



D.C. TO D.C. CONVERTER TRANSDUCER



In measuring and control circuit where a direct connection of current carrying circuit is not possible, a galvanic separation is necessary to have an interference-free operation. This transducer converts input DC voltage or current into proportional load independent DC current or voltage at output with galvanic isolation between input and output.

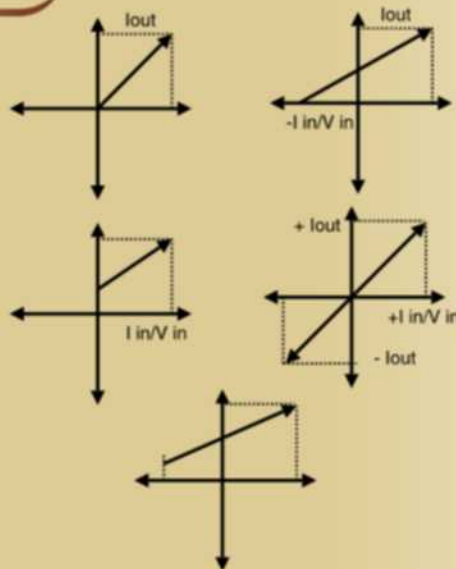
This transducer is used mainly as an amplifying and isolating element in telemetering, computer and control systems.

The input signal is buffered / amplified / summated (as per the requirement) by a precision operational Amp. This signal is fed to a chopper circuit, which drives an isolating transformer. The output of the transformer is synchronously rectified and filtered. The filtered output is fed to a buffer driver which can be factory set to provide various, types of load independent output proportional to the input. The input and output circuits are powered by an isolated supply derived either from an AC auxiliary transformer (for AC auxiliary supplies) or from a DC / DC power converter (for DC auxiliary supplies).

Features

- Available in accuracy class index - 0.1, 0.2, & 0.5
- Withstands wide temperature variations.
- Low internal consumption
- 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

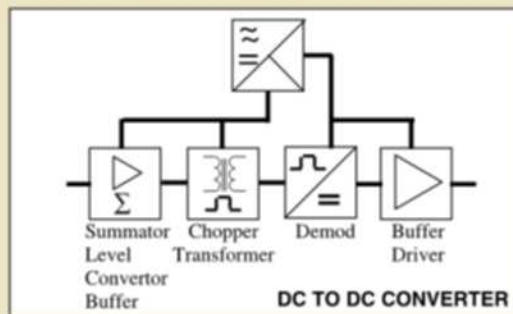


Creating Solutions For Challenging Needs !

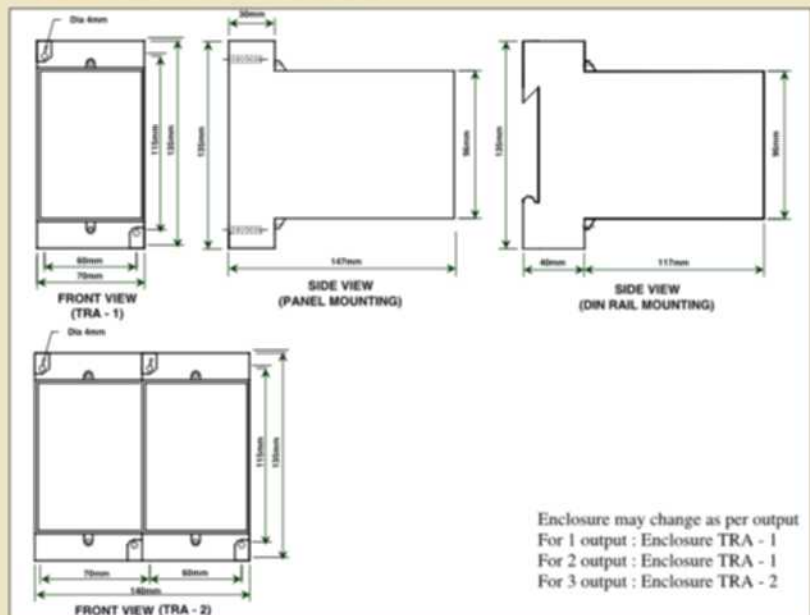
Technical Data

- Measuring Range : 0 - 1.2 In (or Vn)
- Rated Input : 1/2.5/5/10/20/4-20 mA
60 mV to 600 V DC
- Internal Consumption : < 0.1 mA for 0-10 V DC
< 0.1mA for 10-500 V DC
< 0.5 V for current input
- Auxiliary Power Supply : 110/240 V AC
12/24/48/110/220V DC
Self Powered
- Nominal Output : 0-5/10 mA DC
(Unipolar/Bipolar)
4-20mA DC
0-10 V DC
- Load Range (Ohms)
 - a) Current Output : Max 15V/Iout
 - b) Voltage Output : Min 500 Ohms
- Residual A.C. Ripple : < 0.5% (P-P)
- Overload Capacity
 - a) Continuous : 2.0 In / 1.2 Vn
- Accuracy Class : 0.2 / 0.5 / 1.0
- Response Time : < 0.1 sec.
- Input - output Isolation : 2,3, or 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
- Number of output : 1, 2, 3

Block Diagram



Dimensional Drawing



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.



SETO TEKNOLOG PRIVATE LIMITED

406, Hill View Industrial Estate, Amrut Nagar, Ghatkopar (W), Mumbai - 400 086. (INDIA)
Tel.: 91-22-2500 7272 / 5575 1888. Telefax : 91-22-2500 7497

E-mail : seto@vsnl.com , Website : www.seto.co.in, www.setoteknolog.com