



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8004	BOGIE NO	186328 / 186332	DISPATCH DATE	03-MAY-18	
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM	COACH NO	18856	
3.	BOOKED TO	SSE/C&W/CSTM					
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 LWACCN, LGS, LWSCN, LWSCZAC, LWFAC, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)			
	iv)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1105	1105	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85	
	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		SALASAR			
	3	FLOOR BOARD		TWPL			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB, MANOJ			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		AAR KAY FOAM			
	10	FUEL TANK		GAURAV			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date		
			8004		CR		LWLRRM		18856		03-MAY-18		
11.1 Wheel & Axle Details:													
i.		Bogie No.	186328				186332						
ii.		Frame No.	SCI-FM-1581				ECBT-563						
iii.		Bolster No.	P-7906				VT-7891						
iv.		Axle No.	B-8417		Y-7681		Y-8235		Z-9795				
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.	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00			
vii.		Wheel Disc No.	02440-7NL4	00900-7OJ0	31481-7SG7	31983-7SG6	06441-7NL5	02438-7NL4	29679-7SH0	29676-7TS7			
viii.		RB Nos.	12794	12628	12708	12145	13388	11945	11742	12302			
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			
i.			Make & Nos.	GBD-17-5-12	RSK-16-7-267	GBD-17-5-16	RSK-16-01-40	RSK-17-9-762	RSK-16-7-191	RSK-17-9-833	RSK-16-7-263		
ii.			Ht. at test load	512.00	468.00	511.50	466.00	515.00	470.00	514.00	469.00		
iii.			Align. deviation	10.00	16.00	10.00	15.00	15.00	47.00	14.00	39.00		
Items traceability:													
11.3			Sno.	Item						Make			
			i.	Primary Outer Spring		RSK-15-10		RSK-15-10		RSK			
			ii.	Primary inner Spring		GBD-16-12		RSK-17-10		GBD		RSK	
			iii.	Primary Damper		1855, 1797, 1605, 1884		1799, 1882, 1684, 1791		GABRIEL			
			iv.	Secondary Damper		0098, 0066		0028, 0110		ESCORTS			
			v.	Lateral Damper		2265		2276		GABRIEL			
			vi.	Break cylinder & Caliper		F17004,H17019, F17001,H17020		F17005,H17009, F17003,F17007		FTI			
			vii.	Break Disc						FTI		KBI	
			viii.	Contral arm top						KUMAR			
			ix.	Control arm bottom						KUMAR			
			x.	Top rubber Pad						GMT			
			xi.	Vertical Bump Stop						GMT			
			xii.	Ball Joint Control arm						MB		ASHIKA	
			xiii.	Lateral Bump stop						GMT			
			xiv.	Traction center make						EMSON		SARITA	
			xv.	Traction lever make						SARITA			
			xvi.	Ball joint traction lever						GMT			
			xvii.	Traction center elastic						GMT			
			xviii.	Secondary rubber pad						BHAM			
			xix.	Rubber spring						GMT		PRAG	
			xx.	Anti roll bar make						SARITA			
			xxi.	Ball joint roll link						SARITA			
			xxii.	Fork make						SARITA			
11.4			i.	Modification/Trail(if any):		NIL							
			ii.	Deviations (if any):		Deviations (If any): NIL							

LWLRRM - 8004



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM
RAILWAY CR

Shell No : 8004
COUPLING TYPE : CBC

COACH_NO : 18856
DATE OF FITMENT: 03-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A		
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	SIDWAL REFRIGERATION	18-C-1443
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/ 50 Fully Bridge Diode Based with	EL WAVES	WEB CD172603
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	CHANDA & CHANDA	186328
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	CHANDA & CHANDA	186332
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4934
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040016
Group Name DRIVING SECTION				
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	IPSK	NIL
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4994
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801265
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	RAAG1696
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CGL	RBG49511
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	1617KM1267
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819-009
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTUX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NIL



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18856
RAILWAY : CR DATE OF FITMENT: 03-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170796
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170795
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CGL	171204-15
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NIL
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	NEPL	NIL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0011
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2017-10-0006

Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4776
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801312
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	RAAG1174
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CGL	RBG49518
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819004
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819005
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NIL
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170760
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170812
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CGL	171226-02



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ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18856
RAILWAY : CR DATE OF FITMENT: 03-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B			
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED NIL
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	NEPL NIL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMATIC 2017100008
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMATIC 2017100016
Group Name DRIVING END			
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	IPSK NIL
Group Name UNDER FRAME			
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET 17081315
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTERNATIONAL SWITCHGEAR PVT LTD. 2017-09-224
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	NEC SWITCHGEARS & CONRTROL 2017-09-3125
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD 09151565
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL 05/2017
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'.	ANKUR ENGG WORKS NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	RAMYYA ELECTRO GEAR 1801-96-66
Group Name UNDER FRAME PP SIDE			



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM **COUPLING TYPE :** CBC **COACH_NO :** 18856
RAILWAY : CR **DATE OF FITMENT:** 03-MAY-18
S.No PL No & Item Description **Drawing No** **Make** **Item Sr.No.(if any)**

Group Name UNDER FRAME PP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	MAA LUXMI INDUS NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	MAA LUXMI INDUS NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	SAB WEBCO 48/17/1273
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	TRINITRON TCS/RCF/3400-104-020
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY TRINITRON NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	LEC 17111481
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	SIDWAL REFRIGERATION 18021271
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4182156
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES WEBCD172601
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	ESS ESS KAY ENGG. CO. 2017-08-042
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	ESS ESS KAY ENGG. CO. 2017-08-042



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ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18856
RAILWAY CR DATE OF FITMENT: 03-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		CREW ROOM		
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO	NIL
SSE/EL/QC		AME/WM QC/DY CQM I		



