



# AADvance Controller

Catalog Numbers T9110, T9300, T9310, T9401/2, T9431/2, T9451, T9481/2



***Allen-Bradley***

by ROCKWELL AUTOMATION

**System Build Manual**

Original Instructions

**Table 5 - Maximum Electrical Rating Values**

| Module | Back-plane Electrical Ratings |                         | Input/Output Electrical Ratings                           |
|--------|-------------------------------|-------------------------|-----------------------------------------------------------|
|        | Voltage Range (Vdc)           | Maximum Current (mA)    |                                                           |
| T9100  | 18-32                         | 10.4A (400 mA per slot) | -                                                         |
| T9300  | 18-32                         | 9.6A (400 mA per slot)  | -                                                         |
| T9110  | 18-32                         | 380                     | -                                                         |
| T9401  | 18-32                         | 260                     | Input: 18-32 Vdc @ 24 mA                                  |
| T9402  | 18-32                         | 260                     | Input: 0-32 Vdc @ 6.5 mA                                  |
| T9431  | 18-32                         | 260                     | Input: 0-32 Vdc @ 6.5 mA                                  |
| T9432  | 18-32                         | 260                     | Input: 18-32 Vdc @ 24 mA                                  |
| T9481  | 18-32                         | 260                     | Output: 18-32 Vdc/0-20 mA                                 |
| T9482  | 18-32                         | 260                     | Output: 18-32 Vdc/0-20 mA                                 |
| T9451  | 18-32                         | 165                     | Output: 18-32 Vdc @ 0.5 A, Pilot duty 16 VA, 1.5 A Inrush |
| T9801  | 18-32                         | 6.5                     | -                                                         |
| T9802  | 18-32                         | 6.5                     | -                                                         |
| T9803  | 18-32                         | 6.5                     | -                                                         |
| T9831  | 18-32                         | 0-24                    | -                                                         |
| T9832  | 18-32                         | 0-24                    | -                                                         |
| T9833  | 18-32                         | 0-24                    | -                                                         |
| T9851  | 18-32                         | 500                     | -                                                         |
| T9852  | 18-32                         | 500                     | -                                                         |
| T9892  | 18-32                         | 500                     | -                                                         |
| T9881  | 18-32                         | 0-24                    | -                                                         |
| T9882  | 18-32                         | 0-24                    | -                                                         |

## Expansion Cable

This is used to add extra rows of I/O base units and modules.

**AVERTISSEMENT: RISQUE D'EXPLOSION**

Ne pas connecter ou déconnecter l'équipement alors qu'il est sous tension, sauf si l'environnement est exempt de concentrations inflammables ou équivalente



**WARNING:** Substitution of any component may impair suitability for Class I, Division 2 or equivalent.



**AVERTISSEMENT:** La substitution de composants peut rendre impropre à l'utilisation en Classe I, Division 2 ou équivalente.



**CAUTION:** For AADvance modules T9110, T9801,- T9803, T9831- T9833, T9851, T9852, T9892, T9881 and T9882 a disconnect suitable for the location where they are installed shall be provided to allow for removal of power from the fuses before replacement.



**ATTENTION:** Pour les modules AADvance T9110, T9801,- T9803, T9831- T9833, T9851, T9852, T9892, T9881 et T9882, un sectionneur adapté à l'environnement où ils sont installés devra être fourni pour couper l'alimentation en amont des fusibles avant leur remplacement.

## Controller Mounting

An AADvance controller and I/O bases can be mounted using one of two methods:

- A pair of parallel TS35 DIN rails.
- Panel mounted using three holes on each base.

