



FREQUENCY TRANSDUCER TYPE MODEL: (STE-A-5-T)



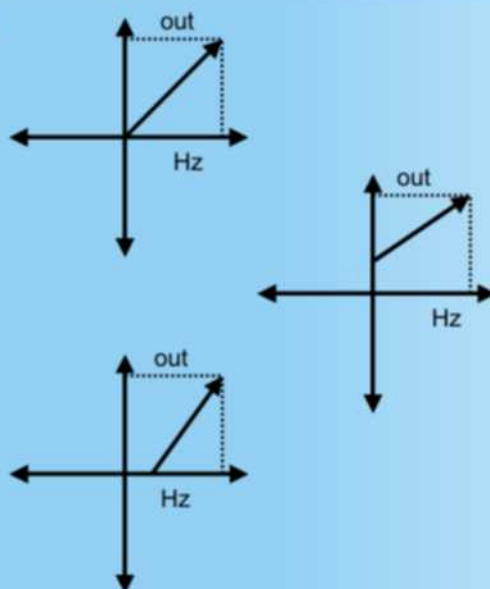
STE-A_5T converts a frequency into an output signal that can serve several receiving instruments such as indicators recorders, alarm units etc.

The input voltage signal is stepped down and galvanically isolated by a transformer T. The zero crossing of the signal is detected to trigger a precision quartz controlled monostable circuit Q. For each cycle of the input signal, the monostable switches a highly stabilized D.C.Voltage to an amplifier A. The output of the amplifier, a constant voltage with fixed pulse width is filtered and averaged. The average signal is proportional to the frequency of the input signal. To suppress the initial range, for instance up to 45Hz a fixed voltage is subtracted. The difference is fed to a current converter C to provide a load independent d.c. Current output, which can be either bipolar or unipolar.

Features

- Available in accuracy class index 0.2, 0.5 & 1.0.
- Withstands wide temperature variations.
- VA burden on PT very low. - < 0.5 VA.
- Wide range of Input / Output to meet National / International requirements.
- Comply to revised IEC 60688 (1997-10) standards.
- Flexibility in auxiliary power supply requirements - A.C. / D.C.
- Rugged and vibration resistant.
- Withstands seismic test as per IEC 344-1974 for Nuclear Power applications.
- Available in dust proof sheet plastic enclosures suitable for Back panel / Din rail mounting.
- Multiple outputs also available - upto 4.
- High input / Output isolations - 4.0 KV.

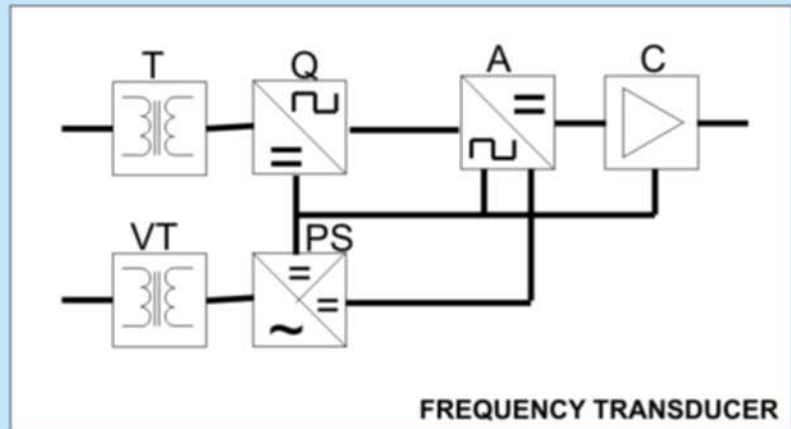
Characteristics



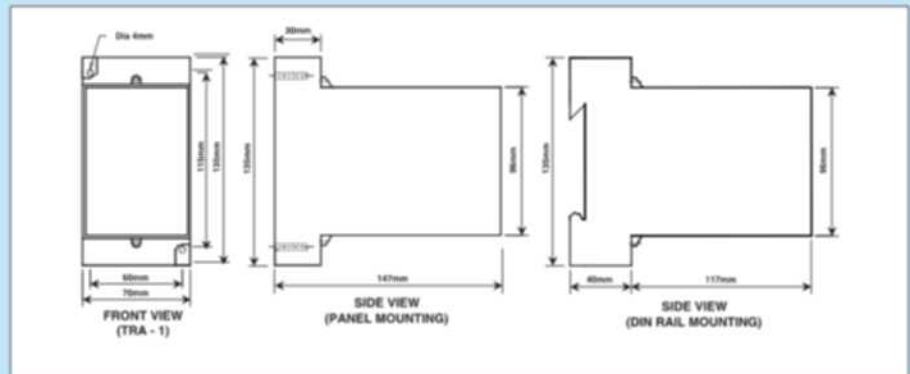
Technical Data

- Measuring Range : ≥ 10 -Hz to ≤ 1 KHz
- Rated Input Voltage : 10 to 660V AC
- Internal Consumption : < 3 VA for selfpowered
- Auxiliary Power Supply : 110 / 240 V AC or 24 / 48 / 110 / 220V DC Or Self Powered
- Nominal Output (Unipolar/Bipolar) : 0-2.5, 0-5, 0-10mA D.C
4-20mA D.C
0-10V D.C
- Output Load
 - a) Current Output : Max 15V/I_{out}
 - b) Voltage Output : Min 1K Ohms
- Residual A.C. Ripple : $< 1\%$ (P-P)
- Overload Capacity
 - a) Continuous : 1.2 V_n, 2.0 I_n
 - b) Momentary : 2.0 V_n for 1 sec.
- Accuracy Class : 0.2 / 0.5 / 1.0
- Response Time : < 0.5 sec.
- Input - output Isolation : 4 KV
- Operating Temperature : 0 – 50°C
- Impulse Voltage Test : Confirms to IEC 251- 5KV having waveform of 1.2/50 Microseconds.
- HF Interference : Confirms to IEC 255-4
- Environment Condition : User group II as per IEC 60688
- Configuration : 1-Phase
- Number of output : 1, 2, 3

Block Diagram



Dimensional Drawings



Other Products

- Supervisory Remote Control & Data Acquisition Systems - Total turnkey.
- Remote terminal Units (RTU).
- Micro RTU.
- Microprocessor Based Equipments _ MCB Monitors, Beetle Monitors, Temperature Scanner etc.
- Custom Built Electronic Equipments.
- Digital A.C. Ammeter.
- Digital A.C. Voltmeter.
- Digital Volt, Amp, & Watt Meter - class 0.5/0.2.
- Position Indicating Transducers.
- Static Energy Meters.
- Digital Flow Meters.
- Digital Power Monitor Cum Controllers.



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