California Type Evaluation Program
Certificate of Approval
Weighing and Measuring Devices

For:	**Submitted By:**
Electric Vehicle Fueling System AC Only Models: FR-482*xx*DRNA*y* FR-802*xx*DRNA*y*	14821530 CANADA INC. (DBA FractalEV) Suite 210 5-420 Erb St. W, Waterloo Ontario, N2L 6K6 Contact: Micah Gold-Utting Tel: (226)-241-3083 Email: contact@fractalev.com Web site: www.FractalEV.com

Standard Features and Options

Standard Features:

- Alternating Current (AC) system in kilowatt-hour (kWh)
- 0.0001 kWh registration display
- Minimum Measured Quantity (MMQ): 0.4 kWh
- Voltage Rating: 208-240 VAC (Volts Alternating Current)
- Maximum Current Deliverable: FR-482 is 48 amperes (A), FR-802 is 80(A)
- Firmware Version Number: V45.10 or higher that increments (V45.XX) sequentially and follows the format (V45.XX).
- Non-resettable totalizer in kWh
- The transaction is terminated when power loss occurs
- Network connection to the cloud. Data stored in the cloud recallable for three years
- Activation via Quick Response (QR) code web-based URL pathway
- Wi-Fi, cellular communication
- Available connection cables: J1772 & North American Charging Standard (NACS)

Options:

- Wall mount or pedestal mount

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Kevin Schnepp, Director
Effective Date: January 28, 2025

14821530 CANADA INC. (DBA FractalEV)

Electric Vehicle Fueling System/Models: FR-482*xx*DRNA*y*, FR-802*xx*DRNA*y*

Application: For use as an Electric Vehicle Fueling System in commercial applications under the California Code of Regulations (CCR) and the National Institute Standards of Technology (NIST) Handbook 44 Section 3.40. EVFS are also known as Electric Vehicle Supply Equipment (EVSE).

Identification: The FractalEV EVSE identification (ID) label (***Figure 1)*** is located on the right side of the charger body (***Figure 2***). To view the Non-resettable totalizer and firmware version, select the "?" icon on the bottom right of the charger's touch screen as highlighted (***Figure 3***), then select the Legal menu as highlighted (***Figure 4***). The firmware version and Non-resettable totalizer value are displayed in the Legal and Compliance information page (***Figure 5***). The *xx* and *y* values found in the model designation have been found to have no effect on the metrology of the device.

Figure 1. ID label example location

FRACTALEV™
Model: FR-482C1DRNAJ
Input: 208/240VAC 60Hz 48A Max
Output: 208/240VAC 60Hz 48A Max
Temp: -22°F to 122°F
(-30°C to 50°C)
NEMA Type 4
Made in China
D.O.M. DD/MM/YY
Intertek
5029175
CONFORMS TO UL 2594
CERTIFIED TO CAN/CSA STD C22.1
CTEP MMQ 0.4kWh

CAUTION WARNING

For use with Electric Vehicles.
Ventilation Not Required.
CAUTION – Do not use this product if there is any damage to the unit. Risk of electric shock. Do not remove cover or attempt to open the enclosure. No user serviceable parts inside. Refer servicing to qualified service personnel. Do not connect to a circuit operating at more than 240 volts.
WARNING – This device is intended only for charging vehicles not requiring ventilation during charging. Risk of explosion. This equipment has arcing or sparking parts that should not be exposed to flammable vapors. This equipment should be located at least 460 mm (18 inches) above the floor.

Pour utilisation avec des véhicules électriques.
Aucune ventilation requise.
ATTENTION – Une Réinitialisation automatique est prévue. Ce dispositive est destiné uniquement à la charger de véhicules ne nécessitant pas de ventilation pendant la charge. N'utilisez pas ce produit si le câble de connexion du véhicule est endommagé. Risque de choc électrique. Ne retirez pas le couvercle et n'essayez pas d'ouvrir le boitier. Aucune pièce réparable par l'utilisateur ne se trouve à l'intérieur. Confiez l'entretien a un personnel qualifié.
AVERTISSEMENT – Ce dispositif est destinéau chargement des véicules ne néessitant pas de ventilation au cours du chargement.
L'appareil comporte des pièces pouvant produire des arcs électriques ou des étincelles qui ne devraient pas êtres exposés aux vapeurs inflammables. Cet équipement doit être situé à au moins 460 mm (18 pouces) au-dessus du sol.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Figure 2. ID label example

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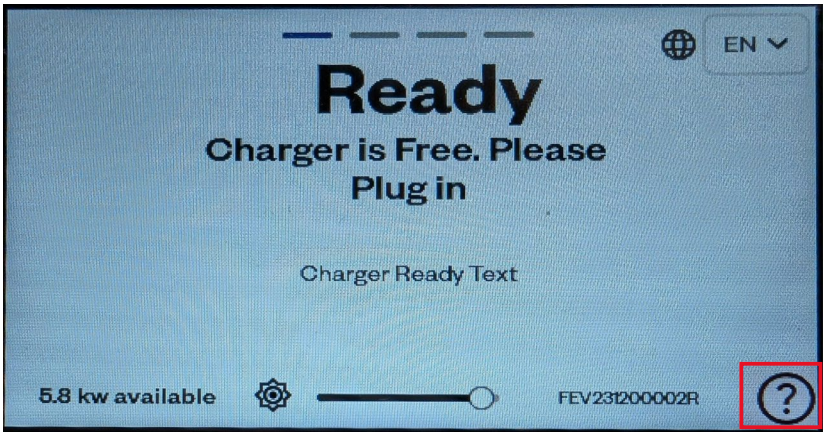

