5
Bolt-type terminals with M6 bolt						
		***Terminal size 16 · Width 18 mm***				
	82 A 400 V AC, 450 V DC	**Bolt-type terminals,** MA[1] = 3.0 Nm	**8WA1 012-1DK10**		041	50
Accessories for flat-type terminals						
 8WA1 822–7TX01		**End plates** (laminated paper, thickness 2 mm) With end bracket	**8WA1 822-7TX01**		041	10
 8WA1 822–7TX00		**Barriers** (laminated paper, thickness 2 mm)	**8WA1 822-7TX00**		041	10
		Covers For terminal size 70	**8WA1 822-7AP00**		041	10

Dimension	Terminal size			
	70	95	150	240
A	60	66	74	82
B	18	25	32	40
H	84	90	106	122
M	M8	M10	M12	M16
T	47	47	47	50
MA[1] (Nm)	6	10	15.5	30

For labeling accessories, see page 12/50.

1) MA = tightening torque.

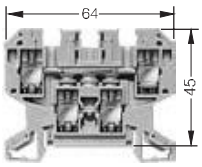
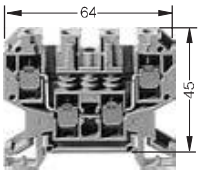
* You can order this quantity or a multiple thereof.

ALPHA FIX S Terminals with Screw Connection

Two-tier terminals

Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Color	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Two-tier terminals, 2-pole with 2 electrically isolated links							
	***Terminal size 4 · Width 6.5 mm AWG 18-10 AWG 18-10***						
	32 A 690 V With end plates 800 V	**Two-tier terminals**	Beige Blue	**8WA1 011-2DG11** **8WA1 011-2BG11**		041 041	50 50
Two-tier terminals, 1-pole							
	***Terminal size 4 · Width 6.5 mm AWG 18-10 AWG 18-10***						
	32 A 690 V With end plates 800 V	**Two-tier terminals**	Beige Blue	**8WA1 011-6DG11** **8WA1 011-6BG11**		041 041	50 50
Accessories							
		End plates	Width 1.5 mm	**8WA1 817**		041	50
		Barriers	Width 1.5 mm	**8WA1 823**		041	25
		Covers	With warning arrow White, inscription possible	**8WA1 811** **8WA1 862**		041 041	50 50
		for link rail	Transparent	**8WA1 822-7AX01**		041	10
	For top level with 2-pole terminals						
	32 A	**Link rails** for	2 terminals 3 terminals 4 terminals 10 terminals	**8WA1 850** **8WA1 851** **8WA1 852** **8WA1 853**		041 041 041 041	50 50 20 10
		Insulation plates		**8WA1 825**		041	50
	32 A	**Bridges**	For link rails	**8WA1 822-7VG00**		041	50
	32 A	**Disconnecting links** [1]		**8WA1 865**		041	50
	10 A	**Test sockets**	Ø 2.3 mm	**8WA1 854**		041	100
	18 A	**Soldering tags**		**8WA7 41**		041	100
	18 A	**Flat connectors**	6.3 ... 0.8 slotted [2]	**8WA1 890**		041	100
	For bottom level with 1-pole and 2-pole terminals						
	32 A	**Link rails** for	2 terminals 10 terminals	**8WA1 835** **8WA1 838**		041 041	50 10
		Insulation plates		**8WA1 825**		041	50
	32 A	**Bridges**	For link rails	**8WA1 822-7VG01**		041	50
	10 A	**Test sockets** and associated **distance sleeves**	Ø 2.3 mm	**8WA1 884** **8WA1 822-7VH11**		041 041	100 100

Rated voltage	AC	DC
Between link rails		
With insulation plate	400 V	450 V
With end plate or barrier	800 V	900 V
With open disconnecting link	500 V	600 V
With alternately bent soldering tags	400 V	450 V
With adjacent terminals with soldering tag and insulated plugs	250 V	300 V

For labeling accessories, see page 12/50.

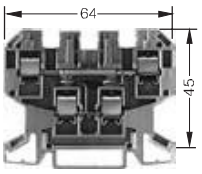
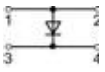
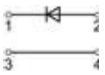
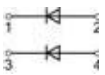
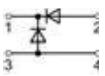
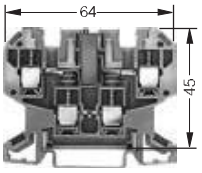
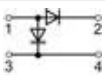
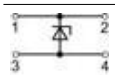
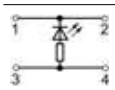
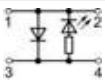
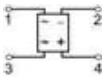
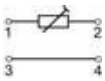
1) The terminals must be provided with end plates and mounted with the end plates pointing to one another.

2) For voltages up to 250 V. One or two flat connectors can be fitted with terminal size 4.

* You can order this quantity or a multiple thereof.

Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides

Dimensions	Arrangement of components	Rated uninterrupted current / Rated insulation voltage	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
			Terminal size 4 · Width 6.5 mm AWG 18-10				
 8WA1 011–6EG20		32/1 A 250 V	**Diode terminals**	**8WA1 011-6EG20**		041	10
		32/1 A 250 V	**Diode terminals**	**8WA1 011-6EG21**		041	10
		1 A 250 V	**Diode terminals**	**8WA1 011-6EG22**		041	10
		32/1 A 250 V	**Diode terminals**	**8WA1 011-6EG23**		041	10
 8WA1 011–6EG51		32/1 A 250 V	**Diode terminals**	**8WA1 011-6EG24**		041	10
		0.25[2] U_Z = 2.4 V[1]	**Zener diode terminals**	**8WA1 011-6EG44**		041	10
		32 A 24 V DC	**Terminals with red LED**	**8WA1 011-6EG25**		041	10
		32 A 24 V DC	**Terminals with red LED, with diode for voltage limitation**	**8WA1 011-6EG26**		041	10
		1 A 250 V AC	**Rectifier terminals**	**8WA1 011-6EG27**		041	10
		-- 250 V	**Compensating terminals** 20 Ω, 0.75 W	**8WA1 011-6EG51**		041	10

For labeling accessories, see page 12/50.

1) Break-through voltage ±5%.

2) Let-through current.

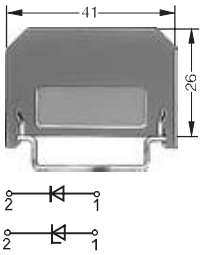
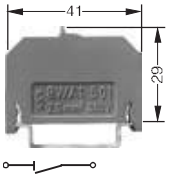
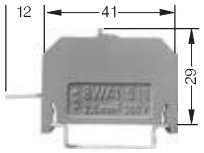
* You can order this quantity or a multiple thereof.

Diode and isolating terminals

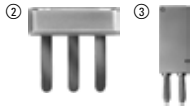
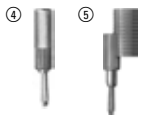
12

Selection and ordering data

With thermoplastic insulating body

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version	Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	***Terminal size 2.5 · Width 6 mm***						
	Diode terminals · Screw connection on both sides with facility for test plug with 2.3 mm Ø						
	1 A, 250 V, U_{RRM} [1]	**Diode terminals**		**8WA1 011-1EF20**		041	5
	0.25 A, 250 V, U_{RRM} [2]	**Diode terminals**		**8WA1 011-1EF28**		041	5
	0.25 A [3], U_Z = 2.4 V [4]	**Zener diode terminals**		**8WA1 011-1EF24**		041	5
8WA1 011-1EF20							
	***Terminal size 2.5 · Width 6 mm***						
	Through-type terminals with sectionalizing feature · With 2 holes for test plug with 2.3 mm Ø						
	10 A, 380 V AC, 450 V DC (with alternately bent soldering tags)	**Isolating terminals** With screw connection on both sides		**8WA1 501**		041	10
		With 1 screw connection and 1 soldering connection		**8WA1 511**		041	10
8WA1 501	Open isolating distance 380 V AC, 450 V DC, Up to 750 V AC, 900 V DC when using barriers						
	Through-type terminals with sectionalizing feature are used for convenient isolation of the current path without disconnection of conductors. It is possible using the sockets of the connection screws to e.g. measure the loop resistance or to connect an ammeter into the circuit. When using connection combs, the connectable cross-section is reduced by one stage.						
8WA1 511							

Accessories

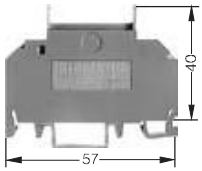
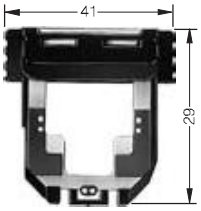
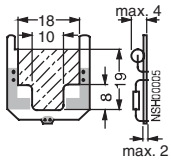
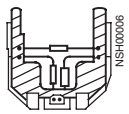
		**Barriers**	Width 1 mm	①	**8WA1 820**	041	50
		Jumper plugs		③	**8WA1 873**	041	10
	10 A	**Connecting combs** [5]	2-pole	②	**8WA1 822-7VF12**	041	50
			3-pole		**8WA1 822-7VF13**	041	20
			4-pole		**8WA1 822-7VF14**	041	20
	10 A	**Test plugs**	White	④	**8WA1 867**	041	10
			Red		**8WA1 868**	041	10
			Blue		**8WA1 870**	041	10
	10 A	**Reduction plugs**		⑤	**8WA1 871**	041	10

1) Peak off-state voltage 1000 V.
2) Peak off-state voltage 4000 V.
3) Let-through current.
4) Break-through voltage ±5%.
5) When used the conductor cross-section is reduced by one terminal size.

* You can order this quantity or a multiple thereof.

Selection and ordering data

Terminal for components · Screw connection on both sides for 2 conductors each · Plug with PCB for components

Dimensions	Limits for current/power loss	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal size 1.5 · Width 10 mm				
 8WA1 822-7EE00	6.3 A 500 V[1)]	**Terminals for components** (only enclosure) For self-fitting with components	**8WA1 011-1EE00**		041	5
 8WA1 011-1EE00	6.3 A/0.65 W	**Plugs for components** With PCB and labeling plate (20 mm × 9 mm)	**8WA1 822-7EE00**		041	1
 Space for components						
 Completely equipped plug, example						

For labeling accessories, see page 12/50.

1) To the next terminal, defined internally by customer components.

* You can order this quantity or a multiple thereof.

ALPHA FIX S Terminals with Screw Connection

Fuse terminals

Overview

8WA1 011-1SF12 fuse terminals are used to protect control circuits from short-circuit.

The fuse terminals are intended for G fuse links 5 × 20 mm and 5 × 25 mm up to 6.3 A and 250 V and for bridging links up to 16 A and 800 V and have a mounting for a replacement fuse link.

The fuse terminals are for inch fuse links ¼" × 1", ¼" × 11/4" up to 6.3 A and 250 V.

Fuse terminals are positive opening fuse-disconnectors.

The fuse links must be replaced at zero voltage. Finger-safety is provided in both closed and open positions.

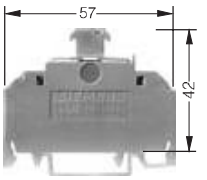
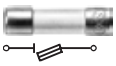
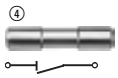
The LED indicates the status of the disconnected fuse (residual current from 2 to 5 mA), but not if the plug is removed (floating).

The double connection is designed so that two conductors even with different cross-sections can be securely clamped.

The fixing base of the terminal allows both centered and recessed mounting, allowing the unhindered routing of a 6 mm x 6 mm neutral busbar. The fuse terminal can therefore be joined into a single group with the other terminals of a branch.

Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides for 2 conductors each

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
① 	***Terminal size 1.5 · Width 10 mm AWG 18-14 AWG 18-14***							
	6.3 A[1] 16 A[2] / 250 V[1], 800 V[2] Open isolating distance 500 V	**Fuse terminals** For G fuse	Without LED	①	**8WA1 011-1SF12**		041	10
		Fuse terminals For inch fuse	Without LED		**8WA1 011-1SF30**		041	10
② 		**Fuse terminals** For G fuse	With LED, 24 V AC/DC	②	**8WA1 011-1SF13**		041	10
			With LED, 48 V AC/DC	②	**8WA1 011-1SF14**		041	10
			With LED, 230 V AC/DC	②	**8WA1 011-1SF15**		041	10
		Fuse terminals For inch fuse	With LED, 24 V AC/DC	②	**8WA1 011-1SF31**		041	10
			With LED, 120 V AC/ 110 V DC	②	**8WA1 011-1SF32**		041	10
	16 A	**Bridging links** (5 mm × 25 mm)		④	**8WA1 891**		041	10
③ 	1 A	**G fuse links** (5 mm × 20 mm) IEC 60127-2, DIN VDE 0820 Part 22, quick, high breaking capacity: 1.5 kA		③	**8WA1 822-7EF16**		041	10
	1.6 A				**8WA1 822-7EF18**		041	10
	2.5 A				**8WA1 822-7EF21**		041	10
	4 A				**8WA1 822-7EF23**		041	10
	6.3 A 250 V				**8WA1 822-7EF25**		041	10
④ 	1 A	**G fuse links** (5 mm × 20 mm) IEC 60127-2, DIN VDE 0820 Part 22, slow, low breaking capacity: 35 A at $I_n \leq 2.5$ A 10 × I_n at $I_n > 2.5$ A		③	**8WA1 822-7EF76**		041	10
	1.6 A				**8WA1 822-7EF78**		041	10
	2.5 A				**8WA1 822-7EF81**		041	10
	4 A				**8WA1 822-7EF83**		041	10
	6.3 A 250 V				**8WA1 822-7EF85**		041	10
⑤ 	65 A	**Link rails**	l = 104 mm, 10 connections	⑤	**8WA1 822-7VD05**		041	20
⑥ 			l = 206 mm, 21 connections	⑥	**8WA1 822-7VD08**		041	20

For labeling accessories, see page 12/50.

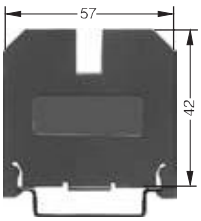
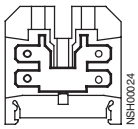
1) When using fuses.

2) When using the bridging link.

* You can order this quantity or a multiple thereof.

Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides for 2 conductors each

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
		Terminal size 6 · Width 8 mm						
⑦ 	16 A per connection point 400 V Up to 1000 V when using barriers	**Through-type terminals with plug-in connection** 4 flat connectors 6.3 ... 0.8[1]	Beige	⑦	**8WA1 232**		041	50
		Barriers	Width 1 mm	⑧	**8WA1 821**		041	50
	24 A	**Link rails**	For 2 terminals	⑨	**8WA1 822-7VH12**		041	50
			For 10 terminals	⑩	**8WA1 822-7VH20**		041	10
		Covers	With warning arrow	⑪	**8WA1 811**		041	50
			White, inscription possible	⑫	**8WA1 862**		041	50

⑧  ⑨  ⑩  ⑪  ⑫ 

For labeling accessories, see page 12/50.

1) Fully insulated tab receptacles must be used with voltages above 400 V up to 1000 V.

* You can order this quantity or a multiple thereof.

Measuring transformer terminals

Overview

Measuring transformer terminals can be used for testing and isolating circuits in switchgear installations, control rooms and the like without any interruption of operation.

The isolating and instrument isolating terminals contain an isolating device in the through-connection. The isolating device permits electrical separation between the input and output of a terminal.

Test sockets for plugs with a diameter of 4 mm can be screwed into the front side of the through-type and isolating terminals. The rated insulation voltage between colored test sockets is 125 V. The rated insulation voltage between test sockets and link rails which are not connected to the terminal is 16 V (circuit 3, terminals 3 and 5).

Two adjacent terminals can be connected in parallel with the disconnecting link. The disconnecting link can be operated in any position of the isolating contact.

Instrument set for one transformer

The basic circuit of the transformer terminal blocks becomes clear in the instrument set for a transformer. Much larger instrument sets also contain this basic circuit which is extended by adding on equivalent circuits. Links between the basic circuits allow many kinds of tests to be carried out, parallel outgoing feeders to other measuring devices, the connection of test equipment etc.

Instrument set for three transformers

The simplest version of an instrument set for a three-phase circuit consists of three basic circuits strung together without any continuing links or extensions. Instead of isolating terminals 1, 3 and 5, less expensive through-type terminals can be used as well. On the other hand, it is also possible to use instrument isolating terminals for this purpose so that the terminal versions are all the same.

Instrument set for three transformers with neutral point

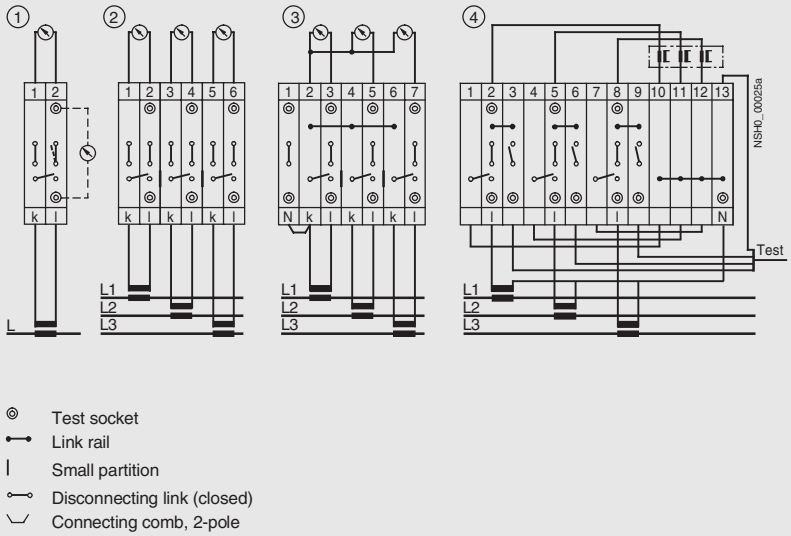
The instrument set with a neutral point is an extension of the previous circuit. Four instead of six lines are sufficient for connecting it with the measuring instruments. The neutral point is produced on the measuring instruments on the one hand, and using a shortened 8WA1 822-7VH10 link rail on the other. The instrument isolating terminal 1 is connected to the neutral point using a connecting comb.

Note

The terminal sets for current transformers are considerably simplified by the introduction of the 8WA1 011-1MH10 through-type terminals and the associated disconnecting bridges. Instead of the 12 isolating or instrument isolating terminals which have been used up to now, only four instrument isolating terminals and three through-type terminals now have to be used.

Instrument set with test facility

This instrument set represents a significant enhancement over previous types. In normal operation, terminals 2, 5 and 8 are closed. For testing a measuring instrument (e.g. a plotter), these terminals are opened and terminals 3, 6 and 9 are closed in order to feed in a test signal. The transformers first have to be short-circuited with the disconnecting links between terminals 1-2, 4-5 and 7-8. Wire bridges connect terminals 1, 4 and 7 with the neutral point. It is formed in terminals 10, 11, 12 and 13 with an 8WA1 887 link rail.



Test socket
Link rail
Small partition
Disconnecting link (closed)
Connecting comb, 2-pole

① Instrument set for 1 transformer
② Instrument set for 3 transformers
③ Instrument set for 3 transformers with neutral point
④ Instrument set with test facility

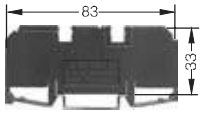
Type	Required number with			
	①	②	③	④
8WA1 011-1MH10			3	7
8WA1 011-1MH11	1	3		3
8WA1 011-1MH15	1	3	4	3
8WA1 825[a]		2	2	
8WA1 885				3
8WA1 887				1
8WA1 822-7VH10			1[b]	
8WA1 822-7VH01	1	3	3	3
8WA1 822-7PH00				4
8WA1 822-7VH22			1	

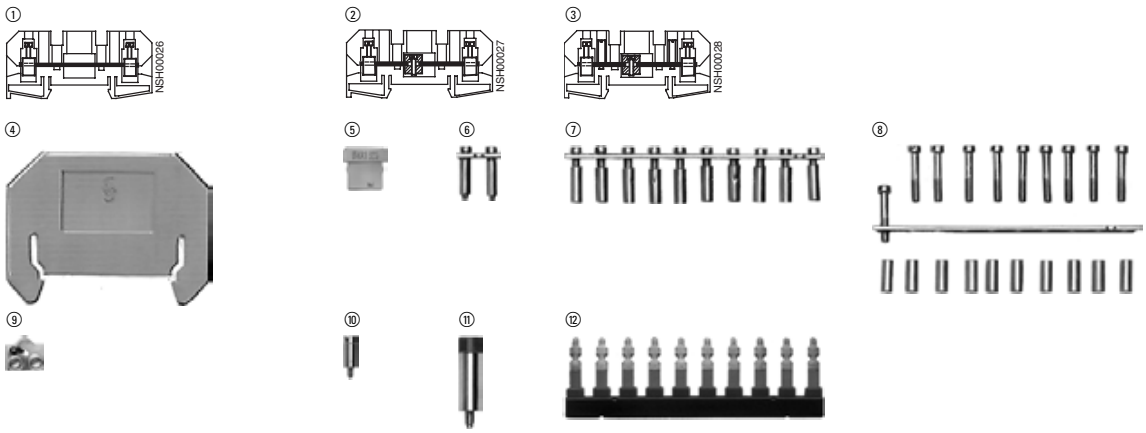
a) May also be required between instrument sets.
b) Shortened.

Connection possibility for measuring transformer terminals (instrument sets)

Selection and ordering data

With thermoplastic insulating body
Screw connection on both sides, and 2 holes for test sockets for 4 mm Ø test plugs, insulated on both sides

Dimensions	Rated uninterrupted current / Rated insulation voltage	Version		Fig. No.	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
 8WA1 011-1MH1.	***Terminal size 6 · Width 8 mm · AWG 14-8 · AWG 16-10***							
	41 A 500 V	**Through-type terminals**	(without test sockets)	①	**8WA1 011-1MH10**		041	20
	41 A 500 V	**Isolating terminals**	(without test sockets)	②	**8WA1 011-1MH11**		041	20
	Open isolating distance 400 V	**Instrument isolating terminals**	(with recessed test sockets)	③	**8WA1 011-1MH15**		041	20
		Barriers	Width 1.5 mm	④	**8WA1 822-7TH00**		041	50
		Insulation plates		⑤	**8WA1 825**		041	50
	41 A	**Link rails** for	2 terminals 3 terminals 4 terminals 10 terminals	⑥ ⑦	**8WA1 885** **8WA1 886** **8WA1 887** **8WA1 888**		041 041 041 041	50 50 20 10
Connection example	41 A	**Link rails**	10-pole, non-assembled, can be shortened as required (screws and distance sleeves provided loose)	⑧	**8WA1 822-7VH10**		041	50
		Covers for link rails, length 80 mm	Transparent White, inscription possible		**8WA1 822-7AX01** **8WA1 822-7AX03**		041 041	10 10
	6 A	**Disconnecting links**[1]		⑨	**8WA1 822-7VH01**		041	50
	16 A	**Test sockets** Ø 4 mm[2]	Recessed	⑩	**8WA1 822-7PH00**		041	50
	16 A	**Test sockets**[3]	Green Black Red	⑪	**8WA1 822-7PH03** **8WA1 822-7PH06** **8WA1 822-7PH08**		041 041 041	50 50 50
	41 A	**Connecting combs** (for insertion into the connection points)	10-pole for shortening as required 2-pole	⑫	**8WA7 163** **8WA1 822-7VH22**		041 041	10 10



For labeling accessories, see page 12/50.

1) Rated insulation voltage with open disconnecting link according to DIN VDE 0110: 125 V Gr. C or 250 V Gr. B.
2) Rated voltage between test socket and passing link rail: 16 V.
3) Rated voltage between two test sockets: 125 V.

*** You can order this quantity or a multiple thereof.**

Circuit-breaker terminals for auxiliary circuits

Overview

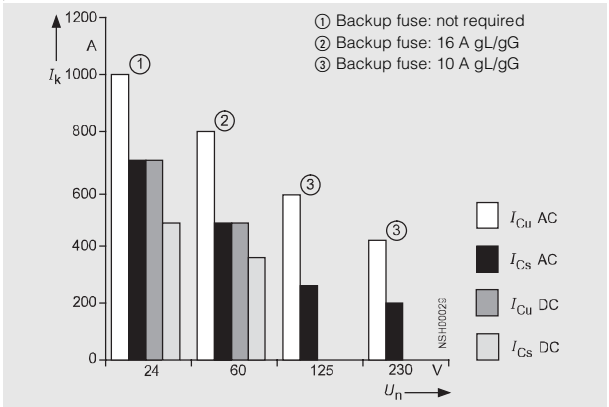
Circuit-breaker terminals are used for short-circuit protection or for protection against overloading and short-circuiting in auxiliary and control circuits after control transformers.

Advantages

- Space-saving construction in terminal block design
- Clear arrangement on the terminal rail (35 mm standard mounting rail)
- Unambiguous indication of switch position or "released" status
- No fuses
- Switch/isolating point function
- Signals through built-in auxiliary switches
- Floating through-connection parallel to the switching contacts
- Double connection to all terminals possible
- Inscription with modular terminal labeling accessories.

Standards

DIN VDE 0660 Part 101 and IEC 60947-2, insofar as they relate to circuit-breaker terminals. Finger-safe according to EN 50274.



Rated short-circuit, making and breaking capacities according to DIN VDE 0660 Part 101 for 8WA1 011-.SF circuit-breaker terminal.

Selection instructions

When selecting circuit-breaker terminals, the different release characteristics must be taken into account.

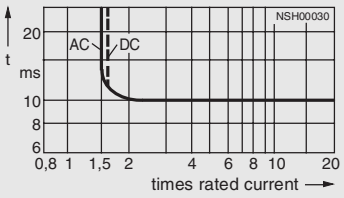
Inductive AC current loads such as contactor coils and solenoid valves have inrush peaks up to ten times the uninterrupted current. Circuit-breaker terminals with short-circuit releases are to be selected such that they do not release as a consequence of inrush peaks.

With regard to circuit-breaker terminals with overload and short-circuit release, a low rated uninterrupted current can be chosen because the short-circuit releases only respond when the levels are high.

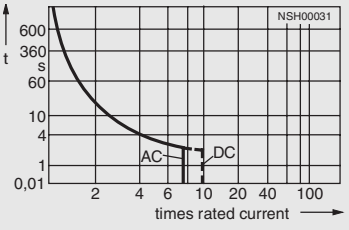
Ordering examples

Existing unit: Solenoid valve 50 Hz, 24 V AC, 20 VA.	
1. Required: Circuit-breaker terminal with short-circuit release. Selection according to making current: Uninterrupted current = 20 VA: 24 V = 0.83 A Making current = 10 · uninterrupted current = 8.3 A	Selected unit: Circuit-breaker terminal 10 A Order No. 8WA1 011–1SF28
2. Required: Circuit-breaker terminal with overload and short-circuit release. Selection according to uninterrupted current: Uninterrupted current = 20 VA: 24 V = 0.83 A	Selected unit: Circuit-breaker terminal 2 A Order No. 8WA1 011-2SF25 Check: The making current equals 10 x uninterrupted current = 8.3 A. This is 4.15 times the rated uninterrupted current of 2 A. The short-circuit release has not yet tripped.

Characteristic curves



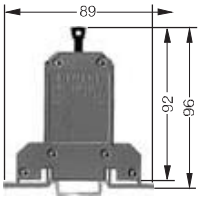
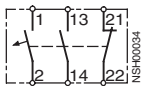
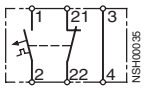
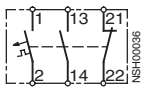
Characteristic curves of short-circuit releases

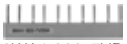


Characteristic curves of combined overload and short-circuit releases at ambient temperature 40 °C

Selection and ordering data

With thermoplastic insulating body · Screw connection on both sides for 2 conductors each

Dimensions	Version	Maximum rated operational voltage	Rated uninterrupted current I_N	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Terminal size 1.5 · Width 12.5 mm · AWG 14-12 AWG 14						
 8WA1 011-1SF24	**Circuit-breaker terminals with short-circuit release**						
		250 V AC, 60 V DC	1	**8WA1 011-1SF24**		041	10
			2	**8WA1 011-1SF25**		041	10
			4	**8WA1 011-1SF26**		041	10
			6	**8WA1 011-1SF27**		041	10
			10	**8WA1 011-1SF28**		041	10
	Circuit-breaker terminals with overload and short-circuit release						
		250 V AC, 60 V DC	1	**8WA1 011-2SF24**		041	10
			2	**8WA1 011-2SF25**		041	10
			4	**8WA1 011-2SF26**		041	10
			6	**8WA1 011-2SF27**		041	10
			10	**8WA1 011-2SF28**		041	10
	Terminal size 1.5 · Width 22.5 mm						
	Circuit-breaker terminals with short-circuit release, auxiliary switches with 1 NO contact and 1 NC contact						
		250 V AC, 60 V DC	1	**8WA1 011-6SF24**		041	5
			2	**8WA1 011-6SF25**		041	5
			4	**8WA1 011-6SF26**		041	5
			6	**8WA1 011-6SF27**		041	5
			10	**8WA1 011-6SF28**		041	5
	Circuit-breaker terminals with overload and short-circuit release, auxiliary switch and through-type connection AWG 14-12 AWG 14						
		250 V AC, 60 V DC	1	**8WA1 011-4SF24**		041	5
			2	**8WA1 011-4SF25**		041	5
			4	**8WA1 011-4SF26**		041	5
			6	**8WA1 011-4SF27**		041	5
			10	**8WA1 011-4SF28**		041	5
	Circuit-breaker terminals with overload and short-circuit release, auxiliary switch with 1 NO contact and 1 NC contact						
		250 V AC, 60 V DC	0.5	**8WA1 011-8SF23**		041	5
			1	**8WA1 011-8SF24**		041	5
			2	**8WA1 011-8SF25**		041	5
			4	**8WA1 011-8SF26**		041	5
			6	**8WA1 011-8SF27**		041	5
			10	**8WA1 011-8SF28**		041	5

Example	For terminals	Rated uninterrupted current A	Version	Length mm		Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Accessories									
	8WA1 011-1SF2. 8WA1 011-2SF2. 8WA1 011-4SF2. 8WA1 011-6SF2. 8WA1 011-8SF2.	76	**Feed-in terminals** Connection up to 16 mm²	--	A	**8WA1 822-7VD00**		041	10
	8WA1 011-1SF2. 8WA1 011-2SF2.	65	**Link rails, 1-pole** 18 connections 9 connections	 206 104		 **8WA1 822-7VD06** **8WA1 822-7VD07**		 041 041	 20 20
 8WA1 822-7VD01	8WA1 011-4SF2. 8WA1 011-6SF2. 8WA1 011-8SF2.	65	**Link rails, 1-pole** 10 connections 5 connections	 206 104		 **8WA1 822-7VD01** **8WA1 822-7VD02**		 041 041	 20 20
 8WA1 822-7VD02									
 8WA1 822-7VD03	8WA1 011-4SF2.	120	**Link rails, 2-pole** 9 connections/pole 5 connections/pole	 206 104		 **8WA1 822-7VD03** **8WA1 822-7VD04**		 041 041	 10 10
 8WA1 822-7VD04									

For labeling accessories, see page 12/50.

* You can order this quantity or a multiple thereof.

ALPHA FIX S Terminals with Screw Connection

Transformer terminals

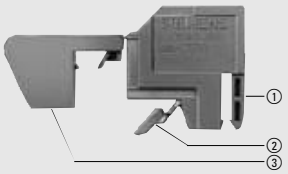
Overview

The 8WA9 200 terminals are used for transformers and rectifiers.

The terminals are insulated on both sides, and are finger-safe according to DIN VDE 0106 Part 100. They possess all properties of the SIGUT connection system.

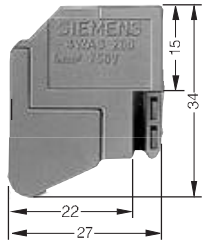
Break-off 12-part 8WA8 858-... labeling strips or the normal labeling accessories can be used to designate the transformer terminals.

In addition to the screw connection, the 8WA9 terminals have a 6.3 ... 0.8 flat connector. The soldered connection is protected by a hinged cover following soldering on the conductor.



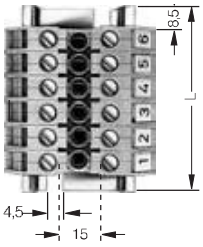
① Retainer for 2 mm × 10 mm mounting rail
② Soldered connection
③ Hinged cover

Selection and ordering data

Dimensions	Terminal size Conductor cross-section	Rated uninterrupted current / Rated insulation voltage according to DIN VDE 0110, Group C	Version	Width	Order No.	Price	PG	PS*/ P. unit
				mm		1 unit		Unit(s)
	Transformer terminal with insulating body made of molded thermoplastic for 2 mm × 10 mm standard mounting rail With screw and plug-in connection as well as soldered connection on device side							
 8WA9 200 (side view)  8WA9 200 (plan view)	Terminal size **4** Screw connection: Solid 0.5 mm² to 6 mm² Finely stranded with or without end sleeve 0.5 mm² to 4 mm² Stripped length 10 mm Flat connector: 6.3 ... 0.8[1] Soldered connection: Solid up to 3 mm Ø Finely stranded up to 2.5 mm² Stripped length 7 mm cULus 18-10 AWG VDE 18-10 AWG	24 A 690 V 600 V according to UL 600 V according to CSA Group D	**Terminals** Beige **Labeling strips** Plain **Labeling strips** Inscription as selected	7.5	**8WA9 200** **8WA8 848-2AY** **8WA8 847-0XA**		041 041 041	100 100 100

Customized versions

Selection and ordering data

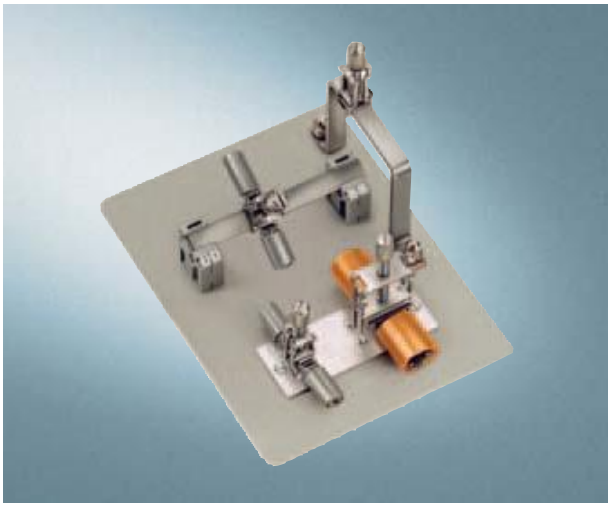
Dimensions	Terminal size Conductor cross-section	Rated uninterrupted current / Rated insulation voltage acc. to DIN VDE 0110, Group C	Version	Length L	Order No.	Price	PG	PS*/ P. unit
				mm		1 unit		Unit(s)
	Terminal size **2.5**	24 A 690 V	**Terminal strips with 8 terminal blocks** 8WA1 011-3DF21 with printed numbers from 1 to 24	164	**8WA1 905-0X**		041	10
	Terminal size **4**	32 A 690 V	**Terminal strips with 6 single terminals** 8WA1 011-1DG11 with snapped-on labeling plates from 1 to 6	57	**8WA1 741-2X**		041	5

For labeling accessories, see page 12/50.

1) Fully insulated flat receptacles must be used with voltages above 400 V up to 690 V.

* You can order this quantity or a multiple thereof.

Overview

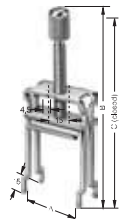


Inductive and capacitive interference which may cause failures in instrumentation and control installations can be prevented to a major extent with the 8WA4 shield connection system. It is a system with a high degree of electrical and mechanical safety, and it gives the user great flexibility of application. Three shield terminals are available, for conductor cross-sections 0 to 8 mm, 7 to 16 mm and 6 to 24 mm.

The method of mounting is simple, safe and time-saving, by a vertical snap-on technique:

- Directly into the detent holes of the mounting plate up to a thickness of 3 mm
- Onto a straight 10 × 3 mm copper rail with insulated supports or a bracket shaped to suit customer requirements
- Onto a copper rail with spacing bolts
- Onto a specially perforated transformer rail with distance sleeves

Selection and ordering data

	Version	Color	Hole spacing Width A	Width A+3	Height B	Height C	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
			mm	mm	mm	mm				
 8WA4 302 (as delivered)	**Shield terminals** 0 to 8 mm	Bare	8	11	51	42	**8WA4 301**		041	5
	Shield terminals 7 to 16 mm	Bare	16	19	53	45	**8WA4 302**		041	5
	Shield terminals 6 to 24 mm	Bare	24	27	78	58	**8WA4 303**		041	5
Accessories										
 8WA4 304	**Holding blocks** With thread	Gray					**8WA4 304**		041	4
	Holding blocks With tapping screw	Gray					**8WA4 305**		041	4
	Copper rails 10 × 3 mm tin-plated, 1000 mm long						**8WA2 842**		041	1
 8WA2 842	**Mounting rails** Special perforation 1000 mm long	Tin-plated					**8WA4 306**		041	1
	Distance sleeves For 8WA4 306						**8WA4 307**		041	10
 8WA4 306										

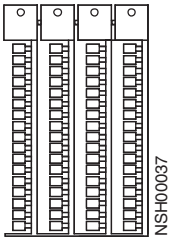
* You can order this quantity or a multiple thereof.

Labeling accessories

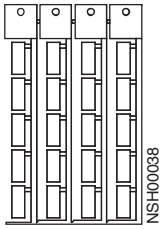
12

Selection and ordering data

Version	Inscription area/Color W × H	Order No.	Price	PG	PS*/ P. unit
	mm		1 unit		Unit(s)
Blank labeling plates (plotter inscription)					
Labeling plates For 8WA1 and 8WA2, individually removable Use individually for 8WA1, or together in grid for 8WA2	5 × 7, white 5 × 10, white[1]	**8WA8 850-2AY** **8WA8 851-2AY**		041 041	1020 1020
Terminal size 2.5 mm²	5 × 7 5 × 10	**8WA8 852-2AY** **8WA8 854-2AY**		041 041	1260 1260
For 8WA2 from terminal size 4 mm²	6 × 7 6 × 10	**8WA8 853-2AY** **8WA8 855-2AY**		041 041	1080 1080
Device identification labels	20 × 9, white	**3TX4 210-0R**		101	380
Labeling plates For individual wires	4 × 12, white 4 × 18, white	Obtainable from: Murrplastik			



Labeling plates for terminal blocks, 1 frame = 68 labels

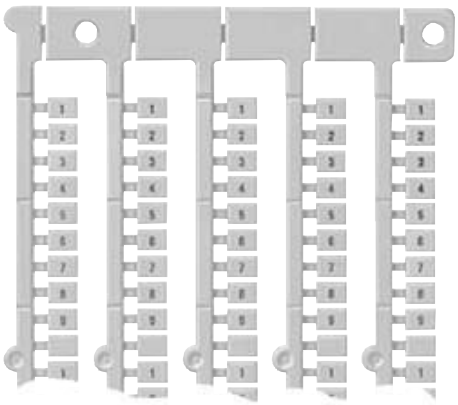


Device identification labels, 1 frame = 20 labels

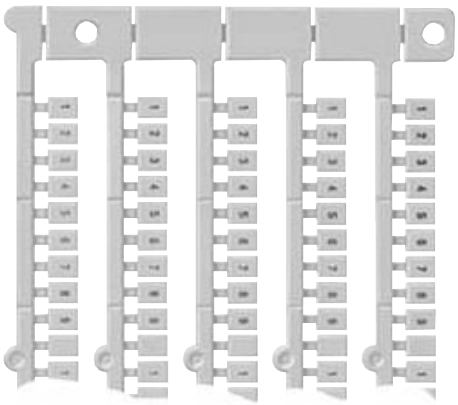
Computer labeling system For individual inscription of	Obtainable from:
• Labeling plates for terminal blocks • Device identification labels • Labeling plates for individual wires	**murrplastik Systemtechnik GmbH**

1) Not for two-tier terminals (bottom level); flat-type terminals: 8WA1 010-1PQ00, 8WA1 808.

* You can order this quantity or a multiple thereof.



Vertical inscription (8WA8 860-0AA)



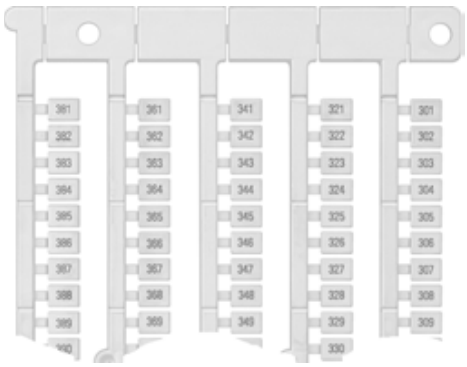
Horizontal inscription (8WA8 861-0AA)

Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Labeling plates, type 1 Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 860-□□□**		041	200
Horizontal inscription	**8WA8 861-□□□**		041	200
Inscription	↑			
1…5 (40x)	**0BA**			
6…10 (40x)	**0BB**			
11…15 (40x)	**0BC**			
16…20 (40x)	**0BD**			
21…25 (40x)	**0BE**			
26…30 (40x)	**0BF**			
31…35 (40x)	**0BG**			
36…40 (40x)	**0BH**			
41…45 (40x)	**0BJ**			
46…50 (40x)	**0BK**			
51…55 (40x)	**0BL**			
56…60 (40x)	**0BM**			
61…65 (40x)	**0BN**			
66…70 (40x)	**0BP**			
71…75 (40x)	**0BQ**			
76…80 (40x)	**0BR**			
81…85 (40x)	**0BS**			
86…90 (40x)	**0BT**			
91…95 (40x)	**0BU**			
96…100 (40x)	**0BV**			
1…20 (10x)	**0AB**			
1…40 (5x)	**0AC**			
41…100 (3x)	**0AD**			
101…200 (2x)	**0AF**			
201…300 (2x)	**0AG**			
1…9, blank (20x)	**0AA**			
1…100 (2x)	**0AE**			
A, B…T (10x)	**1AA**			
U, V, W, X, Y, Z (30x) +, – (10x)	**1AB**			
L1, L2, L3, N, PE (40x)	**1AC**			
U1, V1, W1, U2, V2, W2, (30x); blank (20x)	**1AD**			
T1, T2, T3 (60x); blank (20x)	**1AE**			
T4, T5, T6 (60x); blank (20x)	**1AF**			
1, 3, 5 ... 39 and 2, 4, 6 ... 40	**0DA**			
+	**1AG**			
–	**1AH**			
1a ... 1h to 5a ... 5h (only vertical inscription)	**1AJ**			
6a ... 6h to 10a ... 10h (only vertical inscription)	**1AK**			

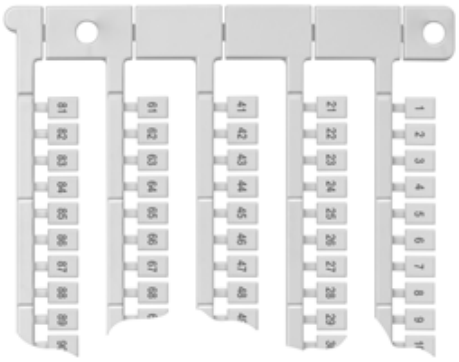
*** You can order this quantity or a multiple thereof.**

Accessories

Labeling accessories



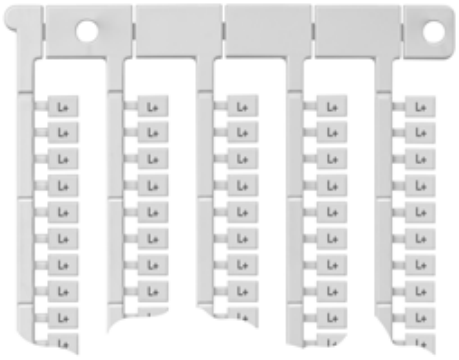
Vertical inscription (8WA8 860-0AH)



Horizontal inscription (8WA8 861-0AQ)

Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Labeling plates, type 2 Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 860-□□□**		041	200
Horizontal inscription	**8WA8 861-□□□**		041	200
Inscription	↑			
10, 20, 30, …200 (10x yellow)	**0CA**			
210, 220, …400 (10x yellow)	**0CB**			
410, 420, …600 (10x yellow)	**0CC**			
610, 620, …800 (10x yellow)	**0CD**			
810, 820, …990 (10x yellow)	**0CE**			
Black warning arrows on yellow label	**0CF**			
1, 2, 3, 4, …200 (1x)	**0AQ**			
201, 202, …400 (1x)	**0AR**			
301, 302, …400 (2x)	**0AH**			
401, 402, …600 (1x)	**0AS**			
401, 402, …500 (2x)	**0AJ**			
501, 502, …600 (2x)	**0AK**			
601, 602, …800 (1x)	**0AT**			
601, 602, …700 (2x)	**0AL**			
701, 702, …800 (2x)	**0AM**			
801, 802, …999 (1x)	**0AU**			
801, 802, …900 (2x)	**0AN**			
901, 902, …999 (2x)	**0AP**			

*** You can order this quantity or a multiple thereof.**



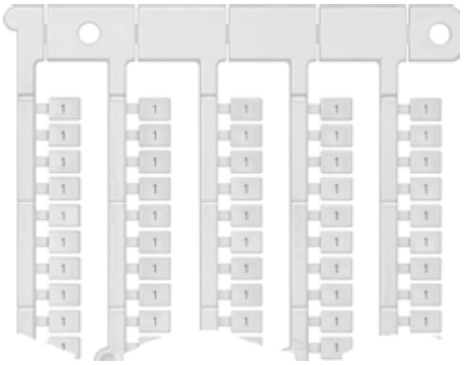
8WA8 847-2AF

Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Labeling plates, type 3a Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 847-□□□**		041	100
Horizontal inscription	**8WA8 848-□□□**		041	100
Inscription	↑			
L1 (100x)	**2AC**			
L2 (100x)	**2AD**			
L3 (100x)	**2AE**			
N (100x)	**1AR**			
MP (100x)	**2AB**			
PE (100x)	**2AH**			
L+ (100x)	**2AF**			
L– (100x)	**2AG**			
Green-yellow (100x)	**2BA**			
Blue (100x)	**2BC**			
PEN (100x)	**2AJ**			
Ground symbol (100x)	**2AA**			
A (100x)	**1AK**			
E (100x)	**1AS**			
F (100x)	**1AL**			
H (100x)	**1AM**			
K (100x)	**1AN**			
M (100x)	**1AP**			
N (100x)	**1AR**			
Q (100x)	**1AQ**			
R (100x)	**1AA**			
S (100x)	**1AB**			
T (100x)	**1AC**			
U (100x)	**1AD**			
V (100x)	**1AE**			
W (100x)	**1AF**			
X (100x)	**1AG**			
Y (100x)	**1AH**			
Z (100x)	**1AJ**			

*** You can order this quantity or a multiple thereof.**

Accessories

Labeling accessories

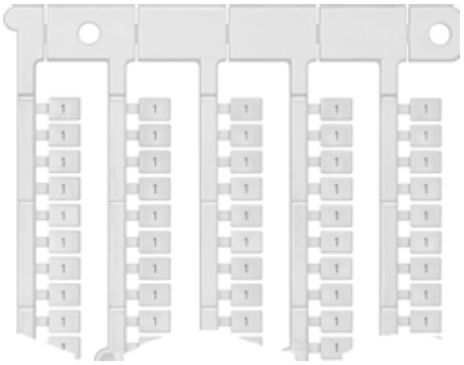


Vertical inscription

Horizontal inscription

Version	Order No.	Price	PG	PS*/ P. unit
		1 unit		Unit(s)
Labeling plates, type 3b Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 847-□□□**		041	100
Horizontal inscription	**8WA8 848-□□□**		041	100
Inscription	↑			
1 (100x)	**0AA**			
2 (100x)	**0AB**			
3 (100x)	**0AC**			
4 (100x)	**0AD**			
5 (100x)	**0AE**			
6 (100x)	**0AF**			
7 (100x)	**0AG**			
8 (100x)	**0AH**			
9 (100x)	**0AJ**			
10 (100x)	**0AK**			
11 (100x)	**0AL**			
12 (100x)	**0AM**			
13 (100x)	**0AN**			
14 (100x)	**0AP**			
15 (100x)	**0AQ**			
16 (100x)	**0AR**			
17 (100x)	**0AS**			
18 (100x)	**0AT**			
19 (100x)	**0AU**			
20 (100x)	**0AV**			
21 (100x)	**0AW**			
22 (100x)	**0AX**			
23 (100x)	**0AY**			
24 (100x)	**0BA**			
25 (100x)	**0BB**			
26 (100x)	**0BC**			
27 (100x)	**0BD**			
28 (100x)	**0BE**			
29 (100x)	**0BF**			
30 (100x)	**0BG**			
31 (100x)	**0BH**			
32 (100x)	**0BJ**			
33 (100x)	**0BK**			
34 (100x)	**0BL**			
35 (100x)	**0BM**			

*** You can order this quantity or a multiple thereof.**



Vertical inscription

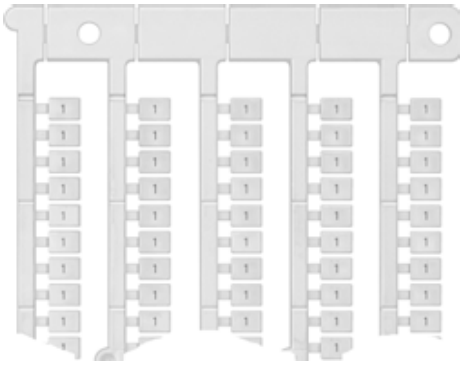
Horizontal inscription

Version	Order No.	Price	PG	PS*/ P. unit
		1 unit		Unit(s)
Labeling plates, type 3c Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 847-□□□**		041	100
Horizontal inscription	**8WA8 848-□□□**		041	100
Inscription	↑			
36 (100x)	**0BN**			
37 (100x)	**0BP**			
38 (100x)	**0BQ**			
39 (100x)	**0BR**			
40 (100x)	**0BS**			
41 (100x)	**0BT**			
42 (100x)	**0BU**			
43 (100x)	**0BV**			
44 (100x)	**0BW**			
45 (100x)	**0BX**			
46 (100x)	**0BY**			
47 (100x)	**0CA**			
48 (100x)	**0CB**			
49 (100x)	**0CC**			
50 (100x)	**0CD**			
51 (100x)	**0CE**			
52 (100x)	**0CF**			
53 (100x)	**0CG**			
54 (100x)	**0CH**			
55 (100x)	**0CJ**			
56 (100x)	**0CK**			
57 (100x)	**0CL**			
58 (100x)	**0CM**			
59 (100x)	**0CN**			
60 (100x)	**0CP**			
61 (100x)	**0CQ**			
62 (100x)	**0CR**			
63 (100x)	**0CS**			
64 (100x)	**0CT**			
65 (100x)	**0CU**			
66 (100x)	**0CV**			
67 (100x)	**0CW**			
68 (100x)	**0CX**			
69 (100x)	**0CY**			
70 (100x)	**0DA**			

