

AC Output Module

P3-08TAS



Isolated Output

The P3-08TAS AC Output Module provides eight 100-240 VAC isolated outputs with eight fused commons.



Terminal block sold separately; terminal block cover included with module.

| Output Specifications | |
|-------------------------------------|--|
| Outputs per Module | 8 |
| Operating Voltage Range (Tolerance) | (CE) 100 – 240 VAC (-15% / +10%) (UL) 100 – 240 VAC (-20% / +20%) |
| Maximum Output Current @ Temp | 1A / point @ 40°C 0.7A / point @ 60°C |
| AC Frequency | 47 - 63 Hz |
| Minimum Load (TYPE 2) | 10 mA |
| Maximum Leakage Current (TYPE 2) | 4 mA @ 264 VDC |
| On Voltage Drop | 1.5 VAC @ > 50 mA 4.0 VAC @ < 50 mA |
| Maximum Inrush Current | 10A for 10 ms |
| OFF to ON Response | 1 ms + 1/2 cycle |
| ON to OFF Response | 1 ms + 1/2 cycle |
| Status Indicators | Logic Side (8 points) |
| Error Status Indicator | Blown Fuse (one for each point) |
| Terminal Type (not included) | 20-position removable terminal block |
| Commons | 8 Isolated (1 point / common) |
| Fuses | 3.15A user replaceable fuse per common For replacement, order P3-FUSE-1. (Qty. 5/pkg.) |

| 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 | MIL STD 810C 514.2 |
| Shock | MIL STD 810C 516.2 |
| Field to Logic Side Isolation | 1500VAC applied for 1 minute |
| Insulation Resistance | >10MΩ @ 500 VDC |
| Heat Dissipation | 12.46W |
| Enclosure Type | Open Equipment |
| Agency Approvals | UL508 file E157382, Canada & USA UL1604 file E200031, Canada & USA CE (EN61131-2*) This equipment is suitable for use in Class 1, Division 2, Groups A, B, C and D or non-hazardous locations only. |
| Module Keying to Backplane | Electronic |
| Module Location | Any I/O slot in any local, expansion, or remote base in a Productivity3000 System. |
| Field Wiring | Removable terminal block (not included). Use ZIPLink wiring system or optional terminal block. See "Wiring I/O Modules". |
| EU Directive | See the "EU Directive" topic in the Productivity3000 Help File. Information can also be obtained at: www.productivitypac.com |
| Weight | 125g (4.41 oz) |

We recommend using prewired ZIPLink cables and connection modules. See "Wiring Systems".

Terminal block cover included. If you wish to hand-wire your module, a removable terminal block is sold separately. Order part number P3-RTB.



*Meets EMC and Safety requirements. See the Declaration of Conformity for details.

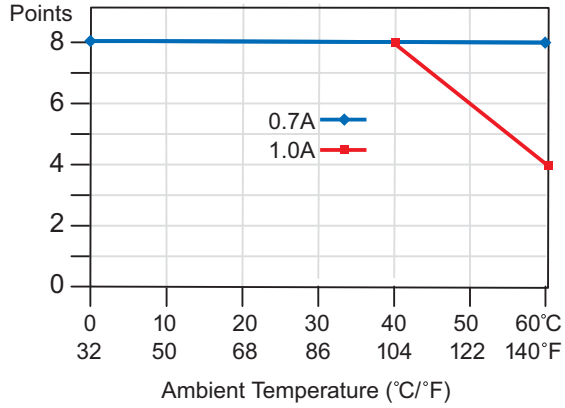
| Removable Terminal Block Specifications | |
|---|---|
| Description | Part No. P3-RTB; 20 screw terminals |
| Wire Range | 22-14 AWG (0.324 to 2.08 sq. mm) Solid / stranded conductor 3/64 in. (1.2 mm) insulation maximum "USE COPPER CONDUCTORS , 60°C" or equivalent. |
| Screw Driver Width | 1/4 inch (6.5 mm) maximum |
| Screw Size | M3 size |
| Screw Torque | Field terminals – 7 - 9 in./lb (.0882 - 1.02 Nm) Self-jacking screws – 2.7 - 3.6 in./lb (0.3 - 0.4 Nm). Do not overtighten screws when installing terminal block. |

WARNING: Explosion hazard – Substitution of components may impair suitability for Class I, Division 2.

