



**RAIL COACH FACTORY, KAPURTHALA**  
**ROLLING STOCK CERTIFICATE (LHB)**

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO	9089	BOGIE NO	206557 / 206558	DISPATCH DATE	03-JUN-20	
2.	RAILWAY	NR	TYPE OF COACH	LLRRMLX	COACH NO	202306	
3.	BOOKED TO	SSE/C&W/DLI					
4.	Tare Weight of Coach	53.4 T					
5.	Carrying Capacity	Seating	5	Sleeping	3	Luggage	3.9 T
6.	6.1	Leading Dimensions:					
	i)	Maximum length over Body	23700+10/-0				
	ii)	Maximum width over Body	3240-8/+0 mm, 3050 mm (for LWSCZDAC)				
	iii)	Maximum height from Rail Level	4250 (for LWACCN), 4039 (for LWACCW, LGS, LWSCN, LWSCZAC, LWFAC, LWCBAC, LWLRRM), 4366 (for LWSCZDAC)				
	iv)	CBC Height	Specified: 1105 +0/-15 mm	1105	1105		
	v)	CBC (Make)		SANROK	SANROK		
	vi)	Buffer (Make)					
7.	Air Brake Testing:	Description	Specified				
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm <sup>2</sup>	06 - 10 Sec			
			Max Pressure in BC	3.80±0.15 Kg/cm <sup>2</sup>			
			All Brake are applied	OK			
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm <sup>2</sup> /mi	No brake application			
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm <sup>2</sup> /Sec, After 02 Sec	Brake must apply			
8.	Painting Details:	Type of Paint	Make	Average Gloss Value			
	8.1	Paint	PU PAINT	GS	88 / 88		
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	FLOOR BOARD	TWPL				
	2	PVC	RESPONSIVE				
	3	UIC VESTIBULES	POLYMER				
	4	BODY SIDE DOOR	JVR				
	5	VESTIBULE SLIDING DOOR	KALSI				
	6	WATER TANKS	AMIT, MANOJ				
	7	FUEL TANK	PD STEEL				
	8	COMPOSITE MODULAR TOILET	CMT				
	9	LAVATORY DOORS	KALSI				
	10	SEAT & BEARTH	AAR KAY FOAM				
	11	BIO-TOILET	SVARN INFRATEL				
	12	EP BRAK / BRAKE EQUIPMENT	ESCORTS				
	13	BIO DIGESTER/VACUUM EVACUATION SYSTEM	SVARN INFRATEL				
10.	10.1	Modification/ Trial (If any): 1-ASPIRATION FIRE/SMOKE DETECTION WITH ALARM SYSTEM AS PER RDSO SPECIFICATION NO. RDSO/2008/CG-04 REV.04, SUPPLIED AND COMMISSIONED BY M/S- SANROK ENTERPRISES , FARIDABAD, CONTACT NO. 09810566723. 2.AUTOMATIC FIRE DETECTION CUM SUPPRESSION SYSTEM SUPPLIED AND COMMISSIONED BY M/S- SANROK ENTERPRISES , FARIDABAD. 3.VINYL WRAPPING SUPPLIED AND FITTED BY M/S TECHNO EXPERT, JALANDHAR.					
	10.2	Deviations (If any): NIL					



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ROLLING STOCK CERTIFICATE (LHB)

