



अंतर्राष्ट्रीय ऑटोमोटिव प्रौद्योगिकी केन्द्र
INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY
[A Division of NATRIP Implementation Society (NATIS), Govt. of India]

C A S B 0937

Date : 30th October 2023

CERTIFICATE

FOR
COMPLIANCE TO THE CENTRAL MOTOR VEHICLES RULES

Cert	Table 7, 11 & 13	Dwg	Total
04	11	04	19 Pgs

1. In order to establish compliance to the provisions of CMVR, 1989, applicable as on date, documental verification / necessary testing was carried out, on the following **base model** submitted by the vehicle **manufacturer** referred below:

Document Reference	Vehicle Manufacturer		
Current Certificate	M/s. Essel Energy Infra Private Limited Plot No. 55, Sector -34, Gurgaon, Haryana, 122 001 Plant : Gurgaon, Haryana		
Motor Model / Type	Max. 30 Minute Power	Net Power	Motor Manufacturer
BL-12-60-1200 / BLDC	1.6 kW @ 40 km/h	2.6 kW @ 40 km/h	M/s. EMF Innovations Pvt.Ltd.
Base Model	Type & Category	Seating Capacity (incl driver)	GVW (kg)
SERF	Battery Operated 2W & L1	2 Persons	248
Variant(s)	NA		

- 1a Brief technical specifications (SERF-01 dt. 01.03.2023) of the **base model** as declared by the vehicle manufacturer are enclosed with this certificate. Detailed specifications (SERF-01 dt. 01.03.2023) of the **base model** are also separately issued to the vehicle manufacturer.
2. It is certified that the above **base model** comply with the provisions of the CMVR, 1989, as amended up-to-date, including following requirements, (as detailed at ANNEXURE - I, IA & IB):
- | Standards | Notification | Date | Effective From | Applicable CMVR |
|---|--------------|------------|----------------|-----------------|
| Type approval for electric Power Train vehicles | SO 2210(E) | 01.06.2018 | 01.06.2018 | 124(1)(30) |
- Refer ANNEXURE - II
3. This Certificate is issued as per CMV Rule 126, to establish compliance with the Central Motor Vehicles Rules, 1989, and shall not be construed as a certificate of compliance to any rules other than those listed in ANNEXURE - I, IA, IB & II. Compliance to these rules has been verified based on the use of specific components / parts / assemblies etc. details of which are given in the detailed specifications duly endorsed by ICAT as mentioned at Para. 1a above. It is the vehicle manufacturer responsibility to ensure fitment of same components / parts / assemblies etc. before submission of the vehicle for registration.

Please turn over for DISCLAIMER

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ANNEXURE - I

Rule No.	Sub Rule(s)	Compliance Verified For		Standard	
93	(1)(A), 1(B), 2	Motor vehicle width, length and height		-	
94	(1), (2) & (3)	Condition of tyres		-	
95	(1), (2), (3), (4), (5) & (6) (Tubeless)	Size & ply rating of tyres		IS 15627:2005 & AIS-050:2004	
		Front / Rear	90/90-12, 54 J M/s JK Tyre M/s CEAT M/s RALSON		
96	(1), (2), (3), (4)(ib), (7)(c) & (8)	Brakes with CBS		IS 14664:2010	
102	(1), (2) & (3)	Signaling devices, direction indicators and stop lights		-	
103	(1)	Position of the indicator		-	
104	(1) & (4)	Fitment of reflectors		AIS-057 (Rev. 1): 2010	
105	(1)(bb), (2)(i) & (4)	Lamps		-	
106	(1)	Deflection of lights		-	
108	(1)	Use of red or white lights		-	
111	-	Prohibition of spotlights etc.		-	
117	(1) & (2)	Speedometer		IS 11827:2008	
119	(1) & (2)	Horns	Installation (Below 7kW)	IS 15796:2008	
			Limit :		83 dB(A) to 112 dB(A)
			Observed :		91 dB(A)
			Performance	IS 1884:1993	
120	(2)	Pass by Noise	Limit :	75 dB(A)	
			Observed :	58 dB(A)	
122	(1) & (2)	Embossment of chassis number & motor number & month of manufacture (Ref: Table 11 of the Technical Specifications)		AIS-065:2005	
123	(1)	Safety devices in motor cycle	Pillion Handhold	IS 14495:1998	
	(2)		Footrests	AIS 148:2018	
	(4)		Stand	AIS 146:2018	
	(5)		External Projection	AIS 147:2018	
124	Refer Annexure-IA & IB	Safety standards of components as applicable		-	
125	(2)(a)	Rear View	Specifications	AIS-001 (Part 2) (Rev.1):2011	
		Mirror	Installation	AIS-002 (Part 2) (Rev.1):2011	

ICAT Ref No.	2022-2176 (IOCS Ref: 164977)
Power Test Report No.	ARAI/AED/20212022/3000021407/CT/1801 dt. 26.02.2022
Noise Report No.	CTOVS 0855 dt. 26.05.2023
Horn Inst. Report No.	CTOVS 0860 dt. 26.05.2023

