Vehicle Current Testing System

VCTS 2020

ECOS

An Introduction

Manufactured by:

KVARTech

KVAR Technologies Pvt. Ltd.

68, Kakad Industrial Estate,
Mahim, Mumbai 400 016. INDIA
www.kvartech.com

For support please contact at:
Email: service@kvartech.com **Phone:** +9122 2431 2031

KVARTech

Introduction

Vehicle Current Testing System (VCTS) is also known as Electrical Check Out System. ECOS is a computerized system for testing electrical circuitry in a vehicle. A vehicle has on an average around 25 circuits, which need to be tested. VCTS 2020 helps in testing these circuits by automatically logging the current and voltage data and providing the test results so that the Vehicle testing process is faster.

The advantages of having a VCTS are:

- **Speeds up Testing resulting in**
    - o Saving time
    - o Increasing productivity
    - o Reducing manpower
- **Eliminates Manual Errors giving**
    - o Accurate and reliable results
- **Generates Automatic Reports**
    - o Not requiring manual data feeding
- **Data Storage**
    - o Data for any vehicle available any time
    - o For analyzing rejected vehicles

Features

- Windows based user software
- Self calibration facility
- Data Storage
- PDA based Remote Control
- Password protected settings
- Clip on type Tong Tester for current measurement
- No need to break electrical circuit for testing
- Programmable number of tests per vehicle
- Programmable number of Vehicle models
- Minimum, maximum, peak current and watt rating for each test programmable
- SPC report for a particular test based on model and period
- Export data in other database formats
- Operator levels programmable for security

Specifications

Instrument Unit

- Voltage Range : 30.00 Volts
- Resolution : 0.1 Volt
- Current Range : 50 A DC Tong Tester
- Resolution : 0.01 A
- Calibration Output : 12V
- For Current : 50 Amp
- Operating System : Windows 10 system

Tong

- Current Range : 50A
- Output : 100 mV / A

Remote Control

- PDA Motorola Hand held MC45

Wi-Fi Interface Unit

- Operating Frequency : 2.4 GHz
- Transmission Standard : 802.11 b/g/n
- Transmission distance : 15-meter line of site
- Serial Transmission : 110-921600 bps, TCP Client 5

System Components

VCTS 2020 System consists of a 19-inch industrial standard rack with

1. IBM / Equivalent PC
2. Keyboard
3. Mouse
4. UPS
5. Wi-Fi Unit
6. Calibration Unit
7. PDA
8. VCTS 2019 software
9. Monitor
10. Tong Tester with:
    i. Battery Clamps
    ii. Shielded Cable – 1 meter
    iii. Connector Assembly
11. Pen drive with VCTS Application

KVARTech

Installation of the System

System is to be located at

- A place convenient for the Operator
- Preferably near the conveyor

To START the system

i. Connect Mains cord of ECOS panel to 230V AC supply using

   appropriate connectors depending on connectors at site

   1. Ensure proper earthing

      o connectors are not loose

ii. Switch "ON" the

   a) UPS

   b) PC

   c) PDA

ECOS is now ready for operation.

PC is preloaded with VCTS software.

For Testing, refer to Software Manual provided separately along

with this manual.

Do's and Don'ts

Do's:

- Read and Follow manufacturer's instructions when operating ECOS
- Keep ECOS area clean and free of dust, water and grease
- Check wiring to make sure it's properly insulated
- Firmly push wires into the connector
- Ensure connections are installed correctly
- Connect Battery terminals as per proper polarity
- Disconnect ECOS if
   o its wiring sparks and have it repaired immediately
   o before any maintenance work
- Turn off ECOS when not in use

Don'ts:

- Use temporary wiring
- Touch anything electric with wet hands
- Let cords get twisted or tangled
- Lay wires / cables under rugs where they will become worn by foot traffic
- Push/press connectors provided with the ECOS forcefully into the socket
- Overload unit by plugging it above specified voltage limit of 230V AC supply only
- Attempt to operate your equipment beyond its rated capacity
- Use it for purposes other than what it has been designed for

KVARTech