

CIRCUIT DESCRIPTION

CD-4C126-01
ISSUE 1
APPENDIX 2B
DRAWING ISSUE 3B
DISTN CODE 7N98

COMMON SYSTEMS
3B20D MODEL3 PROCESSOR
TAPE / DISK CABINET

CHANGES

D. Description of Change

D.1 Changed KS List Numbers to delete any reference to color of the peripheral device and rendered this document general purpose. KS List Number is shown on the specific system drawing referenced in this document.

D.2 Made this document general purpose and allowed it to be applied to different system drawings without having to be reissued as a result of different color requirements for the peripheral devices.

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3B20D MODEL 3 PROCESSOR

TAPE/DISK CABINET

SECTION II - DETAILED DESCRIPTION

1.04 The KS-23113 tape drive is a microprocessor-based half-in.-wide, magnetic tape formatted drive. It records data in ANSI-compatible 1600 bits per in., phone-encoded method and in ANSI-compatible, 6250-bits-per-in. group coded recording method. It is capable of operating in two modes: a 25 in. per sec start/stop mode, or a 75 in.-per-sec streaming mode.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.03 KS-23113 tape transport

104 to 128 VAC, 60 Hz Maximum power - 400 W RMS

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COMMON SYSTEMS

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TAPE/DISK CABINET

SECTION I - GENERAL DESCRIPTION1. PURPOSE OF CIRCUIT

1.01 The tape/disk cabinet may contain up to and including eight moving head disk (MHD) drives, or up to and including four MHD drives and one tape transport unit. The exact number of drives and inclusion of the tape transport is user dependent. Each MHD used in the cabinet requires one KS-22997 converter and ED-4C481 power switch.

1.02 This circuit is designed to:

- (a) Provide interface cabling between the 340-megabyte, the KS-22875 MHD drive, and the disk file controller.
- (b) Support from one to eight 340-megabyte MHDs, or from one to four 340-megabyte MHDs and one tape transport unit.
- (c) Supply DC conversion of the 48-volt power system to DC power, as required for the MHD.
- (d) Supply office alarms and signal distribution, required by the system interfaced into the ED-4C481 power switch.

SECTION II - DETAILED DESCRIPTION1. UNIT FUNCTIONS

1.01 The KS-22997 converter provides five separate DC outputs required for operating the MHD drive from the 48-VDC power system. Voltage alarms are internally generated within the converter and furnished to the ED-4C481 power switch. The converter has internal or external power switch capability. In this design, the power switch function is performed externally by the ED-4C481 power switch.

1.02 The KS-22875 MHD drive provides storage of 340 megabytes of information. The drive operates from five separate DC

voltages, furnished by the KS-22997 converter. The MHDs are interfaced with a disk file controller unit through two separate cables, consisting of a control cable and a data cable.

1.03 The KS-22762 tape drive is a microprocessor-based, half-in.-wide magnetic tape formatted drive. Data is recorded in an ANSI-compatible, 1600-bits-per in., phase-encoded method. It is capable of operation in two modes: 25 in. per sec start/stop mode, or 100 in. per sec streaming mode.

2. CABLING STRUCTURE

2.01 The control cable serves as a common communication bus to all disk memories attached to a particular disk file controller in multiple disk arrangements.

2.02 The data cable serves as a dedicated cable for a particular MHD for data transfer between the disk file controller and the MHD.

SECTION III - REFERENCE DATA

1. WORKING LIMITS

1.01 **KS-22997 converter:**

41.6 to 60.0 VDC

1.02 **KS-22762 Tape transport**

104 to 128 VAC, 60 Hz Maximum power-270 W RMS.

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