

**Government of India  
Ministry of Railways  
Research Designs & standards Organisation  
Manak Nagar, Lucknow 226011.**

No. EL/3.2.12/EC2

Dated : July, 1979

**MODIFICATION SHEET NO. RDSO/WAM4/84**

**PROVISION OF CURRENT LIMITING RESISTOR ON  
STATIC BATTERY CHARGER TYPE BCF7 OF M/S  
CONTROLS & DRIVES CORPORATION, COIMBATORE**

**1. Object of modification :**

1.1 Railways have reported a number of cases of failures of BCF7 chargers due to blowing of fuse, failure of diodes, current transformer and other components. Similar failures were reported on BCF-6 battery charger of the same make. Investigation indicated that these failures were mainly due to inrush of excessive current to the discharged batteries. To limit the excessive current, a current limiting resistor (RCL) was provided and the failures of the component were arrested. This modification is also proposed to be incorporated on BCF7 battery chargers.

**2. Work to be carried out :**

Mount the current limiting resistor (RCL) of resistance 0.6 to 0.7 ohm, 300W as shown in RDSO drawing No. SK. EL. 2813/B outside the battery charger on the side panel as indicated in RDSO drawing No. SK. EL. 3151 enclosed with modification sheet No. 83

**3. Application to class of locomotive :**

3.1 WAM4 and other electric locos with BCF7 battery charger provided.

**4. Material required :**

4.1 Vitreous enamelled wire wound resistor between 0.6 to 0.7 ohm, 300W as per IS: 3373 (Part-II) - 1967 as for BCF-6 chargers.

5. **Material rendered surplus** - N I L

6. **Reference** - N I L

**7. Modification Drawing :**

RDSO. SK. EL.. 2813/B  
RDSO. SK. EL.. 3151

**8. Agency for modification :**

Railways - All battery chargers type BCF-7 provided on electric locomotives.

9. **Distribution :**

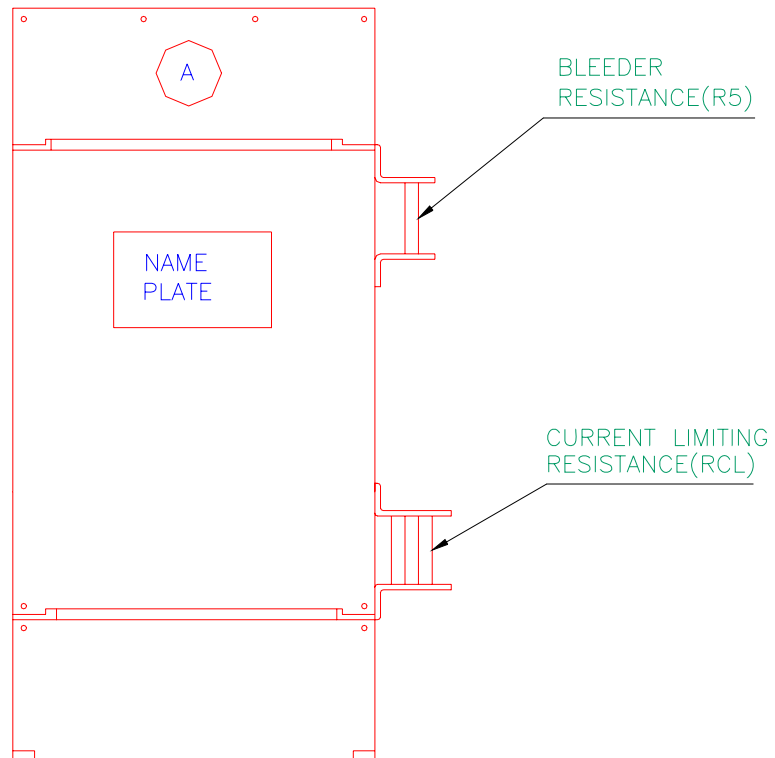
(As per list enclosed.)

Encls. 1. Mailing List  
2. Drg. SK. EL. 2813/B

*S. Kumar*

(S. Kumar)  
for Director General (Elect.)

SKEL-3151



REF:- MOD.NO.RDSO/WAM4/83&84

SCALE:-NTS

APPROVED:-FOR D.G.

MOUNTING OF R'5 & RCL RESISTORS  
OF BCF-7 BATTERY CHARGERS

RDSO ELEC. DTE

SKEL-3151

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