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Data Sheet: T1F-16DA-2-DS Rev B

# Terminator I/O

## T1F-16DA-2 Analog Output Module (use base T1K-16B or T1K-16B-1)

Insert Module into Base

Install Assembly on DIN Rail

Slide Assembly into Position

Module Specifications

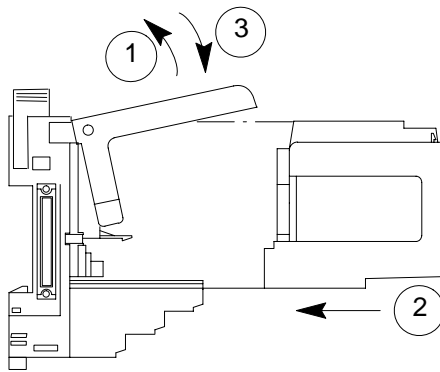
Wiring and Dimensions

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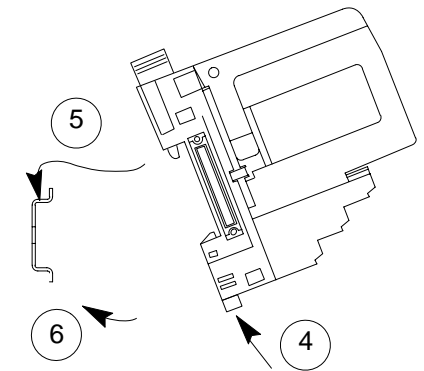
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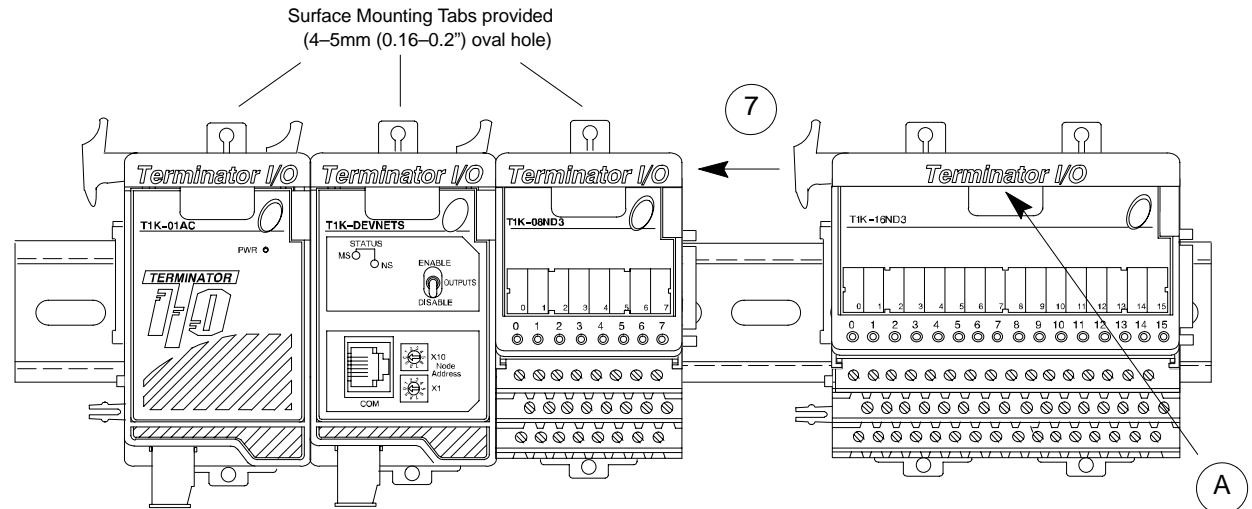
### Insert Module into Base

1. Pull base arm back to allow space for module to enter base
2. Align module slides with base track
3. Press module firmly into base



### Install Assembly on DIN Rail

4. Make sure the locking tab is in the latched position
5. Hook upper tab over upper flange of DIN rail
6. Tilt assembly toward DIN rail until module snaps securely to DIN rail



### Slide Assembly into Position on DIN Rail

7. Slide the module assembly on the DIN rail until the clip arm attaches securely to the adjacent module.

**A.** To remove the module from the base, lift the center of the base arm slightly outward and upward to release the module. Lifting the base arm further will eject the module.  
**B.** To remove the module assembly from the DIN rail, lift the clip arm up and slide the module assembly away from the adjacent module. Use a small screwdriver to pull the locking tab to the down position.

