CBScan gis
Portable operational analyzer for Switchgear in GIS chambers
CBScan is an easy-to-carry test instrument which has basic functionality and features required for testing all types of Switchgear present in GIS chambers like, Circuit Breakers, Drives, Earth Switches, etc. CBScan is a software-based economical instrument which is useful for shop floor testing and onsite commissioning.

Analysis of test results provides information which is useful for evaluating and rectifying settings for motor currents, contact timings, closing and opening speeds, over-travel, rebound, and contact wipe, etc. The operations that can be performed by this system are Close, Open (for switch, drive & circuit breaker) CO, OC, OCO, and other complex recloser sequences (for circuit breakers only).

Features

- Connects to Circuit Breakers, Drives, and Earth Switch with wear resistant test leads, having suitable connectors
- Selects pre-programmed setup parameters and pass/fail limits through software
- Prints graphical results with user specified header and footer on external printer
- Windows based CBScan software allows configuring & storing test setups, viewing reports, and analyzing and handling graphical test data using a PC
- Automatic creation of folder structure on PC for storage of test data
- Dynamic calculations with cursor movements for on-screen analysis
- Test certificate can be stored and printed as per the manufacturer’s format which enables user to compare with factory test results
- All test data is stored in a database for archival and analysis

CBScan is supplied in a robust carrying case.
**Parameters Tested**

**Breaker:**
- Contact Timings
- Contact Bounce
- Non-simultaneity of contacts
- Contact / Mechanism Travel and Speed characteristics
- Trip & Close coil current characteristics
- Motor current

**Drive and earth switch & High-speed earth switch:**
- Testing and analysis of various drives used for GIS bay
- Contact / Mechanism Speed for high-speed earth switch
- Motor starting current
- Continuous Motor current
- Trip and Close timings

**Specifications**

Input Supply: 230V AC, ±5%, 50Hz, Single Phase

**Contact Timing Module:**
- Isolated channels for timings of 6 Main and 6 Dry Auxiliary contacts
  - Channels : 12 channels
  - Resolution : 0.1 ms at 10kC sampling speed
  - Accuracy : Value ±0.05% ± Resolution

**SSR Output Module:**
- Channels : 2 channels
  - One each for Close and Trip commands.
- Solid State Relay contacts rated at 30A / 250V AC / DC for issuing commands to the breaker.
- Protection : Inbuilt over-current protection
- Switching : Within 50 µs

**Analog Input Module:**
- Channels : 6 channels
- Resolution : 0.025% of full range
- Accuracy : ±1% ± Resolution
- Isolation : 2kV between two channels and between channels and chassis

**Analog channel details:**
- 2 channels for Closing / Tripping coil currents.
  - Current range: Up to 25A max.
- 3 channels for Closing / Tripping speed and mechanism travel of each pole.
  - Excitation source for transducer: 5 VDC, inbuilt
- 1 channel for spring charging Motor Current -
  - DC or 1-phase AC or 3-phase AC
  - Current Range: Fixed at 20 A max.

**Note:**
- The above CBScan channels are part of basic model and can be customized as per specific requirements.
- Size and weight of the instrument will vary depending on channel requirement.
Our customer base

Crest Test Systems is a pioneering company in the field of Test & Measurement. The Crest core team has an experience of 30 years in the field of Switchgear Testing. Our test systems are used everyday to test switchgear on the shop-floors of all leading switchgear manufacturers and also in government test and certification labs. Apart from the Power Sector, Crest also designs and manufactures customized test systems for Metros & Railways, Motor Manufacturing, Battery Industry, and Test & Certification Labs.