



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO 8033	BOGIE NO 187028	/ 187029	DISPATCH DATE 25-SEP-18
2.	RAILWAY CR	TYPE OF COACH LWSCZ	COACH NO 181438	
3.	BOOKED TO	SSE/C&W/CSTM		
4.	Tare Weight of Coach	40.5 T		
5.	Carrying Capacity	Seating 102	Sleeping NIL	Luggage NIL
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, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)	
	iv)	CBC Height	Specified: 1105 +0/-15 mm	1102
	v)	CBC (Make)		SANROK
	vi)	Buffer (Make)		SANROK
7.	Air Brake Testing:		Description	Specified
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ²	06 - 10 Sec
			Max Pressure in BC	3.80±0.15 Kg/cm ²
			All Brake are applied	OK
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm ² /mi	No brake application
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm ² /Sec, After 02 Sec	Brake must apply
8.	Painting Details:		Type of Paint	Make
	8.1	Paint	PU PAINT	VIBGYOR
	8.2	Application of PCN-123	87 / 87	
	8.3	Insulation	SATISFACTORY	
9.	Traceability of Furnishing Items:			
	1	EP BRAK / BRAKE EQUIPMENT	KBI	
	2	BIO-TOILET	RAIL TECH	
	3	FLOOR BOARD	SRI RAM	
	4	PVC	RESPONSIVE	
	5	UIC VESTIBULES	KRP	
	6	WATER TANKS	RAIL FAB, AMIT	
	7	BODY SIDE DOOR	JVR	
	8	VESTIBULE SLIDING DOOR	KALSI	
	9	SEAT & BEARTH	SUTLEJ	
	10	LP SHEET	PL	
10.	10.1	Modification/ Trial (If any): NIL		
	10.2	Deviations (If any): NIL		



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

QMF 9827, VER:1.00

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8033		CR		LWSCZ		181438		25-SEP-18	
11.1 Wheel & Axle Details:												
	i.	Bogie No.	187028				187029					
	ii.	Frame No.	ECBT-696				ECBT-698					
	iii.	Bolster No.	ASR-P-184				VT-7383					
	iv.	Axle No.	B - 8450		F - 7928		F - 7763		F - 7698			
	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.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
	vii.	Wheel Disc No.	31180-8RG6-TZ	33213-8RG9-TZ	35740-8RH0-TZ	33209-8RG9-TZ	21002-8MX5-TZ	34387-8QL6-TZ	34389-8QL6-TZ	21000-8MX5-TZ		
	viii.	RB Nos.	09880	07256	08537	08695	09859	07804	08222	08526		
	ix.	RB Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN			
	x.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING									
11.2 Secondary suspension load deflection Values:												
Description			Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side			
			Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
i.	Make & Nos.		GBD-17-6-36	FSK-17-5-03	GBD-17-6-27	FSK-18-5-45	GBD-17-6-23	FSK-18-5-05	GBD-17-6-25	FSK-18-5-40		
ii.	Ht. at test load		511.00	468.00	510.00	468.00	510.00	468.00	508.00	468.00		
iii.	Align. deviation		10.00	10.00	10.00	8.00	11.00	10.00	11.00	9.00		
<u>Items traceability:</u>												
11.3												
	Sno.	Item							Make			
	i.	Primary Outer Spring	GBD-18-4-175-165-179-173			GBD-18-4-196-176-177-170			GBD			
	ii.	Primary inner Spring	RSK-14-5			RSK-14-5			RSK			
	iii.	Primary Damper	10550, 10440, 10532, 10325			10476, 10494, 10468, 10458			GABRIEL			
	iv.	Secondary Damper	261, 946			914, 728			SV			
	v.	Lateral Damper	082			439			SV			
	vi.	Break cylinder & Caliper	A1718-691,A1393-691, A1610-691,A1392-691			A215-691,A1405-691, A2150-691,A1404-691			KBI			
	vii.	Break Disc							FTI			
	viii.	Contral arm top							HAPL			
	ix.	Control arm bottom							HAPL			
	x.	Top rubber Pad							GMT			
	xi.	Vertical Bump Stop							GMT			
	xii.	Ball Joint Control arm							PRAG			
	xiii.	Lateral Bump stop							BONY			
	xiv.	Traction center make							SARITA			
	xv.	Traction lever make							JI			
	xvi.	Ball joint traction lever							GMT		BONY	
	xvii.	Traction center elastic							SB			
	xviii.	Secondary rubber pad							BHAM			
	xix.	Rubber spring							GMT			
	xx.	Anti roll bar make							EMSON			
	xxi.	Ball joint roll link							SARITA			
	xxii.	Fork make							EMSON			
11.4												
	i.	Modification/Trail(if any):	NIL									
	ii.	Deviations (if any):	Deviations (If any): NIL									

