TAC I/NET 1200-series SCU Installation Sheet

Introduction

The 1200-series Security Control Unit (SCU) functions as either a stand-alone device, or as part of a larger local area network (LAN) host system. When connected to a TAC I/NET controller LAN, the SCU communicates with a 7793, 7798B, or a 7798C subLAN interface (SLI). On the controller LAN, the SCU becomes a part of a distributed security control system at a single location or at multiple locations worldwide.

The SCU is available in three configurations, as follows:

✦ SCU1200 – TAC I/NET uses the SCU1200 as a discrete input unit (DIU). The SCU1200 is an input-only device that can monitor and supervise each of 12 discrete inputs, and can report specific activity from its inputs with other devices across the TAC I/NET system.

✦ SCU1280 – TAC I/NET uses the SCU1280 as a discrete input/output unit (DIO). The SCU1280 has the capability to monitor 12 discrete inputs and provide control of eight relay outputs for direct control of field devices. You can link the outputs to activity sensed in other controllers across the TAC I/NET network.

✦ SCU1284 – TAC I/NET uses the SCU1284 as a door processing unit (DPU). This device provides four reader inputs, allowing it to control up to four doors. The SCU1284 also has 12 discrete inputs and 8 relay contact

outputs. By processing input data with programmed information, the SCU controls access into, and exit from areas.

Features and Functions

The SCU offers the following features:

✦ DIN rail mountable
✦ On-board front and rear optical tamper detectors.
✦ Battery-backed hardware clock/calendar.
✦ 512 KB Flash memory storage for downloadable executable (firmware).
✦ 2 MB of battery-backed RAM.
✦ Dynamic memory allocation for storing combinations of more than 95,000 messages and up to 48,000 users.
✦ Configurable as a single- or double-address device.

Physical Description

The SCU is a single-circuit board controller measuring approximately 5.0" H × 8.5" W × 2.5" D (12.70 × 21.60 × 6.35 cm). The following figure shows the layout of the SCU circuit board.
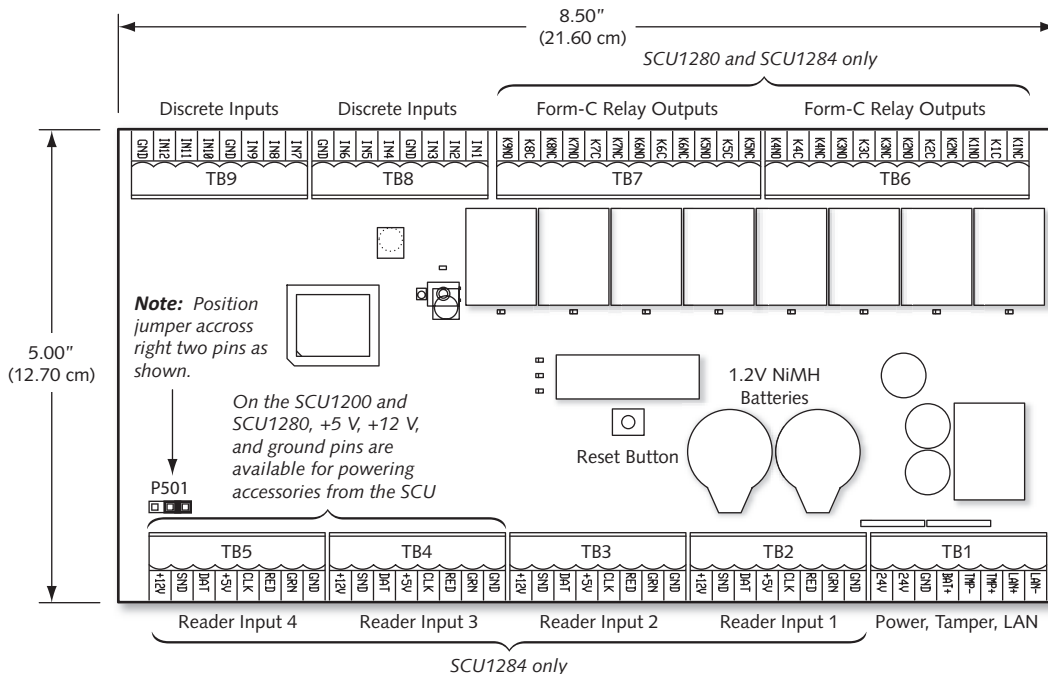

