



Modern Coach Factory Raebareli

DOC NO.: MCF/RBL/QMF 8002

आधुनिक रेल डिब्बा कारखाना, रायबरेली

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No : MCF/RBL/QC/RSC/2020-21/528

RLY	NFR	COACH NO	204847/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G264	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1720

1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-01.05.2020
2. Tare Weight of Coach : 41.24 Tonnes
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18

5. 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	NPP / PP 1101/1097

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S MAHAVEER	
	Part	NPP END M/S OMAX AUTO	
	Complete	MCFRBL-V4U TECHIE	20G264
2	Lav. side wall	M/S MIDAS GUJRAT	LAV.1
		M/S MIDAS GUJRAT	LAV.2
			LAV.3
			LAV.4
3	Side wall	LH SIDE MCFRBL-CONT.AAA/RBL	8
		RH SIDE MCFRBL-CONT.AAA/RBL	8
4	End wall	PP END M/S-RAIL TECH KXH	
		NPP END M/S-RAIL TECH KXH	
5	Roof	MCFRBL-CONT	84
6	Centre Buffer Coupler	M/S FRONTIER	PP 277P2 NPP 242P2

7. AIR BRAKE TEST REPORT:

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .	6 - 10 sec.	9 sec
		Max. pressure in BC	3.0 ± 0.15 kg/cm ² .	3.0 kg/cm ²
		All Brake are applied	OK	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

8. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1	Paint	P.U	K.NEROLAC	M/S-K.NEROLAC (S&A)	88/87	31-Aug-20
2	Insulation			Satisfactory		

R. Sharma
01/12/2020
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लालमंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/528

RLY	N	F	R	Coach No.	2	0	4	8	4	7	/	C	-	DATE OF DISPATCH	2	2	0	9	2	0	2	0
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DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	2	0	G	2	6	4	FUR.NO	LSCN - 1720
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200661				200662			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-898				ECBT-891			
Bolster no.	MCF/RBL/LS5 - 2298				MCF/RBL/LS5 - 1368			
Axle No	20 Z- 1371 RWF	20 Z - 0630 RWF			20 Y- 3789 RWF	20 W- 9449 RWF		
Wheel Dia	917.433	917.444	917.39	917.55	917.37152	917.415	917.82	917.705
Wheel Disc No	TZ 05-19 42155-9PJ0	TZ 07-19 40056-8RL3	TZ 12-19 89133-9WK0	TZ 11-19 83447-9VE5	DP19-697 60717	DP19-697 60806	DP19-268 34506	DP19-268 23543
R.B. Nos.	11-19 33066	12-19 35191	11-19 32693	12-19 34616	11-19 32253	11-19 33361	12-19 34506	11-19 33256
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	RESISTROFLEX Sr NO- 05-20 14084	RESISTROFLEX Sr. NO- 05-20 14249	RESISTROFLEX Sr. NO- 02-20 13634	RESISTROFLEX Sr. NO- 02-20 13832

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294865,294654	295015,294827
2.	Primary outer Spring	CMFSK	11-19 1100-115-(772,114,1139,1117)	11-19 1100-115-(1134,1180,1291,1152)
3.	Primary Inner Spring	CMFSK	10-19 1101-101-(494,565,575,574)	10-19 1101-101-(596,540,552,568)
4.	Primary Damper	IAI	12-19 (288676,289276,290671,290855)	12-19 (290999,291005,289023,288649)
5.	Secondary Damper	IAI	06-20 (326820,326857)	06-20(326059,326981)
6.	Lateral Damper	IAI	01-20 297857	01-20 297656
7.	Brake Cylinder	FAV	G20(751,357,091,014)	G20(357,888,883,441)
8.	Brake Caliper	FAV	G20-(386,384,392,394)-B	G20-(1483,1481,1482,1484)-B
9.	Brake Disc	KBI	24229059 0039-28/20,24229060 0049-29/20 24229060 0013-29/20,24226797 0022-27/20	24226786 0008-01/02,24226785 0020-01/02 24226784 0014-26/20,24226788 0063-26/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RF		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	06-20,06-20	06-20,06-20
17.	Check Valve	ESCORT	06-20	06-20
18.	Anti roll bar Make	RF		
19.	Roll Link make	RF/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	CC	20C59,20A578,SF-118,KUMAR-D872	20B168,20B345,KUMAR-N1242,N158
22.	Control Arm Lower	CC	20B337,20B581,20B618,SF-255	20B419,SF-810,168,KUMAR-D849
23.	Phonic Wheel	KBI	K 12-19	K 12-19

