



## Quick Reference Guide Barrier Strips

Barrier strip style terminal blocks from TE Connectivity are available in 3 main categories: dual-barrier, tri-barrier, and double row. Each category of barrier strip is offered in several industry standard centerline spacings, allowing you to choose from high density to high current applications. Dual-barriers and Tri-Barriers are very similar in that they are both offered with hardware which allows them to be used in either PCB or panel mount applications.

### Features & Benefits

- Available in centerline spacing from 0.250" - 0.4375"
- Position sizes 2 to 30
- Accepts wire range from 10-30 AWG dependant on style
- Full line of accessories includes jumpers, quick connect tabs, and some covers
- Binding head style and wire clamp screws are available; binding head screws are typically used with hardware such as QC tabs and jumpers.
- Wire screw clamps are best suited for bare wire applications.
- Common contact styles offered in both dual- and tri-barriers: PCB pin, extended PCB pin, insulated ext. PCB pin, wire wrap, insulated wire wrap, solder turret, ins. solder turret, quick connect, ins. quick connect and non feed-thru

### Product Applications

- Machine controls
- Power supplies
- Test & measurement
- Automation equipment
- Security/alarm devices
- HVAC controls
- Garage door openers
- Furnaces, water heaters, boilers

**Barrier Strip Selector Chart**



| Dual-Barrier     |                  |                  |                               |                  |                              |                  |
|------------------|------------------|------------------|-------------------------------|------------------|------------------------------|------------------|
| Series           | 3DB              | 4DB              | 4HR                           | JC6              | NC6                          | SSB7             |
| Centerline       | .250"            | .325"            |                               | .375"            |                              | .4375"           |
| Circuits         | 2-30             | 2-30             | 2-16                          | 2-16             | 2-30                         | 2-27             |
| Max Current      | 10A              | 20A              | 20A                           | 20A              | 20A                          | 20A              |
| Max Voltage      | 300V             | 150V/300V        | 300V                          | 300V             | 300V                         | 600V             |
| Wire Range (AWG) | 16-30            | 14-22            | 12-22                         | 12-22            | 12-22                        | 12-22            |
| Description      | Molded to Length | Molded to Length | High Rise<br>Molded to Length | Molded to Length | Low Rise<br>Molded to Length | Molded to Length |



| Tri-Barrier      |                  |                  |                  |                  |                             |                  |
|------------------|------------------|------------------|------------------|------------------|-----------------------------|------------------|
| Series           | #3               | #4               | #4C              | #6               | #6C                         | #8               |
| Centerline       | .250"            | .325"            |                  | .375"            |                             | .4375"           |
| Circuits         | 2-32             | 2-30             | 2-8              | 2-30             | 2-8                         | 2-26             |
| Max Current      | 10A              | 20A              | 15A              | 25A              | 15A                         | 30A              |
| Max Voltage      | 150-300V         | 150-300V         | 300V             | 300/600V         | 300V                        | 600V             |
| Wire Range (AWG) | 18-22            | 12-22            | 14-22            | 12-22            | 14-22                       | 10-18            |
| Description      | Molded to Length | Molded to Length | Molded to Length | Molded to Length | Molded to Length<br>Modular | Molded to Length |



| Double Row Barrier |                                  |                                  |                                  |                                  |
|--------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Series             | 1546306<br>1546307               | 1546670<br>1546671               | 1546310<br>1546311               | 1776544<br>1986158               |
| Centerline         | .374"                            | .437"                            | .563"                            |                                  |
| Circuits           | 2-30                             | 2-26                             | 2-18                             | 2-18                             |
| Max Current        | 20A                              | 25A                              | 30A                              | 30A                              |
| Max Voltage        | 300V                             | 300V                             | 300V                             | 600V                             |
| Wire Range (AWG)   | 12-22                            | 14-22                            | 10-22                            | 10-22                            |
| Description        | Panel Mount,<br>Molded to Length | Panel Mount,<br>Molded to Length | Panel Mount,<br>Molded to Length | Panel Mount,<br>Molded to Length |

## Barrier Strips Overview (Types of Strips and Sockets)

### Dual-Barrier

Two walls or barriers are molded to each side of the terminal screw.



### Tri-Barrier

Three walls or barriers surround each terminal screw. The back wall safeguards field wiring. Image below:



### Double Row Barriers

Used in industrial controls and machine automation. Double row barriers are used in panel mount and wire-to-wire applications.



### Wire Clamp Screws

The lower surface and edges of the clamping plates are carefully designed to securely clamp the wire — with combinations of different wire sizes — without severing stranded wire. Extra care has been taken to produce these components without burrs on any critical clamping surface or edges.

### Quality Plating

TE has been known for its plating, especially on the tin-plated components, and has maintained stringent plating specifications to provide a better performing, more reliable product.

### Integral Standoffs

Standoffs help rid your PCB of any remaining corrosive agents during rinsing operations. Helps prevent trapped solutions in the immediate PC pin area. Significantly reduces the risk of postwave corrosion problems.

### Gas-Tight Connections

The acid-tin plating on your terminals means more than just improved shelf-life and superior solderability. It is to provide the very basis for the heart of your wire connections.

### Customization

With the large number of hardware and contact options available, combined with various accessories, the barrier strip line can be customized for a wide variety of solutions for your PCB and panel mount applications.



### Captive Clamp (Clamping Plate)



The captive clamp is designed to accept multiple wires and wire gauges. With the captive clamp, you save time! No need to loop the wire, you just strip & screw down underneath the clamp. The clamp rides up and down with the screw.

### Binding Head



vs.

The binding head is designed to accept a single stripped wire, looped under the screw head. The ideal use of the binding head is in conjunction with terminated wires and top side accessories (quick connects and jumpers).

## Questions that will help you better select the product that you need:

### Are you looking for a specific pin spacing?

TE offers barrier strips in both PCB and panel mount configurations on the most common centerline spacings ranging from 0.250"-0.4375".

### Is your application for control wiring or for higher current power connections?

For control wiring, you may desire a higher density product such as # 3 Series Tri-Barrier or the 3DB dual-barrier. If you need a barrier strip UL up to 600 volts, then try looking at the SSB7 or #8 series products.

### Would you like to use accessories such as flat, 45 degree or 90 degree quick connect tabs or jumper?

TE offers a wide range of accessories for each style of barrier strip. Often times these accessories are pre-installed at our factory for your convenience.

You may find these accessories at [www.te.com/products/barrierstrips](http://www.te.com/products/barrierstrips)

### Does your application require the block to have special mounting features?

With the many styles of barriers available you will be able to find flat panel mounting versions as well as vertical and right angle through panel products.

## FOR MORE INFORMATION

### TE Technical Support Center

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\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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1-1773458-2 CIS LUG FP 1M 03/2011

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