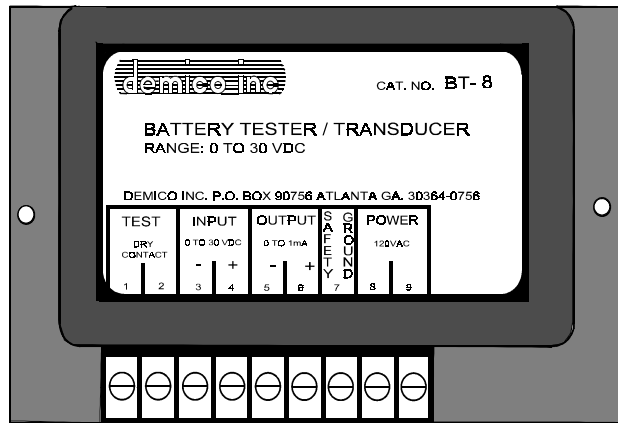


BATTERY TESTER / TRANSDUCER



- ◆ Monitors and Tests a 24 V NiCad Battery
- ◆ Range 0-30 VDC
- ◆ Operation Temperature, -30 to +70 C.
- ◆ Linear Full Range Output 0 to 1 mA
- ◆ Noise Free, Zero Ripple
- ◆ SCADA Compliance Burden 0-10K Ohms
- ◆ Surge Protected, ANSI Standard 37.90R
- ◆ Accuracy, + /- 1 % of Full Scale
- ◆ 10 Meg Ohm input Impedance
- ◆ Units identified by serial number
- ◆ Circuit Board Protected with Polyurethane
- ◆ Non-Metallic Housing
- ◆ Output Isolated From Input, No Grounds Introduced
- ◆ Labeled & Numbered Terminals
- ◆ Terminals are 8-32 Plated Screws and Wire Clamps
- ◆ 7 different power supplies available

INTRODUCTION

BASIC OPERATION

Demico Battery Tester Transducer (BT) series was designed to monitor the condition and voltage of 24 volt NiCad batteries.

24 volt NiCad batteries that are used on reclosers require a known load across the battery during the time of monitoring. NiCad batteries have a flat discharge voltage curve and maintain a constant voltage until it becomes almost discharged or has obtained a “memory”, which sometimes requires battery replacement. The battery must be tested to determine its condition and remaining capacity.

Some transducers will monitor the voltage continuously, but that measurement can be deceiving unless a known load is placed across the battery during testing.

When the test is initiated by a remote signal, a remote DPDT relay that is user installed, disconnects the battery charger and shorts the #1 and #2 terminals on the BT which places a 10 Ohm load on the battery for 1 second (timed internally). The large 10 ohm resistor is inside the transducer. The SCADA reading should be made while the known load is across the Battery. If the voltage drops 3 volts or more it indicates a need to check the battery charger or replace the battery.

