

**CAMA TRUNKS
AND MISCELLANEOUS EQUIPMENT UNITS
EQUIPMENT DESIGN REQUIREMENTS
NO. 5 CROSSBAR SYSTEM**

1. GENERAL

Scope

1.01 This specification, together with the supplementary information listed herein, provides the equipment design requirements for the equipment and circuits to be used in the engineering, manufacture, and installation of the relay rack units for use in offices arranged for centralized automatic message accounting.

1.02 This specification is reissued:

- (a) To add option X in Note B under J23067B in accordance with SD-26101-01, Issue 11D.
- (b) To add information shown on Addendum, Issue 1.

Description

1.03 The units listed herein are designed to be mounted on 23-inch relay rack bays. Each has unit terminal strips for terminating incoming leads, and obtain their battery and ground from the fuse panel at the bottom of the relay rack, on which they are mounted.

1.04 All wiring for these units shall be provided as surface wiring.

2. SUPPLEMENTARY INFORMATION

819-000-000—No. 5 Crossbar System Index
AA128.006—List of General Equipment Requirements Sections
J23064 (819-601-150)—Relay Racks for Trunk Units and Relay Equipment
J29259 (819-005-150)—General Outline—No. 5 Crossbar Systems

3. DRAWINGS

WECo J drawings listed should be ordered by referring to the prefix and base number and requesting the highest suffix dash (—) number.

Key Sheet

SD-25760-01—No. 5 Crossbar Systems
Current Drain Data Sheet
SD-25760-02—No. 5 Crossbar Systems

Equipment

J23067A-()—Incoming Tandem Trunk—
CAMA—With or Without Local
Completion—Reverse Battery
Supervision Incoming—Reverse
Battery or SX Supervision
Outgoing

J23067B-()—Incoming Tandem Trunk—
CAMA—With or Without Local
Completion—Arranged to Repeat
Dial Pulse Using Bylink—Reverse
Battery or E&M Lead Supervision
Incoming—Reverse Battery or SX
Supervision Outgoing

J23067C-()—Juncator — CAMA — Reverse
Battery or SX Supervision Out-
going

J23067D-()—Tone and Wink-off Unit

J23067E-()—Incoming Intertoll Trunk—
CAMA — Arranged to Repeat
Dial Pulses Using Bylink—Re-
verse Battery or E&M Lead Super-
vision Incoming—SX Supervision
Outgoing

J23067F-()—Intermarker Group Trunk
CAMA—Subscriber to Trunk—
Reverse Battery or SX Supervision
Outgoing

J23067G-()—Intermarker Group Trunk—
CAMA—Subscriber to Subscriber

J23067H-()—Calls-waiting Signal Unit—
CAMA

J23067J-()—CAMA—Suspension Unit

4. EQUIPMENT

J23067A (AT&TCo Std)—Unit for One Incoming Tandem Trunk—CAMA—With or Without Local Completion—Reverse Battery Supervision Incoming—Reverse Battery or SX Supervision Outgoing

Equipment—J23067A-()

List 1—Assembly, common equipment, and wiring for one incoming trunk arranged, but not equipped, for reverse battery or SX supervision through switches in accordance with SD-26100-01, apparatus Fig. 1.

List 2—Equipment and wiring required in addition to list 1 for completion to local subscribers in accordance with SD-26100-01, apparatus Fig. 2.

List 3—Equipment and wiring required in addition to list 1 for completion to trunks having reverse battery supervision through switches in accordance with SD-26100-01, apparatus Fig. 3.

List 4—Equipment and wiring required in addition to list 1 for completion to trunks having SX supervision through switches in accordance with SD-26100-01, apparatus Fig. 4.

Notes

A. In addition, there are options involving wiring only as follows:

1. Wiring required in addition to list 1 when local completion is not required in accordance with SD-26100-01, Z option.

B. Job records need not be maintained for F, G, H, N, Q, R, S, T, V, W, X, and Y options.

J23067B (AT&TCo Std)—Unit for One Incoming Tandem Trunk—CAMA—With or Without Local Completion—Arranged to Repeat Dial Pulses Using Bylink—Reverse Battery or E&M Lead Supervision Incoming—Reverse Battery or SX Supervision Outgoing

Equipment—J23067B-()

List 1—Assembly, common equipment, and wiring required for one trunk, equipped for reverse battery supervision through switches in accordance with SD-26101-01, apparatus Fig. 1 and 4.