AC Output Module

P3-08TAS (cont'd)

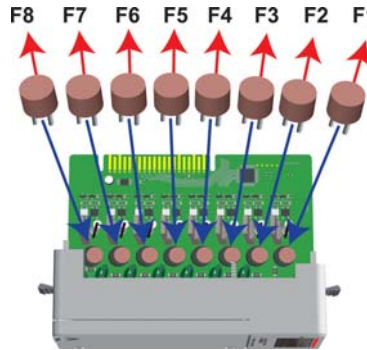
Derating Chart



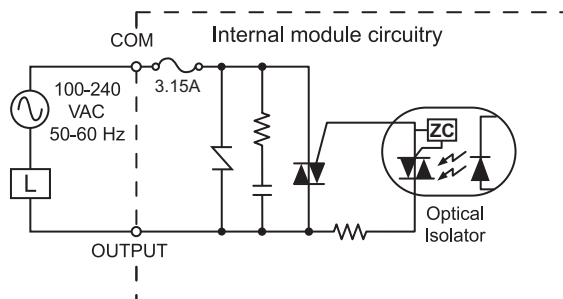
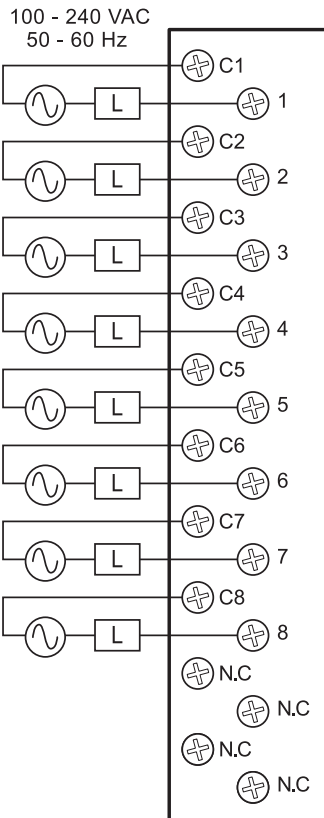
| Temp | Current | |
|------|---------|------|
| | 1.0A | 0.7A |
| 0 | 8 | 8 |
| 40 | 8 | 8 |
| 60 | 4 | 8 |

Replaceable Fuses

Order Part Number P3-FUSE-1 (Qty. 5 per pkg.) One spare included with module.



Wiring Diagrams





Specify your ZIPLink system

Use the Compatibility Matrix table below.

| | |
|---------------|---|
| Step 1 | Locate the I/O module part number. |
| Step 2 | Locate Connector Module Type. (Feedthrough Module, Fuse Module, etc...) |
| Step 3 | Select the cable length by replacing the # symbol with: Blank = 0.5m, -1 = 1.0m, -2 = 2.0m ¹ |

¹Note: Cable part number denotes compatibility between Connector Module and I/O Modules.

| Productivity3000 ZIPLink Wiring System Compatibility Matrix | | | | | | | | |
|---|---------------------|---------------------|-----------|---------------|-----------|--------------|-------------------|----------------|
| Step 2: Connector Module Type | | Feedthrough Modules | | Fuse Modules | | Relay Module | Sensor Input Mod. | Pigtail Cable |
| Step 1: I/O Module | Number of Terminals | ZL-RTB20 | ZL-RTB40 | ZL-RFU20 | ZL-RFU40 | ZL-RRL16-24 | ZL-LTB16-24 | |
| Step 3: Cables | | | | | | | | |
| Inputs | | | | | | | | |
| P3-08NAS | 20 | ZL-P3-CBL20# | | | | | | ZL-P3-CBL20-#P |
| P3-08ND3S | 20 | ZL-P3-CBL20# | | | | | | ZL-P3-CBL20-#P |
| P3-16NA | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-16ND3 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-32ND3 | 40 | | ZL-CBL40# | | | | ZL-P3-CBL40# | |
| P3-64ND3* | 40 | | ZL-CBL40# | | | | ZL-P3-CBL40# | |
| Outputs | | | | | | | | |
| P3-08TAS | 20 | ZL-P3-CBL20# | | | | | | ZL-P3-CBL20-#P |
| P3-08TD1S | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08TD2S | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08TRS | 20 | ZL-P3-CBL20# | | | | | | ZL-P3-CBL20-#P |
| P3-16TA | 20 | ZL-P3-CBL20# | | ZL-P3-CBL20L# | | | | ZL-P3-CBL20-#P |
| P3-16TD1 | 20 | ZL-P3-CBL20# | | ZL-P3-CBL20# | | ZL-P3-CBL20# | | ZL-P3-CBL20-#P |
| P3-16TD2 | 20 | ZL-P3-CBL20# | | ZL-P3-CBL20# | | | | ZL-P3-CBL20-#P |
| P3-16TR | 20 | ZL-P3-CBL20# | | ZL-P3-CBL20# | | | | ZL-P3-CBL20-#P |
| P3-08TRS-1*** | 20 | ZL-P3-CBL20# | | | | | | ZL-P3-CBL20-#P |
| P3-32TD1 | 40 | | ZL-CBL40# | | ZL-CBL40# | | | |
| P3-32TD2 | 40 | | ZL-CBL40# | | ZL-CBL40# | | | |
| P3-64TD1* | 40 | | ZL-CBL40# | | ZL-CBL40# | | | |
| P3-64TD2* | 40 | | ZL-CBL40# | | ZL-CBL40# | | | |
| Analog In | | | | | | | | |
| P3-04ADS | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08AD | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-16AD-1 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-16AD-2 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08RTD** | Matched Only | | | | | | | |
| P3-08THM** | T/C Wire Only | | | | | | | |
| Analog Out | | | | | | | | |
| P3-04DA | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08DA-1 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-08DA-2 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-06DAS-1 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-06DAS-2 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-16DA-1 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-16DA-2 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| Analog Combo | | | | | | | | |
| P3-8AD4DA-1 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |
| P3-8AD4DA-2 | 20 | ZL-P3-CBL20L# | | | | | | ZL-P3-CBL20-#P |

*The P3-64ND3, P3-64TD1, and P3-64TD2 modules have two 32-point connectors and require 2 ZIPLink cables and 2 ZIPLink connector modules.