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8005	BOGIE NO	186377	/ 186376	DISPATCH DATE	14-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18857
3.	BOOKED TO	SSE/C&W/CSTM					
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 LWACCN, LGS, LWSCN, LWSCZAC, LWFAC, LWCBC, LWLRRM), 4366 (for LWSCZDAC)		
	iv)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1098	1100	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85	
	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		PD STEEL			
	3	FLOOR BOARD		TWPL			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB, MANOJ			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		AMIR CHAND			
	10	FUEL TANK		---			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8005		CR		LWLRRM		18857		14-MAY-18	
11.1 Wheel & Axle Details:												
i.	Bogie No.	186377						186376				
ii.	Frame No.	FIAT-6299						ECBT-481				
iii.	Bolster No.	APEX-02-2018						APEX-02-2018				
iv.	Axle No.	Y- 7975			Z- 4437			Y- 8052			Y- 7218	
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.	916.50	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	916.00	
vii.	Wheel Disc No.	32549-7SJ3	14200-7OH2	28809-7SJ2	28808-7SJ2	20358-7ON6	32550-7SJ3	32795-7TG9	20496-7OK0			
viii.	RB Nos.	13960	13948	13725	12957	13186	14097	13754	11935			
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			
i.	Make & Nos.	GBD-17-5-26	RSK-15-10-171	GBD-17-5-49	RSK-15-10-363	RSK-17-9-557	FSK-17-11-125	RSK-17-9-620	FSK-17-11-26			
ii.	Ht. at test load	511.50	467.00	509.50	467.00	515.00	466.00	515.00	464.50			
iii.	Align. deviation	10.00	39.00	11.00	40.00	15.00	9.00	15.00	12.00			
Items traceability:												
11.3	Sno.	Item							Make			
	i.	Primary Outer Spring		FSK-17-10			FSK-17-10			FSK		
	ii.	Primary inner Spring		GBD-18-01			GBD-18-01			GBD		
	iii.	Primary Damper		14138, 14533, 14537, 14541			14543, 6205, 14066, 14535			GABRIEL		
	iv.	Secondary Damper		1109, 1246			1111, 1235			GABRIEL		
	v.	Lateral Damper		0022			0034			ESCORTS		
	vi.	Break cylinder & Caliper		K17608,L17011, K17009,K17013			K13036,K17021, K17014,K17005			FTI		
	vii.	Break Disc								KBI		
	viii.	Contral arm top								KUMAR		RV
	ix.	Control arm bottom								HAPL		RV
	x.	Top rubber Pad								GMT		
	xi.	Vertical Bump Stop								GMT		
	xii.	Ball Joint Control arm								GMT		ASHIKA
	xiii.	Lateral Bump stop								BONY		
	xiv.	Traction center make								EMSON		
	xv.	Traction lever make								SARITA		
	xvi.	Ball joint traction lever								ASHIKA		PRAG
	xvii.	Traction center elastic								GMT		ASHIKA
	xviii.	Secondary rubber pad								BHAM		
	xix.	Rubber spring								PRAG		
	xx.	Anti roll bar make								EMSON		SARITA
	xxi.	Ball joint roll link								SARITA		
	xxii.	Fork make								SARITA		EMSON
11.4	i.	Modification/Trail(if any):		NIL								
	ii.	Deviations (if any):		Deviations (If any): NIL								

LWLRRM - 8005



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM	Shell No : 8005	COACH_NO : 18857
RAILWAY CR	COUPLING TYPE : CBC	DATE OF FITMENT: 14-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801311
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	363/17
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES	WEBCD172609
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186377
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186376
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4522
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040023
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4508
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121802364
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	RAAG1694
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	OLG49539
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819013
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819014
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18857
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170763
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170808
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	171226-27
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LIGHT ENGG CORPORATION	2017-02-1001
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LIGHT ENGG CORPORATION	2017-07-1002

Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4743
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	RAAG2197
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	RAG40533
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819011
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819012
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170813
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170829
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	171226-18
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18857
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B				
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	SYSTEM & SERVICES	070701
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	NATIONAL ENTERPRISES	08-2017-02
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	17071234
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-11-151
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	2017-11-547
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151558
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	05/2017
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'.	ANKUR ENGG WORKS	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	S INTERNATIONAL	63/9-2017
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18857
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME PP SIDE			
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	MAA LUXMI INDUS NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	MAA LUXMI INDUS NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	SAB WEBCO 19/17/626
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	INTERNATIONAL SW. GEARS SBC/RCF/17040019
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY ISG NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	LEC 18010040
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1801358
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4182027
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES WEBCD172607
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS PCP-RCF-17080013
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS PCP-RCF-17080020
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



भारतीय रेलवे पावर कार फैक्ट्री
RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18857
RAILWAY CR DATE OF FITMENT: 14-MAY-18

SSE/EL/QC

AME/WM QC/DY CQM I



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8006	BOGIE NO	186372	/ 186373	DISPATCH DATE	15-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18858
3.	BOOKED TO	SSE/C&/WCSTM					
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, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)		
	iv)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1105	1105	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	87 / 87	
	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		PD STEEL			
	3	FLOOR BOARD		TWPL			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		RAIL FAB, MANOJ			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		AAR KAY FOAM			
	10	FUEL TANK		SHIVALIK			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