Figure 3. Settings icon selection highlight

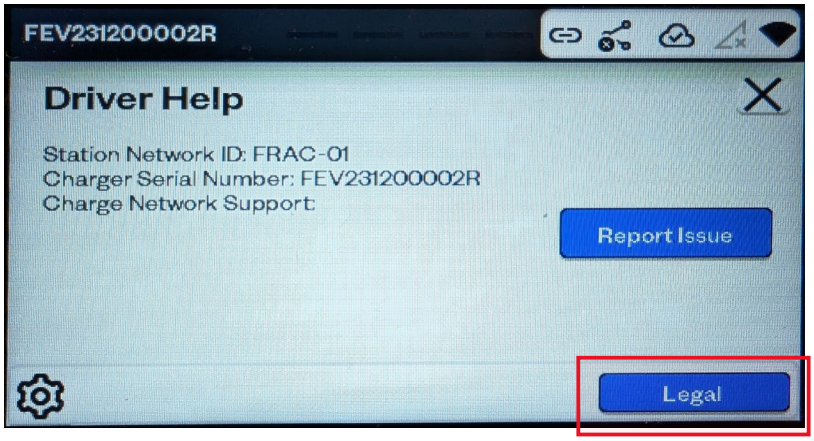

Figure 4. "Legal" selection highlight

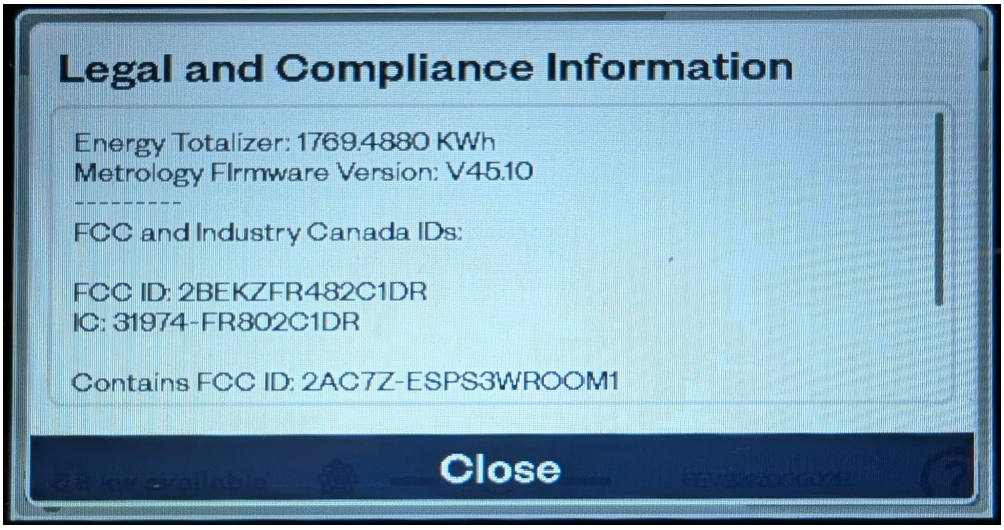

Figure 5. Non-resettable totalizer value and Firmware version example screen

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Sealing: The FractalEV EVSE is a category 1 device with no ability to recalibrate or reconfigure the device. The firmware of the device was verified to increment properly upon a non-metrological change. The major revision of the firmware “V45.XX”, shall not increment as it may affect the metrological function of the charger. The “XX” designation refers to a minor revision change and shall increment sequentially as described in the standard features.

Operation: The FractalEV EVSE may be activated via Quick Response code web-based URL pathway. The EVSE is equipped with a Unique Dynamic QR code on the charger’s display. Users may scan the QR code which brings them to the web-based URL pathway prior to plugging in their vehicle. Through the web-based URL pathway, users must input their email as well as their payment information. After plugging in their vehicle, users may authorize the start of the transaction through the web-based URL pathway. Receipts are sent via email upon the completion of a charging session.

Test Conditions: The emphasis of the evaluation for the FractalEV EVSE system was on device design, performance, markings, sealing, and measurement accuracy at a point between 4A and 10A, 40%-60%MDA, and 70%-100% MDA. Receipt requirements were also evaluated for compliance. Measurements were performed on a model FR-482C1DRNAJ equipped with J1772 cable connection at (0.4) kWh (per the marked MMQ) at low load (4A-10A), 0.6 kWh at medium load (40%-60% MDA) and 0.8 kWh at high load (70%-100% MDA). Permanence testing was performed after 200 kWh of throughput usage.

Evaluated By: J. Witt (CA)

Type Evaluation Criteria Used: *California Code of Regulations, Title 4, Division 9, Chapter 1, Article 1. General Code 1.10.and Electric Vehicle Fueling Systems 3.40 2025 Edition*

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

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Example(s) of the Device: