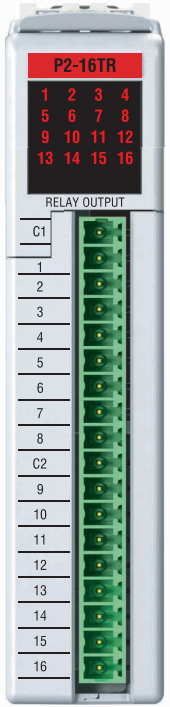
Output Specifications

Output Channels	16
Rated Voltage	12–24 VDC 7–240 VAC
Operating Voltage Range	6–27 VDC 6–264 VAC
Output Type	Relay, form A (SPST)
AC Frequency	47–63 Hz
Maximum Output Current	1A / point, 8A / common @ 60°C for both AC and DC
Minimum Load Current	5mA @ 5VDC
Maximum Inrush Current	4A for 10ms
OFF to ON Response	m 10ms
ON to OFF Response	m 10ms
Status Indicators	Logic Side (16 points)
Commons	2 Isolated (8 point / common)
Recommended External Fuse	8A Max



P2-16TR Relay Output

The P2-16TR Relay Output Module provides sixteen 1A surge-protected outputs with two isolated commons for use with the Productivity2000 system.

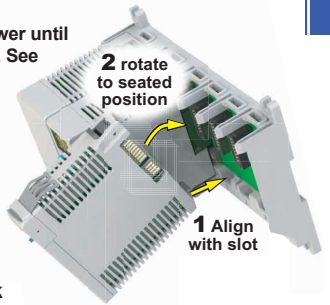
Document Name	Edition/Revision	Date
P2-16TR-DS	2nd Ed.	9/6/2019

Terminal Block sold separately, (see wiring options on page 3).

Warranty: Thirty-day money-back guarantee. Two-year limited replacement. (See www.productivity2000.com for details).

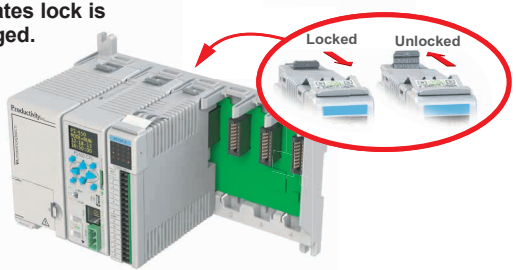
Module Installation

WARNING: Do not apply field power until the following steps are completed. See hot-swapping procedure for exceptions.

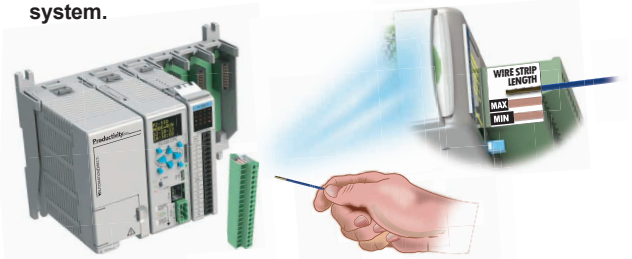


Step One: Align module catch with base slot and rotate module into connector.

Step Two: Pull top locking tab toward module face. Click indicates lock is engaged.



Step Three: Attach field wiring using the removable terminal block or *ZIP*Link wiring system.



QR Code

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

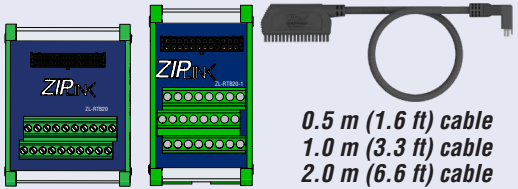
Caution: *If possible, remove field power prior to proceeding. If not, then **EXTREME** care **MUST** be taken to prevent damage to the module, or even personal injury due to a short circuit from the live terminal block.*

Important Hot-Swap Information

The Productivity2000 supports hot-swap! Individual modules can be taken offline, removed, and replaced while the rest of the system continues controlling your process. Before attempting to use the hot-swap feature, be sure to read the hot-swap topic in the programming software's help file or our online documentation at AutomationDirect.com for details on how to plan your installation for use of this powerful feature.