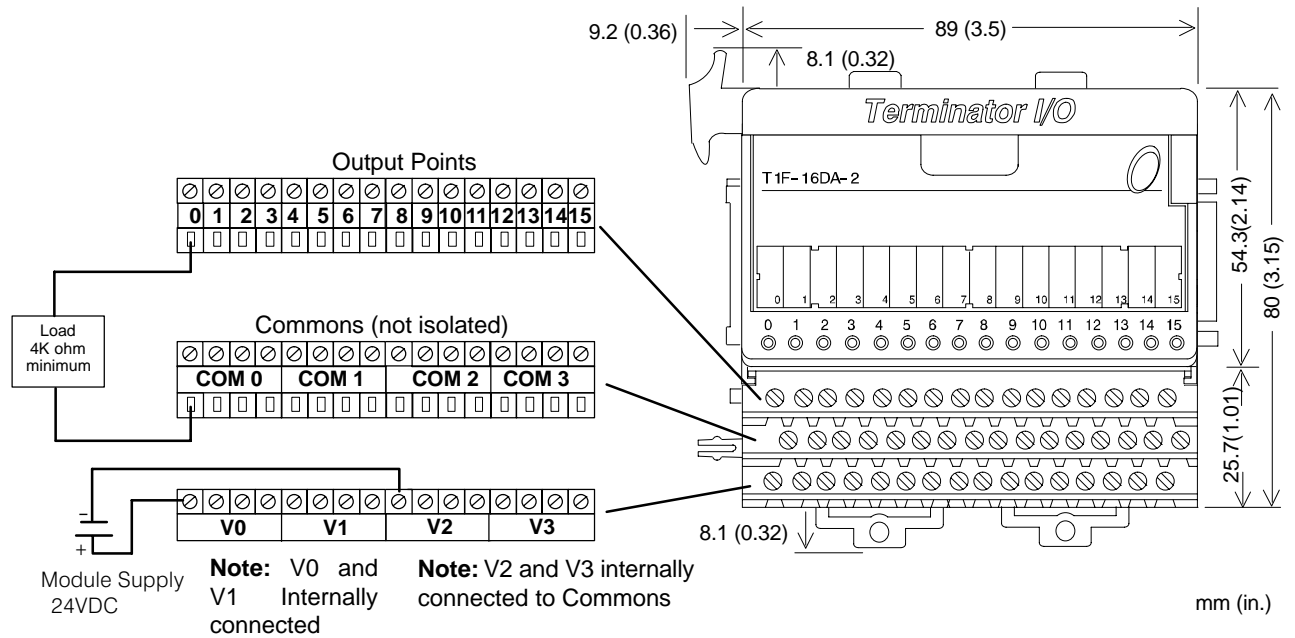
## Specifications

### T1F-16DA-2 16 Channel Voltage Analog Output Rev B

Number of Channels	16
Output Ranges	0-5V, 0-10V, +/- 5V, +/- 10V
Output Type	single ended, 1 common
Resolution	12 bit (1 in 4096)
Peak Output Voltage	15 VDC
Load Impedance	4K ohm min.
Load Capacitance	0.01uF max.
Linearity Error (end to end)	+ / - 2 count max. + / - 0.050% of full scale max
Conversion Settling Time	100us max. full scale change
Full Scale Calibration Error	+ / - 12 counts max.
Offset Calibration Error	10V ranges: + / - 6 counts max 5V ranges: + / - 11 counts max
Accuracy vs. Temperature	+ / - 50 ppm/°C full scale calibration change
Max. Full Scale Inaccuracy (% of full scale); all errors and temp drift included	10V ranges: + / - 0.2% @ 25°C + / - 0.4% @ 60°C 5V ranges: + / - 0.3% @ 25°C + / - 0.5% @ 60°C
Master Update Rate	16 channels per scan max.
Output Points Required	512 discrete pts. or 16 dwords (d (double) word = 32 bit word) Network Interface dependent
Base Power Required	75mA @ 5VDC
External Power Supply	21.6-26.4VDC, 150mA class 2
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-20 to 70°C (-4 to 158°F)
Relative Humidity	5 to 95% (non-condensing)
Environmental Air	No corrosive gases permitted
Vibration	MIL STD 810C 514.2
Shock	MIL STD 810C 516.2
Noise Immunity	NEMA ICS3-304
Weight	172g

**Note:** This module requires software setup via the Module Control Byte. Refer to the Memory Map Chapter in the T1K-INST-M Installation and I/O Manual.

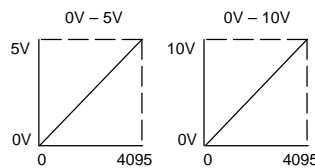
## Wiring & Dimensions



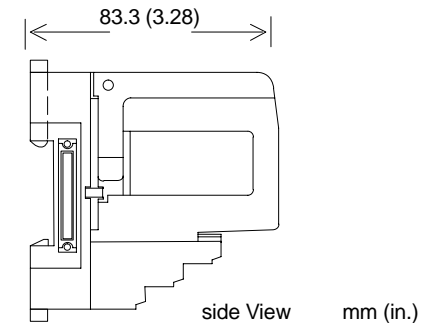
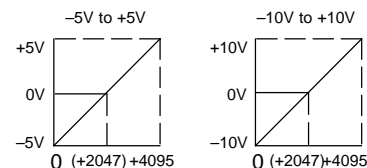
### NOTES:

- 1: Shields should be connected to the 0V terminal of the module or the 0V of the power supply.
- 2: Unused voltage outputs should remain open (no connections) for minimum power consumption.

### Unipolar Ranges



### Bipolar Ranges



### Equivalent Output Circuit

