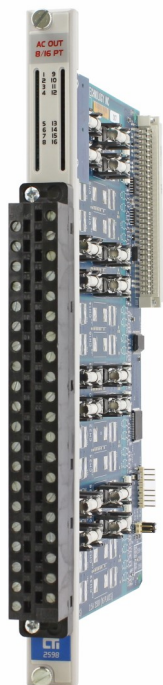


2598 8/16-Point AC Discrete Output Module

Classic



Description

The 2598 8/16-Point AC Discrete Output Module provides eight or sixteen outputs 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 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 or 16 AC outputpoints
- Replaces Siemens® 505-4608, -4616, -4808, and -2816
- 3000 VDC group-to-group isolation
- 2100 VDC channel-to-backplane isolation
- Isolation in groups of four (16pt. login) or in groups of two (8pt. login)
- Wide 11-240 VAC output range
- 2.0 Amps per output
- 16 Amps total module output
- Individually fused outputs
- Sourcing outputs
- Single-wide module

Specifications

Outputs per Module: 8 or 16

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.,
8A per group
32A 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: Littelfuse #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.



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ROCK SOLID PERFORMANCE. TIMELESS COMPATIBILITY.

2598 8/16-Point AC Discrete Output Module

8/16 Point Configuration Explanation

The 2598 was designed to be primarily a 16pt module. However, in order to provide maximum flexibility for the user, it may also be configured as an 8 point module. Some details are listed below to help the user better understand the jumper settings and PCB labeling discrepancies for the 8 point setting.

Grouping Configuration

The 2598 is shipped to allow four 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, J5, and J6 come set in the “8 Common” selection from the factory and should not be altered for proper module operation. In 16 point configuration this setting allows for 4 points per common operation. In 8 point configuration this setting allows for 2 points per common.

For example, Channels 1-4 will share a common user power and Channels 5-8 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 change the supply voltage for each group. So in this example, Channels 1 thru 4 could be 120VAC outputs and Channels 5 thru 8 could be 240VAC outputs.

8 Point Mode: Move jumper in “Login” box to location JP3 to choose 8pt mode. Ensure the Isolation jumpers J2,4,5, & 6 are in ‘8 Common’ positions to correspond to the Siemens® counterpart 8 point modules (2 inputs/ common). Also, note that many of the printed channels (CH 1-CH 32) on the PC board are no longer valid, nor are the front panel connector labels. (You may find it helpful to utilize the appropriate 8 pt. connector labels shipped with the product.) If 8 Point is enabled, the following table’s 8pt. row is the new correlation of PC board printing and front panel label’s LED area printing. For example, in 8 Point Login Configuration, the board marking for channel 10 (CH 10) would be the input channel 6. Likewise, the PC board marking for CH 13 would correlate to input channel 7.

Jumper Configuration	
Jumper	Selection
J2, J4, J5, J6	8 Common
JP 2, 3	JP 2 - 16 pt. Login

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.

2598 8/16-Point AC Discrete Output Module

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.

