



रेल डिब्बा कारखाना, कपूरथला
Rail Coach Factory , Kapurthala

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ROLLING STOCK CERTIFICATE

Form No. : **QMF4254; Version: 05**

| | | | | | | |
|-----|-----------------------------------|---|---------------------------------------|----------|--|--------------|
| 1. | SHELL No: | 5048 | DISPATCH DATE: | | | 23.3.2016 |
| 2. | Rly: | NR | Type: | MEMU/TC2 | Coach No.: | 31331 |
| 3. | Booked to | SSE/C&W/GZB | | | | |
| 4. | Tare Weight of Coach : | 33.15 T | | | | |
| 5. | Carrying Capacity : | Seating: | 80 | Standing | 272 | Luggage: NIL |
| 6. | Shell Details: (SG-90004 alt 'b') | | | | | |
| | 6.1 | Leading Dimensions; | | | | |
| | i) | Maximum height above rail to top of Roof ventilator | | | 4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only) | |
| | ii) | Maximum length over Body | | | 21337 ± 10 | |
| | iii) | Maximum length over Buffer | | | 22297 ± 15 | |
| | iv) | Maximum width over Body | | | 3245 ± 5 | |
| | v) | Maximum width over Flasher light | | | 3402 +0/-5 | |
| | vi) | Minimum height above rail level to the lowest fitting | | | 181.5 mm (AE63143) | |
| | vii) | Buffer/CBC Height | Specified : 1104 +0 /-10 mm | | NA | NA |
| | vii) | Make : | NA | | | |
| | ix) | Shaku Coupler Height | Specified : 1035 +0 /-5 mm | | 1035/1035 | |
| | x) | Shaku Coupler Make: | SANROK | | | |
| 7. | Air Brake Testing: | | | | | |
| | | Description | | | Specified | |
| | 7.1 | Emergency Application | Time for 0 to 3.6 Kg/cm2 of BC | | Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type) | |
| | | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type) | |
| | 7.2 | Insensitivity | BP dipped @ 0.30 Kg/cm2 n 60 sec | | No brake application | |
| | 7.3 | Sensitivity | BP dipped @ 0.60 Kg/cm2 in 6 sec | | Brakes "ON" | |
| | 7.4 | Passenger alarm by pulling chain | | | BP Blasts out, Brakes "ON" | |
| | 7.5 | Piston stroke for BMBC type coach only | | | 19 +10/-0 mm (NAC) | |
| 8. | PAINTING DEATAILS: | | | | | |
| | | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | |
| | 8.1 | PAINT | PU PAINT | GS | 85/85 | |
| | 8.2 | APPLICATION OF PCN-123 | | | SATISFACTORY | |
| | 8.3 | INSUALTION | | | SATISFACTORY | |
| 9. | Traceability of Furnishing Items: | | | | Make | |
| | i. | BRAKE EQUIPMENT | | | ESCORTS | |
| | ii. | SEAT & BERTH | | | OVPL | |
| | II A | BIO TANKS | | | ORIENTAL | |
| | lii | PVC | | | RESPONSIVE | |
| | Iv | FLOOR BOARD | | | TAYAL | |
| | V | UIC VESTIBULE | | | KRP | |
| | Vi | LP SHEETS | | | PL | |
| | Vii | BODY SIDE WINDOW | | | ABC | |
| | Viii | EMERGENCY WINDOW | | | ABC | |
| | Xi | DOOR WINDOW | | | M | |
| | X | WATER TANK | | | RAIL FAB | |
| | Xi | LAV WINDOW | | | MECIDON | |
| | xii | LAV DOOR | | | TWPL | |
| 10. | 10.1 | Modification/ Trial (if any): | | | NIL | |
| | 10.2 | Deviations (if any): | | | NIL | |