QMF 9829, VER:1.00

<b>11.</b>	<b>Bogie Details:</b>	Shell No.	Railway	Type	Coach No.	Dispatch Date				
		9089	NR	LLRRMLX	202306	03-JUN-20				
<b>11.1 Wheel &amp; Axle Details:</b>										
	i.	Bogie No.	206557				206558			
	ii.	Frame No.	BEC-66				KE-44			
	iii.	Bolster No.	SECPL-805				SECPL-795			
	iv.	Axle No.	RWF - T7271		RWF - V4644		RWF - T4036		RWF - V4217	
	v.	Items/locations	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side	Earthing end side	Phonic wheel side	Phonic wheel side	Plain side
	vi.	Wheel Dia.	917.20	917.20	917.20	917.20	917.00	917.00	917.00	917.00
	vii.	Wheel Disc No.	34260-9014-TZ	36971-9019-TZ	33496-9013-TZ	04318-8MM0-TZ	32393-90F9-TZ	32655-90D8-TZ	86134-9WK6-TZ	86135-9WK4-TZ
	viii.	RB Nos.	39495	36939	36165	400512	39342	39247	40599	400562
	ix.	RB Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	
	x.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING							
<b>11.2 Secondary suspension load deflection Values:</b>										
Description		Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side		
i.	Make & Nos.	TAYAL-19-12-6628		TAYAL-19-12-6667		TAYAL-19-12-6635		TAYAL-19-12-6633		
<b>Items traceability:</b>										
<b>11.3</b>	<b>Sno.</b>	<b>Item</b>					<b>Make</b>			
	i.	Primary Outer Spring	STLI-19-12		STLI-19-12		STLI			
	ii.	Primary inner Spring	STLI-19-08		STLI-19-08		STLI			
	iii.	Primary Damper	270575, 269710, 270212, 269741		271113, 270815, 269941, 271044		IAI			
	iv.	Secondary Damper	1591, 1236		1592, 1469		GABRIEL			
	v.	Lateral Damper	296751		296750		IAI			
	vi.	Brake cylinder & Caliper	55195,55410, 55193,55411		55192,55755, 55194,55754		ESCORTS			
	vii.	Brake Disc					KBI	FTI		
	viii.	Contral arm top					KUMAR			
	ix.	Control arm bottom					KUMAR			
	x.	Top rubber Pad					ARYAN			
	xi.	Vertical Bump Stop					GMT			
	xii.	Ball Joint Control arm					ARYAN			
	xiii.	Lateral Bump stop					AVADH			
	xiv.	Traction center make					SARITA			
	xv.	Traction lever make					TAJ			
	xvi.	Ball joint traction lever					AVADH			
	xvii.	Traction center elastic					AVADH			
	xviii.	Secondary rubber pad					NA			
	xix.	Rubber spring					NA			
	xx.	Anti roll bar make					EMSON			
	xxi.	Ball joint roll link					SARITA			
	xxii.	Fork make					RNG			
<b>11.4</b>	i.	Modification/Trail(if any):	NIL							
	ii.	Deviations (if any):	Deviations (If any): NIL							

LLRRMLX - 9089



**RAIL COACH FACTORY, KAPURTHALA**  
**ROLLING STOCK CERTIFICATE (LHB)**

**FOR ELECTRICAL ITEMS**

**ROLLING STOCK CERTIFICATE OF**

**LHB POWER CAR (LOW NOISE) AIR SPRING COACH**

**TYPE OF COACH :** LLRRMLX      **Shell No :** 9089      **COACH\_NO :** 202306

**RAILWAY :** NR      **COUPLING TYPE :** CBC      **DATE OF FITMENT:** 30-MAY-20

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
<b>Group Name PP-SIDE</b>				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	AMIT ENGINEERS	4578-A-20
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJ A	4592222
0	33641419-0, REGULATED BATTERY CHARGER	EDTS109	IC ELECTRICALS COMPANY PVT.LTD	02/20/0046
<b>Group Name BOGIE PP SIDE</b>				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	PRIME ELECTRONICS	206557
<b>Group Name BOGIE NPP SIDE</b>				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	PRIME ELECTRONICS	206558
<b>Group Name ENGINE ROOM</b>				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	AGNI INNTRUMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	RAMYAA ELECTRO-GEAR PVT. LTD.	1909-82-271
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	LEC	2020/0006
<b>Group Name 500 KVA ALTERNATOR SET A</b>				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	DVO-9026/2020014
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	LED3L920A-18614
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	3GIJ1947000-1773179
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	...
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	FLYIDYNE 20020
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL & M/S G&C )	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
11	33635316-11, DATA LOGGER UNIT ( IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	...