भारतीय रेलवे

RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8006		CR		LWLRRM		18858		15-MAY-18	
11.1 Wheel & Axle Details:												
i.	Bogie No.	186372						186373				
ii.	Frame No.	SCI-FM-1569						ECBT-484				
iii.	Bolster No.	VT-7644						VT-7493				
iv.	Axle No.	Y-7981			Z-9770			Z-2533			V-7573	
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.	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00	917.00		
vii.	Wheel Disc No.	30025-7SJ7-TZ	09745-7NM0-TZ	08055-7NL3-TZ	30031-7RJ9-TZ	32381-7SJ0-TZ	20658-7PK8-TZ	30028-7RJ9-TZ	08054-7OJ3-TZ			
viii.	RB Nos.	13800	10378	09793	13463	13404	13982	10558	13841			
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			
i.	Make & Nos.	GBD-17-12-18	RSK-17-12-59	GBD-17-12-15	RSK-17-12-43	GBD-17-8-65	FSK-16-11-173	GBD-16-10-6	FSK-16-11-122			
ii.	Ht. at test load	512.00	468.00	512.50	467.00	514.00	470.00	514.00	470.00			
iii.	Align. deviation	12.00	6.00	9.00	6.00	12.00	9.00	10.00	9.00			
Items traceability:												
11.3	Sno.	Item							Make			
	i.	Primary Outer Spring			FSK-17-10			FSK-17-10			FSK	
	ii.	Primary inner Spring			GBD-18-01			GBD-18-01			GBD	
	iii.	Primary Damper			1835, 6131, 5823, 8026			1694, 1690, 5823, 1834			GABRIEL	
	iv.	Secondary Damper			1141, 1118			1266, 1669			GABRIEL	
	v.	Lateral Damper			179			26			ESCORTS	
	vi.	Break cylinder & Caliper			K17010,K17016, L17034,L17026			K17036,K17012, K17035,K17010			FTI	
	vii.	Break Disc									KBI	
	viii.	Contral arm top									HAPL	
	ix.	Control arm bottom									HAPL	
	x.	Top rubber Pad									GMT	
	xi.	Vertical Bump Stop									PRAG	
	xii.	Ball Joint Control arm									MB	
	xiii.	Lateral Bump stop									BONY	
	xiv.	Traction center make									EMSON	
	xv.	Traction lever make									SARITA	
	xvi.	Ball joint traction lever									GMT	PRAG
	xvii.	Traction center elastic									SB	
	xviii.	Secondary rubber pad									BHAM	
	xix.	Rubber spring									PRAG	
	xx.	Anti roll bar make									EMSON	SARITA
	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							

LWLRRM - 8006



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM	Shell No : 8006	COACH_NO : 18858
RAILWAY CR	COUPLING TYPE : CBC	DATE OF FITMENT: 14-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801310
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	558/18
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES	WEBCB183736
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186372
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186373
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-5096
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040006
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4766
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121802473
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	RAAG1170
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	OLG49535
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	1617KM1278
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819016
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18858
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A			
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT 170302
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT 170810
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES 171226-11
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED NA
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD 2017-10-0005
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	ABROL ENGG 2018-0383

Group Name 500 KVA ALTERNATOR SET B			
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER VTC-3089-LHB-4971
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES RAAG0556
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES RAG49534
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC DGSS1819027
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC DGSS1819027
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEX 01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT 170528
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT 170839
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES 171226-12
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18858
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B				
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0004
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	ABROL ENGG	20180394
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	17071218
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-11-400
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	2017-11-596
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151561
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	05/2017
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'.	ANKUR ENGG WORKS	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	S INTERNATIONAL	97/19-2017
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18858
RAILWAY : CR DATE OF FITMENT: 14-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME PP SIDE			
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	S INTERNATIONAL NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	S INTERNATIONAL NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	SAB WEBCO 06/18/339
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	INTERNATIONAL SW. GEARS SBC/RCF/17040006
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY ISG NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	LEC 17111491
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1712333
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4215916
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES WEBCB183742
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-09-053
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-09-054
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



आराम पदार्थ
RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS	
ROLLING STOCK CERTIFICATE OF LHB POWER CAR EOG AIR BRAKE 500X2 KVA	
TYPE OF COACH : LWLRRM RAILWAY CR	COUPLING TYPE : CBC COACH_NO : 18858 DATE OF FITMENT: 14-MAY-18
SSE/EL/QC	AME/WM QC/DY CQM I



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8007	BOGIE NO	186413	/ 186412	DISPATCH DATE	25-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18860
3.	BOOKED TO	SSE/C&W/CSTM					
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)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1100	1105	
	v)	Buffer/CBC (Make)			SANROK	SANROK	
7.	Air Brake Testing:		Description		Specified		
	7.1	Full Brake Application	Reduce pressure of BP from 5.0 to 3.4 kg/cm2		06 - 10 Sec		
			Max Pressure in BC		3.80±0.15 Kg/cm2		
			All Brake are applied		OK		
	7.2	Insensitivity	Exhaust BP @ 0.3 Kg/cm2/mi		No brake application		
	7.3	Sensitivity	Exhaust BP @ 0.1 Kg/cm2/Sec, After 02 Sec		Brake must apply		
8.	Painting Details:		Type of Paint		Make	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT			ESCORTS		
	2	BIO-TOILET			PD STEEL		
	3	FLOOR BOARD			TWPL		
	4	PVC			RESPONSIVE		
	5	UIC VESTIBULES			POLYMER		
	6	WATER TANKS			RAIL FAB, MANOJ		
	7	BODY SIDE DOOR			IEF/KNOR		
	8	VESTIBULE SLIDING DOOR			KALSI		
	9	SEAT & BEARTH			AAR KAY FOAM		
	10	FUEL TANK			GAURAV		
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



