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Automation and Drives
Electrical Installation Technology
P.O. Box 10 09 53
93009 REGENSBURG
GERMANY
www.siemens.com/e-installation
Welcome to the ALPHA FIX family

The right connection method for any application: The ALPHA FIX terminal blocks are available in the following designs: screw-type terminals, spring-loaded terminals, combi plug terminal, push-in terminals and IDC terminals. This gives you flexibility and it makes configuration easy. Because we not only provide you with the entire range of terminal blocks from a single source, but also everything you need for installing in a control cabinet or distributor box to permit you to implement any application with the right connection technology.

Whether you need small distribution boards, metering cabinets, wall-mounted or floor-mounted distribution boards, we have developed a comprehensive program with our ALPHA distributor systems, in which technology and design are in complete harmony. Accordingly, we offer you our expanded and complete family of ALPHA FIX terminal blocks. Common feature: They can all be snapped onto the 35-mm rail according to DIN EN 60715 and they satisfy all the needs of a clearly laid out wiring scheme.

Electrical Installation from A to Z

With our comprehensive range of ALPHA distribution boards and terminal blocks, BETA modular installation devices, GAMMA building management systems and DELTA switches and outlets, we offer you an end-to-end range of products and services for Electrical Installation from A to Z.
ALPHA FIX terminal blocks: Always the right connection

Terminal blocks are used for space-saving connection of incoming and outgoing lines in switchboards and distribution boards. The trend in the market is clear: Toward time-saving and consequently toward screwless technology. For this reason, we have expanded our proven range of 8WA1 screw-type terminals and 8WH2 spring-loaded terminals. With immediate effect, our ALPHA FIX family includes a uniform, screwless range of connection technology with 8WH2 spring-loaded terminals, the 8WH5 combi plug terminal, the 8WH4 push-in terminal, and the 8WH3 IDC terminal, including the corresponding accessories. Worldwide availability and international certifications distinguish the world of ALPHA FIX terminal blocks.

Free selection
With the ALPHA FIX terminal blocks, you can select the connection method that you require. The labeling system is uniform for all ALPHA FIX terminal blocks. And: All screwless connection technologies of the 8WH series can be freely combined since they have the same accessories. This gives you a high degree of flexibility and simplifies configuration and setting up the control cabinet.

ALPHA FIX – Overview of the advantages:
- Complete series across all connection methods
- High availability
- Fast, time-saving installation
- Compact terminal dimensions
- Minimal stock keeping
- User-friendly labeling system
- Uniform accessories
More advantages, less outlay

Whether it is a flexible plug-in jumper system, multi-functional isolating zone, large-scale labeling or standardized testing system, the new ALPHA FIX terminal blocks provide you with many advantages that will make your work considerably easier. You will profit from minimal stock keeping, shorter parts lists and faster and simpler configuration and installation.

Uniform accessories
The integrated system of 8WH screwless devices is distinguished by the uniform accessories. The jumper, labeling and test accessories are standardized and considerably reduce the logistical costs.

Flexible plug-in jumper system
Would you like to quickly implement all the tasks of potential jumpering? Then flexible and integrated plug-in jumper systems can help you. In order to carry out the potential distribution quickly and individually, the terminals have two jumper shafts. These are arranged in one line for all terminals and they allow the different connection technologies to be combined with each other. In this way, for example, attenuating jumpers connect a 10-mm² to a 2,5-mm² spring-loaded terminal.

Multifunctional isolating zone
Whether you want to form a polarized receptacle quickly and solder-free using the component connector, or you want to use fused connectors for the application of G fuse links – for the use in isolating terminals we provide you with various function elements. The following applies: All isolating terminals of the ALPHA FIX 8WH terminal blocks have a standardized isolating zone. Isolating connectors provide simple isolation.
**Large-scale labeling**
To lay out the wiring in a clear arrangement and to put it into operation, the terminal points must be marked. For the ALPHA FIX terminal blocks, these can be labeled using large letters. This also makes allocation during testing and maintenance work easier.

