2598-8 8-Point AC Discrete Output Module





Description

The 2598 8/16-Point AC Discrete Output Module provides eight outputs isolated in groups of 2 from CTI 2500 Series® or Simatic® 505 I/O bases. The module utilizes solid-state output circuits to switch on or off external devices such as pilot lamps, motor starters, or solenoids. The 2598-8 is designed to switch externally supplied 11 to 240 VAC. The internal logic signals are isolated from the external outputs to 2100 VDC.

Features

- 8 AC output points
- Replaces Siemens® 505-4608, and -4808,
- 3000 VDC group-to-group isolation
- 2100 VDC channel-to-backplane isolation
- Isolation in groups of two
- Wide 11-240 VAC output range
- 2.0 Amps per output
- 16 Amps total module output
- Individually fused outputs
- · Sourcing outputs
- Single-wide module

Outputs per Module: 8

Isolation:

2100 VDC channel-to-backplane 3000 VDC group-to-group

Output Voltage: 11 VAC to 240 VAC

Maximum Output Current:

2.0 Amps max.,4A per group16A per module

For Class 1 Div 2 locations: 2A per point @50°C 1.5A per point @ 60°C

Maximum Surge Current: 3 Amps for 15 Sec

"ON" State Voltage Drop: 1.0V @ 1.0 Amp

"OFF" State Leakage Current: 1mA

Turn On Time: 1 AC cycle

Turn Off Time: 1 AC cycle

⚠ Fuses:

16, 2.5 amp, 250V, Type: Littlefuse #21602.5, Bussman GDA-2.5 (Field replaceable)

Connector: Removable Part# 2500-40F Note: The connector is ordered separately.

Wire Gauge: 14 - 22 AWG

Backplane Power: 1.25 Watts max.

Module Size: Single-wide

Shipping Weight: 1.5 lb. (0.68 Kg)

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.

Specifications



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Channel Configuration Explanation

The 2598-8 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 2598-8 channels. See 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 'CH 10' on the PCB.

Grouping Configuration

The 2598-8 is shipped to allow two channels to be grouped and share a common field user power, thereby allowing a different user power supply voltage to be used by each grouping. Jumpers J2, J4, J6, and J8 come set in the "8 common" selection from the factory and should not be altered for proper module operation. 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 two channels is isolated from the other group of two channels. Be-cause each group of two is isolated, the user may also change the supply voltage for each group. So, in this example, Chan- nels 1-2 could be 240VAC outputs and Channels 3-4 could be 120VAC outputs.



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 ENER-GIZED.	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.

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

Figure 1. Standard Shipping Configuration

Note:

Do not alter jumper settings from '8 COMMON'. The module is configured as needed for proper wiring compatibility with its Siemens® counterpart.

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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
32pt:	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
16 pt:	1	2	3	4	-	-	-	-	5	6	7	8	-	-	-	-	9	10	11	12	-	-	-	-	13	14	15	16	-	-	-	-
8 pt:	1	2	-	-	-	-	-	-	3	4	-	-	-	-	-	-	5	6	-	-	-	-	-	-	7	8	-	-	-	-	-	-

Figure 2. Channel/Fuse Labeling

Note:

Do not alter jumper settings from '8 COMMON'. The module is configured as needed for proper wiring compatibility with its Siemens® counterpart.

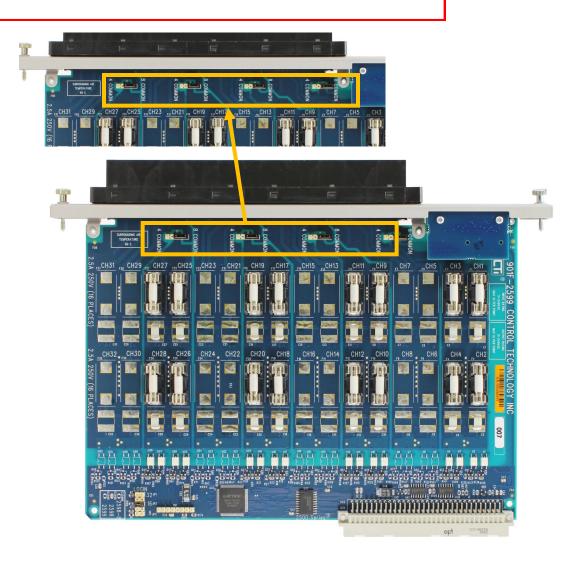
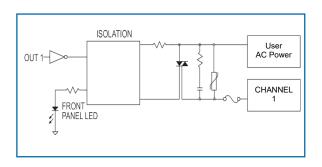


Figure 3. CHANNEL/FUSE LABELING, 8/4 COMMON JUMPERS

(also see chart in Figure 2 for actual channel correlations)

Note: The LOGIN jumper is not needed and is not shipped with the module.

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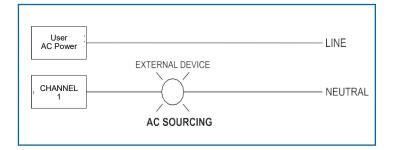
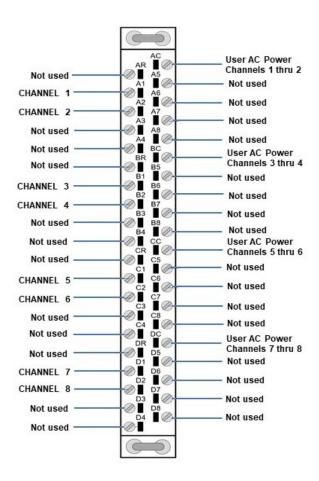


Figure 4. Typical Internal Circuit

Figure 5. Typical External Wiring Diagram

Note: The 2598-8 uses the 2500-40F removable wiring connector. This connector is ordered separately.



2598-8 2 Outputs per Common Wiring Connector The connector is ordered separately. CTI Part # 2500-40F