*** You can order this quantity or a multiple thereof.**

Accessories

Labeling accessories



Vertical inscription

Horizontal inscription

Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Labeling plates, type 3d Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm				
Vertical inscription	**8WA8 847-□□□**		041	100
Horizontal inscription	**8WA8 848-□□□**		041	100
Inscription	↑			
71 (100x)	**0DB**			
72 (100x)	**0DC**			
73 (100x)	**0DD**			
74 (100x)	**0DE**			
75 (100x)	**0DF**			
76 (100x)	**0DG**			
77 (100x)	**0DH**			
78 (100x)	**0DJ**			
79 (100x)	**0DK**			
80 (100x)	**0DL**			
81 (100x)	**0DM**			
82 (100x)	**0DN**			
83 (100x)	**0DP**			
84 (100x)	**0DQ**			
85 (100x)	**0DR**			
86 (100x)	**0DS**			
87 (100x)	**0DT**			
88 (100x)	**0DU**			
89 (100x)	**0DV**			
90 (100x)	**0DW**			
91 (100x)	**0DX**			
92 (100x)	**0DY**			
93 (100x)	**0EA**			
94 (100x)	**0EB**			
95 (100x)	**0EC**			
96 (100x)	**0ED**			
97 (100x)	**0EE**			
98 (100x)	**0EF**			
99 (100x)	**0EG**			
100 (100x)	**0EH**			
0 (100x)	**0EJ**			

*** You can order this quantity or a multiple thereof.**

Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
Labeling plates, customized inscription Label size 5 mm x 7 mm Inscription height 2 mm Grid size 6.2 mm Required text to be specified in plain text				
Vertical inscription	**8WA8 847-0XA**		041	100
Horizontal inscription	**8WA8 848-0XA**		041	100
Labeling plates, without inscription Not suitable for plotting				
Label size 5 mm x 7 mm	**8WA8 848-2AY**		041	100
Label size 5 mm x 10 mm	**8WA8 800-2AY**		041	100

*** You can order this quantity or a multiple thereof.**

Labeling accessories

12

Selection and ordering data

	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	Group identification labels For 8WA2 terminals for plugging onto retaining plates or insulation plates l = 100 mm White	**8WA2 838**		041	50
	**Label holders** For 8WA2 terminals for insertion into test opening	**8WA2 850**		041	50
	**End labels** 21 × 42 mm Paper label, inscription possible, with transparent cover Suitable for 8WA1 805, 8WA1 808 and 8WA2 808 end retainers	**8WA1 806**		041	50
 8WA8 826-0AA	**Terminal strip labels** Suitable for 8WA1 808 and 8WA2 808 end retainers Printed with "X1" Printed with "X2" Printed with "X3" Blank	 **8WA8 826-0AA** **8WA8 826-0AB** **8WA8 826-0AC** **3TX4 210-0H**		 041 041 041 101	 100 100 100 100
	**Label holders for identification of wires with 8WA8 818-... labeling strips** Wires from Ø 2 mm to Ø 10 mm With max. 8 labeling plates of the labeling strip 8WA8 818-□□□ Width 5 mm	**8WA1 881**		041	1000
	**Labeling plates for wires** Wires from Ø 2 mm to Ø 10 mm Blank labeling plate for inscription with water-proof pen Inscription area 9 mm x 30 mm	**8WA8 846-2AY**		041	1000

* You can order this quantity or a multiple thereof.

Selection and ordering data

	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
 8WA1 867	**Test plugs** For 8WA1 and 8WA2 terminals with Ø 2.3 mm hole or 8WA1 854, 8WA1 884 test sockets Uninterrupted current 10 A				
	Red	**8WA1 868**		041	10
	Blue	**8WA1 870**		041	10
 8WA1 884	**Test sockets** Ø 2.3 mm and associated distance sleeve for link rails, terminal sizes 2.5 and 4, two-tier terminals, rear level, terminal size 6 Uninterrupted current 10 A				
	Test socket[1)]	**8WA1 884**		041	100
	Distance sleeve[1)]	**8WA1 822-7VH11**		041	100
	**Reduction plugs** For 8WA1 and 8WA2 terminals with 2.3 mm ø hole or 8WA1 854, 8WA1 884 test sockets Uninterrupted current 10 A with Ø 4 mm hole	**8WA1 871**		041	10
 5ST1 141	**Standard mounting rails,** non-perforated	**5ST1 141**		027	20
	Standard mounting rails, perforated EN 50022-35 × 7.5 2 m long, 1 mm thick, steel, Sendzimir galvanized	**5ST1 145**		027	20
	Standard mounting rails Similar to EN 50022-35 × 15 2 m long, 1.5 mm thick, steel, galvanized, chromized, non-perforated	**5ST1 142**		027	10
	Standard mounting rails EN 50022-35 × 15 2 m long, 2.3 mm thick, copper, non-perforated	**8WA7 551**		041	1
 8WA1 808	**End retainers** Width 10 mm Molded thermoplastic Suitable for 8WA1 806 end label or 8WA8 826-0A terminal strip label or 3TX4 210-0H device label or 4 8WA8 8.. labeling plates	**8WA1 808**		041	50
 8WA1 805	**End retainers**[2)] Width 10.3 mm Steel Suitable for 8WA1 806 end label	**8WA1 805**		041	50

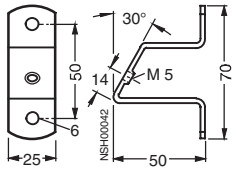
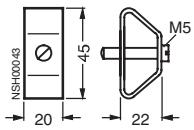
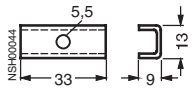
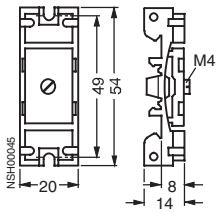
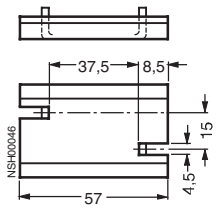
1) The test socket must be used with a distance sleeve.

2) A 8WA1 820 barrier must be inserted in the case of end retainers against a 8WA1 89. link rail (size 2.5).

* You can order this quantity or a multiple thereof.

Accessories

Mounting accessories

Dimensions	Version	Order No.	Price 1 unit	PG	PS*/ P. unit Unit(s)
	**Mounting brackets** For standard mounting rails	**8WA7 46**		041	10
	**Spacer brackets** For raised mounting of terminal strips	**8WA7 53**		041	50
	**Spacers** With 5.5 mm hole For raised mounting of terminal strips	**8WA7 52**		041	100/50
	**Insulation carriers** For insulated mounting of mounting rails onto plates, frame profiles and standard mounting rails according to EN 50022-35	**8WA1 857**		041	20
	Labels For identification of insulation carrier	**8WA1 864**		041	100
	**Fixing parts** For screw mounting of 8WA1 304, 8WA1 011-3DF21, 8WA1 011-3DG21, 8WA1 011-0DG22, 8WA1 011-3DH21 terminal blocks and single terminals (no end retainer required)	**8WA1 815**		041	1

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