



Battery Charger Alarm Contact EXTERNAL FREE-WHEELING DIODE

(p/n EJ5128-00)

NOTICE

Free-wheeling diodes need to be added to an alarm circuit, whenever an application utilizes a connection in the **SCHEMATICS** depicted below. The kitted external *Free-Wheeling* diode (CR9) is added across the coil of the powered relay, with the cathode connected to the positive(+) voltage of the coil, and the anode connected to the negative(-) voltage. This limits voltage generated by an external dc relay coil. This small diode can be added directly to the dc coil.

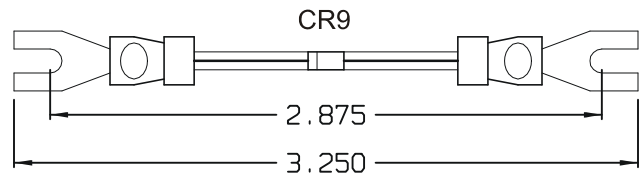
The "dry" form-C alarm contacts on ATevo, AT10.1, AT30, and SCR/SCRF series battery chargers are rated at 0.5A at 120Vac or 120Vdc. These contacts signal a "fault" in the respective battery charger alarm circuitry. They are often used to power an external lamp, audible alarm, or energize another larger relay coil. Although these remote loads may have very low power requirements, care needs to be taken to ensure proper operation.

If current flowing through the coil is not allowed to dissipate slowly, the inductance of the coil can cause large voltage spikes to appear across the switching element (e.g.: a larger relay or transistor conducting the switching function). This action is due to the magnetic field collapsing, once the coil is turned off. **CAUTION** In these instances, equipment damage *may* occur to the battery charger control circuitry, if the External Free-Wheeling Diode (p/n EJ5128-00) is not installed at the relay coil.

SPECIFICATIONS

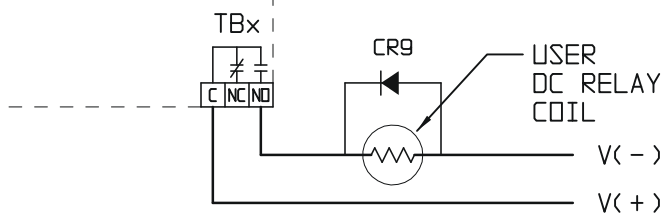
- 1) The Free-Wheeling diode (CR9) is rated for 1.0A at 400V.
- 2) The assembly lugs are insulated, accepting #22-16 AWG wire.

SAMPLE IMAGE



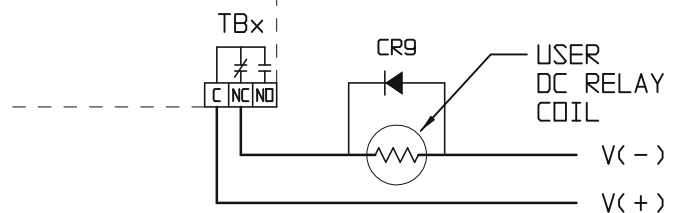
SCHEMATICS

BATTERY CHARGER
FORM-C
ALARM CONTACT



NORMALLY-OPEN CONNECTION

BATTERY CHARGER
FORM-C
ALARM CONTACT



**'FAILSAFE'
NORMALLY-CLOSED CONNECTION**