भारतीय रेलवे

RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8007		CR		LWLRRM		18860		25-MAY-18	
11.1 Wheel & Axle Details:												
i.	Bogie No.	186413						186412				
ii.	Frame No.	FIAT-6091						FIAT-5980				
iii.	Bolster No.	AMIT-04-2018						AMIT-04-2018				
iv.	Axle No.	Y-8430			Y-7932			Z-2719			Z-4689	
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.	916.50	916.50	916.50	916.50	916.50	916.50	917.00	917.00			
vii.	Wheel Disc No.	32352-7SJ0-TZ	33115-7SJ1-TZ	30103-7TG0-TZ	29928-7SJ7-TZ	22486-7QL2-TZ	22484-7QL2-TZ	22483-7QL2-TZ	22485-7QL2-TZ			
viii.	RB Nos.	12637	12674	12625	11722	58629	83155	83100	82315			
ix.	RB Make	TIMKEN			TIMKEN			SKF			SKF	
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			
i.	Make & Nos.	GBD-17-5-46	RSK-16-7-338	GBD-17-5-34	RSK-16-7-257	RSK-12-9-45	FSK-16-11-202	RSK-17-9-109	FSK-16-11-117			
ii.	Ht. at test load	512.00	465.00	512.00	468.00	513.00	470.50	513.00	467.00			
iii.	Align. deviation	7.00	14.00	6.00	11.00	4.00	8.00	2.00	8.00			
Items traceability:												
11.3	Sno.	Item							Make			
	i.	Primary Outer Spring		L&S-15-12			L&S-15-12			L&S		
	ii.	Primary inner Spring		GBD-18-01			GBD-18-01			GBD		
	iii.	Primary Damper		1971, 1969, 2019, 1979			1459, 1479, 1631, 1463			GABRIEL		
	iv.	Secondary Damper		1819, 1749			1806, 1824			GABRIEL		
	v.	Lateral Damper		106			0031			ESCORTS		
	vi.	Break cylinder & Caliper		33953,34215, 33954,34209			19102,16187, 19106,17091			ESCORTS		
	vii.	Break Disc								KBI		
	viii.	Contral arm top								HAPL		
	ix.	Control arm bottom								RV		
	x.	Top rubber Pad								GMT		
	xi.	Vertical Bump Stop								PRAG		
	xii.	Ball Joint Control arm								MB		
	xiii.	Lateral Bump stop								GMT		
	xiv.	Traction center make								EMSON		
	xv.	Traction lever make								SARITA		
	xvi.	Ball joint traction lever								GMT		
	xvii.	Traction center elastic								GMT		
	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								

LWLRRM - 8007



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM
RAILWAY CR

Shell No : 8007
COUPLING TYPE : CBC

COACH_NO : 18860
DATE OF FITMENT: 24-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CUMMINNS	25435374
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	559/18
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES	WEBCB183768
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186413
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186412
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4763
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040004
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4513
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CUMMINNS	25435368
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	5481001
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	3GIJ1715000/1437404
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	806484
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	806486
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18860
RAILWAY : CR DATE OF FITMENT: 24-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	180417007
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	180417007
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL & M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	170045
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	170045
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	2018-02-08
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LIGHT ENGG CORPORATION	2018-01-020
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2017-10-0015

Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4749
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	5481005
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	3GIJ1715000/1447563
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	806489
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	806485
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	180515629
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	180515629
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL & M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	170052
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	170052



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18860
RAILWAY : CR DATE OF FITMENT: 24-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B				
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	2018-04-05
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LIGHT ENGG CORPORATION	2017-02-1001
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2017-10-0001
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	1771217
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-11-494
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	2017-11-672
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151667
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	06/2017
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'.	ANKUR ENGG WORKS	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	S INTERNATIONAL	80/9-2017
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18860
RAILWAY : CR DATE OF FITMENT: 24-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME PP SIDE			
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	S INTERNATIONAL NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	S INTERNATIONAL NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	ESCORTS 16023-10542-00004
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	INTERNATIONAL SW. GEARS SBC/RCF/17080013
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY ISG NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	KIND (KAPSON INDUS.) 17110013
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1801357
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4387316
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/ 50 Fully Bridge Diode Based with	EL WAVES WEBCB183753
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS PCP-RCF-17-06-0007
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS ISG-CBCP-RCF-17080013
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS			
ROLLING STOCK CERTIFICATE OF			
LHB POWER CAR EOG AIR BRAKE 500X2 KVA			
TYPE OF COACH : LWLRRM		COUPLING TYPE : CBC	
RAILWAY CR		COACH_NO : 18860	
		DATE OF FITMENT: 24-MAY-18	
SSE/EL/QC		AME/WM QC/DY CQM I	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8010	BOGIE NO	186431	/ 186430	DISPATCH DATE	26-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18861
3.	BOOKED TO	SSE/C&W/CSTM					
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, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)		
	iv)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1105	1105	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	86 / 86	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT			KBI		
	2	BIO-TOILET			PD STEEL		
	3	FLOOR BOARD			TWPL		
	4	PVC			RESPONSIVE		
	5	UIC VESTIBULES			POLYMER		
	6	WATER TANKS			MANOJ, MANOJ		
	7	BODY SIDE DOOR			JVR		
	8	VESTIBULE SLIDING DOOR			KALSI		
	9	SEAT & BEARTH			AAR KAY FOAM		
	10	FUEL TANK			SHIVALIK		
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8010		CR		LWLRRM		18861		26-MAY-18	
11.1 Wheel & Axle Details:												
i.	Bogie No.	186431						186430				
ii.	Frame No.	FIAT-6367						ECBT-283				
iii.	Bolster No.	AMIT-04-2018						AMIT-04-2018				
iv.	Axle No.	Z - 4905			Z - 4735			S - 3148		Z - 9671		
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.	917.00	917.00	917.00	917.00	916.00	916.00	917.00	916.50			
vii.	Wheel Disc No.	33133-7SH0-TZ	29786-7SH7-TZ	29788-7SG5-TZ	29785-7SG9-TZ	32652-7TG2-TZ	05877-7OG2-TZ	29789-7SG5-TZ	20787-7SJ3-TZ			
viii.	RB Nos.	13922	13380	13217	13737	13726	13613	13729	13721			
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			
i.	Make & Nos.	GBD-17-12-60	RSK-16-01-012	GBD-17-12-43	RSK-16-01-013	RSK-17-9-195	FSK-17-11-133	FSK-17-9-81	FSK-17-11-150			
ii.	Ht. at test load	511.00	466.00	510.00	464.00	514.00	470.00	514.00	470.00			
iii.	Align. deviation	7.00	4.00	7.00	1.00	10.00	8.00	6.00	8.00			
Items traceability:												
11.3	Sno.	Item							Make			
	i.	Primary Outer Spring		FSK-17-10			FSK-17-10		FSK			
	ii.	Primary inner Spring		GBD-18-01			GBD-18-01		GBD			
	iii.	Primary Damper		13905, 14102, 6257, 13905			1912, 1624, 1974, 1623		GABRIEL			
	iv.	Secondary Damper		3241, 3236			3326, 3329		GABRIEL			
	v.	Lateral Damper		0322			210		SV			
	vi.	Break cylinder & Caliper		A1633-261,M0766-260, A1645-261,M0769-260			A2037-261,A1741-261, A2063-261,A1745-261		KBI			
	vii.	Break Disc							KBI			
	viii.	Contral arm top							RV			
	ix.	Control arm bottom							KUMAR			
	x.	Top rubber Pad							GMT			
	xi.	Vertical Bump Stop							PRAG		AVADH	
	xii.	Ball Joint Control arm							ASHIKA		MB	
	xiii.	Lateral Bump stop							BONY			
	xiv.	Traction center make							SARITA		RNG	
	xv.	Traction lever make							SARITA			
	xvi.	Ball joint traction lever							GMT			
	xvii.	Traction center elastic							ASHIKA		BHAM	
	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		SARITA	
11.4	i.	Modification/Trail(if any):		NIL								
	ii.	Deviations (if any):		Deviations (If any): NIL								