Wiring Options

1 *ZIP*Link Feed Through *Modules and Cables*[1]

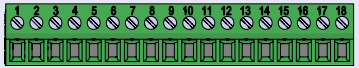


	ZL-RTB20
	ZL-RTB20-1
0.5 m (1.6 ft) cable	ZL-P2-CBL18
1.0 m (3.3 ft) cable	ZL-P2-CBL18-1
2.0 m (6.6 ft) cable	ZL-P2-CBL18-2

2 *Terminal Block with pigtail cable*

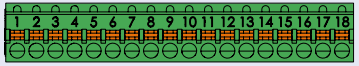
1.0 m (3.3 ft) cable	ZL-P2-CBL18-1P
2.0 m (6.6 ft) cable	ZL-P2-CBL18-2P

3 *Screw Terminal Block only*



P2-RTB
(Quantity 1)

4 *Spring Clamp Terminal Block only*



P2-RTB-1
(Quantity 1)

5 *Accessories*[2]

ZL-RTB-COM

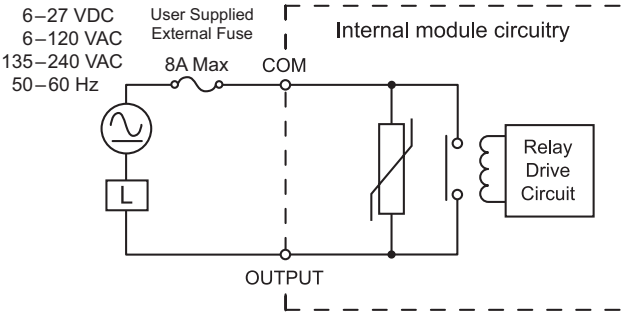
TW-SD-SL-1

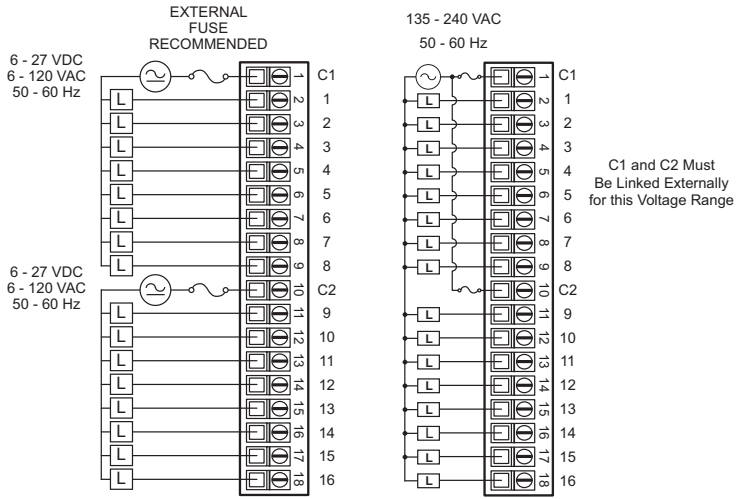
TW-SD-MSL-1

1.Cable + ***ZIP***Link Module = Complete System

2. ZL-RTB-COM provides a common connection point for power or ground

Wiring Diagram and Schematic





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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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
240VAC Resistive	100,000
240VAC Solenoid	100,000

Removable Terminal Block Specifications

Part Number	P2-RTB	P2-RTB-1
Number of Positions	18 Screw Terminals	18 Spring Clamp Terminals
Wire Range	30–16 AWG (0.051–1.31 mm²) Solid / Stranded Conductor 3/64 in. (1.2 mm) Insulation Maximum 1/4 in. (6–7 mm) Strip Length	28–16 AWG (0.081–1.31 mm²) Solid / Stranded Conductor 3/64 in. (1.2 mm) Insulation Maximum 19/64 in. (7–8 mm) Strip Length
Conductors	"USE COPPER CONDUCTORS, 75°C" or Equivalent.	
Screw Driver Width	0.1 inch (2.5 mm) Maximum*	
Screw Size	M2	N/A
Screw Torque	2.5 lb·in (0.28 N·m)	N/A

*Recommended Screwdriver TW-SD-MSL-1

General Specifications

Operating Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-20° to 70°C (-4° to 158°F)
Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	IEC60068-2-6 (Test Fc)
Shock	IEC60068-2-27 (Test Ea)
Field to Logic Side Isolation	1800VAC applied for 1 second
Insulation Resistance	>10MΩ @ 500VDC
Heat Dissipation	2.73 W
Enclosure Type	Open Equipment
Module Keying to Backplane	Electronic
Module Location	Any I/O slot in a Productivity2000 System.
Field Wiring	Use ***ZIP***Link Wiring System or removable terminal block (not included). See "Wiring Options" on page 3.
EU Directive	See the "EU Directive" topic in the Productivity Suite Help File. Information can also be obtained at: www.productivity2000.com
Connector Type (not included)	18 position removable terminal block
Weight	188g (6.64 oz)
Agency Approvals	UL 61010-1 and UL 61010-2-201 File E139594, Canada and USA CE (EN 61131-2 EMC, EN 61010-1 and EN 61010-2-201 Safety)*

*Meets EMC and Safety requirements. See the D.O.C. for details.