**Standardized testing system**
The ALPHA FIX terminal blocks have comprehensive test accessories. The test connectors must be attached in the freely accessible jumper shaft. For individual measuring lines, there is a 2.3 mm diameter test connector. Comprehensive testing tasks can be implemented using the modular test connector. In addition, with the right spacers, the test adapters can be individually assembled and thus be optimally used in test fields.
**8WA1 screw-type terminal – Tried and tested technology**

Whoever decides on using the proven screw connection, will make a good choice with the ALPHA FIX 8WA1 terminal blocks. They are insulated on both sides and closed at both ends. This makes the terminal rugged, eliminates the need for end plates and you save many stock items.

**Always tighten securely**

The clamping parts are designed to yield elastically to tensile stress when tightening the terminal screws. This compensates for any creepage of the clamped cable. Loosening of the terminal screw is prevented by the deformation of the threaded section – even under strong mechanical and thermal load.

---

**Overview of the advantages**

- Terminals closed at both ends eliminate the need for end plates
- Terminals are rugged – ideal for the use of powered screwdrivers
- Symmetrical structure eliminates the need to align the terminals before placing them onto the 35 mm DIN rail
- Due to elastic clamping parts, the terminal screws do not need to be tightened
- Time and money savings with terminal blocks
- Rugged terminal design
8WH2 spring-loaded terminal – this is where contact stability comes in

The trend toward spring-loaded connection systems is on the rise, especially in the construction of control cabinets, systems, controls and in transport systems. For this reason, we have expanded our product range with the new 8WH2 spring-loaded terminals. The spring-loaded terminal is primarily intended for vibration-sensitive applications. The advantages: The spring always exerts constant pressure on the conductor, independently of the operator’s influence. There is no need to check the connection.

Playing it safe
The 8WH2 spring-loaded terminal also shows its advantages during assembly: The extremely compact design ensures very user-friendly wiring even where space is at a premium. Connection is conveniently made from the front, whereby the connecting conductors are securely connected to the power bus applying the spring-loaded principle.

8WH2 spring-loaded terminal – Overview of the advantages

- Comprehensive range of products – the right terminal for any application
- Contact stability even when exposed to vibrations
- No need to retighten the clamping point – contact stability does not depend on the operator
- Space-saving compact design and front connection
8WH5 combi plug terminal – a good combination

The 8WH5 combi plug terminal is used anywhere where pre-assembled modules are used or a high degree of modularity is in demand. For example, anywhere where several function groups are connected to each other or modular designs are used.

Plug-in connection solutions
With this plug-in system, we offer you another component of ALPHA FIX. The contact system withstands even the most extreme vibration loads and is also designed to be safe from contact by fingers, both in the terminal and in the connector. In addition, we provide you with comprehensive accessories – from the latching mechanism and strain relief to the shield connection. ALPHA FIX combi-connectors are distinguished by a rated current of up to 32 A when using the 4-mm² combi-connector.

8WH5 combi plug terminal – Overview of the advantages:
- High contact stability during vibrations
- Comprehensive accessories
- Design that is safe from contact by fingers in the terminal and in the connector
- Quick connection using plug-in modules
- High rated current of up to 32 A
8WH4 push-in terminal: Simply plug it in, that’s it!

Anywhere where the wiring involves rigid conductors or conductors with cable end sleeves, our new 8WH4 push-in terminals are recommended. Thus, they are especially appealing for use in building installation. Switches, outlets, terminals in small and other distribution boards, and miniature circuit-breakers are already available with this connection technology from Siemens.

Even when things get tight
The stripped, rigid conductors are simply plugged into the terminals and they establish a reliable contact. The screwdriver is only required for loosening the connection. This is an advantage that is especially important in very tight and narrow wiring spaces. In addition, the terminals must also be connected with flexible conductors; either with cable end sleeves or with the aid of a screwdriver. This terminal also offers all the advantages of the ALPHA FIX 8WH terminal blocks range.

8WH4 push-in technology – Overview of the advantages
- Direct connection of rigid conductors
- Tool required for loosening only
- Wiring in the narrowest space
- Also connection of flexible conductor
8WH3 IDC terminal: You’ll know how to save time

Especially in series production or when manufacturing large batches of standarized products, our new 8WH3 IDC terminal with IDC technology is preferably used. IDC is the abbreviation of Insulation Displacement Connection. This means: The insulation of the conductor is cut open on both sides by the cutter. It is not necessary to strip the conductor. In this way, a secure contact is established between the conductor and the connecting line of the terminal – simply cut the conductor to length, plug it in and close the terminal. One turn with a screwdriver is sufficient for this. Expressed in numbers, this means: You save up to 60% on wiring time – from the sensor to the control system.

