East Central Railway

Signal & Telecommunication Department

TECHNICAL CIRCULAR NO.-21

Sub: Provision of RDSO approved fuses in different Signalling circuits.

1. Instruction already exists in SEM Part-II for provision of correct rating of fuses in different signaling circuits.
2. All signaling circuits shall be provided with the suitable capacity of fuses.
3. Suitable capacity of fuses can be measured at the time of commissioning.
4. Capacity of fuses should not be less than 2.5 times the rated current.
5. The standard rating of non-deteriorating type fuses used in different signaling circuits are as follows-

S.No.	Circuits	Capacity of fuse
1	Track Circuits	4 Amp
2	Relay circuits-internal & External	2 Amp
3	Signals located upto-800 M	2 Amp
4	Signals located beyond 800 M	1 Amp
5	High voltage point machine	
(a)	For one machine or two machines Working in series in crossover	10 Amp
(b)	Two machines working in parallel in a crossover point	16 Amp

6. When fuse is not provided with fuse blown of indication, additional indication circuit may be provided.
7. Fuses shall be of an approved type. Normally non-deteriorating type, 'G' type, alarm or cartridge type fuses shall be used.
8. At the time of commissioning of any signaling installation, the normal load current of every circuit shall be measured and recorded. These recorded values shall be checked with the theoretically obtained values. Fuse of correct capacity which should be not less than 2.5 times the rated current, shall be provided.
9. When there is case of fuse blowing off, the concerned circuit current shall be measured and compared with the original recorded value. If there is variation, action shall be taken to locate and remove the defect before a new fuse is inserted.

These issues with the approval of CSTE.

10/10/09

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