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|------|--|---|-------------|-------------|---------------|-------------|---------------|-------------|---------------|
| 11. | Bogie Details: | Shell No. | Railway | | Type | | Coach No. | | Dispatch Date |
| | | 5048 | NR | | MEMU/TC | | 31331 | | 10-03-2016 |
| 11.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | |
| 11.2 | Wheel & Axle Details: | PP Side | | | | NPP Side | | | |
| | i. Bogie No. | 164023 | | | | 164024 | | | |
| | ii. Frame No. | ASR-234 | | | | ASR-236 | | | |
| | iii. Axle No. | A-4732 | | A-3543 | | V-1307 | | A-5021 | |
| | iv. Wheel Diameter | 952.50 | 952.00 | 953.00 | 953.00 | 952.00 | 952.00 | 953.00 | 953.00 |
| | v. Wheel Disc No. | 03914/10405 | 41217/08548 | 03938/10405 | 40524/08047 | 46952/4004K | 47003/4004K | 47020/4004K | 47049/4004K |
| | vi. R.B. Nos. | S0932 | S0941 | S0944 | S0953 | Q0427 | Q0428 | S0983 | S1036 |
| | vii. R.B. Make | FAG | | FAG | | FAG | | FAG | |
| | viii. R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | | |
| 11.3 | <u>Items Traceability:</u> | | | | PP SIDE | | NPP SIDE | | |
| | i. | BRAKE CYLINDER Make & NO. | | | PEW-3015,3058 | | PEW-3071,3103 | | |
| | ii. | SECONDARY Shock Absorber Make &NO. | | | K/B-5357,5371 | | K/B-5362,5435 | | |
| 11.4 | i. | Modification/ Trail (if any): | | | NIL | | | | |
| | ii. | Deviations (if any): | | | NIL | | | | |

MEMU/TC2—5048



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ROLLING STOCK CERTIFICATE

Form No. : **QMF4254; Version: 05**

| | | | | | | |
|-----|-----------------------------------|---|---------------------------------------|----------|--|--------------|
| 1. | SHELL No: | 5049 | DISPATCH DATE: | | | 23.3.2016 |
| 2. | Rly: | NR | Type: | MEMU/TC2 | Coach No.: | 31332 |
| 3. | Booked to | SSE/C&W/GZB | | | | |
| 4. | Tare Weight of Coach : | 33.15 T | | | | |
| 5. | Carrying Capacity : | Seating: | 80 | Standing | 272 | Luggage: NIL |
| 6. | Shell Details: (SG-90004 alt 'b') | | | | | |
| | 6.1 | Leading Dimensions; | | | | |
| | i) | Maximum height above rail to top of Roof ventilator | | | 4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only) | |
| | ii) | Maximum length over Body | | | 21337 ± 10 | |
| | iii) | Maximum length over Buffer | | | 22297 ± 15 | |
| | iv) | Maximum width over Body | | | 3245 ± 5 | |
| | v) | Maximum width over Flasher light | | | 3402 +0/-5 | |
| | vi) | Minimum height above rail level to the lowest fitting | | | 181.5 mm (AE63143) | |
| | vii) | Buffer/CBC Height | Specified : 1104 +0 /-10 mm | | NA | NA |
| | vii) | Make : | NA | | | |
| | ix) | Shaku Coupler Height | Specified : 1035 +0 /-5 mm | | 1035/1035 | |
| | x) | Shaku Coupler Make: | SANROK | | | |
| 7. | Air Brake Testing: | | | | | |
| | | Description | | | Specified | |
| | 7.1 | Emergency Application | Time for 0 to 3.6 Kg/cm2 of BC | | Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type) | |
| | | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type) | |
| | 7.2 | Insensitivity | BP dipped @ 0.30 Kg/cm2 n 60 sec | | No brake application | |
| | 7.3 | Sensitivity | BP dipped @ 0.60 Kg/cm2 in 6 sec | | Brakes "ON" | |
| | 7.4 | Passenger alarm by pulling chain | | | BP Blasts out, Brakes "ON" | |
| | 7.5 | Piston stroke for BMBC type coach only | | | 19 +10/-0 mm (NAC) | |
| 8. | PAINTING DEATAILS: | | | | | |
| | | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | |
| | 8.1 | PAINT | PU PAINT | GS | 85/85 | |
| | 8.2 | APPLICATION OF PCN-123 | | | SATISFACTORY | |
| | 8.3 | INSUALTION | | | SATISFACTORY | |
| 9. | Traceability of Furnishing Items: | | | | Make | |
| | i. | BRAKE EQUIPMENT | | | ESCORTS | |
| | ii. | SEAT & BERTH | | | OVPL | |
| | II A | BIO TANKS | | | ORIENTAL | |
| | lii | PVC | | | RESPONSIVE | |
| | Iv | FLOOR BOARD | | | TAYAL | |
| | V | UIC VESTIBULE | | | KRP | |
| | Vi | LP SHEETS | | | PL | |
| | Vii | BODY SIDE WINDOW | | | ABC | |
| | Viii | EMERGENCY WINDOW | | | GI | |
| | Xi | DOOR WINDOW | | | M | |
| | X | WATER TANK | | | RAIL FAB | |
| | Xi | LAV WINDOW | | | MECIDON | |
| | xii | LAV DOOR | | | RCF | |
| 10. | 10.1 | Modification/ Trial (if any): | | | NIL | |
| | 10.2 | Deviations (if any): | | | NIL | |



