

10 Sin Ming Drive Singapore 575701
www.lta.gov.sg

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Our ref LTA/VAC/V30.000.000/29

All Motor Vehicle Dealers / Importers
All Electronic Service Agents

Dear Sir / Madam

CHARGING INLET REQUIREMENTS FOR ELECTRIC VEHICLES (EVs)

1. We refer to the earlier circular (our reference LTA/NEVC/EVR/2024/0003/C) dated 19 April 2024.
2. Under the EV Charging Act 2022 (EVCA), all EV charger models must be type-approved by LTA to ensure safety, before they can be supplied in Singapore. This will include EV charger models that had previously been issued with a Letter of No Objection (LNO). EV chargers must comply with Technical Reference 25 (TR25), which is the national EV charging standard that sets out technical safety requirements for EV chargers, before they can be type-approved.
3. Recently, LTA received feedback from the industry, requesting for clarity on the charging inlet requirements for EVs. To ensure that EVs to be approved and registered for use on public roads have an appropriate means to be charged, any EV submitted to LTA for pre-registration approval shall comply with the requirements in **Annex A**.

4. Please inform your members of the above. More information on charger type approval can be found on LTA's website¹. Should you have any enquiry or require any assistance on EV charger type approval, you may contact EVCS_Application@lta.gov.sg. For enquiries or assistance on EV pre-registration approval applications, you may contact Mr Han Hang Kwang on DID: 6553 5263 or Mr Neo Aik Hing on DID: 6553 5700 (for vehicle batch approval) or Mr Garlice Kwek on DID: 6553 5164 (for vehicle type approval).

5. Thank you.

Yours sincerely



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¹https://www.lta.gov.sg/content/ltagov/en/industry_innovations/technologies/electric_vehicles/regulating_safety_of_ev_chargers.html under "Supply of EV Chargers".

Annex A: Charging Inlet Requirements for EVs

S/N	Group A <i>TR25 compliant:</i> ➤ Combined Charging System Combo 2 (CCS2) ➤ Type 2 ➤ Battery Charging and Swapping System (BCSS) for e-motorcycles	Group B <i>TR25 compliant:</i> ➤ CHAdeMO ➤ CCS1 ➤ Type 1 ➤ Pantograph	Group C <i>Non-TR25-compliant</i> <i>Examples include:</i> ➤ Proprietary ➤ Wireless charging ➤ BCSS for four wheelers	Treatment of Vehicle
1	●			Vehicle can be approved
2	●	●		Vehicle can be approved
3	●		●	Vehicle can be approved, as long as the non-TR25-compliant charging inlet in Group C can be mechanically disabled/restricted/removed
4		●		Vehicle can be approved, if there is relevant proof of the charger that will be used to charge the vehicle. Such relevant proof can be an LNO, charger type approval or registration of charger
5		●	●	Vehicle can be approved, as long as: ➤ relevant proof of LNO, charger type approval or registration of charger is provided for the Group B charging inlet; and ➤ non-TR25-compliant charging inlet in Group C can be mechanically disabled/restricted/removed
6			●	Vehicle cannot be approved

Example: [See S/N 5] For an EV fitted with a CHAdeMO inlet (i.e. Group B) and a proprietary inlet (i.e. Group C), the EV can be approved, as long as the relevant proof of LNO, charger type approval or registration is provided for the CHAdeMO charger, and the proprietary inlet can be mechanically disabled/restricted/removed.

Note:

The permissible charging current of each charger connector type under TR25 is listed in the table below:

	Presence of thermal sensors and/or thermal management systems that complies with clause 4 of TR25:2022 Part 3	Absence of thermal sensors and/or thermal management systems
CCS, CCS2, Pantograph connector types	500 kW	200 kW
CHAdeMO connector type	400 kW	120 kW

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