2595 16-point TTL Output Module

Description

The 2595 16-Point TTL Output Module provides sixteen TTL or CMOS compatible outputs to the CTI 2500 SeriesTM or Simatic® 505 I/O base. The module is designed to respond to standard output instructions. With the 2595, the PLC is capable of providing signals to a variety of field devices including lab instrumentation, BCD message displays, video terminals, board level devices, and low current annunciator panels. With an external pull-up resistor, the 2595 can interface to 24 VDC control systems and other instrumentation. The module can drive up to 16 CMOS or TTL loads per output.

Features

- CTI 2500 Series™ or Simatic® 505 Series I/O base format
- 500V channel-to-channel isolation
- 1500 VDC channel-to-PLC backplane isolation
- Drive BCD message displays and video terminals
- High speed TTL interface to board level devices
- Interface to 5 to 24 VDC control systems and instrumentation
- Operates as a discrete or 16 bit word output

Specifications

- Inputs per module: 16 (2 outputs per common)
- Isolation:
  - 500 VDC group-to-group
  - 1500 VDC channel-to-backplane
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- Output Drive Capabilities:
  - High (VOH) (minimum) = 4.5 V @ 500 μA
  - Low (VOL) (maximum) = 0.4 V @ 30 mA
  - Rise/Fall Time = 1 μSec
  - Outputs are true "low" when energized
- Sink Current: (maximum per output) 50 mA
- PLC Reporting: X or WX (jumper selectable)
- Wire gauge: 14-22 AWG removable connectors
- Backplane power: 2 Watts max
- Module size: Single-wide
- Blown fuse indication: Front panel LED
- Shipping weight: 1 lb. (0.45 Kg)

Additional Product Information:

On CTI’s Website you find will links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance.
The 2595 may operate as a 16 Bit Word Output Module or as a 16 Discrete Output Module. By setting JP1 in Word Mode and using Workshop to configure I/O the 2585 will look like a standard WX input module; for example WY1-WY8.

NOTE: The 2595 will be mapped as the first WY address (i.e. WY1). In Word Mode Channel 1 corresponds to bit 16 or LSB and Channel 16 corresponds to Bit 1 or MSB.

In the example Figure 2, the 16-point TTL output module is inserted in slot 1 in I/O base 0 and configured as a DISCRETE Output module using JP1. In the example below data appears as 16 "Y" locations starting at "Y1". 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.

Any time the operating mode of the 2595 is changed with JP1, the module must be configured in the PLC. Failure to do so may cause unpredictable operation due to the fact that the PLC uses different methods of addressing discrete modules from word modules.
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Figure 3. 2595 Wiring Connector Diagram

Figure 4. 2585 Typical Application Diagram

Typical TTL Output Wiring

Figure 5. JP 1 Location and Configuration Selection of Y or WY

NOTE: UNIT SHIPPED WITH JUMPER 1 CONFIGURED FOR DISCRETE MODE AS SHOWN. FOR WORD MODE MOVE JUMPER TO PINS 2 AND 3.