



Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/866

RLY	WCR	COACH NO	205717/C	DATE OF DISPATCH	31-Dec-20
Type	LWSCN1	Shell No.	20G333	DISPATCH T	Sr.DME/JBP
				FUR.NO.	LSCNG-494

1.	Railway Board's Order No.	: 2020/M(C)/142/2, DATED-09.07.2020
2.	Tare Weight of Coach	: 41.24 Tonnes
3.	Carrying Capacity	: (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A	Epoxy flooring in lavatory	M/S-H.F GLASS WORKS VADODRA
B	Anti slip friendly Grab Bar	M/S-H.F GLASS WORKS VADODRA
C	Provision of Health Faucet in lavatories	M/S-H.F GLASS WORKS VADODRA
D	Washbasin counter Top (Corian of Duport or Montelli)	M/S-H.F GLASS WORKS VADODRA
E	GFRE ceiling instead of NFTC	M/S-H.F GLASS WORKS VADODRA
F	DGFRP panels instead of LP panels	M/S-H.F GLASS WORKS VADODRA
G	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S-H.F GLASS WORKS VADODRA
H	Venturi arrangement in lavatory	M/S-H.F GLASS WORKS VADODRA
I	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 1098/1098

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END	M/S-PIL
	Part	NPP END	M/S-PIL
	Complete	M/S-PIL	12
2	Lav. side wall	M/S-PENNNAR HYD	LAV.1
		M/S-PENNNAR HYD	LAV.3
3	Side wall	M/S-PENNNAR HYD	3
	LH SIDE	M/S-PENNNAR HYD	3
4	End wall	M/S-PIL CHENNAI	
	PP END	M/S-PIL CHENNAI	
5	Roof	M/S-PENNNAR(KIT)	2
6	Centre Buffer Coupler	M/s-ESCORT	PP END 5713 NPP END 6002

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.	07 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	NEROLAC	M/S-KANSAI NEROLAC	87/86	05.11.2020
2	Insulation			Satisfactory		

Parimal Kumar
SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक
गुणवत्ता विभाग
रेलवे, रायबरेली (लागू)



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/-866

RLY	W	C	R	Coach No.	2	0	5	7	1	7	/	C	-	DATE OF DISPATCH	3	1	1	2	2	0	2	0
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DISPATCH	Sr.DME/JBP	Type	L	W	S	C	N	1	Shell No.	2	0	G	3	3	3	FUR .NO	LSCN -G-494
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	201853				201854			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS-5 - 2403				MCF/RBL/LS-5 - 2305			
Bolster no.	SHIVLIKA - 287				SHIVLIKA - 274			
Axle No	20 B - 0434	RWF	20 B - 2512	RWF	20 A - 8588	RWF	20 A - 8684	RWF
Wheel Dia	917.304	917.253	917.439	917.393	917.418	917.314	917.41	917.303
Wheel Disc No	TZ 02-19 23995-9MK3	TZ 05-19 42180-9PJ0	TZ 05-19 49157-9PD1	TZ 02-19 29073-9ML3	TZ 05-19 48157-9PF7	TZ 05-19 48155-9PF4	TZ 05-19 49156-9PF2	TZ 04-19 39826-90H3
R.B. Nos.	06-20 410975	06-20 413809	06-20 412214	06-20 413318	06-20 413449	06-20 411796	06-20 414503	06-20 412253
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.	AVADH RAIL Sr. NO- 07-20 8894	AVADH RAIL Sr. NO- 07-20 9861	AVADH RAIL Sr. NO- 07-20 9970	AVADH RAIL Sr. NO- 07-20 9921

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	ESCORT	7633,7654	7639,7638
2.	Primary outer Spring	CMAFI	07-20 1100-(120,113,106,115)	07-20 1100-(118,105,112,114)
3.	Primary Inner Spring	CMAFI	07-20 1101-(134,126,160,131)	07-20 1101-(6,8,2,5)
4.	Primary Damper	IAI	06-20 (319323,319754,321060,320756)	06-20 (319871,321413,320814,320377)
5.	Secondary Damper	IAI	06-20 (327252,327277)	06-20 (326768,326564)
6.	Lateral Damper	KONI/GBE	04-19 0838	05-20 01889
7.	Brake Cylinder	KBI	C(0376,8854,8902,0376)-K-29	D(0310,0313)-K-29,C(8839,8858)-K-29
8.	Brake Caliper	KBI	C(5813,5970,5965,5814)-29	C(5741,5930,5927,5743)-29
9.	Brake Disc	FAV	08-20 (1945,1345,1343,1241)D133561-300	07-20 (1547,1549,1193,1550)D133561-300
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA/RF		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	AR/BONY		
16.	Leveling Valve	ESCORTS	2009-5665,2009-5797	2008-5928,2009-5893
17.	Check Valve	ESCORTS	2009-1218	2009-4875
18.	Anti roll bar Make	RF		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RF		
21.	Control Arm Upper	SF	518,616,723,584	592,779,505,213
22.	Control Arm Lower	SF	362,325,165,35	448,116,237,253
23.	Phonic Wheel	KBI	K-06-20	K-06-20

Signature of SSE/Bogie/QC



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RLY	WCR	COACH NO	205717/C	DATE OF DISPATCH	31-Dec-20
Type	LWSCN1	Shell No.	20G333	DISPATCH T	Sr.DME/JBP
				FUR.NO.	LSCNG-494

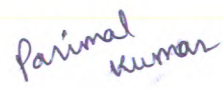

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S -KBI	5822-26/20
2	Distribution valve	M/S -KBI	2020F11692
3	Pull box	M/S -KBI	
4	FIBA	M/S-FAIVELEY	K20-100/K20-089
5	Foot Step	M/S-FABRICON INDS KOLKATA	
6	Decoupling arrangement	M/S-PULSAR INDS KOLKATA	
7	Floor board	M/S-SHREERAM PNL GOVINDGARH	
8	PVC	M/S-H.F GLASS WORKS VADODRA	
9	Lavatory inlay	M/S-H.F GLASS WORKS VADODRA	
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
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-H.F GLASS WORKS VADODRA	
15	Emergency Window	M/S-H.F GLASS WORKS VADODRA	
16	Lavatory/hopper Window	M/S-H.F GLASS WORKS VADODRA	
17	Side panel	NA	
18	Roof Ceiling	M/S-H.F GLASS WORKS VADODRA	
19	Door way/Gangway Ceiling	M/S-H.F GLASS WORKS VADODRA	
20	Partition panel	M/S-H.F GLASS WORKS VADODRA	
21	Partition pillar	M/S-H.F GLASS WORKS VADODRA	
22	Body Side Doors	M/S-H.F GLASS WORKS VADODRA	
23	Vestibule Door(PPE)	M/S-JBM INDS FARIDABAD	
24	Vestibule Door(NPPE)	M/S-JBM INDS FARIDABAD	
25	Bio Tank	M/S-OMAX AUTOS LTD	
26	Pressurised Flushing (electro.pneu.)	M/S-SPAC	
27	Auxiliary Water Tank	M/S-SHIVALIK FAST MOHALI	
28	Under Slung Water Tank (2X685L)	M/S-OASIS	
29	Under Slung Water Tank (1x685 L)	M/S-AMIT ENGG MOHALI	
30	Health Faucet	M/s-KAPCO VALES JALANDHAR	
31	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
32	Controlled discharge tap	M/s-AGMECO PVT LTD UK	
33	Lavatory Doors	M/S-H.F GLASS WORKS VADODRA	
34	Fire Extinguisher	M/s-CHIRAG INDUSTRIES HR	154030/154022
35	Seat & Berth	M/S-H.F GLASS WORKS VADODRA	
36	Ventury grill	M/S-H.F GLASS WORKS VADODRA	
37	Water purifier	M/S-H.F GLASS WORKS VADODRA	
38	RFID	N/A	

Parimal Kumar

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गुणवत्ता विभाग
मेट्रो ०३०, रायबरेली (लालमंडी)

		Modern Coach Factory Raebareilly आधुनिक रेल डिब्बा कारखाना, रायबरेली		DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018	
ROLLING STOCK CERTIFICATE Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/866					
RLY	WCR	COACH NO	205717/C	DATE OF DISPATCH	31-Dec-20
Type	LWSCN1	Shell No.	20G333	DISPATCH T	Sr.DME/JBP
				FUR.NO.	LSCNG-494
13. MODIFICATION (IF ANY) : Partition frame & Partition pillar 14. DEVIATION (IF ANY) : NIL 15. ITEM FITTED ON THE COACH ON TRIAL : NIL					
S NO	ITEM PARTICULARS	PURPOSE	REPORT	REFERENCE &	
			Frequency	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.COM/MCF/RBL	

वरिष्ठ अनु० अभियंता
गुणवत्ता विभाग
आ. र. डि. का रायबरेली (आ. र. डि. का)

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



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	205717/C
RAILWAY	WCR	ELECT. FIT DATE	31-12-2020
		MCF FUR. NO.	SCN-G-494
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: H355.20F.0821 HT Panel: H355.20F.0820	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-3519	RDSO/PE/SPEC/TL 0158, 2010, Rev'0', Ty I.	01
03.	Mounting of 09KVA TFR. <i>Make Sr. No</i>	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 : 20/8/0057 Pump 1: 3668 Pump 2: 3665	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 20/08/172	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: ELECTRONIC Sr. no.: 02200041	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.-1)	01
07.	Provision of Feeder Junction Box Make : AUTO INDUSTRIES	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 : INDORAIL	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: 9/19	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

[Signature]
Senior Section Engineer
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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: ORIENT	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: INTRA	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: SKS	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): S.INTERNATIONALS 2.(PP): S.INTERNATIONALS	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 : 0120114771	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

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

