

## AMENDMENT NO. 1 FEBRUARY 2024

TO

### IS 17191 (Part 2) : 2019 AUTOMOTIVE VEHICLES — ELECTRIC POWER TRAIN VEHICLES PART 2 METHOD OF MEASURING THE RANGE

(Page 1, clause 2) — Substitute the following for the existing clause:

#### ‘2 REFERENCES

The standards given below contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards:

<i>IS No.</i>	<i>Title</i>
IS 14272 : 2011	Automotive vehicles — Types — Terminology
IS 17191 (Part 1) : 2019	Electric power train vehicles: Part 1 Measurement of electrical energy consumption’.

(Page 1, clause 3) — Substitute the following for the existing clause:

#### ‘3 DEFINITIONS

For the purpose of this standard the definitions given in IS 17191 (Part 1) in addition to definitions given in IS 14272 shall apply.’

(Page 1, clause 4) — Substitute the following for the existing clause:

#### ‘4 VEHICLE PREPARATION

Vehicle preparation shall be as per 4 of IS 17191 (Part 1).’

(Page 1, clause 6.1.1) — Substitute the following for the existing clause:

‘6.1.1 The driving cycle shall be the indian driving cycle (IDC) as given in Annex A of IS 17191 (Part 1) for all L category vehicles.’

(Page 2, clause 6.1.2) — Substitute the following for the existing clause:

‘6.1.2 The driving cycle shall be part 1 of the modified Indian driving cycle as given in Annex B of IS 17191 (Part 1) for M1, M2 (with GVW up to 3 500 kg) and N category of vehicles.

The driving cycle shall be Delhi driving cycle as given in Annex C of IS 17191 (Part 1) for M2 (with GVW above 3 500 kg) and M3 category of vehicles.’

(Page 2, clause 6.4.1.1.2) — Substitute the following for the existing clause:

‘6.4.1.1.2 Stopping the discharge occurs:

- a) When the vehicle is not able to run at 65 percent of the maximum thirty minutes speed;or

- b) when an indication to stop the vehicle is given to the driver by the standard onboard instrumentation;  
or
- c) After covering the distance of 100 km.'

(Page 2, clause 6.4.1.2.1) — Substitute the following for the existing clause:

**‘6.4.1.2.1 Normal overnight charge procedure**

The charging is carried out:

- a) With the on board charger if fitted; or
- b) With an external charger recommended by the manufacturer using the charging pattern prescribed for normal charging; and
- c) In an ambient temperature comprised between 20 °C and 30 °C.

NOTE — If the ambient condition cannot be met at the time of the test, then based on mutual agreement between test agency and vehicle manufacturer, requirement of ambient temperature condition can be waived.'

(Page 2, clause 6.5) — Substitute the following for the existing clause:

**‘6.5 Application of the Cycle and Measurement of the Range**

The test sequence shall be followed as per 6.1.

The end of test criteria shall be when the vehicle is not able to meet the target curve up to 50 km/h,(or 85 percent of the maximum speed of the driving cycle or 85 Percent of the maximum speed of the vehicle for L category of vehicles only) or when an indicator from the standard on-board instrumentation is given to the driver to stop the vehicle.

Then the vehicle shall be slowed down to 5 km/h by deactivating the accelerator control,without touching the brake control and then stopped by braking.

When the vehicle does not reach the required acceleration or speed of the test cycle, the accelerator control shall remain fully activated until the reference curve has been reached again.

To respect human needs, up to three interruptions shall be permitted between test sequences of not more than 15 min in total.

At the end, measure D of the covered distance, in km is the electric range of the electric vehicle. It shall be rounded to nearest whole number.'