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| 11. | Bogie Details: | Shell No. | Railway | Type | Coach No. | Dispatch Date | | | |
| | | 5049 | NR | MEMU/TC | 31332 | 16-03-2016 | | | |
| 11.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | |
| 11.2 | Wheel & Axle Details: | PP Side | | | | NPP Side | | | |
| | i. Bogie No. | 164025 | | | | 164026 | | | |
| | ii. Frame No. | ASR-257 | | | | ASR-245 | | | |
| | iii. Axle No. | K-4936 | | A-4320 | | A-4112 | | Y-6564 | |
| | iv. Wheel Diameter | 953.00 | 953.00 | 952.00 | 952.00 | 953.00 | 953.00 | 952.00 | 952.00 |
| | v. Wheel Disc No. | 47042/ 4004K | 59198/ 08318 | 08536/ 14658 | 55233/ 08077 | 41156/ 08548 | 41161/ 4004K | 47032/ 4004K | 59266/08 318 |
| | vi. R.B. Nos. | S1083 | S1080 | S0829 | S0836 | S1076 | S1040 | S1043 | S1022 |
| | vii. R.B. Make | FAG | | FAG | | FAG | | FAG | |
| viii . R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | | | |
| 11.3 | <u>Items Traceability:</u> | | | | PP SIDE | | NPP SIDE | | |
| | i. | BRAKE CYLINDER Make & NO. | | | PEW-2315,2527 | | | PEW-2511,2337 | |
| | ii. | SECONDARY Shock Absorber Make &NO. | | | GAB-5428,5430 | | | GAB-5252,5249 | |
| 11.4 | i. | Modification/ Trail (if any): | | | NIL | | | | |
| | ii. | Deviations (if any): | | | NIL | | | | |

