



Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 02
DATE: 28-05-2021

ROLLING STOCK CERTIFICATE (NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RS/2021-2022 /06

RLY	WR	COACH NO	216071/C	DATE OF DISPATCH		1-Apr-21
Type	LWSCN1	Shell No.	20G428	DISPATCH TO	Sr.DME/C&W/MMCT	FUR.NO. LSCNG-513
1	Railway Board's Order No. : 2020/M (C)/142/2, Dt- 27.01.2021					
2	Tare Weight & Carrying Capacity of Coach :					
S.N	COACH TYPE	LWSCN1	LWS	LWSCZ	LDSL	LSLRD
i	Tare Weight	41.24	40.66	40.5	38.19	38.19
ii	Seating	80	100	102	36	37
iii	Sleeping	80	NIL	NIL	2	4
iv	Luggage	NIL	NIL	NIL	4	4
3	Special feature:					
S.N	DESCRIPTION				MAKE/SUPPLIER	
i	Epoxy flooring in lavatory				M/S-ACME INDIA NDLS	
ii	Anti slip friendly Grab Bar				M/S-ACME INDIA NDLS	
iii	Provision of Health Faucet in lavatories				M/S-ACME INDIA NDLS	
iv	Washbasin counter Top (Corian of Duport or Montelli)				M/S-ACME INDIA NDLS	
vi	GFRE ceiling instead of NFTC				M/S-ACME INDIA NDLS	
v	DGFRP panels instead of LP panels				M/S-ACME INDIA NDLS	
vii	Honey Comb partition frame with DGFRP sheet instead of FRP sheet				M/S-ACME INDIA NDLS	
viii	Venturi arrangement in lavatory				M/S-ACME INDIA NDLS	
ix	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					
4	Smart feature:NIL					
5	SHELL LEADING DIMENSIONS:					
S.N	DESCRIPTION				DIMENSION (MM)	
i	Maximum Length over body				23700	
ii	Maximum Width over body				3240	
iii	Maximum height from Rail Level				4039	
iv	CBC height/Buffer Height from Rail level 1105 +0/-10				NPP/PP	1098/1100
6	TRACEABILITY OF SHELL ITEMS:					
S.N	ITEM	MAKE/SUPPLIER	SERIAL NO			
i	Under frame	Front PP END M/S-OMAX AUTO LTD	84			
		Part NPP END M/S-SFPL				
		Complete MCF/RBL V4U TECHIE	20G428			
ii	Lav. side wall	M/S-ATHANACY ALD	LAV.1	-----	LAV.2	-----
		M/S-ATHANACY ALD	LAV.3	-----	LAV.4	-----
iii	Side wall	LH SIDE M/S-ECBT CHANDIGARH	233			
		RH SIDE M/S-ECBT CHANDIGARH	233			
iv	End wall	PP END M/S-SIPL PALWAL	-----			
		NPP END M/S-SIPL PALWAL	-----			
v	Roof	MCF/CONT	204			
vi	Centre Buffer Coupler	M/S-SANROCK	NPP/PP	17337/17352		
vii	Buffer	N/A	NPP/PP	N/A		
7	AIR BRAKE TEST REPORT:					
S.N	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED		
i	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .	6 – 10 sec.	08 Sec		
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²		
		All Brake are applied	OK	OK		
ii	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK		
iii	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	Brake must apply	OK		
iv	Handbrake(Parking brake)for generator car	1.Apply hand brake	1.Hand Bk. Indicator should be red	OK		
		2.Release hand brake	2. Hand Bk. indicator should be green	OK		
8	PAINTING DETAILS:					
S.N	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
i	Paint	P.U	GSI	M/S-GSI	90/89	1-Feb-21
ii	Insulation	Satisfactory				
9	COACH FURNISH DETAILS :					
S.N	ACTIVITIES	FIRM	TURNKEY/WORK CONTRACT/SUPPLY&APPLY			
i	Coach Furnishing	M/S-ACME INDIA NDLS	TURNKEY			
ii	Air Brake	M/S-TRIDEV	WORKS CONTRACT			
iii	Bio toilet & flushing	M/S-ACME INDIA LTD	TURNKEY			
vi	Epoxy in lav.	M/S-ACME INDIA NDLS	TURNKEY			

SSC/CC/MCF/RBL
गुणवत्ता विभाग
रेडिओका 0, रायबरेली (लालगंज)





Modern Coach Factory Raebarelli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 02

DATE: 28.05.2021

ROLLING STOCK CERTIFICATE(NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-2022 /06

RLY	WR	COACH NO	216071/C	DATE OF DISPATCH	1-Apr-21
Type	LWSCN1	Shell No.	20G428	DISPATCH TO	Sr.DME/C&W/MMCT
10	MODIFICATION (IF ANY)		: NIL		
11	DEVIATION (IF ANY)		: NIL		
12	ITEM FITTED ON THE COACH ON TRIAL		: NIL		