LWSCZ - 8033



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ
RAILWAY CR

Shell No : 8033
COUPLING TYPE : CBC

COACH_NO : 181438
DATE OF FITMENT: 22-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name UNDER FRAME				
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	KNOEE BREMSE	0118104952
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-406
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	061707145
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INDORAIL	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LAXMI	
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	INTEG ELECTRONICS	
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	2018036755
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
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'.	MEENAKASHI ENG. WORKS	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	
Group Name COMPARTMENT				
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-014
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SPECTRUM-MP-012
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181438
RAILWAY CR DATE OF FITMENT: 22-SEP-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		COMPARTMENT		
0	35983528-0, BRUSHLESS DC FAN 110V,DC 400MM SWEEP FIXED TYPE	RDSO/PE/SPEC/TL00 21 REV-0,DEC.2000 BUT WITH DIMENSIONS AND CONSTRUCTION TO RCF DRG.NO.CC76260	LIGHT ENGINEERING CORPORATION	LEC
0	45978257-0, ACCIDENT EMERGENCY LIGHT UNIT IN ROLLING STOCK	GA DRAWING NO CC76240 AND TECHNICAL DETAILS AS PER SPEC.NO EDTS162	DR AUTO INDUSTRIES	
Group Name		UNDER FRAME NPP SIDE		
2	33642230-2, Z S COUPLING NPP SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
SSE/EL/QC		AME/WM QC/DY CQM I		



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 9454 VER:1.00)

1.	SHELL NO	8024	BOGIE NO	187044	/ 187045	DISPATCH DATE	27-SEP-18
2.	RAILWAY	CR	TYPE OF COACH	LWSCZ		COACH NO	181439
3.	BOOKED TO	SSE/C&W/CSTM					
4.	Tare Weight of Coach	40.5 T					
5.	Carrying Capacity	Seating	102	Sleeping	NIL	Luggage	NIL
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, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)		
	iv)	CBC Height	Specified: 1105 +0/-15 mm		1102	1102	
	v)	CBC (Make)			ESCORTS	ESCORTS	
	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 ²		06 - 10 Sec		
			Max Pressure in BC		3.80±0.15 Kg/cm ²		
			All Brake are applied		OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm ² /mi		No brake application		
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm ² /Sec, After 02 Sec		Brake must apply		
8.	Painting Details:	Type of Paint			Make	Average Gloss Value	
	8.1	Paint	PU PAINT			VIBGYOR	87 / 86
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT			FAVELLY		
	2	BIO-TOILET			JSL		
	3	FLOOR BOARD			TWPL		
	4	PVC			RESPONSIVE		
	5	UIC VESTIBULES			POLYMER		
	6	WATER TANKS			RAIL FAB, AMIT		
	7	BODY SIDE DOOR			JVR		
	8	VESTIBULE SLIDING DOOR			KALSI		
	9	SEAT & BEARTH			SUTLEJ		
	10	LP SHEET			PL		
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

QMF 9827, VER:1.00

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8024		CR		LWSCZ		181439		27-SEP-18	
11.1	Wheel & Axle Details:											
i.	Bogie No.	187044					187045					
ii.	Frame No.	BEC-296					RBKYG-H18-166					
iii.	Bolster No.	GT-6221					FIAT-3721					
iv.	Axle No.	F - 7477			B - 9978		B - 9484			C - 0018		
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.	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
vii.	Wheel Disc No.	01591-8MK3-TZ	02970-8MG6-TZ	00570-7NM2-TZ	30942-8QN7-TZ	02973-8MG6-TZ	22542-8PQ6-TZ	01585-8MK3-TZ	01590-8MK3-TZ			
viii.	RB Nos.	01931	06230	06104	04229	09785	07210	08645	09050			
ix.	RB Make	TIMKEN			TIMKEN		TIMKEN			TIMKEN		
x.	RB Type	UIC CARTRIDGE TAPER ROLLER BEARING										
11.2	Secondary suspension load deflection Values:											
Description		Lateral Damper Side		Non-Lat. Damper Side		Lateral Damper Side		Non-Lat. Damper Side				
		Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner	
i.	Make & Nos.	FSK-17-11-119	FSK-17-11-111	FSK-17-11-314	FSK-17-11-97	FSK-17-11-114	FSK-17-11-247	FSK-17-11-303	FSK-17-11-219			
ii.	Ht. at test load	510.00	468.00	509.00	463.00	512.00	467.00	512.00	469.00			
iii.	Align. deviation	9.00	11.00	10.00	13.00	12.00	12.00	13.00	13.00			
Items traceability:												
11.3	Sno.	Item						Make				
i.	Primary Outer Spring		GBD-18-1			GBD-18-1			GBD			
ii.	Primary inner Spring		RSK-14-5			GBD-17-12			RSK		GBD	
iii.	Primary Damper		10454, 10620, 10326, 10465			10563, 10418, 10464, 10561			GABRIEL			
iv.	Secondary Damper		1008, 974			1013, 969			SV			
v.	Lateral Damper		391			351			SV			
vi.	Break cylinder & Caliper		E18530-600,F18055-600, E18544-600,F18095-600			G18279-600,G18275-600, G18278-600,G18432-600			FTI			
vii.	Break Disc								FTI			
viii.	Contral arm top								HAPL			
ix.	Control arm bottom								KUMAR			
x.	Top rubber Pad								GMT			
xi.	Vertical Bump Stop								GMT			
xii.	Ball Joint Control arm								AVADH		PRAG	
xiii.	Lateral Bump stop								BONY		AVADH	
xiv.	Traction center make								EMSON			
xv.	Traction lever make								SARITA			
xvi.	Ball joint traction lever								GMT			
xvii.	Traction center elastic								SB			
xviii.	Secondary rubber pad								BHAM			
xix.	Rubber spring								GMT			
xx.	Anti roll bar make								EMSON			
xxi.	Ball joint roll link								SARITA			
xxii.	Fork make								EMSON			
11.4	i.	Modification/Trail(if any):		NIL								
	ii.	Deviations (if any):		Deviations (If any): NIL								

