POUGHKEEPSIE

POUGHKEEPSIE
Dept. 539
Bldg. 965

MEMO TO: Dr. H. G. Kolsky

April 3, 1959

SUBJECT: Power Requirements for the Sigma System

The power requirements are broken up into the power required for the groups and that required for the input output area.

The groups are:

1. The Sigma group

   (a) Sixteen single slide logic frames and one maintenance console frame.

2. Exchange group

   (a) Three double slide logic frames and one maintenance console frame.

3. High Speed Exchange group

   (a) Three single slide logic frames and one maintenance console frame.

   (b) One single slide logic frame for disk control circuits.

   (c) One Disk File unit.

4. Memory group

   (a) Four double slide frames for the 2 us memory.

   (b) Two double slide frames for the .5 us memory.

   (c) One maintenance console frame.

The Sigma System will have the capabilities of handling eight input output channels.

1. Two channels for two tape adapter units. Each tape adapter will service two tape drives.

2. One channel for a printer.
3. One channel for a card punch.
4. One channel for a card reader.
5. One channel for the input output console.
6. Two spare channels.

Power required

Sigma group

80 Amps 208 3 phase 400 cycles
30 Amps 208 3 phase 60 cycles

H.S. Exchange group

(a) 25 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

(b) Power requirements per Disk unit

208 3 phase 400 cycles 6 Amps
208 3 phase 60 cycles 150 Amps
starting 25 Amps running

Exchange group

30 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

Memory

(1) 2 U.S. Memory (4 frames)

40 Amps 208 3 phase 400 cycles
30 Amps 208 3 phase 60 cycles

(2) .5 U.S. Memory (2 frames)

20 Amps 208 3 phase 400 cycles
20 Amps 208 3 phase 60 cycles

Input Output Area

1. Tape Adapter Unit and two tape drives

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2 Amp 208 3 phase 400 cycles
15 Amps. 208 3 phase 60 cycles

2. Printer

3 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

3. Card Punch

5 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

4. Card Reader

5 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

5. I/O Console

5 Amps 208 3 phase 400 cycles
15 Amps 208 3 phase 60 cycles

Total Power Requirements

400 cycle 208 3 phase 225 Amps
60 cycle 208 3 phase 210 Amps

Air Conditioning required 110.5 K.W.

2.8 KW = 1 TON

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CMP:bjp

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