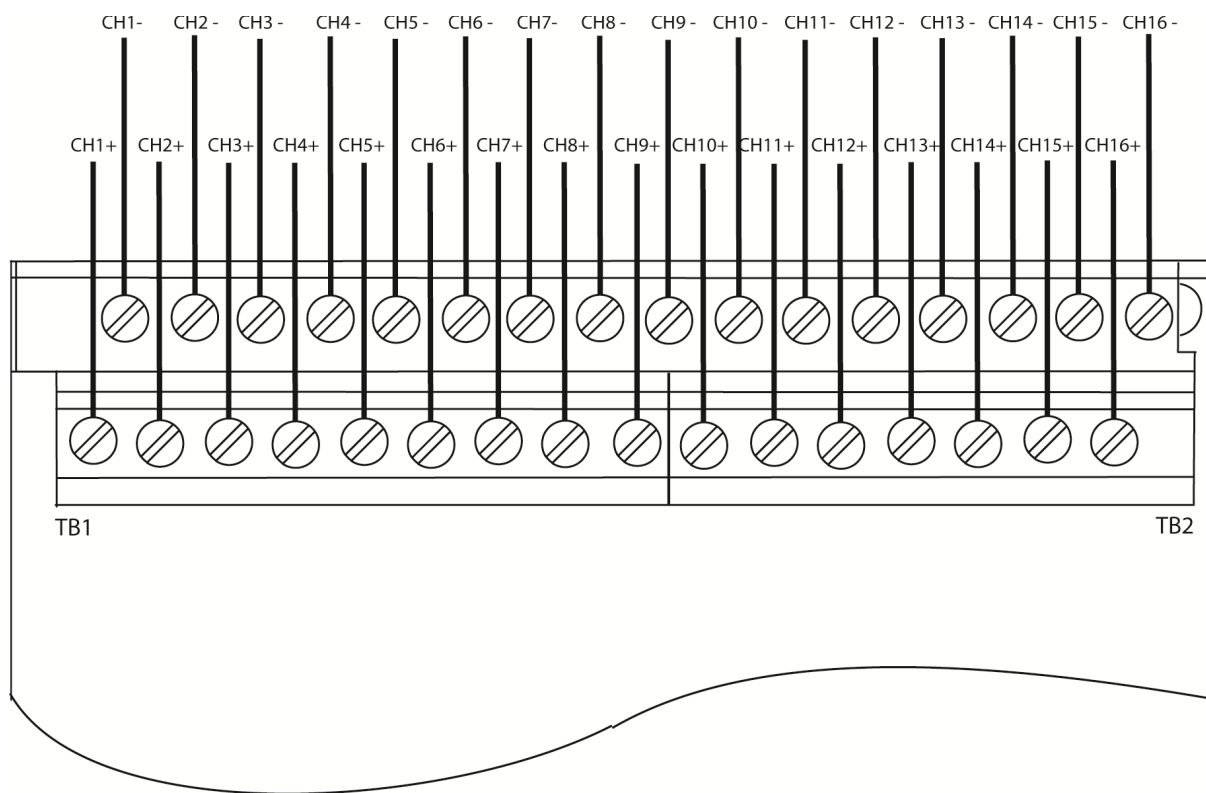
## Free Space around the Controller

Whichever mounting method is used the minimum depth from the rear mounting panel to the front panel and space around the base units are shown in the illustration, if you wish to mount the controller on DIN rails, increase this allowance by the increased depth of the DIN rails. The DIN rails must be TS35 rail, which is a 35mm × 7.5mm standard symmetric rail.

You must have sufficient free space around the base units to allow for the following:

- Space above, to adjust and install field wiring.
- Space below, to let modules fit and to be able to hold a module during removal.
- Space to the right of the last base unit in the row, to move an I/O base unit during assembly or if you are installing a new base unit.

### Connections to T9802/T9803 Isolated Digital Input TA — 16 Channel Dual/TMR



- Apply a minimum tightening torque of 0.5 Nm (0.37 ft. lb.) to the terminal screws.

### Analogue Input Field loop Circuits

These circuits can be used for simplex, dual and triple configurations of analogue input modules. Fit a fuse (as shown) in each circuit to protect the field wiring.

The recommended field loop circuits for analogue inputs are as shown below.

## Parts List

### Base Units

| Part No. | Part Description      |
|----------|-----------------------|
| T9100    | Processor base unit   |
| T9300    | I/O base unit (3 way) |

### Modules

| Part No. | Part Description                                             |
|----------|--------------------------------------------------------------|
| T9110    | Processor module                                             |
| T9401    | Digital input module, 24 Vdc, 8 channel, isolated            |
| T9402    | Digital input module, 24 Vdc, 16 channel, isolated           |
| T9451    | Digital output module, 24 Vdc, 8 channel, isolated, commoned |
| T9431    | Analogue input module, 8 channel, isolated                   |
| T9432    | Analogue input module, 16 channel, isolated                  |
| T9481    | Analogue output module, 3 channel, isolated                  |
| T9482    | Analogue output module, 8 channel, isolated                  |

### Special Application Modules

| Part No. | Part Description                                                                      |
|----------|---------------------------------------------------------------------------------------|
| T9441    | Frequency Input Module (Product not yet released. Contact Sales for more information) |

### Termination Assemblies

| Part No. | Part Description                                       |
|----------|--------------------------------------------------------|
| T9801    | Digital input TA, 16 channel, simplex, commoned        |
| T9802    | Digital input TA, 16 channel, dual                     |
| T9803    | Digital input TA, 16 channel, TMR                      |
| T9831    | Analogue input TA, 16 channel, simplex, commoned       |
| T9832    | Analogue input TA, 16 channel, dual                    |
| T9833    | Analogue input TA, 16 channel, TMR                     |
| T9851    | Digital output TA, 24Vdc, 8 channel, simplex, commoned |
| T9852    | Digital output TA, 24Vdc, 8 channel, dual              |
| T9881    | Analogue output TA, 8 channel, simplex commoned        |