DATA SET 405 TYPE

SUMMARIZING SPECIFICATION

DATA SYSTEMS

1. GENERAL

Scope

1.01 This specification, together with the supplementary information listed herein, summarizes the design requirements and information to be used for the application and ordering of Data Sets 405A and 405B type for use in voice grade private line service.

Capacity

1.02 Data Sets 405A-L1A, L1/2, and L1/3 are medium speed (700, 880, 1400, or 1760 bits per second) half-duplex sets which accept 8, 20, and 32 parallel binary inputs, respectively, for serial transmission to a Data Set 405B type.

1.03 Data Sets 405B-L1A, L1/2, and L1/3 are medium speed (700, 880, 1400, or 1760 bits per second) half-duplex sets which accept serial data from a Data Set 405A type and provide 8, 20, and 32 parallel binary outputs, respectively.

Description

1.04 Data Set 405A-L1A consists of circuit packs BE22, BE40, BE50, BE66, BE67, BE69, BE70, BE73, and BE89 mounted in a wire frame designed for either 23- or 25-inch frame mounting. Connection to the data set is made through a KS-19088, L2 Connector. The following features are provided as part of the basic set.

(a) Acceptance of eight parallel binary inputs for serial transmission using time division multiplexing.

(b) Frequency shift keying (1300-2100 Hz) modulation.

(c) Crystal controlled data rate.

(d) Optional bit rates of 700, 880, 1400, or 1760 bits per second.

(e) Alarms indicating loss of carrier ($>$ 1 second) and loss of power.

(f) Optional modes of operation, start-stop or continuous scan mode.

(g) Completely powered using -48 volts dc from central office supply.

1.05 The overall size of Data Set 405A-L1A is 23.0 inches long, 8.15 inches wide, and 1.92 inches high. It weighs 6 pounds 8 ounces.

1.06 Data Set 405A-L1/2 consists of Data Set 405A-L1 with the addition of circuit packs BE83 and two BE66s mounted in an additional wire frame. Connection to the data set is made through KS-19087, L2 and KS-19088, L2 Connectors. The additional circuitry increases the input capacity to 20 parallel binary inputs.

1.07 The overall size of Data Set 405A-L1/2 is 23.0 inches long, 8.15 inches wide, and 3.90 inches high. It weighs 10 pounds 12 ounces.

1.08 Data Set 405A-L1/3 consists of Data Set 405A-L1 with the addition of circuit packs BE84 and three BE66s mounted in an additional wire frame. Connection to the data set is made through KS-19087, L2 and KS-19088, L2 Connectors. The additional circuitry increases the input capacity to 32 parallel binary inputs.

1.09 The overall size of Data Set 405A-L1/3 is 23.0 inches long, 8.15 inches wide, and 3.90 inches high. It weighs 11 pounds 8 ounces.

1.10 Data Set 405B-L1A consists of circuit packs BE38, BE40, BE51, BE67, BE68, BE69, BE71, BE72, BE93, and a 1023B filter mounted in a wire frame designed for either 23- or 25-inch frame mounting. Connection to the data set is

made through a KS-19088, L2 Connector. The following features are provided as part of the basic set.

(a) Acceptance of serial data from Data Set 405A-L1A and provision of eight parallel binary outputs using time division multiplexing.

(b) Frequency shift keying (1300-2100 Hz) demodulation.

(c) Crystal controlled data rate.

(d) Optional bit rates of 700, 880, 1400, or 1760 bits per second.

(e) Bit averaging to minimize sampling error.

(f) Alarms indicating loss of carrier (> 1 second), loss of sync (> 1 second), improper end of word, and loss of power.

(g) Completely powered from −48 volts dc from central office supply.

1.11   The overall size of Data Set 405B-L1A is 23.0 inches long, 8.15 inches wide, and 1.92 inches high. It weighs 6 pounds 12 ounces.

1.12   Data Set 405B-L1/2 consists of Data Set 405B-L1 with the addition of circuit packs BE85 and two BE93s mounted in an additional wire frame. Connection to the data set is made through KS-19087, L2 and KS-19088, L2 Connectors. The additional circuitry increases the output capacity to 20 parallel binary ouputs.

1.13   The overall size of Data Set 405B-L1/2 is 23.0 inches long, 8.15 inches wide, and 3.90 inches high. It weighs 11 pounds.

1.14   Data Set 405B-L1/3 consists of Data Set 405B-L1 with the addition of circuit packs BE86 and three BE93s mounted in an additional wire frame. Connection to the data set is made through KS-19087, L2 and KS-19088, L2 Connectors. The additional circuitry increases the output capacity to 32 parallel binary outputs.

1.15   The overall size of Data Set 405B-L1/3 is 23.0 inches long, 8.15 inches wide, and 3.90 inches high. It weighs 11 pounds 12 ounces.

2.   SUPPLEMENTARY INFORMATION

A-157100—Common Features Drawing for Printed Wiring Boards
A-836330—Terminal Area Configurations for Printed Wiring Boards
312-809-ZZ0—Data Set 405 Type
594-029-100—Identification—Data Set 405 Type
800-610-158—Packaged Electronic Products—Wiring, Cabling, Numbering, and Lettering
800-610-159—Printed Wiring Assemblies—General Equipment Requirements
X-17428—Plated-Through Holes on Printed Wiring Boards
X-17749—Manufacturing Testing Requirements—Data Set 405A Type
X-17750—Manufacturing Testing Requirements—Data Set 405B Type
KS-19087, L2—Connector
KS-19088, L2—Connector

3.   DRAWINGS

SD-1D203-01—Data Set 405A Type
SD-1D204-01—Data Set 405B Type

4.   PRODUCT

Data Set 405A Type Transmitter

List 1—Assembly, wiring, and common apparatus for basic half-duplex 8-parallel binary input data set per SD-1D203-01, App Fig. 1.
List 1A—Addition to basic data set (L1): frame mounting brackets and a cover.
List 2—Addition to basic data set (L1): 12-bit transmitter expansion unit per SD-1D203-01, App Fig. 2.
List 3—Addition to basic data set (L1): 24-bit transmitter expansion unit per SD-1D203-01, App Fig. 3.

Data Set 405B Type Receiver

List 1—Assembly, wiring, and common apparatus for basic half-duplex 8-parallel binary output data set per SD-1D204-01, App Fig. 1.
List 1A—Addition to basic data set (L1): frame mounting brackets and a cover.
List 2—Addition to basic data set (L1): 12-bit receiver expansion unit per SD-1D204-01, App Fig. 2.
List 3—Addition to basic data set (L1): 24-bit receiver expansion unit per SD-1D204-01, App Fig. 3.

TABLE OF AUTHORIZED
ORDERABLE CODE NUMBERS

DATA SET	RATING	REPLACED BY
405A-L1A	AT&TCo Std	—
405A-L1/2	AT&TCo Std	—
405A-L1/3	AT&TCo Std	—
405B-L1A	AT&TCo Std	—
405B-L1/2	AT&TCo Std	—
405B-L1/3	AT&TCo Std	—

5. GENERAL NOTES

5.01 When ordering data set, show full code.

Example: Data Set 405A-L1A