S.N	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL
i				

13.A TRACEABILITY OF FURNISHING ITEMS:(common items for all coach)

S.N	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
i	Air Brake Module	M/S-KBI	6275-08/21
ii	Distribution valve	M/S-KBI	2021C13141
iii	Pull box	M/S-FAIVELEY	
iv	FIBA	M/S-KBI	11438/29,11466/29
vi	Foot Step	M/S-FABRICON INDS KOLKATA	
v	Decoupling arrangement	M/S-PULSAR INDS KOLKATA	
vii	Floor board	M/S-TWPL MUMBAI	
viii	PVC	M/S-ACME INDIA NDLS	
ix	Lavatory inlay	M/S-ACME INDIA NDLS	
x	UIC Vestibule (PPE)	M/S-SUNCREST KOLKATA	
xi	UIC Vestibule (NPPE)	M/S-SUNCREST KOLKATA	
xii	Gangway bridge mounting (PPE)	M/S-HARE KRISHNA COMP. KXH	
xiii	Gangway bridge mounting (NPPE)	M/S-HARE KRISHNA COMP. KXH	
xiv	Body Side Window	M/S-ACME INDIA NDLS(WIDER)	
xv	Emergency Window	M/S-ACME INDIA NDLS(WIDER)	
xvi	Lavatory/hopper Window	M/S-ACME INDIA NDLS	
xvii	Roof Ceiling	M/S-ACME INDIA NDLS (DGFRP)	
xviii	Door way /gang way ceiling	M/S-ACME INDIA NDLS (GFRE)	
xix	Side panel	M/S-ACME INDIA NDLS (DGFRP)	
xx	Body Side Doors	M/S-ACME INDIA NDLS	
xxi	Vestibule Door(PPE)	M/s-JBM INDS FARIDABAD	
xxii	Vestibule Door(NPPE)	M/s-JBM INDS FARIDABAD	
xxiii	Bio Tank	M/S-FLASH FORGE(P) LTD	
xxiv	Pressurized flushing (ele. Pneu.)	M/S-SPAC	
xxv	Auxiliary Water Tank	M/S-SHIVALIK FAST(01)+AMIT MOHALI(03)	
xxvi	Under Slung Water Tank (2X685L)	M/S-OASIS	
xxvii	Under Slung Water Tank (1X685L)	M/S-AMIT ENGG MOHALI	
xxviii	Health Faucet	M/S-KAPCO VALES JALANDHAR	
xxix	Lotah Filler Tap	M/S-KAPCO VALES JALANDHAR	
xxx	Controlled discharge tap	M/S-AGMECO PVT LTD	
xxxi	Lavatory Modules	M/S-ACME INDIA NDLS (DGFRP)	
xxxii	Lavatory Doors	M/S-ACME INDIA NDLS	
xxxiii	Fire Extinguisher	M/S-ACME INDIA NDLS	
xxxiv	Seat & Berth	M/S-ACME INDIA NDLS	
xxxv	Venturi grill	M/S-ACME INDIA NDLS	

13.B TRACEABILITY OF FURNISHING ITEMS:(items for variant wise)

i	Partition panel	M/S-ACME INDIA NDLS (HONEYCOMB)	
ii	Partition pillar	M/S-ACME INDIA NDLS	
iii	Water purifier	M/S-ACME INDIA NDLS	

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)



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 (NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-22/06

RLY	-	W	R	Coach No.	2	1	6	0	7	1	/	C	-	DATE OF DISPATCH	0	1	0	4	2	0	2	1
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DISPATCH	Sr.DME/C&W/MMCT	Type	L	W	S	C	N	1	Shell No.	2	0	G	4	2	8	FUR.NO	LSCN-G-513
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8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	201341				201342			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS-5 - 2072				MCF/RBL/LS-5 - 2198			
Bolster no.	MCF/RBL/LS-5 - 2506				MCF/RBL/LS-5 - 2474			
Axle No	21 Z - 4022 RWF		21 Z - 2362 RWF		20 Z - 4374 RWF		20 Z - 0903 RWF	
Wheel Dia	917.661	917.448	917.636	917.502	917.731	917.533	917.708	917.508
Wheel Disc No	TZ 01-19 21401-9XH7	TZ 12-19 95418-9WK8	TZ 08-19 73635-9SL2	TZ 02-19 23046-9MK2	TZ 07-19 63418-9RP8	TZ 11-19 88251-9MJ2	TZ 11-19 84570-9VD1	TZ 11-19 81889-9WE8
R.B. Nos.	12-19 46183	12-19 36758	11-19 41811	12-19 38923	12-19 36740	12-19 44416	12-19 38540	12-19 38708
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	TAYAL & CO Sr.NO.06-20 0132	TAYAL & CO Sr.NO.06-20 0411	TAYAL & CO Sr.NO.06-20 9957	TAYAL & CO Sr.NO.06-20 9951

