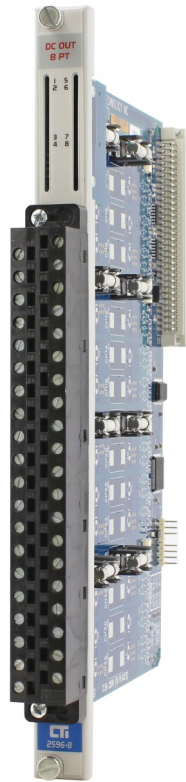


2596-8 8-point DC Discrete Output Module

Classic



Specifications

Outputs per Module: 8

Logon: 8Y

Isolation:

2100 VDC channel-to-backplane

3000 VDC group-to-group

Output Voltage: 11 VDC to 125 VDC

Output Source Current per Circuit:

2.0 Amps max., 1 mA min.

Total Module Output Current:

16 Amps max. from 0° to 60°C

Maximum Surge Current: 3 Amps for 15 Sec

“ON” State Voltage Drop: 0.5V @ 1.0 Amp

“OFF” State Leakage Current: <20µA

Turn On Time: 1 mSec (nominal)

Turn Off Time: 3 mSec (nominal)

⚠ Fuses: 8, 2.5 amp, 250V,

Type: Littlefuse #21602.5,

Bussman GDA-2.5 (Field replaceable)

Connector: Removable 40 Pin Connector

(ordered separately CTI Part # 2500-40F)

Wire Gauge: 14 - 22 AWG

Backplane Power: 1.0 Watts max.

Module Size: Single-wide

Shipping Weight: 1.5 lb. (0.68 Kg)

Description

The 2596-8 8 Point DC Discrete Output Module provides eight sourcing fused outputs from the CTI 2500 Series® or Simatic® 505 I/O base. The module utilizes solid-state output circuits to switch on or off external devices such as pilot lamps, motor starters, or solenoids. The 2596-8 is designed to switch externally supplied 11-125 VDC.

Features

- 8 DC output points
- Replaces Siemens® 505-4508, -4708
- 3000 VDC group-to-group isolation
- 2100 VDC channel-to-backplane isolation
- Isolation in groups of two
- Wide 11-125 VDC output range
- 2.0 Amps per output
- 16 Amps total module output
- Individually sourcing fused outputs
- Single-wide module

Additional Product Information:

On CTI's Website you will find links to the 2500 Series Std Environmental Specifications and the UL Agency Certificates of Compliance.

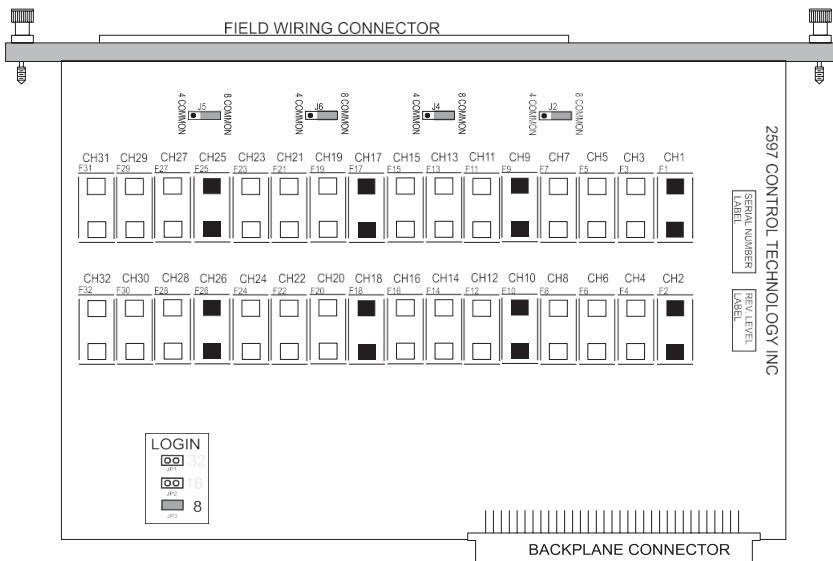


2596-8 8-point DC Discrete Output Module

Login 8/16 Point Configuration Explanation

The 2596-8 was designed using a PCB that could also perform as a 16 or 32pt module. Hence, the PCB printing for channels do not line up with actual 2596-8 channels. See the chart below for the proper correlation of channels. For example, if the module reported channel 4 was blown, then the user would replace the fuse marked 'CH10' on the PCB.

Mode	Channel/Fuse Labeling																															
CH #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
8 pt:	1	2	-	-	-	-	-	-	3	4	-	-	-	-	-	-	5	6	-	-	-	-	-	-	7	8	-	-	-	-	-	-



WARNING:
Do not alter '8 COMMON' jumper J2, J4, J5, and J6 settings. The module is configured as needed for proper wiring compatibility with its Siemens® counterpart.

Figure 1. Jumper and Fuse Configuration
(also see chart on back page for actual channel correlations)
Note: The LOGIN jumpers are not needed for configuration and there are none shipped with the module.

