



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE: 16.05.2016

ROLLING STOCK CERTIFICATERolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/ 632
(DEEN DAYALU)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|------|---|---|---|---|---|------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coach No. | | 1 | 7 | 4 | 3 | 9 | / | C | - | DATE OF DISPATCH | | | | 1 | 2 | - | 0 | 3 | - | 1 | 8 | | | |
| RLY | S | W | R | Type | L | W | S | - | - | - | Shell No. | 7 | 6 | 0 | 7 | 9 | - | 2 | 0 | 1 | 7 | - | 1 | 8 |

- Railway Board's Order No. : 2016/M(C)/142/2, Dated 01.01.2017
- Tare Weight of Coach : 40.66 Tonnes
- Carrying Capacity : (a) Seating: 100 (b) Luggage: NIL

4. SHELL LEADING DIMENSIONS:

| S NO | DESCRIPTION | DIMENSION (MM) |
|------|--|----------------------------|
| 1. | Maximum length over body | 23700 |
| 2. | Maximum width over body | 3240 |
| 3. | Maximum height from Rail Level | 4039 |
| 4. | CBC height/Buffer height from Rail level 1105 +0/-10 | 1)1104 (NPPE) 2)1103 (PPE) |

5. TRACEABILITY OF SHELL ITEMS:

| S NO | ITEM | | MAKE/SUPPLIER | SERIAL NO | | | |
|------|-----------------------|------------|---------------------------------------|-----------|-------|---------|-------|
| 1. | Underframe | Front Part | M/S Omax auto gurgaon HR | PP END | 03 | NPP END | 03 |
| | | Complete | M/S Omax auto gurgaon HR | | | | |
| 2. | Side wall | | M/s-MCF/RBL | RH | 76079 | LH | 76079 |
| 3. | End wall | PP | M/s KEPL/Punchkula | PP END | 76079 | NPP END | 76079 |
| 4. | | NPP | M/s KEPL/Punchkula | | | | |
| 5. | Roof | | M/S MCF/ RBL | | | | |
| 6. | Centre Buffer Coupler | | M/S Escorts ltd railway equipment FBD | PP END | 2023 | NPP END | 2065 |
| 7. | Buffers | | N.A. | | | | |

6. AIRBRAKE TEST REPORT:

| S NO | ITEM | DESCRIPTION | SPEC. VALUE | OBSERVED |
|------|------------------------|--|---|---------------------------------------|
| 1. | Full brake application | <ul style="list-style-type: none"> Reduce pressure of BP from 5.0 to 3.4 kg/cm². Max. pressure in BC All Brake are applied | 6 – 10 sec. 3.0 ±0.15 kg/cm ² . OK | 8sec. 3.0 kg/cm ² OK |
| 2. | Insensitivity | Exhaust BP @ 0.3 kg/cm ² /min. | No brake application | OK |
| 3. | Sensitivity | Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec. | Brake must apply | OK |

7. PAINTING DETAILS:

| S NO | DESCRIPTION | TYPE OF PAINT | MAKE | APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY) | AVERAGE GLOSS VALUE |
|------|-------------|---------------|--------|--|---------------------|
| 1. | Paint | P.U | M/S GS | SUPPLY & APPLY | 78/91 |
| 2. | Insulation | | | Satisfactory | |

[Signature]
SSE/QC/MCF/RBL

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रेडिओकार, रायबरेली (लालगंज)



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DOC NO.: MCF/RBL/QMF 8002

REV NO.: 00

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2017-18/632
(DEEN DAYALU)

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|---|---|---|------|---|---|---|---|---|------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Coach No. | | 1 | 7 | 4 | 3 | 9 | / | C | - | DATE OF DISPATCH | | | | 1 | 2 | - | 0 | 3 | - | 1 | 8 | | | |
| RLY | S | W | R | Type | L | W | S | - | - | - | Shell No. | 7 | 6 | 0 | 7 | 9 | - | 2 | 0 | 1 | 7 | - | 1 | 8 |