**These modules are not supported by the ZIPLink wiring system. Removable terminal block P3-RTB included.

***The P3-08TRS-1 output module is derated, not to exceed 2A per point maximum when used with the ZIPLink wiring system.

I/O Modules

A variety of discrete and analog I/O modules are available for use in local, expansion, and remote I/O bases. Specifications for each module are on the following pages.

A filler module is available for unused I/O module slots (part number P3-FILL).



Discrete Input Modules

| Productivity3000 Discrete Input Modules | | | |
|---|------------------|------------------------------------|-------|
| Part Number | Number of Inputs | Description | Price |
| P3-16SIM | 16 | Input Simulator Module | <---> |
| P3-08ND3S | 8 | Isolated Sinking/Sourcing DC Input | <---> |
| P3-16ND3 | 16 | Sinking/Sourcing DC Input | <---> |
| P3-32ND3* | 32 | Sinking/Sourcing DC Input | <---> |
| P3-64ND3* | 64 | Sinking/Sourcing DC Input | <---> |
| P3-08NAS | 8 | Isolated AC Input | <---> |
| P3-16NA | 16 | AC Input | <---> |

*ZIPLink required.

Analog I/O Modules

| Productivity3000 Analog Input Modules | | | |
|---------------------------------------|--------------------|---------------------------|-------|
| Part Number | Number of Channels | Description | Price |
| P3-04ADS | 4 | Isolated Analog Input | <---> |
| P3-08AD | 8 | Analog Input | <---> |
| P3-16AD-1 | 16 | Analog Input (Current) | <---> |
| P3-16AD-2 | 16 | Analog Input (Voltage) | <---> |
| P3-08RTD | 8 | Analog RTD Input | <---> |
| P3-08THM | 8 | Analog Thermocouple Input | <---> |

| Productivity3000 Analog Output Modules | | | |
|--|--------------------|----------------------------------|-------|
| Part Number | Number of Channels | Description | Price |
| P3-04DA | 4 | Analog Output | <---> |
| P3-08DA-1 | 8 | Analog Output (Current) | <---> |
| P3-08DA-2 | 8 | Analog Output (Voltage) | <---> |
| P3-06DAS-1 | 6 | Isolated Analog Output (Current) | <---> |
| P3-06DAS-2 | 6 | Isolated Analog Output (Voltage) | <---> |
| P3-16DA-1 | 16 | Analog Output (Current) | <---> |
| P3-16DA-2 | 16 | Analog Output (Voltage) | <---> |

| Productivity3000 Analog Input/Output Modules | | | |
|--|--------------------|-------------------------------|-------|
| Part Number | Number of Channels | Description | Price |
| P3-8AD4DA-1 | 8/4 | Analog Input/Output (Current) | <---> |
| P3-8AD4DA-2 | 8/4 | Analog Input/Output (Voltage) | <---> |

Discrete Output Modules

| Productivity3000 Discrete Output Modules | | | |
|--|-------------------|--------------------------|-------|
| Part Number | Number of Outputs | Description | Price |
| P3-08TD1S | 8 | Isolated Sinking Output | <---> |
| P3-08TD2S | 8 | Isolated Sourcing Output | <---> |
| P3-16TD1 | 16 | Sinking Output | <---> |
| P3-16TD2 | 16 | Sourcing Output | <---> |
| P3-32TD1* | 32 | Sinking Output | <---> |
| P3-32TD2* | 32 | Sourcing Output | <---> |
| P3-64TD1* | 64 | Sinking Output | <---> |
| P3-64TD2* | 64 | Sourcing Output | <---> |
| P3-08TAS | 8 | Isolated AC Output | <---> |
| P3-16TA | 16 | AC Output | <---> |
| P3-08TRS | 8 | Isolated Relay Output | <---> |
| P3-16TR | 16 | Relay Output | <---> |
| P3-08TRS-1 | 8 | Isolated Relay Output | <---> |

*ZIPLink required.

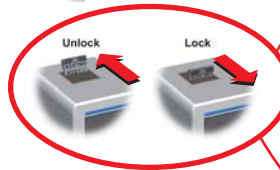
Module Installation Procedure



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

Step One: Align circuit card with slot and press firmly to seat module into connector.

Step Two: Pull top and bottom locking tabs toward module face. Click indicates lock is



Step Three: Attach field wiring using optional terminal block or ZIPLink wiring system and install cover.



To install or remove terminal block cover, press middle to flex cover.



WARNING: Explosion hazard – Do not connect or disconnect connectors or operate switches while circuit is live unless the area is known to be non-hazardous. Do not hot-swap modules unless the area is known to be non-hazardous.