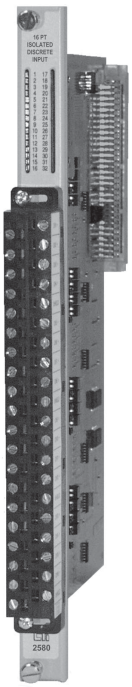
2500 Series PLC System
Product Bulletin

2580, 2581 and 2582 16-Point Isolated Discrete Input Modules



Description

The 2580, 2581 and 2582 16-point Discrete Input Modules accept sixteen discrete isolated inputs to the CTI 2500 Series or SimaticÆ 505 I/O base.

Features

- CTI 2500 Series and Simatic 505 base format
- 1500 V channel-to-channel isolation
- 1500 V channel-to-PLC backplane isolation
- Sourcing and sinking applications
- LEDs field side

Specifications

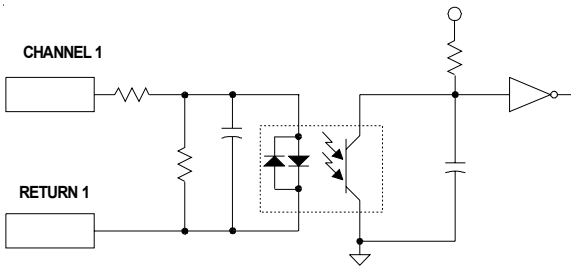
Inputs Per Module: 16
Isolation:
1500 VDC channel-to-channel
1500 VDC channel-to-backplane
Input Voltage:
2580: 95-132 VAC
2581: 12-56 VDC, 7-42 VAC
2582: 90-146 VDC
Input Current: 7 mA nominal per circuit

Specifications (continued)

Turn ON Time:
2580: 1 AC cycle
2581/2582: 1.7 mSec nominal
Turn OFF Time:
2580: 1 AC cycle
2581/2582: 7.2 mSec nominal
Operating Characteristics for Typical Input:

2580:		
Turn ON	85 VAC	2.85 mA
Turn OFF	80 VAC	1.43 mA
Nominal	120 VAC	4.0 mA
2581:		
Turn ON	8.76 VDC	1.65 mA
Turn OFF	7.76 VDC	1.43 mA
Nominal	24 VDC	4.90 mA
	48 VDC	10.0 mA
	56 VDC	11.7 mA
2582:		
Turn ON	63 VDC	1.93 mA
Turn OFF	60 VDC	1.79 mA
Nominal	125 VDC	3.82 mA

Connector: Removable
Wire Gauge: 14-22 AWG
Backplane Power: 1 Watt (maximum)
Module Size: Single wide
Operating Temperature:
0∞ to 60∞C (32∞ to 140∞F)
Storage Temperature:
-40∞ to 85∞C (-40∞ to 185∞F)
Humidity, Relative:
5% to 95% (non-condensing)
Agency Approvals:
UL, UL Canada, Class I Div 2, CE
Shipping Weight: 1.5 lb. (0.68 Kg)



Typical Circuit

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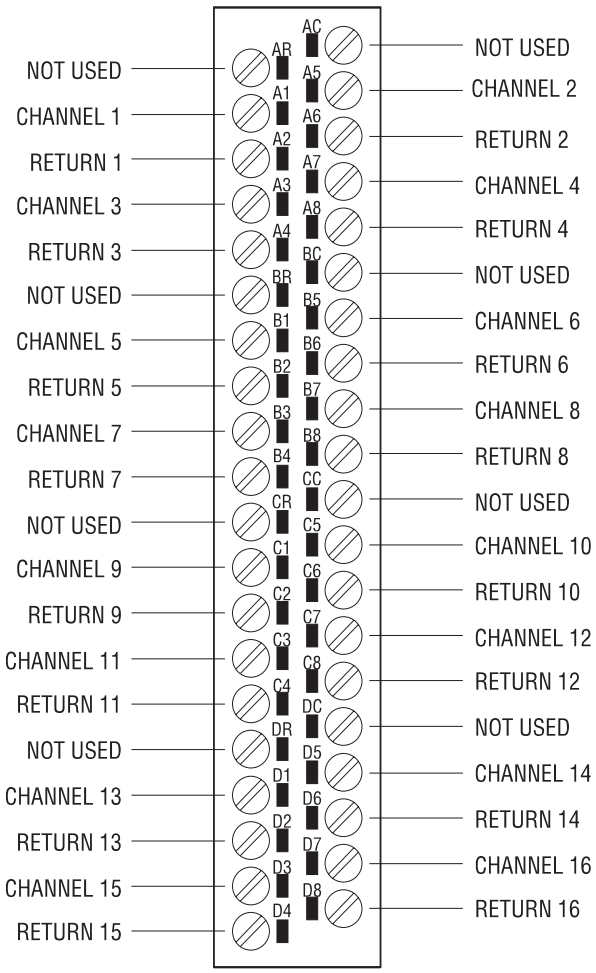
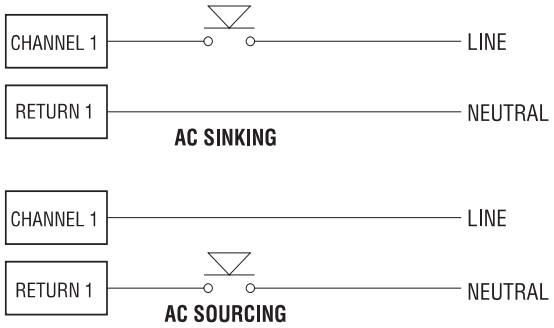
Phone: 865/584-0440 Fax: 865/584-5720 www.controltechnology.com



2580/81/82 Input Connector



Typical Application - 2580

Checking Module Operation

You must check to see that the module is configured in the memory of the PLC. This is important because the module will appear to be functioning regardless of whether it is communicating with the PLC. To view the PLC I/O configuration chart listing all slots on the base and the inputs or outputs associated with each slot, refer to your Programming Manual. An example chart is shown in the following figure.

I/O MODULE DEFINITION FOR CHANNEL . . . 1 BASE 00

SLOT	I/O ADDRESS	NUMBER OF BIT AND WORD I/O X	Y	WX	WY	SPECIAL FUNCTION
01	0001	**1 6**	00	00	00	NO
02	0000	00	00	00	00	NO
15	0000	00	00	00	00	NO
16	0000	00	00	00	00	NO

I/O Configuration Chart

In this example, the 16-point discrete input module is inserted in slot 1 in I/O base 0. Data appears as 16 "X" locations starting at "X1". For your particular module, look in the chart for the number corresponding to the slot occupied by the module. If bit locations appear on this line, then the module is registered in the PLC memory and the module is ready for operation.

If the line is blank or erroneous, re-check the module to ensure that it is firmly seated in the slots. Generate the PLC I/O configuration chart again. If the line is still incorrect, contact your local distributor or CTI at 1-800-537-8398 for further assistance.

WARNING

The module must not be inserted into the I/O rack while rack power is applied.

For CTI product warranty and repair policy call 800-537-8398 or visit CTIís website at: www.controltechnology.com