8. DETAIL OF BOGIES:


| ITEMS | NPP Side | | | | PP Side | | | |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Bogie No | 170284 | | | | 170283 | | | |
| Bogie Type | FIAT | | | | FIAT | | | |
| Frame no. | SCI/FM-1350 | | | | SCI/FM-1506 | | | |
| Bolster no. | MCF/RBL-0150 | | | | MCF/RBL-0122 | | | |
| Axle No | 17A-8152 | | 17A-8884 | | 17B-9652 | | 17B-9492 | |
| Wheel Dia | 917.538 | 917.517 | 917.550 | 917.519 | 917.516 | 917.545 | 917.493 | 917.524 |
| Wheel Disc No | TZ05-17 15761-70Q2 | TZ05-17 15760-70Q2 | TZ05-17 15741-70N2 | TZ05-17 17934-7PK5 | TZ05-17 11143-7QL9 | TZ05-17 19434-70K8 | TZ05-17 15763-70Q2 | TZ05-17 15762-70Q2 |
| R.B. Nos. | 06-17 77936 | 06-17 78414 | 06-17 77931 | 06-17 16263 | 06-17 78285 | 06-17 16258 | 06-17 78777 | 05-17 58839 |
| CT R B Make | SKF | | SKF | | SKF | | SKF | |

9. SECONDARY SUSPENSION

| DESCRIPTION | Bogie NPP side | | Bogie PP side | |
|-------------|-----------------|------------------|------------------|------------------|
| | Secondary 1 | Secondary 2 | Secondary 1 | Secondary 2 |
| Make & Nos. | ACPL05-17- 3386 | ACPL 05-17- 3400 | ACPL 10-17- 3651 | ACPL 10-17- 3646 |

10. TRACEABILITY OF BOGIE ITEMS:

| S. NO | ITEM | MAKE/ SUPPLIER | SERIAL NO. | |
|-------|----------------------------|-------------------|---|---|
| | | | NPP SIDE | PP SIDE |
| 1. | YAW Damper | SV | 653,129 | 626,655 |
| 2. | Primary outer Spring | CMFSK | 08-17-1100-308(370,121,375,52) | 08-17-1100-308(355,240,191,284) |
| 3. | Primary Inner Spring | CMFSK | 03-17-1101-306(167,184,179,180) | 03-17-1101-306(125,164,169,12) |
| 4. | Primary Damper | GABRIEL | 09-17 (8415,8616,8614,8418) | 09-17 (8414,8417,8416,8413) |
| 5. | Secondary Damper | GABRIEL | 08-17-1897,06-17-1151 | 08-17-1898,06-17-1153 |
| 6. | Lateral Damper | GEREP | KW 17-2017 301550559 | KW 17-2017 301550559 |
| 7. | Brake Cylinder | FAV | A18-452, A18-264, A18-379, A18-453, | A17-489, B18-031, B18-019, A18-490, |
| 8. | Brake Caliper | FAV | B18153B, B18151B, B18152B, B18154B, | B18353B, B18351B, B18352B, B18354B, |
| 9. | Brake Disc | FAV | 02-18-1076-D133561-300, 02-18-1075-D133561-300, 02-18-1137-D133561-300, 02-18-1177-D133561-300, | 02-18-997-D133561-300, 02-18-995-D133561-300, 02-18-1176-D133561-300, 02-18-1175-D133561-300, |
| 10. | Ball Joint Control Arm | MTC | | |
| 11. | Lateral Bump Stop | PRAG | | |
| 12. | Traction Centre make | SARITA | | |
| 13. | Traction lever make | JI 01-17 | | |
| 14. | Ball joint traction lever | MTC | | |
| 15. | Ball joint traction centre | MTC | | |
| 16. | Leveling Valve | ESCORT | 2017,1801 | 2017,2017 |
| 17. | Check Valve | ESCORT | 1801 | 1801 |
| 18. | Anti roll bar make | SARITA | | |
| 19. | Roll Link make | SARITA/BONY | | |
| 20. | Fork make | SARITA | | |


Signature of SSE/Bogie/QC



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| Coach No. | 1 | 7 | 4 | 3 | 9 | / | C | - | DATE OF DISPATCH | 1 | 2 | - | 0 | 3 | - | 1 | 8 |
|-----------|---|---|---|---|---|---|---|---|------------------|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|---|---|------|---|---|---|---|---|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RLY | S | W | R | Type | L | W | S | - | - | - | Shell No. | 7 | 6 | 0 | 7 | 9 | - | 2 | 0 | 1 | 7 | - | 1 | 8 |
|-----|---|---|---|------|---|---|---|---|---|---|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|