LWLRRM - 8010



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM	Shell No : 8010	COACH_NO : 18861
RAILWAY CR	COUPLING TYPE : CBC	DATE OF FITMENT: 26-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801308
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	562/18
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES	WEBCB184050
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186431
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186432
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4531
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040018
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4487
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	1309121801309
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	RAAG0538
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTON GREAVES	GLG49521
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819-30
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819-31
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	03/18,03/18,03/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18861
RAILWAY : CR DATE OF FITMENT: 26-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170791
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170793
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	180102-15
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0007
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2017-10-0003

Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4532
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	RAAG1697
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	RAG49532
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819-27
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	KEC	DGSS1819-28
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	03/18,03/18,03/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170814
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	KENT	170764
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	180102-10
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18861
RAILWAY : CR DATE OF FITMENT: 26-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B				
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	DEEV GENSET	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	GREAVES COTTON	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0002
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2017-10-0018
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	17090101 & 17090102
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-11-243
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	2017-11-568
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151651
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	05/2017
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	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	INTERNATIONAL SWITCHGEAR PVT LTD.	ISG-CB-RCF-18020023
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	INTERNATIONAL SWITCHGEAR PVT LTD	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18861
RAILWAY : CR DATE OF FITMENT: 26-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME PP SIDE			
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	PRIME ELECT NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	PRIME ELECT NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	KNORR BREMISE 0118074555
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	INTERNATIONAL SW. GEARS SBC/RCF/17020018
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY ISG NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	KIND (KAPSON INDUS.) 17010006
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1712335
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4387600
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/ 50 Fully Bridge Diode Based with	EL WAVES WEBCB184022
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS PCP-RCF-17-06-0005
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	INTERNATIONAL SWITCHGEARS ISG-CBCP-RCF-17080014
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS			
ROLLING STOCK CERTIFICATE OF			
LHB POWER CAR EOG AIR BRAKE 500X2 KVA			
TYPE OF COACH : LWLRRM		COUPLING TYPE : CBC	
RAILWAY CR		COACH_NO : 18861	
		DATE OF FITMENT: 26-MAY-18	
SSE/EL/QC		AME/WM QC/DY CQM I	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8008	BOGIE NO	186414	/ 186415	DISPATCH DATE	28-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18859
3.	BOOKED TO	SSE/C&W/CSTM					
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)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1105	1104	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT			KBI		
	2	BIO-TOILET			PD STEEL		
	3	FLOOR BOARD			TWPL		
	4	PVC			RESPONSIVE		
	5	UIC VESTIBULES			POLYMER		
	6	WATER TANKS			MANOJ, MANOJ		
	7	BODY SIDE DOOR			JVR		
	8	VESTIBULE SLIDING DOOR			KALSI		
	9	SEAT & BEARTH			AAR KAY FOAM		
	10	FUEL TANK			SHIVALIK		
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



