SLC® Series 5 Carrier System

AUA53( ) Current Feed Coin Channel Unit — 5SCU260 (AUA53) 5SC4V1U (AUA53B)

Features/Functions

- Coin-first or dial-tone-first coin service
- Single channel current feed unit
- On-hook transmission (OHT)
- Unique keying to prevent erroneous insertion in shelf
- No option switches
- BUSY LED on Faceplate
- Faceplate test access to tip and ring (AUA53B)
- Enhanced inventory (AUA53B)
- Conforms to appropriate industry standards

Description

This data sheet describes the AUA53( ) current feed coin channel unit (CU) (AUA53 COMCODE 106210396, AUA53B COMCODE 108041302) and is intended for the end-user of the unit. This data sheet is being reissued primarily to update the latest CLEI Code and COMCODE information on the AUA53B channel unit.

The AUA53( ) CU is a 2-wire analog voice-frequency (VF) channel unit. It is intended for use in all *SLC* ® Series 5 remote terminals (RTs), all *SLC* ®-2000 Access System RTs and multi-services distant terminals (MSDTs), and the DDM-2000 FiberReach Narrowband Shelf. The AUA53( ) channel unit provides a single (A/odd) channel of coin-first service using ground-start signaling or dial-tone-first (DTF) service using loop-start signaling. Transmission parameters are fixed and the signaling mode is selected automatically. The channel unit stores a

plug-in inventory record in non-volatile memory, readable by a compatible host. The inventory record includes 10-character CLEI[1], COMCODE, ECI, Function, Loss, and ID codes. During a switch event to a protection line, the channel unit maintains the existing signaling state. In the event of a permanent carrier failure, the channel unit assumes the on-hook state.

Figure 1 shows the faceplate diagram and edge connector functions for the AUA53( ) CU. Figure 2 shows the loop current profiles as a function of loop current plus telephone set resistance. Table 1 lists the AUA53( ) CU Signaling and transmission specifications. Table 2 lists the environmental specifications and Table 3 lists the power drain requirements.

Compatibility

The AUA53( ) channel unit can be hosted by all *SLC* Series 5 RTs, all *SLC*-2000 Access System RTs and MSDTs, and the DDM-2000 FiberReach Narrowband Shelf.

The AUA53( ) channel unit is end-to-end compatible with *SLC* Series 5 AUA33( ) and *SLC*-96 WP12 coin current sink channel units, and with *SPQ*333 *SLC* Series 5/*SLC*-2000 Access System dual coin current sink channel units. The AUA53( ) CU is compatible with all 1C/2C-type and 1D-type coin telephone sets, except that the AUA53B CU usage with DTF coin sets is limited to sets with ground lifting.

1 COMMON LANGUAGE is a registered trademark and CLEI, is a trademark of Bell Communications Research, Inc.

Specifications

The AUA53( ) channel unit conforms to the appropriate criteria of ANSI[1], Bellcore, FCC, GTE, Rural Utilities Service (RUS), and UL[2] standards.

Table 1 lists specifications that supplement or highlight the information found in 363-205-010, *SLC Series 5 Carrier Applications and Planning Guide*, Chapter 6.

Table 1. AUA53( ) CU Signaling and Transmission Specifications

Parameter	Value
Loop Range *	1500 Ω (AUA53) 900 Ω (AUA53B)
1kHz VF Loss	0.0 dB off-hook (AUA53) > 40 dB on-hook (AUA53) 1.0 dB off-hook (AUA53B) 4.0 dB on-hook (AUA53B)
Structural Impedance	735 Ω + 2.64 µF (AUA53) 900 Ω + 2.16 µF (AUA53B)

* Supplying > 23 mA into 550 Ω coin telephone set.

1 Registered trademark of American National Standards Institute, Inc.

2 Registered trademark of Underwriters Laboratories, Inc.

Figure 1 shows the loop current profiles as a function of loop current plus telephone set resistance.