11. TRACEABILITY OF FURNISHING ITEMS:

| S NO | ITEM | MAKE/SUPPLIER | SERIAL NO |
|------|-----------------------------------|--|---------------------------------|
| 1. | Air Brake Module | M/s Faively transport tech.india ltd baddi(HP) | M17087B |
| 2. | Distribution valve | M/s Faively transport tech.india ltd baddi(HP) | 17115561B |
| 3. | Pull box | M/s Faively transport tech.india ltd baddi(HP) | |
| 4. | FIBA | M/s KBI Faridabad. New Delhi | PP END 896/29 NPP END 880/29 |
| 5. | Foot Step | M/s Super spark pvt.ltd.faridabad | |
| 6. | D-coupling arrangement | M/s Kohinoor Industries Faridabad | |
| 7. | Floor board | M/s A.K. ENT. KOLKATA | |
| 8. | PVC | M/s Premier polyfilm, New Delhi | |
| 9. | Lavatory Inlay | N/A | |
| 10. | UIC Vestibule (PPE) | M/s Cemcon ind.DLI | |
| 11. | UIC Vestibule (NPPE) | M/s Cemcon ind.DLI | |
| 12. | Gangway Bridge mounting(PPE) | M/s Mahaveer matel works Kapurthala | |
| 13. | Gangway Bridge mounting(NPPE) | M/s Mahaveer matel works Kapurthala | |
| 14. | Body Side Window | M/s Century poly ind.ltd. vadodara | |
| 15. | Emergency Window | M/s Century poly ind.ltd. vadodara | |
| 16. | Hopper Window | M/s shatabdi safety glass vadodara | |
| 17. | Roof ceiling | M/s Century poly ind.ltd. vadodara | |
| 18. | Door way gangway ceiling | M/s Century poly ind.ltd. vadodara | |
| 19. | Body Side Doors | M/s sukata CDG | |
| 20. | Vestibule door(PPE) | M/s KALSI LDH | |
| 21. | Vestibule door (NPPE) | M/s KALSI LDH | |
| 22. | Bio Tank | M/s Rasandik eng. ltd | |
| 23. | Overhead Water Tank(4X390L) | M/s Rubicon STEEL MOHALI | |
| 24. | Bib Cock/Controlled Discharge Tap | M/s KPR IND. MOHALI | |
| 25. | Lavatory Doors | M/s Century poly ind.ltd. vadodara | |
| 26. | Fire Extinguisher | M/s SAFTEY | NPP-2923,PP-2908 |
| 27. | Water purified | M/s Prag Polymer, Lucknow | NPP-2/089,PP-2/106 |
| 28. | Seat & Berth | M/s Century poly ind.ltd. vadodara | |
| 29. | Luggage Rack | M/s Century poly ind.ltd. vadodara | |
| 30. | Light Luggage Rack | M/s Century poly ind.ltd. vadodara | |

SSE/QC/MCF/RBL

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| Coach No. | | 1 | 7 | 4 | 3 | 9 | / | C | - | DATE OF DISPATCH | | | | 1 | 2 | - | 0 | 3 | - | 1 | 8 | | | | |
| RLY | S | W | R | Type | L | W | S | - | - | - | Shell No. | | 7 | 6 | 0 | 7 | 9 | - | 2 | 0 | 1 | 7 | - | 1 | 8 |

12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

| S NO | ITEM PARTICULARS | PURPOSE | REPORT Frequency | REFERENCE & PERIOD OF TRIAL |
|------|------------------|---------|------------------|-----------------------------|
| | | | | |

15. WARRANTY:

| S NO | COMPONENTS | WARRANTY |
|------|---|---|
| 1 | Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain Clutch wire etc. (items which are consumable in nature) | NIL |
| 2 | Other coach furnishing sub assemblies(bought out items) | 24 months from the date of dispatch of coach OR 30 months from the date of supply of material whichever is earlier. |

NOTE:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from date of Application for any manufacturing /Application as per clause -4,para- V of RDSO specification no .M&C/PCN/100/2013-Given below -

| S.No | Time period | Gloss Retention (initial gloss >85 unit at 60°) | Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10) | Adherence of paints (with each other and with substrate)Cross-cut tape adhesion test as per ASTM D:3359/97(or latest) |
|------|--------------|---|---|--|
| 1 | After 1 year | 80% of initial gloss | 7 | 5B |
| 2 | After 2 year | 70% of initial gloss | 6 | 5B |
| 3 | After 3 year | 60% of initial gloss | 5 | 4B |

If any imperfection is noticed or any defect arises during the warranty -period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

| | | |
|----------------|----------------|----------------|
| | | |
| SSE/QC/MCF/RBL | AME/QC/MCF/RBL | Dy.CQM/MCF/RBL |