List 2—Assembly, common equipment, and wiring required for one trunk equipped for SX supervision through switches in accordance with SD-26101-01, apparatus Fig. 1 and 5.

List 3—Equipment and wiring required in addition to list 1 or 2 for local completion in accordance with SD-26101-01, apparatus Fig. 2.

List 4—Equipment and wiring required in addition to list 1 or 2 for extramural operation with loop signaling incoming to trunk in accordance with SD-26101-01, apparatus Fig. 6.

List 5—Equipment and wiring required in addition to list 1 or 2 for extramural operation with E and M leads or loop signaling incoming to trunk in accordance with SD-26101-01, apparatus Fig. 3.

List 6—Equipment and wiring required in addition to list 1 or 2 for intramural operation from step-by-step office or incoming extramural operation with code selector in No. 5 CAMA office in accordance with SD-26101-01, apparatus Fig. 7.

Notes

A. In addition, there are options involving wiring only as follows:

1. Wiring required in addition to list 1 or 2 when local completion is not required in accordance with SD-26101-01, V option.

- B. Job records need not be maintained for A, B, E, G, H, M, N, Q, R, S, T, W, X, Y, Z, and ZB options.

J23067C (AT&TCo Std)—Unit for One CAMA Junctor—Reverse Battery or SX Supervision Outgoing

Equipment—J23067C-()

List 1—Assembly, common equipment, and wiring for one CAMA junctor arranged but not equipped, for reverse battery or SX supervision SD-26102-01, apparatus Fig. 1.

List 2—Equipment and wiring required in addition to list 1 for completion to trunks having reverse battery supervision only, in accordance with SD-26102-01, apparatus Fig. 2.

List 3—Equipment and wiring required in addition to list 1 for completion to trunks having SX supervision incoming only, in accordance with SD-26102-01, apparatus Fig. 3.

Notes

A. Reserved.

- B. Job records need not be maintained for X, Y, and Z options.

J23067D (AT&TCo Std)—Unit for One Tone and Wink-off Circuit

Equipment—J23067D-()

List 1—Assembly, equipment, and wiring for one unit in accordance with SD-26103-01, apparatus Fig. 1.

J23067E (AT&TCo Std)—Unit for One Incoming Intertoll Trunk—CAMA—Arranged to Repeat Dial Pulses Using Bylink—

Reverse Battery or E & M Lead Supervision Incoming—SX Supervision Outgoing

Equipment—J23067E-() -

List 1—Assembly, common equipment, and wiring for one trunk arranged, but not equipped, for extramural operation from step-by-step office with loop signaling incoming through code selector in No. 5 CAMA office or E & M lead supervision in accordance with SD-26104-01, apparatus Fig. 1.

List 2—Equipment and wiring required in addition to list 1 for extramural operation from step-by-step office with loop signaling, incoming through code selector in No. 5 CAMA office, in accordance with SD-26104-01, apparatus Fig. 2.

List 3—Equipment and wiring required in addition to list 1 for E & M lead supervision in accordance with SD-26104-01, apparatus Fig. 3.

Notes

- A. In addition, there are options involving wiring only, as follows:

1. Wiring required in addition to list 1 or 2 for completion to 4-party semiselective, 8- or 10-party lines in accordance with SD-26104-01, N option.

2. Wiring required in addition to list 1 or 2 when completion to 4-party semiselective, 8- or 10-party lines is not required in accordance with SD-26104-01, M option.

- B. Job records need not be maintained for Q, R, S, T, W, X, Y, and Z options.

J23067F (AT&TCo Std)—Unit for One Intermarker Group Trunk—CAMA—Subscriber to Trunk—Reverse Battery or SX Supervision Outgoing

Equipment—J23067F-()

List 1—Assembly, common equipment, and wiring for one trunk in accordance with SD-26105-01, apparatus Fig. 1.