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ANNEXURE - IA

Rule 124 (1) Table Sr. No.	Parts / Components / Assemblies	Standard	2 Wheelers (L1 Category)
1 (a) & (c)	Automobiles lamps (bulb)	AIS- 034 (Part 1) (Rev.1) : 2010	✓
2	Hydraulic brake hose (if fitted)	IS-7079:2008	✓
3	Hydraulic brake fluid (if fitted)	IS-8654:1986	✓
18 - A	Tell tale symbols and control	AIS-126:2014	✓
21 (ii)	Electromagnetic compatibility of motor vehicles	AIS-004:2009 (Part - 3)	✓
23	Gradeability	AIS-003:1999	✓
24	Lighting and light signaling devices	AIS-009 (Rev.1):2011	✓
26(c)	Specific Requirements of L Category Electric Power Train Vehicles	AIS-156:2020 (Amendment 3 Phase 2)	✓
27	Measurement of Electrical Energy Consumption	AIS-039:2015 (Rev 1)	✓
28	Method of Measuring the Range	AIS-040:2015 (Rev 1)	✓
29	Measurement of Net Power and Maximum 30 minute Power	AIS-041:2015 (Rev 1)	✓
30	Type Approval for Electric Power Train Vehicles	AIS-049:2016 (Rev 1)	✓
32 (ii)	The performance requirements for lighting and light-signalling devices		✓
32 (ii)(a)	Main-beam and dipped beam headlamps	AIS-010 (Part 2) (Rev.1): 2010	✓
32 (ii)(b)	Front position lamps, Direction indicator lamps, Stop lamps, Rear position lamps, rear-registration plate (mark) illuminating devices	AIS-010 (Part 3) (Rev.1): 2010	✓
32 (ii)(c)	Front fog lamps	AIS-012 (Part 1) (Rev.1) : 2011	NA
32 (ii)(d)	Rear fog lamps	AIS-012 (Part 2) (Rev.1) : 2011	NA
32 (ii)(e)	Stop lamps of S3 or S4 category	AIS-012 (Part 6)(Rev.1) : 2011	NA
32 (ii)(f)	Daytime running lamps	AIS-012 (Part 10)(Rev.1) : 2011	NA
43(b)	Wheel rims Fr. & Rr.- Sheet Metal	AIS-073:2005 (Part 1/2)	✓
44	Protective devices against unauthorized use	AIS-074:2005	✓
48	Spray suppression system	AIS-103:2009	✓

ANNEXURE - IB

CMV Rule	Compliance Verified For		Standard	Effective Date
2 (i)	Definitions – category of vehicle	L1	IS:14272-2011	20.10.2018
124 (4)	The procedure for Type Approval and establishing Conformity of Production for components	Tyres / Horn / Brake hose	AIS-037:2004	01.04.2009
		Bulb / Rear View Mirror		01.10.2009
		Lighting and Light Signaling Devices / Retro-Reflectors		01.04.2010
		Traction Battery for Electric Power train Vehicles		31.03.2023

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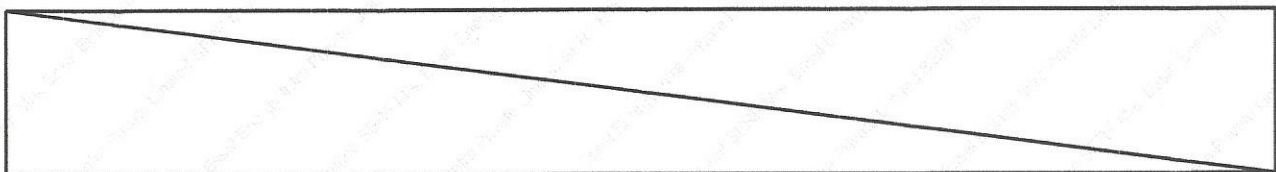
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ANNEXURE - II

Standards	Notification	Date	Effective From	Applicable CMVR	Applicability
Pass by Noise Limits	GSR 111(E)	10.02.2004	01.04.2005	120 (2)	Yes
Brakes / Signalling devices, Direction Indicators and Stop lights / Fitment of reflectors / VIN / Safety Standards of components	GSR 338(E)	26.03.1993	Notified dates	ANNEXURE - I/ ANNEXURE - IA/ ANNEXURE - IB	Yes
Position of Indicators/ Lamps	GSR 116(E)	27.02.2002			Yes
Tyres / Use of red, white or blue light	GSR 400(E)	31.05.2002			Yes
Gradeability / Spray Suppression	SO 1365(E)	13.12.2004			Yes
BOV definition / Tyres / Brakes / Signalling devices, Direction Indicators and Stop lights / Fitment of reflectors / Horns / Pass by noise / VIN	GSR 589(E)	16.09.2005			Yes
Safety Standards of components	SO 1431(E)	20.08.2007			Yes
Tyres / VIN / Safety Standards of components	GSR 784(E)	12.11.2008			Yes
Spray Suppression	SO 436(E)	15.03.2012			Yes
Deflection of Lights / Speedometer / Horns	GSR 291(E)	24.04.2014			Yes
External projection / Tell tale / EMC / BOV / ATD	SO 411(E)	09.02.2016			Yes
Lamps	GSR 188(E)	22.02.2016			Yes
Brakes	GSR 310(E)	16.03.2016			Yes
Safety Standards of components	SO 6108(E)	10.12.2018			Yes
Definitions / Brakes / Fitment of reflectors / Rear View Mirror	GSR 1192(E)	10.12.2018			Yes
Motor Vehicle Width, Length and Height / Overall Dimension	GSR 414(E)	26.06.2020			Yes
Safety devices in motor cycle	GSR 457(E)	20.07.2020			Yes
Definitions	GSR 240(E)	31.03.2021			Yes
Wheel Rims	SO 1406(E)	22.03.2021			Yes
	SO 359(E)	27.01.2022			Yes
	SO 2914(E)	22.07.2021			Yes
	SO 2634(E)	08.06.2022	Yes		
	SO 3896(E)	12.08.2022	Yes		
Traction battery	SO 5419(E)	27.12.2021	Yes		
	SO 4143(E)	02.09.2022	Yes		
	SO 4567(E)	28.09.2022	Yes		
Traction Battery for Electric Power train Vehicles	GSR 888 (E)	19.12.2022	Yes		

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