आवृत्ति प्रमाणपत्र

RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8008		CR		LWLRRM		18859		28-MAY-18	
11.1	Wheel & Axle Details:											
	i.	Bogie No.	186414				186415					
	ii.	Frame No.	FIAT-6379				FIAT-6382					
	iii.	Bolster No.	AMIT-03-2018				AMIT-03-2018					
	iv.	Axle No.	Y- 7879		Y- 8239		Y- 7724		Y- 8232			
	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	916.50	916.00	916.50	916.50		
	vii.	Wheel Disc No.	05885-7OG2-TZ	05884-7OG2-TZ	00659-7NK2-TZ	01807-7NJ5-TZ	00661-7NK2-TZ	00657-7NK6-TZ	07278-7OJ4-TZ	00660-7NL4-TZ		
	viii.	RB Nos.	13604	14141	13914	13731	13918	13061	13351	12101		
	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		
i.	Make & Nos.	GBD-17-5-54	RSK-16-7-324	GBD-17-5-30	RSK-16-7-285	RSK-17-9-99	RSK-16-7-241	RSK-17-9-186	RSK-16-7-261			
ii.	Ht. at test load	513.00	467.00	512.50	468.00	513.00	469.00	514.00	471.00			
iii.	Align. deviation	9.00	9.00	9.00	9.00	9.00	21.00	9.00	23.00			
Items traceability:												
11.3	Sno.	Item							Make			
	i.	Primary Outer Spring		L&S-15-12			L&S-15-12			L&S		
	ii.	Primary inner Spring		GBD-18-01			GBD-18-01			GBD		
	iii.	Primary Damper		1629, 1531, 1460, 1973			1480, 1461, 1478, 1521			GABRIEL		
	iv.	Secondary Damper		1750, 1823			1747, 1822			GABRIEL		
	v.	Lateral Damper		0209			0198			ESCORTS		
	vi.	Break cylinder & Caliper		A2044-261,M2024-260, A2035-261,M2025-260			A2005-261,A1773-261, A1957-261,A1744-261			KBI		
	vii.	Break Disc								KBI		
	viii.	Contral arm top								HAPL	RV	
	ix.	Control arm bottom								RV	KUMAR	
	x.	Top rubber Pad								GMT		
	xi.	Vertical Bump Stop								PRAG		
	xii.	Ball Joint Control arm								GMT	ASHIKA	
	xiii.	Lateral Bump stop								BONY		
	xiv.	Traction center make								EMSON		
	xv.	Traction lever make								SARITA		
	xvi.	Ball joint traction lever								ASHIKA		
	xvii.	Traction center elastic								ASHIKA		
	xviii.	Secondary rubber pad								BHAM		
	xix.	Rubber spring								GMT		
	xx.	Anti roll bar make								EMSON		
	xxi.	Ball joint roll link								SARITA		
	xxii.	Fork make								SARITA	EMSON	
11.4	i.	Modification/Trail(if any):		NIL								
	ii.	Deviations (if any):		Deviations (If any): NIL								

LWLRRM - 8008



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM
RAILWAY CR

Shell No : 8008
COUPLING TYPE : CBC

COACH_NO : 18859
DATE OF FITMENT: 28-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	560/18
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/ 50 Fully Bridge Diode Based with	EL WAVES	WEBCB183769
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186414
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186415
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB- 4511
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040017
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB- 4486
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV- D,AM-4,PART- A	CUMMINS	25435362
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV- D,AM-4,PART- A	CUMMINS	25435366
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV- D,AM-4,PART- A	BHEL	5481002
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV- D,AM-4,PART- A	ABB BY BHEL	3GIJI1715000/1437 614
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV- D,AM-4,PART- A	ABB BY BHEL	8006483
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV- D,AM-4,PART- A	ABB BY BHEL	8006482
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV- D,AM-4,PART- A	MICROTEX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV- D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV- D,AM-4,PART- A	CHINTAN ENGG	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18859
RAILWAY : CR DATE OF FITMENT: 28-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0001
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	ABROL ENGG	2018-03-87

Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-4993
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	5481003
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	3GIJI1715000/1469575
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	8006481
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	8006480
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEX	01/18,01/18,01/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL& M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	NA
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM **COUPLING TYPE :** CBC **COACH_NO :** 18859
RAILWAY : CR **DATE OF FITMENT:** 28-MAY-18
S.No PL No & Item Description **Drawing No** **Make** **Item Sr.No.(if any)**

Group Name 500 KVA ALTERNATOR SET B				
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NIL
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0010
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	ABROL ENGG	2018-03-88
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	17090079 & 17090080
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-11-226
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	INTEG ELECTRONICS	2017-03-030
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151566
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	05/2017
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	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	RAMYAA ELECTRICAL	1801-98-701
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS	NIL
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	PRIME ELECT	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18859
RAILWAY : CR DATE OF FITMENT: 28-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	NEC SWITCHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	S INTERNATIONAL NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	KNORR BREMISE 0117223459
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	INTERNATIONAL SW. GEARS SBC/RCF/17070019
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY ISG NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	KIND (KAPSON INDUS.) 17110006
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1707130
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4216006
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES WEBCB183780
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-09-049
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-09-044
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



राईल कोच फैक्टरी
RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM	COUPLING TYPE : CBC	COACH_NO :	18859
RAILWAY CR		DATE OF FITMENT:	28-MAY-18
SSE/EL/QC		AME/WM QC/DY CQM I	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

(FORM NO. QMF 4254 VER.06)

1.	SHELL NO	8009	BOGIE NO	186460	/ 186450	DISPATCH DATE	31-MAY-18
2.	RAILWAY	CR	TYPE OF COACH	LWLRRM		COACH NO	18862
3.	BOOKED TO	SSE/C&W/CSTM					
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 LWACCN, LGS, LWSCN, LWSCZAC, LWFAC, LWCBCAC, LWLRRM), 4366 (for LWSCZDAC)		
	iv)	Buffer/CBC Height	Specified: 1105 +0/-15 mm		1105	1105	
	v)	Buffer/CBC (Make)			SANROK	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	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	87 / 87	
	8.2	Application of PCN-123	SATISFACTORY				
	8.3	Insulation	SATISFACTORY				
9.	Traceability of Furnishing Items:						
	1	EP BRAK / BRAKE EQUIPMENT		KBI			
	2	BIO-TOILET		PD STEEL			
	3	FLOOR BOARD		TWPL			
	4	PVC		RESPONSIVE			
	5	UIC VESTIBULES		POLYMER			
	6	WATER TANKS		MANOJ, RAIL FAB			
	7	BODY SIDE DOOR		JVR			
	8	VESTIBULE SLIDING DOOR		KALSI			
	9	SEAT & BEARTH		AAR KAY FOAM			
	10	FUEL TANK		GAURAV			
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