List 2—Equipment and wiring required in addition to list 1, for completion to trunks having reverse battery supervision only, in accordance with SD-26105-01, apparatus Fig. 2.

List 3—Equipment and wiring required in addition to list 1 for completion to trunks having SX supervision incoming only, in accordance with SD-26105-01, apparatus Fig. 3.

Notes

- A. Reserved.
- B. Job records need not be maintained for R, S, T, X, Y, and Z options.

J23067G (AT&TCo Std)—Unit for One Intermarker Group Trunk—CAMA—Subscriber to Subscriber

Equipment—J23067G-()

List 1—Assembly, equipment, and wiring for one trunk in accordance with SD-26107-01, apparatus Fig. 1.

Notes

- A. In addition, there are options involving wiring only, as follows:
 - 1. Wiring required in addition to list 1 for completion of 4-party semiselective, 8- or 10-party lines in accordance with SD-26107-01, N option.
 - 2. Wiring required in addition to list 1 when completion to 4-party semiselective, 8- or 10-party lines is not required in accordance with SD-26107-01, M option.
- B. Job records need not be maintained for T, V, X, Y, and Z, options.

J23067H (AT&TCo Std)—Unit for One Calls-waiting Signal Circuit—CAMA

Equipment—J23067H-()

List 2—Assembly, equipment and wiring for one calls-waiting signal unit in accordance with SD-26046-01, apparatus Fig. 1.

List 3—Wiring and equipment required in addition to list 2 when loop signaling is required per SD-26046-01, V option.

List 4—Wiring and equipment required in addition to list 2 when E&M lead signaling is required per SD-26046-01, T option.

List 5—Wiring and equipment required in addition to list 2 when E&M lead signaling is required without CAMA supervision per SD-26046-01, S and T options.

J23067J (AT&TCo Std)—Unit for One CAMA Suspension Circuit

Equipment—J23067J-()

List 2—Equipment and wiring required in addition to list 4 when the Abandon Switchboard (AS) key is located in a switchboard in a different building from the No. 5 crossbar equipment using loop signaling per SD-26017-01, X option.

List 3—Assembly, common equipment and wiring for one CAMA suspension unit per SD-26017-01, apparatus Fig. 1.

List 4—Equipment and wiring required in addition to list 3 when AS key is located in master test frame or in switchboard in same building using loop signaling per SD-26017-01, T option.

List 5—Equipment and wiring required in addition to list 3 when AS key is located in a different building using E&M lead signaling per SD-26017-01, apparatus Fig. 2.

Notes

- A. Reserved.
- B. Apparatus located separately and external wiring required when the AS key is located in a switchboard, and when:
1. The No. 5 crossbar equipment is located in the same building, provide SD-26017-01, Y option and SD-95872-01, App Fig. 1, 2 and 3, Z and X options.
 2. The No. 5 crossbar equipment is located in a distant building, provide SD-26017-01, Y option, and order separately a relay unit power supply, AS key and lamp, and OA tone bar in accordance with J21350AC (SD-95872-01).
- C. When the AS key is to be located in the master test frame jack, lamp, and key bay, it shall be ordered separately in accordance with J23252Q. Also provide wiring in accordance with SD-26017-01, Z option.
- D. Typical locations for the AS key and lamp in switchboards are shown on ED-26766-01 and ED-92115-01. The OA tone bar shall be mounted on a panel P40D670 in the operating room as shown on ED-91192-01-().

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5. GENERAL NOTES

5.01 Nonrecord options involving straps on the switchboard cable side of trunk unit terminal strips shall be wired by the installer after the switchboard cable has been connected, in order to make the straps accessible for possible changes. These options are not included as lists in this specification, since job records need not be maintained for them.

List of A&M Only and Mfr Disc. Equipment

The following equipment has been replaced as indicated. Where A&M Only items appear, the issue numbers shown are those of the issue in which the rating was first applied.

EQUIPMENT	RATING	DETAILS LAST SHOWN IN ISSUE	REPLACING EQUIPMENT
J23067H, L1	Mfr Disc.	1	J23067H, L2
J23067J, L1	Mfr Disc.	1	J23067J, L3