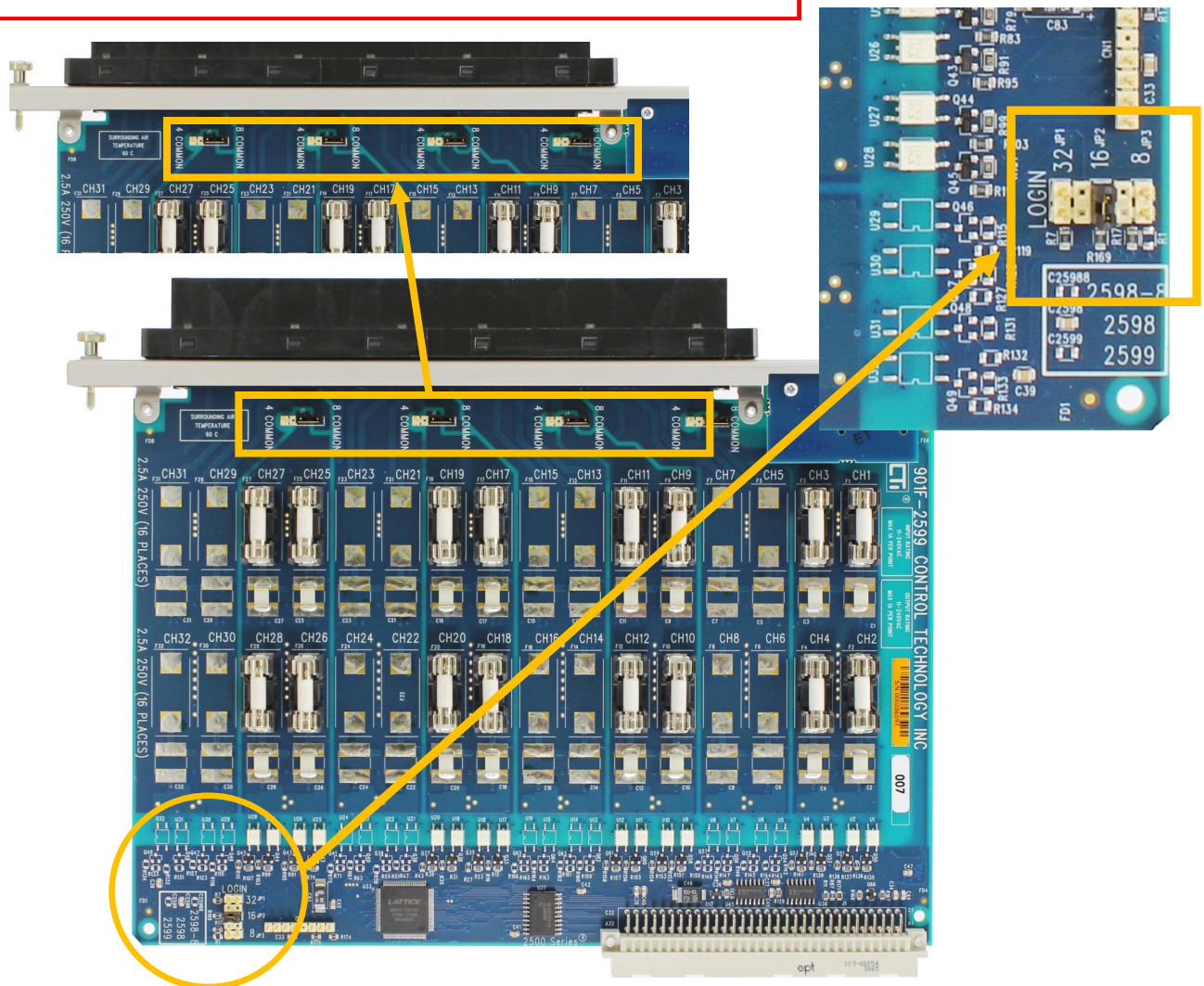


Figure 3. CHANNEL/FUSE LABELING, 8/4 COMMON JUMPERS and LOG-IN JUMPERS
(also see chart in Figure 2 for actual channel correlations)

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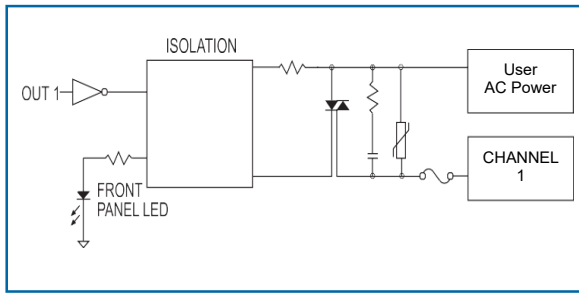