रॉडिंक, रायबरेली (लालगंज)

सहायक यांत्रिक अभियंता / गुणवत्ता
Assistant Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE: 18.01.2017

FOR ELECTRICAL ITEMS**ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC DD COACHES**

PAGE 1 OF 3

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC GS COACHES

| SHELL/COACH NO | 17439/C | TYPE COACH | LWS DF |
|----------------|---------------------------------------|------------------|--------|
| RAILWAY | SWR | DATE OF DESPATCH | |
| Sr no | Description of test | Remarks | |
| 2. | LIGHTS, CHARGING SOCKETS | OK | |
| 3. | RAILWAY CARRIAGE FAN | OK | |
| 4. | WHEEL SLIDE PROTECTION SYSTEM (WSP) | OK | |
| 5. | WORKING OF 9 KVA TRANSFORMER | OK | |
| 6. | WORKING OF REGULATED BATTERY CHARGER | OK | |
| 7. | SAFETIES : | | |
| 7.1. | FUSES AND THEIR RATING | OK | |
| 7.2 | CONTROL CIRCUIT | OK | |
| 7.3 | POWER CIRCUIT | OK | |

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC DD COACHES

PAGE 2 OF 3

| | | | |
|-----|---|---|-----------|
| 01. | Switch board cabinet Make : AMIT On Board Sr no : AE/USBC-607 HT Panel Sr no : AE/USBC-610 | EDTS 333, Rev `01'Am-1 | 01 |
| 02 | Emergency light system for EOG type coaches (AEL), Make : MAAVE | EDTS 151, Rev -c Am-1 & 2 | 04 |
| 03. | Provision & Mounting of PACIL Assly. Make: DR AUTO | As per RDSO/PE/SPEC/TL/0091- 2016,REV-01, TYPE-I Drg no. LW 76098. | 02 |
| 04. | Fitment of Switch Plate Assly (Cabin Side) Make : SSK | EDML 127,Rev-1& DRG NO 4248ALT-a | 10 |
| 05. | Fitment of Switch Plate Assly (Corridor Side) Make : SSK | EDML 127,Rev-1 & DRG NO 4249 ALT-a | 10 |
| 06. | Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : LIGHT Engg. Corp. | IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I. | 30 |
| 07. | Provision of Cabin, Corridor, doorway and Gangway Lights. Make: RT VISION | As per RDSO/PE/SPEC/TL- 0091(REV-1) TYPE B-1 | 28 |
| 08. | Provision & Mounting of Lavatory Light Make: K LITE | As per RDSO/PE/SPEC/TL/0091- 2016,REV-01, TYPE-D & Drg no. LW 76092. | 04 |

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC DD COACHES

PAGE 3 OF 3

| | | | |
|-----|---|--|----------------|
| 09. | Battery fuse box +ve Make : AECO | LW 71001,Alt-F | 01 |
| 10 | Battery fuse box -ve Make : SSK | LW 71002,Alt-F | 01 |
| 11. | Regulated battery charger Make : AAL Sr no: BCH061710309 | As per RDSO/pe/spec/ac/0129, Rev.-1 (2009) | 01 |
| 12. | 9KVA transformer Make : PANTRONICS Sr no : PAN-17016640 | As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI. | 01 |
| 13. | ZS coupling 400A/750V/03Ph/50hz. Make : S.INTERNATIONAL | As per spec No EDTS 105,Rev`e' Am-3 TYPE-2 | 01 set |
| 14. | Feeder junction boxes. Make : ELECOS | EDTS-328 REV-C | 01 set |
| 15. | Wheel set earthling equipment. Make : DARSHAN | EDTS101,REV-C,AM-1 | 02 sets |
| 16. | Wheel Slide Protection System (WSP) Make : FAIVELEY Sr no : 46/17/1202 | M/s : FAIVELEY | 01 set |
| 17. | 110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : A RAJA Lug date : 01/18 | RDSO/pe/spec/ac-0009 rev- 1-2008 amdt-1 | 01 set |
| 18. | Battery box for LHB coaches. Make : HITECH | CC 91205 | 01 |

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|------------------------------|-----------------------|
| | |
| SSE/EL/QC | SEE(P)/MCF/RBL |
| DyCEE/P&P/MCF/RBL | |

वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
लोकप्रियता/लालगंज/रायबरेली
E/Elect-QC/M.C.F./LJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली, लखनऊ
Sr. Electrical Engineer / RCF / RBL / Lucknow