With reference to Figure 11 - Flat Panel Mounting, three mounting units are illustrated above.

Drill three holes per base unit to suit M5 screws.

The screws are positioned with reference to the datum Hole A, which is shown on Figure 11 above.

- Set Dimension 'X' to suit number of base units:
- Min 157 mm for 1 base unit
- Min 283 mm for 2 base units
- Min 409 mm for 3 base units
- Add 126 mm for each additional base unit

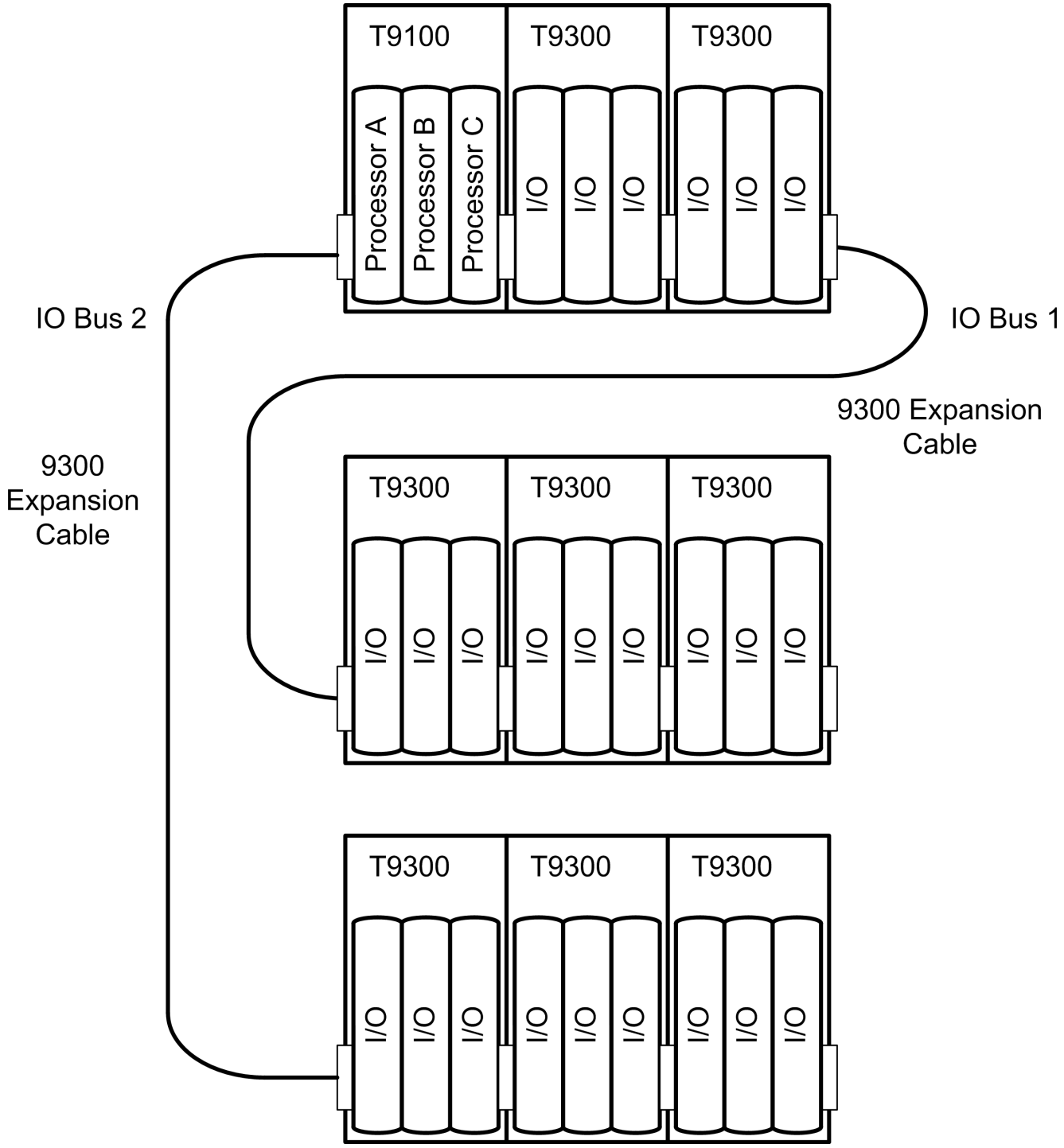
CAUTION: HEAT DISSIPATION AND ENCLOSURE POSITION
The maximum air temperature rating in an enclosure where standard AADvance processor and I/O modules are installed to support predictable reliability is 70 °C (158 °F) for I/O modules and 60 °C (140 °F) for processor modules. System and field power consumption by modules and termination assemblies is dissipated as heat. You should consider the effect of heat dissipation on the design and positioning of your enclosure; e.g. enclosures exposed to continuous sunlight will have a higher internal temperature that could increase the operating temperature of the modules. Modules operating at the extremes of the temperature band for a continuous period can have a reduced reliability.

ATTENTION: DISSIPATION THERMIQUE ET EMPLACEMENT DE L'ENCEINTE
La température ambiante nominale maximum dans une enceinte où un processeur AADvance et des modules d'E/S standard sont installés pour assurer une fiabilité prévisible, est de 70 °C (158 °F) pour modules d'E/S et de 60 °C (140 °F) pour processeur. La consommation électrique du système et du terrain par les modules et les ensembles de raccordement est dissipée sous forme de chaleur. Vous devez tenir compte de l'effet de la dissipation thermique lors de conception et de disposition de votre enceinte, par exemple, des enceintes continuellement exposées à la lumière solaire auront une température interne plus élevée qui pourrait accroître la température de fonctionnement des modules. La fiabilité des modules fonctionnant aux limites extrêmes de la plage de température pendant une période prolongée peut être réduite.

