



DESIGN BULLETIN

Design Bulletin No. – DB/02/2013/04

Subject : Failure of Brake Valve Controllers in CCB-1.5 on HHP Locomotives.

Background : (1) Complaints received from Zonal Railways

References: (i) Sr.DME(D)/KGP's L.No. DLS/KGP/DLW/1451 dated 18 July 2013
(ii) Sr.DME/D/PA's L.No. PA/DM/03 dated 02.09.2013 & 31.08.2013
(iii) Sr.DME(D)/SGUJ's L.No. D/BG/GM Loco / Performance/Pt.III
dated 02 May 2013
(iv) SBI shed Ref. No. M.233/107/MIC dtd 29/05/2010

Objective : Failure investigation & recommendations for minimizing the cases of CCB-1.5 Brake Valve Controller related failure on HHP locomotives.

1. Introduction -

Zonal railways have been reporting of Brake Valve Controller failures in HHP locomotives fitted with CCB-1.5 brake system. Failure investigation in such cases has revealed that a sizeable number of such failures are being caused by ingress of liquid into the BVC body. While the crew needs to be educated to prevent spillage of water / tea over the BVC module located on the control console, the OEM M/s. Knorr Bremse has recommended fitment of a deflector plate in the BVC to protect the PCB inside the BCV module from ingress of moisture.

2. Modification Procedure:

The procedure to be adopted for modification of BVC module is specified as under:

