

CIRCUIT DESCRIPTION
BELL TELEPHONE LABORATORIES, INC.,
SYSTEMS DEVELOPMENT DEPT., NEW YORK.
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CD-20030-01
Issue 3
Appendix 1-D
November 19, 1926
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PANEL MACHINE SWITCHING SYSTEM
FUSE ALARM CIRCUIT FOR
15 AMPERE FUSES ON SELECTOR FRAME FUSE PANELS
USING SAME PILOTS AND AUDIBLE ALARMS
AS FOR INDIVIDUAL SELECTOR FUSES

CHANGES

A. CHANGED AND ADDED FUNCTIONS

A.1 None.

B. CHANGES IN APPARATUS

B.1 Ward-Leonard Resistance per KS-3104 added as an alternate for No. 18-AD on all figures.

C. CHANGES IN CIRCUIT REQUIREMENTS OTHER THAN THOSE APPLYING TO ADDED OR REMOVED APPARATUS

C.1 No change.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 No change.

DEVELOPMENT

1. PURPOSE OF CIRCUIT

1.1 No change.

2. WORKING LIMITS

2.1 No change.

OPERATION

3. FUNCTIONS

3.1 No change.

4. CONNECTING CIRCUITS

4.1 No change.

DETAILED DESCRIPTION

5. The detailed description of this circuit contained in CD-20030-01, Issue 3-D, dated June 19, 1926, remains unchanged.

BELL TELEPHONE LABORATORIES, INC.

DEPT. 332-A

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PANEL MACHINE SWITCHING SYSTEM
FUSE ALARM CIRCUIT FOR
15 AMPERE FUSES ON SELECTOR FRAME FUSE PANELS
USING SAME PILOTS AND AUDIBLE ALARMS
AS FOR INDIVIDUAL SELECTOR FUSES

CHANGES

A. CHANGED AND ADDED FUNCTIONS

A.1 None.

B. CHANGES IN APPARATUS

B.1	<u>Removed</u>	<u>Replaced by</u>	<u>Added</u>
	19-BJ Resistances (B)	W.L. Resistances K3096 (B)	None

C. CHANGES IN CIRCUIT REQUIREMENTS OTHER THAN THOSE APPLYING TO ADDED OR REMOVED APPARATUS

C.1 None.

D. DESCRIPTION OF CIRCUIT CHANGES

D.1 Change is made to rewrite circuit description to correct for error previously made in issue of circuit description.

D.2 Circuit note 101 was not previously shown.

DEVELOPMENT

1. PURPOSE OF CIRCUIT

1.1 The purpose of this circuit is to give an alarm when a 15 ampere fuse or a selector fuse at a selector frame fuse panel is operated.

2. WORKING LIMITS

2.1 None.

OPERATION

3. FUNCTIONS

- 3.1 This is a typical fuse alarm circuit. It provides means for locating the particular selector frame fuse panel at which a 15 ampere fuse or a selector fuse has operated.

4. CONNECTING CIRCUITS

- 4.1 This circuit connects to the alarm bus bars at selector frame fuse panels.

DETAILED DESCRIPTION

5. 48 VOLT FUSES - FIGURES 1, 2, 3 AND 4

- 5.1 The 1-1/3 ampere fuse wired in parallel with the 15 ampere fuse operates when the 15 ampere fuse opens and connects battery to the winding of the (A) relay in series with the selector frame lamp and the resistance, operating the relay and lighting the lamp. The operation of the (A) relay lights the aisle pilot lamp and operates a bell signal. The removal of the operated fuse retires the alarm signal. The operation of a selector fuse causes similar operation of the fuse alarm circuits.

6. 24 VOLT FUSES - FIGURES 1, 2, 3 AND 4

- 6.1 The operation of the 15 ampere fuse or a selector fuse at a 24 volt fuse panel causes similar operation of alarm signals as described in paragraph 5.1 except that the selector frame lamp is lighted only from the operation of a selector fuse.

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