These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to General Electric Company.
1.0 GENERAL

This instruction provides basic information regarding the subject card. Refer to the system elementary diagrams for information relating to the overall system operation.

2.0 DESCRIPTION

The card contains either one or two integrated circuit divider chips with the following group arrangements:

- GO1 and GO3 one channel
- GO2 and GO4 two channels

The GO1 and GO3 card, and the GO2 and GO4 card are both mechanically and functionally interchangeable. Different groups for the equivalent functions identify use of different electronic devices. A transistor power supply is furnished to convert from ±20V to ±15V.

PERFORMANCE

The card will have the following characteristics while exposed to the conditions indicated:

2.11 Division
With ±20V and COM applied to tabs 31, 2 and 15 respectively, the card will generate a nominal output voltage of

\[ \text{OP} = 10 \cdot \frac{N}{D} \]

where the input signal voltages N and D are within the ranges of

\[ .1V \leq D \leq 10V \quad \text{and} \quad |N| \leq D \]

2.12 Overall Accuracy
Total error (25°C): ± .65% max. or ±0.65V for D > .1V
Total error vs temp: ± .033%/°C or 3.3mV/°C
Total error vs. power supply: ± .15%/V (±0.15% at 25°C and 0.033%/°C of error is caused by power supply variation)
Warm-up time to rated performance: 5 min.

2.13 Output
Max. output voltage: ± 10V
Max. output current: ± 5mA
Output Impedance: .1 ohm

2.14 Input
Rated numerator voltage, N: ± 10V with |N| ≤ D
Rated denominator voltage, D: ± 10V with N > 0
Max. safe input voltage, N, D: ± 15V
Input Impedance: N=9K ohm, D=25K ohm

2.15 Power Supply
Range: 15V ± .15V at tab 26, −15V ± .15V at tab 8
Quiescent current: +15mA, −9mA at ±15V, +31mA, −25mA at ±20V.

2.16 Temperature
Rated performance: 0°C to +70°C
Max. operating: −25°C to +85°C

3.0 ADJUSTMENTS

There are no adjustments on this card.

4.0 TROUBLESHOOTING

4.1 Check for +15 ± 1 volts at tab 26, −15 ± 1 volts at tab 8

4.2 With +20 volts, −20 volts and Com applied to tabs 31, 2 and 15 respectively, apply 10 volts to N1 and D1 or N2 and D2. Card output for this condition should be 10 volts ± 0.65%.

If the output does not fall within this value, the card should be replaced.

4.3 Use an oscilloscope to determine if excessive noise on any of the input signals causes a distortion of the output signal during system operation. Filtering of the input signal(s) may be necessary to improve operation.
1. Indicate tab connections corresponding to holes tabulated.

2. Crossing hatched tabs indicates tab not used.

3. Card size: 5.000 x 6.000

4. Cross section is located on the component side of the card. Tag 1 is opposite tag 1 and etc.

Notes:

I. Circuit board, 500 x 500 mm.

2. This card has gold plated tabs on both sides.

3. Tabs 1 to 32 are located on the reverse side.

4. Tabs 33 to 64 are located on the component side of the card.

5. The tab numbers shown are those on this card.

HOLE TABULATION

ALL HOLEs EXCEPT THE HOLES TABULATED BELOW

LOC DIP: PUAh

A - 17 - 2
B - 40 - 32
C - 52 - 38

NOTES

I. Indicated tag numbers correspond to matching receptacle numbers.

2. Crossing hatched tabs indicates tags used.

3. Card size: 5.000 x 6.000

4. Cross section is located on the component side of the card. Tag 1 is opposite tag 1 and etc.

The tab numbers shown are those used on this card.

(GROUPE KEY LOCATIONS)

601 B-6 112-13 126-27 1
2 3 4 5 6
HOLE TABULATION

ALL HOLES 0.03 DIA EXCEPT
THE HOLES TABULATED BELOW

LOC. DIA QUAN
A 157 2
B 32 38
C 38

NOTES
1 INDICATED TAB NUMBERS CORRESPOND TO
MATCHING RECEPTACLE NUMBERS
2 CROSS HATCHED TABS INDICATES TABS USED.
3 CARD SIZE: 6.000 X 3.000
4 THIS CARD HAS GOLD PLATED TABS ON BOTH SIDES.
   TABS 1 THRU 32 ARE LOCATED ON THE REVERSE SIDE.
   TABS 33 THROUGH 64 ARE LOCATED ON THE COMPONENT
   SIDE OF THE CARD TAB IX IS OPPOSITE TAB I AND ETC
   THE TAB NUMBERS SHOWN ARE THOSE USED ON THIS CARD.

TOP VIEW

DIAGNOSTIC

DRAWING

GROUP KEY LOCATIONS

GROUP KEY LOCATIONS
10 20 30 40 50 60 70 80 90 100

SEE NOTE 1 & 2

SEE NOTE 4