निदेशक कार्यालय

RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

11.	Bogie Details:		Shell No.		Railway		Type		Coach No.		Dispatch Date	
			8009		CR		LWLRRM		18862		31-MAY-18	
11.1 Wheel & Axle Details:												
i.		Bogie No.	186460				186450					
ii.		Frame No.	FIAT-6370				ECBT-301					
iii.		Bolster No.	APEX-02-2018				APEX-113					
iv.		Axle No.	Z- 3898		Z- 2801		Y- 7951		B- 8167			
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.	917.00	916.50	916.50	917.00	916.00	916.00	916.00	916.00		
vii.		Wheel Disc No.	29828-7SG5-TZ	19139-7OJ9-TZ	31915-7SG5-TZ	31917-7SG5-TZ	31285-7SG5-TZ	19123-7OJ9-TZ	29757-7SJ5-TZ	25491-7RH3-TZ		
viii.		RB Nos.	44280	81944	81033	44281	44296	83091	77148	81941		
ix.		RB Make	SKF		SKF		SKF		SKF			
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		
i.			Make & Nos.	GBD-17-12-24	RSK-16-7-393	GBD-17-12-58	RSK-16-7-402	RSK-17-9-470	FSK-17-11-55	RSK-17-9-854	FSK-17-11-105	
ii.			Ht. at test load	512.00	468.00	511.00	468.00	510.00	468.50	510.00	466.00	
iii.			Align. deviation	7.00	12.00	7.00	11.00	24.00	12.00	22.00	9.00	
Items traceability:												
11.3		Sno. Item							Make			
		i.		Primary Outer Spring		RSK-15-11		RSK-15-10		RSK		
		ii.		Primary inner Spring		RSK-16-06		RSK-16-12		RSK		
		iii.		Primary Damper		7743, 7806, 5972, 7810		7741, 7795, 7857, 7796		GABRIEL		
		iv.		Secondary Damper		3190, 3297		3183, 3196		GABRIEL		
		v.		Lateral Damper		404		434		SV		
		vi.		Break cylinder & Caliper		A2228-261,M1772-260, A2029-261,M1773-260		A1982-261,A1746-261, A1979-261,A1749-261		KBI		
		vii.		Break Disc						KBI		
		viii.		Contral arm top						RV		HAPL
		ix.		Control arm bottom						RV		KUMAR
		x.		Top rubber Pad						GMT		
		xi.		Vertical Bump Stop						GMT		
		xii.		Ball Joint Control arm						MB		GMT
		xiii.		Lateral Bump stop						BONY		GMT
		xiv.		Traction center make						SARITA		
		xv.		Traction lever make						AFW		
		xvi.		Ball joint traction lever						GMT		
		xvii.		Traction center elastic						BHAM		
		xviii.		Secondary rubber pad						BHAM		
		xix.		Rubber spring						GMT		
		xx.		Anti roll bar make						EMSON		
		xxi.		Ball joint roll link						SARITA		
		xxii.		Fork make						SARITA		
11.4		i.		Modification/Trail(if any):		NIL						
		ii.		Deviations (if any):		Deviations (If any): NIL						

LWLRRM - 8009



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM
RAILWAY CR

Shell No : 8009
COUPLING TYPE : CBC

COACH_NO : 18862
DATE OF FITMENT: 31-MAY-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CUMMINS	25435369
Group Name PP-SIDE				
1	33635225-1, AC PACKAGE UNIT	EDTS075 TYPE-II	ESS ESS KAY	565/18
2	33640312-2, SPEAKERS	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA	NIL
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES	WEBCC183939
Group Name BOGIE PP SIDE				
1	33635067-1, BOGIE 1	EDTS101 REV-"A"	S INTERNATIONAL	186460
Group Name BOGIE NPP SIDE				
2	33635067-2, BOGIE 2	EDTS101 REV-"A"	S INTERNATIONAL	186450
Group Name ENGINE ROOM				
1	33635146-1, SMOKE SENSOR UNIT	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMENT	NIL
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	RAMYAA ELECTRO	1708-82-15
0	33641961-0, STARTER BATTERY CHARGING CONTROL PANEL FOR LHB TYPE POWER CAR	EDTS116	ISGPL	SBC-RCF-17040002
Group Name DRIVING SECTION				
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	M V ELECTRO SYSTEM	IPSK
Group Name 500 KVA ALTERNATOR SET A				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	RAMYAA ELECTRO	1708-82-23
1	33635316-1, ENGINE 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	CUMMINS	25435370
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	5481007
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	3GIJI1715000/1437 403
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	18006494
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	18006488
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	03/18,03/18,03/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18862
RAILWAY CR DATE OF FITMENT: 31-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET A				
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	132134
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	132134
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL & M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	170055
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	1803628
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	2018-04-06
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0003
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2018-03-091
Group Name 500 KVA ALTERNATOR SET B				
0	33635183-0, 60 KVA TRANSFORMER	EDTS076	VIMAL TRANSFORMER	VTC-3089-LHB-5077
2	33635316-2, ALTERNATOR 500KVA	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	5481008
3	33635316-3, RADIATOR FAN MOTOR	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	3GIJI1715000/1447562
4	33635316-4, VENTILATOR FAN MOTOR-1	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	18006490
5	33635316-5, VENTILATOR FAN MOTOR-2	EDTS 102 ,REV-D,AM-4,PART- A	ABB BY BHEL	18006492
6	33635316-6, STARTER BATTERY 290AH CAPACITY	EDTS 102 ,REV-D,AM-4,PART- A	MICROTEx	03/18,03/18,03/18
7	33635316-7, ELECTRONIC ENGINE CONTROLLER	EDTS 102 ,REV-D,AM-4,PART- A	NOT PROVIDED	NA
8	33635316-8, FUEL CONSUMPTION METER (INPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	128135
9	33635316-9, FUEL CONSUMPTION METER (OUTPUT)	EDTS 102 ,REV-D,AM-4,PART- A	CHINTAN ENGG	128135
10	33635316-10, OVER VOLTAGE RELAY (IN CASE OF M/S BHEL & M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	CROMPTION GREAVES	170054
11	33635316-11, DATA LOGGER UNIT (IN CASE OF CUMMINS ENGINE)	EDTS 102 ,REV-D,AM-4,PART- A	CUMIMINS	1803610



