



INTERNATIONAL CENTRE FOR AUTOMOTIVE TECHNOLOGY
(A division of National Automotive Board (NAB) - MHI, Govt. of India)

Ready Reckoner - E-Rickshaw/Ecart Category CMVR TYPE APPROVAL

Definition	<p>E-rickshaw- A special purpose battery operated vehicle having 3 wheels and intended to provide last mile connectivity for transport of passengers. (i) such vehicle is constructed or adapted to carry not more than 4 passengers, excluding driver & not more than 40 kg luggage in total (ii) the net power is not more than 2000W and, (iii) the maximum speed of the vehicle is not more than 25km/h</p> <p>E-Cart- A special purpose battery operated vehicle having 3 wheels and intended to provide last mile connectivity for carrying goods. (i) such vehicle is constructed or adapted for carrying goods by providing a separate load body or compartment with the maximum weight three hundred and ten kilograms in addition to driver (ii) the net power is not more than 2000W and, (iii) the maximum speed of the vehicle is not more than 25km/h</p>	Dimensions		
		Length (meters)	Width (meters)	Height (meters)
		2.80	1.00	1.80

Fuel BATTERY OPERATED VEHICLE

AIS 007 Tables	Brief Tech Specs	T7, T11 & 13	Detail Tech Specs	1B
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Sr. no.	Test Description	Reference Standard	CMV Rule No.	Remarks	LAB
1	CERTIFICATION CHARGES PER BASE MODEL OR VARIANT	-	-	-	CBU/CMVR
2	TEST TRACK HIRING CHARGES EXTERNAL NOISE TEST TRACK	-	-	-	VTT
3	BRAKE TEST - E RICKSHAW	IS 14664:1999	96 (1) (2) (3) (4)(i) & 7(b)	-	VEL
4	TEST TRACK HIRING CHARGES - OVAL TEST TRACK	-	-	-	VTT
5	DOCUMENTATION VEL	-	-	-	CBU/CMVR
6	RVM INSTALLATION (VEL)	AIS - 002 (Part1) (Rev.2):2023 & Amd.1*	125 (2)(a)	-	VEL
7	HORN INSTALLATION (VEL)	IS 15796:2008	119 (1) (2)	-	VEL
8	NET POWER, 30 MIN. POWER, 30 MIN. SPEED TEST OF 3 OR4 WHEELER BOV VEHICLE AS PER AIS 041	AIS-041	124 (1)	-	VTL
9	AIS 038 TYPE APPROVAL CHARGES	AIS-038/2003 & AIS-048/2009	124 (1)	-	EEL
10	HAND HOLD - E RICKSHAW (VEL)	Rule 142(1) 42	124 (1)	-	VEL
11	PHOTOGRAPHS OF THE VEHICLE	-	-	-	VEL
12	LIGHTING INSTALLATION TEST FOR E RICKSHAW AND 3 WHEELER	AIS-009/2001	105(1) (b) (3) (4) (5) & (7)	AIS 009 (Rev.1):2011 *	VEL
13	CMVR PHYSICAL VERIFICATION FOR E-RICKSHAW	-	-	-	VEL
14	COMPLETE COMPONENT CLEARANCE CHARGES (2W-3W-ERICK)	-	-	-	PMG
15	WEIGHMENT - E RICKSHAW	-	-	-	VEL
16	TEST TRACK HIRING CHARGES - HILL TRACK	-	-	-	VTT
17	DOCUMENTATION CHARGES	-	-	-	CBU/CMVR
18	HLLD E-RICK □	AIS-009 Rev1.	-	-	PHL
19	WATER WADING TEST	-	-	-	EEL

Component Level Tests

1	Tyres	IS:15627-2005	95 (1)	-	TTL
2	Reflex reflector	AIS-057 (Rev. 1)-2010	104 (4)	-	PHL
3	Horn	IS:1884-1993	119 (1)	-	VEL
4	Automotive Lamps (Bulbs) -Head Lamp (main/dipped), Front Position Lamp bulb/Stop lamp bulb/Direction indicator lamp bulb -Front, Direction indicator lamp bulb - Rear/Reversing lamp bulb, Number plate lamp bulb	AIS-034: 2004	124 (1)(1) Table B (1)	-	PHL
5	Performance Requirements for Lighting & Signaling -Head Lamp (main/dipped), Front Position Lamp, Direction indicator Lamp Front, Reversing Lamp, Stop lamp (S1 / S2)/Direction indicator Lamp- Rear, Registration Plate lamp	AIS-010 (Part 1) (Rev.1):2010	124(1) Table B (3b)	-	PHL
6	Wheel rims (Alloy / sheet metal / spoke)	IS:16192 (Part 1)-2014 / IS:16192 (Part 2)-2014 / IS:16192 (Part 3)-2018	124 (1)(1) Table B (2)(b/c/d)	-	CTL
7	Performance requirement of lighting, light signalling	AIS-012/2004 AIS-010/2004	124 (1)(1) Table B (3)(b)	-	PHL
8	Safety Requirements of Traction batteries	AIS-048/2009	124 (1)(1) Table B (6)	-	EEL
9	Rear view mirror	AIS-001 (Part 2) (Rev. 1)-2011 & AIS-001 (Part 1) (Rev. 2)-2023	125 (2)	-	VEL
10	Safety Glass (Windscreen)	IS 2553: (Part 1)	100 (2)	-	CTL
11	Reflective tape	AIS 090:2005	104(1)	-	VEL
12	Battery Pack	AIS-156 (Part II) 2020 Amd 3	-	-	EEL

Applicable test on E-Rickshaw/E-cart, w.e.f Apr-26					
1	WIPING TEST	IS 2553(Part2)(rev.1)2019*, IS 15802:2008* & AIS-054:2004	101 (1)	-	PSL
2	Tell Tale	AIS 071(Part1 & Part2):2009*	124 (1)	-	VEL
3	Turning circle diameter	IS 12222:2011	98(1) (2) (3)	With steering only	VEL
4	GRADEABILITY TEST	AIS-003 (Amd.1):2022	124 (1)	-	VEL
5	SPEEDOMETER CALIBRATION TEST	IS 11827:2008	117 (1) (2)	-	VEL
6	EXTERNAL PROJECTION TEST FOR L CATEGORY	IS 13942:1994	-	-	VEL
Applicable test on E-Rickshaw/E-cart, w.e.f Apr-27					
1	Performance requirements with regards to its electrical safety	AIS-156 (Part 1) *	-	-	-
2	Performance requirements of a rechargeable electrical energy storage system (REESS)	AIS-156 (Part 2) *	-	-	-
3	Overall dimension of (a) Driver Seat and (b) Leg space requirement for passengers	AIS 134:2016*	-	-	-
4	Performance requirements with regards to EMI/EMC	AIS-004 (Part 3)	-	-	-
5	Performance requirements with regards energy consumption	AIS 039 (Rev.1)	-	-	-
6	Performance requirements with regards minimum range	AIS-040 (Rev.1)	-	-	-
7	Performance requirements with regards to stability of the vehicle	-	-	-	-
8	Performance requirements with regards to Closed loop & Encryption System	-	-	-	-