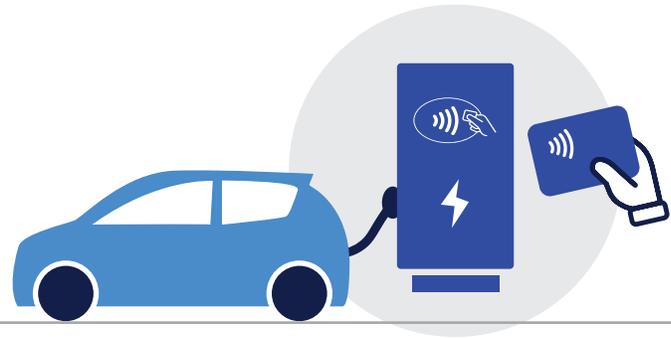


# EMV® Chip News

November 2021



## Electric Vehicle Charging Implementation Considerations

**Overview:** Electric Vehicle Charging solutions are reminded to use Merchant Category Code (MCC) 5552 and understand the authorization models available if offering electric vehicle charging services to customers.

With the growing demand for sustainable energy, electric vehicles are becoming more widely used. To meet the electric vehicle charging (EVC) infrastructure needs, charging stations are being deployed in a variety of environments, including both private and public locations such as gasoline stations, retail and office parking lots.

EVC is differentiated from automated fuel dispenser transactions by the longer charging time and the lower average cost to charge; it is differentiated from parking transactions by its fueling component, even though parking is a part of the transaction.

**Effective 18 October 2019, Visa created MCC 5552— Electric Vehicle Charging for global use.**

### What is a Merchant Category Code (MCC)?

It is a four-digit number assigned to describe a merchant’s primary business based on annual sales volume. It can also identify a specific merchant or type of transaction and data can be used for a range of purposes:

- Data reporting and analytics
- Risk management
- Product enhancements
- Issuance Reward Programs

**Note:** If a EVC charges for both parking and EVC, the MCC used should be the merchant’s primary business or highest sales volume. It is also acceptable to use 2 MCCs (MCC 7523—Parking and MCC 5552—EV Charging) separately if needed.

### There are two authorization models available for EVC transactions:

1. Authorize for a known amount at the end of the charging session.
2. Authorize for an estimated amount at the beginning of the charging session and use incremental authorizations / reversals to true-up.
  - Estimated / initial authorizations give eligible merchants the ability to better process transactions when the final amount of the transaction is not known, by sending an authorization for the anticipated amount of the transaction.
  - An incremental authorization is used to increase the total amount authorized if the estimated / initial authorized amount is insufficient.
  - The incremental authorization may also be based on a revised estimate of what the cardholder spends.
  - It does not replace the original authorization but is only additional to previously authorized amounts.
  - The sum of all linked estimated and incremental authorizations represents the total amount authorized for a given transaction.

**Note:** The original authorization must be coded as an estimated authorization. Merchants must correctly identify these transactions and use the appropriate indicators when using estimated and incremental authorizations.

A few key fields include:

- Field 60.10—Additional Authorization Indicators.
  - Field 62.2—Transaction Identifier Bitmap Format or TLV Field 125\* Usage 2, Dataset ID 03, Tag 03— Original Transaction Identifier: The original transaction identifier value from the initial authorization must be included in Field 62.2 of all subsequent incremental authorizations and/or authorization reversals.
  - Field 63.3—Message Reason Code.
  - Optionally, Field 54—Additional Amounts, populated with the total cumulative amount for this series of incremental authorizations.
- Merchants should consult with their acquirers to ensure the indicators are being populated and passed in the authorization record before implementing an estimated and incremental solution.

### For more information

Refer to the [Visa Merchant Data Standards Manual](#) for more details. Contact Cindy Kohler at [kohler@visa.com](mailto:kohler@visa.com) for further assistance.

### Other resources

In February 2021, the Secure Technology Alliance Payments Council published a white paper, “Electric Vehicle Charging Open Payment Framework with ISO 15118” and hosted the webinar, “Electric Vehicle Charging Payments Innovations”.

- **White paper:** <https://www.securetechalliance.org/publications-electric-vehicle-charging-open-payment-framework-with-iso-15118/>
- **Webinar:** [Electric Vehicle Charging Payments Innovations Webinar – Secure Technology Alliance \(securetechalliance.org\)](#)

**\*Changed from Field 124**

#### Inquiries and Additional Resources

For inquiries or questions, please contact:  
[VisaTechPartnerships@visa.com](mailto:VisaTechPartnerships@visa.com).

In the meantime, please visit these Visa chip sites for more information about EMV:

[Visachip.com](https://www.visachip.com)

[Visa Technology Partner](#)

EMV Testing and Certification White Paper: [Current Global Payment Network Requirements for the U.S. Acquiring Community](#)

US Payments Forum White Paper: [EMV Level 3 Contactless Certification Recommended Solutions to Reduce Deployment Time](#)

#### Visa Approval Services

Refer to Approval Services monthly approved products lists for chip payment devices that were granted Letter of Approval (LOA) upon completion of Visa’s contactless Level 2 kernel testing and approval process. The complete list is available on Visa Technology Partner website at:  
<https://technologypartner.visa.com/Testing/TestMaterials.aspx>

For any other questions on the Approval Services’ testing and approval process for contactless chip payment devices, please contact [ApprovalServices@visa.com](mailto:ApprovalServices@visa.com).

For more EVC related resources, visit [Visa Technology Partner](#) webpage.