Figure 1. SCU Controller

Installation Instructions

The SCU controller is designed to mount on a DIN rail. You can use a DIN rail directly attached to a wall, or use a DIN rail mounted in the optional SCU enclosure.

Note: *When mounting the SCU in an optional enclosure, the position of the SCU's rear optical tamper sensor must be considered if you intend to detect the unauthorized removal of the enclosure from the wall. In this case, refer to TCON312, "Security Control Unit Installation Guide," for complete installation instructions.*

Use the following steps to attach the SCU to a DIN rail:

1. Position the SCU at the desired position along the DIN rail.

2. Tilt the upper portion of the SCU toward the mounting surface and hang it on the DIN rail.

3. Push the lower portion of the SCU toward the mounting surface to snap it into place.

For in-depth installation instructions, refer to *TCON312, "Security Control Unit Installation Guide."*

Specifications

Note: *This section describes only the SCU specifications that are most useful for installing the device. For complete SCU specifications, refer to TCON312, "Security Control Unit Installation Guide."*

Power and Environmental Requirements

Power Input: 24 VAC (±10%) 50/60Hz, 1.2A Max.
Battery Charge Current: 2.0A Max. (short ckt.)
                                  0.8A Typical

Operating Temperature:
(without battery backup)   32° to 122°F (0° to 50°C)
(with Lead-Acid battery backup):   50° to 100°F (10° to 40°C)
Humidity: 10% to 80% RH, non-condensing

RAM Battery Backup

Two replaceable onboard 1.2 V Ni-MH rechargeable batteries maintain RAM for more than 30 days.

Manufacturer: VARTA
Model: V 80 H
Battery Charge Current: 2.1 mA (trickle charge)
Life Expectancy (typical):   up to 3 years (45°C)
                                     up to 6 years (20° C)

LAN Connection

Connection: part of a shared 8-position plug-on terminal
Interface: EIA RS485
Data Rate: 9,600 baud
Cable length: 5,000 feet (1,500 m) maximum
Cable type: 22 AWG (0.324 mm^2) shielded twisted pair (Belden 9841)

Field Outputs

Eight form-C relays 24 V AC/DC, 1 A outputs

Field Inputs

Twelve discrete input points (DI or DA), non-supervised or supervised inputs.

Reader Connection

Connection: Four 8-position removable terminal plugs
Interface: TTL Level Signal
Cable Type: 6-8 Conductor Shielded 18–24 AWG (0.897 mm^2–0.206 mm^2) (CRDRDR and KEYRDR)
Two shielded twisted pair cables for I/DISC reader.
8 conductor shielded for other reader types
Cable Length: Up to 300 ft. (90m) for CRDRDR and KEYRDR using 24 AWG (0.206 mm^2).
Up to 200 ft. (60 m) for I/DISC reader
Power: 12 VDC @ 100 mA and 5 VDC @ 50 mA max.

Note: *Position P501 jumper accross right two pins as shown in Figure 1 on first page.*

Refer to TCON112 *TAC Readers Installation Guide* for specific readers

Physical Description

Weight: 1.3 lbs. (0.6 kg)
Dimensions: 5.00" H× 8.50" W × 2.5" D
                      (12.70 cm × 21.60 cm × 6.35 cm)

Agency Approvals

FCC Part 15, CE, ACA
UL294 Listed Subassembly

On October 1st, 2009, TAC became the Buildings business of its parent company Schneider Electric. This document reflects the visual identity of Schneider Electric; however, there remains references to TAC as a corporate brand in the body copy. As each document is updated, the body copy will be changed to reflect appropriate corporate brand changes..

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