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S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
<b>Group Name 500 KVA ALTERNATOR SET A</b>				
12	33635316-12, NEUTRAL REACTOR( IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	..
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	BHASIN PACKARD ELECTRONICS PVT LTD	12196923/1
<b>Group Name 500 KVA ALTERNATOR SET B</b>				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	DVO-9026/1920092
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	LED3L920A-18817
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	3GIJ1947000-1743297
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	...
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	FLYIDYNE 191033
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C )	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
11	33635316-11, DATA LOGGER UNIT ( IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	...
12	33635316-12, NEUTRAL REACTOR( IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	NIL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	KIRLOSKAR ELECTRIC CO.	...
<b>Group Name DRIVING END</b>				
0	33635092-0, EXT.SUPP SOCKET 125 AMP,415V,IP67,5POLE(3P+N+E) WITH PILOT CONTACTS	CATALOGUE NO 1945436/PV 4125-6 &1948036/UIV 4125-6 RES. OF M/S GARO OREQUIVELANT APPROVED MAKE	JAI BALA JI	NIL
<b>Group Name NON-DRIVING END</b>				
0	33635092-0, EXT.SUPP SOCKET 125 AMP,415V,IP67,5POLE(3P+N+E) WITH PILOT CONTACTS	CATALOGUE NO 1945436/PV 4125-6 &1948036/UIV 4125-6 RES. OF M/S GARO OREQUIVELANT APPROVED MAKE	JAI BALA JI	NIL



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S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
<b>Group Name UNDER FRAME</b>				
0	33635031-0, FEEDER JUNCTION BOX FOR POWER CAR	EDML021 REV-A	MV ELECTRO SYSTEM PVT LTD	NIL
0	33635031-0, FEEDER JUNCTION BOX FOR POWER CAR	EDML021 REV-A	NEERA ENTERPRISES	NIL
1	33635080-1, PUMP	EDTS186	L E CORP. KAPSONS	1119-R-1225
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	RAMYAA ELECTRO-GEAR PVT. LTD.	1909-82-273
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	RAMYAA ELECTRO-GEAR PVT. LTD.	1909-82-261
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	RSI SWITCHGEAR PVT.LTD	1901173
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGINEERING COMPANY.PVT .LTD	2019-03-36
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/09-2008,REV-1 WITH AM-1	AMARA RAJA BATTERIES LTD.	01/2019
0	33650184-0, BATTERY BOX MOUNTING FOR LHB COACH AND 9 HOLES OF DIA 25 mm AS PER SKED-383 IN DRG.NO. 3 10113.0.76	1 10113.0.76.700.005 EXCEPT ITEM NO. 5,22,23,25 TO 27 ALT 'C'.	MEENAKSHI ENGINEERING WORKS	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	NEC SWITCHGEAR S & CONTROLS	2019-05-7962
<b>Group Name CREW ROOM</b>				
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	ESCORT	190670-61190-0013
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02		
2	33635080-2, PUMP CONTROLLER	EDTS186	KALSI METAL WORK PVT.LTD	CPA-8035
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	AMIT ENGINEERS	AE-2001330



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S.No PL No & Item Description		Drawing No	Make	Item Sr.No.(if any
Group Name		CREW ROOM		
0	33635262-0, SINGLE INLET RADIAL BLOWER 415V,3-PHASE,50 HZ,185W,1045 CUBIC METER PER HOUR DISCHARGE FOR EXHAUSTIN	EDTS331,TYPE-2	INTEG	NIL
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJ A	NIL
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	INTERNATION AL SWITCHGEAR S	PCP-RCF-19120020
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	ELECTROWAV ES	WSBCA-201362
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	ELECTROWAV ES	WSBCA-201360
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DHINGRA ENGINEERING WORKS	NIL
1	33641936-1, SWITCH BOARD CABINET	EDTS-073, REV.-A	ESS ESS KAY ENGG. CO. PVT. LTD.	2019-10-128
2	33641936-2, DISCONNECTING & EARTHING DEVICE	EDTS-073, REV.-A	ESS ESS KAY ENGG. CO. PVT. LTD.ESS ESS KAY ENGG. C	L&T
SSE/EL/QC		AME/WM QC/DY CQM I		