

# **Quick Reference Guide**Barrier Strips

Barrier strip style terminal blocks from Tyco Electronics 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 dualand 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**

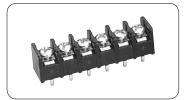
- Machine controls
- · Power supplies
- Test & measurement
- Automation equipment
- · Security/alarm devices
- HVAC controls
- Garage door openers
- Furnaces, water heaters, boilers







# **Barrier Strip Selector Chart**







<b>Dual-Barrier</b>							
Series	3DB	4DB	4HR	JC6	NC6	SSB7	
Centerline	.250"	.325"		.37	.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 Molded to Length	Molded to Length	Low Rise Molded to Length	Molded to Length	















Tri-Barrier								
iri-Barrier								
Series	#3	#4	#4C	#6	#6C	BC6	MB6	#8
Centerline	.250"	.325"		.375"				.4375"
Circuits	2-32	2-30	2-8	2-30	2-8	2-16	4-40	2-26
Max Current	10A	20A	15A	25A	15A	20A	25A	30A
Max Voltage	150-300V	150-300V	300V	300/600V	300V	300V	300V	600V
Wire Range (AWG)	18-22	12-22	14-22	12-22	14-22	12-22	12-22	10-18
Description	Molded to Length	Molded to Length	Molded to Length	Molded to Length	Molded to Length Modular	Molded to Length	Snapped to Length	Molded to Length







Double Row Barrier							
Series	1546306 1546307	1546670 1546671	1546310 1546311	1776544 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, 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.



## 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.

#### **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**

Tyco Electronics Corporation 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

VS.

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.



### **Binding Head**



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?

Tyco Electronics 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?

Tyco Electronics 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.tycoelectronics.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

## **Technical Support**

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Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined www.tycoelectronics.com/leadfree

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