8WH3 insulation displacement terminal – Overview of the advantages
- Up to 60% time saving
- No pretreatment of conductor
- Space-saving and safe operation
- Quick connection with only one turn
- No special tools required
### Uniformity is the standard

Whether you need small distribution boards, metering cabinets, wall-mounted or floor-mounted distribution boards, we have developed a comprehensive program with our ALPHA distributor systems, in which technology and design are in complete harmony. Accordingly, we offer you our expanded and complete family of ALPHA FIX terminal blocks. Common feature: They can all be snapped onto the 35-mm rail according to DIN EN 60715 and they satisfy all the needs of a clearly laid out wiring scheme.

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#### 8 WH \( \text{Type} \)

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<tr>
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#### Order code

**8 WH** \( \text{Order code} \)

**8WH1** screw-type terminal

Page 6

**8WH2** spring-loaded terminal

Page 7

**8WH3** combi plug terminal

Page 8

**8WH5** push-in terminal

Page 9

**8WH1 DC** terminal

Page 10

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Discover the World of ALPHA FIX
Terminal Blocks

Product Information

First information (overview of product range – clearly summarized arguments and advantages)

- ALPHA Distribution Boards and Terminal Blocks
- SIEMENS Building Management Systems
- DELTA Modular Installation Devices
- ALPHA FIX Terminal Blocks
- Product Information

Catalogs (ordering documentation with prices and device selection)

- Product data sheet ALPHA
- Product data sheet SIEMENS
- Product data sheet DELTA
- Product data sheet ALPHA FIX

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If you want further information about products and systems from the Siemens Electrical Installation range, simply tick the relevant box for the required documentation and send us the postcard. We will then send the requested documentation to your address free of charge.

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### Standard terminals

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Type</th>
<th>Number of connection points</th>
<th>MLFB positions</th>
<th>1.5 mm²</th>
<th>2.5 mm²</th>
<th>4 mm²</th>
<th>6 mm²</th>
<th>10 mm²</th>
<th>16 mm²</th>
<th>35 mm²</th>
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</tbody>
</table>

#### Example:

- **8WH3003** – **0AF00**
  - e.g. IDC TT terminal, 2.5 mm², 3 connection points, color: gray
# Hybrid terminals

<table>
<thead>
<tr>
<th>Connection type</th>
<th>Type</th>
<th>Number/connection points</th>
<th>MLEB positions</th>
<th>Details</th>
<th>1.5 mm²</th>
<th>2.5 mm²</th>
<th>4 mm²</th>
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<tbody>
<tr>
<td>Spring-loaded</td>
<td>3</td>
<td>8WH2103</td>
<td>3</td>
<td>TT terminal, 1 x Screw, 2 x Spring</td>
<td>E00</td>
<td>E01</td>
<td>E07</td>
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<td>PE terminal, 1 x Screw, 2 x Spring</td>
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<tr>
<td>IDC</td>
<td>2</td>
<td>8WH3100</td>
<td>2</td>
<td>TT terminal, 1 x Quick, 1 x Screw</td>
<td>E00</td>
<td>E01</td>
<td>E07</td>
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<td>PE terminal, 1 x Quick, 1 x Screw</td>
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<td>Two-tier</td>
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<td>8WH3103</td>
<td>3</td>
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<td>E01</td>
<td>E07</td>
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<td>PE terminal, 2 x Quick, 1 x Screw</td>
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<td>Combi plug</td>
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<td>TT terminal, 1 x Plug-in, 1 x Spring</td>
<td>F00</td>
<td>F01</td>
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<td>PE terminal, 1 x Plug-in, 1 x Spring</td>
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<tr>
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<td>3</td>
<td>8WH5103</td>
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<td>TT terminal, 1 x Plug-in, 2 x Spring</td>
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<td>F01</td>
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<td></td>
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<td>PE terminal, 1 x Plug-in, 2 x Spring</td>
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<td>4</td>
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<td>TT terminal, 2 x Plug-in, 2 x Spring</td>
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<td>F01</td>
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<td>PE terminal, 2 x Plug-in, 2 x Spring</td>
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</tr>
</tbody>
</table>

*Example:* Hybrid PE terminal, push-in/spring-loaded terminal, 2 connections, 2.5 mm², green-yellow **Subject to change**