Jumper Configuration	
Jumper	Selection
J2, J4, J5 & J6	8 per Common

Grouping Configuration

The 2596-8, two channels are grouped together and share a common field user power, thereby allowing a different user power supply voltage to be used by each grouping. Jumpers J2, J4, J5, and J6 are set in the "8 Common" selection from the factory and, for proper module operation, should not be altered. This setting allows for 2 points per common operation.

For example, Channels 1-2 will share a common user power and Channels 3-4 will share another common user power. In this example each group of four channels is isolated from the other group of four channels. Because each group of four is isolated, the user may also change the supply voltage for each group. So, in this example, Channels 1-2 could be 24VDC outputs and Channels 3-4 could be 60VDC outputs.

Standard Shipping Configuration

2596-8 8-point DC Discrete Output Module

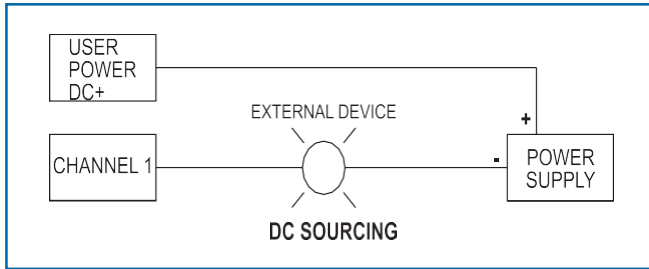


Figure 2. Typical External Wiring Diagram

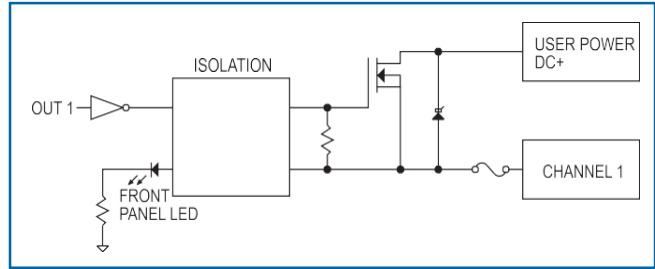
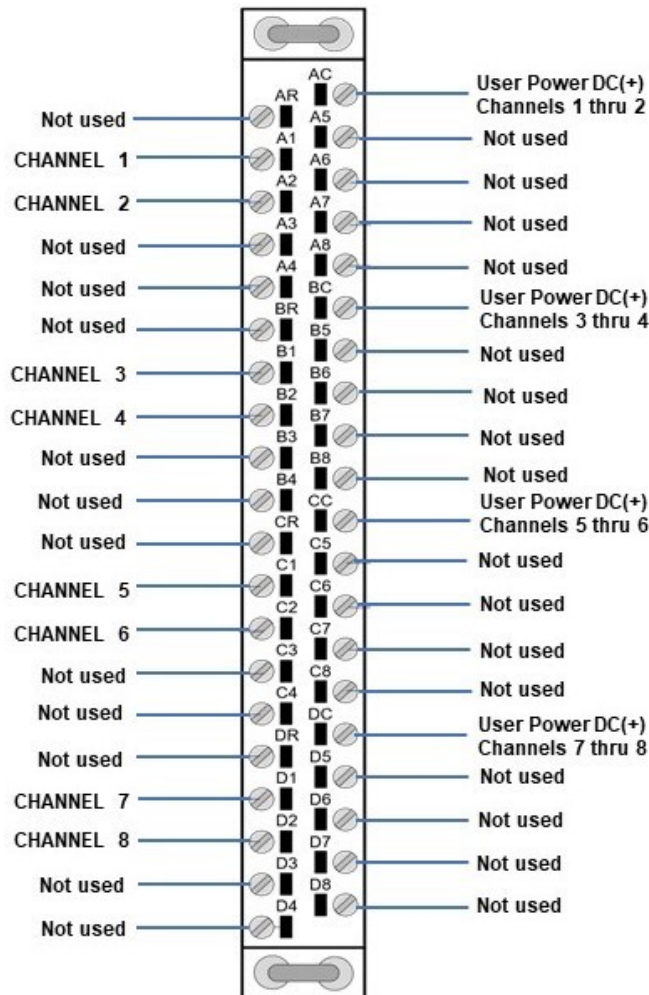


Figure 3. Typical Internal Circuit

Note: The 2596-8 uses the 2500-40F removable wiring connector. This connector is ordered separately.



2596-8 2 Outputs Per Common Wiring Connector Diagram

2596-8 8-point DC Discrete Output Module



CAUTION – Non-Hazardous Areas/Hazardous Areas

WARNING – EXPLOSION HAZARD. DO NOT REMOVE OR REPLACE WHILE CIRCUIT IS LIVE UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS.	AVERTISSEMENT – RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER PENDANT QUE LE CIRCUIT EST SOUS TENSION À MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES.
WARNING – EXPLOSION HAZARD. DO NOT REMOVE OR REPLACE FUSE WHEN ENERGIZED.	AVERTISSEMENT – RISQUE D'EXPLOSION. NE PAS RETIRER NI REMPLACER UN FUSIBLE SI L'APPAREILLAGE EST SOUS TENSION.

Turn off power to the system before replacing fuses either in power supplies or IO modules. Refer to Product Bulletin or Installation and Operation Guide for specific information on the correct fuse for replacement. If there are any questions please contact CTI support. Fuses should only be replaced by qualified technicians.