Signature of SSE/Bogie/QC



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				FUR.NO.	LSCN-1720

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-FAIVELEY	H20 004B
2	Distribution valve	M/s-FAIVELEY	2007 5748B
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	9319/29,9320/29
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS DELHI	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-KRP PUNE	
12	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-BIKRAN GZB	
15	Emergency Window	M/S-SHATABDI VADODARA	
16	Lavatory/hopper Window	M/S-BET INDS PUNJAB	
17	Side panel	M/S-HF VADODARA	
18	Roof Ceiling	M/S-A.B COMPOSITE	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 1,3	M/s-SUKATA INDS HARIYANA	
	Body Side Doors 2,4	M/s-JBM FARIDABAD	
21	Vestibule Door(PPE)	M/s-JBM FARIDABAD	
22	Vestibule Door(NPPE)	M/s-JBM FARIDABAD	
23	Bio Tank	M/s-RAIL FAB KXH	
24	Presurized Flushing(Elect.pneumatic)	M/S-SPAC	
25	Auxiliary Water Tank	M/s-AMIT ENG. MOHALI	
26	Under Slung Water Tank (2X685L)	M/s-SHIVALIK FAST MOHALI	
27	Under Slung Water Tank (1x685 L)	M/s-AMIT ENG. MOHALI	
28	Health Faucet	M/s- KAPCO VALVES JUC	
29	Lotah Filler Tap	M/s- KAPCO VALVES JUC	
30	Controlled discharge tap	M/s-AGMECO PVT LTD	
31	Lavatory Doors	M/S-MSL MOHALI	
32	Seat & Berth	M/S-ADVANCE SILICON PALWAL (SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	

Seema
02/12/2020

SSE/QC/MCF/RBL

वरि०अनु० अभियंता

गुणवत्ता विभाग

रे०डि०का०, रायबरेली (ता.रायबरेली)



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Type	LWSCN1	Shell No.	20G264	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1720

13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

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

16. 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 30months from the date of supply of material whichever is earlier.

NOTE:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfbl@gmail.com
6. Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from

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.

 01/12/2020 SSE/QC/MCF/RBL	 3-12-2020 SME/AME/QC/MCF/RBL	 21/12 Dy.CQM/MCF/RBL
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गुणवत्ता विभाग
रे०डि०का०, रायबरेली (तालगंज)

किरणपाल
सहायक यांत्रिक इंजीनियर
Asst. Mechanical Engineer
आ. रे. डि. का. रायबरेली
MCF, RBL

सधीर कुमार
उप मुख्य गुणवत्ता अधिकारी
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.						
TYPE COACH	LWSCN		SHELL/COACH NO		204847/C	
RAILWAY	NFR	ELECT. FIT DATE	18-09-2020	MCF EUR. NO.	LSCN-1720	
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, NL,LAP CHARGING SOCKETS					OK
3.	WORKING OF ACCIDENTAL, EMERGENCY LIGHTS.					OK
4.	RAILWAY CARRIAGE FAN					OK
5.	WHEEL SLIDE PROTECTION SYSTEM (WSP)					OK
6.	WORKING OF 9 KVA TRANSFORMER					OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.					OK
8.	SAFETY :					----
8.1.	FUSES AND THEIR RATING					OK
8.2.	CONTROL CIRCUIT					OK
8.3.	POWER CIRCUIT					OK

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli

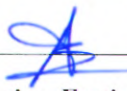


	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: MREM On Board: MREM 355410 HT Panel: MREM 355441	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: VIMAL Sr no.: VTC 3089 LHB-2448	RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	01
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001,Alt -B.	OK
04.	Provision of Pump equipment with pump box. Make: DR AUTO Sr no : 20/08/0019 Pump 1: 3735 Pump 2: 3664	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 20/08/088	As per Spec. EDTS186 Rev-a Am-2, & drg no. CC71328 & LW70020	01
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: WAVES Sr. no.: W4K5I 201902	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : AECO	EDTS-328 REV-C,AM-4,Type- II,COR-2	01 SET
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
09.	Battery fuse box +ve Make : RICHMOND	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : RICHMOND	As per LW 71002,Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: HITECH	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	01
12.	Provision of batteries Type: 110 V, 120 AH VRLA SMF Battery Set. Make: AMARA RAJA Lug Date: 06/20	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET


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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: ELECTROWAVES	As per Drg. No. ICF/SK-7-6-158,alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1,am-1.	30
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: FIEM	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1 .Type-B1.Drg. No. CC76453.	26
15.	Fitment of LED Light fittings for Night Light with berth indication Type-E (1 watt). Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1, ICF/STB-7-6-053.Type- E. Drg. No. CC76461	10
16.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
17.	Fitment of LED Light fittings for PACIL. Make: KAVERI	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
18.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
19.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
20.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
21.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10
22.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
23.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-5, Am-1, Table-1, Item-3.	20
24.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3 ph, 50 Hz). Make:- 1.(NPP): PRIME ELECT. 2.(PP): PRIME ELECT.	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	01 SET
25.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
26.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : FAIVELEY Sr no : 12459	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

	
SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

स० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL