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18862
RAILWAY : CR DATE OF FITMENT: 31-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name 500 KVA ALTERNATOR SET B				
12	33635316-12, NEUTRAL REACTOR(IN CASE OF M/S G&C)	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	NEPL
13	33635316-13, RADIATOR FRAME	EDTS 102 ,REV-D,AM-4,PART- A	BHEL	2018-02-07
0	33641596-0, CONTROL PANEL FOR VENTILATOR FANS OF DIESEL ENGINE FOR LHB TYPE POWER	EDTS110	LOGOMOTIVE PVT LTD	2017-10-0006
0	33641950-0, CONTROL PANEL FOR RADIATOR FAN MOTOR OF DIESEL ENGINE FOR LHB POWER CA	EDTS114 REV-A	LOGOMOTIVE PVT LTD	2018-03-090
Group Name DRIVING END				
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	M V ELECTRO SYSTEM	IPSK
Group Name UNDER FRAME				
1	33635080-1, PUMP	EDTS186	LEC WITH (KIND) PUMP SET	17090083 & 17090084
0	33640178-0, BATTERY FUSE BOX -VE	LW71002 ALT"a"	INTEG ELECTRONICS	2017-03-041
0	33640786-0, BATTERY FUSE BOX +VE	LW71001 ALT"a"	ABROL ENGG CO.	2017-11-539
0	33641559-0, 24V STARTER BATTERY CHARGER FOR 500KVA DA SET	EDTS106	BHASIN PACKARD	09151557
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	D R AUTO	NIL
0	33641729-0, 70AH,110V, VRLA LEAD ACID MAINTENANCE FREE BATTERY(9 NOSX12V)	RDSO/PE/SPEC/AC/0 09-2008,REV-1 WITH AM-1	HBL	05/2017
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'.	METAFIL	NIL
1	35982913-1, CAPACITOR BANK FOR LHB EOG POWER CAR COACHES	EDML130, TABLE-2	INTERNATIONAL SWITCHGEAR PVT LTD.	ISG-CB-RCF-18020019
Group Name UNDER FRAME PP SIDE				
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	INTERNATIONAL SWITCHGEAR PVT LTD	NIL



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
LHB POWER CAR EOG AIR BRAKE 500X2 KVA

TYPE OF COACH : LWLRRM COUPLING TYPE : CBC COACH_NO : 18862
RAILWAY : CR DATE OF FITMENT: 31-MAY-18
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name UNDER FRAME PP SIDE			
1	33642230-1, UNDER FRAME PP SIDE	EDTS-105, REV-B	PRIME ELECT NIL
Group Name UNDER FRAME NPP SIDE			
0	33640592-0, FEEDER JUNCTION BOX FOR LHB EOG AC COACHES	EDML020 REV-A	INTERNATIONAL SWICHGEARS NIL
2	33642230-2, UNDER FRAME NPP SIDE	EDTS-105, REV-B	PRIME ELECT NIL
Group Name CREW ROOM			
0	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	KNORR BREMISE 0118054448
	33501439-0, AXLE MOUNTED DISC BRAKE SYSTEM FOR ALSTOM-LHB DESIGN-POWER CAR COACHES	MDTS077 REV. 02	
1	33635020-1, SWITCH BOARD COBINET	EDTS104,REV-A	TRINITRON TCS/RCF/3400/104/001
2	33635020-2, DISCONNECTING & EARTHING DEVICE	EDTS104,REV-A	L&T BY TRINITRON NIL
2	33635080-2, PUMP CONTROLLER	EDTS186	KIND (KAPSON INDUS.) 17110027
2	33635146-2, SMOKE SENSOR	SPEC.NO EDTS087 TYPE-II	PRECISION SAFETY EQUIPMWNT NIL
2	33635225-2, MICRO PROCESSOR CONTROLLER	EDTS075 TYPE-II	ESS ESS KAY 1803599
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
1	33640312-1, PUBLIC ADDRESSING SYSTEM	EDTS173,TYPE-II	PUNJAB RADIOS/AHUJA 4387581
0	33640361-0, EMERGENCY BATTERY CHARGER	M/s Pyramid model no.PYRA/BCUR/415/50 Fully Bridge Diode Based with	EL WAVES WEBCC183938
1	33640543-1, DA CONTROL PANEL FOR 2 X 500KVA DGSETS.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-05-011
2	33640543-2, HOG PANEL FOR CONTROL OF CONVERTOR/DG SUPPLY.	EDTS 103, REV-D, AM-3	ESS ESS KAY 2017-05-016
0	33641614-0, TAIL LIGHT LED TYPE WITH FLASHER UNIT & VHF CHARGING SOCKET TO DRG. NO. LP73200 ALT "A"	EDTS215	DR AUTO NIL



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (LHB)

FOR ELECTRICAL ITEMS			
ROLLING STOCK CERTIFICATE OF			
LHB POWER CAR EOG AIR BRAKE 500X2 KVA			
TYPE OF COACH : LWLRRM		COUPLING TYPE : CBC	
RAILWAY CR		COACH_NO : 18862	
		DATE OF FITMENT: 31-MAY-18	
SSE/EL/QC		AME/WM QC/DY CQM I	