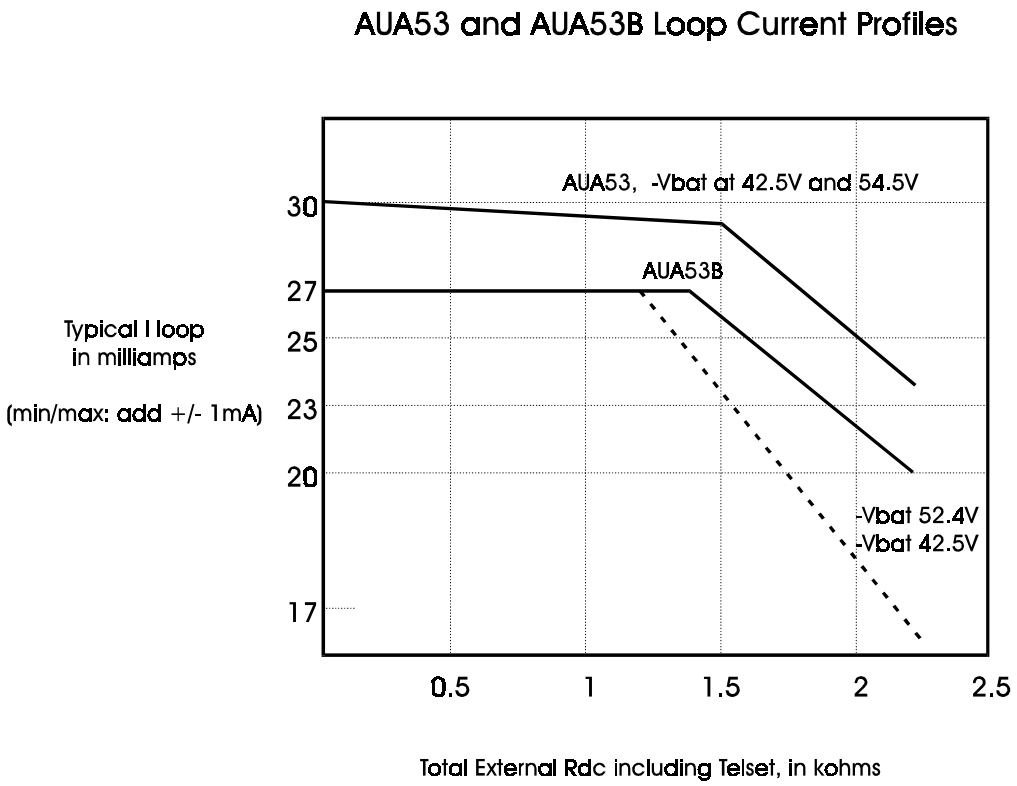


Figure 1. AUA53( ) CU Loop Current Profile

Table 2. Environmental Specifications

A. Temperature Range (Ambient) 1. Operating, per TR-NWT-000057: in Lucent Technologies cabinet mounted RT, outside ambient temperatures of -40° F (-40° C) with no solar load to +115° F (46° C) with maximum solar load and maximum power dissipation. Lucent Technologies cabinets are designed to assure that the components within do not exceed their rated temperatures for the above conditions. 2. Storage, per TR-NWT-000057: ambient temperatures of -40° to 140° F (-40° to 60° C).
B. Relative Humidity 1. Operating, per TR-NWT-000057. For outside ambient temperature 84° F (29° C) or less, relative humidity of 5% to 95%. For ambient temperatures above 84° F (29° C), the relative humidity is limited to that corresponding to a specific humidity of 0.024 pounds of water per pound of dry air. 2. Storage, per TR-NWT-000057: ambient temperatures 84° F (29° C) or less, 10% to 95%. For ambient temperatures above 84° F (29° C), the relative humidity is limited to that corresponding to a specific humidity of 0.024 pounds of water per pound of dry air.

Table 3. Power drain for AUA53B CU (Per Channel)

Condition	Value
Idle	0.46 W
Active (T/R resistance 600 ohms):	1.86 W
During coin operations - transients lasting < 0.5 second	8.4 W

Installation and Testing

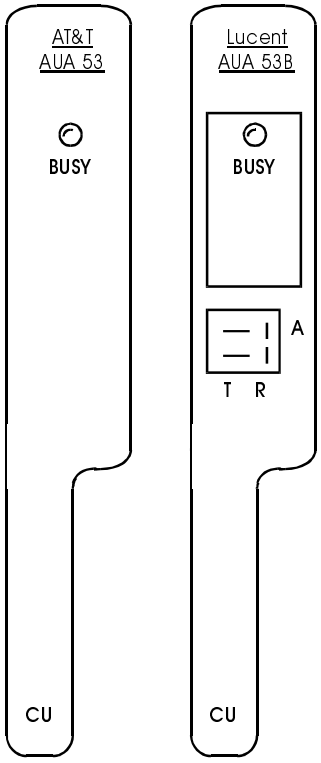
There are no switches to set on this unit. Procedures for testing the unit are given in 363-205-402 *SLC Series 5 Carrier System Channel Unit Installation and Testing.*

The AUA53( ) CU, in all its applications, is compatible with mechanized loop testing (MLT) and the pair gain test controller (PGTC) and the extended test controller (XTC) test systems.

Faceplate Features

The AUA53( ) channel unit faceplates are shown in Figure 1. Both the AUA53 and AUA53B channel units have one red LED indicator; in addition to the LED the AUA53B CU has one faceplate jack. The faceplate jack provides convenient test access to the tip (T) and ring (R) of the odd (O) channel through the channel unit faceplate test cord adapter part number 400395M, available from Telecom Assistance Group, Inc., West Berlin, New Jersey; (1-800-824-7005).

BUSY (Red LED): The BUSY LED will light upon power up and when the coin channel is off-hook.



Edge Connections	
Finger	Function
1	Frame Gnd
2	Ringing Gnd
17, 19, 20, 21	Circuit Gnd
22, 23, 25, 50	+5 Volts DC
26	-48 Volts DC
27	Ringing
31	T
32	R
49	-5 Volts DC

Figure 2. AUA53 ( ) Faceplate Diagram and Edge Connections

References

The following documents provide additional information about the use of this channel unit in the *SLC* Series 5 Carrier System and the *SLC*-2000 Access System:

363-205-010	*SLC Series 5 Carrier System Application and Planning Guide*
363-205-401	*SLC Series 5 Carrier System Remote Terminal - Acceptance and Turnup*
363-205-402	*SLC Series 5 Carrier System Channel Unit Installation and Testing*
363-205-500	*SLC Series 5 Carrier System Maintenance and Trouble Clearing*
363-208-000	*SLC-2000 Access System Application, Planning, and Ordering Guide*
915-710-115	*SLC Series 5 Carrier System Application Engineering*

Technical Assistance

Follow local procedures for obtaining technical assistance. Lucent Technologies also provides in-hours or emergency out-of-hours help for the *SLC* Series 5 Carrier System and the *SLC*-2000 Access System. Call the Lucent Technologies Regional Technical Assistance Center at 1-800-225-RTAC.

Ordering Information

Additional copies of this document (363-005-112) are available from the Customer Information Center — call 1-888-582-3688.

Comments

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