MEMU/TC2—5049



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ROLLING STOCK CERTIFICATE

Form No. : **QMF4254; Version: 05**

| | | | | | | |
|-----|-----------------------------------|---|---------------------------------------|----------|--|--------------|
| 1. | SHELL No: | 5050 | DISPATCH DATE: | | | 26.03.2016 |
| 2. | Rly: | NR | Type: | MEMU/TC2 | Coach No.: | 31333 |
| 3. | Booked to | SSE/C&W/GZB | | | | |
| 4. | Tare Weight of Coach : | 33.15 T | | | | |
| 5. | Carrying Capacity : | Seating: | 80 | Standing | 272 | Luggage: NIL |
| 6. | Shell Details: (SG-90004 alt 'b') | | | | | |
| | 6.1 | Leading Dimensions; | | | | |
| | i) | Maximum height above rail to top of Roof ventilator | | | 4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN only) | |
| | ii) | Maximum length over Body | | | 21337 ± 10 | |
| | iii) | Maximum length over Buffer | | | 22297 ± 15 | |
| | iv) | Maximum width over Body | | | 3245 ± 5 | |
| | v) | Maximum width over Flasher light | | | 3402 +0/-5 | |
| | vi) | Minimum height above rail level to the lowest fitting | | | 181.5 mm (AE63143) | |
| | vii) | Buffer/CBC Height | Specified : 1104 +0 /-10 mm | | NA | NA |
| | vii) | Make : | NA | | | |
| | ix) | Shaku Coupler Height | Specified : 1035 +0 /-5 mm | | 1035/1030 | |
| | x) | Shaku Coupler Make: | SANROCK | | | |
| 7. | Air Brake Testing: | | | | | |
| | | Description | | | Specified | |
| | 7.1 | Emergency Application | Time for 0 to 3.6 Kg/cm2 of BC | | Less than 05 Sec (for BMBC type) 3 to 5 Sec (for Non BMBC type) | |
| | | | Brake release time to reach .4 Kg/cm2 | | Less than 20 Sec (for BMBC type) 15 to 20 Sec (for Non BMBC type) | |
| | 7.2 | Insensitivity | BP dipped @ 0.30 Kg/cm2 n 60 sec | | No brake application | |
| | 7.3 | Sensitivity | BP dipped @ 0.60 Kg/cm2 in 6 sec | | Brakes "ON" | |
| | 7.4 | Passenger alarm by pulling chain | | | BP Blasts out, Brakes "ON" | |
| | 7.5 | Piston stroke for BMBC type coach only | | | 19 +10/-0 mm (NAC) | |
| 8. | PAINTING DEATAILS: | | | | | |
| | | | TYPE OF PAINT | MAKE | AVERAGE GLOSS VALUE | |
| | 8.1 | PAINT | PU PAINT | GS | 85 | |
| | 8.2 | APPLICATION OF PCN-123 | | | SATISFACTORY | |
| | 8.3 | INSUALTION | | | SATISFACTORY | |
| 9. | Traceability of Furnishing Items: | | | | Make | |
| | i. | BRAKE EQUIPMENT | | | ESCORTS | |
| | ii | Bio tank | | | ORIENTAL | |
| | ii. | SEAT & BERTH | | | OVPL | |
| | iii | PVC | | | RESPONSIVE | |
| | iv | FLOOR BOARD | | | TAYAL | |
| | v | UIC VESTIBULE | | | KRP | |
| | vi | LP SHEETS | | | PL | |
| | Vii | BODY SIDE WINDOW | | | ABC | |
| | Viii | EMERGENCY WINDOW | | | GI | |
| | Xi | DOOR WINDOW | | | MECIDON | |
| | X | WATER TANK | | | RUBICON | |
| | Xi | LAV WINDOW | | | MECIDON | |
| | xii | LAV DOOR | | | TWPL | |
| 10. | 10.1 | Modification/ Trial (if any): | | | NIL | |
| | 10.2 | Deviations (if any): | | | NIL | |



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|------|---|---|---|-------------|------------------|----------------------|-----------------|-----------------|-----------------|
| 11. | Bogie Details: | Shell No. | Railway | Type | Coach No. | Dispatch Date | | | |
| | | 5050 | NR | MEMU/TC | 31333 | 16-03-2016 | | | |
| 11.1 | BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt 'a' | | | | | | | | |
| 11.2 | Wheel & Axle Details: | PP Side | | | | NPP Side | | | |
| | i. Bogie No. | 164027 | | | | 164028 | | | |
| | ii. Frame No. | ASR-250 | | | | ASR-241 | | | |
| | iii. Axle No. | J-8910 | | A-3838 | | A-4375 | | A-4766 | |
| | iv. Wheel Diameter | 952.00 | 952.50 | 952.00 | 952.00 | 953.00 | 953.00 | 952.00 | 952.00 |
| | v. Wheel Disc No. | 08433/ 14491 | 55234/ 08077 | NIL | 59193/ 08318 | 41219/ 08548 | 40526/ 08047 | 65873/ 10405 | 55250/08 077 |
| | vi. R.B. Nos. | S0839 | S0831 | S0540 | S1444 | Q0582 | Q0559 | S0828 | S0833 |
| | vii. R.B. Make | FAG | | FAG | | FAG | | FAG | |
| | viii . | R.B. Type | Direct Mounted Spherical Roller Bearing | | | | | | |
| 11.3 | Items Traceability: | | | | PP SIDE | | NPP SIDE | | |
| | i. | BRAKE CYLINDER Make & NO. | | | PEW-3018,2891 | | PEW-3080,3046 | | |
| | ii. | SECONDARY Shock Absorber Make &NO. | | | GAB-5199,5361 | | GAB-5203,5450 | | |
| 11.4 | i. | Modification/ Trail (if any): | | | NIL | | | | |
| | ii. | Deviations (if any): | | | NIL | | | | |

MEMU/TC2—5050