

		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/2020-21/530							
RLY	NFR	COACH NO	204849/C			DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G200	DISPATCH TO	SSE/C&W/KIR	FUR.NO.	LSCN-1730
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	1102/1104
6. TRACEABILITY OF SHELL ITEMS:							
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO				
1	Under frame	Front	PP END	M/S-OMAX AUTO	414		
		Part	NPP END	M/S-AMIT	013		
		Complete	MCFRBL-TECHIE	20G200			
2	Lav. side wall	M/S-INDIRA CHENNAI	LAV.1		LAV.2		
		M/S-INDIRA CHENNAI	LAV.4		LAV.3		
3	Side wall	LH SIDE		MCFRBL-CONT-AAA	11		
		RH SIDE		MCFRBL-CONT-AAA	11		
4	End wall	PP END		M/S-OMAX REWARI			
		NPP END		M/S-OMAX REWARI			
5	Roof	MCFRBL-CONT.	88				
6	Centre Buffer Coupler	M/S-FRONTIER	PP	209P2	NPP	108P2	
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.	8 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	MAKE	APPLICATION BY MCF/ CONTRACTOR	AVERAGE	DATE OF	
		OF PAINT		(SUPPLY & APPLY)	GLOSS VALUE	COMPLETION	
1	Paint	P.U	NEROLAC	M/S-K.NEROLAC (S&A)	90/89	2-Sep-20	
2	Insulation	Satisfactory					


 SSE/QC/MCF/RBL

वरिष्ठ अभियंता
 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/2020-21/530

RLY	N	F	R	Coach No.	2	0	4	8	4	9	/	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	0	0	FUR NO	LSCN - 1730
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200070				200069			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT - 582				ECBT - 750			
Bolster no.	AMIT - 340				AMIT - 509			
Axle No	20 Y - 7994 RWF		20 Y - 8192 RWF		20 W - 8559 RWF		20 W - 8340 RWF	
Wheel Dia	917.63	917.65	917.62	917.64	917.67	917.74	917.72	917.66
Wheel Disc No	TZ 12-19 90262-9WL9	TZ 12-19 93223-9WJ8	TZ 11-19 83298-9VE9	TZ 11-19 83270-9WE1	TZ 06-19 59344-9QK4	TZ 11-19 81891-9WL0	TZ 11-19 84534-9VD1	TZ 11-19 86115-9WK4
R.B. Nos.	12-19 38959	11-19 34131	11-19 34013	11-19 34134	12-19 39621	12-19 39170	12-19 39249	12-19 45228
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.	RESISTOFLEX Sr. NO- 03-20 14166	RESISTOFLEX Sr. NO- 03-20 14246	RESISTOFLEX Sr. NO- 05-20 13984	RESISTOFLEX Sr. NO- 05-20 14191

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294911,294784	294782,293856
2.	Primary outer Spring	CMAFI	06-20 1100-(391,389,390,383)	02-20 1100-(448,462,445,444)
3.	Primary Inner Spring	CMAFI	06-20 1101-(432,439,441,467)	01-20 1101-(146,181,182,165)
4.	Primary Damper	GABRIEL/IAI	01-20 (13809,13819,13812,13822)	01-20 (299858,298616,298843,300627)
5.	Secondary Damper	IAI	01-20 (296053,296154)	01-20 (302055,302065)
6.	Lateral Damper	G.B.	05-20 01837	05-20 01801
7.	Brake Cylinder	KBI	C(8289,6981,6980,8296)-K-29	C(9525,8118,8110,9503)-K-29
8.	Brake Caliper	KBI	C(4245,4339,4336,4241)-29	C(5102,5262,5265,5101)-29
9.	Brake Disc	KBI	24226796-0034-27-20, 24226796-0035-27-20, 24226797-0037-27-20, 24226797-0034-27-20	24229053-0063-28-20, 24229053-0064-28-20, 24229053-0061-28-20, 24229053-0062-28-20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	23-20-C5631,23-20-C5508	23-20-C5437,23-20-C5537
17.	Check Valve	KNORR	03-20 24639	03-20 24712
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA +GMT		
20.	Fork make	RF/RNG		
21.	Control Arm Upper	KUMAR	D-2203,D-9900,D-2202,D-2200	D-3483,D3489,D-3417,D-2744
22.	Control Arm Lower	KUMAR	D-2598,D-9807,D-2503,D-9288	D-3457,D-3465,D-3489,D-9982
23.	Phonic Wheel	KBI	K-06-20	K-06-20

Signature of SSE/Bogie/QC



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REV NO: 01
DATE: 17.04.2018

ROLLING STOCK CERTIFICATE
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/530

RLY	NFR	COACH NO	204849/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G200	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1730

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	5860 27/20
2	Distribution valve	M/s-KBI	2020G11840
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	9150/29,9152/29
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-KRP PUNE	
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-SAWALIKA INDS KOLKATA	
15	Emergency Window	M/S-SHATABDI INDS 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 2,4	M/s- JVR LDH	
	Body Side Doors 1,3	M/s- SUKATA HARIYANA	
21	Vestibule Door(PPE)	M/s- JBM FARIDABAD	
22	Vestibule Door(NPPE)	M/s- JBM FARIDABAD	
23	Bio Tank	M/s-OMAX AUTO	
24	Presurized Flushing(Elect.pneumatic)	M/S-SPAC	
25	Auxiliary Water Tank	M/s-AMIT ENGG.MOHALI	
26	Under Slung Water Tank (2X685L)	M/s-SHIVALIK FAST MOHALI	
27	Under Slung Water Tank (1x685 L)	M/s-AMIT ENGG.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 INDS MOHALI	
32	Seat & Berth	M/S-ADVANCE SILICON PALWAL	
33	Ventury grill	NIL	
34	RFID	NIL	

Seema
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालमज)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
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ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/530

RLY	NFR	COACH NO	204849/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G200	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1730

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.

SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वारे 0 अनु 0 अभियंता
गुणवत्ता विभाग
रे 0 डि 0 का 0, रायबरेली (लाजपतजी)

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



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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DATE: 29.06.2020

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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		204849/C	
RAILWAY	NFR	ELECT. FIT DATE	19-09-2020	MCF EUR. NO.	LSCN-1730	
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





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DOC NO.: MCF/RBL/QEF/8001

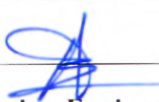
REV NO: 01

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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.: NEC On Board: 2020065599 HT Panel: 2020076483	EDTS 355, Rev`01`.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN 20018874	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 : 2019/09/002 Pump 1: 19090192 Pump 2: 19090197	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 2019/06/0470	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 201918	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: RT VISION	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): MAA LAXMI INDUSTRIES 2.(PP): MAA LAXMI INDUSTRIES	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 : KNORR Sr no : 0119392882	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL



मोबा / रायबरेली