

Comments received by the manufacturers/supplier on the draft Specification No. RDSO/PE/SPEC/AC/0177 (Rev.02)-2013 for High Capacity Inter Vehicular Coupler Unit (500 Amps. Rating) For EOG Type AC Coaches/Power Cars/ Locos

**Manufacture: concord pvt ltd**

CLAUSE NO OF RDSO SPECIFICATION/S TR	CLAUSE, AS IT EXISTS RDSO SPECIFICATION/S TR	SUGGESTION In THE RDSO SPECIFICATION/STR	RDSO Remarks
4.1.1	The jumper Plug of IV Coupler for loco to Loco connection shall be with oblique entry of cables to avoid infringement of Jumper plug cable with hinged cover of Socket housing.	In reference to the provided drawing following details are required. 1. Jumper Assembly details and jumper housing dimensions. 2. Details and dimensions of insulating base to be fitted. 3. Conduction pin details. 4. Coupling socket dimension and details to be fitted with Jumper.	Modified drawing has been attached
4.1.2	The jumper plug for loco to loco connection shall be as per RDSO"s drawing no. RDSO/PE/SK/AC/0253- (Rev-0)-2024.		

**CESE/SR.**

<b>S. No.</b>	<b>Problem</b>	<b>Suggestions</b>	<b>RDSO Remarks</b>
1	<b>Breakage of adapter assembly.</b> The adapter assembly provided in the neck region of the IVC plug assembly used for the HOG connection frequently breaks down leading to water entry into the plug and conduit, causing short circuit at times. As the weight of the cable acts on the adapter, in the neck region of the plug, leading to its breakage. Also, since the adapter is straight, the IVC infringes on the power car body as shown in the image	As a corrective measure, it is suggested to provide oblique entry for HOG IVC also, similar to proposed loco to loco IVC	The specification has been revised only for loco to loco connection. Therefore no change in the specification for coaches and loco to coaches and power car to coaches.

	below.		
2	<b>Breakage of Socket/Dummy socket cover.</b> The socket assembly is made of die case aluminium grade 4600 conforming to 15:617. During the service of the coaches, the socket cover is damaged, breaks and falls off due to hitting of coach/shunting loco buffer in the yard	As a corrective measure, it is suggested to revise the material specification of socket and dummy socket to stainless steel similar to the loco socket (revised in Rev. 01 of the specification). This may prevent breakage of covers.	
3		Further suggestions:  a) It is also suggested to include an anti-fall arrangement for the IVC plug assembly so as to prevent it from falling from its position as a safety feature. In SR, a safety chain arrangement is being provided for the plug assembly, to hold the plug in its position, in case of improper locking of ratchet assembly or improper spring tension of the lock lever arm assembly. A copy of the Technical Circular 2024/01 dt. dt. 13.09.2024 is attached as an annexure to the letter. Incorporating the same in the specification will aid all the Railways to prevent, falling OFF of plug assembly  b) Similar to Vande Bharat design as shown below, an higher rated IVC may be designed for provision in LHB coaches for easy access of the maintenance staff during coupling/ decoupling and to avoid failures.	

**Sr.DEE/TKD: No Comments/Suggestions**

**Aryan Exporter: No comments/ suggestions**