

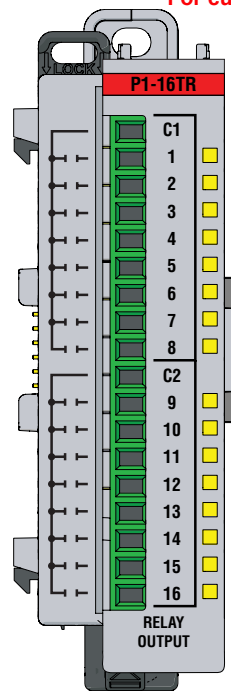
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 For current \$AUD visit [www.directautomation.com.au](http://www.directautomation.com.au)

Output Specifications	
<b>Outputs per Module</b>	16
<b>Rated Voltage</b>	6.25–30 VDC, 6–120 VAC
<b>Operating Voltage Range</b>	5–30 VDC, 5–144 VAC
<b>Output Type</b>	Relay FORM A (SPST)
<b>AC Frequency</b>	47–63 Hz
<b>Maximum Output Current</b>	2A / point, 8A / common for both AC and DC 2A / point, 4A / common if used with <b>ZIP</b> Link Cable
<b>Minimum Load Current</b>	5mA @ 5VDC
<b>Maximum Inrush Current</b>	5A for 10ms
<b>OFF to ON, ON to OFF Response</b>	≤ 10 ms
<b>Status Indicators</b>	Logic Side (16 points)
<b>Commons</b>	2 isolated (8 points/common)
<b>Maximum Applicable Fuse</b>	8A

Typical Relay Life		
Voltage & Type of Load	Operations at 1A Load Current	
30VDC Resistive	100,000	
30VDC Solenoid	100,000	
120VAC Resistive	100,000	
120VAC Solenoid	100,000	

## P1-16TR Relay Output

The P1-16TR Relay Output Module provides sixteen 2A outputs with two isolated commons for use with the Productivity1000 system.



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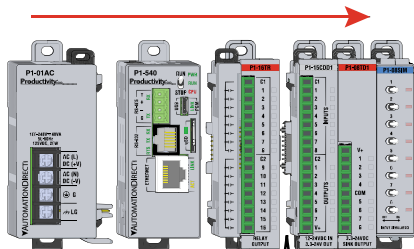
Terminal Block sold separately, (see wiring options on page 3).  
 Warranty: Thirty-day money-back guarantee. Two-year limited replacement (See [www.productivity1000.com](http://www.productivity1000.com) for details).

# Module Installation

# QR Code

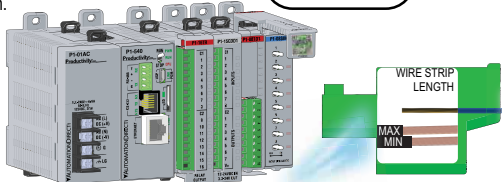
**WARNING:** Do not add or remove modules with field power applied.

**Step One:** With latch in "locked" position, align connectors on the side of each module and stack by pressing together. Click indicates lock is engaged.

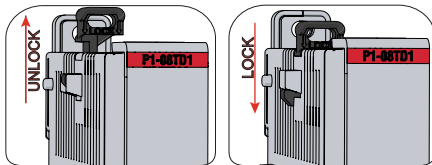


**Step Two:** Attach field wiring using the removable terminal block or ZIPLink wiring system.

Check all latches are secure after modules are connected.



**Step Three:** To unstack modules, pull locking latch up into the unlocked position and then pull modules apart.

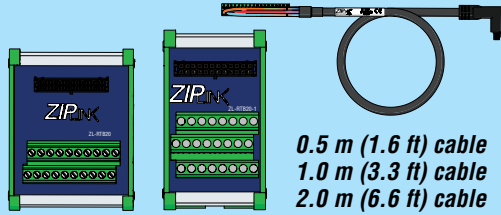


Use any QR Code reader application to display the module's product insert.

