

MODEL 319

HI-REL ±3½ DIGIT 8 CHANNEL ANALOG MULTIPLEXING DPM



FEATURES

- Up to 8 Signals from Different Sources
- Sequential or Random Address
- Conditioned Analog Output

DESCRIPTION

The 319 is an 8 Channel Analog Multiplexing DPM of the single ended type meaning that all channels must have a common return at one point. Two types are available, Sequential or Random Addressing of Channel selection. When Sequential Type is used, an External Clock Pulse steps the Internal Decoder from Channel 1 thru 8. In sequence, a Reset Pulse or Level returns the Decoder and Multiplexer to Channel "0" (Open). When Random Addressing is used, a BCD Word is used to select the appropriate channel: reset performs as in the Sequential Type. This Model as the others in this Series uses the 300 Main Frame. Refer to page 16.

TERMINAL DESCRIPTION

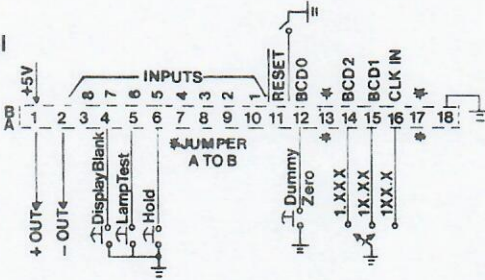
Pin 1B, +5Vdc; 18B, 5V Return (Digital Ground); 13B connect to 13A (-12); 17B connect to 17A (+12V); 14A-16A Decimal Points connect to ground as required; 1A conditioned Analog Output 1mA max.; 2A Analog Input/Output Common; 4A Display Blank; 5A Lamp Test; 10B thru 3B Channels 1 thru 8 + Signal Inputs; 11B Reset, connect to Ground to clear Internal Decoder and Analog Multiplexer; 16B Clock, the Decoder will advance to next channel on the "1" to "0" transition. 12B, BCD 0; 15B, BCD 1; 14B, BCD 2. These are address Inputs when Random Type is ordered and Outputs when Sequential Model is ordered. All Logic Inputs/Outputs are TTL Compatible. 12A Dummy Zero.

SPECIFICATIONS

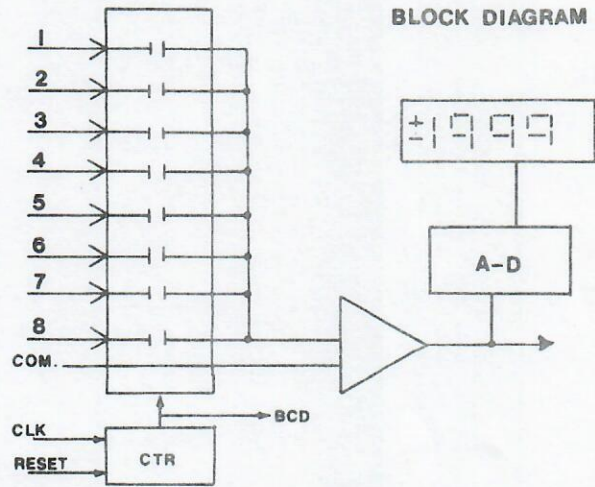
Linearity	±0.1%
Maximum Input Voltage	±10V
Input Impedance	10 Mega OHMS
Common Mode Rejection	60dB @ 50-60 Hz
Clock and Reset Logic	1 Low Power TTL
No. of Channels	8
Analog Output	100µV or 1mV/Count, 1mA Max.
Power Consumption	5Vdc ±5% @ 330mA
Polarity	Automatic
Zero	Automatic
Operating Temperature	-10 to +55°C
Storage Temperature	-20 to +70°C
Temperature Coefficient	±50 PPM/°C
Input Ranges	+200mV & ±2.0V F.S.
Switching Type	Break Before Make

Truth Table

BCD	Reset	Channel On
X	0	None
000	1	1
001	1	2
010	1	3
011	1	4
100	1	5
101	1	6
110	1	7
111	1	8



BLOCK DIAGRAM



ORDERING INFORMATION

MODEL 319 X X X

Range/Address

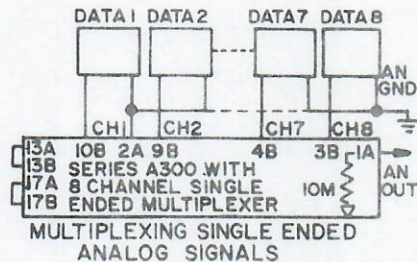
- 0 ... 200mV/Random
- 1 ... 2.0V/Random
- 2 ... 200mV/Sequential
- 3 ... 2.0V/Sequential

Power

- 0 ... 5Vdc Req'd
- 1 ... 115/230 Vac

Display

- 0 ... Standard
- 1 ... Dummy Zero



Connector(s) Included