10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	338778,338779	338831,338826
2.	Primary outer Spring	CMAFJ	06-20-1100-(233,128,134,142)	06-20-1100-(139,207,210,201)
3.	Primary Inner Spring	CMAFJ	06-20-1101 (52,66,51,4)	06-20-1101 (39,61,41,102)
4.	Primary Damper	IAI	02-20-(310307,310033,309739,288716)	02-20-(309505,289260,289987,288624)
5.	Secondary Damper	IAI	06-20-(326321,326259)	06-20-(326299,326488)
6.	Lateral Damper	GBE	05-20 01677	05-20 1684
7.	Brake Cylinder	KBI	C(9634,8075,8079,9640)K29	C(9596,8089,8054,9595)K29
8.	Brake Caliper	KBI	C(5212,5233,5231,5214)-29	C(5150,5251,5252,5160)-29
9.	Brake Disc	FAV	08-20 (2311,1970,1886,1884)D133561-300	03-20 (2184,2186,2183,1885)D133561-300
10.	Ball Joint Control Arm	GMT/BONY		
11.	Lateral Bump Stop	BONY		
12.	Traction Centre make	RNG		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT/BASANT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	FAV	F20-261,F20-301	F20-304,C20-746
17.	Check Valve	FAV	G20-093	F20-343
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	RF/GMT		
20.	Fork make	RF		
21.	Control Arm Upper	SF	134,136,100,126	H109,H178,H87,H72
22.	Control Arm Lower	SF	H528,H70,H156,H167	H156,H30H14,H181
23.	Phonic Wheel	KBI	01-20	01-20

Signature of SSE/Bogie/QC	SME/AME/QC/MCF/RBL	Dy.QCM/MCF/RBL
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सहायक यांत्रिक इंजीनियर
Asst. Mechanical Engineer
आ. रे. डि. का. रायबरेली
MCF, RBL

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



GSTIN : 03ACBPK3400D1ZM
Excise Regn. No. ACBPK3400DXM001

G. S. INDUSTRIES

APPROVED BY

N.S.I.C.

R.D.S.O.

ISO 9001-2015

ISO 14001-2015

D-146, FOCAL POINT EXTENSION, JALANDHAR-144004

PHONE : (O) 0181-5081474

(M) 99882-65025, 99884-55459

Website : www.gspaints.com

e-mail : info@gspaints.com

WARRANTY CERTIFICATE

To,
Dy.CME/FP
MODERN COACH FACTORY,
RAEBARELI, LALGANJ-229120

Dated 6/2/21

Sub:- Performance warranty certificates.

Ref: - P.O.no 31061800101167 DATED 21.08.2019

Name Of Work: - Pu Paint For Lhb Type Rajdhani Coaches.

Dear Sir,

With reference to above, we do here by confirm the warranty for three years from the date of application of the delivered below mention coaches vide your above referred purchase order after application & due inspection at your end.

SR.	SHELL NO.	FURNISHING NO.	COACH NO.	Railway NO.	DATE OF COMPLETION
233	LWSEN 206428	LSCN(6)513	216071	WR	01-02-21

The warranty is applicable from date of dispatch against the below mention defects as per RDSO specification no. M&C/PCN/100/2018.

- Gloss level value of applied paint-initial 85 unit (on the date of painting) and minimum 80%, 70% and 60% of initial gloss after one year, two years and three years respectively from the date of application
- Decolonization of paint film.
- Cracking of paint film.
- Peeling of paint film.
- Blistering of the paint film.

Thanking you,
For G.S.Industries

Auth.signatory



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना,
रायबरेली

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REV NO: 01

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	216071/C
RAILWAY	WR	ELECT. FIT DATE	22-03-2021
		MCF FUR. NO.	SCN-G-513
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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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: HIND On Board: H355.20E.0789 HT Panel: H355.20E.0756	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 4425	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: HIND Sr no : 20/10/338 Pump 1: 20/03/715 Pump 2: 20/03/716	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: KIND SL.no.: 21020149	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: SIGNOTRON Sr. no.: 08201755	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 : RSI	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : RSI	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: AGASTYA	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: AGASTYA	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: SALZER	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 : KNORR Sr no : 0120144924	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

 वरिष्ठ अनुभाग अभियन्ता SSE/EL/QC गुणवत्ता नियंत्रण आधुनिक रेल डिब्बा कारखाना / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 आयुक्त प्रबन्धक / विद्युत आधुनिक रेल डिब्बा कारखाना / रायबरेली AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL
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