LWSCZ - 8024



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR**

TYPE OF COACH : LWSCZ
RAILWAY CR

Shell No : 8024
COUPLING TYPE : CBC

COACH_NO : 181439
DATE OF FITMENT: 25-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	DARASHAN ENTERPRISES	
Group Name UNDER FRAME				
0	33501427-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-AC & NAC COACHES	MDTS077 REV. 02	SAB WABCO	12/18/557
0	33635250-0, 15 KVA TRANSFORMER 750VAC/415VAC/190 VAC FOR LHB EOG TYPE SCN COACHES	EDTS336,REV-0	VIMAL TRANSFORMER CORPN.	VTC-3089-LHB-400
0	33640117-0, REGULATED BATTERY CHARGER FOR LHB AC SLEEPER COACHES	EDTS074,Rev-A	AUTOMETER ALLAIANCE LTD.	061707157
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	ABROL ENGG	
0	33640580-0, FEEDER JUNCTION BOX	EDTS328	MAA LAXMI	
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL	
1	33642000-1, UNDERSLUNG SWITCH BOARD CABINET	EDTS355	NEC SWITCHGEARS & CONTROL	201744365
1	33642230-1, Z S COUPLING PP-SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
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'.	KAPURTHALA COACH ENGG	
0	45178288-0, 110V,120AH VRLA SMF BATTERY SET PRECHARGED WITH I/CELL & FRONT COVER	RDSO/PE/SPEC/D/TL /0009-99 REV"O" Amendment-1	AMARA RAJA BATTERIES LTD	
Group Name COMPARTMENT				
1	33635298-1, HOT CASE	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	SSER-MP-014
2	33635298-2, BOOTLE COOLER CUM DEEP FREEZER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
3	33635298-3, BOTTLE COOLER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
4	33635298-4, WATER BOILER	EDTS339,REV-0	SPECTRUM SCIENTIFIC PVT LTD	
2	33642000-2, CUBICAL IN DOORWAY	EDTS355	NEC SWITCHGEARS & CONTROL	CUBICAL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB EOG TYPE NON-AC CHAIR CAR

TYPE OF COACH : LWSCZ COUPLING TYPE : CBC COACH_NO : 181439
RAILWAY CR DATE OF FITMENT: 25-SEP-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		COMPARTMENT		
0	35983528-0, BRUSHLESS DC FAN 110V,DC 400MM SWEEP FIXED TYPE	RDSO/PE/SPEC/TL00 21 REV-0,DEC.2000 BUT WITH DIMENSIONS AND CONSTRUCTION TO RCF DRG.NO.CC76260	LIGHT ENGINEERING CARPORATION	LEC
0	45978257-0, ACCIDENT EMERGENCY LIGHT UNIT IN ROLLING STOCK	GA DRAWING NO CC76240 AND TECHNICAL DETAILS AS PER SPEC.NO EDTS162	DR AUTO INDUSTRIES	
Group Name		UNDER FRAME NPP SIDE		
2	33642230-2, Z S COUPLING NPP SIDE	EDTS-105, REV-B	PRIME ELECTRICAL	
SSE/EL/QC		AME/WM QC/DY CQM I		