SIEMENS TL-30U Time Limit Module Instruction Manual

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SIEMENS TL-30U Time Limit Module

Description

The Model TL-30U Time Limit module from Siemens In-dustry, Inc., is designed to provide a controlled time interval from 1 second up to 10 minutes, after which either a circuit is activated, (such as a municipal alarm) or a circuit is deactivated (such as alarm bells).

The module, which is of solid-state circuitry, is normally passive, drawing no power until an alarm signal is re-ceived. When this occurs, a binary counter is activated to control precisely the length of the desired time limit in a preprogrammed sequence of system operation. This sequence could silence audible alarm devices so that the system could receive and annunciate subsequent alarms. An alternate use would delay the transmission of an alarm signal to the municipal headquarters to allow time to check the source of the alarm, or it could involve the actuation of an extinguishing system.

This time interval is available in two ranges, as follows:

- 1 second to 20 seconds
- 30 seconds to 10 minutes

Standard units are preset for a 5-minute, time-out sequence, but can be changed by field adjustment.

Note:
Underwriters Laboratories Inc. standards require that when time limit cutoffs are used with audible devices, they shall operate no less than 5 minutes and have no limit.

*NOTICE TO USERS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHER INVOLVED PARTIES			
This product incorporates field-programmable software. In order for the product to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm System, UL 864, certain programming features or options must be limited to specific values or not used at all as indicated below.			
Program feature or option	Permitted in UL 864? (Y/N)	Possible settings	Settings permitted in UL 864
Time Interval	Y	0-10 min.	5 min. – no limit

The module contains a red LED indicator lamp which is illuminated at the end of the timing period. This lamp will remain on until the module has been reset by the system reset switch. The LED lamp can be lamp tested from the control panel.

Electrical Information

Current Requirement:

- Normal – None
- Operated – 69mA @ 24VDC max

Installation

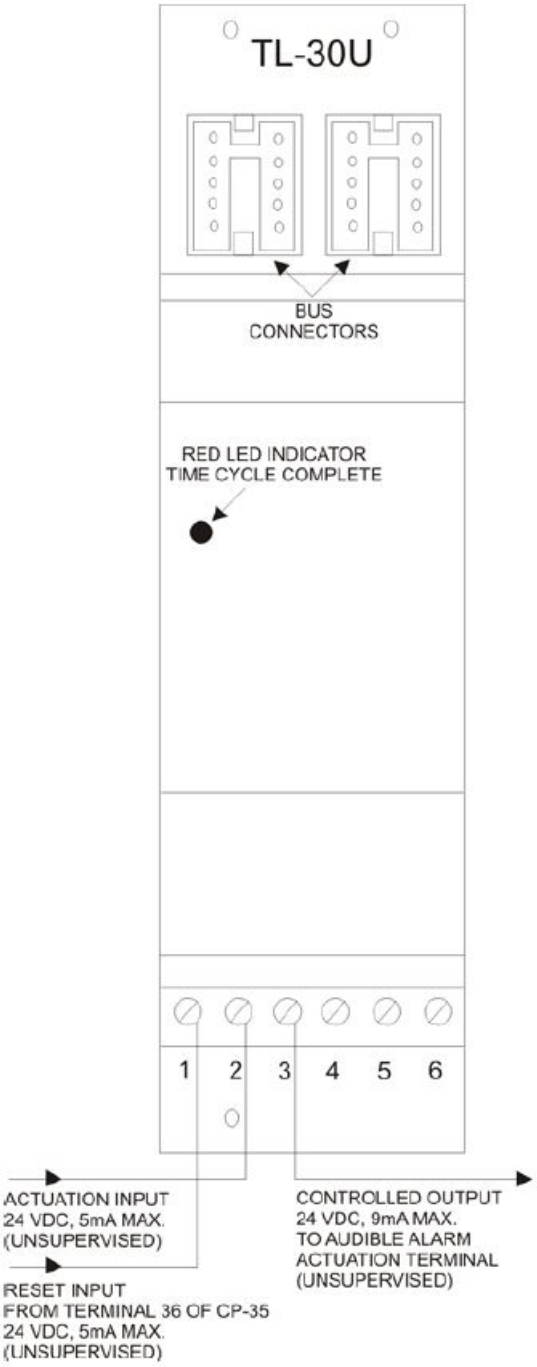
1. Mount the module to the horizontal mounting brackets in the control enclosure.
2. Install the Model JA-5 (5 in long) bus connector cable assembly between receptacle P2 of the module and receptacle P1 of the module or control panel immediately preceding it in the bus.
   Note: If the preceding module is on another row in the enclosure, a JA-24 (24 in long) bus connector cable assembly will be required.
3. Modules are to be bus-connected from right to left. For two-row enclosures, the modules in the lower row are to be connected from left to right. Succeeding rows are to be alternately connected, right to left, left to right, etc.
4. If a module is the last module in the system, install either a JS-30 (30 in long) or JS-64 (64 in long) bus connector assembly from the unused receptacle of the last module to terminal 41 of the CP-35 control panel. This completes the module supervision circuit.
5. Wire the circuit(s) as described in the CP-35 Control Panel Instruction Manual (P/N 315-085063) Installation and Wiring. Refer to the Wiring illustration.
   Note: If a zone is not used, the EOL device should be connected to the alarm-initiating circuit terminals 2 and 3 (Zone 1) or 4 and 5 (Zone 2) of the module.
6. If a supplementary relay module, annunciator, or other output module is used, then the alarm outputs, terminals 1 (Zone 1) and 6 (Zone 2), should be connected to these units.
7. In the event more than one TL-30U is employed, all time intervals must be set identically.

Wiring Test
Refer to the CP-35 Control Panel Instruction Manual, Installation and Wiring.

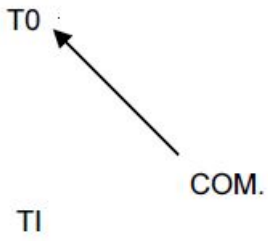
Typical Wiring

Programming the TL-30U

There are two jumpers and one potentiometer on the component board used to program the module.

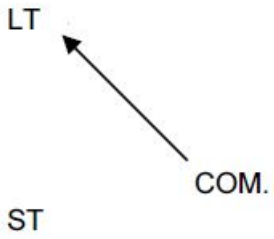


TIME IN/TIME OUT JUMPER*



Determines whether TL-30U will be a time-in or time-out. Connect the jumper between common and T0 or TI.

LONG-TIME/SHORT-TIME JUMPER



Determines timing period. LT: 30 sec -10 min, ST: 1-20 sec. Connect a jumper between common and LT or ST.

Time in denotes the delay time period before terminal 3 goes high (+).

Adjust potentiometer R13 (500K) for the exact time period desired. Cross-zoning may be accomplished without the use of zone-operated relays. The two-zone outputs are fed directly into the TL-30U (terminals 1 and 2). After the second zone has been activated, the TL-30U will time as programmed.

NOTES

1. Jumper terminal 2 to terminal 1.
2. All input/output signals are not supervised.
3. **Minimum wire size:** 18 AWG
4. **Maximum wire size:** 12 AWG
5. Terminals 1-6 are power limited.

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Documents / Resources

	SIEMENS TL-30U Time Limit Module [pdf] Instruction Manual TL-30U Time Limit Module, TL-30U, Time Limit Module, Limit Module

References

- Fire Alarm Resources | Download fire alarm documents