Figure 4. Typical Internal Circuit

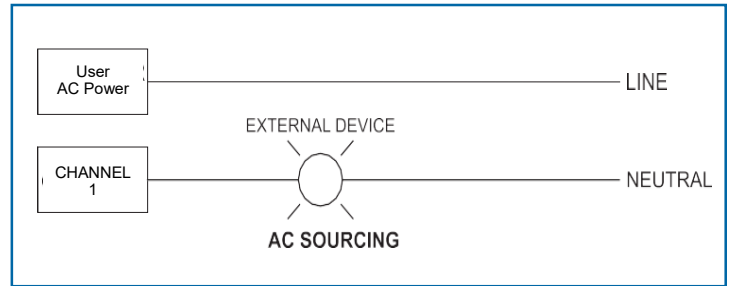
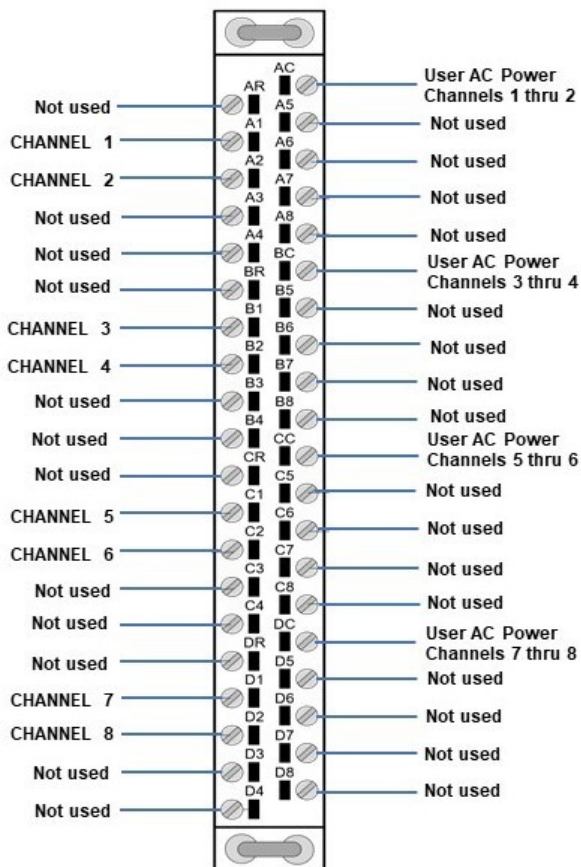
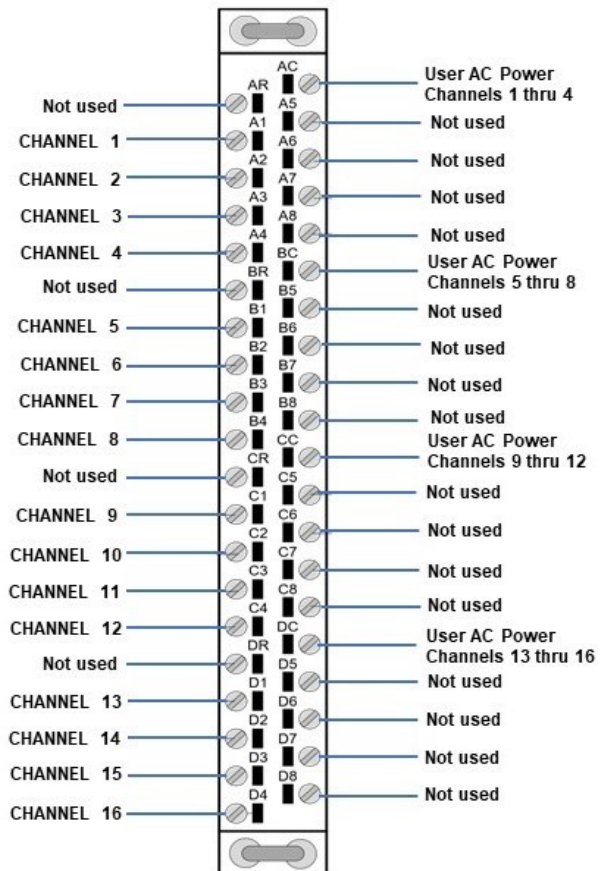


Figure 5. Typical External Wiring Diagram

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



2598 Selector in 8 pt Login
2 Outputs per Common Wiring Connector



2598 Selector in 16 pt Login
4 Outputs per Common Wiring Connector

2598 8/16-Point AC 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.