Base Units Rows and Expansion Cables

AADvance T9300 I/O base units connect to the right hand side of the T9100 processor base unit (I/O Bus 1) and to the right hand side of other T9300 I/O base units by a direct plug and socket connection. The I/O base units connect to the left hand side of the processor base unit by using the T9310 expansion cable (I/O Bus 2). The expansion cable also connects the right hand side of I/O base units to the left hand side of other I/O base units to install extra rows of I/O base units. Base units are secured in place by top and bottom clips that are inserted into the slots on each base unit.

Figure 12 - Connecting Base Units with Expansion Cables



The expansion bus accessed from the right hand edge of the T9100 processor base unit is designated I/O Bus 1, while the bus accessed from the left hand edge is designated I/O Bus 2. The module positions (slots) in the I/O base units are numbered from 01 to 24, the left most position being slot 01. Any individual module position within the controller can thus be uniquely identified by the combination of its bus and slot numbers, for example 1-01.

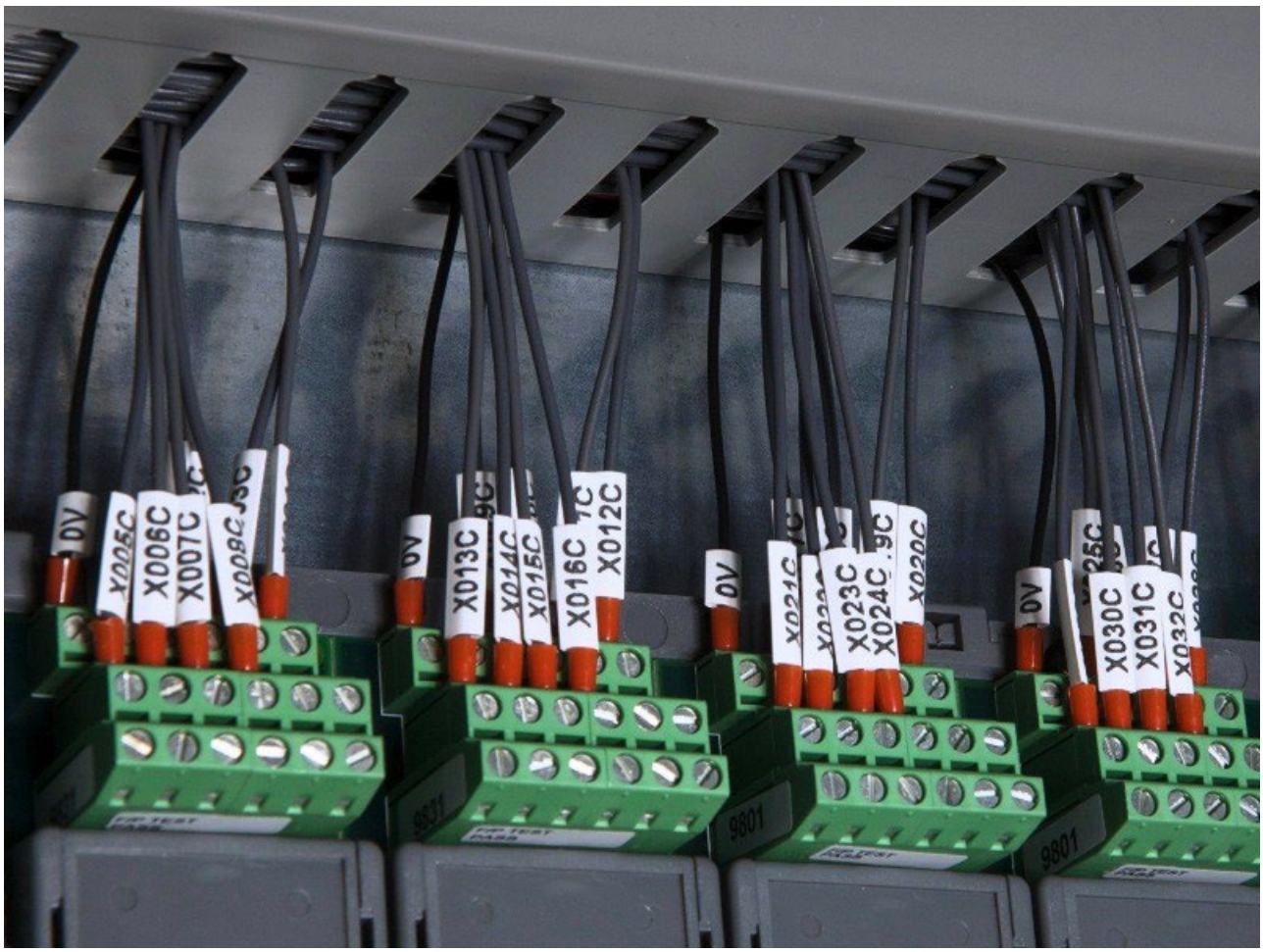
The electrical characteristics of the I/O bus interface limit the maximum possible length of either of the two I/O buses (the combination of I/O base units and expansion cables) to 8 meters (26.24 ft.).

NOTE The T9310 Expansion Cable is 2 m (6.56 ft.).

Adding Field Cable Management

The field, power and other system wiring will be connected to terminals along the top of the base units. It is recommended a length of cable trunking or the equivalent be put above each set of base units, for cable management.

Figure 13 - Field Wiring Connections



System Power Requirements

A controller's system power should be supplied from two different 24 Vdc (Nominal) power supplies with a common return path; that is, the 0 V return will be the same between the power feeds. Each controller also requires an external field power source for the field loops.

WARNING: A controller system must be installed with a power network that is designed to meet over voltage Category II