# P1-16TR Schematic and Wiring Diagram

## Wiring Options

### 1 ZIPLink Feed Through Modules and Cables<sup>1</sup>



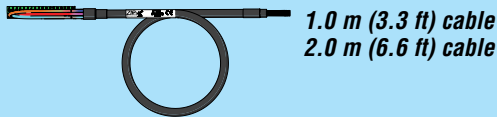
**ZIPINK**  
AUTOMATIONDIRECT

ZL-RTB20  
ZL-RTB20-1

ZL-P1-CBL18  
ZL-P1-CBL18-1  
ZL-P1-CBL18-2

0.5 m (1.6 ft) cable  
1.0 m (3.3 ft) cable  
2.0 m (6.6 ft) cable

### 2 Terminal Block with pigtail cable



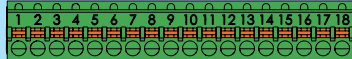
ZL-P1-CBL18-1P  
ZL-P1-CBL18-2P

### 3 Screw Terminal Block only



P2-RTB  
(Quantity 1)

### 4 Spring Clamp Terminal Block only



P2-RTB-1  
(Quantity 1)

### 5 Accessories<sup>2</sup>

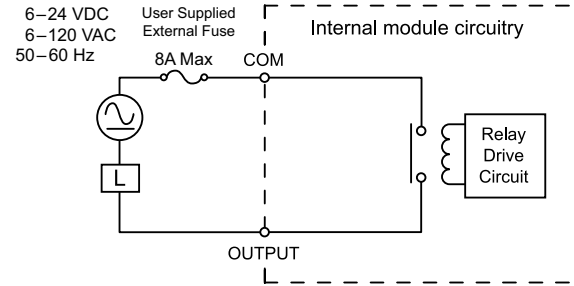


ZL-RTB-COM

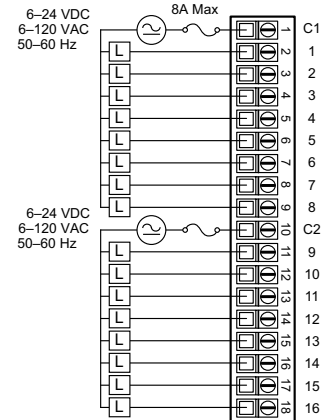
TW-SD-SL-1

TW-SD-MSL-1

1. Cable + ZIPLink Module = Complete System
2. ZL-RTB-COM provides a common connection point for power or ground



EXTERNAL FUSE RECOMMENDED



**WARNING:** To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

**Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.**

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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### Terminal Block Specifications

Part Number	P2-RTB	P2-RTB-1
<b>Positions</b>	18 Screw Terminals	18 Spring Clamp Terminals
<b>Wire Range</b>	30–16 AWG (0.051–1.31 mm <sup>2</sup> ) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 1/4 in (6–7 mm) Strip Length	28–16 AWG (0.081–1.31 mm <sup>2</sup> ) Solid / Stranded Conductor 3/64 in (1.2 mm) Insulation Max. 19/64 in (7–8 mm) Strip Length
<b>Conductors</b>	*USE COPPER CONDUCTORS, 75°C* or equivalent.	
<b>Screw Driver</b>	0.1 in (2.5 mm) Maximum*	
<b>Screw Size</b>	M2	N/A
<b>Screw Torque</b>	2.5 lb-in (0.28 N-m)	N/A

\*Recommended Screw Driver TW-SD-MSL-1

### General Specifications

<b>Operating Temperature</b>	0° to 60°C (32° to 140°F)
<b>Storage Temperature</b>	-20° to 70°C (-4° to 158°F)
<b>Humidity</b>	5 to 95% (non-condensing)
<b>Environmental Air</b>	No corrosive gases permitted
<b>Vibration</b>	IEC60068-2-6 (Test Fc)
<b>Shock</b>	IEC60068-2-27 (Test Ea)
<b>Field Circuit Isolation</b>	1800VAC applied for 1 second
<b>Insulation Resistance</b>	>10MΩ @ 500VDC
<b>Heat Dissipation</b>	3000mW
<b>Enclosure Type</b>	Open Equipment
<b>Module Location</b>	Any I/O position in a Productivity1000 System.
<b>Field Wiring</b>	Use <b>ZIPLink</b> Wiring System or removable terminal block (sold separately). See "Wiring Options" on page 3.
<b>EU Directive</b>	See the "EU Directive" topic in the Productivity Suite Help File. Information can also be obtained at: <a href="http://www.productivity1000.com">www.productivity1000.com</a>
<b>Connector Type (sold separately)</b>	18-Position Removable Terminal Block
<b>Weight</b>	91g (3.2 oz)
<b>Agency Approvals</b>	UL 61010-1 and UL 61010-2-201 File E139594, Canada & USA CE (EN 61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)*

\*See CE Declaration of Conformance for details.

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P1-16TR-DS	4th Edition	1/8/2020

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